



# 57<sup>th</sup> ASMS Conference on Mass Spectrometry and Allied Topics

May 31 – June 4, 2009  
Philadelphia, Pennsylvania





**57<sup>th</sup> ASMS CONFERENCE ON MASS SPECTROMETRY AND ALLIED TOPICS**  
**MAY 31 – JUNE 4, 2009**  
**PHILADELPHIA, PENNSYLVANIA**

**TABLE OF CONTENTS**

General Information .....	2
Hotels and Transportation .....	4
ASMS Board of Directors .....	5
Interest Groups and Committees .....	6
Awards .....	7
Research Awards .....	8
Convention Center Floor Plans .....	9
Exhibit Hall Floor Plan .....	10
ASMS Corporate Members .....	11
Corporate Hospitality Suites .....	14
Program Acknowledgements .....	15
Program Overview - Sunday, Monday, Tuesday .....	16
Program Overview - Wednesday, Thursday .....	17
Workshops .....	18

*Title information in the following sections is provided by authors.*

*The complete abstract database is available through the ASMS web page: <http://www.asms.org>*

Sunday .....	21
Monday Morning .....	21
Monday Afternoon .....	23
Tuesday Morning .....	26
Tuesday Afternoon .....	29
Wednesday Morning .....	31
Wednesday Afternoon .....	34
Thursday Morning .....	36
Thursday Afternoon .....	38
Special Posters .....	41
Monday Posters .....	41
Tuesday Posters .....	72
Wednesday Posters .....	103
Thursday Posters .....	136
Author Index .....	168

**SPONSORS**

ASMS gratefully acknowledges the support of the following companies.

*Closing Event Major Sponsor*

**Agilent Technologies**

*Student Travel*

**Elsevier Science**

*Closing Event*

caprotec bioanalytics GmbH	◆	SGE Analytical Science
New Objective, Inc.	◆	Shimadzu
Proxeon A/S	◆	Waters Corporation
Rosetta Biosoftware	◆	ZefSci

## GENERAL INFORMATION

Welcome to the 57<sup>th</sup> ASMS Conference on Mass Spectrometry and Allied Topics. Conference program activities and exhibit booths are in the Pennsylvania Convention Center. Corporate Member hospitality suites are located in the Marriott Hotel.

**SUNDAY TUTORIAL LECTURES.** The Tutorial Session is 5:00 – 6:30 pm, Sunday in Exhibit Hall C (level 2).



5:00 pm, **The Art of Communication in the Sciences**  
**Willard W. Harrison**, *University of Florida*



5:45 pm, **Ion Mobility in Mass Spectrometry**  
**David E. Clemmer**, *Indiana University*

**PLENARY SESSIONS.** The conference opens with a plenary session at 6:45 pm on Sunday in Exhibit Hall C (following the Tutorial Session).



**Sunday, 6:45 – 7:00 pm, Conference Opening**  
7:00 – 7:45 pm  
**Biofuels and Global Climate Change**  
**Jerald L. Schnoor**, *University of Iowa*

**Monday, 4:45 – 5:30 pm, Award Lecture**  
**Tuesday, 4:45 – 5:30 pm, Award Lecture**



**Thursday, 4:45 – 5:30 pm**  
**Fostering Creativity**  
**Richard N. Zare**, *Stanford University*

### ORAL SESSION LOCATIONS

- Session A** (MOA, TOA, WOA, ThOA), Ballroom A, mezzanine, take escalator from Grand Hall
- Session B** (MOB, TOB, WOB, ThOB), Ballroom B, mezzanine, take escalator from Grand Hall.
- Session C** (MOC, TOC, WOC, ThOC), Room 201, on central corridor leading from Grand Hall, level 2
- Session D** (MOD, TOD, WOD, ThOD), Room 204, on central corridor leading from Grand Hall, level 2
- Session E** (MOE, TOE, WOE, ThOE), Exhibit Hall C, level 2
- Session F** (MOF, TOF, WOF, ThOF), Room 103, street level
- Session G** (MOG, TOG, WOG, ThOG), Room 113, street level

**ORAL PRESENTATIONS.** Only LCD computer projectors are used for oral sessions. The ASMS PC computers are running Windows XP and Office 2007.

**SPEAKER PREPARATION.** Speakers must go to the speaker room at least one day prior to their talks to load presentations on the ASMS computers. The speaker room is Room 303 (take escalator up to level 3). The room is open with a technician present:

**Sunday:** 10:00 am - 8:00 pm  
**Monday through Wednesday:** 7:30 am - 5:00 pm

**POSTERS AND EXHIBIT BOOTHS** are in Exhibit Hall AB. The Hall is open:

**Sunday Reception:** 7:45 - 9:30 pm  
**Monday through Wednesday:** 7:30 am – 8:00 pm  
**Thursday:** 7:30 am - 3:30 pm

**POSTER SET-UP.** Posters are located in Exhibit Hall AB. Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Thursday posters must be removed by 3:30 pm. **Refer to the poster numbers in this final program for board assignments.** Authors are expected to supply pushpins to mount their posters. Poster titles begin on page 41.

**POSTER SCHEDULE.** The poster sessions are 10:30 am – 2:30 pm, Monday through Thursday. Authors are encouraged to attend their posters as much as possible between 10:30 am and 2:30 pm on their scheduled day. However, authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm. Authors should wear a “presenter badge.” Presenter badges are available at the poster supply counter located at the entrance to the poster hall.

**WORKSHOPS.** Workshops are scheduled 5:45 – 7:00 pm on Monday, Tuesday, and Wednesday. See pages 18 to 20 for schedule. There will be light refreshments offered for those attending workshops. Refreshments are on the street level (100 rooms).

**EXHIBIT BOOTHS.** The exhibit hall is open 7:30 am – 8:00 pm for poster viewing and the Internet Café. Companies may attend their booths 9:00 am – 5:00 pm; however attendance is required as follows:

**Sunday Reception:** 7:45 – 9:30 pm  
**Monday through Thursday:** 10:30 am – 2:30 pm

**LUNCH.** Concessions are near the Internet café are open in Exhibit Hall AB. Reading Market directly below the Grand Hall of the convention center offers an array of fresh, local options.

**INTERNET ACCESS.** Free wireless access is provided in the Poster-Exhibit Hall AB.

**CONFERENCE PROCEEDINGS.** The conference proceedings will be published on DVD after the conference. Members will receive the DVD with their September JASMS.

**WEB BROADCASTING OF SESSIONS.** Tutorial lectures, plenary sessions, and oral sessions will be web cast. Your last name and the User ID on the back of your name badge must be entered to view presentations. All presentations will be available until August 14. Web casting of presentations does not constitute publication and in no way jeopardizes the rights of authors to publish material that has been presented. To access the presentations, go to [www.asms.org](http://www.asms.org).

**CORPORATE HOSPITALITY SUITES.** See page 14. Hospitality suites may be open 6:00 – 11:30 pm, Monday through Wednesday. Suites are located in the Marriott Hotel. Suite opening hours may vary. ASMS will provide shuttle transportation 6:00 – 10:00 pm, Monday through Wednesday from the Marriott to:  
Route 1: Holiday Inn Express, Crowne Plaza, Sofitel  
Route 2: Embassy Suites, and Sheraton Hotel

**REGISTRATION** is open 10:00 am – 8:00 pm on Sunday, 7:30 am – 5:00 pm on Monday through Thursday.



## GENERAL INFORMATION

### SOCIAL ACTIVITIES

- **WELCOME MIXER, SUNDAY, 7:45 - 9:30 PM, Exhibit Hall AB.** Conference name badge is required.
- **GUEST REGISTRATION.** Guest registration includes Sunday evening mixer and continental breakfast and welcome on Monday, 9:00 – 11:00 am in Room 109 AB. Cost for guest registration: \$20.
- **CONFERENCE FINALE, 6:00 - 9:30 PM, THURSDAY**

The conference concludes on Thursday evening, June 4 at the National Constitution Center. The evening includes full access to the exhibits and buffet, plus band and dancing. **Your event ticket specifies the time for your viewing of "Freedom Rising,"** a multimedia production that vividly displays the recurring themes of U.S. history. Tickets are limited to conference registrants and registered guests only. This event is not appropriate for children. Tickets may be purchased until 12 noon on Monday. *Cost: \$20 for each conference registrant and registered guest.* Cash bar.

The National Constitution Center is a walk of only 7 blocks along Arch Street. For those wishing to ride, buses begin departing at 5:45 pm. Check ticket for your bus departure time. **Yellow tickets depart at 5:45 pm, green tickets at 6:10, and blue tickets at 6:30 pm.**

**CHEMICAL HERITAGE FOUNDATION MUSEUM.** The Chemical Heritage Foundation recently opened its new museum. The museum is open to ASMS registrants on Sunday afternoon. ASMS is providing shuttle buses 1:00 – 4:00 pm to/from CHF. Admission and transportation is free but a reservation is required for the bus.

**PHILADELPHIA HOSPITALITY.** Visit the booth of the Philadelphia Convention and Visitors Bureau in the Exhibit Hall and on the 12<sup>th</sup> Street Concourse of the convention center. The attendants will assist you with restaurant reservations and tourist information.

### CONFERENCE REGULATIONS

- **Name badges** are required for all conference sessions, including the exhibit hall and the employment center.
- **No smoking** is permitted in the convention center.
- **Cell phones** must be **turned off** in oral sessions.
- **No photography or recording** in any session, including posters.
- **The placement of advertising** in the meeting area is strictly prohibited unless approved by ASMS. No signs on easels are permitted.
- **No hardware, terminals, accessories, or any items** for sale may be displayed in any area of the conference, except in corporate exhibit booths and hospitality suites.
- There may be **no organized activities** (even off-site) other than those approved by ASMS during the conference week (5:00 pm on Sunday through 9:00 pm on Thursday).
- **Corporate or institutional logos** may appear only in the title of posters or talks in technical sessions. Logos appearing anywhere else in a poster will be removed or covered by ASMS.

**EMPLOYMENT CENTER.** The Employment Center is located in Exhibit Hall AB and is open to all conference registrants. Candidates must supply at least 20 resumés. Employers and candidates may use the center to search the database of candidates and positions. There are poster boards to advertise positions and messages. There are booths available for conducting interviews. Interview spaces must be reserved one day in advance.

**Sunday:** 7:45 – 9:00 pm

**Monday – Wednesday:** 8:30 am - 5:00 pm

**Thursday:** 8:30 am – 2:30 pm

### MEDIA EVENTS

Corporate media events are scheduled on Monday in Rooms 108A, 108B or in hospitality suites at the Marriott Hotel. Members of the press and financial institutions are welcome.

COMPANY	SCHEDULE	ROOM
Shimadzu	Monday 10:00 – 11:00 am	108B, Conv. Center
Bruker Daltonics	Monday 11:00 am – 12:00 pm	108A, Conv. Center
Thermo Scientific	Monday 1:00 – 2:00 pm	Salons G-K, 5 <sup>th</sup> fl, Marriott
Agilent	Monday 2:00 – 3:00 pm	Salon H, 5 <sup>th</sup> fl, Marriott
Applied Biosystems	Monday 3:00 – 4:00 pm	Salons B-F, 5 <sup>th</sup> fl, Marriott
Waters Corporation	Monday 4:30 – 5:30 pm	Salon E, 5 <sup>th</sup> fl, Marriott

### ASMS

ASMS

2019 Galisteo Street, Building I-1, Santa Fe, NM 87505

Phone: (505) 989-4517 Fax: (505) 989-1073

E-mail: office@asms.org

## HOTELS AND TRANSPORTATION

### CONFERENCE HOTELS

1	Courtyard	21 N Juniper Street Tel: 215-496-3200
2	Crowne Plaza	1900 Market Street Tel: 215-561-7500
3	Embassy Suites	1776 Ben Franklin Pwy Tel: 215-561-1776
4	Four Points	1201 Race Street Tel: 215-496-2700
5	Hampton Inn	1301 Race Street Tel: 215-665-9100
6	Hilton Garden Inn	1100 Arch Street Tel: 215-923-0100
7	Holiday Inn Express	1305 Walnut Street Tel: 215-735-9300
8	Loews	1200 Market Street Tel: 215-627-1200
9	Marriott	1201 Market Street Tel: 215-625-2900
10	Ritz Carlton	Ten Avenue of the Arts Tel: 215-523-8000
11	Sheraton	17th & Race Street Tel: 215-448-2000
12	Sofitel	120 S. 17 <sup>th</sup> Street Tel: 215-569-8300

**TRANSPORTATION.** All hotels are within walking distance of the Pennsylvania Convention Center. ASMS will provide limited shuttle service as follows:

**Sunday, 5:00 – 10:00 pm from convention center to:**

- Route 1: Holiday Inn Express (pm only), Sofitel, Crowne Plaza
- Route 2: Embassy Suites, Sheraton

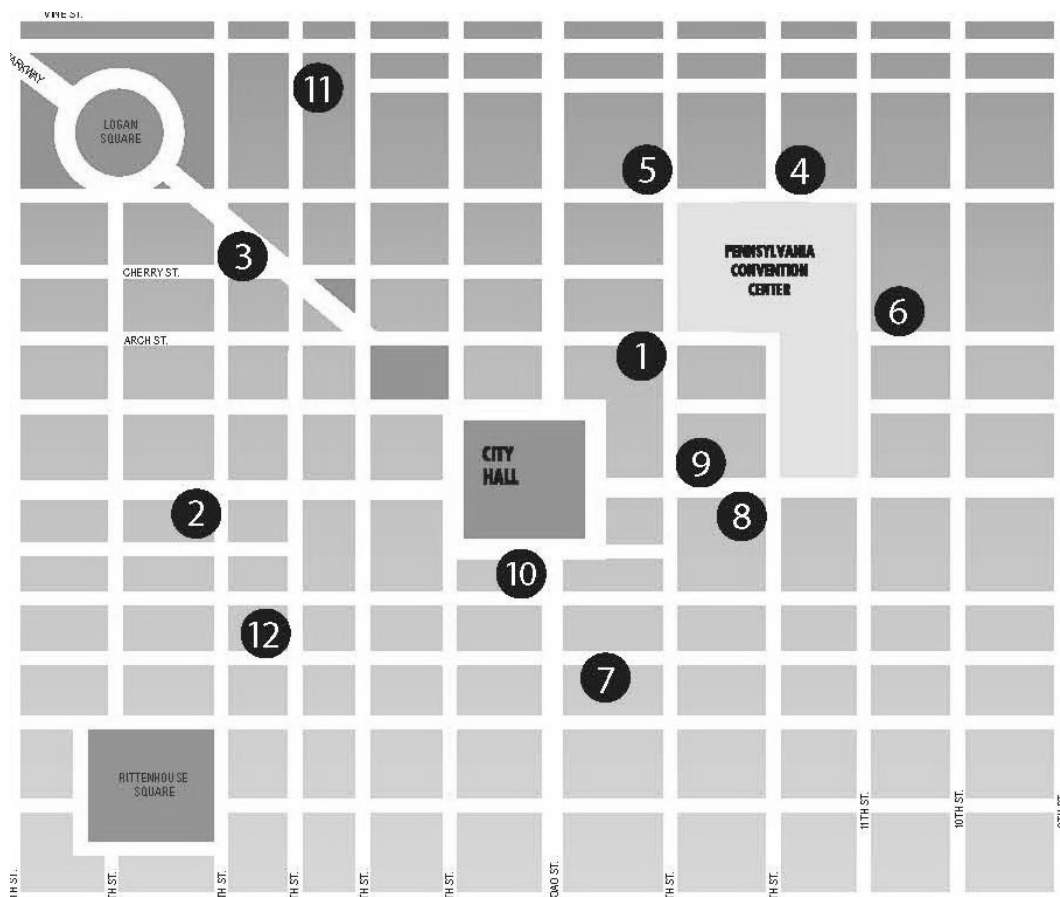
**Monday – Thursday, 7:30 – 9:30 am to convention center:**

- Route 1: From Sofitel and Crowne Plaza to convention center
- Route 2: From Sheraton and Embassy Suites to convention center

**Monday – Wednesday, 6:00 – 10:00 pm from the Marriott (hospitality suites) to:**

- Route 1: Holiday Inn Express (pm only), Sofitel, Crowne Plaza
  - Route 2: Embassy Suites, Sheraton
- Last buses depart the Marriott at 10:00 pm.

At the convention center, buses are located along the 12<sup>th</sup> Street Concourse exit. In the evening at the Marriott Hotel, buses are located at the hotel entrance on 12<sup>th</sup> Street (next to hotel restaurant).



**ASMS BOARD OF DIRECTORS**



**President**  
**Gary L. Glish**  
University of North Carolina  
Chapel Hill, NC



**Vice President for Programs**  
**Scott A. McLuckey**  
Purdue University  
West Lafayette, IN



**Vice President for Arrangements**  
**Gary Siuzdak**  
The Scripps Research Institute  
La Jolla, CA



**Treasurer**  
**Richard A. Yost**  
University of Florida  
Gainesville, FL



**Secretary**  
**Amina S. Woods**  
National Institutes of Health  
Baltimore, MD



**Member at Large for Publications**  
**Mary T. Rodgers**  
Wayne State University  
Detroit, MI



**Member at Large for Education**  
**John H. Callahan**  
US FDA  
College Park MD



**Member at Large for Measurements & Standards**  
**Stephen E. Stein**  
Natl. Inst. of Standards and Technology  
Gaithersburg, MD



**Past President**  
**Barbara S. Larsen**  
The Dupont Company  
Wilmington, DE

**Staff**

Judith A. Sjoberg, *Executive Director*  
Cindi Lilly; Brent Watson  
Jennifer Watson; Marin Walker; Miquela Ortiz-Sena

**ASMS**

announces the election of these members to the Board of Directors

**Vice President for Arrangements**



**Robert B. (Chip) Cody**  
*JEOL USA, Inc.*

**Secretary**



**Kristina (Kicki) Håkansson**  
*University of Michigan*

**Member at Large for Publications**



**John R. Engen**  
*Northeastern University*

**INTEREST GROUP COORDINATORS**

<i>Analytical Lab Managers</i>	Richard W. Kondrat <i>University of California, Riverside</i>
<i>Clinical Chemistry</i>	Russell Grant <i>Labcorp.</i>
<i>Computer Applications</i>	Mark Sanders <i>Thermo Fisher Scientific</i>
<i>Drug Metabolism &amp; Pharmacokinetics</i>	Lucinda Cohen <i>Merck Research</i> Ragu Ramanatha <i>Schering Plough Research Institute</i>
<i>Environmental Applications</i>	Enrico Davoli <i>Mario Negri Institute</i>
<i>Flavor, Fragrance and Foodstuff</i>	David N. Heller <i>FDA/CVM</i>
<i>Forensics</i>	Plamen A. Demirev <i>Johns Hopkins University</i>
<i>FTMS</i>	Yury O. Tsybin <i>EPFL</i>
<i>Fundamentals</i>	Kelly Sullivan <i>Pacific Northwest Natl. Laboratories</i> Elaine M. Marzluff <i>Grinnell College</i>
<i>Hydrocarbon and Chemical Process</i>	Michael T. Cheng <i>Chevron Research</i>
<i>Hydrogen Exchange &amp; Covalent Labeling</i>	John R. Engen <i>Northeastern University</i>
<i>Ion Mobility MS</i>	John A. McLean <i>Vanderbilt University</i>
<i>Imaging MS</i>	Michelle Reyzer <i>Vanderbilt University</i>
<i>Ion Trap MS</i>	Gavin E. Reid <i>Michigan State University</i>
<i>LC/MS Related Topics</i>	J. Will Thompson <i>Duke University</i>
<i>Metabolomics</i>	Eric Milgram <i>Applied Scientific Consulting</i> Anders Nordstrom <i>Karolinska Institutet</i>
<i>Metal Ion Coordination Chemistry</i>	Victor Ryzkov <i>Northern Illinois University.</i>
<i>Peptide Fragmentation</i>	Michael J. Van Stipdonk <i>Wichita State University</i> Bella Paizs <i>DKFZ Heidelberg</i>
<i>Pharmaceuticals</i>	Chris Petucci <i>Wyeth Research</i> Carmen T. Santasania <i>Supelco/Sigma Aldrich</i>
<i>Polymeric Materials</i>	Michael J. Polce <i>Lubrizol Advanced Materials</i>
<i>Regulated Bioanalysis</i>	Fabio Garofolo <i>Algorithme Pharma Inc.</i>
<i>Young Mass Spectrometrists</i>	Connell Cunningham <i>Rohm and Haas Company</i>

**COMMITTEES**

<i>Asilomar Conference</i>	Robert B. Cody, Chair Veronica M. Bierbaum Facundo Fernandez Barbara S. Larsen
<i>Audit</i>	Gary J. Van Berkel John R. Eyler Susan Richardson
<i>Corporate Liaison</i>	Gary Siuzdak, Chair Barbara S. Larsen Michael Sabatino, LEAP Selena Larkin (BioTrove) Carol Harp (Agilent) Jon Speak (Applied Biosystems) Wendy Weise (Thermo Scientific) Heather Scollins (Advion)
<i>Education</i>	John H. Callahan, Chair Rong Wang Richard Vachet Ileana Cristea Christine Hughie
<i>Archivist</i>	Michael A. Grayson
<i>Measurements &amp; Standards</i>	Stephen E. Stein, Chair Kenneth L. Busch Eric Deutsch Jonathan Amster David Stranz
<i>Nominating</i>	Robert Cotter Joseph Zaia Vicki H. Wysocki Leesa Deterding Mike S. Lee
<i>Publications</i>	Mary T. Rodgers, Chair David V. Dearden Donald H. Chace Scott Gronert Nadja Cech Michael L. Gross (Ex Officio)
<i>Sanibel Conference</i>	Ljiljana Pasa Tolic, Chair David J. Burinsky Touradj Solouki Stephen E. Stein
<i>Web Site Design</i>	John R. Engen, Chair Mary T. Rodgers John H. Callahan Susan T. Weintraub Richard A. Yost

## AWARD FOR A DISTINGUISHED CONTRIBUTION IN MASS SPECTROMETRY

Award Lecture: 4:45 pm, Monday, Exhibit Hall C

### 2009 Recipients: Simon J. Gaskell and Vicki H. Wysocki



In a series of publications beginning in 1992 a group led by **Simon J. Gaskell** and another led by **Vicki H. Wysocki** contributed in parallel to the development of the “Mobile Proton Model.” This model unified diverse observations of real-world collision-induced peptide fragmentation so widely used for peptide sequencing and protein inference. Based on fundamental thermodynamic considerations and many observations, this has become the accepted model for understanding peptide fragmentation spectra. The model provides both very specific predictions concerning fragmentation and enables spectra to be interpreted and simulated. It now serves as a foundation both for increased sophistication in database search algorithms, as well as the basis on which many other researchers in the area of peptide mass spectrometry to build more advanced models of fragmentation.



Professor Gaskell is Director of the Michael Barber Centre for Mass Spectrometry and Vice President (Research), University of Manchester.

Vicki Wysocki is Professor with the Department of Chemistry, the Department of Biochemistry and Molecular Biophysics and the BIOS Institute for Collaborative Research at the University of Arizona.

## THE BIEMANN MEDAL

Award Lecture: 4:45 pm, Tuesday, Exhibit Hall C

### 2009 Recipient: Neil L. Kelleher



Top-down proteomics is now a household word among ASMS members, and this is largely due to Neil L. Kelleher, who started top-down analysis and has vigorously promoted this technology starting as a graduate student and continuing today. Unlike the bottom-up approach that starts with protein fragments, top-down proteomics preserves information concerning protein isoforms and the interplay between posttranslational modifications by isolating and fragmenting whole proteins in the gas phase. The analytical software he has developed, ProSight PTM, provides the charge- and isotope-deconvolution needed for top-down proteomics data and is used by over 450 laboratories worldwide. Dr. Kelleher has applied top-down analysis to a number of important biological systems, such as the protein component of human chromatin and determination of the post-translational dynamics of histone H4 through the cell cycle. His laboratory is a major driving force in the extension of tandem mass spectrometry to high mass ions, generating over 130 papers in peer-reviewed journals and already leading to a number of major awards.

Neil Kelleher is Professor of Chemistry at the University of Illinois (Urbana-Champaign).

## RON HITES AWARD FOR AN OUTSTANDING RESEARCH PUBLICATION IN JASMS

Award Presentation: 4:45 pm, Wednesday, Exhibit Hall C

The Ron Hites Award recognizes a high quality presentation of outstanding original research. Selection is based on a paper’s innovative aspects, technical quality, likely stimulation of future research, likely impact on future applications, and quality of presentation. The Award is named in honor of Professor Ronald A. Hites of Indiana University, who led the creation of *JASMS* in 1988 while president of ASMS.



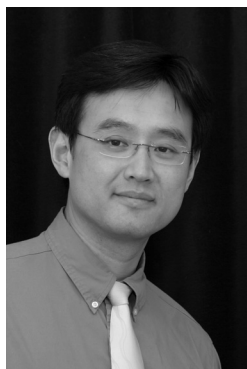
The inaugural award is presented to **Dr. Alison E. Ashcroft** for the article *Monitoring Copopulated Conformational States during Protein Folding Events Using Electrospray Ionization-Ion Mobility Spectrometry-Mass Spectrometry*, David P. Smith, Kevin Giles, Robert H. Bateman, Sheena E. Radford, Alison E. Ashcroft, *JASMS* **2007**, *18*, 2180-2190. Dr Ashcroft is Manager of the Mass Spectrometry Facility in the Astbury Centre for Structural Molecular Biology, Leeds University.





## RESEARCH AWARDS

Sponsored by  
**Thermo Scientific**



**Zheng Ouyang**  
*Purdue University*

Sponsored by  
**Waters Corporation**



**Benjamin A. Garcia**  
*Princeton University*

---

### CALL FOR 2010 RESEARCH AWARD PROPOSALS

---

- OBJECTIVE** To promote academic research by young scientists in mass spectrometry.
- ELIGIBILITY** Open to academic scientists within four years of joining the tenure track faculty or equivalent in a North American university. Applicants may not have previously received an award under this program.
- APPLICATION** Applicants should submit **SEVEN** collated sets of the following
1. One-page fiscal proposal and justification
  2. List of current research support
  3. Three-page proposal, including references, figures, etc.
  4. *Curriculum vitae*
  5. Two letters of recommendation (may be sent directly to ASMS)
- DEADLINE** Application materials, including letters of recommendation, must be received in the ASMS office by November 30. Send to:
- ASMS, 2019 Galisteo Street, Building I-1, Santa Fe, NM 87505
- FISCAL** The awards of \$25,000 each will be made to a university in the name of the selected individual and for the researcher's exclusive use. In accepting this award, the institution will agree not to charge overhead on the funds.
- INFORMATION** Contact ASMS. Telephone: (505) 989-4517 • Fax: (505) 989-1073 • [office@asms.org](mailto:office@asms.org)

#### **RICHARD A. SCHAEFFER MEMORIAL FUND**

The Richard A. Schaeffer Memorial Fund provides student travel grants of approximately \$750 each. Information and applications are available at [www.richardschaeffer.org](http://www.richardschaeffer.org).

#### **Recipients of the 2009 Grants for ASMS Conference Travel**

Ryan Dain, *Wichita State University*  
Oscar Martinez, Jr, *University of Colorado*  
Kevin McAvey, *University of New Orleans*

#### **GREATER BOSTON MASS SPECTROMETRY DISCUSSION GROUP (GBMSDG) STUDENT TRAVEL AWARDS**

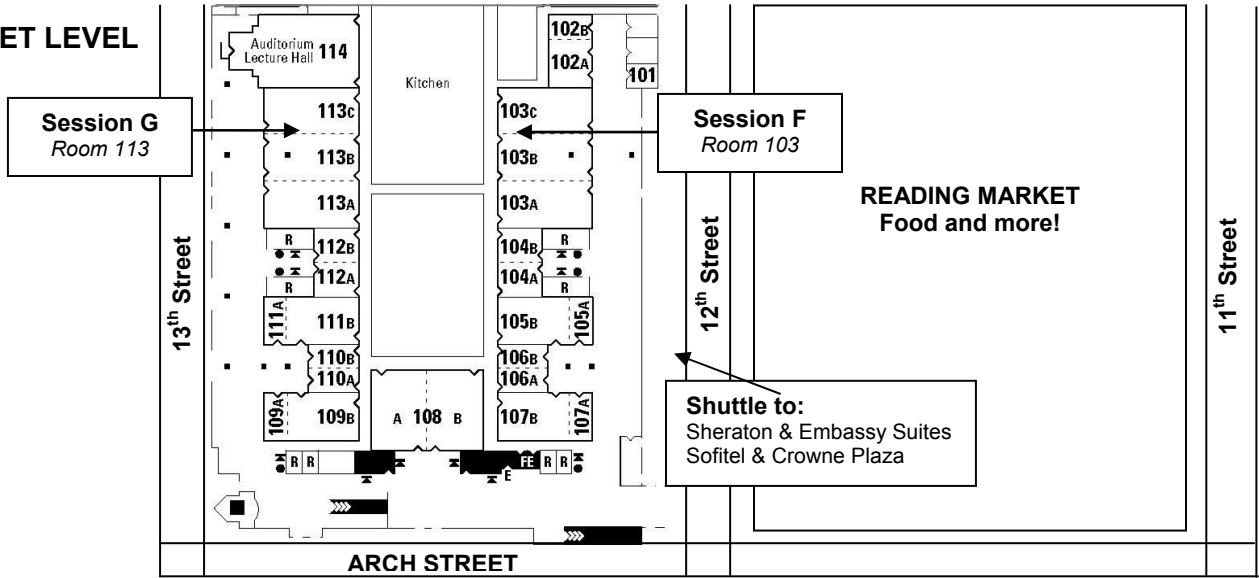
Awards are approximately \$1,000 each. Information and application details may be found at [www.gbmsdg.org](http://www.gbmsdg.org).

#### **2009 Recipients**

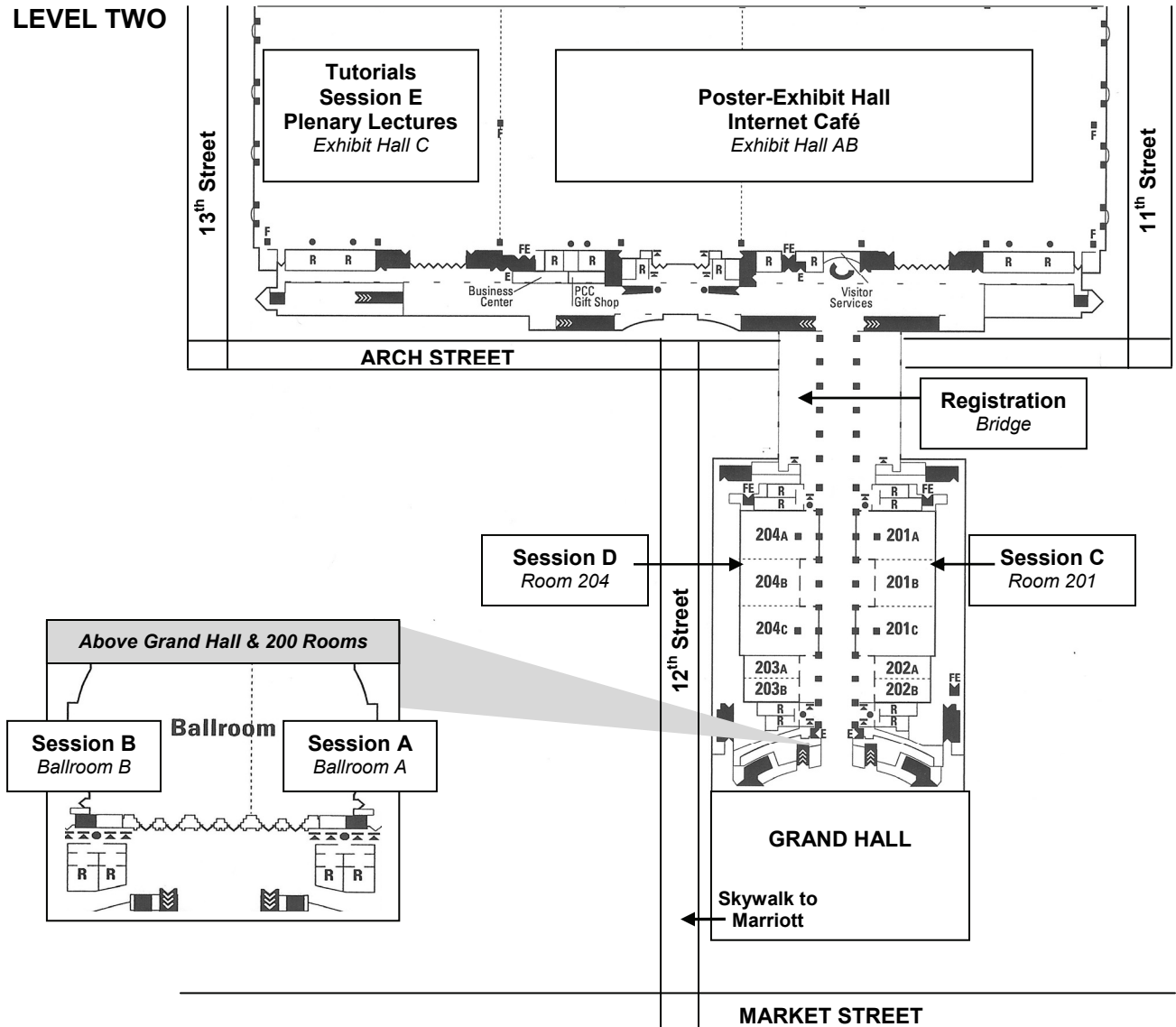
Jennifer S. Cobb, *Brandeis University*  
Gregory O. Staples, *Boston University School of Medicine*

CONVENTION CENTER FLOOR PLAN

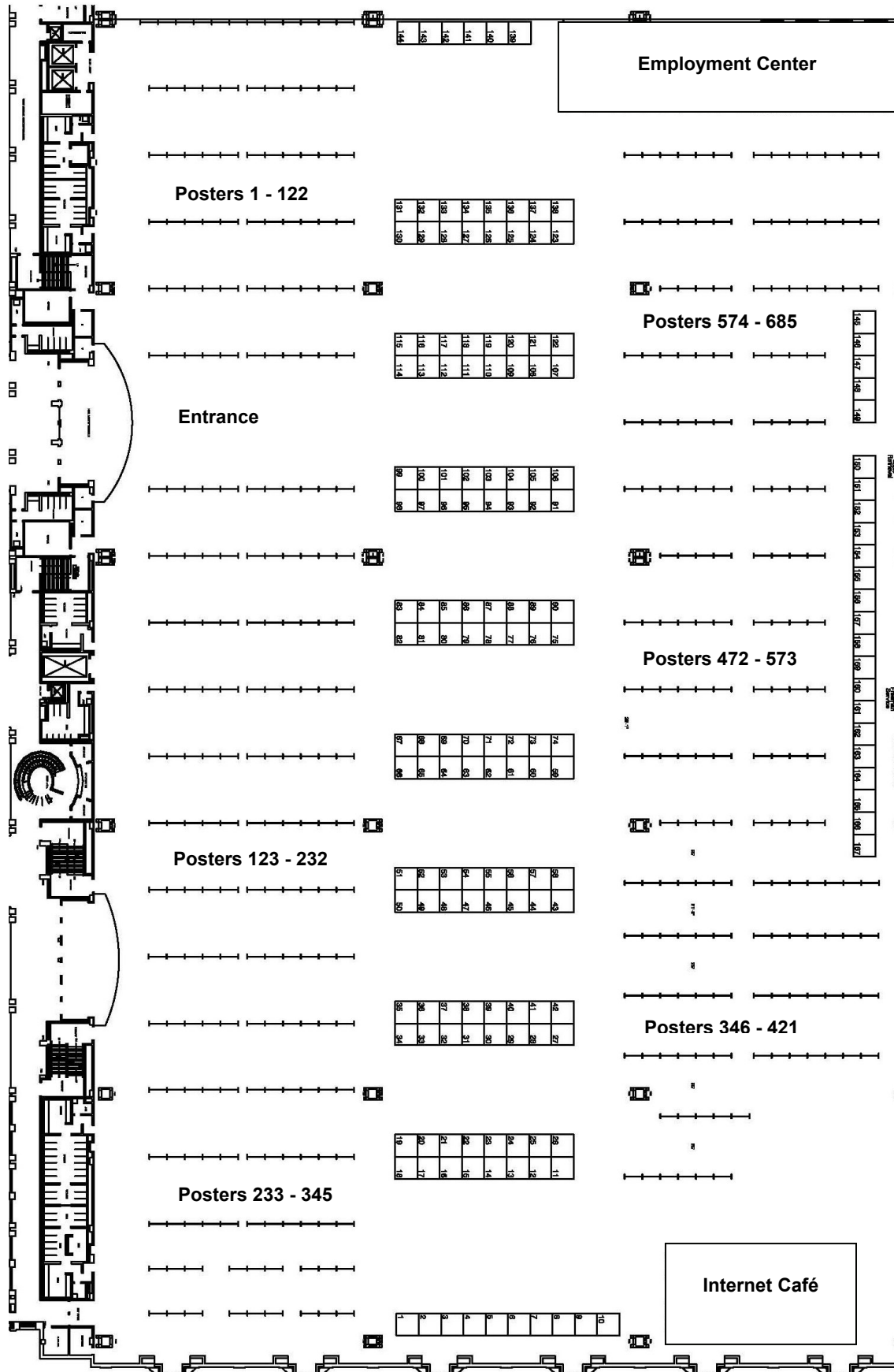
STREET LEVEL



LEVEL TWO



POSTER / EXHIBIT HALL



**ASMS CORPORATE MEMBERS**

COMPANY	BOOTH/POSTER/LIBRARY	MARRIOTT HOTEL HOSPITALITY SUITE
1st Detect Corporation	149	
ACS Publications	Tabletop	
Advanced Chemistry Development	78	
Advion	21/Poster	Salon I, 5 <sup>th</sup> floor
Agela Technologies, Inc.	132/Poster	
Agilent Technologies	114/Poster	Salon H, 5 <sup>th</sup> floor
AIM Research Company	70	
Alcatel Vacuum Products, Inc.	35	
Alpha Omega Technologies	Poster	
Alturas Analytics, Inc.	29	
American Laboratory	Tabletop	
American Pharmaceutical Review	Tabletop	
Analytica of Branford		
Analytical Sales & Services	75/Poster	
Analytical West, Inc.	167	
Antec (USA)	36/Poster	
Applied Biosystems/MDS Analytical Technologies	106	Salons B-F, 5 <sup>th</sup> floor
Applied Kilovolts	93/Poster	
Ardara Technologies L.P.	140/Poster	
Beckman Coulter, Inc.	38	
Bertin Technologies	17/Poster	
BioChemed Services	7	
Biocrates Life Sciences AG	121/Poster	
Bioinformatics Solutions Inc.	64	
BioInquire, LLC	86/Poster	
Bio-Rad Laboratories	135/Poster	
Bioreclamation	74	
Biotage	163	
BioTechniques	Tabletop	
BioTrove	66	Salon J, 5 <sup>th</sup> floor
Brandenburg Limited	Poster	
Bruker Daltonics	68	Franklin 7-8, 4 <sup>th</sup> floor
Caliper Life Sciences	25	
Cambridge Isotope Laboratories	53	
Canadian Life Science	102	
caprotec bioanalytics GmbH	94/Poster	
Cell Biosciences Inc.	165/Poster	
CEM Corporation	31/Poster	
Cerno Bioscience	26	
CETAC Technologies	11/Poster	
Chem-Space Associates	46	
Chemyx, Inc.	52/Poster	
Chromsys LLC	111	
Chromsystems GmbH	151/Poster	
CovalX	59	
Covance		
Covaris, Inc.	90	
CSS Analytical Co., Inc.	144	
CVC Technologies, Inc.	65/Poster	Franklin 6, 4 <sup>th</sup> floor
Denator AB	Poster	
Detector Technology, Inc.	145	
Dionex Corporation	34/Poster	
Drug Discovery News	159	
Edwards	88	
Eksigent Technologies	138	Franklin 1, 4 <sup>th</sup> floor
Elsevier	Tabletop	
EMD Chemicals	6/Poster	
Enthalpy Analytical, Inc.	118	
EquipNet	155	
ETP Electron Multipliers	Poster	
Excellims Corporation	62	
Expression Pathology, Inc.	136/Poster	
Extrel CMS	123/Poster	

COMPANY	BOOTH/POSTER/LIBRARY	MARRIOTT HOTEL HOSPITALITY SUITE
Gel Company Inc.	73	
Genedata, Inc.	133/Poster	Franklin 9, 4 <sup>th</sup> floor
Genetic Engineering & Biotechnology News	Tabletop	
Geneva Bioinformatics	10/Poster	
Genevac	157	
Genomics	97	
Genome Web, LLC	Tabletop	
GenTech Scientific Inc.	14	
Gerstel, Inc.	126/Poster	
GL Sciences	108	
Glygen Corp.	67/Poster	
Hamamatsu Corporation	142/Poster	
Harvard Apparatus	89	
Hitachi High Technologies, Inc.	110/Poster	
Honeywell Burdick & Jackson		
Horizon Technology, Inc.	32	
Hudson Surface Technology	28/Poster	
ICX Technologies	58/Poster	
IDEX Health & Science	104/Poster	
Indigo Biosystems, Inc.	141	
Innovative Vacuum Solutions		
Institute for Systems Biology	152	
INTAVIS, Inc.	22	
International Equipment Trading Ltd.	116	
International Labmate	Tabletop	
Ion Signature Technology	54	
Ionic Analytik GMBH	55/Poster	
Ionics Mass Spectrometry Group, Inc.	18/Poster	
IonSense, Inc.	81/Poster	
Ionwerks, Inc.	154/Poster	
IsoSciences, LLC	3	
ITT Power Solutions	61	
JASCO	23	
Jaytee Biosciences Ltd	128	
JEOL USA, Inc.	95	
Labbyte		
LC Resources	Poster	
LEAP Technologies	113/Poster	Franklin 11, 4 <sup>th</sup> floor
LECO Corporation	131/Poster	Franklin 5, 4 <sup>th</sup> floor
Lhasa Limited	125/Poster	
Linden CMS	9	
M&M Mass Spec Consulting	109	
Mac-Mod Analytical, Inc.	164/Poster	
MassTech, Inc.	103	
Matrix Science Ltd.	19	
McKinley Scientific, LLC	91	
MeCour Temperature Control	42	
MestreLab Research	5	
Michrom Bioresources, Inc.	33	
MicroLiter Analytical Supplies, Inc.	60	
MicroSolv Technology Corp.	8	
MSI TOKYO, Ltd.	120	
mSPEC Group	48	
Nanoliter, LLC	124/Poster	
Nanoxis	153/Poster	
Nest Group, The	Poster	
New Objective, Inc.	100/Poster	
NIST	Poster	
Nonlinear Dynamics	45/Poster	
Novatia, LLC	143	
NuSep	137	
Oerlikon Leybold Vacuum	16	
OI Analytical	130	
Omni Enclosures	92	
Omni International	129/Poster	



COMPANY	BOOTH/POSTER/LIBRARY	MARRIOTT HOTEL HOSPITALITY SUITE
Optimize Technologies, Inc.	117	
Orochem Technologies Inc.	57	
Pall Life Sciences	Poster	
Parker Hannifin	148	
Partek, Inc.	147	
PEAK Scientific Instruments	51	
PerkinElmer, Inc.	40/Poster	Franklin 2, 4 <sup>th</sup> floor
Pfeiffer Vacuum	69/Poster	
Phenomenex	71	
Phoenix S and T, Inc	87	
PHOTONIS	139	
Physical Electronics	80	
Phytronix Technologies	150	
PPD	166	
Precision Instruments	72/Poster	
Pressure BioSciences	156/Poster	
Promega Corporation	63	
Prosolia, Inc	127	
Prospect Biosystems		
Protea Biosciences, Inc.	2/Poster	
Protein Discovery, Inc.	20/Poster	
Protein Forest, Inc.	47	Franklin 10, 4 <sup>th</sup> floor
Proteome Software, Inc	27	
Proxeon A/S	12	Franklin 3, 4 <sup>th</sup> floor
Receptors, LLC	96	
Research Scientific Services	79	
Resolution Analytical Systems	13	
RMI Laboratories LLC	161	
Rosetta Biosoftware	112/Poster	Franklin 4, 4 <sup>th</sup> floor
Sage-N Research, Inc.	115	
Scientific Instrument Services	82/Poster	
Select Science, Ltd	15	
Sepax Technologies, Inc.	158	
SGE Analytical Science	84	
Shimadzu	101/Poster	Salons C-D, 5 <sup>th</sup> floor
Shiseido Co., Ltd.		
Shodex	44	
Sierra Analytics, Inc.	4	
Sigma-Aldrich	134	
Silvertone Sciences	107	
Single Organism Software, Inc.	122/Poster	
Spark Holland	43	
SpectralWorks Ltd.	41	
Spectroscopy Magazine	39	
Spellman High Voltage Electronics Corp.	24	
SSI /Lab Alliance	160	
SunChrom GmbH	37	
Syagen Technology, Inc.	77/Poster	
Tandem Labs		
Thermo Scientific	99	Salon G-K, 5 <sup>th</sup> floor
Tomtec, Inc	105	
Torion Technologies, Inc.	49/Poster	
Tosoh Bioscience LLC	119/Poster	
UVP, LLC	50	
Varian, Inc.	56/Poster	Franklin 12-13, 4 <sup>th</sup> floor
VIC Instruments	Poster	
VICI Valco Instruments Co.	146	
VRS	85	
Waters Corporation	83	Salon E, 5 <sup>th</sup> floor
Wiley-Blackwell	30	
Xenotech LLC	1	
York Bioanalytical Solutions	76	
ZefSci	98	

### MARRIOTT HOTEL HOSPITALITY SUITES

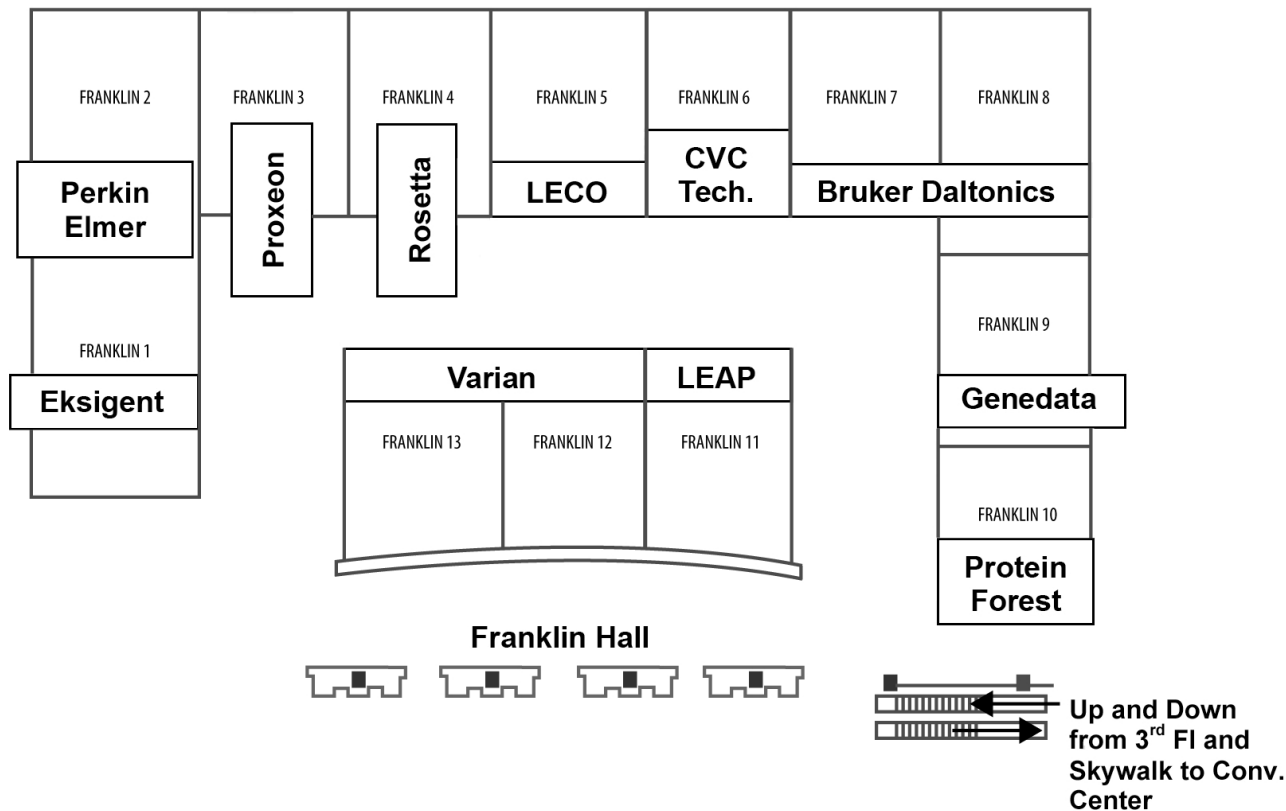
Hospitality suites may be open 6:00 – 11:30 pm, Monday through Wednesday. Suites are located in the Marriott Hotel. Suite opening hours may vary. ASMS will provide limited shuttle bus transportation from the Marriott as follows:

Route 1: Holiday Inn Express, Sofitel, Crowne Plaza

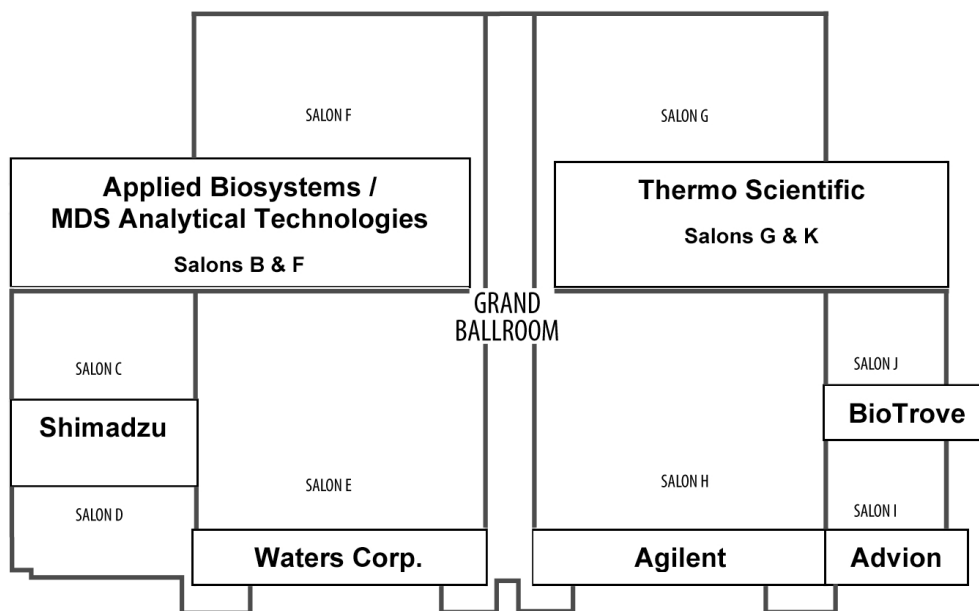
Route 2: Embassy Suites, Sheraton

Last buses depart the Marriott at 10:00 pm.

#### FOURTH FLOOR, MARRIOTT HOTEL



#### FIFTH FLOOR, MARRIOTT HOTEL



## PROGRAM ACKNOWLEDGEMENTS



**Scott A. McLuckey**  
*Vice President for Programs*

### STUDENT ASSISTANTS

Graduate students are assisting with all aspects of the conference, including registration, oral and poster sessions, and the employment center. The students each receive a stipend to assist with their conference expenses. Elsevier Science has generously underwritten the student stipends.

### PROGRAM COMMITTEE

---

David J. Burinsky  
John H. Callahan  
Robert Cole  
Jeffrey DeGrasse  
Brian Eckenrode  
Daniele Fabris  
Russell Grant  
Murray V. Johnston

Hee-Yong Kim  
Charles N. McEwen  
Melinda McFarland  
Scott A. McLuckey  
Yehia Mechref  
Steve Musser  
Zheng Ouyang  
Ragu Ramanathan

Mark M. Ross  
Kevin Schefcheck  
Peter Scholl  
Andy Tao  
William E. Wallace  
Amina S. Woods  
Yu Xia  
Alfred L. Yergey

### SESSION CHAIRS

---

Bradley L. Ackermann  
Sabine Becker  
Kathrin Breuker  
Jennifer Brodbelt  
Kathleen Cox  
Ileana M. Cristea  
Enrico Davoli  
Plamen A. Demirev  
Heather Desaire  
Facundo Fernandez  
Michael C. Fitzgerald  
David B. Friedman  
Valerie Gabelica  
Douglas E. Goeringer  
Pat Griffin  
Scott Grimm  
Chungang Gu  
Kristina Hakansson

Sonja Hess  
Yunsheng Hsieh  
Ryan R. Julian  
Igor A. Kaltashov  
Hilkka Kenttamaa  
John Klassen  
Julie A. Leary  
Jeehuin K. Lee  
Xing-Fang Li  
Elaine M. Marzluff  
John A. McLean  
Arthur Moseley  
Carol Nilsson  
Robert J. Noll  
Zheng Ouyang  
Pavel Pevzner  
Gavin E. Reid  
Michael Reily  
Mary T. Rodgers

Ryan P. Rodgers  
Jason Rouse  
Ravinder J. Singh  
Gary Siuzdak  
Michael R. Sussman  
Sarah Trimpin  
Beatrix Ueberheide  
Steve E. Unger  
Gary J. Van Berkel  
Akos Vertes  
Susan T. Weintraub  
Chrys Wesdemiotis  
Evan R. Williams  
Christine Wu  
Jing-Tao Wu  
Vicki H. Wysocki  
Graeme Young  
Alla Zelenyuk  
Mingshe Zhu

### WORKSHOP AND INTEREST GROUP MEETING ORGANIZERS

---

Michael T. Cheng  
Nigel Clarke  
Lucinda Cohen  
Connell Cunningham  
Enrico Davoli  
Plamen A. Demirev  
Heather Desaire  
John R. Engen  
Daniele Fabris  
Valerie Gabelica

Fabio Garofolo  
Russell Grant  
David N. Heller  
Robert L. Hettich  
Richard W. Kondrat  
Elaine M. Marzluff  
John A. McLean  
Yehia Mechref  
Eric Milgram  
Anders Nordstrom

Bela Paizs  
Chris Petucci  
Michael J. Polce  
Ragu Ramanathan  
Michelle Reyzor  
Victor Ryzhov  
Carmen T. Santasania  
J. Will Thompson  
Yury O. Tsybin  
Michael J. Van Stipdonk

**CONFERENCE PROGRAM OVERVIEW**

<b>SAT</b>	9:00 am - 4:30 pm	<b>SHORT COURSES</b>
	2:00 - 5:00 pm	<b>REGISTRATION</b>
<b>SUNDAY</b>	9:00 am - 4:30 pm	<b>SHORT COURSES</b>
	10:00 am - 8:00 pm	<b>REGISTRATION</b>
	5:00 - 6:30 pm	<b>TUTORIAL LECTURES, Exhibit Hall C</b> <ul style="list-style-type: none"> <li>• The Art of Communication in the Sciences; <b>Willard W. Harrison</b>, <i>University of Florida</i></li> <li>• Ion Mobility in Mass Spectrometry; <b>David E. Clemmer</b>, <i>Indiana University</i></li> </ul>
	6:45 - 7:45 pm	<b>OPENING and PLENARY LECTURE, Exhibit Hall C</b> Biofuels and Global Climate Change; <b>Jerald L. Schnoor</b> , <i>University of Iowa</i>
	7:45 - 9:30 pm	<b>RECEPTION IN THE EXHIBIT HALL, Exhibit Hall AB</b>
<b>MONDAY</b>	8:30 - 10:30 am	<b>ORAL SESSIONS</b> <ul style="list-style-type: none"> <li>• MOA: <b>Mass Spectrometry of Lipids</b>, <i>Ballroom A</i></li> <li>• MOB: <b>Chromatography-Mass Spectrometry Approaches to Increase Throughput in Discovery PK Assays</b>, <i>Ballroom B</i></li> <li>• MOC: <b>Characterizing Protein-Protein Interactions</b>, <i>Room 201</i></li> <li>• MOD: <b>Developments in Ion Mobility Instrumentation and Theory</b>, <i>Room 204</i></li> <li>• MOE: <b>Quantitative Bottom Up Proteomics</b>, <i>Exhibit Hall C</i></li> <li>• MOF: <b>Fundamentals and Novel Applications of Ion/Molecule Reactions</b>, <i>Room 103</i></li> <li>• MOG: <b>Frontiers in Elemental Mass Spectrometry</b>, <i>Room 113</i></li> </ul>
	10:30 am - 2:30 pm	<b>POSTER SESSION AND EXHIBITS, Exhibit Hall AB</b>
	2:30 - 4:30 pm	<b>ORAL SESSIONS</b> <ul style="list-style-type: none"> <li>• MOA: <b>MS and Accelerator MS for Human Microdosing and Metabolism Studies</b>, <i>Ballroom A</i></li> <li>• MOB: <b>Mass Spectrometry and Clinical Applications</b>, <i>Ballroom B</i></li> <li>• MOC: <b>Tandem MS of Whole Proteins and Protein Complexes</b>, <i>Room 201</i></li> <li>• MOD: <b>Developments in Ion Trapping Instrumentation</b>, <i>Room 204</i></li> <li>• MOE: <b>Biomarker Discovery – Proteins</b>, <i>Exhibit Hall C</i></li> <li>• MOF: <b>Ion Spectroscopy</b>, <i>Room 103</i></li> <li>• MOG: <b>Mass Spectrometry in Environmental Toxicology</b>, <i>Room 113</i></li> </ul>
	4:45 - 5:30 pm	<b>AWARD LECTURE: Exhibit Hall C</b> <b>Recipient of the Award for a Distinguished Contribution in Mass Spectrometry</b>
	5:45 - 7:00 pm	<b>WORKSHOPS, see page 18</b>
	6:00 - 11:30pm	<b>CORPORATE HOSPITALITY SUITES, Marriott Hotel</b>
	<b>TUESDAY</b>	8:30 - 10:30 am
10:30 am - 2:30 pm		<b>POSTER SESSION AND EXHIBITS, Exhibit Hall AB</b>
2:30 - 4:30 pm		<b>ORAL SESSIONS</b> <ul style="list-style-type: none"> <li>• TOA: <b>LC-MS Assessment of Human Metabolism in Compliance with MIST Guidance</b>, <i>Ballroom A</i></li> <li>• TOB: <b>Small Molecule Biomarkers</b>, <i>Ballroom B</i></li> <li>• TOC: <b>Advances in the Characterization of Glycoproteins</b>, <i>Room 201</i></li> <li>• TOD: <b>Novel Developments in Mass Spectrometry Instrumentation: Analyzers, Detectors, Tandem Instruments</b>, <i>Room 204</i></li> <li>• TOE: <b>The Role of Mass Spectrometry in Understanding Cellular Pathways</b>, <i>Exhibit Hall C</i></li> <li>• TOF: <b>Clusters/Complexes/Solvated Ions</b>, <i>Room 103</i></li> <li>• TOG: <b>HDX for Protein Structure and Folding</b>, <i>Room 113</i></li> </ul>
4:45 - 5:30 pm		Research Award Presentations <b>AWARD LECTURE, Exhibit Hall C; Recipient of the Biemann Medal</b>
5:45 - 7:00 pm		<b>WORKSHOPS, see page 19</b>
6:00 - 11:30pm		<b>CORPORATE HOSPITALITY SUITES, Marriott Hotel</b>

**CONFERENCE PROGRAM OVERVIEW**

<b>WEDNESDAY</b>	8:30 - 10:30 am	<p><b>ORAL SESSIONS</b></p> <ul style="list-style-type: none"> <li>• WOA: <b>Emerging MS Techniques for Drugs and Metabolite Imaging in Tissues</b>, <i>Ballroom A</i></li> <li>• WOB: <b>Advances in Metabolomics</b>, <i>Ballroom B</i></li> <li>• WOC: <b>Novel Strategies for Gas Phase Ion Structural Characterization</b>, <i>Room 201</i></li> <li>• WOD: <b>Applications of Ion Mobility Spectrometry</b>, <i>Room 204</i></li> <li>• WOE: <b>New Developments in Bioinformatics</b>, <i>Exhibit Hall C</i></li> <li>• WOF: <b>MS of Polymers/Materials I: Structures and Properties</b>, <i>Room 103</i></li> <li>• WOG: <b>Compositional Analysis of Petroleum by MS</b>, <i>Room 113</i></li> </ul>
	10:30 am - 2:30 pm	<b>POSTER SESSION AND EXHIBITS</b> , <i>Exhibit Hall AB</i>
	2:30 - 4:30 pm	<p><b>ORAL SESSIONS</b></p> <ul style="list-style-type: none"> <li>• WOA: <b>Polypeptide Ion Fragmentation: Theory and Experiment</b>, <i>Ballroom A</i></li> <li>• WOB: <b>Application of Direct/Open Air Ionization Techniques for Quantitation of Drugs</b>, <i>Ballroom B</i></li> <li>• WOC: <b>Advances in Proteoglycan and Carbohydrate Analysis</b>, <i>Room 201</i></li> <li>• WOD: <b>Developments in Imaging Instrumentation</b>, <i>Room 204</i></li> <li>• WOE: <b>Characterization of Membrane Proteins</b>, <i>Exhibit Hall C</i></li> <li>• WOF: <b>MS of Polymers/Materials II: HPLC and Ion Mobility Separation</b>, <i>Room 103</i></li> <li>• WOG: <b>MS and Emerging Environmental Contaminants</b>, <i>Room 113</i></li> </ul>
	4:45 - 5:30 pm	<b>ASMS MEETING</b> , <i>Exhibit Hall C</i>
	5:45 - 7:00 pm	<b>WORKSHOPS</b> , <i>see page 20</i>
	6:00 – 11:30 pm	<b>CORPORATE HOSPITALITY SUITES</b> , <i>Marriott Hotel</i>

<b>THURSDAY</b>	8:30 - 10:30 am	<p><b>ORAL SESSIONS</b></p> <ul style="list-style-type: none"> <li>• ThOA: <b>MS of Peptide and Protein Drugs</b>, <i>Ballroom A</i></li> <li>• ThOB: <b>Novel LC-MS Techniques for Regulated Bioanalysis of Drugs</b>, <i>Ballroom B</i></li> <li>• ThOC: <b>Mass Spectrometry at the Interface between Chemistry and Biology</b>, <i>Room 201</i></li> <li>• ThOD: <b>Fundamentals and Instrumentation: Ion/Electron and Ion/Ion Interactions</b>, <i>Room 204</i></li> <li>• ThOE: <b>Advances in Global Phosphoproteins</b>, <i>Exhibit Hall C</i></li> <li>• ThOF: <b>Nucleic Acid MS</b>, <i>Room 103</i></li> <li>• ThOG: <b>Aerosol MS</b>, <i>Room 113</i></li> </ul>
	10:30 am - 2:30 pm	<b>POSTER SESSION AND EXHIBITS</b> , <i>Exhibit Hall AB</i>
	2:30 - 4:30 pm	<p><b>ORAL SESSIONS</b></p> <ul style="list-style-type: none"> <li>• ThOA: <b>Imaging Applications with MS</b>, <i>Ballroom A</i></li> <li>• ThOB: <b>ADME Analysis by Laser Desorption and other New MS Techniques</b>, <i>Ballroom B</i></li> <li>• ThOC: <b>New Developments in Ionization</b>, <i>Room 201</i></li> <li>• ThOD: <b>ETD/ECD/EDD Applications</b>, <i>Room 204</i></li> <li>• ThOE: <b>Characterizing PTMs</b>, <i>Exhibit Hall C</i></li> <li>• ThOF: <b>Miniaturization of the Mass Spectrometer</b>, <i>Room 103</i></li> <li>• ThOG: <b>MS and Nano-Science/Nano-Technology</b>, <i>Room 113</i></li> </ul>
	4:45 - 5:30 pm	<b>PLENARY LECTURE</b> , <i>Exhibit Hall C</i> Fostering Creativity; <b>Richard N. Zare</b> , <i>Stanford University</i>
	6:00 - 9:00 pm	<b>CONFERENCE CLOSING EVENT</b> , <i>National Constitution Center (Ticket required)</i>



## MONDAY WORKSHOPS, 5:45 – 7:00 PM

Workshops are organized on topics of special interest with a focus on new technology.  
There is no additional charge for workshops – they are open to all as a forum for discussion.  
There are light refreshments provided on the street level where workshops are located.

### **Tips and Tricks for the MS Analysis of Nucleic Acids and their Assemblies**

*DNA/RNA Interest Group*

Daniele Fabris and Valerie Gabelica, presiding

#### **Room 108 B**

The workshop will cover the practical aspects of MS analysis of nucleic acids by MALDI and ESI. A panel of experts will provide tips on how to overcome the challenges posed by the characterization of covalent and non-covalent adducts and will address questions raised by the audience.

### **Integrated Quantitative and Qualitative LC-MS Approaches: Revisiting with New Technologies**

*Drug Metabolism and Pharmacokinetics Interest Group*

Lucinda Cohen and Ragu Ramanathan, presiding

#### **Room 113 ABC**

Workshop will include a panel discussion on the utility of high resolution and fast scanning mass spectrometer based approaches for integrating quantitative and qualitative LC-MS approaches for assessing DMPK properties. LC-MS approaches to acquire metabolite information early in the discovery program as well as in early clinical studies will be discussed by industry leaders. Time for lively discussion is included. Meeting will open with brief discussion on DMPK Interest Group impact on 2009 conference program and request for suggestions on 2010 session, and workshop topics. New DMPK-IG officers will also be elected at this meeting.

### **FTMS**

*FTMS Interest Group*

Yury O. Tsybin, presiding

#### **Room 103 ABC**

In-depth understanding of ion behavior in traps and induced current generation principles are the basis of recent improvements of high resolution mass spectrometry performance. We will discuss these and other advances in FTMS instrumentation and fundamentals, as well as current limitations, in a workshop format meeting. In addition, last minute hot topics are welcome to the stage in the usual format of short presentation.

### **Metal Ions in the Gas Phase**

*Metal Ion Coordination Chemistry Interest Group*

Victor Ryzhov, presiding

#### **Room 111 AB**

This workshop will encompass various topics involving gas-phase metal ions (bare and coordinated), including challenges in metal ion formation, their reactivity, structure and energetics. Sample topics include: Thermochemistry of metal-ligand binding, structure of metal complexes, metal ion reactivity, role of metal ions in gas-phase catalysis. Discussion will also be held on the advantages of using metal ions to enhance/influence dissociation of biomolecules. Approaches complementary to the experimental mass spectrometry techniques (such as theoretical calculations and ion spectroscopy) will be presented as well.

### **Glycomics and Glycoproteomics: How Challenging?**

Yehia Mechref, presiding

#### **Room 105 AB**

Structural characterization of biologically important oligosaccharides has been increasingly emphasized, since it appears that most of the processes in the living cells are associated with different forms of carbohydrate interactions. Glycosylation of proteins and the interactions of glycans and other biomolecular entities touch on many areas of modern biology and medicine. Any alterations in a glycan composition or structure could potentially be either a cause or consequential attributes of the biochemical in balance that is recognized as a “disease”. Although the development of different structural tools (the majority of which based on mass spectrometry) has somewhat paved the way to a better understanding of oligosaccharide roles in signaling and regulations between various cells, the inherent difficulties of structural analysis in glycobiology still exist. These difficulties mainly originate from (a) structural complexity of glycoconjugates featuring various forms of branching and other types of isomerism; (b) microheterogeneities at the sites of glycosylation; (c) extensive occurrence of glycosylation in eukaryotic proteins; and (d) distribution of glycosylated proteins in different parts of living cells. This workshop will highlight these challenging aspects and describe the state-of-the-art approaches and their applications in biology and medicine.

### **Imaging 101: Getting Started and Getting Better**

*Imaging MS Interest Group*

Michelle Reyzer, presiding

#### **Room 108 A**

Imaging mass spectrometry is a rapidly growing technology with many applications, including pharmaceutical and ADME studies, lipidomics, and protein biomarker discovery. This inaugural workshop of the Imaging MS interest group will bring together experienced scientists and anyone who would like to add imaging capabilities to their analytical toolbox. There will be several short (3-5 slides) presentations focusing on helpful hints for obtaining good quality images from various samples, followed by an informal discussion.

### **Biofuel Production, Storage, and Use:**

#### **Are We Ready for the Challenge?**

*Hydrocarbon & Chemical Process Interest Group*

Michael T. Cheng, presiding

#### **Room 109 AB**

As world demand for energy is increasing, particularly liquid transportation fuels, it is necessary to seek out alternative sources. In addition to petroleum, we will discuss the problems associated with analyses of fuel and intermediates derived from sources such as coal, shale, tar sand, and biomass.

## TUESDAY WORKSHOPS, 5:45 – 7:00 PM

Workshops are organized on topics of special interest with a focus on new technology. There is no additional charge for workshops – they are open to all as a forum for discussion. There are light refreshments provided on the street level where workshops are located.

### **Mass Spectrometry Applications in Clinical Diagnostics: From the Bench to the Bedside**

*Clinical Chemistry Interest Group*  
Russell Grant and Nigel Clarke, presiding

#### **Room 113 ABC**

This interactive workshop will highlight and discuss the 2 different routes from inception of a MS based diagnostic assay to clinical utility. The first route will involve discussion regarding conversion of established clinical biomarkers to MS technologies. Validation criteria and standardization efforts will be discussed. The second route will discuss new biomarker panels with a view towards FDA submissions and the IVDMA process. Brief presentation vignettes (2-3 slides from 3-4 speakers maximum) from industry and government representatives will be used to initiate discussions.

### **Identification of Counterfeit Foods and Ingredients by Mass Spectrometry**

*Flavor, Fragrance and Foodstuff Interest Group*  
David N. Heller, presiding

#### **Room 107 B**

Mass spectrometry plays a variety of roles in the detection of counterfeit food and flavor ingredients. The workshop aims to bring together analysts with an interest in this broad application area, which can include enforcement of product specifications and safety standards, detection of substitutes or contaminants, determining location or species of origin, forensic analysis, or use in regulatory action. The workshop will include examples as well as discussion of recent developments, current needs and concerns. Attendees are invited to share problem-solving techniques and to identify issues

### **How Hot Is your Mass Spectrometer?**

*Fundamentals Interest Group*  
Elaine M. Marzluff, presiding

#### **Room 108 B**

Many mass spectrometry experiments assume an energy distribution of ions in a mass spectrometer, but knowing that energy distribution can be quite challenging. In this workshop we will consider what is known about some fundamental ways of knowing the temperature distribution of ions, and results for several types of mass spectrometers and ion sources.

### **Current Topics in Metabolomics**

*Metabolomics Interest Group*  
Eric Milgram and Anders Nordstrom, presiding

#### **Room 103 ABC**

A WWW-based survey was conducted in order to determine which metabolomics topics are of the most interest to workshop participants. Survey aspects included where the technique is being applied, the types of instrumentation and software being used, as well as metabolite identification and assignment of biological significance. The data from the survey was used to determine which topics should be covered for this year's workshop. In addition to discussing the results of the survey, there will be interactive discussions based on the survey results.

### **Advances, Applications, and Limitations of Accurate Mass Measurements**

*Pharmaceuticals Interest Group*  
Chris Petucci and Carmen T. Santasania, presiding

#### **Room 105 AB**

Recent advances in accurate mass instrumentation have made sub-ppm mass accuracy routinely attainable in drug discovery and development. This workshop will be a panel led discussion to discuss the current applications of accurate mass instrumentation in the pharmaceutical industry. In addition, highlights of a survey to benchmark the current industry practices with accurate mass instrumentation will be discussed.

### **Polymer Problem Solving Session and Interest Group Meeting**

*Polymeric Materials Interest Group*  
Michael J. Polce, presiding

#### **Room 109 AB**

The workshop will consist of several short informal presentations (3-5 slides) in which speakers briefly describe a specific unresolved measurement challenge they have encountered (sample prep, ionization issues, data interpretation, etc.) and the audience provides useful comments and suggestions in an open discussion. A brief meeting will follow to discuss any technical topics of current interest to the group.

### **Challenge in LC-MS/MS Bioanalysis: Ion Suppression, Matrix Effect, Contamination Criteria and Regression Type**

*Regulated Bioanalysis Interest Group*  
Fabio Garofolo, presiding

#### **Room 111 AB**

As per the input of the numerous interest group members who answered the Feb. 2009 survey, this year workshop will focus on the following 3 most requested "hot topics": 1) *Ion suppression and matrix effect: Do we need full or partial validation for the same compound in different species?* 2) *Contamination Criteria in LC-MS/MS: What criteria are you using?* 3) *Acceptance of nonlinear calibration models in LC-MS/MS: How much "quadratic" is acceptable?*

The purpose of this workshop is to provide an educational forum to discuss issues and applications associated with the LC-MS/MS Bioanalysis. The scientific debate will be led by three panelists who are recognized international experts in the field. They will introduce each of the above mentioned topics to engage the audience and encourage all to participate in a dynamic and productive discussion. The workshop report will be posted on the ASMS Regulated Bioanalysis Forum

### **Probing Protein Conformation - What's New?**

*H/D Exchange and Covalent Labeling Interest Group*  
John R. Engen and Robert L. Hettich, Presiding

#### **Room 108 A**

The latest innovations in labeling strategies for understanding protein conformation and interactions will be discussed. Several hot topics in both H/D exchange and covalent labeling will be covered. The meeting will conclude with a software "free-for-all" where recent advances, challenges and solutions will be shown and explored.

### **Analytical Laboratory Managers Interest Group Meeting**

Richard Kondrat, presiding  
**Room 110 AB**

## WEDNESDAY WORKSHOPS, 5:45 – 7:00 PM

Workshops are organized on topics of special interest with a focus on new technology. There is no additional charge for workshops – they are open to all as a forum for discussion. There are light refreshments provided on the street level where workshops are located.

### **Finding Unknowns in the Environment: High Resolution and MS/MS Approaches**

*Environmental Applications Interest Group*

Enrico Davoli, presiding

#### **Room 107 B**

High resolution MS is providing an extremely powerful tool for screening and identification of unknowns. Highly accurate data can be now easily obtained from TOF instruments, orbitraps and FT-ICR. Libraries and different types of data mining are available, but a standardized method is still lacking.

### **MS Applications in Forensics and Homeland Protection**

*Forensics and Homeland Security Interest Group*

Plamen A. Demirev, presiding

#### **Room 108 A**

MS approaches for detection and identification of explosives, chemical and biological agents will be discussed. These will include specific methods for ionization, data acquisition and data analysis. Examples of fielded MS instrumentation for homeland protection will be provided.

### **Instrumental Innovations for Ion Mobility-Mass Spectrometry**

*Ion Mobility MS Interest Group*

John A. McLean, presiding

#### **Room 105 AB**

Advances in instrumental arrangements for 2D separations using IM-MS continue to evolve at a rapid rate. A sampling of these include thermostatically controlled separations, different IM pressure regimes, high resolution designs, multiplexed data acquisition capabilities, new ion source designs, and miniaturization, to highlight but a few. Attendant with these advances are unique capabilities and practical limitations. The focus of this workshop will be a discussion of the latest developments in IM-MS instrumentation and theory both in terms of new capabilities and present challenges to be addressed.

### **Use of the Ion Trap Mass Spectrometer for Undergraduate Research Projects**

*Ion Trap Mass Spectrometry Interest Group*

Heather Desaire, presiding

#### **Room 111 AB**

Individuals who use ion traps in undergraduate research programs will discuss their successes and challenges in implementing this research grade device into projects that are appropriate for novice researchers. Please plan to participate by sharing your own experiences or asking questions to others who currently work extensively with undergraduates. This workshop will be especially beneficial for future faculty at predominantly undergraduate institutions as well as any existing researchers who wish to learn more about involving undergraduates in their mass spectrometry research.

### **Acquisition Strategies for Coupling MS to Ultraperformance/Ultrafast LC**

*LC/MS & Related Topics Interest Group*

J. Will Thompson, presiding

#### **Room 103 ABC**

Improved chromatographic performance of ultraperformance or ultrafast liquid chromatography systems is leading to ever-increasing demands on mass spectrometers. Narrow chromatographic peak widths from these systems allows for higher peak capacity for complex sample analysis and faster analysis times for simple mixture separations, often pushing mass spectrometers to their duty cycle limits for quantitative and/or qualitative analyses. This year's LC/MS & Related Topics workshop discussion will focus on data acquisition strategies that are used to best match the duty cycle of mass spectrometers to the chromatography system used.

### **Challenges in Peptide Fragmentation and Sequencing**

*Peptide Fragmentation Interest Group*

Bela Paizs and Michael J. Van Stipdonk, presiding

#### **Room 113 ABC**

This workshop attempts to bridge the information gap between researchers pursuing fundamental and statistical studies on peptide fragmentation with those bio-informaticians writing peptide sequencing software. Topics like fragmentation mechanisms (both CID and EC/TD), fragment ion structures, sequence scrambling upon CID, and recent advances in database search based and de novo sequencing will be discussed in detail.

### **Careers in Mass Spectrometry**

*Young Mass Spectrometrists Interest Group*

Connell Cunningham, presiding

#### **Room 108 B**

Are there jobs and where do you find them? This workshop will focus on understanding changes within the work environment and how to obtain a job in our current economic environment. We will have a panel of experts from academics, government and industry to answer your questions.

**5:00 – 6:30 PM, SUNDAY  
TUTORIAL LECTURES  
Exhibit Hall C**

5:00 pm The Art of Communication in the Sciences



**Willard W. Harrison, University of Florida**

5:45 pm Ion Mobility in Mass Spectrometry



**David E. Clemmer, Indiana University**

**6:45 – 7:45 PM, SUNDAY  
CONFERENCE OPENING AND PLENARY LECTURE  
Scott A. McLuckey, presiding  
Exhibit Hall C**

6:45 pm Welcome to the 57<sup>th</sup> ASMS Conference on Mass Spectrometry  
**Gary L. Glish, President, ASMS**

7:00 pm Biofuels and Global Climate Change



**Jerald L. Schnoor, University of Iowa**

**7:45 – 9:30 pm  
WELCOME RECEPTION IN THE EXHIBIT HALL  
Exhibit Hall AB**

**8:30 – 10:30 AM, MONDAY MORNING  
MASS SPECTROMETRY OF LIPIDS  
Gavin E. Reid, presiding  
Ballroom A**

MOA am 8:30 **New Insights into the Human Lens through Multi-Faceted Lipid Mass Spectrometry;** Jane M. Deeley<sup>1</sup>; Jessica R. Nealon<sup>1</sup>; Roger J.W. Truscott<sup>2</sup>; Stephen J. Blanksby<sup>1</sup>; Todd W. Mitchell<sup>1</sup>; <sup>1</sup>University of Wollongong, Wollongong, Australia; <sup>2</sup>University of Sydney, Sydney, Australia

MOA am 8:50 **Automated Lipid Identification and Quantitation by Multidimensional Mass Spectrometry-Based Shotgun Lipidomics;** Kui Yang; Hua Cheng; Richard Gross; Xianlin Han; *Washington University, St. Louis, MO*

MOA am 9:10 **Methodology for the Rapid Determination of Lipids Employing Chip-Based Nano-ESI FT-ICR MS, Accurate Mass, and Infrared Heating;** Larry Lerno; Carlito Lebrilla; *University of California, Davis, CA*

MOA am 9:30 **Identification of a Class of Endogenous Sulfated Glycosphingolipids in NSC11 Glioblastoma Cancer Stem Cells;** Huan He<sup>1,2</sup>; Mark R. Emmett<sup>2</sup>; Carol Nilsson<sup>3</sup>; Alan G. Marshall<sup>2</sup>; Howard Colman<sup>4</sup>; Charles A. Conrad<sup>4</sup>; <sup>1</sup>Florida State University, Tallahassee, FL; <sup>2</sup>Nat'l High Magnetic Field Lab, Tallahassee, FL; <sup>3</sup>Pfizer, Inc., San Diego, CA; <sup>4</sup>M.D. Anderson Cancer Center, Houston, TX

MOA am 9:50 **The Comparative Lipidomics of VSV, SFV and their Host Plasma Membrane by Quantitative Shotgun Mass Spectrometry;** Julio L Sampaio<sup>1</sup>; Lucie Kalvodova<sup>2</sup>; Christer Ejsing<sup>1</sup>; Kai Simons<sup>1</sup>; Andrej Shevchenko<sup>1</sup>; <sup>1</sup>MPI-CBG, Dresden, Germany; <sup>2</sup>Infectious Disease Research Institute, Seattle, Washington

MOA am 10:10 **From Single Cells to Whole Body Sections: Multiscale Imaging of Phospholipids by MALDI MS;** Pierre Chaurand; Peggi Angel; Richard M. Caprioli; *Vanderbilt University, Nashville, TN*

**8:30 – 10:30 AM, MONDAY MORNING  
CHROMATOGRAPHY-MASS SPECTROMETRY  
APPROACHES TO INCREASE THROUGHPUT IN  
DISCOVERY PK ASSAYS  
Yunsheng Hsieh, presiding  
Ballroom B**

MOB am 8:30 **High Throughput LC-MS in ADME/TOX: Making the Impossible Possible;** Li Di; Edward Kerns; Susan Petusky; Susan Li; Zhen Lin; Guy Carter; *Wyeth Research, Monmouth Jct., NJ*

MOB am 8:50 **Enhancing the Throughput of Discovery PK Using High Resolution Ultrafiltration LC-MS;** Richard B. Van Breemen; *University of Illinois, Chicago, IL*

MOB am 9:10 **Microflow UPLC/MS as a Method to Improve Discovery PK Throughput;** Heather E Skor; David C Gale; Sadayappan V Rahavendran; *Pfizer Global Research & Development, La Jolla, CA*

MOB am 9:30 **Comparison of HPLC-MS/MS and UPLC-MS/MS Performances for Quantification of a Clinical Candidate and its Metabolites in Plasma Utilizing Chemometric Approach;** Margret Thorsteinsdottir<sup>1,2</sup>; Gisli Bragason<sup>2</sup>; Baldur Bragi Sigurdsson<sup>2</sup>; Olafur P Magnússon<sup>2</sup>;

<sup>1</sup>University of Iceland, Reykjavik, Iceland;

<sup>2</sup>deCODE genetics, Reykjavik, Iceland

MOB am 9:50 **Fast Determination of Metabolic Soft Spots by New LC/MS Technologies: An Effective Approach to Improving PK Properties;** Mingshe Zhu; Qian Ruan; Ming Yao; *Bristol-Myers Squibb, Princeton, NJ*

MOB am 10:10 **A Novel and Integrated Platform for Fully Automated High-Throughput LCMSMS Analysis of *in vitro* ADME Samples;** Andreas H. Luippold; Thomas Arnhold; Wolfgang Joerg; Klaus Klinder; Kurt Schumacher; *Boehringer Ingelheim Pharma GmbH & Co KG, Biberach An Der Riss, Germany*

**8:30 – 10:30 AM, MONDAY MORNING  
CHARACTERIZING PROTEIN-PROTEIN INTERACTIONS**  
John Klassen, presiding  
Room 201

MOC am 8:30 **Investigation of Intact Protein Complexes and Protein-Protein Interactions by Native Ion Mobility and Tandem Mass Spectrometry;** Esther Van Duijn; Arjan Barendregt; Charlotte Uetrecht; Kristina Lorenzen; Rebecca Rose; Glen Shoemaker; Albert J.R. Heck; *Utrecht University, Utrecht, Netherlands*

MOC am 8:50 **Micelles Protect ATP Synthases from Solution to Gas Phase and Reveal Novel Protein Interactions in Membrane Embedded Subunits;** Carol Robinson; Min Zhou; Dijana Matak Vinkovic; Nina Morgner; Shoshanna Isaacson; Neslon Barrera; *University of Cambridge, Cambridge, UK*

MOC am 9:10 **Transient Protein Interactions and Ligand Exchange between Transporters and Receptors: MS Study of Retinoic Acid Delivery to RAR by CRABP;** Virginie Sjoelund; Igor A. Kaltashov; *University of Massachusetts, Amherst, MA*

MOC am 9:30 **Comprehensive Structural Mass Spectrometry for the Identification of Assembly Interactions in an HIV-1 Capsid Mutant Protein;** Lisa Jones<sup>1</sup>; Hao Zhang<sup>1</sup>; Michael L. Gross<sup>1</sup>; Peter Prevelige<sup>2</sup>; <sup>1</sup>Washington University, St. Louis, MO; <sup>2</sup>University of Alabama, Birmingham, AL

MOC am 9:50 **New Approaches for Efficient Chemical Cross-linking of Proteins and Protein Complexes;** Julian Mintseris; Steven Gygi; *Harvard Medical School, Boston, MA*

MOC am 10:10 **Assembly and stability of native and modified Shiga toxins investigated by ES-MS;** Elena Kitova<sup>1</sup>; George L. Mulvey<sup>2</sup>; Tanis Dingle<sup>2</sup>; Thomas P. Griener<sup>2</sup>; Glen D. Armstrong<sup>2</sup>; John Klassen<sup>1</sup>; <sup>1</sup>University of Alberta, Edmonton, Canada; <sup>2</sup>University of Calgary, Calgary, Alberta

**8:30 – 10:30 AM, MONDAY MORNING  
DEVELOPMENTS IN ION MOBILITY  
INSTRUMENTATION AND THEORY**  
John A. McLean, presiding  
Room 204

MOD am 8:30 **A New High Throughput Ultra-Sensitive and Quantitative NanoLC-IMS-MS Platform;** Richard D. Smith; Erin Baker; Yehia Ibrahim; David Prior; William Danielson; Anuj Shah; Ryan Kelly; Jason Page; Gordon Anderson; Keqi Tang; Mikhail Belov; *Pacific Northwest National Laboratory, Richland, WA*

MOD am 8:50 **Next-Generation Ion Mobility-Mass Spectrometry Instrumentation for the Analysis of Large Protein Assemblies;** Brandon Ruotolo<sup>1</sup>; Kevin Giles<sup>2</sup>; John B. Hoyes<sup>2</sup>; Carol Robinson<sup>1</sup>; <sup>1</sup>University of Cambridge, Cambridge, UK; <sup>2</sup>Waters Corporation, Manchester, UK

MOD am 9:10 **Improving the Accuracy of Experimental and Theoretical Cross-Section Measurements in Travelling Wave Ion Mobility Spectrometry-Mass Spectrometry;** Tom W. Knapman<sup>1</sup>; Joshua T. Berryman<sup>1</sup>; Victoria L. Morton<sup>1</sup>; Iain D. G. Campuzano<sup>2</sup>; Sarah A. Harris<sup>1</sup>; Peter G. Stockley<sup>1</sup>; Alison E. Ashcroft<sup>1</sup>; <sup>1</sup>Astbury Centre for Structural Molecular Biology, University of Leeds, Leeds UK; <sup>2</sup>Waters Corporation, Manchester, UK

MOD am 9:30 **Deriving a Theoretical Mass Scale from Ion Mobility Measurements;** Stephen Valentine; David E. Clemmer; *Indiana University, Bloomington, IN*

MOD am 9:50 **Separation of Ion Electronic States by Cryogenic Ion Mobility-Mass Spectrometry;** Jody May; David H. Russell; *Texas A&M University, College Station, TX*

MOD am 10:10 **Integrated 'Omics' on the Basis of Structural Separations by Ion Mobility-Mass Spectrometry;** Larissa S. Fenn; Michal Kliman; Thomas J. Kerr; Randi Gant; Ablatt Mahsut; Sophie Zhao; John A. McLean; *Vanderbilt University, Nashville, TN*

**8:30 – 10:30 AM, MONDAY MORNING  
QUANTITATIVE BOTTOM UP PROTEOMICS**  
Susan T. Weintraub, presiding  
Exhibit Hall C

MOE am 8:30 **Designing, Executing, and Analyzing Quantitative Bottom Up Proteomics Studies for Biological Discovery;** Michael Washburn; *Stowers Institute for Medical Research, Kansas City, MO*

MOE am 8:50 **Quantitative MS Proteomics with <sup>14</sup>N/<sup>15</sup>N Metabolic Labelling: Precision, Accuracy and Power;** Matthew Russell; Phil D. Charles; Kathryn S. Lilley; *University of Cambridge, UK*

MOE am 9:10 **Large-Scale iTRAQ-Based Quantitative Proteomic Comparison of Human ES, iPSC, and somatic Cells Using Beam-Type CAD with Ion Trap Mass Analysis;** Douglas H. Phanstiel; Justin Brumbaugh; Graeme C. Mcalister; Craig D. Wenger; Shulan Tian; James A. Thomson; Ron Stewart; Joshua J. Coon; *University of Wisconsin, Madison, WI*

MOE am 9:30 **Targeted Quantitative Proteomics Analysis Using a Novel Stable Isotope Tagging System and Tandem Mass Spectrometry;** Wei Yan<sup>1,2</sup>; Jie Luo<sup>1</sup>; Jimmy Eng<sup>1,2</sup>; Ruedi Aebersold<sup>1,3</sup>; Jeff Ranish<sup>1</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>University of Washington, Seattle, WA; <sup>3</sup>Swiss Federal Institute of Technology, Zurich, Switzerland

MOE am 9:50 **Using Differential Proteomics to Drive Targeted Analyses: Understanding Development in the Worm.;** Gregory Finney<sup>1</sup>; Gennifer Merrihew<sup>2</sup>; Brendan Maclean<sup>2</sup>; Michael J. Maccoss<sup>2</sup>; <sup>1</sup>Univ of Washington, Genome S, Seattle, WA; <sup>2</sup>University of Washington, Seattle, WA



MOE am 10:10 **One-Year Longitudinal Study of the Chicken Plasma Proteome to Identify Biomarkers for Epithelial Ovarian Cancer**; Adam Hawkrigde; Rebecca Wysocky; James Petite; Kenneth Anderson; Paul Mozdziak; Jonathan Horowitz; David C. Muddiman; *North Carolina State University, Raleigh, NC*

**8:30 – 10:30 AM, MONDAY MORNING  
FUNDAMENTALS AND NOVEL APPLICATIONS OF  
ION/MOLECULE REACTIONS**  
Hilkka Kenttamaa, presiding  
Room 103

MOF am 8:30 **Gas Phase Reactions of Carbanions with N and O Atoms**; Zhibo Yang; Brian Eichelberger; Oscar Martinez Jr.; Momir Stepanovic; Theodore P. Snow; Veronica M. Bierbaum; *University of Colorado, Boulder, CO*

MOF am 8:50 **Direct Observation of the Reactions of the Phenyl Radical with Dioxygen Using Distonic Ions**; Benjamin B. Kirk; David G Harman; Stephen J Blanksby; *University of Wollongong, Wollongong, Australia*

MOF am 9:10 **Ion Molecule Ghostbusters: Tracking Ephemeral Radical Migration in Peptides and Proteins**; Benjamin Moore<sup>1</sup>; Tony Ly<sup>1</sup>; Stephen J. Blanksby<sup>2</sup>; Ryan R. Julian<sup>1</sup>; <sup>1</sup>*University of California, Riverside, Riverside, CA*; <sup>2</sup>*University of Wollongong, Wollongong, Nsw, Australia*

MOF am 9:30 **Ion/Molecule Reactions at Atmospheric Pressure with ESSI-MS: Fundamentals and Applications**; David Touboul<sup>1,2</sup>; Matthias Jecklin<sup>2</sup>; Renato Zenobi<sup>2</sup>; <sup>1</sup>*CNRS-ICSN, Gif-sur-yvette, France*; <sup>2</sup>*ETH Zürich, Zürich, Switzerland*

MOF am 9:50 **Ionization Mechanisms Related to Negative Ion APPI, APCI, and DART**; Charles N. McEwen<sup>1</sup>; Barbara S. Larsen<sup>2</sup>; <sup>1</sup>*Univ. of the Sciences in PA, Philadelphia, PA*; <sup>2</sup>*The DuPont Company, Wilmington, DE*

MOF am 10:10 **Data Dependent Neutral Gain MS3: Toward Automated Functional Group Identification in Drug Metabolites via LC-MS, Ion-Molecule Reactions and CAD**; Steven Habicht; Nelson Vinuesa; Hilkka Kenttamaa; *Purdue University, West Lafayette, IN*

**8:30 – 10:30 AM, MONDAY MORNING  
FRONTIERS IN ELEMENTAL MASS SPECTROMETRY**  
Sabine Becker, presiding  
Room 113

MOG am 08:30 **Bio-Imaging of Metals in the Brain by Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) to Study Neurodegenerative Diseases**; Johanna Sabine Becker; *Forschungszentrum Juelich, Juelich, Germany*

MOG am 8:50 **Cytotoxicity of Arsenic Containing Chemical Warfare Agent Degradation Products with Metallomic Approaches for Metabolite Analysis**; Karolin K. Kroening<sup>1</sup>; Renee N. Easter<sup>1</sup>; Morwena J.V. Solivio<sup>1</sup>; Alvaro Puga<sup>2</sup>; Joseph A. Caruso<sup>1</sup>; <sup>1</sup>*Dept. of Chemistry, UC, Cincinnati, OH*; <sup>2</sup>*Dept. of Environmental Health, UC, Cincinnati, OH*

MOG am 9:10 **Speciation Analysis of Gadolinium Chelates in Hospital Effluents and Wastewater Treatment Plant Sewage by a Novel HILIC/ICP-MS Method**; Jens Künemeyer; Lydia Terborg; Björn

Meermann; Christine Brauckmann; Uwe Karst; *University of Münster, Münster, Germany*

MOG am 9:30 **Characterization of Selenium Metabolites in Se-enriched Kale via Ion-Pairing Reversed Phase Chromatography with ICPMS and ESI-IT-MS Detection**; Qilin Chan; Scott E. Afton; Joseph A. Caruso; *Department of Chemistry, University of Cincinnati, Cincinnati, OH*

MOG am 9:50 **Elucidating the Role of Metals in Amyotrophic Lateral Sclerosis Using Inline Liquid Chromatography- Inductively Coupled Plasma- Mass Spectrometry**; Lelie Herman<sup>1</sup>; Liba Amir<sup>2</sup>; Pik Chan<sup>3</sup>; Joan Valentine<sup>1</sup>; Julian Whitelegge<sup>3</sup>; <sup>1</sup>*University of California, Los Angeles, Los Angeles, CA*; <sup>2</sup>*Agilent, Wilmington, DE*; <sup>3</sup>*University of California, Los Angeles, CA*

MOG am 10:10 **Separation and Quantification of Antisense Oligonucleotides by Hydrophilic Interaction Liquid Chromatography Coupled to ICP-MS**; Renee N. Easter; Karolin K. Kroening; Patrick A. Limbach; Joseph A. Caruso; *University of Cincinnati, Cincinnati, OH*

**10:30 AM – 2:30 PM, MONDAY  
POSTER SESSION (See page 41)  
Exhibit Hall AB**

Authors of odd-numbered posters present 10:30 am – 12:15 pm.  
Authors of even-numbered posters present 12:45 – 2:30 pm.  
Please do not remove posters before 7:30 pm. Posters must be removed by 8:00 pm.

**2:30 – 4:30 PM, MONDAY AFTERNOON  
MS AND ACCELERATOR MS FOR HUMAN  
MICRODOSING AND METABOLISM STUDIES**  
Graeme Young, presiding  
Ballroom A

MOA pm 2:30 **A Review of the State-of-the Art of human Microdosing and Nanotracer Studies - as an Introduction to the Session**; Graeme Young; *GlaxoSmithKline*

MOA pm 2:50 **Absolute Quantitation without Internal Standards: Accelerator Mass Spectrometry and Microtracers for Pharmacokinetics and Metabolite Discovery**; Pete Lohstroh; Brad Keck; Le Vuong; John Vogel; Stephen Dueker; *Vitalea Science, Davis, CA*

MOA pm 3:10 **Quantification and Identification of Metabolites at Microdosing Levels**; Carmai Seto<sup>1</sup>; Takeo Sakuma<sup>1</sup>; Jinsong Ni<sup>2</sup>; Fred Ouyang<sup>2</sup>; Devin Welty<sup>2</sup>; Van Dinh<sup>2</sup>; Gabriella Szekely-klepser<sup>2</sup>; Andrew Acheampong<sup>2</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada*; <sup>2</sup>*Allergan Inc., Irvine, CA*

MOA pm 3:30 **Single Instrument AMS and IRMS for Microdose/Microtrace Mass Balance Studies**; Giacomo Jason<sup>1</sup>; Tim Schulz-König<sup>2</sup>; Stephen Dueker<sup>1</sup>; Brad Keck<sup>1</sup>; Hans-Arno Synal<sup>2</sup>; John Vogel<sup>1</sup>; <sup>1</sup>*Vitalea Science, Davis, CA*; <sup>2</sup>*ETH Zurich, Zurich, Switzerland*

MOA pm 3:50 **Early Investigation of Human Metabolism in Drug Development**; David S. Wagner; Amanda Culp; John Ulrich; Andrea Seffler; Steve Castellino; *GlaxoSmithKline, Rtp, NC*

MOA pm 4:10 **Comprehensive Analysis of (Phosphorylated) Nucleoside Reverse Transcriptase Inhibitors**

**and Endogenous Deoxynucleotides in Plasma and PBMCs Using (Ion-Pair) LC-MS/MS;** Leon Coulier; Henk Gerritsen; Lars Brull; *TNO Quality of Life, Zeist, Netherlands*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
MASS SPECTROMETRY AND CLINICAL APPLICATIONS  
Ravinder J. Singh, presiding  
Ballroom B**

- MOB pm 2:30 **Dermcidin Identification from Exhaled Air for Lung Cancer Diagnosis;** Wei-chao Chang<sup>1</sup>; Ming-Shyan Huang<sup>2</sup>; Chih-Jen Yang<sup>2</sup>; Wen-Yu Wang<sup>2</sup>; Tsung-Ching Lai<sup>1</sup>; Michael Hsiao<sup>1</sup>; Chung-Hsuan Chen<sup>1</sup>; <sup>1</sup>*The Genomics Research Center, Academia Sinica., Taipei, Taiwan;* <sup>2</sup>*Kaohsiung Medical University Hospital, Kaohsiung, Taiwan*
- MOB pm 2:50 **Large-Scale Proteomic Study of Chronic Kidney Allograft Rejection from Tissue Biopsies;** Aleksey Nakorchevsky<sup>1</sup>; Johannes Hewel<sup>2</sup>; Daniel Salomon<sup>1</sup>; John Yates<sup>1</sup>; <sup>1</sup>*The Scripps Research Institute, La Jolla, CA;* <sup>2</sup>*University of Toronto, Toronto, ON*
- MOB pm 3:10 **Targeted MRM Expression Profiling of 45 Proteins in a Cohort of 60 Cardiovascular Disease Plasma Samples;** Michael A. Kuzyk<sup>1</sup>; Darryl B. Hardie<sup>1</sup>; Gabriela Cohen-Freue<sup>2</sup>; Dominik Domanski<sup>1</sup>; Juncong Yang<sup>1</sup>; John S. Hill<sup>2</sup>; Angela M. Jackson<sup>1</sup>; Christoph H. Borchers<sup>1</sup>; <sup>1</sup>*UVic-Genome BC Proteomics Centre, Victoria, Canada;* <sup>2</sup>*James Hogg iCAPTURE Centre, Vancouver, Canada*
- MOB pm 3:30 **Sensitive Quantification of Circulating Vitamin D Metabolites in Multiple Sclerosis Patients Using Selective SPE coupled to Capillary-LC and Isotope-Dilution MS;** Xiaotao Duan<sup>1,2</sup>; Eunjin Bang<sup>1</sup>; Hao Wang<sup>1,2</sup>; Bianca Weinstock-Guttman<sup>1</sup>; Murali Ramanathan<sup>1</sup>; Jun Qu<sup>1,2</sup>; <sup>1</sup>*University at Buffalo, Amherst, NY;* <sup>2</sup>*CoE Bioinformatics & Life Sci, Buffalo, NY*
- MOB pm 3:50 **Ultra High-Throughput Quantitative LC-MS/MS in a Clinical Diagnostics Laboratory - Breaking the 2000 Samples/System/Day Barrier;** Russell Grant; Brian Rappold; Patricia Holland; *LabCorp, Burlington, NC*
- MOB pm 4:10 **Quantitative Human Plasma Protein Biomarker Verification by Multiple Reaction Monitoring: A Multi-site Study of Precision and Reproducibility;** Terri Addona<sup>1</sup>; Susan E. Abbatiello<sup>1</sup>; Birgit Schilling<sup>2</sup>; Steven J. Skates<sup>3</sup>; D. R. Mani<sup>1</sup>; David M Bunk<sup>4</sup>; Clifford H. Spiegelman<sup>5</sup>; Lisa J. Zimmerman<sup>6</sup>; Amy-Joan L. Ham<sup>6</sup>; Hasmik Keshishian<sup>1</sup>; Steven C. Hall<sup>7</sup>; Steven A. Carr<sup>1</sup>; CPTAC Network<sup>8</sup>; <sup>1</sup>*Broad Institute, Cambridge, MA;* <sup>2</sup>*Buck Institute for Age Research, Novato, CA;* <sup>3</sup>*Massachusetts General Hospital, Boston, MA;* <sup>4</sup>*NIST, Gaithersburg, MD;* <sup>5</sup>*Texas A&M University, College Station, TX;* <sup>6</sup>*Vanderbilt University, Nashville, TN;* <sup>7</sup>*UCSF, San Francisco, CA;* <sup>8</sup>*National Cancer Institute, Bethesda, MD*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
TANDEM MS OF WHOLE PROTEINS AND  
PROTEIN COMPLEXES  
Kathrin Breuker, presiding  
Room 201**

- MOC pm 2:30 **Revealing the Sites of Ligand and Protein Binding in Protein Complexes by Top-Down Mass Spectrometry;** Sheng Yin; Joseph A. Loo; *UCLA, Los Angeles, CA*
- MOC pm 2:50 **A High Throughput Format for Top Down Proteomics Using GELFrEE Coupled to Nanocapillary-LTQ FT ICR MS at >12 Tesla;** Ji Eun Lee<sup>1</sup>; John F. Kellie<sup>1</sup>; John C. Tran<sup>1</sup>; Adaikalam Vellaichamy<sup>1</sup>; Dorothy Ahlf<sup>1</sup>; Jeremiah D. Tipton<sup>2</sup>; Alan G. Marshall<sup>2,3</sup>; Neil L. Kelleher<sup>1</sup>; <sup>1</sup>*University of Illinois, Urbana, IL;* <sup>2</sup>*National High Magnetic Field Laboratory, Tallahassee, FL;* <sup>3</sup>*Florida State University, Tallahassee, FL*
- MOC pm 3:10 **High Throughput Quantitative Screening Measuring Intact Proteins by a Novel Rapid Mass Spectrometric Approach;** Kim Alving; Gary Asmussen; Tatiana Gladysheva; James Lillie; Aharon Cohen; Bing Wang; *Genzyme Corporation, Waltham, MA*
- MOC pm 3:30 **Probing the Gas-Phase Dissociation Behavior of Model Homodimeric Protein Complexes with Divergent Interfacial Structures;** Eric D. Dodds; Anne E. Blackwell; Christopher M. Jones; Matthew H. J. Cordes; Vicki H. Wysocki; *University of Arizona, Tucson, AZ*
- MOC pm 3:50 **Sequence analysis of Intact Disulfide-Rich Mini-Proteins Using a Combined Chemical Derivatization and ETD Strategy;** Beatrix Ueberheide<sup>1</sup>; David Fenyo<sup>1</sup>; Paul F Alewood<sup>2</sup>; Brian Chait<sup>1</sup>; <sup>1</sup>*The Rockefeller University, New York, NY;* <sup>2</sup>*The University of Queensland, St Lucia, Australia*
- MOC pm 4:10 **Top-Down Proteomics with a 14.5 T FT-ICR Mass Spectrometer: Secondary Ion Collection in an External Octopole Ion Trap;** Jeremiah D. Tipton<sup>1</sup>; John F. Kellie<sup>2,3</sup>; Paul M. Thomas<sup>2,3</sup>; Dorothy R. Ahlf<sup>2,3</sup>; Chris L. Hendrickson<sup>1,4</sup>; Neil L. Kelleher<sup>2,3</sup>; Alan G. Marshall<sup>1,4</sup>; <sup>1</sup>*National High Magnetic Field Laboratory, Tallahassee, FL;* <sup>2</sup>*Department of Chemistry, UI, Urbana-Champaign, IL;* <sup>3</sup>*Institute for Genomic Biology, UI, Urbana-Champaign, IL;* <sup>4</sup>*Department of Chemistry, FSU, Tallahassee, FL*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
DEVELOPMENTS IN ION TRAPPING  
INSTRUMENTATION  
Elaine M. Marzluff, presiding  
Room 204**

- MOD pm 2:30 **A New Tool for High-speed Proteomics: Orbitrap Mass Analyzer Interfaced to a Dual Linear Trap;** Eugen Damoc<sup>1</sup>; Eduard Denisov<sup>1</sup>; Jens Griep-raming<sup>1</sup>; Hartmut Kuipers<sup>1</sup>; Oliver Lange<sup>1</sup>; Alexander Makarov<sup>1</sup>; Philip M Remes<sup>2</sup>; Jae C. Schwartz<sup>2</sup>; Dennis Taylor<sup>2</sup>; Thomas Moehring<sup>1</sup>; Vlad Zabrouskov<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific GmbH, Bremen, Germany;* <sup>2</sup>*Thermo Fisher Scientific, San Jose, CA*
- MOD pm 2:50 **Optimized Cell Geometry for Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Christopher L. Hendrickson<sup>1,3</sup>; Steven C. Beu<sup>2</sup>; Greg T. Blakney<sup>1</sup>; Nathan

- Kaiser<sup>1</sup>; Daniel G. McIntosh<sup>1</sup>; John P. Quinn<sup>1</sup>; Alan G. Marshall<sup>1,3</sup>; <sup>1</sup>*National High Magnetic Field Laboratory, Tallahassee, FL*; <sup>2</sup>*S C Beu Consulting, Austin, TX*; <sup>3</sup>*Florida State University, Tallahassee, FL*
- MOD pm 3:10 **Femtosecond Laser-Induced Ionization/ Dissociation (fs-LID) of Protonated Biomolecules**; Christine L. Kalcic; Scott A. Smith; Yuanxing Chen; Nelson Winkler; Gavin E. Reid; A. Daniel Jones; Marcos Dantus; *Michigan State University, East Lansing, MI*
- MOD pm 3:30 **Miniature Monolithic Rectilinear Ion Traps and Arrays by Stereo-lithography on Printed Circuit Board (SLA-on-PCB)**; Jeff Maas<sup>1</sup>; Scott Smith<sup>2</sup>; Zheng Ouyang<sup>1</sup>; R. Graham Cooks<sup>1</sup>; William Chappell<sup>1</sup>; <sup>1</sup>*Purdue University, W. Lafayette, IN*; <sup>2</sup>*Michigan State University, East Lansing, MI*
- MOD pm 3:50 **Improvements to MS3 Fragmentation Efficiency in a Low Pressure Linear Ion Trap using a Pulsed Valve and Increased Drive Frequency**; Bruce Collings; Matthew A. Romaschin; *MDS Analytical Technologies, Concord, Canada*
- MOD pm 4:10 **Electron Ionization Dissociation in a Radio Frequency Linear Ion Trap**; Atim A. Enyenihi; Takashi Baba; Gary L. Glish; *University of North Carolina, Chapel Hill, NC*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
BIOMARKER DISCOVERY – PROTEINS**  
**Arthur Moseley, presiding**  
**Exhibit Hall C**

- MOE pm 2:30 **Protein Biomarkers: Translating Discoveries into Tools**; Douglas M. Sheeley; *National Center for Research Resources, Bethesda, MD*
- MOE pm 2:50 **An Integrative Biology Approach for Plasma Biomarker Discovery in Idiopathic Pneumonia Syndrome**; Daniela M Schlatter<sup>1</sup>; Mark R. Chance<sup>1</sup>; Rob M. Ewing<sup>1</sup>; Sergei Ilchenko<sup>1</sup>; Gaurav S.J.B Rana<sup>1</sup>; Kenneth R. Cooke<sup>1,2</sup>; <sup>1</sup>*Case Western Reserve University, Cleveland, OH*; <sup>2</sup>*University Hospitals, Cleveland, OH*
- MOE pm 3:10 **Protein Cartography of the Tissue Microenvironment in Tumor Progression**; Thomas P. Conrads<sup>1,3</sup>; Brian L Hood<sup>1,3</sup>; Melanie Flint<sup>1,3</sup>; Jaqueline M. Jones-Laugner<sup>1,3</sup>; Arash Radfar<sup>2,3</sup>; Rajiv Dhir<sup>2,3</sup>; <sup>1</sup>*Department of Pharmacology & Chemical Biology, Pittsburgh, PA*; <sup>2</sup>*Department of Pathology, Pittsburgh, PA*; <sup>3</sup>*University of Pittsburgh Cancer Institute, Pittsburgh, PA*
- MOE pm 3:30 **Studying Biological Variation of Plasma Protein Levels in a Twin Sample Set Using Targeted Multiplexed MRM Protein Expression Profiling**; Christie L Hunter<sup>1</sup>; Sean L. Seymour<sup>1</sup>; Veronica Saenz-vash<sup>2</sup>; Marjorie Minkoff<sup>1</sup>; Steven A. Carr<sup>3</sup>; Leigh Anderson<sup>4</sup>; <sup>1</sup>*Applied Biosystems, Foster City, CA*; <sup>2</sup>*Broad Institute of MIT and H, Cambridge, MA*; <sup>3</sup>*Broad Institute, Cambridge, MA*; <sup>4</sup>*Plasma Proteome Institute, Washington, DC*
- MOE pm 3:50 **A Case Study for Shifting the Biomarker Discovery Paradigm: Predicting Response to Therapy in Hepatitis C Patients Using Unbiased Proteomics**; J. Will Thompson<sup>1</sup>; Joseph Lucas<sup>2</sup>; Laura G. Dubois<sup>1</sup>; Keyur Patel<sup>3</sup>; Arthur Moseley<sup>1</sup>; Diane Uzarski<sup>3</sup>; Hans Tillman<sup>3</sup>;

- Robert Califf<sup>3</sup>; Geoff Ginsburg<sup>2</sup>; Jeanette Mccarthy<sup>2</sup>; John McHutchison<sup>3</sup>; <sup>1</sup>*Duke University School of Medicine, Durham, NC*; <sup>2</sup>*Duke Institute for Genome Sciences & Policy, Durham, NC*; <sup>3</sup>*Duke Clinical Research Institute, Durham, NC*
- MOE pm 4:10 **A Robust Mass Spectrometry-Based Pipeline for Biomarker Discovery and Verification**; Chenwei Lin<sup>1</sup>; Liming Hou<sup>1</sup>; Mary Trute<sup>1</sup>; Jeffrey R. Whiteaker<sup>1</sup>; Alexei Krasnoselsky<sup>1</sup>; Regine M. Schoenher<sup>1</sup>; Li-Chia Feng<sup>1</sup>; Karen S. Spratt<sup>1</sup>; Sharon Pitteri<sup>1</sup>; Ted Holzman<sup>1</sup>; Ted Whitmore<sup>2</sup>; Philip Gafken<sup>1</sup>; Lisa A. Jones<sup>1</sup>; Jason M. Hogan<sup>1</sup>; Samir Hanash<sup>1</sup>; Christopher J. Kemp<sup>1</sup>; Dan Martin<sup>2</sup>; Martin McIntosh<sup>1</sup>; Peter Nelson<sup>1</sup>; Amanda Paulovich<sup>1</sup>; <sup>1</sup>*Fred Hutchinson Cancer Research Center, Seattle, WA*; <sup>2</sup>*Institute For System Biology, Seattle, WA*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
ION SPECTROSCOPY**  
**Valerie Gelabel, presiding**  
**Room 103**

- MOF pm 2:30 **Overview: Ion Spectroscopy**; Joel H Parks; *Rowland Institute at Harvard, Cambridge, MA*
- MOF pm 2:50 **Deprotonation Site Determined by IR Spectroscopy**; Jos Oomens; Jeffrey D. Steill; *FOM Rijnhuizen, Nieuwegein, Netherlands*
- MOF pm 3:10 **Photofragmentation Spectroscopy of Protonated Peptides Assisted by Pulsed CO<sub>2</sub> Laser**; Oleg V. Boyarkin; Monia Guidi; Natalia S. Nagornova; Thomas R. Rizzo; *LCPM, EPFL, Lausanne, Switzerland*
- MOF pm 3:30 **Infra Red Spectroscopy of Fragment Ions of Protonated Peptides**; Benjamin Bythell<sup>2</sup>; Undine Erlekam<sup>3</sup>; Michael J. Van Stipdonk<sup>1</sup>; Bela Paizs<sup>2</sup>; Philippe Maitre<sup>3</sup>; <sup>1</sup>*Wichita State University, Wichita, KS*; <sup>2</sup>*DKFZ, Heidelberg, Heidelberg, Germany*; <sup>3</sup>*Laboratoire de Chimie Physiq, Orsay, France*
- MOF pm 3:50 **Energy Dependent VUV Photodetachment Spectroscopy of Polyanions in the Gas Phase Probed by Synchrotron Radiation**; Alexandre Giuliani<sup>1,2</sup>; Debora Scuderi<sup>3</sup>; Joel Lemaire<sup>3</sup>; Christophe Dehon<sup>3</sup>; Roland Thissen<sup>4</sup>; Denis Duflo<sup>2</sup>; Laurent Nahon<sup>1</sup>; Philippe Maitre<sup>3</sup>; <sup>1</sup>*Synchrotron Soleil, Gif-sur-yvette, France*; <sup>2</sup>*Cepia INRA, Nantes, France*; <sup>3</sup>*Laboratoire de Chimie Physique, Orsay, FRANCE*; <sup>4</sup>*Laboratoire de Planétologie de Grenoble, Grenoble, France*; <sup>5</sup>*Laboratoire de Physique des Lasers, Atomes et Mo, Villeneuve d'Ascq, France*
- MOF pm 4:10 **Electronic Action Spectroscopy of the GFP Model Chromophore in a Quadrupole Ion Trap: Electron Photodetachment vs. Photodissociation**; Matthew W. Forbes; Charles S. Yeung; Chloe Yang; Vy M. Dong; Rebecca A. Jockusch; *University of Toronto, Toronto, ON, Canada*

**2:30 – 4:30 PM, MONDAY AFTERNOON  
MASS SPECTROMETRY IN  
ENVIRONMENTAL TOXICOLOGY  
Xing-Fang Li, presiding  
Room 113**

- MOG pm 2:30 **The Use of Mass Spectrometry to Support Risk Assessment;** Michael G. Bartlett; Yongzhen Liu; Catherine White; Srinivasa Muralidhara; James Bruckner; *University of Georgia, Athens, GA*
- MOG pm 2:50 **Mass Spectrometry Studies of Arsenic Metabolism and Toxicity;** Meiling Lu<sup>2</sup>; Zhongwen Wang<sup>3</sup>; Anthony McKnight-Whitford<sup>1</sup>; Jie Liu<sup>1</sup>; Huiming Yan<sup>1</sup>; Xiufen Lu<sup>1</sup>; Chungang Yuan<sup>4</sup>; Hailin Wang<sup>2</sup>; X. Chris Le<sup>1</sup>; *University of Alberta, Edmonton, Canada; <sup>2</sup>Res. Centre for Eco.-Environ, Beijing, China; <sup>3</sup>Health Canada, Ottawa, Canada; <sup>4</sup>North China Electric Power University, Baoding, China*
- MOG pm 3:10 **SILAC and Mass-Spectrometry for the Assessment of Effects of Arsenite on the Global Protein Expression in the Human HL-60 Cells;** Lei Xiong; Yinsheng Wang; *University of California, Riverside, CA*
- MOG pm 3:30 **Monitoring DNA Damaging Exposure Thresholds for a Foodborne Carcinogen Using LC-MS/MS and DNA Microarrays;** James Glick<sup>1</sup>; Ka Yee Yeung<sup>2</sup>; Helmut Zarbl<sup>3</sup>; Paul Vouros<sup>1</sup>; *Northwestern University, Boston, MA; <sup>2</sup>University of Washington, Seattle, WA; <sup>3</sup>Robert Wood Johnson Medical School, Piscataway, NJ*
- MOG pm 3:50 **Proteomic Analysis of a Combined Psychological Stress and 7,12-Dimethylbenz(a)anthracene (DMBA) Exposure Effects of Liver Drug Metabolizing Enzymes;** Melanie Flint<sup>1,2</sup>; Brian L Hood<sup>2,4</sup>; Nicolas A Stewart<sup>3,4</sup>; Mai Sun<sup>2</sup>; Thomas P. Conrads<sup>2,4</sup>; *Dept of Pharmacology & Chemical Biology, Pittsburgh, PA; <sup>2</sup>Clinical Proteomics Facility, Pittsburgh, PA; <sup>3</sup>Center for Clinical Pharmacology, Pittsburgh, PA; <sup>4</sup>University of Pittsburgh, Pittsburgh, PA*
- MOG pm 4:10 **Investigation of Pharmaceutical and Personal Care Products in Missouri Natural and Drinking Water Using Liquid Chromatography Tandem Mass Spectrometry;** Yinfa Ma<sup>1</sup>; Chuan Wang<sup>1</sup>; Sanjeewa Gamagedara<sup>1</sup>; Isaac Stayton<sup>1</sup>; Honglan Shi<sup>1</sup>; Craig Adams<sup>3</sup>; Terry Timmons<sup>2</sup>; *Missouri S&T, Rolla, MO; <sup>2</sup>Missouri Department of Natural Resources, Jefferson City, MO; <sup>3</sup>University of Kansas, Lawrence, KS*

**4:45 – 5:30 PM, MONDAY  
AWARD LECTURE  
Gary L. Glish, presiding  
Exhibit Hall C**

4:45 pm **Award for a Distinguished Contribution in Mass Spectrometry**



**Simon J. Gaskell**  
*University of Manchester*



**Vicki H. Wysocki**  
*University of Arizona*

**5:45 – 7:00 pm  
MONDAY WORKSHOPS  
See page 18.**

There will be light refreshments provided on the lower level where workshops are located.

**8:30 – 10:30 AM, TUESDAY MORNING  
MASS SPECTROMETRY AND BIOFUELS  
Michael R. Sussman, presiding  
Ballroom A**

- TOA am 8:30 **Mass Spectrometry in the World of Bioenergy Research: An Overview;** Mary Lipton; *PNNL, Richland, WA*
- TOA am 8:50 **Biodiesel: Profiling, Stability and MS Solutions;** G. John Langley<sup>1</sup>; Julie Hermiman<sup>1</sup>; Christianne Wicking<sup>1</sup>; Tom Lynch<sup>2</sup>; *University of Southampton, Southampton, UK; <sup>2</sup>BP Castrol Global Lubricants Technology, Pangbourne, UK*
- TOA am 9:10 **Metaproteome Analysis of a Termite Hindgut Microbial Community: Relevant to Biofuel Development;** Kristin E Burnum<sup>1</sup>; Stephen J Callister<sup>1</sup>; Carrie D Nicora<sup>1</sup>; Richard D Smith<sup>1</sup>; Philip Hugenholtz<sup>2</sup>; Falk Warnecke<sup>3</sup>; Rudolf H Scheffrahn<sup>4</sup>; Mary S Lipton<sup>1</sup>; *Pacific Northwest National Laboratory, Richland, WA; <sup>2</sup>DOE Joint Genome Institute, Walnut Creek, CA; <sup>3</sup>Lawrence Berkeley National Laboratory, Berkeley, CA; <sup>4</sup>University of Florida, Gainesville, FL*
- TOA am 9:30 **Bio-Char Investigated by Analytical Flash Pyrolysis and GCMS;** Helge Egsgaard<sup>1</sup>; Esben Wilson Bruun<sup>1</sup>; Henrik Hauggaard-Nielsen<sup>1</sup>; Per Ambus<sup>1</sup>; Niels Bech<sup>2</sup>; Norazana Ibrahim<sup>2</sup>; Peter Arendt Jensen<sup>2</sup>; *Biosystem Division; Risoe-DTU, Roskilde, Denmark; <sup>2</sup>Department of Chem. Eng; DTU, Lyngby, Denmark*
- TOA am 9:50 **Identification of the Extracellular Cellulolytic Enzymes in Thermophilic Bacteria that Are Important for Microbial Cellulose Degradation to Bioethanol;** Richard J. Giannone<sup>1</sup>; Adriane Lochner<sup>1</sup>; Andrew Dykstra<sup>1,2</sup>; Martin Keller<sup>1</sup>; James G. Elkins<sup>1</sup>; Robert Hettich<sup>1</sup>; *Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>The University of Tennessee, Knoxville, TN*

TOA am 10:10 **Large Array Scheduled MRM Analysis of Metabolic Pathways Using an Enhanced Scan Rate Hybrid Triple Quadrupole / Linear Ion Trap**; Francesco Pingitore; Sofya Aronova; Miryam Kadkhodayan; Guillaume Cottarel; *Codexis, Inc., Redwood City, CA*

**8:30 – 10:30 AM, TUESDAY MORNING  
ACCURATE MASS LC-MS APPROACHES FOR  
CHARACTERIZATION AND QUANTIFICATION OF  
DRUGS AND METABOLITES**

**Kathleen Cox, presiding  
Ballroom B**

TOB am 8:30 **Identification of a Novel CYP1A2-Mediated Bioactivation Pathway of Nimesulide Using LTQ-Orbitrap and Q-Trap Mass Spectrometers**; Li Ma; Qian Ruan; Jinping Gan; W. Griffith Humphreys; Mingshe Zhu; *Bristol-Myers Squibb, Princeton, NJ*

TOB am 8:50 **Combination of Fast Liquid Chromatography and Quadrupole Time-of-Flight for Quantitative Analysis of Pharmaceuticals in Plasma Using Accurate Mass**; Gerard Hopfgartner<sup>1</sup>; J.C. Yves Leblanc<sup>2</sup>; Chantal Grivet<sup>1</sup>; Emmanuel Varesio<sup>1</sup>; <sup>1</sup>*University of Geneva, Geneva, Switzerland*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*

TOB am 9:10 **An Integrated Approach to *in vitro* and *in vivo* Metabolite Quantitation Based on High Resolution Full Scan MS Data**; Jonathan L. Josephs<sup>1</sup>; Chiuwa Emily Luk<sup>1</sup>; Mary Grubb<sup>1</sup>; Yanou Yang<sup>1</sup>; Haiying Zhang<sup>1</sup>; Hong Cai<sup>1</sup>; Robert Langish<sup>1</sup>; Petia Shipkova<sup>1</sup>; Mark Sanders<sup>2,3,SUP</sup>; <sup>1</sup>*Bristol-Myers Squibb, Pennington, NJ*; <sup>2</sup>*Thermo Fisher Scientific, Somerset, NJ*

TOB am 9:30 **High-Resolution Analysis of the Pyridine-3-Sulfonyl Derivatives of 17 $\beta$ -Estradiol and its Metabolites by Orbitrap-Mass Spectrometry**; Jacquelyn R. Cole<sup>1</sup>; Dmitri Zagorevski<sup>2</sup>; David C. Spink<sup>1</sup>; <sup>1</sup>*Wadsworth Center, NYS Department of Health, Albany, NY*; <sup>2</sup>*Rensselaer Polytechnic Institute, Troy, NY*

TOB am 9:50 **2D Mass Mapping: Novel Data Visualization Method for Complex Peptide Mixtures Analysis**; Konstantin Artemenko<sup>1</sup>; Alexander R. Zubarev<sup>1</sup>; Tatiana Samgina<sup>2</sup>; Albert T. Lebedev<sup>2</sup>; Mikhail Savitski<sup>1</sup>; Roman Zubarev<sup>3</sup>; <sup>1</sup>*Uppsala University, Uppsala, Sweden*; <sup>2</sup>*Moscow State University, Moscow, Russian Federation*; <sup>3</sup>*Karolinska Institute, Stockholm, Sweden*

TOB am 10:10 **Method Development for Absolute Quantitation of Insulin Grows Factor Binding Proteins (IGFBP) in Plasma Samples by Capillary LC-MS**; Olaf Boernsen; Denis Herzog; Stephan Charmont; Nelson Guerreiro; Francois Legay; Stephan Bek; *Novartis Pharma AG, Basel, Switzerland*

**8:30 – 10:30 AM, TUESDAY MORNING  
CHARACTERIZING PROTEIN-LIGAND INTERACTIONS  
WITH MASS SPECTROMETRY**  
**Michael C. Fitzgerald, presiding  
Room 201**

TOC am 8:30 **Mass Spectrometry-Based Approaches for Monitoring Protein-Ligand Interactions: An Overview**; Lars Konermann; Jingxi Pan; Brian Boys; *The University of Western Ontario, London, ON, Canada*

TOC am 8:50 **Hydroxyl Radical Footprinting of CCL5-Chondroitin Sulfate Complex Reveals both the Binding Interface and a Ligand-Induced Conformational Change**; Caroline Watson; Fei Yu; James Prestegard; Joshua S. Sharp; *Complex Carbohydrate Research Center/UGA, Athens, GA*

TOC am 9:10 **Design and Application of Novel Cross-Linking Reagents for Mapping Protein-Protein Interactions**; Danielle Vellucci; Lan Huang; Scott Rychnovsky; *University of California, Irvine, CA*

TOC am 9:30 **Investigation of VDR Modulator Interactions with the Full Length VDR/RXR $\alpha$  Nuclear Receptor Complex by HDX-MS**; Jun Zhang; Michael Chalmers; Bruce Pascal; Patrick Griffin; *The Scripps Research Institute, Scripps Florida, Jupiter, FL*

TOC am 10:10 **Thermodynamic Analysis of Chaperone-Substrate Complexes**; Ying Xu<sup>1</sup>; Sebastian Schmitt<sup>2</sup>; Liangjie Tang<sup>3</sup>; Ursula Jakob<sup>2</sup>; Michael C. Fitzgerald<sup>1</sup>; <sup>1</sup>*Duke University, Durham, NC*; <sup>2</sup>*University of Michigan, Ann Arbor, MI*; <sup>3</sup>*ExSAR Corporation, Monmouth Junction, NJ*

**8:30 – 10:30 AM, TUESDAY MORNING  
NOVEL DEVELOPMENTS IN MASS SPECTROMETRY  
INSTRUMENTATION: ION SOURCES**  
**Jennifer Brodbelt, presiding  
Room 204**

TOD am 8:30 **Infrared Matrix-Assisted Laser Desorption Electrospray Ionization Coupled to FT-ICR Mass Spectrometry**; Kermit K. Murray<sup>1</sup>; Jason S. Sampson<sup>2</sup>; David C. Muddiman<sup>2</sup>; <sup>1</sup>*Louisiana State Univ., Baton Rouge, LA*; <sup>2</sup>*North Carolina State University, Raleigh, NC*

TOD am 8:50 **Desorption Electrospray/Metastable-Induced Ionization (DEMI): A New Ambient Multimode Ionization Technique**; Leonard Nyadong; Asiri Galhena; Facundo Fernandez; *Georgia Institute of Technology, Atlanta, GA*

TOD am 9:10 **Enhanced Control of Nanophotonic Ion Production by Laser Desorption Ionization from Tailored Nanopost Arrays**; Jessica A. Stolee<sup>1</sup>; Bennett N. Walker<sup>1</sup>; Deanna L. Pickel<sup>2</sup>; Scott Retterer<sup>2</sup>; Akos Vertes<sup>1</sup>; <sup>1</sup>*George Washington University, Washington, DC*; <sup>2</sup>*Oak Ridge National Laboratory, Oak Ridge, TN*

TOD am 9:30 **Implementation of an EI/CI Interface on a Hybrid Orbitrap System for Ultra-High Resolution GC-MS**; Amelia C. Peterson; Graeme C. McAlister; Joshua J. Coon; *University of Wisconsin, Madison, WI*

TOD am 9:50 **Towards Total Ion Utilization: Electrospray Ionization in a Sub-Ambient Pressure Environment for High Sensitivity Mass Spectrometry**; Jason Page; Ioan Marginean; Ryan Kelly; Keqi Tang; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*

TOD am 10:10 **Plasma-based Ambient Desorption/Ionization Mass Spectrometry (ADI-MS): Investigations into Desorption Characteristics and Competitive Ionization**; Jacob T. Shelley; Kevin P. Pfeuffer; Steven J. Ray; Gary M. Hieftje; *Indiana University, Bloomington, IN*

**8:30 – 10:30 AM, TUESDAY MORNING**  
**QUANTITATIVE INTACT PROTEOMICS (QIP)**  
**David B. Friedman, presiding**  
**Exhibit Hall C**

- TOE am 8:30 **Quantitative Top-Down Proteomics and Systems Biology of Colon Cancer**; Rod Nibbe; Mark Chance; *Case Western Reserve Univ, Cleveland, OH*
- TOE am 8:50 **Genetic Inheritance of Proteome Variation in Human Lymphoblastoid Cells**; Megan Rowland; Hauqin Pan; Xinxin Zhang; Phillip Cooley; Nikhil Garge; Benjamin J. Cargile; Maureen K. Bunger; *Research Triangle Institute, Research Triangle Park, NC*
- TOE am 9:10 **DIGE/MS and MudPIT: Adaptive Sample Size Re-Estimation to Combine Statistical Power with Depth of Coverage**; W. Hayes Mcdonald; Bing Zhang; Lillian B. Nanney; David B. Friedman; *Vanderbilt University School of Medicine, Nashville, TN*
- TOE am 9:30 **Relative Quantitative Analyses of Intact Methylated Yeast Ribosomal Proteins Using Fourier-Transform Mass Spectrometry**; Kristofor Webb; Rebecca Lipson; Julian Whitelegge; Steven Clarke; *University of California Los angeles, Los Angeles, CA*
- TOE am 9:50 **A New Realm for Protein Quantitation: Reproducibility and Modification Occupancy Using Label-Free Top Down Mass Spectrometry**; John F. Kellie<sup>1</sup>; Ji Eun Lee<sup>1</sup>; John C. Tran<sup>1</sup>; Dorothy R. Ahlf<sup>1</sup>; Haylee M. Thomas<sup>1</sup>; Adaikkalam Vellaichamy<sup>1</sup>; Jeremiah D. Tipton<sup>2</sup>; Alan G. Marshall<sup>2,3</sup>; Neil L.; <sup>1</sup>*University of Illinois, Urbana, IL*; <sup>2</sup>*National High Magnetic Field Laboratory, Tallahassee, FL*; <sup>3</sup>*Florida State University, Tallahassee, FL*
- TOE am 10:10 **Differential Gel Electrophoresis Examination of Asian Ash Tree Resistance to Emerald Ash Borer Attack Verses North American Ash Tree Susceptibility**; Kari Green-Church; Alexandra Popoval-Butler; Cindy James; Justin GA Whitehill; Nan M Kleinholz; Daniel A. Herms; Pierluigi Bonello; *The Ohio State University, Columbus, OH*

**8:30 – 10:30 AM, TUESDAY MORNING**  
**GAS-PHASE METAL ION CHEMISTRY**  
**Mary T. Rodgers, presiding**  
**Room 103**

- TOF am 8:30 **Gas-Phase Reactions of Transition Metal Complexes with Diazoacetates: Substituent Effects and the Formation of Novel Organometallic Species**; Scott Gronert; Scott K. Koehn; *Virginia Commonwealth University, Richmond, VA*
- TOF am 8:50 **Competition between Cluster Fragmentation, C-C Bond Coupling and C-X Bond Activation in Silver Hexynyl Cluster Cations, [(C4H9CCAg)nAg]+. Size Does Matter!** Richard A. J. O'Hair<sup>1,2</sup>; Farrah Q Wang<sup>1,2</sup>; George N. Khairallah<sup>1,2</sup>; Craig M Williams<sup>4</sup>; George Koutsantonis<sup>3</sup>; <sup>1</sup>*University of Melbourne, Victoria, Australia*; <sup>2</sup>*Bio21 Inst, Uni of Melbourne, Melbourne, Australia*; <sup>3</sup>*University of Western Australia, Perth, Australia*; <sup>4</sup>*University of Queensland, Brisbane, Australia*

- TOF am 9:10 **Hydration Energies and Charge Separation Processes of Group 12 Dications**; Theresa Cooper; Damon R Carl; Peter B. Armentrout; *University of Utah, Department of Chemistry, Salt Lake City, UT*
- TOF am 9:30 **Connecting Reduction Energies of Hydrated Metal Ions to Aqueous Solution: The Absolute SHE Potential, and Proton and Electron Solvation Energies**; William A. Donald; Ryan D. Leib; Maria Demireva; Jeremy T. O'Brien; M. Jeannette Aiken; Evan R. Williams; *University of California, Berkeley, CA*
- TOF am 9:50 **Origin of Enantio-Selective Reduction of the Ternary Coppered D,L Amino-Acid Complexes under Activation Conditions**; Françoise Fournier; Carlos Afonso; Denis Lesage; Valérie Mancel; Nicole Sellier; Jean-Claude Tabet; *University Paris VI (UPMC), Paris Cedex 05, France*
- TOF am 10:10 **Radical Cations of Methionine,  $\alpha$ -Methylmethionine and S-Methylcysteine: Generations and Dissociations in the Gas Phase**; Junfang Zhao<sup>1</sup>; Dominic C. M. Ng<sup>2</sup>; Ivan K. Chu<sup>2</sup>; A.C. Hopkinson<sup>1</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>*York University, Toronto, Canada*; <sup>2</sup>*University of Hong Kong, Hongkong, China*

**8:30 – 10:30 AM, TUESDAY MORNING**  
**MASS SPECTROMETRY IN HOMELAND PROTECTION**  
**Plamen A. Demirev, presiding**  
**Room 113**

- TOG am 8:30 **Mass Spectrometry in Biodefense**; Catherine Fenselau; *University of Maryland, College Park, MD*
- TOG am 8:50 **Mass Spectrometric Tools to Determine Ricin Sample Processing Methods**; Karen L. Wahl; Helen W. Kreuzer-Martin; Jon H. Wahl; Heather A. Colburn; David S. Wunschel; Brian H. Clowers; *Pacific Northwest National Laboratory, Richland, WA*
- TOG am 9:10 **Rapid Detection of Botulinum Neurotoxin in a Spiked Sample through Activity Detection and Proteomics**; Suzanne R. Kalb<sup>1</sup>; Hercules Moura<sup>1</sup>; Theresa J. Smith<sup>2</sup>; Leonard A. Smith<sup>2</sup>; James D. Marks<sup>3</sup>; John R. Barr<sup>1</sup>; <sup>1</sup>*CDC, Atlanta, GA*; <sup>2</sup>*USAMRIID, Ft. Detrick, MD*; <sup>3</sup>*University of California at San Francisco, San Francisco, CA*
- TOG am 9:30 **Rapid Identification of E. coli O157:H7 by "Top-Down" Proteomics Using MALDI-TOF/TOF Mass Spectrometry**; Clifton K. Fagerquist<sup>1</sup>; Brandon R. Garbus<sup>1</sup>; Katherine E. Williams<sup>2</sup>; Anna H. Bates<sup>1</sup>; Siobhan Boyle<sup>1</sup>; Leslie A. Harden<sup>1</sup>; William G. Miller<sup>1</sup>; Robert E. Mandrell<sup>1<sup>S</sup></sup>; <sup>1</sup>*USDA, ARS, Albany, CA*; <sup>2</sup>*UCSF, Department of Medicine, San Francisco, CA*
- TOG am 9:50 **The Use of Affinity Capture Mass Spectrometry for Detection of Biomarker Proteins and Biological Warfare Agents**; Erin Johnson; Walther Ellis; Linda Powers; Vicki Wysocki; *University of Arizona, Tucson, AZ*
- TOG am 10:10 **Bioaerosol Detection Using MALDI Ion Mobility and Mass Spectrometry**; Juaneka M. Hayes<sup>1</sup>; Michael P. Tolocka<sup>1</sup>; Kermit K. Murray<sup>1</sup>; Ernest K. Lewis<sup>2</sup>; Thomas Egan<sup>2</sup>; J. Albert Schultz<sup>2</sup>; <sup>1</sup>*Louisiana State University, Baton Rouge, LA*; <sup>2</sup>*Ionwerks Inc., Houston, TX*

**10:30 AM – 2:30 PM, TUESDAY  
POSTER SESSION (See page 72)  
Exhibit Hall AB**

Authors of odd-numbered posters present 10:30 am – 12:15 pm.

Authors of even-numbered posters present 12:45 – 2:30 pm.

Please do not remove posters before 7:30 pm. Posters must be removed by 8:00 pm.

**2:30 – 4:30 PM, TUESDAY AFTERNOON  
LC-MS ASSESSMENT OF HUMAN METABOLISM IN  
COMPLIANCE WITH “MIST” GUIDANCE  
Chungang Gu and Scott Grimm, presiding  
Ballroom A**

- TOA pm 2:30 **A New Paradigm for Metabolite Profiling and Bioanalysis to Identify and Manage Metabolite Safety Concerns;** Scott W. Grimm; *AstraZeneca Pharmaceuticals, Wilmington, DE*
- TOA pm 2:50 **A Methodology for Complete Plasma Metabolite Profiling and Identification with High-Resolution LC/MS to Address MIST Issues in Early Clinical Studies;** Haiying Zhang<sup>1</sup>; Wenying Li<sup>1</sup>; Weiping Zhao<sup>3</sup>; Jonathan L. Josephs<sup>2,4</sup>; William Humphreys<sup>1</sup>; Mingshe Zhu<sup>5</sup>; <sup>1</sup>Bristol-Myers Squibb R&D, Pennington, NJ; <sup>2</sup>Bristol-Myers Squibb, Princeton, NJ; <sup>3</sup>Bristol Myers Squibb, Princeton, NJ; <sup>4</sup>Bristol-Myers Squibb, Pennington, NJ; <sup>5</sup>Bristol-Myers Squibb, Princeton, NJ
- TOA pm 3:10 **Metabolite Profiling Challenges in the First-in-Human Study. Identification of Two Novel Metabolites of a Nociceptin Agonist;** Natalia Penner<sup>1</sup>; Swapan K. Chowdhury<sup>2</sup>; <sup>1</sup>Biogen Idec, Cambridge, MA; <sup>2</sup>Schering-Plough, Kenilworth, NJ
- TOA pm 3:30 **A Review of Accurate Mass LC-MS Applications for Compliance with MIST Guidelines;** Richard Clayton; Brian Morrison; John Kendrick; *Covance Laboratories, Ltd, Harrogate, North Yorkshire, UK*
- TOA pm 3:50 **A Retention-Time-Shift-Tolerant Background-Subtraction and Noise-Reduction Algorithm (BgS-NoRA) for Extraction of Drug Metabolites in LC-MS Data;** Peijuan Penny Zhu; Wei Ding; Wei Tong; Anima Ghosal; Kevin Alton; Swapan K. Chowdhury; *Schering-Plough Research Institute, Kenilworth, NJ*
- TOA pm 4:10 **Rapid Detection and Characterization of N-acetyl-L-Cysteine Conjugates in Human Urine Using Polarity Switching of Quadrupole-Linear Ion Trap Mass Spectrometry;** Wenying Jian<sup>1</sup>; Ming Yao<sup>2</sup>; Duxi Zhang<sup>2</sup>; Mingshe Zhu<sup>2</sup>; <sup>1</sup>Johnson and Johnson, Raritan, NJ; <sup>2</sup>Bristol-Myers Squibb, Princeton, NJ

**2:30 – 4:30 PM, TUESDAY AFTERNOON  
SMALL MOLECULE BIOMARKERS  
Bradley L. Ackermann, presiding  
Ballroom B**

- TOB pm 2:30 **Exposure and Response Biomarkers of Cigarette Smoke: Implications in Pulmonary Disease Onset and Progression;** Stacy L. Gelhaus; Ian A. Blair; *Univ. of Penn/SOM/Pharmacol, Philadelphia, PA*
- TOB pm 2:50 **Understanding the Incorporation of Gemcitabine into DNA and its Application as a Biomarker;** Enaksha R Wickremsinhe<sup>1</sup>; Barry S Lutzke<sup>1</sup>; Angela S Freeman<sup>1</sup>; Susan E Pratt<sup>1</sup>;

Angela Bones<sup>1</sup>; Crystal A Dotson-Roberts<sup>1</sup>; Bradley L. Ackermann<sup>1</sup>; Anne H Dantzig<sup>1,2</sup>; <sup>1</sup>Eli Lilly and Company, Indianapolis, IN; <sup>2</sup>The Cleveland Clinic, Cleveland, OH

- TOB pm 3:10 **Determining the Compatibility between Processing and Staining Methods for Histological Analysis of Frozen Tissue Specimens and LC-MS Analysis of Hormones;** Jeffrey C. Hanson<sup>2</sup>; Donald Johann<sup>3</sup>; Jaime Rodriguez-Canales<sup>2</sup>; Xia Xu<sup>1</sup>; Josip Blonder<sup>1</sup>; Michael R. Emmert-Buck<sup>2</sup>; Timothy D. Veenstra<sup>1</sup>; <sup>1</sup>SAIC-Frederick, Inc., Frederick, MD; <sup>2</sup>National Cancer Institute, Bethesda, MD; <sup>3</sup>NIH, Bethesda, MD
- TOB pm 3:30 **Metabolic Biomarkers Discovery;** Vladimir Tolstikov; *UC Davis Genome Center, Davis, CA*
- TOB pm 3:50 **High Throughput UFLC-MS/MS Analysis of Urinary Prostanoids before and after Exercise;** Matt Blatnik<sup>1</sup>; Rick Steenwyk<sup>2</sup>; <sup>1</sup>Pfizer Inc., Groton, CT; <sup>2</sup>Pfizer, Lebanon, CT
- TOB pm 4:10 **Mass Spectrometry Strategies for Lipidome Analysis and the Identification of Lipid Biomarkers of Disease;** Todd A. Lydic; Julia V. Busik; Gavin E. Reid; *Michigan State University, East Lansing, MI*

**2:30 – 4:30 PM, TUESDAY AFTERNOON  
ADVANCES IN THE CHARACTERIZATION OF  
GLYCOPROTEINS  
Heather Desaire, presiding  
Room 201**

- TOC pm 2:30 **A Lectin Affinity-Based Biomarker Discovery Workflow Targeting Cancer-Specific Glycopeptides in Human Plasma;** Penelope M. Drake<sup>2</sup>; Eric Johansen<sup>2</sup>; Richard Niles<sup>2</sup>; Michael Lerch<sup>2</sup>; Haichuan Liu<sup>2</sup>; Bensheng Li<sup>1</sup>; Simon Allen<sup>2</sup>; Kwanyoung Jung<sup>4</sup>; Steven C. Hall<sup>2</sup>; Birgit Schilling<sup>1</sup>; H. Ewa Witkowska<sup>2</sup>; Susan Fisher<sup>3</sup>; Fred Regnier<sup>4</sup>; Bradford W. Gibson<sup>1</sup> <sup>1</sup>Buck Inst. for Age Research, Novato, CA; <sup>2</sup>UCSF Mass Spectrometry Core, San Francisco, CA; <sup>3</sup>UC San Francisco, San Francisco, CA; <sup>4</sup>Purdue University, West Lafayette, IN
- TOC pm 2:50 **In-Depth Urinary N-Glycoproteome Profiling in Normal and Prostate Cancer Patient Urine;** Yong Zhou<sup>1</sup>; Laura Knutzen<sup>1</sup>; Hector Ramos<sup>1</sup>; Carey Sheu<sup>1</sup>; Paul Shannon<sup>1</sup>; Hui Zhang<sup>2</sup>; Julian D Watts<sup>1</sup>; Alvin Liu<sup>3</sup>; Ruedi Aebersold<sup>1,4</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Johns Hopkins Medical Institutions, Baltimore, MD; <sup>3</sup>University of Washington School of Medicine, Seattle, WA; <sup>4</sup>IMBS, ETH&Faculty of Science, U of Zurich, Switzerland
- TOC pm 3:10 **Glycopeptide Analysis of HIV-1 Envelope Proteins: Influence of Glycosylation on Envelope Immunogenicity;** Eden P. Go<sup>1</sup>; Qing Chang<sup>1</sup>; Hua-Xin Liao<sup>2</sup>; Sutherland Laura<sup>2</sup>; Munir Alam<sup>2</sup>; Barton F. Haynes<sup>2</sup>; Heather Desaire<sup>1</sup>; <sup>1</sup>University of Kansas, Lawrence, KS; <sup>2</sup>Duke University Medical Center, Durham, NC
- TOC pm 3:30 **Glycomics of the Antibacterial Salivary Agglutinin Protein Using LC-MS;** Niclas G. Karlsson<sup>1</sup>; Samah Issa<sup>1</sup>; Antoon J.M. Ligtenberg<sup>2</sup>; <sup>1</sup>School of Chemistry, NUI Galway, Galway, Ireland; <sup>2</sup>Department of Oral Biochemistry, Free University, Amsterdam, The Netherlands

TOC pm 3:50 **Site-Specific Glycosylation of Human Serum Glycoproteins via Partition and Quantitation of the N-Glycome-Utility for Disease Biomarker Discovery**; Caroline S. Chu<sup>1</sup>; Ning Tang<sup>2</sup>; John Froehlich<sup>1</sup>; Tony Ferrige<sup>3</sup>; Robert Alecio<sup>4</sup>; Patrick D. Perkins<sup>2</sup>; Kevin Killeen<sup>5</sup>; Keith Waddell<sup>2</sup>; Rudolf Grimm<sup>2</sup>; Helen Chew<sup>6</sup>; Suzanne Miyamoto<sup>6</sup>; Carlito Lebrilla<sup>1</sup>; <sup>1</sup>UC Davis, Davis, CA; <sup>2</sup>Agilent Technologies, Santa Clara, CA; <sup>3</sup>Positive Probability Limited, Ely, UK; <sup>4</sup>Positive Probability Ltd, Sittingbourne, UK; <sup>5</sup>Agilent Laboratories, Santa Clara, CA; <sup>6</sup>UC Davis Cancer Center, Sacramento, CA

TOC pm 4:10 **Identification and Quantitation of Phosphorylated and O-GlcNAcylated Proteins Associated with Mitotic Spindles and Midbodies during Cytokinesis (Part B)**; Namrata Udeshi<sup>1</sup>; Zihao Wang<sup>2</sup>; Chad Slawson<sup>2</sup>; Philip Compton<sup>1</sup>; Jeffrey Shabanowitz<sup>1</sup>; Gerald W. Hart<sup>2</sup>; Donald F. Hunt<sup>1</sup>; <sup>1</sup>University of Virginia, Charlottesville, VA; <sup>2</sup>Johns Hopkins School of Medicine, Baltimore, MD

**2:30 – 4:30 PM, TUESDAY AFTERNOON**  
**NOVEL DEVELOPMENTS IN MASS SPECTROMETRY INSTRUMENTATION: ANALYZERS, DETECTORS, TANDEM INSTRUMENTS**  
**Robert J. Noll, presiding**  
**Room 204**

TOD pm 2:30 **A High Mass Resolution, Multiplexed Time-of-Flight Mass Spectrometer**; Robert H. Jackson; Zhongyu Yang; C. Bronson Crothers; David A. Ferris; Stephen A. Lammert; *Stillwater Scientific Instruments, Inc., Orono, ME*

TOD pm 2:50 **Direct Analysis Of Neutrals Using Superconducting Detector in Tandem Mass Spectrometry**; Masataka Ohkubo<sup>1</sup>; Masahiro Ukibe<sup>1</sup>; Shigetomo Shiki<sup>1</sup>; Shigeo Tomita<sup>2</sup>; Shigeo Hayakawa<sup>3</sup>; <sup>1</sup>National Inst. of Adv. Indust. Sci. Tech. (AIST), Tsukuba, Ibaraki; <sup>2</sup>University of Tsukuba, Tsukuba, Ibaraki; <sup>3</sup>Osaka Prefecture University, Sakai, Osaka

TOD pm 3:10 **Comparison of As-Built and Simion-174 Model Results for a Toroidal Ion Trap Mass Spectrometer**; Joseph Oliphant; Edgar Lee; Eric Handberg; *Torion Technologies, Inc., American Fork, UT*

TOD pm 3:30 **Increased Proteome Definition Exploiting Performance Enhancements of a New Linear Ion Trap Mass Spectrometer**; Tonya P. Second; Justin Blethrow; Vlad Zabrouskov; Jae C. Schwartz; *Thermo Fisher Scientific, San Jose, CA*

TOD pm 3:50 **Ion-Ion Interactions in the Orbitrap Mass Analyzer**; Richard H. Perry<sup>1</sup>; Gary Abdiel Salazar<sup>1</sup>; Qizhi Hu<sup>2</sup>; R. Graham Cooks<sup>1</sup>; Robert J. Noll<sup>1</sup>; <sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>Amgen, Inc., Thousand Oaks, CA

TOD pm 4:10 **Multiple-Reflection Time-of-Flight Mass Spectrometry of Exotic Nuclei**; Wolfgang R. Plass<sup>1,2</sup>; Timo Dickel<sup>2</sup>; Arno Becker<sup>2</sup>; Ulrich Czok<sup>2</sup>; Hans Geissel<sup>1,2</sup>; Christian Jesch<sup>2</sup>; Wadim Kinsel<sup>1,2</sup>; Martin Petrick<sup>1,2</sup>; Katrin Reinheimer<sup>2,3</sup>; <sup>1</sup>GSI, Darmstadt, Germany; <sup>2</sup>Justus-Liebig-Universitaet Giessen, Giessen, Germany; <sup>3</sup>Institute for Analytical Instrumentation, St. Petersburg, Russia

**2:30 – 4:30 PM, TUESDAY AFTERNOON**  
**THE ROLE OF MASS SPECTROMETRY IN UNDERSTANDING CELLULAR PATHWAYS**  
**Ileana M. Cristea, presiding**  
**Exhibit Hall C**

TOE pm 2:30 **Quantitative Phosphoproteomics Identifies Sites in K-CI Cotransporters that Regulate Cell Volume and Neuronal Excitation**; Jesse Rinehart<sup>1</sup>; Yelena D. Maksimova<sup>1</sup>; Jessica E. Tanis<sup>1</sup>; Kathy Stone<sup>1</sup>; Junhui Zhang<sup>1</sup>; Mary Risinger<sup>3</sup>; Weijun Pan<sup>1</sup>; Dianqing Wu<sup>1</sup>; Christopher Colangelo<S>; <sup>1</sup>Yale University, New Haven, CT; <sup>2</sup>Howard Hughes Medical Institute, New Haven, CT; <sup>3</sup>University of Cincinnati College of Medicine, Cincinnati, OH

TOE pm 2:50 **A Targeted Spatial-Temporal Proteomic Approach Reveals New Cellular Pathways Involved in Human Cytomegalovirus Virion Maturation**; Nathaniel J. Moorman; Thomas E. Shenk; Ileana M. Cristea; *Princeton University, Princeton, NJ*

TOE pm 3:10 **Lysine Butyrylation is a Prevalent and Evolutionarily-conserved Posttranslational Modification Pathway**; Zhongyi Cheng; Kai Zhang; Zhihong Zhang; Yue Chen; Minjia Tan; Yingming Zhao; *University of Chicago, Chicago, IL*

TOE pm 3:30 **Mapping Epigenetic Signaling Networks (the Human Epigenome) Using a Combined Proteomic-Genomic Approach**; Gary LeRoy; Nicolas L. Young; Mariana D. Plazas-Mayorca; Benjamin A. Garcia; *Princeton University, Princeton, NJ*

TOE pm 3:50 **Toward Simultaneously Assessing the Activation State of the Kinome including Substrate-Kinase Relationship**; Kazuishi Kubota<sup>1</sup>; Rana Anjum<sup>1</sup>; Yonghao Yu<sup>1</sup>; Adam Feldman<sup>2</sup>; Chin-Lee Wu<sup>2</sup>; John Rush<sup>3</sup>; Judit Villen<sup>1</sup>; Steven Gygi<sup>1</sup>; <sup>1</sup>Harvard Medical School, Boston, MA; <sup>2</sup>Massachusetts General Hospital, Boston, MA; <sup>3</sup>Cell Signaling Technology, Danvers, MA

TOE pm 4:10 **Proteomics «Google»-Like Tool for Signaling Pathways**; Roman Zubarev; Konstantin Artemenko; Corina Mayrhofer; Y.M. Eva Fung; *Karolinska Institute, Stockholm, Sweden*

**2:30 – 4:30 PM, TUESDAY AFTERNOON**  
**CLUSTERS/COMPLEXES/SOLVATED IONS**  
**Evan R. Williams, presiding**  
**Room 103**

TOF pm 2:30 **Characterization of Floppy Systems with Vibrational Spectroscopy: Learning to Live with Anharmonic Effects**; Mark Johnson; *Yale University, New Haven, CT*

TOF pm 2:50 **Hydration of Hydrophobic and High Charge State Ions: Transitions from Gas-Phase Structure to Bulk**; James Prell; Jeremy T O'Brien; Evan R. Williams; *University of California, Berkeley, CA*

TOF pm 3:10 **Structures of Hydrated Metalated and Proton-Bound Dimer Adenine by IRMPD Spectroscopy**; Khadijeh Rajabi; Elizabeth Gillis; Travis Fridgen; *Memorial University of NL, St. John's, NF*

TOF pm 3:30 **Gas Phase Hydration of Trapped Peptides: Kinetics**; Xiangguo Shi; Joel H. Parks; *Rowland Institute at Harvard, Cambridge, MA*



- TOF pm 3:50 **Chirality: Effects on Folding and Aggregation of Peptides**; Michael T. Bowers; Christian Bleiholder; Nicholas Dupuis; *University of California, Santa Barbara, CA*
- TOF pm 4:10 **Influence of Configurational Entropy on the Dissociation Kinetics of Protein-Ligand Complexes in the Gas Phase**; Elena Kitova; John Klassen; *University of Alberta, Edmonton, Canada*

**2:30 – 4:30 PM, TUESDAY AFTERNOON  
HDX FOR PROTEIN STRUCTURE AND FOLDING  
Igor A. Kaltashov, presiding  
Room 113**

- TOG pm 2:30 **Structure of Lipid-Free and Lipid-Bound Human Apolipoprotein A-I by Hydrogen-Deuterium Exchange Analyzed by Mass Spectrometry**; Palaniappan S Chetty<sup>1</sup>; Michael C Phillips<sup>1</sup>; Lund-Katz S<sup>1</sup>; Leland Mayne<sup>1</sup>; David Stranz<sup>2</sup>; Walter Englander<sup>1</sup>; <sup>1</sup>*University of Pennsylvania, Philadelphia, PA*; <sup>2</sup>*Sierra Analytics, Inc., Modesto, CA*
- TOG pm 2:50 **On the Conformation of HIV-1 Nef from Various Viral Strains**; Thomas E. Wales<sup>1</sup>; Lori Emert-Sedlak<sup>2</sup>; Thomas E. Smithgall<sup>2</sup>; John R. Engen<sup>1</sup>; <sup>1</sup>*Northeastern University, Boston, MA*; <sup>2</sup>*University of Pittsburgh School of Medicine, Pittsburgh, PA*
- TOG pm 3:10 **Insight into the Escherichia coli L7/L12 Ribosomal Stalk Complex from Hydrogen Exchange Mass Spectrometry**; Stephanie Deroo<sup>1</sup>; Yuliya Gordiyenko<sup>1</sup>; Carol Robinson<sup>2</sup>; <sup>1</sup>*Cambridge University, Cambridge, UK*; <sup>2</sup>*University of Cambridge, Cambridge, UK*
- TOG pm 3:30 **Conformational and Functional Effect of Posttranslational Modifications on sRAGE Protein by Solution-Phase H/D Exchange FT-ICR Mass Spectrometry**; Hui-Min Zhang<sup>1</sup>; Shaun McLoughlin<sup>2</sup>; Huan He<sup>1</sup>; Carol Nilsson<sup>3</sup>; Mark R. Emmett<sup>1</sup>; Alan G. Marshall<sup>1</sup>; <sup>1</sup>*Nat'l High Magnetic Field Lab/Florida State Univ., Tallahassee, FL*; <sup>2</sup>*Abbott Laboratories, Abbott Park, IL*; <sup>3</sup>*Pfizer, Inc., San Diego, CA*
- TOG pm 3:50 **Amyloidogenic beta-2-Microglobulin Transiently Populates a Long-Lived Unfolded State**; Thomas J.d. Jorgensen<sup>1</sup>; Lei Cheng<sup>2</sup>; Anna Jansson<sup>4</sup>; Niels H.H. Heegaard<sup>3</sup>; <sup>1</sup>*University of Southern Denmark, Odense M, Denmark*; <sup>2</sup>*Dept. Biochemistry & Molecular Biology, Odense M, Denmark*; <sup>3</sup>*Statens Serum Institut, Copenhagen, Denmark*; <sup>4</sup>*Sidec AB, Stockholm, Sweden*
- TOG pm 4:10 **Examination of Electron-Induced Fragmentation of Intact Protein Ions as a New Tool in Top-Down HDX MS Measurements**; Rinat Abzalimov<sup>1</sup>; Desmond Kaplan<sup>2</sup>; Michael Easterling<sup>2</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>*University of Massachusetts, Amherst, MA*; <sup>2</sup>*Bruker Daltonics, Inc., Billerica, MA*

**4:45 – 5:30 PM, TUESDAY  
AWARD LECTURE  
Gary L. Glish, presiding  
Exhibit Hall C**

- 4:45 pm **Presentation of the Thermo Scientific Research Award**  
**Presentation of the Waters Corporation Research Award**
- 4:55 pm **Recipient of the Biemann Medal**



Neil L. Kelleher, *University of Illinois*

**5:45 – 7:00 pm  
TUESDAY WORKSHOPS  
See page 19.**

There will be light refreshments provided on the lower level where workshops are located.

**8:30 – 10:30 AM, WEDNESDAY MORNING  
EMERGING MS TECHNIQUES FOR DRUGS AND  
METABOLITE IMAGING IN TISSUES  
Akos Vertes, presiding  
Ballroom A**

- WOA am 8:30 **About Tissues, Compounds and Metabolites**; Markus Stoeckli; Dieter Staab; Brendan Prideaux; *Novartis Institutes for BioMedical Research, Basel, Switzerland*
- WOA am 8:50 **Ambient Mass Spectrometric Imaging of Metabolites in Mus Musculus Brain and Arabidopsis Thaliana Leaf by Mid-Infrared Laser Ablation Electrospray Ionization**; Peter Nemes<sup>1</sup>; Ales Svatos<sup>2</sup>; Akos Vertes<sup>1</sup>; <sup>1</sup>*George Washington University, Washington, DC*; <sup>2</sup>*Max Planck Institute, Jena, Germany*
- WOA am 9:10 **High-Field MALDI FTMS for Direct Pre-Clinical Imaging of Drug Distribution and Metabolism**; Katherine A. Kellersberger<sup>1</sup>; Michael L. Easterling<sup>1</sup>; Santosh Kesari<sup>2</sup>; Claire M. Sauvageot<sup>2</sup>; Jeffrey N. Agar<sup>3</sup>; Nathalie Y.R. Agar<sup>4</sup>; <sup>1</sup>*Bruker Daltonics, Inc., Billerica, MA*; <sup>2</sup>*Dana Farber Cancer Institute, Harvard Med. School, Boston, MA*; <sup>3</sup>*Brandeis University, Waltham, MA*; <sup>4</sup>*Harvard Medical School, Neurosurgery, Boston, MA*
- WOA am 9:30 **9-Aminoacridine as a Matrix for *in situ* Characterization of Primary Metabolites and Anionic Phospholipids by MALDI Imaging Mass Spectrometry**; Farida Benabdellah<sup>1</sup>; David Touboul<sup>1</sup>; Alain Brunelle<sup>1</sup>; Olivier Lapr evote<sup>1,2</sup>; <sup>1</sup>*Mass spectrometry ICSN-CNRS, Gif-sur-yvette, France*; <sup>2</sup>*Paris-Descartes University, Paris, France*
- WOA am 9:50 **Mass Spectrometric Imaging of Plant Metabolites on Various Organs: Comparative Study of Genetically Mutated Arabidopsis vs. Wild Type**; Ji Hyun Jun<sup>1,2</sup>; Zhenjiu Liu<sup>1,2</sup>;

Zhihong Song<sup>2,3</sup>; Basil J. Nikolau<sup>2,3</sup>; Edward S. Yeung<sup>1,2</sup>; Young Jin Lee<sup>1,2</sup>; <sup>1</sup>Department of Chemistry, Iowa State University, Ames, IA; <sup>2</sup>Ames Lab, Ames, IA; <sup>3</sup>Department of Biochemistry, Iowa State University, Ames, IA

WOA am 10:10

**Spatial Querying of Mass Spectral Imaging Data Allows for Differential Analysis of Neurodegenerative Alterations in Tissue;** Raf Van de Plas; Kristiaan Pelckmans; Thomas Philips; Justin Vijay Louis; Bart De Moor; Etienne Waelkens; *K.U.Leuven, Leuven, Belgium*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
ADVANCES IN METABOLOMICS  
Michael Reily, presiding  
Ballroom B**

WOB am 8:30

**Metabolic Signatures of Human Drug Response Phenotyping;** Oliver Fiehn<sup>1</sup>; Gert Wohlgenuth<sup>1</sup>; Dinesh Kumar Barupal<sup>1</sup>; Tobias Kind<sup>1</sup>; Rima Kaddurah-Daouk<sup>2</sup>; <sup>1</sup>UC Davis, Davis, CA; <sup>2</sup>Duke University, Durham, NC

WOB am 8:50

**UPLC-MS Metabolite Profiling to Investigate the Influence of the Gut Microbiome on Host Metabolism;** Elizabeth J. Want<sup>1</sup>; Jonathan Swann<sup>1</sup>; Florian Geier<sup>1</sup>; James Sidaway<sup>2</sup>; Jeremy Nicholson<sup>1</sup>; Elaine Holmes<sup>1</sup>; Ian Wilson<sup>2</sup>; <sup>1</sup>imperial College, London, UK; <sup>2</sup>Astra Zeneca, Macclesfield, UK

WOB am 9:10

**Metabonomic Profiling and Metabolite Identification of Bromoethylamine, A Potent Nephrotoxicant;** Petia Shipkova<sup>1</sup>; Serhiy Hnatyshyn<sup>1</sup>; Mark Sanders<sup>2</sup>; Jeff Vassallo<sup>1</sup>; Michael Reily<sup>1</sup>; Don Robertson<sup>1</sup>; Lois Lehman-Mckeeman<sup>1</sup>; <sup>1</sup>Bristol Myers Squibb, Princeton, NJ; <sup>2</sup>Thermo Fisher Scientific, Somerset, NJ

WOB am 9:30

**Identification and Quantification of Metabolites in a Human Plasma Standard Reference Material by Multiple Mass Spectrometry Methods;** Nathan G. Dodder; Ruth Barak; Gauthier Eppe; Elizabeth A. McGaw; Stephen E. Stein; Karen W. Phinney; *NIST, Gaithersburg, MD*

WOB am 9:50

**Accurate and Sensitive All-Ions Quantitation Using a New Ultra High Resolution LCMS and its Application to Endogenous Metabolite Profiling;** Mark Sanders<sup>1</sup>; Kevin J. Mchale<sup>1</sup>; Chunang (christine) Gu<sup>2</sup>; Petia Shipkova<sup>3</sup>; <sup>1</sup>Thermo Fisher Scientific, Somerset, NJ; <sup>2</sup>ThermoFisher Scientific, San Jose, CA; <sup>3</sup>Bristol Myers Squibb, Princeton, NJ

WOB am 10:10

**High-Resolution, Full-Scan Mass Spectrometry for Quantitative Cellular Metabolomics and Fluxomics;** Michelle F. Clasquin; Wenyun Lu; Eugene Melamud; Joshua D. Rabinowitz; *Princeton University, Princeton University, NJ*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
NOVEL STRATEGIES FOR GAS PHASE ION  
STRUCTURAL CHARACTERIZATION  
Ryan R. Julian, presiding  
Room 201**

WOC am 8:30

**Cross Sectional Areas by Fourier Transform Ion Cyclotron Resonance (CRAFTI) Collisional Damping Analysis;** Fan Yang; Jacob Voelkel; David V. Dearden; *Brigham Young University, Provo, UT*

WOC am 8:50

**Phosphopeptide Characterization by Femtosecond Laser-Induced Ionization/Dissociation (fs-LID);** Gavin E. Reid;

Christine L. Kalcic; Scott A. Smith; Marcos Dantus; *Michigan State University, East Lansing, MI*

WOC am 9:10

**Ozone Induced Dissociation in Structure Elucidation;** Huong Pham; Todd W Mitchell; Michael Thomas; Stephen J Blanksby; *University of Wollongong, Wollongong, NSW, Australia*

WOC am 9:30

**Infrared Multiphoton Dissociation of Peptides in a Dual Cell Linear Ion Trap Mass Spectrometer;** Myles Gardner<sup>1</sup>; James Madsen<sup>1</sup>; Suncerae Smith<sup>1</sup>; Aaron Ledvina<sup>2</sup>; Jennifer Brodbelt<sup>1</sup>; <sup>1</sup>University of Texas - Austin, Austin, TX; <sup>2</sup>UW Madison, Madison, WI

WOC am 9:50

**Homo- and Hetero-Oligomeric Complexes in the Gas Phase Investigated by Ion Mobility and Tandem Mass Spectrometry;** Elisabetta Boeri Erba; Brandon Ruotolo; Carol Robinson; *University of Cambridge, Department of Chemistry, Cambridge, UK*

WOC am 10:10

**Identification and Inhibition of Gas Phase Rearrangements of Protonated YAGFL Analogs and their Fragments;** Ashley C. Gucinski; Asiri Galhena; Brittany R. Perkins; Arpad Somogyi; Vicki H. Wysocki; *University of Arizona, Tucson, AZ*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
APPLICATIONS OF ION MOBILITY SPECTROMETRY  
Facundo Fernandez, presiding  
Room 204**

WOD am 8:30

**Application Overview of Ion Mobility Spectrometry Coupled with Mass Spectrometry;** Herbert H. Hill; William F. Siems; Kimberly A. Kaplan; Christina L. Crawford; Eric J. Davis; Roberto Fernandez Maestre; *Washington State University, Pullman, WA*

WOD am 8:50

**Ion Mobility Characterization of Carbohydrate:Protein Conformational Binding;** Julie A. Leary<sup>1</sup>; Raluca Stefanescu<sup>2</sup>; Connie Jen<sup>1</sup>; <sup>1</sup>UC Davis, Davis, CA; <sup>2</sup>University of Davis, Davis, CA

WOD am 9:10

**A Shape Selective Study of Conformational Changes in Metal Containing Proteins;** James Scrivens<sup>1</sup>; Frances D L Kondrat<sup>1</sup>; Charlotte Scarff<sup>1</sup>; Claudia A Blindauer<sup>1</sup>; Narinder Sanghera<sup>1</sup>; Gillian R. Hilton<sup>1</sup>; Andrew C Gill<sup>2</sup>; Teresa Pinheiro<sup>3</sup>; Ko; <sup>1</sup>University of Warwick, Coventry, UK; <sup>2</sup>Roslin Institute, Compton Laboratories, Compton, UK

WOD am 9:30

**Photofragmentation with VUV Post-Ionization Coupled with Ion-Mobility Mass Spectrometry for Analysis of Peptides and Sulfatides;** Thomas Egan<sup>1</sup>; Ernest K. Lewis<sup>1</sup>; Kelley Waters<sup>1</sup>; Valerie Vaughn<sup>1</sup>; Steve Ulrich<sup>1</sup>; Shelley N. Jackson<sup>2</sup>; J. Albert Schultz<sup>1</sup>; Amina S. Woods<sup>2</sup>; <sup>1</sup>Ionwerks, Inc., Houston, TX; <sup>2</sup>NIDA-IRP, NIH, Baltimore, MD

WOD am 9:50

**Ultrafast Field Asymmetric Waveform Ion Mobility Spectrometry/ Mass Spectrometry Analyses at Extreme Electric Fields in Microscopic Multichannel FAIMS Chips;** Alexandre A. Shvartsburg<sup>1</sup>; Keqi Tang<sup>1</sup>; Richard D. Smith<sup>1</sup>; Martin Holden<sup>2</sup>; Andrew Thompson<sup>2</sup>; Martyn Rush<sup>2</sup>; Andrew Koehl<sup>2</sup>; David Ruiz-Alonso<sup>2</sup>; Danielle Touto; <sup>1</sup>Pacific Northwest National Laboratory, Richland, WA; <sup>2</sup>Owlstone Ltd., Cambridge, UK

WOD am 10:10 **Observation of Neutral Molecule (Ion-Pair) Evaporation from Ionic Liquid Nanodroplets by Tandem Differential Mobility Analysis-Mass Spectrometry (DMA-MS)**; Christopher J. Hogan; Juan Fernandez de la Mora; *Yale University - Mechanical Engineering, New Haven, CT*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
NEW DEVELOPMENTS IN BIOINFORMATICS**

**Pavel Pevzner, presiding  
Exhibit Hall C**

WOE am 8:30 **A Fast Previewer for Shotgun Proteomics Data**; Marshall W. Bern; *Palo Alto Research Center, Palo Alto, CA*

WOE am 8:50 **A Probabilistic Algorithm for Protein Identification Using a Simple, Realistic Model that Recognizes Degeneracy**; Oliver Serang<sup>1</sup>; Jason Weston<sup>2</sup>; Michael J. Maccoss<sup>1</sup>; William Noble<sup>1</sup>; <sup>1</sup>*University of Washington, Seattle, WA*; <sup>2</sup>*NEC Research, Princeton, NJ*

WOE am 9:10 **Spectral Profiles: A Novel Representation of Tandem Mass Spectra and its Application for Gapped Peptide Generation**; Sangtae Kim; Nuno Bandeira; Pavel Pevzner; *University of California San Diego, La Jolla, CA*

WOE am 9:30 **Correlation of Database Entries and its Impact on Statistical Analysis in Peptide Identification**; Aleksey Y Ogurtsov; Gelio Alves; Yi-kuo Yu; *National Center for Biotechnology Information, NLM, Bethesda, MD*

WOE am 9:50 **Sequencing Proteins with MS/MS and a Homologous Reference Sequence**; Xiaowen Liu<sup>1</sup>; Yonghua Han<sup>2</sup>; Denis Yuen<sup>3</sup>; Bin Ma<sup>1</sup>; <sup>1</sup>*University of Waterloo, Waterloo, Canada*; <sup>2</sup>*University of Western Ontario, London, ON*; <sup>3</sup>*Bioinformatics Solutions, Inc., Waterloo, ON*

WOE am 10:10 **Proteogenomics of the Plague Bacterium, Yersinia Pestis**; Sam Payne; Shih-Ting Huang; Rembert Pieper; *J Craig Venter Institute, Rockville, MD*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
MS OF POLYMERS/MATERIALS I:  
STRUCTURES AND PROPERTIES  
Chrys Wesdemiotis, presiding  
Room 103**

WOF am 8:30 **Role of the Adducted Cation in the Release of Nitroxide End-Group of Controlled Synthetic Polymers in Mass Spectrometry**; Michael Mazarin; Marion Girod; Stephane Viel; Trang Phan; Sylvain Marque; Stephane Humbel; Laurence Charles; *University Aix-Marseille I & III, Marseille Cedex 20, France*

WOF am 8:50 **Inconsistencies in the Analysis of Large Polycyclic Aromatic Hydrocarbons by Laser Desorption and Matrix Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry**; Hans Joachim Räder; Anna Cristadoro; Klaus Müllen; *Max Planck Institute for Polymer Research, Mainz, Germany*

WOF am 9:10 **Isotopically Labeled Nylon Provides Insight into Oxidative and Hydrolytic Degradation Mechanisms**; James Hochrein; Donald Bradley; Michael White; Steven Thornberg; Robert Bernstein; *Sandia National Laboratories, Albuquerque, NM*

WOF am 9:30 **Characterization of rf Plasma-Polymerized Compounds by MALDI Mass Spectrometry**;

Lijuan Peng; Gary R. Kinsel; *Southern Illinois University Carbondale, Carbondale, IL*

WOF am 9:50 **Comparison of Electron Transfer Dissociation and Collision-Induced Dissociation Fragmentation of Multiply Charged Polyethers**; Tony Jackson<sup>1</sup>; Gillian R. Hilton<sup>2</sup>; Susan E. Slade<sup>2</sup>; James Scrivens<sup>2</sup>; <sup>1</sup>*AkzoNobel CARG, Songjiang Industrial Estate, China*; <sup>2</sup>*University of Warwick, Coventry, UK*

WOF am 10:10 **Sample Spot Heterogeneity Investigated by MALDI - Imaging Mass Spectrometry**; Steffen M. Weidner; Jana Falkenhagen; Rolf-Dieter Schulze; Andreas Thuenemann; *Fed.Inst.f.Mat.Research, Berlin, Germany*

**8:30 – 10:30 AM, WEDNESDAY MORNING  
COMPOSITIONAL ANALYSIS OF PETROLEUM BY MS  
Ryan P. Rodgers, presiding  
Room 113**

WOG am 8:30 **High Resolution MS/MS Techniques for the Investigation of Crude Oils and its Fractions**; Wolfgang Schrader<sup>1</sup>; Saroj Panda<sup>1</sup>; Kishore Sripada<sup>1</sup>; Jan T. Andersson<sup>2</sup>; <sup>1</sup>*Max-Planck Inst Coal Res., Mülheim / Ruhr, Germany*; <sup>2</sup>*Inst. Inorg. and Analytical Chem, Univ. Muenster, Muenster, Germany*

WOG am 8:50 **Non-Invasive Molecular Characterization of Kerogen and its Insoluble Biopolymer Precursors by Fourier Transform Mass Spectrometry**; Rachel L. Sleighter; Elodie Salmon; Heidi M. Bialk; Patrick G. Hatcher; *Old Dominion University, Norfolk, VA*

WOG am 9:10 **Comprehensive Characterization of Crude Oils by Thermalanalysis Coupled to a Novel Photo-Ionization Mass Spectrometer: Signatures of Vaporized Hydrocarbons and Asphaltene-Pyrolysis**; Robert Geißler<sup>1,2</sup>; Thorsten Streibel<sup>1,2</sup>; Mohammed Saraji<sup>1,2</sup>; Ralf Zimmermann<sup>1,2</sup>; <sup>1</sup>*Universität Rostock, Rostock, Germany*; <sup>2</sup>*Helmholtz Zentrum München, Oberschleissheim, Germany*

WOG am 9:30 **A Unified Theory of Asphaltene Structure**; Amy Mckenna<sup>1</sup>; Ryan P. Rodgers<sup>1</sup>; Alan G. Marshall<sup>3</sup>; <sup>1</sup>*Natl High Magnetic Field Laboratory, Tallahassee, FL* <sup>2</sup>*Ion Cyclotron Resonance Prog, Tallahassee, FL*

WOG am 9:50 **Fingerprinting Heteroatom Hydrocarbons Using Ion Mobility – Mass Spectrometry**; Francisco Alberto Fernandez Lima; David H. Russell; *Texas A&M University, College Station, TX*

WOG am 10:10 **High-energy Laser-induced Acoustic Desorption/Fourier Transform Ion Cyclotron Resonance Mass Spectrometric Analysis of Heavy Petroleum Products**; David Pinkston; Vanessa Gallardo; Steven Habicht; Hilikka Kenttamaa; *Purdue University, West Lafayette, IN*

**10:30 AM – 2:30 PM, WEDNESDAY  
POSTER SESSION (See page 103)  
Exhibit Hall AB**

Authors of odd-numbered posters present 10:30 am – 12:15 pm.  
Authors of even-numbered posters present 12:45 – 2:30 pm.  
Please do not remove posters before 7:30 pm. Posters must be removed by 8:00 pm.

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
POLYPEPTIDE ION FRAGMENTATION:  
THEORY AND EXPERIMENT**

**Vicki H. Wysocki, presiding  
Ballroom A**

- WOA pm 2:30 **Enhancing ETD by Chemical Modifications that Increase Charge States of Peptides and Proteins;** Brian L. Frey; April Jue; Aaron Ledvina; Joshua J. Coon; Lloyd Smith; *University of Wisconsin, Madison, WI*
- WOA pm 2:50 **Structural Motifs that Suppress Peptide Ion Fragmentation after Electron Capture;** Takwah Dominic Chan; W. Y. Kelly Chan; *The Chinese Univ. of Hong Kong, Hong Kong Sar, China*
- WOA pm 3:10 **Side-Chain Mediated Fragmentation of Peptide Radical Ions Produced in 157 nm Photodissociation;** Liangyi Zhang; James P. Reilly; *Indiana university, Bloomington, IN*
- WOA pm 3:30 **Effect of Chain Length on “b” Fragment Structures in Collision-Induced Cissociation of Protonated Peptides;** Xian Chen<sup>1</sup>; Long Yu<sup>1</sup>; Jos Oomens<sup>2</sup>; Jeffrey Steill<sup>2</sup>; David H. Powell<sup>1</sup>; Nicolas Polfer<sup>1</sup>; <sup>1</sup>*University of Florida, Gainesville, FL*; <sup>2</sup>*FOM Rijnhuizen, Nieuwegein, Netherlands*
- WOA pm 3:50 **IRMPD and H/D Exchange Reveals that the HA b<sub>2</sub><sup>+</sup> Ion Is a Mixture of Diketopiperazine and Oxazolone Structures;** Brittany R. Perkins<sup>1</sup>; Sung Hwan Yoon<sup>1</sup>; Julia Chamot-rooke<sup>2</sup>; Arpad Somogyi<sup>1</sup>; Vicki H. Wysocki<sup>1</sup>; <sup>1</sup>*The University of Arizona, Tucson, AZ*; <sup>2</sup>*CNRS, Palaiseau, France*
- WOA pm 4:10 **DFT Modeling of Proton Transfer Reactions for the Formation of (b<sub>3</sub>)<sup>+</sup> Ions within Alternative Amino Acid Model Tetrapeptides;** Travis Cooper; Michael J. Van Stipdonk; *Wichita State University, Wichita, KS*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
APPLICATION OF DIRECT/OPEN AIR IONIZATION  
TECHNIQUES FOR QUANTITATION OF DRUGS**

**Jing-Tao Wu, presiding  
Ballroom B**

- WOB pm 2:30 **An Overview of Ambient Surface Sampling and Ionization Techniques;** Gary J. Van Berkel; *Oak Ridge National Laboratory, Oak Ridge, TN*
- WOB pm 2:50 **Quantitation of Drugs in Biological Matrices by Desorption Electrospray Ionization: Accuracy, Precision, Dynamic Range and Limit of Detection;** Nicholas E. Manicke; Demian R. Ifa; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- WOB pm 3:10 **Eliminating Method Development, Sample Preparation and Chromatographic Separations in High-Throughput Bioanalysis Using DART on an Enhanced Resolution Triple-Quadrupole Mass Spectrometer;** Elizabeth Crawford<sup>1</sup>; Brian Musselman<sup>1</sup>; Shaoxia Yu<sup>2</sup>; Jing-Tao Wu<sup>2</sup>; <sup>1</sup>*IonSense, Inc., Saugus, MA*; <sup>2</sup>*Millennium Pharmaceuticals, Inc., Cambridge, MA*
- WOB pm 3:30 **Desorption Electrospray Ionization (DESI) for Direct Quantitation of Xenobiotics from Dried Blood Spots;** Christopher A. Evans<sup>1</sup>; Chester Bowen<sup>1</sup>; Joseph H Kennedy<sup>2</sup>; Justin Wiseman<sup>3</sup>; <sup>1</sup>*GlaxoSmithKline, King of Prussia, PA*; <sup>2</sup>*Prosolia, Inc, Indianapolis, IN*; <sup>3</sup>*Prosolia, Inc., Indianapolis, IN*

WOB pm 3:50 **Ambient Surface Sampling Mass Spectrometry Using a Fully Automated Chip-Based Nano-Electrospray System;** Vilmos Kertesz; Gary J. Van Berkel; *Oak Ridge National Laboratory, Oak Ridge, TN*

WOB pm 4:10 **Application of Transmission Mode Desorption Electrospray Ionization (TM-DESI) to the Quantitative Analysis of Drugs;** Joe Chipuk<sup>1</sup>; Jennifer Brodbelt<sup>2</sup>; <sup>1</sup>*University of Texas, Austin, TX*; <sup>2</sup>*The University of Texas, Austin, TX*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
ADVANCES IN PROTEOGLYCAN AND  
CARBOHYDRATE ANALYSIS**

**Julie A. Leary, presiding  
Room 201**

- WOC pm 2:30 **It's a Sweet World: Glycomic Analysis and Cellular Communication in the Extra- and Intracellular Space;** Carol Nilsson<sup>1</sup>; Huan He<sup>2</sup>; Mark R. Emmett<sup>3</sup>; Alan G. Marshall<sup>4</sup>; Roger A. Kroes<sup>6</sup>; Joseph R. Moskal<sup>6</sup>; Arugadoss Devakumar<sup>1</sup>; Roslyn Dillon<sup>1</sup>; Charles A. Conrad; <sup>1</sup>*Pfizer, Inc., San Diego, CA*; <sup>2</sup>*Florida State University, Tallahassee, FL*; <sup>3</sup>*Nat'l High Magnetic Field Lab, Tallahassee, FL*; <sup>4</sup>*Ion Cyclotron Resonance Prog, Tallahassee, FL*; <sup>5</sup>*M.D. Anderson Cancer Center*
- WOC pm 2:50 **New Perspectives on the Interpretation of Glycosaminoglycan Tandem Mass Spectra;** Nancy Leymarie; Hicham Naimy; Gregory O Staples; Catherine E. Costello; Joseph Zaia; *BU School of Medicine, Boston, MA*
- WOC pm 3:10 **Characterization of Heparin-Derived Oligosaccharides using Ion-Pair Reversed-Phase LC/ESI-MS;** Weibin Chen; Catalin Doneanu; John Gebler; *Waters Corporation, Milford, MA*
- WOC pm 3:30 **Sequential Enrichment and Structural Analysis of Sulfated N-Glycans through Anion-Exchange Chromatography and MALDI-MS/MS;** Ming Lei; Yehia Mechref; Milos V. Novotny; *Indiana university, Bloomington, IN*
- WOC pm 3:50 **Exploring the N-linked Glycome for Early Detection of Epithelial Ovarian Cancer by NanoLC FT-ICR Mass Spectrometry;** Michael S. Bereman<sup>1</sup>; William A. Cliby<sup>2</sup>; David C. Muddiman<sup>1</sup>; <sup>1</sup>*North Carolina State University, Raleigh, NC*; <sup>2</sup>*Mayo Clinic, Rochester, MN*
- WOC pm 4:10 **The Development of Methods towards High Throughput Clinical Glycomics;** Scott R. Kronewitter<sup>1</sup>; Kyle S. Peacock<sup>1</sup>; Maria Lorna de Leoz<sup>1</sup>; Hyun Joo An<sup>1</sup>; Suzanne Miyamoto<sup>2</sup>; Gary S. Leiserowitz<sup>2</sup>; Helen K. Chew<sup>2</sup>; Carlito B. Lebrilla<sup>1</sup>; <sup>1</sup>*UC Davis, Davis, CA*; <sup>2</sup>*UC Davis Cancer Center, Davis, CA*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
DEVELOPMENTS IN IMAGING INSTRUMENTATION**

**Douglas E. Goeringer, presiding  
Room 204**

- WOD pm 2:30 **New Strategies for Imaging Mass Spectrometry Using C60-SIMS and MALDI Probes;** Anthony Carado<sup>1</sup>; Melissa Passarelli<sup>1</sup>; Julie Wingate<sup>2</sup>; Alexandre Loboda<sup>2</sup>; Nick Winograd<sup>1</sup>; <sup>1</sup>*Penn State University, University Park, PA*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*
- WOD pm 2:50 **High Resolution C-60 SIMS and MALDI Microscopy Using a Delay Line Detector;** Leendert A. Klerk<sup>1</sup>; Andriy Kharchenko<sup>1</sup>; Luke

Macaleese<sup>1</sup>; Nicholas P. Lockyer<sup>2</sup>; John Vickerman<sup>2</sup>; Ron M.A. Heeren<sup>1</sup>; <sup>1</sup>*FOM Institute for Atomic and Molecular Physics, Amsterdam, Netherlands*; <sup>2</sup>*University of Manchester, Manchester, UK*

WOD pm 3:10 **Digital Imaging Mass Spectrometry with the TimePix**; Casimir Bamberger<sup>1</sup>; Andreas Bamberger<sup>2</sup>; <sup>1</sup>*Scripps Research Institute, La Jolla, CA*; <sup>2</sup>*Physics Institute, Albert-Ludwigs University, Freiburg i. Br., Germany*

WOD pm 3:30 **Investigation of Nanoscale Chemical Imaging via Tip-Enhanced, Near-Field Desorption/Ionization Mass Spectrometry at Atmospheric Pressure**; James A. Bradshaw; Kent A Meyer; Olga S. Ovchinnikova; Douglas E. Goeringer; *Oak Ridge National Laboratory, Oak Ridge, TN*

WOD pm 3:50 **Laser Induced Material Transfer Combined with MALDI MS for a Sub-cellular Imaging**; Andrey I. Zavalin; Peggi Angel; Richard M. Caprioli; *Vanderbilt University Sch of Med, Nashville, TN*

WOD pm 4:10 **MALDI-Tissue Imaging at High Resolution and Speed: Essential Steps Towards its Applications in Histology**; Soeren-Oliver Deininger; Detlev Suckau; Michael Becker; M. Schuerenberg; *Bruker Daltonik GmbH, Bremen, Germany*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
CHARACTERIZATION OF MEMBRANE PROTEINS  
Christine Wu, presiding  
Exhibit Hall C**

WOE pm 2:30 **Filter Aided Sample Preparation (FASP) Combines the Advantages of In-Gel and In-Solution Digestion**; Jacek R. Wisniewski; Nagarjuna Nagaraj; Alexandre Zougman; Matthias Mann; *Max-Planck-Institute of Biochemistry, D-82152 Martinsried, Germany*

WOE pm 2:50 **Quantitative Assessment of Enhanced Recovery of Hydrophobic Peptides from Reversed Phase Chromatography at Elevated Temperatures**; Kelli G. Kline; Sarah M. Moore; Christine C. Wu; *University of Colorado School of Medicine, Aurora, CO*

WOE pm 3:10 **Scoring Peptides by their Retention Time: A Method that both Predicts and Incorporates Retention Time into a Peptide-Spectrum Match Scoring Function**; Lukas Käll<sup>1</sup>; Michael J. Maccoss<sup>2</sup>; William Noble<sup>2</sup>; <sup>1</sup>*Stockholm University, Stockholm, Sweden*; <sup>2</sup>*University of Washington, Seattle, WA*

WOE pm 3:30 **Strategies for MALDI Imaging Mass Spectrometry of Integral Membrane Proteins**; Angus C. Grey<sup>1</sup>; Pierre Chaurand<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; Kevin L. Schey<sup>1</sup>; <sup>1</sup>*Vanderbilt University, Nashville, TN*; <sup>2</sup>*Vanderbilt Univ Sch of Med, Nashville, TN*

WOE pm 3:50 **The Subunits of a Large Integral Membrane Protein Complex characterized by Top-Down Fourier-Transform Mass Spectrometry**; Julian Whitelegge<sup>1</sup>; Christopher Ryan<sup>1</sup>; Puneet Souda<sup>1</sup>; Sara Bassilian<sup>1</sup>; Kym Faull<sup>1</sup>; Balakumar Thangaraj<sup>2</sup>; Petra Fromme<sup>2</sup>; <sup>1</sup>*University of California LA, Los Angeles, CA*; <sup>2</sup>*Arizona State University, Tempe, AZ*

WOE pm 4:10 **Mass Spectrometry of Integral Membrane Transporters from Detergent Micelles Reveals**

**their Stoichiometry and Interactions**; Shoshanna C. Isaacson; Nelson P. Barrera; Min Zhou; Dijana Matak-Vinkovic; Carol V. Robinson; *University of Cambridge, Cambridge, UK*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
MS OF POLYMERS/MATERIALS II:  
HPLC AND ION MOBILITY SEPARATION  
Chrys Wesdemiotis, presiding  
Room 103**

WOF pm 2:30 **Polymer Analysis Using GPC, Thermospray Deposition and MALDI-TOF Mass Spectrometry**; Mark Arnould; *Xerox, Webster, NY*

WOF pm 2:50 **Structural Characterization of a Complex Nonionic Surfactant by LC-MS<sup>n</sup>**; Nilufer Solak; Chrys Wesdemiotis; *The University of Akron, Akron, OH*

WOF pm 3:10 **Characterization on Poly (*n*-Butyl Acrylate)s by LC/ESI-MS<sup>n</sup>**; Junkan Song<sup>1</sup>; Jan W. van Velde<sup>1</sup>; Luc L.T. Vertommen<sup>1</sup>; Ron M.A. Heeren<sup>2</sup>; Oscar F. van den Brink<sup>1</sup>; <sup>1</sup>*Research, Development and Innovation, AkzoNobel, Arnhem, The Netherlands*; <sup>2</sup>*FOM Inst. Atomic/Molecular Phy, Amsterdam, The Netherlands*

WOF pm 3:30 **Recent Mass Spectrometric Developments and Investigations for Age Determination of Ball Point Ink Entries on Paper**; Dieter Kirsch<sup>1</sup>; Vincent Guillou<sup>1</sup>; Bernhard Spengler<sup>2</sup>; Peter Seiler<sup>1</sup>; Fritz Koehler<sup>1</sup>; <sup>1</sup>*Bundeskriminalamt, Wiesbaden, Germany*; <sup>2</sup>*Analytical Chemistry, Giessen, Germany*

WOF pm 3:50 **Identification of Poly(p-phenylene terephthalamide) Branching and Metathesis Products**; Anthony P. Gies; David M. Hercules; *Vanderbilt University, Nashville, TN*

WOF pm 4:10 **Ion Mobility Spectrometry-Mass Spectrometry of Star-Branched Poly(ethylene glycols)**; Barbara S. Larsen<sup>2</sup>; Calvin A. Austin<sup>1</sup>; Brian Bohrer<sup>3</sup>; Ellen D. Inutan<sup>1</sup>; Sadish Karunaweera<sup>1</sup>; David E. Clemmer<sup>3</sup>; Sarah Trimpin<sup>1</sup>; <sup>1</sup>*Wayne State University, Detroit, MI*; <sup>2</sup>*The DuPont Company, Wilmington, DE*; <sup>3</sup>*Indiana University, Bloomington, IN*

**2:30 – 4:30 PM, WEDNESDAY AFTERNOON  
MS AND EMERGING ENVIRONMENTAL  
CONTAMINANTS  
Enrico Davoli, presiding  
Room 113**

WOG pm 2:30 **Emerging Environmental Contaminants: What's New**; Susan Richardson; *US EPA, Athens, GA*

WOG pm 2:50 **Analysis of Illicit Drugs and Metabolites in Wastewater Derived from an Educational Institution**; M. Paul Chiarelli<sup>1</sup>; Sara Castiglioni<sup>2</sup>; Deepika Panawennage<sup>1</sup>; Ettore Zuccato<sup>2</sup>; Enrico Davoli<sup>2</sup>; <sup>1</sup>*Loyola University, Chicago, IL*; <sup>2</sup>*Mario Negri Institute, Milano, Italy*

WOG pm 3:10 **Liquid Chromatography Accurate Mass Spectrometry Screening Analysis of Pharmaceuticals in Fish Collected from Effluent-Dominated Streams**; Alejandro J. Ramirez<sup>1</sup>; C. Kevin Chambliss<sup>1,3</sup>; Bryan W. Brooks<sup>2</sup>; <sup>1</sup>*Mass Spectrometry Core Facility, Baylor University, Waco, TX*; <sup>2</sup>*Environmental*

- WOG pm 3:30 *Studies, Baylor University, Waco, TX;* <sup>3</sup>*Chemistry and Biochemistry, Baylor University, Waco, TX*  
**Fast Analysis of Pharmaceuticals in Water following EPA Method 1694: Applications of UHPLC-MS/MS;** Michael Thurman; Imma Ferrer; *University of Colorado, Boulder, CO*
- WOG pm 3:50 **LC/MS/MS Characterization of Mechanisms of N-Nitrosodiphenylamine Formation during Water Chloramination Disinfection;** Wenjun Zhou<sup>1,1</sup>; Jessica Boyd<sup>1,2</sup>; Feng Qin<sup>1,2</sup>; Yuli Zhao<sup>1,2</sup>; Xing-fang Li<sup>1,2</sup>; <sup>1</sup>*Edmonton, Canada;* <sup>2</sup>*University of Alberta, Edmonton, AB*
- WOG pm 4:10 **A Novel Technique Utilizing SBSE and DART-TOF for the Analysis of Pharmaceutical and Pesticide Contaminants in Aqueous Media;** Kathleen Brooks Loftin<sup>1</sup>; Timothy P. Griffin<sup>1</sup>; Christian A. Clausen III<sup>2</sup>; Robert B. Cody<sup>3</sup>; A. John Dane<sup>3</sup>; <sup>1</sup>*NASA- Kennedy Space Center, Kennedy Space Center, FL;* <sup>2</sup>*University of Central Florida, Orlando, FL;* <sup>3</sup>*JEOL USA, Inc., Peabody, MA*

**4:45 – 5:30 PM, WEDNESDAY  
ASMS MEETING  
Wine and Beer, Awards!!  
Exhibit Hall C**

**5:45 – 7:00 pm  
WEDNESDAY WORKSHOPS  
See page 20.**

There will be light refreshments provided on the lower level where workshops are located.

**8:30-10:30, THURSDAY MORNING  
MS OF PEPTIDE AND PROTEIN DRUGS  
Jason Rouse, presiding  
Ballroom A**

- ThOA am 8:30 **Application of Immunoglobulin Degrading Enzyme IdeS and LC-MS Analysis as Powerful Characterization Method for Therapeutic Antibodies;** Anne Zeck; Joerg Regula; Wilma Dormeyer; Georg Drabner; Hans Rainer Völger; Hans Koll; *Roche Diagnostics GmbH, Penzberg, Germany*
- ThOA am 8:50 **Stability of Protein Therapeutics under Near-Physiological Conditions: Conformation and Dynamics of Acid- $\beta$ -Glucosidase;** Cedric Bobst<sup>1</sup>; John J. Thomas<sup>2</sup>; Paul Salinas<sup>2</sup>; Rinat Abzalimov<sup>1</sup>; Philip J. Savickas<sup>2</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>*University of Massachusetts, Amherst, MA;* <sup>2</sup>*Shire HGT, Cambridge, MA*
- ThOA am 9:10 **Application of Fast Liquid Chromatography-UHR Time-of-Flight Mass Spectrometry to the Characterization of Pharmaceutical Grade rBet v 1 Birch Pollen Allergen;** Emmanuel Nony; Emmanuel Godat; Pierrick Lemoine; Thierry Batard; Philippe Moingeon; *Stallergenes, Antony, France*
- ThOA am 9:30 **The Development of a Method for the Determination of a Proprietary Domain Antibody Therapeutic Using UPLC-MS/MS;** Matthew Szapacs; Jonathan Kehler; Sharon Boram; David Citerone; *GlaxoSmithKline, Blue Bell, PA*

- ThOA am 9:50 **Sequence Elucidation of Unknown Peptide of High Doping Potential by Electrospray Ionization Mass Spectrometry;** Fuyu Guan<sup>1</sup>; Cornelius Ubobh<sup>2</sup>; Lawrence R. Soma<sup>1</sup>; Jeffrey Rudy<sup>2</sup>; <sup>1</sup>*University of Pennsylvania, West Chester, PA;* <sup>2</sup>*PA Equine Toxicology, West Chester, PA*
- ThOA am 10:10 **The Challenging Topography of the LC/MS Peptide Map;** Scott Berger; Asish Chakraborty; Weibin Chen; *Waters Corporation, Milford, MA*

**8:30-10:30, THURSDAY MORNING  
NOVEL LC-MS TECHNIQUES FOR REGULATED BIOANALYSIS OF DRUGS  
Steve E. Unger, presiding  
Ballroom B**

- ThOB am 8:30 **HPLC-APPI-MS/MS Used as a Quantification Tool for Plasma Levels Studies of Cholecalciferol, Cinobufagin and Bisphenol-A;** Julien Breault-Turcot<sup>1</sup>; Jean-Francois Levesque<sup>2</sup>; Sebastien Gagne<sup>2</sup>; <sup>1</sup>*Université de Montréal, Montréal, QC;* <sup>2</sup>*Merck Frosst Canada & Co, Kirkland, Canada*
- ThOB am 8:50 **Is the Quantum Vantage Triple Quadrupole Mass Spectrometer Suitable for Regulated Bioanalysis?** Jim Shen; Roger N. Hayes; Jennifer N. Cunliffe; *Schering-Plough Research Institute, Summit, NJ*
- ThOB am 9:10 **Combining High Speed Chromatography and Multistream HPLC Systems to Increase Productivity and Efficiency in the Bioanalytical Laboratory;** John Gibbons<sup>1</sup>; Chad Briscoe<sup>2</sup>; Min J. Yang<sup>1</sup>; Adrian Taylor<sup>1</sup>; David Cox<sup>1</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada;* <sup>2</sup>*MDS Pharma Services, Lincoln, NE*
- ThOB am 9:30 **Quantification of Endogenous Leptin and Recombinant-Methionyl Human Leptin in Clinical Plasma Samples at Low-Nanomolar Levels by Immunocapture / Mass Spectrometry;** Yan Wang; Chris Bellows; Kristine de Dios; Swati Gupta; Joseph S. Heilig; Steven Taylor; *Amylin Pharmaceuticals, Inc., San Diego, CA*
- ThOB am 9:50 **Monitoring Age Related Changes of Metabolism of Doxorubicin Using HPLC-LIF-MS/MS;** Joseph B Katzenmeyer; Yaohua Wang; Edgar A. Arriaga; *University of Minnesota, Minneapolis, MN*
- ThOB am 10:10 **Analysis of Drug Residues in Milk by On-Line SPE/LC/MS/MS;** Claude Mallet; Claude Mallet; *Waters Corporation, Milford, MA*

**8:30-10:30, THURSDAY MORNING  
MASS SPECTROMETRY AT THE INTERFACE BETWEEN CHEMISTRY AND BIOLOGY  
Pat Griffin, presiding  
Room 201**

- ThOC am 8:30 **Chemical Biology Approaches to Understanding the Regulation of Nuclear Receptors;** Michael J. Chalmers; Scott A. Busby; Ruben Garcia-Ordonez; Monica Istrate; Naresh Kumar; Scott Novick; Bruce D. Pascal; Jun Zhang; Patrick R. Griffin; *The Scripps Research Institute, Jupiter, FL*
- ThOC am 8:50 **Probing Drug Mechanism of Action via Cellular Metabolomics: Thymineless Death and Glycineless Stasis;** Yun Kyung (Sophia) Kwon; Joshua Rabinowitz; *Princeton University, Princeton, NJ*

- ThOC am 9:10 **Identification of Native Divalent and Trivalent Cross-linked Amino Acids from Left Ventricular Cardiac Collagen;** Forrest S.E. Helfrich; Timothy J. Black; Eric D. Dodds; Qianli Yu; Doug F. Larson; Vicki H. Wysocki; *University of Arizona, Tucson, AZ*
- ThOC am 9:30 **FAC-MS Uncovers New Effectors for Old Transcriptional Regulators, Discovery of Novel Transcription Factor Effectors for MetJ;** Ricardo Marti-arbona<sup>1</sup>; Hiro Teshima; Penny Anderson; Pat J. Unkefer; Clifford Unkefer; *Los Alamos National Laboratory, Los Alamos, NM*
- ThOC am 9:50 **Substantially Improved Reproducibility and Precision in Quantitative Proteomics Assays by Targeted Data Acquisition;** Frank Fischer; Mikhail Savitski; Gavain Sweetman; Marcus Bantscheff; *Cellzome AG, Heidelberg, Germany*
- ThOC am 10:10 **Characterizing the Partitioning between RNA Regulatory Structures in the Moloney Murine Leukemia Virus Using Antisense LNAs;** Arie Hawkins; Daniele Fabris; *U. Maryland Baltimore County, Baltimore, MD*

**8:30-10:30, THURSDAY MORNING  
FUNDAMENTAL ASPECTS OF ION/ELECTRON AND ION/ION REACTIONS  
Kristina Hakansson, presiding  
Room 204**

- ThOD am 8:30 **When Positive and Negative Ions Meet: Energetics, Structure, Mechanisms and More!** Evan R. Williams; William A. Donald; Ryan D. Leib; James S. Prell; *University of California, Berkeley, CA*
- ThOD am 8:50 **Electron-Induced Rearrangements in Histidine and Arginine Peptides;** Frantisek Turecek<sup>1</sup>; Jean Wyer<sup>2</sup>; Annelie Ehlerding<sup>2</sup>; Henning Zettergren<sup>2</sup>; Preben Hvelplund<sup>2</sup>; Steen Brondsted Nielsen<sup>2</sup>; Benjamin Bythell<sup>3</sup>; Bela Paizs<sup>3</sup>; <sup>1</sup>*University of Washington, Seattle, WA*; <sup>2</sup>*University of Aarhus, Aarhus, Denmark*; <sup>3</sup>*German Cancer Research Institute, Heidelberg, Germany*
- ThOD am 9:10 **Uncommon Radical Rearrangements in Electron Capture Dissociation of Peptide Ions;** Cheng Lin<sup>1</sup>; Xiaojuan Li<sup>1</sup>; Nadezda P. Sargaeva<sup>1</sup>; Peter B. O'connor<sup>2</sup>; <sup>1</sup>*Boston University School of Medicine, Boston, MA*; <sup>2</sup>*University of Warwick, Coventry, UK*
- ThOD am 9:30 **Peptide Conformation Selectivity in Electron Capture and Transfer Dissociation;** Yury O. Tsybin; Hisham Ben Hamidane; Aleksey Vorobyev; Matthew Wodrich; Clemence Corminboeuf; *Ecole Polytechnique Federale, Lausanne, Switzerland*
- ThOD am 9:50 **Mechanisms of Resonance Electron Capture by Neutral Peptides. Parallel with the ECD/ETD Mechanisms;** Yury V. Vasil'ev; Douglas F. Barofsky; Max L. Deinzer; *Oregon State University, Corvallis, OR*
- ThOD am 10:10 **Reverse Electron Transfer Dissociation on Anionic Peptides Using Molecular Radical Cations;** Nicolas Polfer<sup>1</sup>; Malwina Huzarska<sup>1</sup>; Desmond Kaplan<sup>2</sup>; Michael Easterling<sup>2</sup>; <sup>1</sup>*University of Florida, Gainesville, FL*; <sup>2</sup>*Bruker Daltonics, inc., Billerica, MA*

**8:30-10:30, THURSDAY MORNING  
ADVANCES IN GLOBAL PHOSPHOPROTEIN ANALYSIS  
Carol Nilsson, presiding  
Exhibit Hall C**

- ThOE am 8:30 **Biological Insights from Quantitative Analysis of Phosphorylation-Mediated Signaling Networks;** Forest M White; *MIT, Cambridge, MA*
- ThOE am 8:50 **Why Large-Scale Phosphoproteomic Analyses Benefit from the Joint Use of Collision and Electron-Based Fragmentation Methods;** Paul A. Grimsrud; Danielle L. Swaney; Craig D. Wenger; Desiree den Os; Michael R. Sussman; Jean-Michel M. Ane; Joshua J. Coon; *University of Wisconsin, Madison, WI*
- ThOE am 9:10 **Large-Scale Proteomic Analyses Reveal that Aurora B is a Master Kinase Regulating the C-phase Cytoskeleton;** Nurhan Ozlu<sup>3</sup>; Flavio Monigatti<sup>3</sup>; Bernhard Renard<sup>2</sup>; Christine Field<sup>1</sup>; Hanno Steen<sup>3</sup>; Timothy Mitchison<sup>1</sup>; Judith Steen<sup>3</sup>; <sup>1</sup>*Harvard Medical School, Boston, MA*; <sup>2</sup>*University of Heidelberg, Heidelberg, Germany*; <sup>3</sup>*Harvard Medical School/Children's Hospital Boston, Boston, MA*
- ThOE am 9:30 **Tyrosine Phosphorylation Signaling Network Analysis Reveals That Focal Adhesion Kinase is Important during Mouse Embryonic Stem Cell Differentiation;** Yu Lu<sup>1</sup>; Scott Ficarro<sup>2</sup>; Yi Zhang<sup>2</sup>; Manor Askenazi<sup>3</sup>; Jignesh Parikh<sup>2</sup>; Shaojuan Li<sup>2</sup>; C. John Luckey<sup>4</sup>; Jarrod Marto<sup>1</sup>; <sup>1</sup>*Dana-Farber Cancer Institute, Harvard Medical Scho, Boston, MA*; <sup>2</sup>*Dana-Farber Cancer Institute and Hebrew University, Boston, MA*; <sup>3</sup>*Brigham Women's Hospital, Boston, MA*
- ThOE am 9:50 **Analysis by Microfluidic LC-MS/MS with Integrated Phosphopeptide Enrichment Reveals Dynamic Human Milk Protein Phosphorylation during Lactation;** John W. Froehlich<sup>1</sup>; Ning Tang<sup>2</sup>; Keith Waddell<sup>2</sup>; Karsten Kraiczek<sup>2</sup>; Martin Vollmer<sup>2</sup>; Tom Van De Goor<sup>2</sup>; Rudolf Grimm<sup>2</sup>; Carlito B. Lebrilla<sup>1</sup>; *University of California, Davis, CA*; <sup>2</sup>*Agilent Technologies, Santa Clara, CA*
- ThOE am 10:10 **In Vitro and In Vivo Study of Phosphorylated Histidine Containing Peptides by Nano-ESI/nano-HPLC Tandem Mass Spectrometry;** Bryan M. Ham<sup>1</sup>; Feng Yang<sup>2</sup>; Samuel O. Purvine<sup>2</sup>; Rui Zhao<sup>2</sup>; Richard D. Smith<sup>2</sup>; Mary S. Lipton<sup>2</sup>; <sup>1</sup>*Customs & Border Protection, Newark, NJ*; <sup>2</sup>*Pacific Northwest National Laboratory, Richland, WA*

**8:30-10:30, THURSDAY MORNING  
NUCLEIC ACID MS  
Jeehiun K. Lee, presiding  
Room 103**

- ThOF am 8:30 **Probing the Effects of Sodium Cationization on the Structure and Stability of Nucleic Acids via IRMPD Action Spectroscopy and Theory;** Mary T. Rodgers<sup>1</sup>; B. Scott Fales<sup>1</sup>; Nathaniel O. Fujamade<sup>1</sup>; Nuwan Hallowita<sup>1</sup>; Yuan-wei Nei<sup>1</sup>; Jos Oomens<sup>2</sup>; Jeffrey Steill<sup>2</sup>; <sup>1</sup>*Wayne State University, Detroit, MI*; <sup>2</sup>*FOM Rijnhuizen, Nieuwegein, Netherlands*
- ThOF am 8:50 **IR Spectroscopy of DNA Single Strands, Duplexes and I-Motif to Characterize their Gas Phase Structure;** Frederic Rosu<sup>1</sup>; Valerie

Gabelica<sup>1</sup>; Gilles Gregoire<sup>2</sup>; Charles Desfrancois<sup>2</sup>; Jean-Pierre Schermann<sup>2</sup>; Joel Lemaire<sup>3</sup>; Edwin De Pauw<sup>4</sup>; <sup>1</sup>University of Liege, Liege, Belgium; <sup>2</sup>UMR 7538 CNRS, Université Paris 13, Paris, France; <sup>3</sup>Laboratoire de Chimie Physique, Orsay, France; <sup>4</sup>Liege University, Liege, Belgium

ThOF am 9:30 **Determining RNA Modifications Using Fourier Transform Ion Cyclotron Resonance Mass Spectrometry (FT-ICR MS);** Stefan Weidt<sup>1</sup>;

Angus Lamond<sup>2</sup>; Pat Langridge-smith<sup>1</sup>; C. Logan Mackay<sup>1</sup>; <sup>1</sup>University of Edinburgh, Edinburgh, UK; <sup>2</sup>University of Dundee, Dundee, UK

ThOF am 9:30 **Investigating Higher-Order Structure of Nucleic Acids by IRMPD in FTICR Mass Spectrometry;** Joshua Wilhide; Katherine Kellersberger; Daniele Fabris; *U. Maryland Baltimore County, Baltimore, MD*

ThOF am 9:50 **LC-MS/MS for Assessing the Formation and the Cytotoxic/Mutagenic Properties of the Thymidine Glycol/8-Oxo-2'-Deoxyguanosine Tandem Lesion;** Yong Jiang; Bifeng Yuan; Yuesong Wang; Yinsheng Wang; *University of California, Riverside, CA*

ThOF am 10:10 **Identifying LEF1 IRES Protein Complexes by Mass Spectrometry;** Becky Tsai; Xiaorong Wang; Lan Huang; Marian Waterman; *University of California, Irvine, CA*

**8:30-10:30, THURSDAY MORNING  
AEROSOL MS  
Alla Zelenyuk, presiding  
Room 113**

ThOG am 8:30 **What Aerosol Mass Spectrometers Tell Us about the Air We Breathe;** Murray V. Johnston; *University of Delaware, Newark, DE*

ThOG am 8:50 **Detection of Aerosol Particles with a Quadrupole Ion Trap Mass Spectrometer;** G. Asher Newsome; Elias P. Rosen; Richard M. Kamens; Tomas Baer; Gary L. Glish; *University of North Carolina, Chapel Hill, NC*

ThOG am 9:10 **Reactive Uptake of Trimethylamine into Ammonium Nitrate Particles Using an IT-TOF Aerosol Mass Spectrometer;** Julie A. Lloyd<sup>1</sup>; Katherine J. Heaton<sup>2</sup>; Murray V. Johnston<sup>3</sup>; <sup>1</sup>University of the Sciences in Philadelphia, Philadelphia, PA; <sup>2</sup>Phoenix S&T, Chester, PA; <sup>3</sup>University of Delaware, Newark, DE

ThOG am 9:30 **Two-Step Laser Ionization TOF-Mass Spectrometry for Analysis of Intact Organic Molecules from Individual Aerosol Particles: Detection of Organic Aerosol-Source Tracers;** Matthias Bente<sup>2</sup>; Martin Sklortz<sup>1</sup>; Thorsten Streibel<sup>1,2</sup>; Ralf Zimmermann<sup>1,2</sup>; <sup>1</sup>Universität Rostock, Rostock, Germany; <sup>2</sup>Helmholtz Zentrum München, Oberschleissheim, Germany

ThOG am 9:50 **Nanoparticle Atomic Composition from NAMS Spectra;** Christopher A. Zordan; Murray V. Johnston; *University of Delaware, Newark, DE*

ThOG am 10:10 **Miniaturized MS-Based System for Rapid Detection and Identification of Chemical and Biological Warfare Agents and Toxic Industrial Chemicals;** Berk Oktem; Vadym D. Berkout; Andrey N. Vilkov; Thomas D. Saul; Appavu K. Sundaram; Seshu K. Gudlavalleti; Jane Razumovski; Chaminda M. Gamage; Eugene Moskovets; Robert M. Serino; Vladimir M. Doroshenko; *Science and Engineering Serv. Inc., Columbia, MD*

**10:30 AM – 2:30 PM, THURSDAY  
POSTER SESSION (See page 136)  
Exhibit Hall AB**

**Authors of odd-numbered posters present 10:30 am – 12:15 pm.  
Authors of even-numbered posters present 12:45 – 2:30 pm.  
Please remove posters by 3:30 pm.**

**2:30-4:30, THURSDAY AFTERNOON  
IMAGING APPLICATIONS WITH MS  
Sarah Trimpin, presiding  
Ballroom A**

ThOA pm 2:30 **Capturing Complex Multi-Natural Product Discussions between Bacteria;** Pieter Dorrestein; *University of California, San Diego, Skaggs school, La Jolla, CA*

ThOA pm 2:50 **Tissue Preparation for the *in situ* MALDI MS Imaging of Proteins, Lipids, and Small Molecules at Cellular Resolution;** Nathalie Y. R. Agar<sup>2</sup>; Paul J. Kowalski<sup>3</sup>; John H. Wong<sup>1</sup>; Kristin J. Boggio<sup>1</sup>; Rebecca M. Lazarus<sup>1</sup>; Jeffrey N. Agar<sup>1</sup>; <sup>1</sup>Brandeis University, Chemistry, Waltham, MA; <sup>2</sup>Harvard Medical School, Neurosurgery, Boston, MA; <sup>3</sup>Bruker Daltonics, Inc., Billerica, MA

ThOA pm 3:10 **Total Solvent-Free Analysis Using Mass Spectrometry;** Sarah Trimpin<sup>1</sup>; Ellen D. Inutan<sup>1</sup>; Thushani N. Herath<sup>1</sup>; Emmanuelle Claude<sup>2</sup>; Charles N. Mcewen<sup>3</sup>; Ken Mackie<sup>3</sup>; Michael Walker<sup>4</sup>; <sup>1</sup>Wayne State University, Detroit, MI; <sup>2</sup>Waters Cooperation, Manchester, UK; <sup>3</sup>Univ. of the Sciences in PA, Philadelphia, PA; <sup>4</sup>Indiana University, Bloomington, IN

ThOA pm 3:30 **Novel “Tomography” Mass Spectrometry Tissue Imaging Method;** Corina Mayrhofer<sup>1</sup>; Alexander R. Zubarev<sup>1</sup>; Eva Fung<sup>1</sup>; Roman A. Zubarev<sup>2</sup>; <sup>1</sup>Uppsala University, Uppsala, Sweden; <sup>2</sup>Karolinska Institute, Stockholm, Sweden

ThOA pm 3:50 **Tissue-less Tissue Imaging: Molecular Printing Using Affinity-Enhanced Chromatographic Surfaces for MALDI TOF/TOF;** Mariana Rusa; Steve Roth; Matthew Hammond; Vanitha Thulasiraman; Enrique Dalmasso; Fiona Plows; *Bio-Rad Laboratories, Inc., Hercules, CA*

ThOA pm 4:10 **Tissue Imaging of Neuropeptides by MALDI Orbitrap MS;** Peter D. Verhaert<sup>1</sup>; Martijn Pinkse<sup>1</sup>; Maria C. Prieto Conaway<sup>2</sup>; <sup>1</sup>Delft University of Technology, Delft, Netherlands; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA

**2:30-4:30, THURSDAY AFTERNOON  
ADME ANALYSIS BY LASER DESORPTION AND OTHER  
NEW MS TECHNIQUES  
Mingshe Zhu, presiding  
Ballroom B**

ThOB pm 2:30 **Utility of MALDI-MS for ADME Studies;** Walter Korfmacher; *Schering-Plough, Kenilworth, NJ*

ThOB pm 2:50 **Validation and Application of a Method for Quantification of Antidepressants in Plasma Samples Using a MALDI-QqQ system;** Timothy Sangster<sup>1</sup>; Siew Mun Wan<sup>1</sup>; Robert Macneill<sup>1</sup>; Daniel Lebre<sup>2</sup>; Pauline J. Vollmerhaus<sup>2</sup>; Gary Impey<sup>2</sup>; <sup>1</sup>HLS, East Millstone, NJ; <sup>2</sup>Applied Biosystems/MDS Analytical Technologies, Concord, ON, Canada

ThOB pm 3:10 **Investigation of Individual Drug and Metabolite Whole-Body Distributions via**



**Accurate Mass Imaging MALDI Mass Spectrometry;** Sheerin Khatib-Shahidi<sup>1</sup>; Sucharita Dutta<sup>2</sup>; Yingying Huang<sup>2</sup>; Caroline Ding<sup>2</sup>; Maria C. Prieto Conaway<sup>2</sup>; Cornelis Hop<sup>1</sup>; Patrick J. Rudewicz<sup>1</sup>; <sup>1</sup>Genentech, Inc., South San Francisco, CA; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA

ThOB pm 3:30 **High Throughput Profiling of Drug Metabolites Using Low Pressure LC/Orbitrap MS: An Alternative Approach to UPLC/MS;** Qian Ruan; Li Ma; Yuan-qing Xia; Mohammed Jemal; William Humphreys; Mingshe Zhu; *Bristol-Myers Squibb, Princeton, NJ*

ThOB pm 3:50 **Combined Multiple Survey Approach for Sulfate Metabolite Identification Studies Using a Hybrid Linear Ion Trap Triple Quadrupole Mass Analyzer;** Shaokun Pang<sup>1</sup>; Loren Olson<sup>2</sup>; Elliott Jones<sup>2</sup>; Rongda Xu<sup>1</sup>; Daniel B. Kassel<sup>1</sup>; <sup>1</sup>Takeda San Diego, Inc., San Diego, CA; <sup>2</sup>Applied Biosystems, San Jose, CA

ThOB pm 4:10 **Analysis of *in-vivo* Samples for Metabolite Identification with a Prototype QToF Mass Spectrometer with Enhanced Dynamic Range and Spectral Resolution;** Jose Castro-perez<sup>1</sup>; Kate Yu<sup>1</sup>; John P. Shockcor<sup>1</sup>; Henry Y. Shion<sup>1</sup>; Emma Marsden-edwards<sup>2</sup>; Jason L Wildgoose<sup>2</sup>; Martin Green<sup>2</sup>; John B Hoyes<sup>2</sup>; Alistair Wal; <sup>1</sup>Waters Corporation, Milford, MA; <sup>2</sup>waters, Manchester, UK; <sup>3</sup>Showa University, Tokyo, Japan

**2:30-4:30, THURSDAY AFTERNOON  
NEW DEVELOPMENTS IN IONIZATION**

**Gary J. Van Berkel, presiding  
Room 201**

ThOC pm 2:30 **Separations in a Single Droplet: Understanding Surface Effects in Electrospray Ionization;** Kaveh Jorabchi; Lloyd Smith; *University of Wisconsin, Madison, WI*

ThOC pm 2:50 **Charge-State Reduction of Synthetic Polymers by SEC-ESI-MS with Postcolumn Addition of Ionic Surfactants;** Andreas Nasioudis<sup>1</sup>; William F. Joyce<sup>2</sup>; Jan W. van Velde<sup>1</sup>; Oscar F. van den Brink<sup>1</sup>; <sup>1</sup>AkzoNobel Research, Development & Innovation, Arnhem, Netherlands; <sup>2</sup>AkzoNobel Surface Chemistry LLC, Brewster, NY

ThOC pm 3:10 **New Reagents for ESI "Supercharging" of Noncovalent Protein Complexes and Denatured Proteins;** Rachel O. Loo; Shirley Lomeli; Sheng Yin; Joseph A. Loo; *UCLA, Los Angeles, CA*

ThOC pm 3:30 **A Simple Method for the Determination of Electrospray Response Factors of Non-Covalent Complexes: Application to DNA G-Quadruplex Binding and Self-Assembly;** Valerie Gabelica<sup>1</sup>; Jussara Amato<sup>2</sup>; Giorgia Oliviero<sup>2</sup>; Frederic Rosu<sup>1</sup>; Edwin De Pauw<sup>1</sup>; <sup>1</sup>University of Liege, Liège, Belgium; <sup>2</sup>University Federico II, Napoli, Italy

ThOC pm 3:50 **AC Electrospray: A New Soft Ionization Technique for Mass Spectrometry;** Nishant Chetwani; David Go; Hsueh-Chia Chang; *University of Notre Dame, Notre Dame, IN*

ThOC pm 4:10 **Positron Ionization Mass Spectrometry of Biomolecules;** Panagiotis G Papoulias<sup>1</sup>; Alan Sebastian<sup>4</sup>; Eugene Surdutovich<sup>3</sup>; Kristina Hakansson<sup>2</sup>; Walter E Kauppila<sup>4</sup>; Philip Andrews<sup>2</sup>; <sup>1</sup>National Resource For Proteo, Ann

*Arbor, MI; <sup>2</sup>University of Michigan, Ann Arbor, MI; <sup>3</sup>Oakland University, Rochester, MI; <sup>4</sup>Wayne State University, Detroit, MI*

**2:30-4:30, THURSDAY AFTERNOON  
ETD/ECD/EDD APPLICATIONS  
Beatrix Ueberheide, presiding  
Room 204**

ThOD pm 2:30 **Ion/Ion and Ion/Electron Dissociation Methods: Characteristics and Instrumentation;** John E. P. Syka<sup>1</sup>; James L. Stephenson<sup>2</sup>; <sup>1</sup>Thermo Fisher Scientific, Charlottesville, VA; <sup>2</sup>Research Triangle Institute, Research Triangle Park, NC

ThOD pm 2:50 **Reverse Electron Transfer Dissociation (rETD) of Glycosaminoglycan Negative Ions;** Jeremy Wolff<sup>2</sup>; Franklin E. Leach III<sup>1</sup>; Tatiana Laremore<sup>3</sup>; Robert J. Linhardt<sup>3</sup>; Desmond Kaplan<sup>2</sup>; Michael Easterling<sup>2</sup>; Jon Amster<sup>1</sup>; <sup>1</sup>University of Georgia, Athens, GA; <sup>2</sup>Bruker Daltonics, Billerica, MA; <sup>3</sup>Rensselaer Polytechnic Institute, Troy, NY

ThOD pm 3:10 **ETD and the Combinatorial Epigenetic Histone Code: High-Throughput Hyper-Modified Peptide Analysis with Novel On-Line LC-MS Coupled to Electron Transfer Dissociation;** Nicolas L. Young; Peter A. DiMaggio; Mariana D. Plazas-Mayorca; Richard C. Baliban; Christodoulos A. Floudas; Benjamin A. Garcia; *Princeton University, Princeton, NJ*

ThOD pm 3:30 **Sequencing of Bis-Arylhydrazone Cross-Linked Peptides by Electron Transfer Dissociation to Assess Protein-Protein Interactions;** Myles Gardner<sup>1,2</sup>; Jennifer Brodbelt<sup>1,2</sup>; <sup>1</sup>The University of Texas, Austin, TX; <sup>2</sup>The University of Texas, Austin, TX

ThOD pm 3:50 **Electron Capture Dissociation *de novo* Sequencing by C- and Z- Terminal Fragment Discrimination Using Neutral-Radical Reaction;** Takashi Baba<sup>1,2</sup>; Travis Greene<sup>1</sup>; Gary L. Glish<sup>1</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>Hitachi Ltd., Tokyo, Japan

ThOD pm 4:10 **The Yeast Proteome Revealed by Electron Transfer Dissociation and a Multiple Protease-Based Shotgun Approach;** Danielle L. Swaney; Joshua J. Coon; *University of Wisconsin, Madison, WI*

**2:30-4:30, THURSDAY AFTERNOON  
CHARACTERIZING PTMs  
Sonja Hess, presiding  
Exhibit Hall C**

ThOE pm 2:30 **Characterization of AMPylation on Threonine, Serine, and Tyrosine Using Tandem Mass Spectrometry;** Yan Li; Rowaida Al-Eryani; Haydn L. Ball; *UTSW, Dallas, TX*

ThOE pm 2:50 **Quantification of Histone Modifications upon Suz12 Deletion in Embryonic Stem Cells by High Mass Accuracy LTQ-CID/ETD-Orbitrap Mass Spectrometry;** Hye Ryung Jung<sup>1</sup>; Diego Pasini<sup>2</sup>; Marco Ruijken<sup>3</sup>; Linda Olsson<sup>2</sup>; Kristian Helin<sup>2</sup>; Ole N. Jensen<sup>1</sup>; <sup>1</sup>University of Southern Denmark, Odense, Denmark; <sup>2</sup>Biotech Research and Innovation Centre (BRIC), Copenhagen, Denmark; <sup>3</sup>MsMetrix, Maarssen, The Netherlands

ThOE pm 3:10 **Selected Reaction Monitoring (SRM) of Ubiquitin Isopeptide Linkages in Neurodegenerative Disease;** Eric Dammer<sup>1</sup>; Nicholas Seyfried<sup>1</sup>; Ping Xu<sup>1</sup>; Yair M. Gozal<sup>2,3</sup>; Marla Gearing<sup>2</sup>; James J. Lah<sup>2,4</sup>; Allan I. Levey<sup>2,4</sup>;

Junmin Peng<sup>1,2</sup>; <sup>1</sup>Emory University Department of Human Genetics, Atlanta, GA; <sup>2</sup>Center for Neurodegenerative Disease, Atlanta, GA; <sup>3</sup>Graduate Program in Neuroscience, Atlanta, GA; <sup>4</sup>Department of Neurology, Atlanta, GA

ThOE pm 3:30

**Glycation Isotopic Labelling with 13C6-Reducing Sugars for Quantitative Analysis of Glycated Proteins;** Feliciano Priego-Capote<sup>1</sup>; Alexander Scherl<sup>1</sup>; Yohann Couté<sup>2</sup>; Jean-charles Sanchez<sup>3</sup>; <sup>1</sup>University of Geneva, Geneva, Switzerland; <sup>2</sup>Biomedical Proteomics Group, Structural Biology an, Geneva, Switzerland; <sup>3</sup>Geneva University, Geneva, Switzerland

ThOE pm 3:50

**Characterization of Mycobacterium Tuberculosis Membrane and Surface Exposed Proteins by Liquid Chromatography Mass Spectrometry-Based Proteomics Techniques;** Christina Bell<sup>1,2</sup>; Mike Sweredoski<sup>1</sup>; Sonja Hess<sup>1</sup>; <sup>1</sup>Caltech, Pasadena, CA; <sup>2</sup>Johannes Gutenberg-Universität, Mainz, Germany

ThOE pm 4:10

**Revealing the Unexpected with Multi-Species Comparative Proteomics;** Dumitru Brinza<sup>1</sup>; Mary S. Lipton<sup>2</sup>; Kim K. Hixson<sup>2</sup>; Richard D. Smith<sup>2</sup>; Pavel Pevzner<sup>1</sup>; Nuno Bandeira<sup>3</sup>; <sup>1</sup>University of California, San Diego, La Jolla, CA; <sup>2</sup>PNNL / Battelle Northwest, Richland, WA; <sup>3</sup>Center for Computational Mass Spectrometry, UCSD, La Jolla, CA

**2:30-4:30, THURSDAY AFTERNOON  
MINIATURIZATION OF THE MASS SPECTROMETER  
Zheng Ouyang, presiding  
Room 103**

ThOF pm 2:30

**Miniature Mass Spectrometers: Overview;** R. Graham Cooks; Jason Harper; Nicholas Charipar; Guangming Huang; Liang Gao; Robert J. Noll; Zheng Ouyang; *Purdue University, West Lafayette, IN*

ThOF pm 2:50

**Planar Electrode Ion Traps;** Daniel Austin; Zhiping Zhang; Ying Peng; Brett Hansen; Miao Wang; Milton Lee; Aaron Hawkins; *Brigham Young University, Provo, UT*

ThOF pm 3:10

**Fundamentals of Miniature Quadrupole Mass Filters;** Stephen Taylor<sup>1</sup>; Boris Brkic<sup>1</sup>; Adam Clare<sup>1</sup>; Thomas J Hogan<sup>1</sup>; Neil France<sup>2</sup>; <sup>1</sup>University of Liverpool, Liverpool, UK; <sup>2</sup>Q-Technologies Ltd, Liverpool, UK

ThOF pm 3:30

**In situ Mass Spectrometry for Marine Applications: Present and Future;** Tim Short<sup>1</sup>; Ryan J. Bell<sup>1,2</sup>; Ashish Chaudhary<sup>1,2</sup>; Friso H. W. Van Amerom<sup>1</sup>; Strawn K. Toler<sup>1</sup>; <sup>1</sup>SRI International, St Petersburg, FL; <sup>2</sup>University of South Florida, St Petersburg, FL

ThOF pm 3:50

**Advances in Hand-Portable Gas Chromatography-Toroidal Ion Trap Mass Spectrometry;** Milton L. Lee; *Brigham Young University, Provo, UT*

ThOF pm 4:10

**Development, Characterization and Optimization of a Multiple Source Rectilinear Ion Trap Miniature Mass Spectrometers;** Liang Gao; Jason Harper; Guangming Huang; Sameer Kothari; Nathan Sanders; R. Graham cooks; Zheng Ouyang; *Purdue University, West Lafayette, IN*

**2:30-4:30, THURSDAY AFTERNOON  
MS AND NANO-SCIENCE/NANO-TECHNOLOGY  
Gary Siuzdak, presiding  
Room 113**

ThOG pm 2:30

**Nanostructure-Initiator Mass Spectrometry (NIMS) Imaging: Direct Analysis of Endogenous and Exogenous Metabolites in Tissues;** Hin-koon Woo; Oscar Yanes; Gary J Patti; Wilasinee Uritboonthai; Junefredo Apon; Gary Siuzdak; *The Scripps Research Institute, La Jolla, CA*

ThOG pm 2:50

**Field Enhanced Optimization of MALDI-TOF-MS Sample Preparation for Peptides Analysis Using Induction Based Fluidics (IBF);** Julie Harmon; Paul Tate; Kevin J Clifford; Ted Gauthier; *University of South Florida, Tampa, FL*

ThOG pm 3:10

**Microfluidic-Based NanoLC/QQQ for High-Sensitivity Quantification of Pharmaceutical Molecules in Small Volumes of Whole Blood;** Stephan Buckenmaier; Lukas Trojer; *Agilent Technologies, Waldbronn, Germany*

ThOG pm 3:30

**Characterization of Free-Standing Nano-Objects Using Single Impact Cluster-SIMS;** Veronica Pinnick<sup>1</sup>; Stanislav Verkhoturov<sup>1</sup>; Leonid Kaledin<sup>2</sup>; Emile A. Schweikert<sup>1</sup>; <sup>1</sup>Texas A&M University, College Station, TX; <sup>2</sup>Argonide Corporation, Sanford, FL

ThOG pm 3:50

**Quantitative Proteomic Analysis of Mouse Lymph Nodes Exposed to Titanium Dioxide Nanoparticles;** Yuan Gao; Neera V. Gopee; Ricky D. Holland; Paul C. Howard; Li-Rong Yu; *National Center for Toxicological Research/FDA, Jefferson, AR*

ThOG pm 4:10

**Multiplexed Tracking of Functionalized Gold Nanoparticles in Biological Systems Using Laser Desorption/Ionization Mass Spectrometry (LDI-MS);** Zhengjiang Zhu; Oscar R. Miranda; Vincent M. Rotello; Richard Vachet; *University of Massachusetts Amherst, Amherst, MA*

**4:45-5:30 PM, THURSDAY  
PLENARY LECTURE  
Scott A. McLuckey, presiding  
Exhibit Hall C**

**Fostering Creativity**



**Richard N. Zare, Stanford University**

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

Proteomics: Quantitation Techniques (001 - 032)  
 Bioinformatics: Quantitation (033 - 065)  
 Proteomics: Biomarker Discovery (066 - 097)  
 Lipids: Structural Analysis (098 - 112)  
 Proteomics: Biomarker Assays (113 - 130)  
 Proteomics: New Approaches (131 - 154)  
 Small Molecule Analysis (155 - 184)  
 Instrumentation: Quadrupoles and Traps (185 - 211)  
 Lipids: Biochemistry and Steroid (212 - 229)  
 Lipids: Methods / Profiling (230 - 254)  
 Quantitation: Endogenous Small Molecule (255 - 282)  
 Proteomics: PTM Determination - Method Development (283 - 303)  
 Instrumentation: Ion Sources - ESI & APPI (304 - 338)  
 LC/MS (339 - 356)  
 LC/MS Sample Preparation (357 - 375)  
 Chiral Analysis by MS (376 - 380)  
 Immunology (381 - 396)  
 Drug Metabolism: Quantitation (397 - 426)  
 Drug Metabolism: High Throughput (427 - 453)  
 Peptides: Quantitation - Methods (454 - 477)  
 Carbohydrate / Oligosaccharides (478 - 499)  
 Peptides: General (500 - 516)  
 Reactive Metabolites (517 - 535)  
*in vitro* Metabolite Identification (536 - 548)  
 Agriculture (549 - 564)  
 MALDI Sample Preparation (565 - 583)  
 MALDI Tandem MS (584 - 593)  
 Proteomics: Clinical Applications (594 - 621)  
 Ion Activation / Dissociation (622 - 644)  
 Elemental Analysis and Isotope Ratio MS (645 - 652)  
 GC/MS (653 - 672)

### SPECIAL POSTERS, displayed all week

Special **Commercialization of Mass Spectrometry**; Michael A. Grayson; *Retired, St Charles, MO*

Special **Significant Improvements to the PSI Mass Spectrometer Data File Standard: mzML 1.1**; Matthew Chambers<sup>2</sup>; Lennart Martens<sup>1</sup>; Marc Sturm<sup>3</sup>; Darren Kessner<sup>4</sup>; Fredrik Levander<sup>5</sup>; Jim Shofstahl<sup>6</sup>; Wilfred Tang<sup>7</sup>; Angel D. Pizarro<sup>8</sup>; Luisa Montecchi-Palazzi<sup>1</sup>; Natalie Tasman<sup>9</sup>; Mike Coleman<sup>10</sup>; Puneet Souda<sup>11</sup>; Henning Hermjakob<sup>1</sup>; Pierre-alain Binz<sup>12</sup>; Eric Deutsch<sup>9</sup>; <sup>1</sup>EMBL-EBI Wellcome Trust Genome Campus, Hinxton, UK; <sup>2</sup>Vanderbilt University, Nashville, TN; <sup>3</sup>Eberhard Karls University, Tuebingen, Germany; <sup>4</sup>Cedars-Sinai Center for Applied Proteomics, Los Angeles, CA; <sup>5</sup>Lund University, Lund, Sweden; <sup>6</sup>Thermo Fisher Scientific, San Jose, CA; <sup>7</sup>Applied Biosystems, Foster City, CA; <sup>8</sup>University of Pennsylvania, Philadelphia, PA; <sup>9</sup>Institute for Systems Biology, Seattle, WA; <sup>10</sup>Stowers Institute, Kansas City, MO; <sup>11</sup>UCLA, Los Angeles, CA; <sup>12</sup>Genebio -Geneva Bioinformatics, Geneva, Switzerland

Special **PSI Transitions Markup Language (TraML) for Exchange of Selected Reaction Monitoring Transition Lists**; Eric Deutsch<sup>1</sup>; Matthew Chambers<sup>2</sup>; Lennart Martens<sup>3</sup>; Brendan Maclean<sup>4</sup>; Jim Shofstahl<sup>5</sup>; Darren Kessner<sup>6</sup>; Fredrik Levander<sup>7</sup>; Pierre-Alain Binz<sup>8</sup>; Ruedi Aebersold<sup>1,9</sup>; Mi-Youn Brusniak<sup>10</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Vanderbilt University, Nashville, TN; <sup>3</sup>European Bioinformatics Institute, Hinxton, UK; <sup>4</sup>University of Washington, Seattle, WA; <sup>5</sup>Thermo Fisher Scientific, San Jose, CA; <sup>6</sup>Cedars-Sinai Center for A, Los

Angeles, CA; <sup>7</sup>Lund University, Lund, Sweden; <sup>8</sup>Genebio -Geneva Bioinformatics, Geneva, Switzerland; <sup>9</sup>Swiss Federal Institute of Technology, Zurich, Switzerland; <sup>10</sup>Institute for Systems Bio, Seattle, WA

Special **Teaching the Masses. Development of a Mass Spectrometry Tutorial for the Biomedical Researcher**; James A. Kelley<sup>1</sup>; Josip Blonder<sup>2</sup>; Terry L. Sumpter<sup>2</sup>; Timothy D. Veenstra<sup>2</sup>; Lawrence R. Phillips<sup>1</sup>; <sup>1</sup>National Institutes of Health, Frederick, MD; <sup>2</sup>SAIC-Frederick, Inc., Frederick, MD

Special ABRF 1 (Mon-Tues) **PRG 2009 Study: Relative Protein Quantification in a Clinical Matrix**; Michael J. Maccoss<sup>2</sup>; Allis S. Chien<sup>1</sup>; David B. Friedman<sup>3</sup>; David Hawke<sup>4</sup>; Jeroen Krijgsveld<sup>2</sup>; Kathryn S. Lilley<sup>6</sup>; Robert E. Settler<sup>7</sup>; Nicholas E. Sherman<sup>8</sup>; Chris Turck<sup>9</sup>; <sup>1</sup>Stanford University, Stanford, CA; <sup>2</sup>University of Washington, Seattle, WA; <sup>3</sup>Vanderbilt University School of Medicine, Nashville, TN; <sup>4</sup>UT-M.D. Anderson Cancer Center, Houston, TX; <sup>5</sup>EMBL, Gene Expression Unit, Heidelberg, Germany; <sup>6</sup>University of Cambridge, Cambridge, UK; <sup>7</sup>Virginia Bioinformatics Institute, Blacksburg, VA; <sup>8</sup>University of Virginia, Charlottesville, VA; <sup>9</sup>Max Planck Institute, Munich, Germany

Special ABRF 2 (Wed-Thurs) **PRG2009 Study: Evaluation of a Quantitative Proteomics Standards by Proteomics Laboratories**; James Farmer<sup>1</sup>; David Arnott<sup>2</sup>; Alexander R. Ivanov<sup>3</sup>; Jeffrey A. Kowalak<sup>4</sup>; William S. Lane<sup>5</sup>; Karl Mechtler<sup>6</sup>; Brett Phinney<sup>7</sup>; Manfred R. Raida<sup>8</sup>; Susan T. Weintraub<sup>9</sup>; <sup>1</sup>Einstein College of Medicine, Tarrytown, NY; <sup>2</sup>Genentech, Inc., S. San Francisco, CA; <sup>3</sup>Harvard University HSPH, Boston, MA; <sup>4</sup>NIH, Bethesda, MD; <sup>5</sup>Harvard University, Cambridge, MA; <sup>6</sup>IMP Research Institute of Mo, Vienna, Austria; <sup>7</sup>Univeristy of CA, Davis, Davis, CA; <sup>8</sup>Experimental Therapeutics Ce, Singapore, Singapore; <sup>9</sup>University of Texas HSC, San Antonio, TX

Special 18<sup>th</sup> IMSC, 2009 Breman, Germany

### PROTEOMICS: QUANTITATION TECHNIQUES, 001-032

MP 001 **Towards Robust Quantitative MRM Plasma Analysis Using Nanobore Liquid Chromatography through Improved Nano-electrospray Performance**; Susan E. Abbatiello<sup>1</sup>; Amanda Berg<sup>2</sup>; Gary Valaskovic<sup>2</sup>; Steven A. Carr<sup>1</sup>; <sup>1</sup>Broad Institute, Cambridge, MA; <sup>2</sup>New Objective, Inc., Woburn, MA

MP 002 **Withdrawn**

MP 003 **CaptiveSpray: A New Ionization Technique to Maximizing Speed, Sensitivity, Resolution and Robustness for LCMS Protein Biomarker Quantitation**; Kerry Nugent<sup>1</sup>; Yixin Zhu<sup>1</sup>; Peter Kent<sup>1</sup>; Brett Phinney<sup>2</sup>; Rudy Alvarado<sup>2</sup>; <sup>1</sup>Michrom Bioresources, Inc., Auburn, CA; <sup>2</sup>Univeristy of CA, Davis, Davis, CA

MP 004 **Detection and Quantitation of Active Ricin in Food**; Sara C. Mcgrath<sup>1</sup>; David M. Schieltz<sup>1</sup>; Lisa G. McWilliams<sup>2</sup>; John R. Barr<sup>1</sup>; <sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA; <sup>2</sup>Battelle, Atlanta, GA

MP 005 **Analyzing More Than 8-Samples with iTRAQ - Exploring the Changes in the Human Serum Proteome during Pregnancy**; Marijan Gucek<sup>1</sup>; Peter Scholl<sup>2,3</sup>; Ingo Ruczinski<sup>2</sup>; John D. Groopman<sup>2</sup>; Keith P. West<sup>2</sup>; Robert N. Cole<sup>1</sup>; <sup>1</sup>Johns Hopkins School of Medicine, Baltimore, MD; <sup>2</sup>Bloomberg School of Public

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Health, Johns Hopkins, Baltimore, MD; <sup>3</sup>US FDA, College Park, MD
- MP 006 **Assessing the Quantitative Dynamic Range of 8-Plex iTRAQ Proteomics Reagents in Simple and Complex Mixture of Proteins;** Saw Yen Ow; Malinda Salim; Josselin Noirel; Phillip C Wright; *The University of Sheffield, Sheffield, UK*
- MP 007 **Improved iTRAQ & TMT Quantification on an LTQ Orbitrap Equipped with a New Type of HCD Fragmentation Cell;** Peter Pichler<sup>1</sup>; Thomas Köcher<sup>2</sup>; Johann Holzmann<sup>2</sup>; Michael Schutzbier<sup>2</sup>; Goran Mitulovic<sup>3</sup>; Thomas Moehring<sup>4</sup>; Karl Mechtler<sup>2</sup>; Gustav Ammerer<sup>1,5</sup>; <sup>1</sup>*Christian Doppler Laboratory for Proteome Analysis, Vienna, Austria*; <sup>2</sup>*IMP, Vienna, Austria*; <sup>3</sup>*IMBA Inst. of Mol. Biotech., Vienna, Austria*; <sup>4</sup>*Thermo Fisher Scientific, Bremen, Germany*; <sup>5</sup>*University of Vienna, Vienna, Austria*
- MP 008 **Quantitative Proteomic Analysis and Genome Annotation of *Candida albicans* and *Candida glabrata*;** Keshava T.S. Prasad<sup>1</sup>; Kumaran Kandasamy<sup>1,2</sup>; Santosh Renuse<sup>1</sup>; Harsh Pawar<sup>1</sup>; Arivusudar Marimuthu<sup>1</sup>; Raghothama Chaerkady<sup>1,2</sup>; Pradip Kumar Acharya<sup>1</sup>; Akhilesh Pandey<sup>2</sup>; <sup>1</sup>*Institute of Bioinformatics, Bangalore, India*; <sup>2</sup>*Johns Hopkins University, Baltimore, MD*
- MP 009 **Cross-Sample Analysis of MRM-Based Plasma Protein Expression Measurements Key Component of Developing High Quality MRM Assays;** Sean L. Seymour<sup>1</sup>; Leigh Anderson<sup>2</sup>; Christie L Hunter<sup>1</sup>; <sup>1</sup>*Applied Biosystems, Foster City, CA*; <sup>2</sup>*Plasma Proteome Institute, Washington, DC*
- MP 010 **Generating Neuropeptide Standard Curve in a Single LC-MS Run by N, N-Dimethyl Amino Acids Tandem Mass Tags;** Feng Xiang; Junhua Wang; Lingjun Li; *University of Wisconsin, Madison, WI*
- MP 011 **Automated Solid Phase Sequential Isotope Labeling for Protein Quantitation;** Reinout Raijmakers<sup>1,2</sup>; Paul J. Boersema<sup>1,2</sup>; Shabaz Mohammed<sup>1,2</sup>; Albert J.R. Heck<sup>1,2</sup>; <sup>1</sup>*Utrecht University, Utrecht, Netherlands*; <sup>2</sup>*Netherlands Proteomics Centre, Utrecht, Netherlands*
- MP 012 **A Low Cost, Automated Chemical Derivatization Technique for Relative Proteome Quantification;** Andy Lo; Joel H. Weiner; Liang Li; *University of Alberta, Edmonton, Canada*
- MP 013 **A New Technique: Double-Stable-Isotope-Coding (DSIC) for Quantitative Proteomics;** Hong Wang; Chee-Hong Wong; Alice Chin; Jacob Kennedy; Qing Zhang; Samir Hanash; *PHS, Fred Hutchinson Cancer, Seattle, WA*
- MP 014 **Targeting and Quantifying the Hydrophobic Peptidome Fraction by High Resolution Multiple Selected Reaction Monitoring (H-mSRM);** Diana Klingler<sup>2</sup>; Peter Sonderegger<sup>2</sup>; Endre Laczko<sup>1</sup>; <sup>1</sup>*Functional Genomics Center ETHZ UHZ, Zurich, Switzerland*; <sup>2</sup>*Institute of Biochemistry UZH, Zurich, Switzerland*
- MP 015 **Transfer of Optimized Acquisition Parameters between Mass Analyzer Types for Improved Protein Identification and Quantification;** Christine Miller; David Horn; Shripad Torvi; Ning Tang; Keith Waddell; *Agilent Technologies, Santa Clara, CA*
- MP 016 **Using High Mass Accuracy to Quantify Targeted Proteins;** Amol Prakash<sup>1</sup>; Gene Ciccimaro<sup>2</sup>; Scott Peterman<sup>2</sup>; Taha Rezaei<sup>1</sup>; Bryan Krastins<sup>1</sup>; David Sarracino<sup>1</sup>; Mary F Lopez<sup>1</sup>; <sup>1</sup>*ThermoFisher Scientific, Cambridge, MA*; <sup>2</sup>*Thermo Fisher, New Jersey, NJ*
- MP 017 **Evaluating the Performance Factors of a Targeted Label-Free Protein Quantitation Approach on an Ultra-High Resolution API-Qq-TOF;** Wolfgang Jabs; Markus Lubeck; Marina Behrens; Carsten Baessmann; *Bruker Daltonik GmbH, 28359 Bremen, Germany*
- MP 018 **Data-Independent Tandem Mass Spectrometry Acquisition for Label-Free Peptide/Protein Quantification;** Alexander Scherl<sup>1</sup>; Jean-charles Sanchez<sup>1</sup>; Judith Nicholson<sup>2</sup>; Ted Hupp<sup>2</sup>; <sup>1</sup>*University of Geneva, Geneva, Switzerland*; <sup>2</sup>*University of Edinburgh, Edinburgh, UK*
- MP 019 **Accurate Label-Free Quantitation of Proteins by UPLC/MSE Using Replicates;** Chong-Feng Xu; Thomas A. Neubert; *NYU Langone Medical Center, New York, NY*
- MP 020 **Unexpected Decrease of Internal Standard Signals in Quantitative MALDI-TOF Mass Spectrometry;** Norman H.L. Chiu; Walter B. Wilson; *University of North Carolina at Greensboro, Greensboro, NC*
- MP 021 **Evaluation of Label-Free Relative Protein Quantification by Protein Standard Mixtures;** Andrej Vasilj<sup>1</sup>; Andrej Shevchenko<sup>2</sup>; Marc Gentzel<sup>3</sup>; <sup>1</sup>*MPI-Cell Biology and Genetic, Dresden, Germany*; <sup>2</sup>*MP of Mol Cell Biology, Dresden, Germany*; <sup>3</sup>*MPI-CBG, Dresden, Germany*
- MP 022 **Detection and Quantification of a Novel Plant Pathogen Defense Protein Mannitol Dehydrogenase from LC/MS<sup>E</sup> Datasets;** Kevin Blackburn; Fang-yi Cheng; John D. Williamson; Michael B. Goshe; *NC State University, Raleigh, NC*
- MP 023 **A Label-Free Quantitation Strategy for Personalized Membrane Proteomics Signature in Colorectal Cancer;** Chien-peng Wu<sup>1</sup>; Chia-li Han<sup>1</sup>; Chia-feng Tsai<sup>1</sup>; Chih-wei Chien<sup>2</sup>; Pei-yi Lin<sup>1</sup>; Guei-tian Chen<sup>3</sup>; Err-cheng Chan<sup>3</sup>; Jinn-shiun Chen<sup>4</sup>; Jao-song Yu<sup>3</sup>; Yu-ju Chen<sup>1</sup>; <sup>1</sup>*Institute of Chemistry, Academia Sinica, Taipei, Taiwan*; <sup>2</sup>*National Tsing Hua University, Hsin Chu, Taiwan*; <sup>3</sup>*Chang Gung University, Tao Yuan, Taiwan*; <sup>4</sup>*Chang Gung Memorial Hospital, Tao Yuan, Taiwan*
- MP 024 **BDNF-Induced Changes in the Expression of the Translation Machinery In Hippocampal Neurons: Protein Levels and Dendritic mRNA;** Bruno Manadas<sup>1</sup>; Ana Santos<sup>1</sup>; Krisztina Szabadfi<sup>1</sup>; João Gomes<sup>1</sup>; Spiros D. Garbis<sup>2</sup>; Michael Fountoulakis<sup>2</sup>; Carlos B Duarte<sup>1</sup>; <sup>1</sup>*Center for Neuroscience and Cell Biology, Cantanhede, Portugal*; <sup>2</sup>*B.R.F.A.A., Athens, Greece*
- MP 025 **Data-Independent Relative Quantification of Salt Stress-Induced Membrane Protein Abundance Changes in *Arabidopsis thaliana* Using Label-Free GeLC/MS<sup>E</sup>;** Uma Kota; Kevin Blackburn; Steven D. Clouse; Michael B. Goshe; *North Carolina State University, Raleigh, NC*
- MP 026 **A Rapid Label-Free Proteomics Survey of Immortalization in Cultured Human Breast Epithelial Cells;** Rui Miguel Mamede Branca; Virginia Pearce; Laszlo Prokai; *University of North Texas Health Science Center, Fort Worth, TX*
- MP 027 **Development of Robust Label-Free Proteomics for Determination of Changes in UV Induced DNA Damage;** Bei Zhao; George F. Heine; Jeffrey D. Parvin; Michael A. Freitas; *Ohio State Univ., Columbus, OH*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 028 **Withdrawn**
- MP 029 **Validation of RNAi Protein Knockdown Using Targeted Proteomics;** Daniela Tomazela; Jennifer Merrihew; Geoff Findlay; Veronika Glukhova; Frances Mao; Willie Swanson; Ray Monnat Jr; Michael J. Maccoss; *University of Washington, Seattle, WA*
- MP 030 **Monitoring Proteomes of Transgenic Peanuts Engineered for Reduced Allergen Content by Using Linear Trap Quadrupole and Triple Quadrupole Mass Spectrometry;** Severin E. Stevenson<sup>1</sup>; Ye Chu<sup>2</sup>; Peggy Ozias-Akins<sup>2</sup>; Jay J. Thelen<sup>1</sup>; <sup>1</sup>*UM Biochem-Proteomics, Columbia, MO*; <sup>2</sup>*University of Georgia-Tifton, Tifton, GA*
- MP 031 **Withdrawn**
- MP 032 **Identification of Biomarkers for Diabetic Retinopathy by Multiple Reaction Monitoring;** Kyunggon Kim<sup>3</sup>; Jiyoung Yu<sup>1</sup>; Kyong Soo Park<sup>2</sup>; Hyeong Gon Yu<sup>3</sup>; In-Jin Jang<sup>4</sup>; Youngsoo Kim<sup>1</sup>; <sup>1</sup>*Dept. of Biomedical Sciences, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea*; <sup>2</sup>*Dept. of Internal Medicine, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea*; <sup>3</sup>*Dept. of Ophthalmology, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea*; <sup>4</sup>*Dept. of Pharmacology, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea*
- BIOINFORMATICS: QUANTITATION, 033 - 065**
- MP 033 **Quantitative Analysis Methods in Proteomics;** Ashoka D. Polpitiya; Weijun Qian; Vladislav A Petyuk; Gordon Anderson; Richard D. Smith; *Pacific Northwest National Lab, Richland, WA*
- MP 034 **Automatic Computational Protein Co-Regulation Screening for Quantitative Mass Spectrometry Experiments;** Marc Kirchner<sup>1,2</sup>; Bernhard Y Renard<sup>2,3</sup>; Ullrich Koethe<sup>2</sup>; Judith AJ Steen<sup>1</sup>; Hanno Steen<sup>1</sup>; Fred A Hamprecht<sup>2,3</sup>; <sup>1</sup>*Harvard Medical School / Children's Hospital, Boston, MA*; <sup>2</sup>*University of Heidelberg, Heidelberg, Germany*; <sup>3</sup>*Children's Hospital Boston, Boston, MA*
- MP 035 **Shared Peptides in Mass Spectrometry Based Protein Quantification;** Banu Dost<sup>1</sup>; Nuno Bandeira<sup>2</sup>; Vineet Bafna<sup>3</sup>; <sup>1</sup>*University of California, San Diego, La Jolla, CA*; <sup>2</sup>*University of California, La Jolla, CA*; <sup>3</sup>*Univ. Cal. San Diego, San Diego, CA*
- MP 036 **Identifying and Quantifying Isoforms and Homologues;** Johannes PC Vissers<sup>1</sup>; Richard R Sprenger<sup>2</sup>; Lennart Martens<sup>3</sup>; Scott Geromanos<sup>1</sup>; Jim Langridge<sup>1</sup>; <sup>1</sup>*Waters Corporation, Manchester, UK*; <sup>2</sup>*Department of Medical Biochemistry, AMC, Amsterdam, Netherlands*; <sup>3</sup>*EMBL European Bioinformatics Institute, Hinxton, UK*
- MP 037 **Automated, XIC Based Protein Quantitation of Comparative Low-Resolution 2D/LC Shotgun Experiments within the Elucidator System.;** Eberhard Durr<sup>1</sup>; Peter Askovich<sup>2</sup>; Lori C Stansberry<sup>1</sup>; Mark A Miller<sup>1</sup>; Loren D Schultz<sup>1</sup>; Joseph G Joyce<sup>1</sup>; <sup>1</sup>*Merck & Co, West Point, PA*; <sup>2</sup>*Rosetta Biosoftware, Seattle, WA*
- MP 038 **Mathematical Modelling of Dynamic Exclusion to Optimize Protein and Spectral Counts in MudPIT;** Ying Zhang; Zhihui Wen; Laurence Florens; Michael Washburn; *Stowers Institute for Medical Research, Kansas City, MO*
- MP 039 **Algorithms for Label-Free Protein Quantification Across Hundreds of LC-MS Data Sets;** Zia Khan; Joshua Bloom; Benjamin Garcia; Mona Singh; Leonid Kruglyak; *Princeton University, Princeton, NJ*
- MP 040 **Assessing Reproducibility of Label-Free Proteomics Platforms Using a Large Rat Sera Study: A Comparison of Microspray and Nanospray;** Xiaofeng Guo<sup>1</sup>; Vasant Marur<sup>1</sup>; Neil Russell<sup>1</sup>; Matthew J Sniatynski<sup>1</sup>; Michael Anthanas<sup>2</sup>; Bruce Kristal<sup>1,3</sup>; <sup>1</sup>*Brigham and Women's Hospital, Boston, MA*; <sup>2</sup>*VAST Scientific, Cambridge, MA*; <sup>3</sup>*Harvard Medical School, Boston, MA*
- MP 041 **Evaluation of Label Free Differential Mass Spectrometry to Detect Low Level Proteins in Unfractionated Complex Mixture;** Sheeno Thyparambil; Shweta S Chavan; Veronica MacLeod; Rick Edmondson; *Univ Arkansas Med Sci., Little Rock, AR*
- MP 042 **Peptide Normalization Increases Sensitivity of Label-Free Quantification of Proteins;** Richard LeDuc; Jeffery Hiken; Henry W. Rohrs; Monica Bessler; R. Reid Townsend; *Washington University, St. Louis, MO*
- MP 043 **New Algorithm for Label-Free Protein Quantification;** Weiwu Chen<sup>1</sup>; Baozhen Shan<sup>1</sup>; Eric Bonneau<sup>2</sup>; Janine Voyer<sup>1</sup>; Gilles Lajoie<sup>3</sup>; Pierre Thibault<sup>2</sup>; Bin Ma<sup>4</sup>; <sup>1</sup>*Bioinformatics Solutions Inc., Waterloo, ON*; <sup>2</sup>*Univ. of Montreal, Montreal, QC*; <sup>3</sup>*University of Western Ontario, London, ON*; <sup>4</sup>*University of Waterloo, Waterloo, Canada*
- MP 044 **Novel Label-Free Quantitation Algorithms to Analyze Large Numbers of Proteome/Metabolome Samples;** Ken Aoshima<sup>1,2</sup>; Satoshi Tanaka<sup>1,2</sup>; Tatsuji Nakamura<sup>1,2</sup>; Hideki Watanabe<sup>1</sup>; Khin Than Myint<sup>1,2</sup>; Junro Kuromitsu<sup>1</sup>; Yoshiya Oda<sup>1,2</sup>; <sup>1</sup>*Eisai Co., Ltd, Ibaraki, Japan*; <sup>2</sup>*CREST, Saitama, Japan*
- MP 045 **Evaluation of Relative Quantitation in Proteomics with Label-Free Methods;** Bernd Roschitzki<sup>1,2</sup>; Bertan Gerrits<sup>2</sup>; Christian Panse<sup>2</sup>; Jonas Grossmann<sup>2</sup>; Simon Barkow-Oesterreicher<sup>2</sup>; Ralph Schlapbach<sup>2</sup>; <sup>1</sup>*University of Zurich, Zurich, Switzerland*; <sup>2</sup>*ETH Zurich FGCZ, Zurich, Switzerland*
- MP 046 **Label Free Proteomics: Utilizing the Computational Proteomic Analysis System for Relative Protein Quantitation;** Lewis C Jackson; Mark Lovell; Bert C. Lynn; *University of Kentucky, Lexington, KY*
- MP 047 **Identification Of Mosquito Salivary Gland Proteins and Determination of Parasite Infection;** Marcus Macht<sup>1</sup>; Aditya P. Dash<sup>2</sup>; Hebelero Romano<sup>1</sup>; Arun Sharma<sup>2</sup>; <sup>1</sup>*Bruker Daltonics GmbH, Bremen, Germany*; <sup>2</sup>*National Institute for Malaria Research, New Delhi, India*
- MP 048 **Label-Free Differential Analysis: An Iterative Approach to Increased Coverage, Improved Statistics and Results;** Michael Athanas<sup>1</sup>; Michael J. Maccoss<sup>2</sup>; Amol Prakash<sup>3</sup>; Lukas Kall<sup>2</sup>; Daniela Tomazela<sup>2</sup>; Brendan Maclean<sup>2</sup>; Taha Rezaei<sup>3</sup>; Bryan Krastins<sup>3</sup>; David Sarracino<sup>3</sup>; Scott Peterman<sup>4</sup>; Mary F Lopez<sup>3</sup>; <sup>1</sup>*VAST Scientific, Cambridge, MA*; <sup>2</sup>*University of Washington, Seattle, WA*; <sup>3</sup>*ThermoFisher Scientific, Cambridge, MA*; <sup>4</sup>*ThermoFisher Scientific, Somerset, NJ*
- MP 049 **Comparative Analysis of Paired Samples from Distinct Proteomics Mixtures Using CRAWDAD;** Eric Rynes<sup>1</sup>; Greg L. Finney<sup>1</sup>; Daniela Tomazela<sup>1</sup>; F. Sessions Cole<sup>2</sup>; Aaron Hamvas<sup>2</sup>; Michael J. MacCoss<sup>1</sup>; <sup>1</sup>*Dept. of Genome Sciences, University of Washington,*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Seattle, WA; <sup>2</sup>Dept. of Pediatrics, Washington University, St. Louis, MO
- MP 050 **Utilization of High-Accuracy FTICR-MS Data in Protein Quantitation Experiments;** Martin Strohal<sup>1,2</sup>; Petr Novak<sup>1</sup>; Petr Pompach<sup>1</sup>; Petr Man<sup>1</sup>; Daniel Kavan<sup>1</sup>; Matthias Witt<sup>3</sup>; Pert Dzubak<sup>4</sup>; Marian Hajduch<sup>4</sup>; Vladimir Havlicek<sup>1,4</sup>; <sup>1</sup>Institute of Microbiology, Prague, Czech Republic; <sup>2</sup>Institute of Chemical Technology, Prague, Czech Republic; <sup>3</sup>Bruker Daltonik GmbH, Bremen, Germany; <sup>4</sup>Palacky University, Olomouc, Czech Republic
- MP 051 **MassComp-Q: A Comprehensive Quantitation Software Tool for Stable Isotope Labeling and Label-Free Quantitative Proteomics;** Chih-Chiang Tsou; Ting-Yi Sung; Wen-Lian Hsu; *Institute of Information Science, Academia Sinica, Taipei, Taiwan*
- MP 052 **A Computational Method for Improved Quantitation Accuracy of Differentially 18O/16O Labeled Peptides Exhibiting Variable Rate of 18O Incorporation;** Xiaoying Ye<sup>1</sup>; Brian Luke<sup>1</sup>; Donald Johann<sup>2</sup>; Thorkell Andreasson<sup>1</sup>; Timothy D. Veenstra<sup>1</sup>; Josip Blonder<sup>1</sup>; <sup>1</sup>SAIC-Frederick Inc., Frederick, MD; <sup>2</sup>NIH, Bethesda, MD
- MP 053 **Quantitative Approach to Proteome Analysis of Human Body Fluids Based on AMT Tags and Isotopic Labeling;** Igor Popov<sup>1,2</sup>; Ilya A Agron<sup>2,3</sup>; Alexey Kononikhin<sup>2</sup>; Dmitry Avtonomov<sup>2,3</sup>; Oxana Trifonova<sup>4</sup>; Irina Larina<sup>4</sup>; Eugene Nikolaev<sup>1,2</sup>; <sup>1</sup>Institute for Energy Problems of Chemical Physics, Moscow, Russia; <sup>2</sup>Emanuel Institute of Biochemical Physics RAS, Moscow, Russia; <sup>3</sup>Ins. for Biomedical Chem. Rus. Acad. Med. Sciences, Moscow, Russia; <sup>4</sup>Institute for Biomedical Problems RAS, Moscow, Russia
- MP 054 **Algorithm for Quantification of Stable Isotope Labeled Peptides;** Yingxin Zhao; Sigmund Haidecher; Ronald Tilton; Larry Denner; Jonathan Starkey; Rovshan Sadygov; *University of Texas, Galveston, TX*
- MP 055 **High-Throughput Measurement of Protein Turnover in Plants Using Stable Isotope Labeling Coupled with LC-MS/MS Analysis;** Wen-Ping Chen<sup>1</sup>; Xiao-Yuan Yang<sup>1,4</sup>; Adrian D. Hegeman<sup>1,4</sup>; Aaron K. Rendahl<sup>2</sup>; Sanford Weisberg<sup>2</sup>; Thomas F. McGowan<sup>3</sup>; William M. Gray<sup>4</sup>; Jerry D. Cohen<sup>1</sup>; <sup>1</sup>Dept. Horticultural Science - U of MN, Saint Paul, MN; <sup>2</sup>School of Statistics - U of MN, Saint Paul, MN; <sup>3</sup>Center for Mass Spectrometry and Proteomics - U of MN, Saint Paul, MN; <sup>4</sup>Dept. Plant Biology - U of Minnesota, Saint Paul, MN
- MP 056 **SILAC Quantification with PEAKS to a Depth of 3000 Proteins from a Double Knockout GSK-3 of Mouse Embryonic Stem Cells;** Chris Hughes<sup>1</sup>; Brad Doble<sup>3</sup>; Lei Xin<sup>2</sup>; Clark Chen<sup>2</sup>; Baozhen Shan<sup>2</sup>; Bin Ma<sup>4</sup>; Gilles Lajoie<sup>1</sup>; <sup>1</sup>University of Western Ontario, London, ON; <sup>2</sup>Bioinformatic Solutions Inc., Waterloo, ON; <sup>3</sup>McMaster University, Hamilton, ON; <sup>4</sup>University of Waterloo, Waterloo, ON
- MP 057 **Automatic Quantification of 16/18O Labeled LC/MS Data;** Anna Kreshuk<sup>1</sup>; Marc Kirchner<sup>1</sup>; Bernhard Y. Renard<sup>1</sup>; Dominic Winter<sup>2</sup>; Hanno Steen<sup>3</sup>; Judith A. J. Steen<sup>3</sup>; Wolf D. Lehmann<sup>2</sup>; Fred A. Hamprecht<sup>1</sup>; <sup>1</sup>University of Heidelberg, Heidelberg, Germany; <sup>2</sup>German Cancer Research Center, Heidelberg, Germany; <sup>3</sup>Harvard Medical School/Children's Hospital Boston, Boston, MA
- MP 058 **Quantitation across Multiple iTRAQ Samples Using Scaffold Q+;** Charles E Roberts<sup>1</sup>; Jason Nunes<sup>1</sup>; Brian C. Searle<sup>1</sup>; <sup>1</sup>Proteome Software, Portland, OR
- MP 059 **Mathematical Modeling and Assessment of Quantitation Following Abundant Protein Depletion Using Hexapeptide Beads and iTRAQ;** John H. Schwacke; Lashanda Waller; Daniel R. Knapp; *Medical University of South Carolina, Charleston, SC*
- MP 060 **Improved Technique for Automated Analysis of iTRAQ Data Using LTQ-Orbitrap;** Getiria L. Onsongo; Susan K. Van Riper; Kofi P. Adragani; Ebbing De Jong; Matthew D. Stone; Sricharan Bandhakavi; Baolin Wu; John V. Carlis; Timothy J. Griffin; *University of Minnesota, Minneapolis, MN*
- MP 061 **A Bioinformatic Tool for Detailed Interrogation of Multiple iTRAQ Datasets;** Erika P Parkinson<sup>1</sup>; Andrew Garrow<sup>2</sup>; Paul J Skipp<sup>1</sup>; Maja Aleksic<sup>2</sup>; Andrew White<sup>2</sup>; Geraldine Clough<sup>1</sup>; Daniel J Scott<sup>2</sup>; C. David O'Connor<sup>1</sup>; <sup>1</sup>University of Southampton, Southampton, UK; <sup>2</sup>Safety & Environmental Assurance Centre, Unilever, Sharnbrook, UK
- MP 062 **Templated Proteogenomics: A Novel Method for Monoclonal Antibody Sequencing;** Natalie E Castellana<sup>1</sup>; Victoria Pham<sup>2</sup>; David Arnott<sup>2</sup>; Jennie Lill<sup>2</sup>; Vineet Bafna<sup>1</sup>; <sup>1</sup>UCSD, La Jolla, CA; <sup>2</sup>Genentech, Inc., S. San Francisco, CA
- MP 063 **Development of a Reliable and Efficient Genome Annotation Pipeline Using Proteomic Mass Spectrometry Data;** Markus Brosch; Tim Hubbard; Jyoti Choudhary; *Wellcome Trust Sanger Instit, Cambridge, UK*
- MP 064 **Assigning Proteins Identified from Tissues to Cells Using Publicly Available Gene Chip Data;** Kenneth Parker; *BG-Medicine, Waltham, MA*
- MP 065 **Formulation of a MySQL Database and Query Toolset to Extract Complex Metabolic Information from a Natural Microbial Consortia.;** Nathan C. Verberkmoes<sup>1</sup>; Brian Dill<sup>1</sup>; Brian Thomas<sup>2</sup>; Denise Schmoyer<sup>1</sup>; Manesh Shah<sup>1</sup>; Vincent Deneff<sup>2</sup>; Paul Wilmes<sup>2</sup>; Patricia Carey<sup>1</sup>; Steve Singer<sup>3</sup>; Korin Wheeler<sup>3</sup>; Michael Thelen<sup>3</sup>; Robert Hettich<sup>1</sup>; <sup>1</sup>Oak Ridge National Lab, Oak Ridge, TN; <sup>2</sup>University of California, Berkeley, Berkeley, CA; <sup>3</sup>Lawrence Livermore National Laboratory, Livermore, CA

### PROTEOMICS: BIOMARKER DISCOVERY, 066 - 097

- MP 066 **Markers of Ovarian Endometrioid Cancer Using a Genetically Engineered Mouse Model and Pathway Analysis;** David M. Lubman; Hyeyeung Kim; Rong Wu; Kathleen Cho; David Misek; *University of Michigan, Ann Arbor, MI*
- MP 067 **Protein Composition of Liver Cyst Fluid from the BALB/c-cpk/+ Mouse Model of Autosomal Recessive Polycystic Kidney Disease (ARPKD);** Xianyin Lai<sup>1</sup>; Bonnie L. Blazer-Yost<sup>1,2</sup>; Vincent H. Gattone II<sup>1</sup>; Monalisa N. Muchatuta<sup>2</sup>; Frank A. Witzmann<sup>1</sup>; <sup>1</sup>Indiana University School of Medicine, Indianapolis, IN; <sup>2</sup>Indiana University Purdue University at Indianapolis, Indianapolis, IN
- MP 068 **Proteomic Analysis of Differentiation Factors: Retinal Ganglion Cell Line Differentiated by Co-Culture with Non-Pigmented Ciliary Epithelium Cell Secreted Proteins;** Ming-Hui Yang<sup>1</sup>; Shiang-Bin Jong<sup>2</sup>; Jen-Taie Shiea<sup>1</sup>; Yu-Chang Tyan<sup>2</sup>; <sup>1</sup>National Sun Yat-

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Sen Univ., Kaohsiung, Taiwan; <sup>2</sup>Kaohsiung Medical University, Kaohsiung, Taiwan
- MP 069 **Biomarker Discovery by Stable Isotope Labeling of Mouse Models;** Michaela D Filiou; Yaoyang Zhang; Birgit Bisle; Elisabeth Frank; Melanie S Kessler; Boris Hamsch; Stefan Reckow; Katrin Haegler; Giuseppina Maccarrone; Rainer Landgraf; Christoph W Turck; *Max Planck Institute of Psychiatry, Munich, Germany*
- MP 070 **Identification of Novel Urinary Biomarkers of Renal Obstruction Using Temporal Quantitative Proteomics;** Ali R. Vaezzadeh<sup>1,2</sup>; Andrew Briscoe<sup>2</sup>; Lee Dicker<sup>3</sup>; Oliver Hoffman<sup>3</sup>; Winston Hyde<sup>3</sup>; Hanno Steen<sup>1,2</sup>; Richard S. Lee<sup>1,2</sup>; <sup>1</sup>Harvard Medical School, Boston, MA; <sup>2</sup>Children's Hospital Boston, Boston, MA; <sup>3</sup>Harvard School of Public Health, Boston, MA
- MP 071 **Label-Free Quantitative Studies of Pancreatic Cancer Stem Cells;** Lan Dai<sup>1</sup>; David M. Lubman<sup>1</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI
- MP 072 **Proteomic analysis of Tumor Necrosis Factor-Alpha Resistant Human Breast Cancer Cells Reveals a MEK5/Erk5-Mediated Epithelial-Mesenchymal Transition Phenotype;** Changhua Zhou<sup>1</sup>; Ashley Nitchke<sup>2</sup>; Wei Xiong<sup>2</sup>; Qiang Zhang<sup>1</sup>; Yan Tang<sup>2</sup>; Michael Bloch<sup>2</sup>; Steven Elliott<sup>2</sup>; Yun Zhu<sup>2</sup>; Lindsey Bazzone<sup>2</sup>; David Yu<sup>2</sup>; Christopher B. Weldon<sup>2</sup>; John A. McLachlan<sup>2</sup>; Rachel Schiff<sup>2</sup>; Babara S. Beckman<sup>2</sup>; Thomas Wiese<sup>1</sup>; Kenneth P. Nephew<sup>2</sup>; Bin Shan<sup>2</sup>; Matthew Burow<sup>2</sup>; Guangdi Wang<sup>1</sup>; <sup>1</sup>Xavier University of Louisiana, New Orleans, LA; <sup>2</sup>Tulane University School of Medicine, New Orleans, LA
- MP 073 **Withdrawn**
- MP 074 **Comparative Proteomic Analysis of Liver Cancer Stem Cells;** Sheng-Ta Tsai<sup>1</sup>; Chia-Ning Shen<sup>1</sup>; Chih-Chiang Tsou<sup>2</sup>; Wan-Yu Mao<sup>1</sup>; Wei-Chao Chang<sup>1</sup>; Wen-Lian Hsu<sup>2</sup>; Chung-Hsuan Chen<sup>1</sup>; <sup>1</sup>Genomics Research Center, Academia Sinica, Taipei, Taiwan; <sup>2</sup>Institute of Information Science, Academia Sinica, Taipei, Taiwan
- MP 075 **Determining the Origin of Estradiol-Reactive Vitelline Envelope Protein Fragments in Female Rainbow Trout Using MALDI-TOF-MS and MS/MS;** Kimberly Salinas<sup>1</sup>; Sherry Vickery<sup>1</sup>; Candice Lavelle<sup>2</sup>; Michael Hemmer<sup>1</sup>; <sup>1</sup>U.S. EPA, Gulf Breeze, FL; <sup>2</sup>U.S. EPA-Student Services Contractor, Gulf Breeze, FL
- MP 076 **Analysis of Synovial Lavage and Plasma from Identical Twins to Identify Osteoarthritis Biomarkers;** Haihong Zhou<sup>1</sup>; Joseph Menetski<sup>1</sup>; Hua Lin<sup>2</sup>; Shanhua Lin<sup>2</sup>; Christopher Becker<sup>2</sup>; Xuemei Zhao<sup>1</sup>; Stephen Oakley<sup>3</sup>; Tim Spector<sup>3</sup>; Suzanne Mandala<sup>1</sup>; Ronald Hendrickson<sup>1</sup>; <sup>1</sup>Merck & Co., Inc., Rahway, NJ; <sup>2</sup>PPD Biomarker Discovery Sciences, Menlo Park, CA; <sup>3</sup>St. Thomas' Hospital, King's College London, London, UK
- MP 077 **Urinary Biomarker for Benign Prostatic Hyperplasia - Discovery Using MALDI-TOF-Based Biostatistics Combined with LC-ESI/MS/MS-Based Stable-Isotope Labeling;** Shu-Hui Chen<sup>1</sup>; Hong-Lin Cheng<sup>1</sup>; Bing-Yuan Ou<sup>1</sup>; Hung-Jen Huang<sup>1</sup>; Nan-Haw Chow<sup>1</sup>; Yen-Wen Chen<sup>2</sup>; <sup>1</sup>National Cheng Kung University, Tainan, Taiwan; <sup>2</sup>National Central University, Chuang-Li, Taiwan
- MP 078 **Proteomic Analysis to Understanding a Retinoid-Hypersensitive Embryonal Carcinoma Cell Mutant;** Qishan Lin; Jinghua Zhu; Paulette McCormick; *University at Albany, Rensselaer, NY*
- MP 079 **Systematic Evaluation of Immobilized pH Gradient-Isoelectric Focusing (IPG-IEF) for Salivary Biomarker Discovery;** Jonathan L. Bundy<sup>1</sup>; Michael Gardner<sup>1</sup>; Megan Rowland<sup>2</sup>; James Stephenson<sup>1</sup>; <sup>1</sup>Research Triangle Institute, Rtp, NC; <sup>2</sup>RTI International, Cary, NC
- MP 080 **Comparison of Ultrastructure and Protein Composition of Planktonic and Biofilm Stages of Non-Typeable Haemophilus Influenzae;** James Kerwin; Siva Wu; Paul Webster; *House Ear Institute, Los Angeles, CA*
- MP 081 **Comparison of Tumour and Normal Endometrial Samples by LC-MS/MS Using an Iterative Exclusion List Approach;** Sebastien Voisin<sup>1</sup>; Leroi Desouza<sup>1</sup>; Olga Krakovska<sup>1</sup>; Alexander D. Romaschin<sup>2</sup>; Terence J Colgan<sup>3</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>York University, Toronto, Canada; <sup>2</sup>St Michael's Hospital, Toronto, Canada; <sup>3</sup>Mt Sinai Hospital, Toronto, Canada
- MP 082 **Urinary Glycoprotein Biomarker Discovery for Human Bladder Cancer Using Multi-Lectin Affinity Chromatography and LC-MS/MS;** Na Yang<sup>1</sup>; Shun Feng<sup>1</sup>; Huy Vuong<sup>1</sup>; Steve Goodison<sup>2</sup>; Charles J. Rosser<sup>2</sup>; Fan Xiang<sup>3</sup>; David M. Lubman<sup>1</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>University of Florida, Jacksonville, FL; <sup>3</sup>Shimadzu Biotech, Pleasanton, CA
- MP 083 **Discovery of G-Quadruplex DNA Binding Proteins Using MALDI-MS and LC/MS;** Yuexi Wang; Linda McGown; *Rensselaer Polytechnic Institute, Troy, NY*
- MP 084 **Optimization of Glycopeptide Capture for Biomarker Discovery in Human Plasma and Cerebrospinal Fluid;** Frode Berven<sup>1,2</sup>; Rushdy Ahmad<sup>2</sup>; Rune J Ulvik<sup>1</sup>; Steven A. Carr<sup>2</sup>; <sup>1</sup>University of Bergen, Bergen, Norway; <sup>2</sup>Broad Institute, Cambridge, MA
- MP 085 **Proteomics and Protein Network Studies of Metastasis in Human Breast Cancer;** Yashu Liu<sup>1</sup>; Jintang He<sup>1</sup>; Xiaolei Xie<sup>1</sup>; Steve Goodison<sup>2</sup>; Fan Xiang<sup>3</sup>; David M. Lubman<sup>1</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>University of Florida, Jacksonville, FL; <sup>3</sup>Shimadzu Biotech, Pleasanton, CA
- MP 086 **Identification of Differentially Spiked Proteins from Un-Depleted and Un-Fractionated Human Plasma;** Jose E. Meza<sup>1</sup>; Steven C. Hall<sup>2</sup>; H. Ewa Witkowska<sup>2</sup>; Susan J. Fisher<sup>2</sup>; <sup>1</sup>Agilent Technologies, Santa Clara, CA; <sup>2</sup>UCSF MS Core Facility, San Francisco, CA
- MP 087 **Serum Biomarker Discovery of Alzheimer-Related Peptides in Presymptomatic Patients by Means of 2D Protein and Peptide Separation on Monolithic Columns;** Linda IJsselstijn<sup>1</sup>; Deborah Kronenberg<sup>1</sup>; Remco Swart<sup>2</sup>; Peter J. Koudstaal<sup>1</sup>; Peter A. E. Sillevius Smitt<sup>1</sup>; Monique M. B. Bretelet<sup>1</sup>; Theo M. Luider<sup>1</sup>; <sup>1</sup>Erasmus University Medical Center, Rotterdam, The Netherlands; <sup>2</sup>Dionex Benelux B.V., Amsterdam, The Netherlands
- MP 088 **Discovery of Novel Colorectal Cancer Biomarkers in Dissected Colorectal Epithelia and their targeted Verification in Plasma.;** Silvia Surinova<sup>1</sup>; Marta Dziejchciarková<sup>2</sup>; Andreas Panagiotidis<sup>1</sup>; Matej Skrovina<sup>3</sup>; Bruno Domon<sup>1</sup>; Marián Hajdúch<sup>2</sup>; Ruedi Aebersold<sup>1,4</sup>; <sup>1</sup>Institute of Molecular Systems Biology (ETHZ), Zurich, Switzerland; <sup>2</sup>Palacký University and University Hospital, Olomouc, Czech Republic; <sup>3</sup>J.G.Mendel Oncology Centre, Novy Jicin, Czech Republic; <sup>4</sup>Institute for Systems Biology, Seattle, WA



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- |  |  |
|--|--|
| <p>MP 089 <b>Multiplex Longitudinal Proteomic Profiling of Human Sera in the Study of the Pathogenesis of Type-1 Diabetes;</b> <u>Robert Moulder</u><sup>1</sup>; Walteri Hosia<sup>2</sup>; Olli Simell<sup>3</sup>; Riitta Lahesmaa<sup>1</sup>; <sup>1</sup>Turku Centre for Biotechnology, Turku, Finland; <sup>2</sup>Karolinska Institute, Stockholm, Sweden; <sup>3</sup>Faculty of Medicine, University of Turku, Turku, Finland</p>   | <p>MP 099 <b>Discrimination among Geometrical Isomers of Linolenic Acid Methyl Ester Using Low Energy Electron Ionization Mass Spectrometry and Chemometrics;</b> <u>Diako Ebrahimi Mohammadi</u>; Leila Hejazi; Michael Guilhaus; David B. Hibbert; <i>The University of New South Wales, Sydney, Australia</i></p>   |
| <p>MP 090 <b>Differential Proteome Profiling Using iTRAQ in Microalbuminuric and Normoalbuminuric Type 2 Diabetic Patients;</b> <u>Hopil Min</u><sup>1</sup>; Yeonjung Kim<sup>1</sup>; Yunhyi Ku<sup>2</sup>; Ji Yoon Lee<sup>3</sup>; Kyong Soo Park<sup>2</sup>; Youngsoo Kim<sup>1</sup>; <sup>1</sup>Dept. of Biomedical Sciences, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea; <sup>2</sup>Dept. of Internal Medicine, College of Medicine, Seoul Nat'l Univ, Seoul, South Korea; <sup>3</sup>National Instrumentation Center for Environmental, Seoul Nat'l Univ, Seoul, South Korea</p>                        | <p>MP 100 <b>Determination of the Composition of Fatty Acid Mixtures Using GC × FI-MS: A Comprehensive Two-Dimensional Separation Approach;</b> <u>Leila Hejazi</u>; Diako Ebrahimi; Michael Guilhaus; David B. Hibbert; <i>The University of New South Wales, Sydney, Australia</i></p>   |
| <p>MP 091 <b>Profiling the Post-Translational Modifications of Human Serum Albumin;</b> <u>Christine Jelinek</u><sup>1</sup>; Rebekah Gundry<sup>2</sup>; Jessica E. Mott<sup>1</sup>; Robert O'meally<sup>1</sup>; Jennifer Van Eyk<sup>2</sup>; Robert J. Cotter<sup>1</sup>; <sup>1</sup>Johns Hopkins School of Medicine, Baltimore, MD; <sup>2</sup>Johns Hopkins University, Baltimore, MD</p>   | <p>MP 101 <b>Maximizing the Detection of Complex Hydrophobic Lipids (e.g. triglycerides): Optimizing Ionization Efficiency and Chromatographic Standard Nanoscale Separations.;</b> <u>David A. Weil</u>; Michael Woodman; <i>Agilent Technologies, Schaumburg, IL</i></p>   |
| <p>MP 092 <b>Identification of <i>in vitro</i> Modified Lipoproteins Using MALDI Tandem Mass Spectrometry and a Reduced Proteins Database Approach.;</b> <u>Omar Belgacem</u><sup>1</sup>; Helen Montgomery<sup>2</sup>; Matthew Openshaw<sup>1</sup>; Wu Zidian<sup>1</sup>; Sobal Grazyna<sup>3</sup>; Gerald Stubiger<sup>4</sup>; <sup>1</sup>Shimadzu Biotech, Manchester, UK; <sup>2</sup>Shimadzu, Koichi Tanaka MS Research laboratory, Manchester, UK; <sup>3</sup>Department of Nuclear Medicine, Medical University, Vienna, Austria; <sup>4</sup>Department of Vascular Biology Thrombosis Research, Vienna, Austria</p> | <p>MP 102 <b>Singlet Oxygen Cycloadducts of Hydroperoxy Dienes Fragment to <math>\gamma</math>-Hydroxy Alkenals; A Reaction that is Promoted by Vitamin E;</b> <u>Xiaodong Gu</u>; Wujuan Zhang; Jaewoo Choi; Wei Li; Xi Chen; James Laird; Robert G. Salomon; <i>Case Western Reserve Univ., Cleveland, OH</i></p>  |
| <p>MP 093 <b>NanoLC-MS/MS Analysis of Urinary Biomarkers for Chronic Graft-versus-Host Disease;</b> <u>Michel Boutin</u><sup>1</sup>; Imran Ahmad<sup>2</sup>; Nathalie Lachapelle<sup>2</sup>; Claude Rondeau<sup>2</sup>; Jean Roy<sup>2</sup>; Pierre Thibault<sup>1</sup>; <sup>1</sup>IRIC, University of Montreal, Montréal, Canada; <sup>2</sup>Blood and Marrow Transplant Program, HMR, Montréal, Canada</p>  | <p>MP 103 <b>Structure Characterization of Glycosphingolipids in Human Milk;</b> <u>Ying Zhou</u><sup>1</sup>; David S. Newburg<sup>2</sup>; Catherine E. Costello<sup>1</sup>; <sup>1</sup>Boston University School of Medicine, Boston, MA; <sup>2</sup>Mass General Hospital Harvard Medical School, Boston, MA</p>   |
| <p>MP 094 <b>Identifying Differentially Regulated Proteins as Markers for Colorectal Neoplasia.;</b> <u>Vikram Palamalai</u>; Jonathan J Harrington; Douglas Mahoney; Ann L Oberg; H. Robert Bergen, Iii; David A Ahlquist; <i>Mayo Clinic College of Medicine, Rochester, MN</i></p>  | <p>MP 104 <b>Chloro-Nitration of Biomembrane Lipids: Arachidonic and Linoleic Acids;</b> <u>Srinivas Chakravartula</u>; Archana Marathi; Michael Balazy; <i>New York Medical College, Valhalla, NY</i></p>   |
| <p>MP 095 <b>HIV-Infected Patients with Neurocognitive Impairments: Proteomic Fingerprints of Serum/Plasma and CSF.;</b> Jayme Wiederin<sup>1</sup>; Fenghai Duan<sup>3</sup>; Wojciech Rozek<sup>2</sup>; <u>Pawel Ciborowski</u><sup>1</sup>; <sup>1</sup>University of Nebraska Medical Center, Omaha, NE; <sup>2</sup>National Veterinary Research Institute, Pulawy, Poland; <sup>3</sup>Brown University, Providence, RI</p>   | <p>MP 105 <b>A New and Universal Product Ion Nomenclature for Low- and High-Energy CID of Sodiated Glycerophospholipid Precursor Ions;</b> <u>Ernst Pittenauer</u><sup>1</sup>; Robert Mistrík<sup>2</sup>; Guenter Allmaier<sup>3</sup>; <sup>1</sup>Vienna University of Technology, Vienna, Austria; <sup>2</sup>HighChem, Ltd., Bratislava, Slovakia; <sup>3</sup>Vienna Univ of Technology, Vienna, Austria</p>   |
| <p>MP 096 <b>Label-Free Proteomic Profiling of D-Serine-Induced Toxicity Biomarkers in Rat Urine;</b> <u>Lining Qi</u>; John J. Schlager; Pavel Shiyonov; <i>Wright Patterson Air Force Research Laboratory, Dayton, OH</i></p>  | <p>MP 106 <b>Analysis of Fatty Acid Methyl Esters Using the High Throughput LDTD Source Coupled to the LTQ Orbitrap Mass Spectrometer;</b> Josee Champagne<sup>1</sup>; André Vachereau<sup>3</sup>; <u>Sylvain Letarte</u><sup>2</sup>; Denis Faubert<sup>1</sup>; Pierre Picard<sup>2</sup>; <sup>1</sup>IRCM, Montreal, Canada; <sup>2</sup>Phytronix Technologies, Inc., Quebec, QC; <sup>3</sup>Dinotech Inc., Roxboro, Canada</p>  |
| <p>MP 097 <b>Identification of Binding Partners in Eukaryotic Translation Initiation Factors -RNA Binding Protein Complex.;</b> <u>David Shahbazian</u>; Nahum Sonnenberg; Bernard F. Gibbs; <i>McGill University, Montreal, Canada</i></p>  | <p>MP 107 <b>Automated Lipid A Structure Hypotheses Generated by STALA: A Computational Tool to Interpret Lipid A Tandem Mass Spectra;</b> <u>Ying Sonja Ting</u><sup>1</sup>; Scott A. Shaffer<sup>1</sup>; Jace W. Jones<sup>1</sup>; Wailap Ng<sup>2</sup>; Robert K. Ernst<sup>3</sup>; David R. Goodlett<sup>1</sup>; <sup>1</sup>University of Washington, Seattle, WA; <sup>2</sup>National Yang Ming University, Taipei, TAIWAN; <sup>3</sup>University of Maryland, Baltimore, MD</p> |
| <b>LIPIDS: STRUCTURAL ANALYSIS, 098 - 112</b>  |  |
| <p>MP 098 <b>Comparing the Collisional-Induced Dissociation Spectra of Various Triglyceride Adduct Ions Formed via Electrospray;</b> <u>Dong Zheng</u>; Jason J. Evans; <i>University of Massachusetts Boston, Boston, MA</i></p>  | <p>MP 109 <b>Characterization of Cardiolipin Molecular Species by Reversed-Phase Ion Pair High-Performance Liquid Chromatography-Mass Spectrometry;</b> <u>Charles Hoppel</u>; Paul Minkler; <i>Case Western Reserve Univ., Cleveland, OH</i></p>  |



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 110 **Structure to Function: Characterization of the Phosphorylation Pattern of *Yersinia pestis* Lipid A**; Jace W. Jones<sup>1</sup>; Adeline M Hajjar<sup>1</sup>; Robert K. Ernst<sup>2</sup>; David R. Goodlett<sup>1</sup>; Frantisek Turecek<sup>1</sup>; <sup>1</sup>University of Washington, Seattle, WA; <sup>2</sup>University of Maryland-Baltimore, Baltimore, MD
- MP 111 **LC MS/IMS/MS of Chondroitin Sulfate Mixtures to Characterize Isomeric Forms**; Roy Martin<sup>1</sup>; Hui Wei<sup>1</sup>; Joshua S. Sharp<sup>2</sup>; <sup>1</sup>Waters Corporation, Beverly, MA; <sup>2</sup>University of Georgia, Athens, GA
- MP 112 **Fast Sample Preparation for Sensitive Analysis of *Helicobacter pylori* Lipid A: Single Colony Analysis and Discovery of an Unusual Structure**; Jianjun Li; Ping Zhou; Vandana Chandan; Xin Liu; Kenneth H.N. Chan; Eleonora Altman; National Research Council, Ottawa, Canada
- PROTEOMICS: BIOMARKER ASSAYS, 113 - 130**
- MP 113 **From Discovery to Validation: Rheumatoid Arthritis Serum Protein Biomarkers by Multiple Reaction Monitoring (MRM)**; Shanhua Lin; Hua Lin; Jing Wang; Ted Jones; Chris Becker; PPD Biomarker Discovery Sciences, Menlo Park, CA
- MP 114 **Quantification of Preterm Birth Biomarkers by LC-MRM/MS in Human Cervicovaginal Fluid Samples**; Sumit J. Shah; Kenneth H. Yu; Vineet Sangar; Samuel I. Parry; Ian A. Blair; University of Pennsylvania, Philadelphia, PA
- MP 115 **Simultaneous Analysis of Multiple Cerebrospinal Fluid Biomarkers for Alzheimer's Disease**; Yong Seok Choi; Kelvin H. Lee; University of Delaware, Newark, DE
- MP 116 **Absolute Quantification of Oxidative Modifications on apoA-I Protein by Stable Isotope Dilution LC-MRM/MS Assays**; Kannan Rangiah; Eugene F. Ciccimaro; Ioannis Parastatidis; Harry Ischiropoulos; Muredach P Reilly; Sumit J Shah; Ian A Blair; University of Pennsylvania, Philadelphia, PA
- MP 117 **Proteomic Survey of Hydrolytic Enzymes and Their Natural Inhibitors in Infant Stool**; Karine Bagramyan; Teresa Hong; Markus Kalkum; City of Hope, Duarte, CA
- MP 118 **A Strategy for Rapid Validation of Candidate Cancer Serological Biomarkers Using Label-Free Multiple Reaction Monitoring**; Hsin-Yao Tang; Lynn A. Beer; Huan Wang; Won-A Joo; Tony Chang-Wong; David W. Speicher; The Wistar Institute, Philadelphia, PA
- MP 119 **MRM for Oral Cancer Biomarker Validation in Saliva: Inherent Challenges, Solutions and Methods Development**; Ebbing De Jong<sup>1</sup>; Hongwei Xie<sup>2</sup>; Getiria I Onsongo<sup>1</sup>; John V Carlis<sup>1</sup>; Nelson L Rhodus<sup>1</sup>; Frank G Ondrey<sup>1</sup>; Tim Griffin<sup>1</sup>; <sup>1</sup>University of Minnesota, Minneapolis, MN; <sup>2</sup>Waters Corporation, Milford, MA
- MP 120 **iMALDI: A Targeted Proteomics Approach to the Differentiation of EGFR and its Isoforms**; Brinda Shah; Christoph H. Borchers; UVic Genome BC Proteomics Centre, Victoria, BC
- MP 121 **Verification of Alzheimer's Disease (AD) Progression Markers with Targeted Proteomics**; Weixun Wang; Fanyu Meng; Katie Southwick; Jun Man; Yi Du; Kai Zhou; Nathan Yates; Ronald Hendrickson; Merck & Co. Inc., Rahway, NJ
- MP 122 **Development of Quality Assurance/Quality Control Specifications for Robust SRM-Based Assays: Increasing Reproducibility from Laboratory to Laboratory**; Scott Peterman<sup>1</sup>; Reiko Kiyonami<sup>1</sup>; Bruno Doman<sup>2</sup>; <sup>1</sup>ThermoFisher Scientific, San Jose, CA; <sup>2</sup>ETH Zurich, Zurich, Switzerland
- MP 123 **Development of a Multiplexed SRM Assay for Protein Biomarkers of Osteoarthritis**; Michael J. Ford<sup>1</sup>; Bryan Krastins<sup>2</sup>; David Lee<sup>3</sup>; Reuben Gobeze<sup>4</sup>; David Sarracino<sup>2</sup>; Taha Rezaei<sup>2</sup>; Amol Parakash<sup>2</sup>; Richard C. Jones<sup>1</sup>; Mary F Lopez<sup>2</sup>; Ruth A. Vanbogelen<sup>1</sup>; Michael R. Pisano<sup>1</sup>; <sup>1</sup>NextGen Sciences, Ann Arbor, MI; <sup>2</sup>ThermoFisher BRIMS, Cambridge, MA; <sup>3</sup>Harvard Medical School, Boston, MA; <sup>4</sup>Case Western University, Cleveland, OH
- MP 124 **Multiplexed MRM Assay for the Detection of Prostate Cancer**; Anastasia K. Yocum<sup>1,2</sup>; Rong Zhao<sup>1,2</sup>; Arul M. Chinnaiyan<sup>1,2</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>Michigan Center for Translational Pathology, Ann Arbor, MI
- MP 125 **The Discovery and Evaluation of Candidate Markers of Alzheimer's Disease Using Tandem Mass Tags and SRM Mass Spectrometry**; Darragh O'Brien<sup>1</sup>; Andreas Guentert<sup>2</sup>; Karsten Kuhn<sup>3</sup>; Peter Schulz-knappe<sup>3</sup>; Helen Byers<sup>1</sup>; James Campbell<sup>1</sup>; Simon Lovestone<sup>2</sup>; Malcolm Ward<sup>1</sup>; <sup>1</sup>Proteome Sciences PLC, London, UK; <sup>2</sup>Institute of Psychiatry, London, UK; <sup>3</sup>Proteome Sciences R&D, Frankfurt/Main, Germany
- MP 126 **Multiple Reaction Monitoring Cubed (MRM3) : A New Method for Protein Quantification in Crude Serum at Low Nanogram/mL Level**; Fortin Tanguy<sup>1</sup>; Arnaud Salvador<sup>2</sup>; Jean-philippe Charrier<sup>1</sup>; Christof E. Lenz<sup>3</sup>; Florence Bettsworth<sup>1</sup>; Geneviève Choquet-Kastylevsky<sup>1</sup>; Jérôme Lemoine<sup>2</sup>; <sup>1</sup>BIOMERIEUX, Marcy L'etoile, France; <sup>2</sup>Université de Lyon, Lyon 1, Lyon, France; <sup>3</sup>Applied Biosystems Germany, Darmstadt, Germany
- MP 127 **Application of MRM and mTRAQ™; Labeling to the Verification Process of Candidate Biomarkers Discovered by Cleavable ICAT™#174; Reagent**; Un-Beom Kang<sup>1</sup>; Younghee Ahn<sup>1</sup>; Kyunggon Kim<sup>4</sup>; Jong Won Lee<sup>4</sup>; Yong-Hak Kim<sup>2</sup>; Byunghye Shin<sup>2</sup>; Sanghwa Kim<sup>5</sup>; Joon Kim<sup>3</sup>; Myeong-Hee Yu<sup>2</sup>; Youngsoo Kim<sup>4</sup>; Dong-Young Noh<sup>4</sup>; Cheolju Lee<sup>1</sup>; <sup>1</sup>Life Sciences Division, KIST, Seoul, South Korea; <sup>2</sup>Functional Proteomics Center, KIST, Seoul, South Korea; <sup>3</sup>Korea University, Seoul, South Korea; <sup>4</sup>College of Medicine, Seoul National University, Seoul, South Korea; <sup>5</sup>Applied Biosystems, Seoul, South Korea
- MP 128 **Isoelectric Point Based Signal Suppression in MALDI-TOF MS to Identify Cancer Biomarkers Including HMGB1 from Human Tissue and Serum**; L.J. Sparvero<sup>1</sup>; Shelly A. Kucherer<sup>2</sup>; Michael E. DeVera<sup>1</sup>; Herbert J. Zeh<sup>1</sup>; Michael T. Lotze<sup>1</sup>; Andrew A. Amoscato<sup>1</sup>; <sup>1</sup>University of Pittsburgh, Pittsburgh, PA; <sup>2</sup>Carnegie Mellon University, Pittsburgh, PA
- MP 129 **Discovery, Verification and Multi-Technique Assay of a New Serum Protein Biomarker of Ovarian Cancer Tumor Burden**; Paul Russo<sup>1</sup>; Mark M. Ross<sup>1</sup>; Weidong Zhou<sup>1</sup>; Francesco Meani<sup>1</sup>; Lance Liotta<sup>1</sup>; Emanuel Petricoin<sup>1</sup>; Mary Lopez<sup>3</sup>; Taha Rezaei<sup>3</sup>; Bin Wei<sup>2</sup>; Jennifer Edwards<sup>2</sup>; Shelley Hoover<sup>2</sup>; Paul Goldsmith<sup>2</sup>; Gregory Alvord<sup>2</sup>; Octavio Quinones<sup>2</sup>; Elizabeth Spehalski<sup>2</sup>; Mark Simpson<sup>2</sup>; <sup>1</sup>George Mason University, Manassas, VA; <sup>2</sup>National Cancer Institute, Bethesda, MD; <sup>3</sup>Thermo BRIMS, Cambridge, MA

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 130 **A LC/MS/MRM Method for Insulin, Glucagon, Amylin Isoforms and GLP-1 Isoforms;** Amy Lu; Albert B Seymour; Ru Wei; *Pfizer RTC, Cambridge, MA*
- PROTEOMICS: NEW APPROACHES, 131 - 154**
- MP 131 **Top-Down Proteomics on a Chromatographic Time Scale Using a Q-TOF MS: Combining MS, MS/MS and Pseudo-MS3 Analyses;** Robert A. Everley; Judith J. A. Steen; Hanno Steen; *Harvard Medical School/Children's Hospital Boston, Boston, MA*
- MP 132 **Application of Agarose Gel Electrophoresis for Top-Down Protein Analysis;** Emiko Yamauchi; Yoshiya Oda; *Eisai Co. Ltd., Tsukuba, Ibaraki, Japan*
- MP 133 **Intact Protein Separation Using Alkaline Reversed Phase Chromatography for Proteomics;** Hiroyuki Katayama; Yoshiya Oda; *Eisai Co., Ltd., Tsukuba Ibaraki, Japan*
- MP 134 **Investigating the Apoptotic Proteome of Jurkat Cells Using Top Down Proteomics;** Dorothy Ahlf; Haylee Thomas; Neil L. Kelleher; *University of Illinois, Urbana, IL*
- MP 135 **Major Advance for 2D Fractionation of Intact Proteins Prior to Liquid Chromatography Coupled to Ion Trap-Fourier Transform Tandem Mass Spectrometry;** John C. Tran; Cong Wu; John Kellie; Ji Eun Lee; Adaikkalam Vellaichamy; Ken Durbin; Adam Catherman; Neil L. Kelleher; *University of Illinois at Urbana-Champaign, Urbana, IL*
- MP 136 **Applying Reverse Electron Transfer Dissociation in the Mapping of Post-Translational Modifications in IDE and Tau Related to Alzheimer's Disease;** Malwina A. Huzarska<sup>1</sup>; Michael Easterling<sup>2</sup>; Desmond Kaplan<sup>2</sup>; Malcolm A. Leissring<sup>3</sup>; Nicolas Polfer<sup>1</sup>; <sup>1</sup>*University of Florida, Gainesville, FL*; <sup>2</sup>*Bruker Daltonics, Inc., Billerica, MA*; <sup>3</sup>*Mayo Clinic, Jacksonville, FL*
- MP 137 **Screening and Identification of Protein Mixture at One Time by Capillary LC/MALDI-TOF with Screening MALDI Plate;** Junho Kim<sup>1</sup>; Jongyeob Jeon<sup>3</sup>; Miyoung Ha<sup>2,3</sup>; Yangsun Kim<sup>2,3</sup>; <sup>1</sup>*Department of Chemistry, Sangji University, Wonju, Korea*; <sup>2</sup>*Hudson Surface Technology, Inc., Newark, NJ*; <sup>3</sup>*Applied Surface Technology, Inc., Suwon, Korea*
- MP 138 **A New Approach for Accurate Mass Top-Down Sequencing of Intact Proteins/Toxins Using High Resolution Ion-Trap TOF Mass Spectrometry;** Christopher Nixon<sup>1</sup>; Jesse Hines<sup>2</sup>; Timothy R. Croley<sup>1</sup>; <sup>1</sup>*Commonwealth of Virginia, DCLS, Richmond, VA*; <sup>2</sup>*Shimadzu Scientific Instruments, Research Triangle Park, NC*
- MP 139 **Top-Down PIITA Analysis and Bottom-Up PACIFIC Analysis of Alpha Synuclein Isoforms;** Shu-Hua Chen; Jianpeng Zhang; Elizabeth Nguyen; Alexandre Panchaud; Yihsuan Tsai; Scott A. Shaffer; Jing Zhang; David R. Goodlett; *University of Washington, Seattle, WA*
- MP 140 **Unifying Fluorescence Microscopy and Mass Spectrometry for Studying Protein Complexes in Cells;** Changhui Deng; Andrew Krutchinsky; *UCSF, San Francisco, CA*
- MP 141 **In-Depth, Comprehensive Mapping of the Human Seminal Plasma Proteome by a Novel, Iterative LC-MS/MS/Database Search Workflow;** Claire Daully<sup>1</sup>; Antoine D. Rolland<sup>2</sup>; Martin Hornshaw<sup>1</sup>; Régis Lavigne<sup>3</sup>; Charles G. Pineau<sup>2,3</sup>; <sup>1</sup>*Thermo Fisher Scientific, Courtaboeuf Cedex, France*; <sup>2</sup>*Inserm U625, Rennes, France*; <sup>3</sup>*Proteomics Core Facility OUEST-genopole®, Rennes, France*
- MP 142 **MALDI TOF/TOF Data Acquisition Strategy that Minimizes MS/MS Acquisition Time While Maintaining High Quality Data and Increasing Depth of Coverage;** Kathleen Lewis<sup>1</sup>; Aaron Booy<sup>2</sup>; Sean L. Seymour<sup>1</sup>; Christie L Hunter<sup>1</sup>; <sup>1</sup>*Applied Biosystems, Oakland, CA*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*
- MP 143 **Comparison and Evaluation of Different Acquisition Parameters in LTQ-FT and LTQ-Orbitrap Mass Spectrometers to Improve Protein Identification Rates;** Anastasia Kalli<sup>1</sup>; Geoffrey Smith<sup>1</sup>; John Lloyd<sup>2</sup>; Sonja Hess<sup>1</sup>; <sup>1</sup>*CalTech, Pasadena, CA*; <sup>2</sup>*NIH/NIDDK, Germantown, MD*
- MP 144 **A Data-Dependent Method to Increase Protein Coverage of Cell Lysates without Additional Instrument Time;** Michael J. Huddleston; Roland S. Annan; *GlaxoSmithKline, King of Prussia, PA*
- MP 145 **Comparison of Gas Phase Fraction, Precursor Ion Exclusion and On-Line SCX Separation on Limited Amount Proteome Samples Analysis;** Wei Chen; *University of British Columbia, Vancouver, Canada*
- MP 146 **Generating Products of All Ions Using a High Speed and High Sensitivity Experimental Trap-TOF;** Stephen A Tate<sup>1</sup>; Nic Bloomfield<sup>2</sup>; Igor Chernushevich<sup>3</sup>; Alexandre Loboda<sup>3</sup>; <sup>1</sup>*MDS Sciex, Concord, Canada*; <sup>2</sup>*MDS Analytical Tech- Sciex, Concord, ON*; <sup>3</sup>*MDS Analytical Technologies, Concord, ON*
- MP 147 **Improved Sampling of complex Mixtures Using Data-Independent Acquisition on an Ion Trap Mass Spectrometer Equipped with an Ion Funnel;** Jesse D. Canterbury; Scott A. Shaffer; Jennifer E. Merrihew; David R. Goodlett; Michael J. Maccoss; *University of Washington, Seattle, WA*
- MP 148 **Using High Resolution Ion Maps as an Alternative to Low Resolution MRM for Validating Proteins in Complex Matrices;** Scott Geromanos; Marc V. Gorenstein; Jim Langridge; *Waters Corporation, Milford, MA*
- MP 149 **Data-Independent (PACIFIC) Direct Infusion Tandem Mass Spectrometry: A Time Advantaged Peptide Identification Strategy Using an Electrodynamic Ion Funnel;** Scott A. Shaffer; Shuhua Chen; Alexandre Panchaud; Jesse D. Canterbury; Jing Zhang; Michael J. Maccoss; David R. Goodlett; *University of Washington, Seattle, WA*
- MP 150 **Workflow for Maximizing Proteome Coverage Using CID and ETD;** Martin Zeller; Bernard Delanghe; Torsten Ueckert; Thomas Moehring; *Thermo Fisher Scientific, Bremen, Germany*
- MP 151 **Increased Sequence Coverage in Complex Protein Digests by Consecutive, Targeted LC-MS/MS Runs with Both CID and ETD;** Felix Salinas<sup>1</sup>; Andrea Schneider<sup>2</sup>; Markus Lubeck<sup>3</sup>; Reinaldo Almeida<sup>4</sup>; Carsten Baessmann<sup>3</sup>; <sup>1</sup>*Bruker Daltonics, Inc., Bastrop, TX*; <sup>2</sup>*Bruker Daltonics, Bremen, Germany*; <sup>3</sup>*Bruker Daltonik GmbH, Bremen, Germany*; <sup>4</sup>*Advion, Arnsberg, Germany*
- MP 152 **Practical Advantage of Negative Ion Mode MALDI: Alternative Way to Improve Protein Identification for Peptide Mass Fingerprinting;** Tomoyuki Oe; Mao

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- |   |   |        |  |
|---|---|--------|--|
| MP 153                                    | Suzuki; Takao Sanaki; Seon Hwa Lee; Takaaki Goto; <i>Tohoku University, Sendai, Japan</i>   | MP 164 | <b>A New LC-MS/MS Method for Determination of Maleic Acid in Rat Plasma;</b> <u>Jingguo Hou</u> ; Fei Liu; Sheng Wang; Luke Liu; Bibo Xu; <i>Primera Analytical Solutions Corp., Princeton, NJ</i>   |
| MP 154                                    | <b>In-Source Atmospheric Pressure - Electron Capture Dissociation (AP-ECD): Applicability for the Study of Post-Translational Modifications on Peptides;</b> <u>Jason Rogalski</u> ; Damon Robb; Michael Blades; Juergen Kast; <i>University of British Columbia, Vancouver, BC</i>   | MP 165 | <b>Determination of Triamcinolone Acetonide in Human Plasma Using Liquid-Liquid Extraction and High-Performance Liquid Chromatography Coupled to Tandem Mass Spectrometry (LC-MS/MS);</b> <u>Rafael E. Barrientos-Astigarraga</u> ; Paulo A. R. Galvinas; Jane K. Finzi; Maria Fernanda de O. Carrazedo; Yara Popst Armando; Leandro S. C. Barbosa; Olívia C. M. Amorim; Washington M. Silva; <i>MAGABI Pesquisas Clinicas Farmaceuticas Ltda., São Paulo, Brazil</i>  |
| MP 155                                    | <b>Intermediate Pressure MALDI-FTMS for Determination of Relative Phosphorylation Rates in the Mouse Aryl Hydrocarbon Receptor (AhR) by Protein Kinase A;</b> <u>Alan Friedman</u> <sup>1</sup> ; Michael Easterling <sup>2</sup> ; Brent Kobiush <sup>1</sup> ; Thomas Gasiewicz <sup>1</sup> ; <sup>1</sup> <i>University of Rochester Medical Center, Rochester, NY;</i> <sup>2</sup> <i>Bruker Daltonics, Inc., Billerica, MA</i> | MP 166 | <b>High Performance Liquid Chromatography Combined with Multi-Stage Mass Spectrometry Analysis of DNA Adducts of Aristolochic Acids;</b> <u>Haivan Gao</u> <sup>1</sup> ; Jing Dong <sup>3</sup> ; Feng Feng <sup>2</sup> ; Leren Wan <sup>3</sup> ; Yuki Hashi <sup>3</sup> ; Hailin Wang <sup>2</sup> ; <sup>1</sup> <i>Central South University, Changsha, China;</i> <sup>2</sup> <i>Research Center of Eco-environmental sciences, Beijing, China;</i> <sup>3</sup> <i>Shimadzu International Trading (Shanghai) Co., Ltd, Beijing, China</i> |
| <b>SMALL MOLECULE ANALYSIS, 155 - 184</b> |   |        |  |
| MP 156                                    | <b>Identification of Pigments Precursors in Garlic Greening by LCMS-IT-TOF System;</b> <u>Jing Dong</u> <sup>1</sup> ; Dan Hu <sup>2</sup> ; Leren Wan <sup>1</sup> ; Yuki Hashi <sup>1</sup> ; Guanghua Zhao <sup>2</sup> ; <sup>1</sup> <i>Shimadzu International Trading(Shanghai)Co., Limit, Beijing, China;</i> <sup>2</sup> <i>China Agricultural University, Beijing, China</i>  | MP 167 | <b>Ultra High Mass Resolution and Mass Accuracy Measurement and Multistage MS on Structural Elucidation of Trace Level Pharmaceutical Impurities;</b> <u>Wendy Zhong</u> <sup>1</sup> ; Jiong Yang <sup>1</sup> ; Michael Easterling <sup>2</sup> ; <sup>1</sup> <i>Schering-Plough, Summit, NJ;</i> <sup>2</sup> <i>Bruker Daltonics, Inc., Billerica, MA</i>   |
| MP 157                                    | <b>Using Iso-LCMS for Impurity Identification Directly from a Non-Volatile Mobile Phase Buffer by LCMS Linear Ion Trap Technology;</b> <u>Jeffrey M. Selenka</u> ; Thomas Leitzinger; Cynthia Sanderson; <i>PPD, Middleton, WI</i>  | MP 168 | <b>Investigations of the Fragmentation of Novel Compounds from the Synthetic Pathway of AstraZeneca Compounds to Facilitate Rapid Characterisation Using ESI-QIT-MS;</b> <u>Angelika Galezowska</u> <sup>1</sup> ; Mark W. Harrison <sup>2</sup> ; G. John Langley <sup>1</sup> ; <sup>1</sup> <i>University of Southampton, Southampton, UK;</i> <sup>2</sup> <i>AstraZeneca, Macclesfield, UK</i>  |
| MP 158                                    | <b>Determination of Repaglinide in Human Plasma Using Positive Ion ESI-LC/MS/MS;</b> <u>Hollie Barton</u> ; James Waltrip; Song Zhao; William R. Mylott; Bruce Hidy; Rand Jenkins; <i>PPD, Richmond, VA</i>   | MP 169 | <b>Highly Efficient Ionization of Liquid Crystals by Laser Diode Thermal Desorption-Atmospheric Pressure Chemical Ionization (LDTD-APCI);</b> <u>Shigeru Sakamoto</u> <sup>1</sup> ; Patrice Tremblay <sup>2</sup> ; Jim Koers <sup>3</sup> ; <sup>1</sup> <i>Thermo Fisher Scientific K.K., Yokohama, Japan;</i> <sup>2</sup> <i>Phytronix Technologies Inc, Quebec, Canada;</i> <sup>3</sup> <i>Thermo Fisher Scientific, San Jose, CA</i>   |
| MP 159                                    | <b>FAIMS for Drug Discovery and Development Using an Ion Trap and a Triple Quadrupole MS.;</b> Keeley Murphy; Kevin Cook; Julie Horner; <u>James Kapron</u> ; Nicholas Duczak, Jr; Mark Harrison; <i>Thermo Fisher Scientific, San Jose, CA</i>   | MP 170 | <b>High Throughput MALDI-MRM Analysis of Steroids;</b> <u>Michal Weinstock</u> <sup>1</sup> ; Brian Williamson <sup>1</sup> ; Pauline J. Vollmerhaus <sup>2</sup> ; Gary Impey <sup>2</sup> ; Babu Purkayastha <sup>1</sup> ; <sup>1</sup> <i>Applied Biosystems, Framingham, MA;</i> <sup>2</sup> <i>MDS Analytical Technologies, Concord, ON</i>   |
| MP 160                                    | <b>Simultaneous Determination of Emtricitabine and Tenofovir in Human Plasma Using Positive Ion ESI-LC/MS/MS;</b> Moucun Yuan; <u>Laura Nakovich</u> ; William R. Mylott; Bruce Hidy; Rand Jenkins; <i>PPD, Richmond, VA</i>  | MP 171 | <b>A Combinatorial Approach for Analyzing the MALDI Response of Small Molecules;</b> <u>Michelle L. Reyzer</u> ; Adam Lander; Eliot McKinley; H. Charles Manning; Richard M. Caprioli; <i>Vanderbilt University, Nashville, TN</i>   |
| MP 161                                    | <b>Characterization of Degradation Products of a Triazole Antifungal Agent by HR-LC/MS/MS and On-Line H/D Exchange LC/MS in LTQ-Orbitrap Mass Spectrometer;</b> <u>Ibrahim Daaro</u> ; Guodong Chen; Irina Schwartzburg; Birendra Pramanik; <i>Schering-Plough Research Institute, Kenilworth, NJ</i>   | MP 172 | <b>Nanostructured Surfaces Produced by Laser Ablation as Substrates for Metabolome Analysis via Laser Desorption/Ionization Mass Spectrometry;</b> <u>Andrea Amantonico</u> ; Luca Flamigni; Reto Glaus; Joachim Koch; Detlef Günther; Renato Zenobi; <i>ETH Zurich, Zurich, Switzerland</i>   |
| MP 162                                    | <b>CE<sub>50</sub>: Quantifying Collision Induced Dissociation Energy for Small Molecule Characterization and Identification;</b> <u>Tzipporah Kertes</u> <sup>1</sup> ; Lowell Hall <sup>2</sup> ; Dennis Hill <sup>1</sup> ; David Grant <sup>1</sup> ; <sup>1</sup> <i>University of Connecticut, Storrs, CT;</i> <sup>2</sup> <i>Eastern Nazarene College, Quincy, MA</i>   | MP 173 | <b>Detection and Quantification of PAH Metabolites by Liquid Chromatography Electron Capture Atmospheric Pressure Chemical Ionization/Mass Spectrometry;</b> <u>Arnaldo Diaz</u> <sup>1</sup> ; Stacy Gelhaus <sup>1</sup> ; Clementina Mesaros <sup>1</sup> ; Ian A. Blair <sup>2</sup> ; <sup>1</sup> <i>UPENN, Philadelphia, PA;</i> <sup>2</sup> <i>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA</i>  |
| MP 163                                    | <b>Comprehensive Two Dimensional Gas Chromatography Combustion Isotope Ratio Mass Spectrometry (GCxGCC-IRMS) for Determination of <sup>13</sup>C/<sup>12</sup>C Ratios of Endogenous Urinary Steroids;</b> <u>Ying Zhang</u> ; Herbert Tobias; Bruce Pan; Gavin Sacks; J Thomas Brenna; <i>Cornell University, Ithaca, NY</i>   |        | <b>Development of a Novel Liquid Chromatography Electrospray Ionization-Mass Spectrometry Assay to Assess Intramitochondrial Oxidative Stress;</b> <u>Sankha S Basu</u> ; Stacy Gelhaus; Clementina Mesaros; Ian A. Blair;   |

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- University of Pennsylvania School of Medicine, Philadelphia, PA
- MP 174 **Identification of an Impurity in Dronabinol in Sesame Oil by APCI-MSn and NMR;** Randy Wilhelm; John E. Johnson; Frank W. Moser; Covidien, Ltd / Mallinckrodt Pharmaceutical R&D, St. Louis, MO
- MP 175 **Analysis of Cellular Free Amino Thiols and Their Disulfides by Stable Isotope Dilution LC-MS;** Stefanie Khartulyari; Clementina Mesaros; Alexander S. Whitehead; Ian A. Blair; Center for Excellence in Environmental Toxicology, Philadelphia, PA
- MP 176 **Study the Fragmentation of  $\beta$ -Methylamino-L-alanine Derivative;** Tan Guo; Rice University, Houston, TX
- MP 177 **EI mass Spectral Study of Chemical Weapon Convention related compounds; Alkylhexahydro-1,3,2-Benzodioxaphosphole and Alkyldodecahydrodibenzo [D,G][1,3,6,2]-Trioxaphosphocine (Ganesha);** Meehir Palit; W. Gary Mallard; Maciej Sliwakowski; Org. for the Prohibition of Chemical Weapon (OPCW), The Hague, Netherlands
- MP 178 **Coupling of EPR/MS Techniques for Radical Mechanism Elucidation: Application to Biological Thiol Adducts Characterization;** Mathilde Triquigneaux; Beatrice Tuccio; Robert Lauricella; Laurence Charles; University Aix-Marseille I & III, Marseille Cedex 20, France
- MP 179 **Analysis of Impurities in Temocapril Using Liquid Chromatography/Quadrupole Time-of-Flight Mass Spectrometry;** Ying Ms. Wang; Agilent Technologies (China), Shanghai, China
- MP 180 **The LC-MS/MS Methods for Evaluating Drug Residues in Animal Residues-Catfish Integrated Farming System;** Tzong-Shan Chin; Chi-Yang Lee; Chang-Tzon Chen; National Chia-Yi University, Chia-Yi City, Taiwan
- MP 181 **Comparison of Using Different Sample Preparation Methods for Analyzing Chinese Herbal Products by LC-MS/MS;** Lai Chuan Chang; Lai-chuan Chang; Biotech Total Solutions, Taipei, Taiwan
- MP 182 **Coupling LC-Fluorescence with Tandem Mass Spectrometry for Identifying Modified Amino Acids;** André LeBlanc; Boris Guichard; William Maupillier; Lekha Sleno; UQAM, Montreal, Canada
- MP 183 **LCMSMS Validation of Palomid 529 in Multiple Species Utilizing Stereoisomer as Internal Standard;** Adlai E Niggebrugge<sup>1</sup>; Michael Callahan<sup>1</sup>; David Sherris<sup>2</sup>; <sup>1</sup>Charles River Laboratories, Shrewsbury, MA; <sup>2</sup>Paloma Pharmaceuticals Inc, Boston, MA
- MP 184 **Characterization of Degradation Products of an Adenosine A2A Receptor Antagonist under Stressed Conditions by LC-MS and FT Tandem MS Analysis;** Li-kang Zhang<sup>1</sup>; Birendra Pramanik<sup>2</sup>; <sup>1</sup>Schering-Plough Research Inst., Kenilworth, NJ; <sup>2</sup>Schering-Plough Research, Kenilworth, NJ
- MP 186 **New Design of a Compact Fourier-Transform Quadrupole Ion Trap for High Sensitivity Applications;** Alexander Laue; Albrecht Glasmachers; Universität Wuppertal, Wuppertal, Germany
- MP 187 **Ion-Image Current Detection Method for Fourier Transform Linear Ion Trap;** Houle Wang; David Kennedy; Kerry Nugent; Michrom BioResources, Inc., Auburn, CA
- MP 188 **Derivation of Analytical Expressions to Define Resonant Ejection from Square and Sinusoidal Wave Ion Traps;** Hideya Koizumi<sup>1</sup>; Eiko Koizumi<sup>2</sup>; William B. Whitten<sup>1</sup>; Peter T. A. Reilly<sup>1</sup>; <sup>1</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>Peace College, Raleigh, NC
- MP 189 **Comparison of Signal Thresholds in Orbitrap and LTQ Mass Spectrometry for the Identification of Peptides and Proteins in Complex Mixtures;** Catherine C L Wong; Daniel Cociorva; Tao Xu; John Yates; The Scripps Research Institute, La Jolla, CA
- MP 190 **Mars Organic Molecule Analyzer (MOMA): A Miniature Ion Trap Mass Spectrometer for the Detection of Organics on Mars;** Alexander S. Misharin<sup>1</sup>; Andrey N. Vilkov<sup>1</sup>; Timothy J. Cornish<sup>2</sup>; Theresa Evans-Nguyen<sup>3</sup>; Robert J. Cotter<sup>3</sup>; Luann Becker<sup>4</sup>; Vladimir M. Doroshenko<sup>1</sup>; <sup>1</sup>MassTech Inc., Columbia, MD; <sup>2</sup>JHU/APL, Laurel, MD; <sup>3</sup>Johns Hopkins University School of Medicine, Baltimore, MD; <sup>4</sup>Johns Hopkins University, Baltimore, MD
- MP 191 **Methods to Improve the Extraction Efficiency and Resolution of the Mass Selective Axial Ejection from a Linear Quadrupole Ion Trap;** Michael Guna<sup>1</sup>; Tom Biesenthal<sup>2</sup>; <sup>1</sup>MDS Analytical Tech, Sciex, Concord, Canada; <sup>2</sup>MDS Analytical Technologies, Concord, ON
- MP 192 **Extension of Dynamic Range via a Fast Scanning, Dual Cell Linear Ion Trap Mass Spectrometer;** Jason D. Russell<sup>1</sup>; David Good<sup>1</sup>; Danielle L. Swaney<sup>1</sup>; Qiangwei Xia<sup>1</sup>; Jae C. Schwartz<sup>2</sup>; George Stafford<sup>2</sup>; John E. P. Syka<sup>2</sup>; Joshua J. Coon<sup>1</sup>; <sup>1</sup>University of Wisconsin - Madison, Madison, WI; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA
- MP 193 **Efficient Detection for Linear Traps Using a Single Electron Multiplier;** Michael W. Senko<sup>1</sup>; Kevin Hunter<sup>2</sup>; Wayne Sheils<sup>2</sup>; Dick Stresau<sup>2</sup>; <sup>1</sup>Thermo Fisher Scientific, San Jose, CA; <sup>2</sup>ETP Electron Multipliers, Ermington, Australia
- MP 194 **Implementation of a Progressively Spaced Stacked Ring Ion Guide on a Linear Ion Trap Mass Spectrometer;** Eloy R. Wouters; Maurizio Splendore; Christopher Mullen; Jae C. Schwartz; Michael W. Senko; Jean-Jacques Dunyach; Thermo Fisher Scientific, San Jose, CA
- MP 195 **Performance Improvements in High Mass Range Modes on a Dual Cell Linear Ion Trap;** Jae C. Schwartz; Dennis M. Taylor; Philip M. Remes; Thermo Fisher Scientific, San Jose, CA
- MP 196 **Comparison of a Dual Cell Linear Ion Trap with a Four-Fold Symmetric Stretch versus a Two-Fold Symmetric Stretch;** Philip M Remes; Jae C. Schwartz; Thermo Fisher Scientific, San Jose, CA
- MP 197 **Boundary Element Method for Printed Circuit Board Ion Trap Structure Optimization with the Elimination of Certain Multipole Harmonics;** Chuan-fan Ding<sup>1</sup>; Gong-yu Jiang<sup>1</sup>; Li Ding<sup>2</sup>; <sup>1</sup>Fudan University,

<b>INSTRUMENTATION: QUADRUPOLES AND TRAPS, 185 - 211</b>
--

- MP 185 **Point of Sample Quadrupole Mass Spectrometer (QMS) for the Identification of Low Mass Isotopes;** Thomas J Hogan<sup>1</sup>; Jeyan Sreekumar<sup>1</sup>; Stephen Taylor<sup>1</sup>; Phillip Turner<sup>2</sup>; Christopher Knott<sup>2</sup>; Antonio Provenzano<sup>2</sup>; Bryan Garney<sup>2</sup>; <sup>1</sup>University of Liverpool, Liverpool, UK; <sup>2</sup>AWE, Aldermaston, England

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- | <p>China, Shanghai, China; <sup>2</sup>Shimadzu Research Lab (Shanghai), Shanghai, China</p> <p>MP 198 <b>PCB Ion Trap Mass Spectrometer Coupled with Electrospray Ionization Source;</b> <u>Gong-yu Jiang</u><sup>1</sup>; Xiaoxu Li<sup>1</sup>; Chan Luo<sup>1</sup>; Chuan-fan Ding<sup>1</sup>; Li Ding<sup>2</sup>; <sup>1</sup>Fudan University, China, Shanghai, China; <sup>2</sup>Shimadzu Research Lab (Shanghai), Shanghai, China</p> <p>MP 199 <b>High Precursor Ion Isolation in a Pure Quadrupole Field.;</b> <u>Roger Giles</u>; Matthew C Gill; Shimadzu Research Laboratories (Europe) Ltd, Manchester, UK</p> <p>MP 200 <b>None-Resonant Collision Induced Dissociation in a Digital Linear Ion Trap Time-of-Flight Mass Spectrometer.;</b> <u>Matthew C Gill</u>; Roger Giles; Shimadzu Research Laboratories (Europe) Ltd, Manchester, UK</p> <p>MP 201 <b>Design and Fabrication of Ceramic Linear Ion Trap with Its Detector;</b> <u>Hui Mu</u>; Tao Lin; Xiaohui Yang; Junsheng Zhang; Li Ding; Shimadzu Research Laboratory, Shanghai, China</p> <p>MP 202 <b>Highly Effective Injection Method of MALDI Ions into the Digital Ion Trap;</b> <u>Kei Kodera</u>; Makoto Hazama; Sadanori Sekiya; Shinichi Iwamoto; Koichi Tanaka; Shimadzu Corporation, Kyoto, Japan</p> <p>MP 203 <b>Ion Funnel Transmission Increases Number of Protein Identifications in Complex Proteomics Samples;</b> <u>Brian Stall</u><sup>1</sup>; Markus Lubeck<sup>2</sup>; Ralf Hartmer<sup>2</sup>; Christoph Gebhardt<sup>2</sup>; Andreas Brekenfeld<sup>2</sup>; Andrea Schneider<sup>2</sup>; <sup>1</sup>Bruker Daltonics Inc, Billerica, MA; <sup>2</sup>Bruker Daltonik, Bremen, Germany</p> <p>MP 204 <b>Mass Analysis with Stability Islands with a Conventional Linear Quadrupole and Quadrupoles with 4%, 8% and 12% Added Hexapole Fields;</b> <u>XianZhen Zhao</u>; Zilan Xiao; D. J. Douglas; University of British Columbia, Vancouver, Canada</p> <p>MP 205 <b>An Amplitude and Frequency Stabilized High Power Oscillator for Mass Filtering and Driving Multipole Ion Guides;</b> <u>Tzu-Yung Lin</u><sup>1</sup>; Raman Mathur<sup>2</sup>; Cheng Lin<sup>1</sup>; Konstantin Aizikov<sup>1</sup>; Ronald W. Knepper<sup>1</sup>; Peter B. O'Connor<sup>3</sup>; <sup>1</sup>Boston University, Boston, MA; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA; <sup>3</sup>University of Warwick, Coventry, UK</p> <p>MP 206 <b>Full 3D Model Calculations of Entrance Fringe Fields and Their Impact on the Acceptance Characteristics of a Quadrupole Mass Filter;</b> David G. Welkie; Analytica of Branford, Branford, CT</p> <p>MP 207 <b>Enhanced Performance of Miniature Quadrupole Array Mass Spectrometers;</b> <u>Kohei Sasai</u><sup>1,2</sup>; Jun Aoki<sup>1</sup>; Michisato Toyoda<sup>1</sup>; Tetsuo Shimizu<sup>2</sup>; <sup>1</sup>Osaka University, Toyonaka, Osaka, Japan; <sup>2</sup>Horiba STEC, Kyoto, Japan</p> <p>MP 208 <b>Simulation and Optimization of the Nanoaerosol Mass Spectrometer (NAMS);</b> <u>Mark R Pennington</u>; Murray V. Johnston; Univ. of Delaware, Newark, DE</p> <p>MP 209 <b>Study of Long-Term Signal Stability of Residual Gas Analyzers;</b> <u>Chang Joon Park</u>; Keu Chan Lee; Jong Rok Ahn; Jin Tae Kim; Korea Research Institute of Standards and Science, Daejeon, South Korea</p> <p>MP 210 <b>Practical Quadrupole Theory: Resolution and Transmission as a Function of RF Frequency;</b> <u>Dodge Baluya</u><sup>2</sup>; Christopher Taormina<sup>3</sup>; Nicolas Polfer<sup>2</sup>; Randy Pedder<sup>1</sup>; <sup>1</sup>Ardara Technologies L.P., Monroeville, PA; <sup>2</sup>University of Florida, Gainesville, FL; <sup>3</sup>Ardara Technologies, Gibsonia, PA</p> <p>MP 211 <b>Improving the High Energy Performance of Curved Ion Guides;</b> <u>Felician Muntean</u><sup>1</sup>; Urs Steiner<sup>2</sup>; <sup>1</sup>Varian Inc., Walnut Creek, CA; <sup>2</sup>Varian, Santa Clara, CA</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; padding: 5px;">LIPIDS: BIOCHEMISTRY AND STEROID, 212 - 229</th> </tr> <tr> <td style="width: 10%; vertical-align: top; padding: 5px;">MP 212</td> <td style="padding: 5px;"><b>Decomposition Behavior of Anionic Adducts of Steroids Formed by Electrospray Anion Attachment;</b> <u>Nalaka Rannulu</u>; Richard B. Cole; University of New Orleans, New Orleans, LA</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 213</td> <td style="padding: 5px;"><b>Electrospray Ionisation Mass Spectrometry Reveals Age-Related Alterations in Human Lens Phospholipid Composition;</b> <u>Jessica R Nealon</u><sup>1</sup>; Jane M Deeley<sup>1</sup>; Stephen J Blanksby<sup>1</sup>; Roger JW Truscott<sup>2</sup>; Todd W Mitchell<sup>1</sup>; <sup>1</sup>University of Wollongong, Wollongong, Australia; <sup>2</sup>University of Sydney, Sydney, Australia</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 214</td> <td style="padding: 5px;"><b>MALDI-FTMS Comparative Analysis of Phospholipid Profiles of <i>Saccharomyces cerevisiae</i> Exposed to Cadmium;</b> <u>S Mariccor Andresa Batoy</u><sup>1</sup>; Sabine Borgmann<sup>2</sup>; Karen Flick<sup>3</sup>; Peter Kaiser<sup>3</sup>; Jeffrey J. Jones<sup>4</sup>; Charles L. Wilkins<sup>1</sup>; <sup>1</sup>University of Arkansas, Fayetteville, AR; <sup>2</sup>TU Dortmund, Dortmund, Germany; <sup>3</sup>University of California, Irvine, Irvine, CA; <sup>4</sup>Applied Proteomics, Glendale, CA</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 215</td> <td style="padding: 5px;"><b>Profiling of Sphingolipids in Cells and Tissues Treated with Bioactive Compounds by LC-MS/MS;</b> <u>Lingyun Li</u>; Eva Budman; Alexei Belenky; Kim Alving; Paul Mason; Aharon Cohen; Jim Lillie; Stefan Girgenrath; Mandy Cromwell; Thomas Natoli; John Leonard; Bing Wang; Genzyme Corp., Waltham, MA</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 216</td> <td style="padding: 5px;"><b>Suicide Inactivation of 5-Lipoxygenase;</b> <u>Patrick Hutchins</u><sup>1</sup>; Robert C. Murphy<sup>2</sup>; <sup>1</sup>Univ of Colorado, Denver, CO; <sup>2</sup>University of Colorado Den, Aurora, CO</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 217</td> <td style="padding: 5px;"><b>Novel Neurosteroid Panel Quantitation Method: Role of Placental Factors in Neonatal Brain Development;</b> <u>Karolina M. Krasinska</u><sup>1</sup>; Florian Ermini<sup>2</sup>; Theresa M. McLaughlin<sup>1</sup>; Anna Penn<sup>2</sup>; Allis S. Chien<sup>1</sup>; <sup>1</sup>SUMS, Stanford University, Stanford, CA; <sup>2</sup>Stanford School of Medicine, Stanford, CA</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 218</td> <td style="padding: 5px;"><b>Probing Phosphatidylserine Metabolism by Mass Spectrometry;</b> <u>Atsuko Kakio Kimura</u>; Karl R Kevala; Hee-yong Kim; National Institutes of Health, Bethesda, MD</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 219</td> <td style="padding: 5px;"><b>Analysis of N-Acylphosphatidylethanolamines by LC-MS/MS;</b> <u>Karl R Kevala</u>; Jeff Kim; Jeongrim Lee; Hee-yong Kim; National Institutes of Health, Bethesda, MD</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 220</td> <td style="padding: 5px;"><b>Changes in Brain Phosphatidylcholine after Stroke;</b> <u>Hay-Yan J. Wang</u>; Hsiao-Han Wang; Jr Shin Kuo; Cheng Bin Liu; National Sun Yat-Sen University, Kaohsiung, Taiwan</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 221</td> <td style="padding: 5px;"><b>Precursor Ion Scanning to Search for Oxidized Plasma Phosphatidylcholines in an Atherogenic Mouse Model;</b> <u>Christopher K. Barlow</u><sup>1</sup>; Anna C. Calkin<sup>1</sup>; Jacquelyn M. Weir<sup>1</sup>; Akiko Ono<sup>2</sup>; Shaun P. Jackson<sup>2</sup>; Mark E. Cooper<sup>1</sup>; Peter J. Meikle<sup>1</sup>; <sup>1</sup>Baker IDI Heart and Diabetes Institute, Melbourne, Australia; <sup>2</sup>Australian Centre for Blood Diseases, Melbourne, Australia</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 222</td> <td style="padding: 5px;"><b>How Sterols Affect the Lipidome of Developing <i>Drosophila</i> Larvae?;</b> <u>Dominik Schwudke</u><sup>1</sup>; Maria Carvalho<sup>2</sup>; Ronny Herzog<sup>2</sup>; Suzanne Eaton<sup>2</sup>; Andrej Shevchenko<sup>2</sup>; <sup>1</sup>National Centre for Biological Sciences, Bangalore / Bengaluru, India; <sup>2</sup>MPI-CBG, Dresden, Germany</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 223</td> <td style="padding: 5px;"><b>Distinguishing Artifacts from Answers in MALDI-MS Detection of Cholesterol Oxidation Products;</b> <u>Kevin M. McAvey</u>; Chanel A. Fortier; Matthew A. Tarr;</td> </tr> </table> | LIPIDS: BIOCHEMISTRY AND STEROID, 212 - 229 |  | MP 212 | <b>Decomposition Behavior of Anionic Adducts of Steroids Formed by Electrospray Anion Attachment;</b> <u>Nalaka Rannulu</u> ; Richard B. Cole; University of New Orleans, New Orleans, LA | MP 213 | <b>Electrospray Ionisation Mass Spectrometry Reveals Age-Related Alterations in Human Lens Phospholipid Composition;</b> <u>Jessica R Nealon</u> <sup>1</sup> ; Jane M Deeley <sup>1</sup> ; Stephen J Blanksby <sup>1</sup> ; Roger JW Truscott <sup>2</sup> ; Todd W Mitchell <sup>1</sup> ; <sup>1</sup> University of Wollongong, Wollongong, Australia; <sup>2</sup> University of Sydney, Sydney, Australia | MP 214 | <b>MALDI-FTMS Comparative Analysis of Phospholipid Profiles of <i>Saccharomyces cerevisiae</i> Exposed to Cadmium;</b> <u>S Mariccor Andresa Batoy</u> <sup>1</sup> ; Sabine Borgmann <sup>2</sup> ; Karen Flick <sup>3</sup> ; Peter Kaiser <sup>3</sup> ; Jeffrey J. Jones <sup>4</sup> ; Charles L. Wilkins <sup>1</sup> ; <sup>1</sup> University of Arkansas, Fayetteville, AR; <sup>2</sup> TU Dortmund, Dortmund, Germany; <sup>3</sup> University of California, Irvine, Irvine, CA; <sup>4</sup> Applied Proteomics, Glendale, CA | MP 215 | <b>Profiling of Sphingolipids in Cells and Tissues Treated with Bioactive Compounds by LC-MS/MS;</b> <u>Lingyun Li</u> ; Eva Budman; Alexei Belenky; Kim Alving; Paul Mason; Aharon Cohen; Jim Lillie; Stefan Girgenrath; Mandy Cromwell; Thomas Natoli; John Leonard; Bing Wang; Genzyme Corp., Waltham, MA | MP 216 | <b>Suicide Inactivation of 5-Lipoxygenase;</b> <u>Patrick Hutchins</u> <sup>1</sup> ; Robert C. Murphy <sup>2</sup> ; <sup>1</sup> Univ of Colorado, Denver, CO; <sup>2</sup> University of Colorado Den, Aurora, CO | MP 217 | <b>Novel Neurosteroid Panel Quantitation Method: Role of Placental Factors in Neonatal Brain Development;</b> <u>Karolina M. Krasinska</u> <sup>1</sup> ; Florian Ermini <sup>2</sup> ; Theresa M. McLaughlin <sup>1</sup> ; Anna Penn <sup>2</sup> ; Allis S. Chien <sup>1</sup> ; <sup>1</sup> SUMS, Stanford University, Stanford, CA; <sup>2</sup> Stanford School of Medicine, Stanford, CA | MP 218 | <b>Probing Phosphatidylserine Metabolism by Mass Spectrometry;</b> <u>Atsuko Kakio Kimura</u> ; Karl R Kevala; Hee-yong Kim; National Institutes of Health, Bethesda, MD | MP 219 | <b>Analysis of N-Acylphosphatidylethanolamines by LC-MS/MS;</b> <u>Karl R Kevala</u> ; Jeff Kim; Jeongrim Lee; Hee-yong Kim; National Institutes of Health, Bethesda, MD | MP 220 | <b>Changes in Brain Phosphatidylcholine after Stroke;</b> <u>Hay-Yan J. Wang</u> ; Hsiao-Han Wang; Jr Shin Kuo; Cheng Bin Liu; National Sun Yat-Sen University, Kaohsiung, Taiwan | MP 221 | <b>Precursor Ion Scanning to Search for Oxidized Plasma Phosphatidylcholines in an Atherogenic Mouse Model;</b> <u>Christopher K. Barlow</u> <sup>1</sup> ; Anna C. Calkin <sup>1</sup> ; Jacquelyn M. Weir <sup>1</sup> ; Akiko Ono <sup>2</sup> ; Shaun P. Jackson <sup>2</sup> ; Mark E. Cooper <sup>1</sup> ; Peter J. Meikle <sup>1</sup> ; <sup>1</sup> Baker IDI Heart and Diabetes Institute, Melbourne, Australia; <sup>2</sup> Australian Centre for Blood Diseases, Melbourne, Australia | MP 222 | <b>How Sterols Affect the Lipidome of Developing <i>Drosophila</i> Larvae?;</b> <u>Dominik Schwudke</u> <sup>1</sup> ; Maria Carvalho <sup>2</sup> ; Ronny Herzog <sup>2</sup> ; Suzanne Eaton <sup>2</sup> ; Andrej Shevchenko <sup>2</sup> ; <sup>1</sup> National Centre for Biological Sciences, Bangalore / Bengaluru, India; <sup>2</sup> MPI-CBG, Dresden, Germany | MP 223 | <b>Distinguishing Artifacts from Answers in MALDI-MS Detection of Cholesterol Oxidation Products;</b> <u>Kevin M. McAvey</u> ; Chanel A. Fortier; Matthew A. Tarr; |
|---|--|---|--|--------|---|--------|---|--------|--|--------|--|--------|--|--------|--|--------|--|--------|--|--------|---|--------|---|--------|---|--------|--|
| LIPIDS: BIOCHEMISTRY AND STEROID, 212 - 229   |  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 212  | <b>Decomposition Behavior of Anionic Adducts of Steroids Formed by Electrospray Anion Attachment;</b> <u>Nalaka Rannulu</u> ; Richard B. Cole; University of New Orleans, New Orleans, LA  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 213  | <b>Electrospray Ionisation Mass Spectrometry Reveals Age-Related Alterations in Human Lens Phospholipid Composition;</b> <u>Jessica R Nealon</u> <sup>1</sup> ; Jane M Deeley <sup>1</sup> ; Stephen J Blanksby <sup>1</sup> ; Roger JW Truscott <sup>2</sup> ; Todd W Mitchell <sup>1</sup> ; <sup>1</sup> University of Wollongong, Wollongong, Australia; <sup>2</sup> University of Sydney, Sydney, Australia  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 214  | <b>MALDI-FTMS Comparative Analysis of Phospholipid Profiles of <i>Saccharomyces cerevisiae</i> Exposed to Cadmium;</b> <u>S Mariccor Andresa Batoy</u> <sup>1</sup> ; Sabine Borgmann <sup>2</sup> ; Karen Flick <sup>3</sup> ; Peter Kaiser <sup>3</sup> ; Jeffrey J. Jones <sup>4</sup> ; Charles L. Wilkins <sup>1</sup> ; <sup>1</sup> University of Arkansas, Fayetteville, AR; <sup>2</sup> TU Dortmund, Dortmund, Germany; <sup>3</sup> University of California, Irvine, Irvine, CA; <sup>4</sup> Applied Proteomics, Glendale, CA   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 215  | <b>Profiling of Sphingolipids in Cells and Tissues Treated with Bioactive Compounds by LC-MS/MS;</b> <u>Lingyun Li</u> ; Eva Budman; Alexei Belenky; Kim Alving; Paul Mason; Aharon Cohen; Jim Lillie; Stefan Girgenrath; Mandy Cromwell; Thomas Natoli; John Leonard; Bing Wang; Genzyme Corp., Waltham, MA   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 216  | <b>Suicide Inactivation of 5-Lipoxygenase;</b> <u>Patrick Hutchins</u> <sup>1</sup> ; Robert C. Murphy <sup>2</sup> ; <sup>1</sup> Univ of Colorado, Denver, CO; <sup>2</sup> University of Colorado Den, Aurora, CO   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 217  | <b>Novel Neurosteroid Panel Quantitation Method: Role of Placental Factors in Neonatal Brain Development;</b> <u>Karolina M. Krasinska</u> <sup>1</sup> ; Florian Ermini <sup>2</sup> ; Theresa M. McLaughlin <sup>1</sup> ; Anna Penn <sup>2</sup> ; Allis S. Chien <sup>1</sup> ; <sup>1</sup> SUMS, Stanford University, Stanford, CA; <sup>2</sup> Stanford School of Medicine, Stanford, CA   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 218  | <b>Probing Phosphatidylserine Metabolism by Mass Spectrometry;</b> <u>Atsuko Kakio Kimura</u> ; Karl R Kevala; Hee-yong Kim; National Institutes of Health, Bethesda, MD   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 219  | <b>Analysis of N-Acylphosphatidylethanolamines by LC-MS/MS;</b> <u>Karl R Kevala</u> ; Jeff Kim; Jeongrim Lee; Hee-yong Kim; National Institutes of Health, Bethesda, MD   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 220  | <b>Changes in Brain Phosphatidylcholine after Stroke;</b> <u>Hay-Yan J. Wang</u> ; Hsiao-Han Wang; Jr Shin Kuo; Cheng Bin Liu; National Sun Yat-Sen University, Kaohsiung, Taiwan  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 221  | <b>Precursor Ion Scanning to Search for Oxidized Plasma Phosphatidylcholines in an Atherogenic Mouse Model;</b> <u>Christopher K. Barlow</u> <sup>1</sup> ; Anna C. Calkin <sup>1</sup> ; Jacquelyn M. Weir <sup>1</sup> ; Akiko Ono <sup>2</sup> ; Shaun P. Jackson <sup>2</sup> ; Mark E. Cooper <sup>1</sup> ; Peter J. Meikle <sup>1</sup> ; <sup>1</sup> Baker IDI Heart and Diabetes Institute, Melbourne, Australia; <sup>2</sup> Australian Centre for Blood Diseases, Melbourne, Australia  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 222  | <b>How Sterols Affect the Lipidome of Developing <i>Drosophila</i> Larvae?;</b> <u>Dominik Schwudke</u> <sup>1</sup> ; Maria Carvalho <sup>2</sup> ; Ronny Herzog <sup>2</sup> ; Suzanne Eaton <sup>2</sup> ; Andrej Shevchenko <sup>2</sup> ; <sup>1</sup> National Centre for Biological Sciences, Bangalore / Bengaluru, India; <sup>2</sup> MPI-CBG, Dresden, Germany  |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |
| MP 223  | <b>Distinguishing Artifacts from Answers in MALDI-MS Detection of Cholesterol Oxidation Products;</b> <u>Kevin M. McAvey</u> ; Chanel A. Fortier; Matthew A. Tarr;   |   |  |        |   |        |   |        |  |        |  |        |  |        |  |        |  |        |  |        |   |        |   |        |   |        |  |

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Richard B. Cole; *University of New Orleans, New Orleans, LA*
- MP 224 **Glycolipids Synthesized by the Dental Pathogen *Streptococcus mutans* - Not Sugar-Free!**; Larry Sallans; Jenny E. Custer; Bryan D. Goddard; Neil Ford; Stephen F. Macha; Edna S. Kaneshiro; *University of Cincinnati, Cincinnati, OH*
- MP 225 **Changes in the Mitochondrial Lipidome as a Function of Alzheimer's Disease Progression**; Michael D. Timmons; Melissa Bradley; Jianquan Wang; Mark A. Lovell; Bert C. Lynn; *Univ. of Kentucky, Lexington, KY*
- MP 226 **A Nonenzymatic Route to Lysophosphatidylcholine: Spontaneous Deacylation of oxidatively Damaged Phospholipids**; Jaewoo Choi; Wujuan Zhang; Xiaodong Gu; Xi Chen; Li Hong; James M. Laird; Robert G. Salomon; *Case Western Reserve Univ., Cleveland, OH*
- MP 227 **Glycooxidation: The Role of Aminophospholipids Glycation in Oxidative Stress**; M Rosário Domingues; Cláudia Simões; *University of Aveiro, Aveiro, Portugal*
- MP 228 **Mycobacterium Tuberculosis Cytochrome-P450 CYP125 is Important for Host Cholesterol Degradation and Biosynthesis of Lipid Virulence Factors**; Hugues Hugues Ouellet; Shenheng Guan; Eric D. Chow; Jonathan B. Johnston; A.I. Burlingame; Jeffery Cox; Paul R. Ortiz de Montellano; *University of California, San Francisco, CA*
- MP 229 **LC-MS Method for Simultaneous Analysis of Multiple Steroid Pathways**; Thomas Griffiths, II; Kara Pearson; William H. Schaefer; *Merck Research Labs, West Point, PA*
- |   |  |
|---|--|
| <b>LIPIDS: METHODS / PROFILING, 230 - 254</b> |  |
|---|--|
- MP 230 **Selective Visualization of Polar and Non-Polar Lipids by Utilizing Alkali Metal Salts Added to Matrix Solution**; Yuki Sugiura<sup>1</sup>; Mitsutoshi Setou<sup>2</sup>; <sup>1</sup>*Tokyo Institute of Technology, Yokohama, Japan*; <sup>2</sup>*Hamamatsu School of Medicine, Hamamatsu, Japan*
- MP 231 **Liquid Microphase Extraction and Controlled Emitter Tip Chemistry-Coupled to Nanospray Mass Spectrometry for Direct Lipid Analysis**; Patrick J. Horn; Anna K. Behrendt; Kent D. Chapman; Guido F. Verbeck; *University of North Texas, Denton, TX*
- MP 232 **Improved Identification of Glycerophospholipids Using a Linear Ion Trap Mass Spectrometer (LTQ) with Pulsed Q Collision Induced Dissociation (PQD)**; Tanxi Cai; Jing Li; Peng Xue; Zhengsheng Xie; Ziyou Cui; Linan Shi; Junjie Hou; Xiulan Chen; Peng Wu; Fuquan Yang; *Institute of Biophysics, CAS, Beijing, China*
- MP 233 **Mass Spectrometry Approaches to Lipid Profiling in Biological Matrices**; Joelle Onorato; Petia Shipkova; Michael Reily; David Wang-Iverson; *Bristol-Myers Squibb, Princeton, NJ*
- MP 234 **A Profiling and Quantification Method with High Sensitivity for Glycosphingolipids**; Hyeyoung Lee<sup>1</sup>; Hyun Joo An<sup>1</sup>; Caroline S. Chu<sup>1</sup>; Larry Lerno<sup>1</sup>; Laura A. Gillies<sup>1</sup>; Rudolf Grimm<sup>2</sup>; Carlito B. Lebrilla<sup>1</sup>; J. Bruce German<sup>1</sup>; <sup>1</sup>*University of California, Davis, CA*; <sup>2</sup>*Agilent Technologies, Santa Clara, CA*
- MP 235 **Analysis of whole Lipid Extracts Using On-Line High Resolution LC-MS**; Catharina Crone<sup>1</sup>; Eric Genin<sup>2</sup>; Helmut Muenster<sup>1</sup>; <sup>1</sup>*Thermo Fisher Scientific, Bremen, Germany*; <sup>2</sup>*ThermoFisher Scientific, Courtaboeuf, France*
- MP 236 **Analysis of Ganglioside Distribution in Mammalian Brain Tissue by Direct Profiling and Micro-Extraction Studies Using MALDI-TOF/MS**; Benoit Colsch; Alice Delvolve; Shelley N Jackson; Amina S. Woods; *NIDA-IRP, NIH, Baltimore, MD*
- MP 237 **Comparing Global and Targeted Lipid and Fatty Acid Shotgun Profiling of Brain Tissue Extracts by NanoESI-Infusion**; Gary Impey<sup>2</sup>; Brigitte Simons<sup>1</sup>; Eva Duchoslav<sup>1</sup>; Kaisa Koisten<sup>3</sup>; Kim Ekroos<sup>3</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada*; <sup>2</sup>*Applied Biosystems, Concord, ON*; <sup>3</sup>*Zora Biosciences, Espoo, Finland*
- MP 238 **Shotgun Lipidomics of PIP and PIP2 in Rat Retina**; Ekaterina S Lobanova<sup>1</sup>; Julio L Sampaio<sup>2</sup>; Polina V Lishko<sup>3</sup>; Vadim Y Arshavsky<sup>1</sup>; Andrej Shevchenko<sup>4</sup>; <sup>1</sup>*Duke Eye Center, Durham, NC*; <sup>2</sup>*MPI-CBG, Dresden, Germany*; <sup>3</sup>*Harvard Medical School, Boston, MA*; <sup>4</sup>*MP of Mol Cell Biology, Dresden, Germany*
- MP 239 **Lipidomic Profiling in Human Plasma Utilizing Orbitrap Mass Spectrometer: Improved Quantification and Identification with High Resolution and Accurate Mass Measurements**; Xiang He; Ted Jones; Sophia Chen; Praveen Kumar; Thomas A. Shaler; Hua Lin; Chris Becker; *PPD Biomarker Discovery Sciences, LLC, Menlo Park, CA*
- MP 240 **A Software Tool for Species Unrestricted, Instrument-Independent Interpretation of Shotgun Lipidomics Data**; Ronny Herzog<sup>1</sup>; Dominik Schwudke<sup>1,2</sup>; Andrej Shevchenko<sup>3</sup>; <sup>1</sup>*Max Planck Institute CBG, Dresden, Germany*; <sup>2</sup>*National Centre for Biological Sciences, Tata Inst, Bangalore / Bengaluru, India*; <sup>3</sup>*MP of Mol Cell Biology, Dresden, Germany*
- MP 241 **An LC-EIMS Method for a Rapid Profiling of Free Fatty Acids in Biological Fluids**; Achille Cappiello; Giorgio Famigliani; Pierangela Palma; Elisabetta Pierini; Veronica Termopoli; Helga Truffelli; *University of Urbino, Urbino, Italy*
- MP 242 **Mass Defects in Lipidomics: Strategies for Exploiting High Resolution Mass Spectra from Human Lipid Profiles**; Albert Koultman<sup>1</sup>; Dietrich Volmer<sup>2</sup>; <sup>1</sup>*MRC-HNR, Cambridge, UK*; <sup>2</sup>*Medical Research Council, Cambridge, UK*
- MP 243 **Derivatization for Lipidomics in Very Low Biofluid Sample Volumes: Analysis of Free Fatty Acids, Neutral and Polar Lipids by UHPLC-FTMS**; Ivana Bobeldijk-Pastorova; Raymond Ramaker; Leon Coulier; Elwin Verheij; *TNO Quality of Life, Zeist, Netherlands*
- MP 244 **A Merging of Proteomics and Lipidomics: Mass Spectrometric Approaches to Profiling Mammary and Liver Cytoplasmic Lipid Droplets**; Brittany D.M. Hodges; Julie A. Weisz; Christine C. Wu; *University of Colorado School of Medicine, Aurora, CO*
- MP 245 **Analysis of Cellular Lipids Using Normal Phase Liquid Chromatography with APPI and ESI Mass Spectrometry**; Anita Brinker; Diana R Johnson; Joseph Dixon; *Rutgers University, New Brunswick, NJ*
- MP 246 **A New LC/APCI-MS Method for the Separation and Mass Spectrometric Analysis of Neutral Sphingolipids and Cholesterol**; Hany Farwanah<sup>1</sup>; Jennifer Wirtz<sup>1</sup>; Thomas Kolter<sup>1</sup>; Klaus Raith<sup>2</sup>; Reinhard H. H. Neubert<sup>3</sup>; Konrad Sandhoff<sup>3</sup>; <sup>1</sup>*Universität-Bonn, Bonn, Germany*; <sup>2</sup>*Landesamt für Verbraucherschutz, Magdeburg, Germany*; <sup>3</sup>*Universität Halle-Wittenberg, Halle / Saale, Germany*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 247 **Analysis of Phosphatidylcholines in Human Plasma by 2D-LC Coupled with FT-ICR-MS and MS/MS;** Qiaohong He; Liang Li; *University of Alberta, Edmonton, Canada*
- MP 248 **Reverse-Phase LC/MS Method for Phosphoinositide Analysis in Cancer Cell Lines;** Arugadoss Devakumar; Roslyn Dillon; Michael Greig; Shubha Bagrodia; *Pfizer Global R & D, San Diego, CA*
- MP 249 **Automated On-Column Lipid Extraction and Fractionation for Clinical Lipidomics;** Kai Schuhmann<sup>1</sup>; Dominik Schwudke<sup>2</sup>; Ronny Herzog<sup>1</sup>; Martin Sibum<sup>3</sup>; Andrea Kohn<sup>3</sup>; Stefan R. Bornstein<sup>4</sup>; Andrej Shevchenko<sup>1</sup>; <sup>1</sup>*Max Planck Institute CBG, Dresden, Germany*; <sup>2</sup>*National Centre for Biological Sciences, Tata Inst, Bangalore / Bengaluru, India*; <sup>3</sup>*Spark Holland Inc., Emmen, Netherlands*; <sup>4</sup>*Department of Internal Medicine III, TU Dresden, Dresden, Germany*
- MP 250 **Withdrawn**
- MP 251 **Phospholipid Analysis by Femtosecond Laser-Induced Ionization/Dissociation Mass Spectrometry (fs-LID MS);** Scott A. Smith; Christine L. Kalcic; Marcos Dantus; Gavin E. Reid; *Michigan State University, East Lansing, MI*
- MP 252 **Accelerating Lipid Profiling of Human Samples for Biomarker Discovery Using UFLC-IT-TOF;** Simon Ashton<sup>1</sup>; Neil J Loftus<sup>1</sup>; Chris Titman<sup>1</sup>; Albert Koullman<sup>2</sup>; <sup>1</sup>*Shimadzu, Manchester, UK*; <sup>2</sup>*MRC Human Nutrition Research, Cambridge, UK*
- MP 253 **UPLC/TOF MS Metabolomic Approach for Profiling Fatty Acid Content in Eggs of Marine Ornamental Species;** John P. Shoccock<sup>1</sup>; Kate Yu<sup>1</sup>; Stephen O'Shea<sup>2</sup>; Jose Castro-perez<sup>1</sup>; Nancy Breen<sup>2</sup>; Michael P. Balogh<sup>1</sup>; <sup>1</sup>*Waters Corporation, Milford, MA*; <sup>2</sup>*Roger Williams University, Bristol, Rhode Island*
- MP 254 **High-Throughput Analysis of (Dihydro)Ceramides and 2-Hydroxyacyl (Dihydro)Ceramides in Biological Materials Using Flow Injection Analysis Coupled with ESI-MS/MS;** Hai Pham Tuan; Diane Butz; Therese Koal; *BIOCRATES Life Sciences AG, Innsbruck, Austria*
- QUANTITATION: ENDOGENOUS SMALL MOLECULE, 255 - 282**
- MP 255 **An AccQ-Tag Assay for Amino Acid Quantitation in Complex Samples Using UPLC-ESI-MS/MS and PDA Detection;** Jenny M. Armenta<sup>1</sup>; Diego F. Cortes<sup>1</sup>; Kenneth Blakeslee<sup>2</sup>; Vladimir Shulaev<sup>1</sup>; <sup>1</sup>*Virginia Bioinformatics Institute, Blacksburg, VA*; <sup>2</sup>*Waters Corporation, Columbia, Maryland*
- MP 256 **Analysis of Purine and Pyrimidine Bases, Nucleosides, and Nucleotides in Protein Hydrolysates;** Damon Barbacci; *BD, Sparks, MD*
- MP 257 **Fast Throughput Liquid Chromatography/Tandem Mass Spectrometry Method for Quantification of Tricarboxylic Acid and High Energy Intermediates;** Stephen Barnes<sup>1</sup>; Antonio Piras<sup>1,2</sup>; D. Ray Moore<sup>1</sup>; <sup>1</sup>*University of Alabama at Birmingham, Birmingham, AL*; <sup>2</sup>*University of Cagliari, Cagliari, Sardinia, Italy*
- MP 258 **Rugged and Reproducible LC/MS/MS Method to Analyze Citalopram and its Metabolites in Human Plasma Using Automated Liquid-Liquid Extraction;** Yousef Basir; Wence Tong; *Covance Bioanalytical, Indianapolis, IN*
- MP 259 ***o,o'*-Dityrosine as an Index of Free Radical Activity in Ageing and Inflammatory Diseases;** Martin P Bucknall<sup>1</sup>; Anne Poljak<sup>1</sup>; Michael J Davies<sup>2</sup>; Alicia J Jenkins<sup>3</sup>; Perminder Sachdev<sup>1</sup>; Justyna M Czarna Bahl<sup>4</sup>; George A Smythe<sup>1</sup>; <sup>1</sup>*UNSW, Sydney, Australia*; <sup>2</sup>*The Heart Research Institute, Sydney, Australia*; <sup>3</sup>*University of Melbourne, Melbourne, Australia*; <sup>4</sup>*Statens Serum Institute, Copenhagen, Denmark*
- MP 260 **Quantitative Analysis of Fatty Acids and Eicosanoids in Physiological Samples by LC/MS/MS Using Isotope Coded Tags;** Scott B. Daniels; Marjorie Minkoff; Sasi Pillai; Subhakar Dey; Brian Williamson; Babu Purkayastha; *Applied Biosystems, Framingham, MA*
- MP 261 **Systematic and Expanded Investigation of High and Unexpected Positive Deviation for QC Samples during GLP Incurred Samples Analysis by LC-MS/MS;** Georges El-Kadissi; Mireille Nohra; Natasha Savoie; Ericka Franco; Véronik Gill; Milton Furtado; Chantal Menard; Mary Carbone; Fabio Garofolo; *Algorithme Pharma Inc., Laval (Montreal), Quebec, Canada*
- MP 262 **Development of a New Assay for Evaluating KDO-8-P synthase Inhibitors Using Weak Anion Exchange LC and ESI-MS Detection;** Rong-Fang Gu; Gejing Deng; Elaina Zverina; *AstraZeneca, Waltham, MA*
- MP 263 **Measurement of Vitamin B12 in Beverages by Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS);** Min Huang; Doug Winters; Covance, *Food and Drug Analysis, Madison, WI*
- MP 264 **Metabolic Flux Analysis of the Co-Fermentation of Glucose and Xylose by *S. Cerevisiae* 424A(LNH-ST) Using Isotope Labeling and LC-SIM-MS;** Amber Jannasch; Elizabeth Casey; Miroslav Sedlak; Wenchu Yang; Nathan S. Mosier; Nancy Ho; Jiri Adamec; *Purdue University, West Lafayette, IN*
- MP 265 **Quantitation of Mercapturic Acid Conjugates of 4-Hydroxynonenal and 4-Oxononenal Metabolites in Smokers and Non-Smokers by Electrospray LC-MS/MS;** Heather Kuiper; Brandi Langsdorf; Fred Stevens; *Oregon State University, Corvallis, OR*
- MP 266 **Quantification of N-Terminal Valine Ethylation in Human Hemoglobin by Isotope Dilution nanoLC-Nanospray Ionization Tandem Mass Spectrometry;** Wen-peng Lin; Yen-Bor Lee; Hauh-Jyun Candy Chen; *National/ Chung-Cheng University, Chia-yi, Taiwan*
- MP 267 **LC/MS/MS Analyses of Collagen from Meat Extract;** Anna Sylvia Ferrari Marques<sup>1</sup>; Helio Martins-Junior<sup>1</sup>; Jose Luiz Costa<sup>1</sup>; Takeo Sakuma<sup>2</sup>; Daniel Lebre<sup>3</sup>; Robert Ellis<sup>2</sup>; Eladia Almeida<sup>4</sup>; Wilson Silva<sup>4</sup>; <sup>1</sup>*Applied Biosystems Inc., Sao Paulo, Brazil*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*; <sup>3</sup>*Applied Biosystems/MDS Sciex, Concord, ON*; <sup>4</sup>*Bertin Ltda., Lins, SP, Brazil*
- MP 268 **Quantification of Clarithromycin in Serum, Bronchoalveolar Lavage Fluid and Lung Tissue Using LC/MS-MS: Influence of Dose Escalation on *Mycoplasma Pneumoniae*;** Claudia Meek<sup>1,3</sup>; Seth Rutherford<sup>1</sup>; Robert Hardy<sup>2</sup>; Claudia Tagliabue<sup>2,4</sup>; Richard Leff<sup>1,2</sup>; <sup>1</sup>*Texas Tech University Health Sciences Center, Dallas, TX*; <sup>2</sup>*University of Texas Southwestern Medical Center, Dallas, TX*; <sup>3</sup>*Children's Medical Center, Dallas, TX*; <sup>4</sup>*Fondazione IRCCS Policlinico, Mangiagalli e Regina, Milano, Italy*
- MP 269 **Endogenous Steroid Profiling of Equine Serum Using Turbulent Flow Chromatography with Tandem Mass**



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Spectrometry**; Benjamin C Moeller<sup>1</sup>; Scott Stanley<sup>1</sup>; <sup>1</sup>University of California - Davis, Davis, CA
- MP 270 **UHPLC-MS/MS Quantitation of Malonyl Coenzyme A in Mammalian Tissue**; Russell Pickford<sup>1</sup>; Donna Wilks<sup>2</sup>; Elaine Preston<sup>2</sup>; Michael M. Swarbrick<sup>2</sup>; <sup>1</sup>University of New South Wales, Sydney, Australia; <sup>2</sup>Garvan Institute of Medical Research, Sydney, Australia
- MP 271 **Profiling of Phase-1 Metabolites of Lipid Peroxidation Products in Human THP-1 Monocytes by Electrospray LC/MSMS**; Ralph Reed<sup>1</sup>; Cristobal L. Miranda<sup>1</sup>; Heather Kuiper<sup>1</sup>; Brandi L. Langsdorf<sup>2</sup>; Fred Stevens<sup>1</sup>; <sup>1</sup>Oregon State University, Corvallis, OR; <sup>2</sup>Linus Pauling Institute, Corvallis, OR
- MP 272 **Establishing a Definitive Method for the Determination of the Anandamide and 2-Arachidonoyl Glycerol in Human Plasma**; Gary A. Schultz<sup>1</sup>; Barry R. Jones<sup>1</sup>; Barry S. Lutzke<sup>2</sup>; Dale A. Campbell<sup>1</sup>; Bradley L. Ackermann<sup>2</sup>; <sup>1</sup>Advion BioServices, Inc., Ithaca, NY; <sup>2</sup>Eli Lilly & Company, Indianapolis, IN
- MP 273 **Quantitation of Fatty Acids in Breath by Secondary Electrospray Ionization Mass Spectrometry**; Pablo Martinez-Lozano Sinues; National Research Council, Segrate (MI), Italy
- MP 274 **Development and Validation of a Liquid Chromatography-Tandem Mass Spectrometry for the Simultaneous Determination of B Group Vitamins in Infant Formula**; Joon Hyuk Suh; Byung Kyu Lee; Jeong-Rok Youm; Sang Beom Han; College of Pharmacy, Chung-Ang University, Seoul, South Korea
- MP 275 **A Simple, Fast LC-MS/MS Method to Assess Glutamate Quantitation in Microdialysate**; Dao M. Tran; Licong Jiang; Vertex Pharmaceuticals Inc., San Diego, CA
- MP 276 **Isotope Dilution - Matrix-Assisted Laser Desorption Ionization-Time of Flight Mass Spectrometry for the Determination of Serum Thyroid Hormones**; Ming-Hui Yang<sup>1</sup>; Yuh-Shan Su<sup>2</sup>; Shiang-Bin Jong<sup>2</sup>; Yu-Chang Tyan<sup>2</sup>; <sup>1</sup>National Sun Yat-Sen University, Kaohsiung, Taiwan; <sup>2</sup>Kaohsiung Medical University, Kaohsiung, Taiwan
- MP 277 **Quantification of the cellular Glutathione/Glutathione Disulfide Content by Fast Liquid Chromatography/Mass Spectrometry Analysis.**; Shin-cheng Tzeng; Claudia Maier; Oregon State University, Corvallis, OR
- MP 278 **Formation and Biological Activity of 15-Oxo-Eicosatetraenoic Acid, a Novel 15-Lipoxygenase-Derived Arachidonic Acid Metabolite**; Cong Wei; Sumit Shah; Ian A. Blair; Center for Cancer Pharmacology, University of Penn, Philadelphia, PA
- MP 279 **Bioanalytical Methods for Monitoring Relative Changes of Oxylipins from Mouse Plasma**; Richard L. Wong; Baomin Xin; Jing Yang; Timothy Olah; Bristol-Myers Squibb Company, Lawrenceville, NJ
- MP 280 **A Sensitive and Rugged Method To Measure Endogenous Levels of S-Adenosylmethionine (SAM) and S-Adenosylhomocysteine (SAH) in Biological Samples Using LC-MS/MS**; Suzie Yeh; Sang Na; Rena Zhang; William Bart Emary; Merck & Co., Inc., West Point, PA
- MP 281 **Quantitative Analysis of 8-oxo-dG in Human Urine Using Negative Ion Electrospray LC-MS-MS**; Yang Yuan; Long Yuan; Richard B. Van Breemen; University of Illinois, Chicago, IL
- MP 282 **Simultaneous Determination of 2-Arachidonoylglycerol, 1-Arachidonoylglycerol and Arachidonic acid in Mouse Brain Tissue and Cerebellar Membranes using Liquid Chromatography/Tandem Mass Spectrometry**; Mei-Yi Zhang<sup>1</sup>; Ying Gao<sup>2</sup>; Natasha Kagan<sup>1</sup>; Edward Kerns<sup>1</sup>; Tarek Samad<sup>2</sup>; Pranab K Chanda<sup>2</sup>; <sup>1</sup>Chemical and Screening Sciences, Wyeth Research, Princeton, NJ; <sup>2</sup>Neuroscience Discovery Research, Wyeth Research, Princeton, NJ
- PROTEOMICS: PTM DETERMINATION (METHOD DEVELOPMENT), 283 - 303**
- MP 283 **On the Labelling of Peptide Fragmented Mass Spectra in Proteomic Studies**; Bertran Gerrits<sup>1</sup>; Christian Panse<sup>1</sup>; Bernd Bodenmiller<sup>2</sup>; Ralph Schlapbach<sup>1</sup>; <sup>1</sup>Functional Genomics Center, Zurich, Switzerland; <sup>2</sup>ETH Zurich, Zurich, Switzerland
- MP 284 **Structure Elucidation of Disulfide Bonds in a Rhamnose-Binding Lectin from Salmon Eggs**; Liang Zhao<sup>1</sup>; Ruben T. Almaraz<sup>2</sup>; Fan Xiang<sup>3</sup>; Jerry L. Hedrick<sup>2</sup>; Andreas H. Franz<sup>1</sup>; <sup>1</sup>University of the Pacific, Stockton, CA; <sup>2</sup>University of California Davis, Davis, CA; <sup>3</sup>Shimadzu Biotech, Pleasanton, CA
- MP 285 **Top-Down ECD Mass Spectrometry of Calmodulin Deamidation**; Chunxiang Yao<sup>1</sup>; Nadezda P. Sargaeva<sup>1</sup>; Weidong Cui<sup>1</sup>; Xiaojuan Li<sup>1</sup>; Tzu-yung Lin<sup>1</sup>; Konstantin Aizikov<sup>1</sup>; Cheng Lin<sup>1</sup>; Peter B. O'connor<sup>2</sup>; <sup>1</sup>Boston University Sch Med, Boston, MA; <sup>2</sup>University of Warwick, Coventry, UK
- MP 286 **An Integrated Bottom-Up and Top-Down Characterization of Metalloproteins and Protein Molecular Forms in the Extracellular Fraction of Extremophilic Microbial Communities**; Brian K. Erickson<sup>1</sup>; Steven Singer<sup>2</sup>; Korin Wheeler<sup>2</sup>; Nathan C. Verberkmoes<sup>3</sup>; Manesh Shah<sup>3</sup>; Michael Thelen<sup>2</sup>; Jill Banfield<sup>4</sup>; Robert Hettich<sup>3</sup>; <sup>1</sup>University of Tennessee - Oak Ridge National Lab, Knoxville, TN; <sup>2</sup>Lawrence Livermore National Laboratory, Livermore, CA; <sup>3</sup>Oak Ridge Nat'l Lab, Oak Ridge, TN; <sup>4</sup>University of California - Berkeley, Berkeley, CA
- MP 287 **Top-Down Proteomics Analysis of 2DE Separated Protein Isoforms Using Gel Protein Recovery System and ESI FT-ICR MS**; Christopher Bolcato<sup>1</sup>; John Cardamone<sup>1</sup>; Manimalha Balasubramani<sup>1</sup>; Matthew Powell<sup>2</sup>; Trust Razunguzwa<sup>2</sup>; Reid Asbury<sup>2</sup>; <sup>1</sup>University of Pittsburgh, Pittsburgh, PA; <sup>2</sup>Protea Biosciences, Morgantown, WV
- MP 288 **Variant and PTM Characterization of Human Hemoglobins by Mass Spectrometry and Bioinformatics Approaches**; Lei Li; Vivek N. Bhatia; Weiwei Tong; David H. Perlman; Catherine E. Costello; Mark E. McComb; Boston University School of Medicine, Boston, MA
- MP 289 **A Mixed-Integer Linear Optimization Framework for the Identification and Quantification of Highly Modified Proteins via Electron Transfer Dissociation Tandem MS**; Peter A. DiMaggio; Nicolas L. Young; Richard C. Baliban; Benjamin A. Garcia; Christodoulos A. Floudas; Princeton University, Princeton, NJ
- MP 290 **Characterization of Protein Isoforms Using Tandem MS of Intact and On-Line Digested Proteins from a Single Intact Protein HPLC Separation**; Errol W.



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 291 **Robinson**; Zhixin Tian; Nikola Tolić; Daniel López Ferrer; Konstantinos Petritis; Joshua N. Adkins; Richard D. Smith; Ljiljana Paša-Tolić; *Pacific Northwest National Laboratory, Richland, WA*
- MP 292 **Protein LC-MS with On-Line Fraction Collection, Enzymatic Digestion and Rapid Infusion MS/MS: An Automated Analysis Workflow for Complex Proteomic Samples**; Geoffrey S. Rule<sup>2</sup>; Daniel Eikel<sup>1</sup>; Brigitte Simons<sup>3</sup>; Simon J. Prosser<sup>4</sup>; <sup>1</sup>AdvionBioSystems, Ithaca, NY; <sup>2</sup>Advion BioSystems, Salt Lake City, UT; <sup>3</sup>MDS Analytical Technologies, Concord, ON; <sup>4</sup>Advion BioSciences, Inc., Ithaca, NY
- MP 293 **Application of an Intact Protein Separation Space for PTM Characterization**; Mark E. McComb; David H. Perlman; Wantao Ying; Giuseppe Infusini; Vivek N. Bhatia; Weiwei Tong; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*
- MP 294 **Systematic Screening of non-Phosphorylation Post-Translational Modifications in Yeast Kinases by Mass Spectrometry and PTMap**; Kai Zhang; Yue Chen; Jeong Soo Yang; Yingming Zhao; *University of Chicago, Chicago, IL*
- MP 295 **Microwave-Assisted Acid Hydrolysis Combined with LC-ESI QqTOF MS for Mapping Complete Protein Sequences and Characterizing PTMs**; Nan Wang; Liang Li; *University of Alberta, Edmonton, Alberta, Canada*
- MP 296 **PTM Finder Based on PEAKS De Novo Sequencing Result**; Lei Xin<sup>1</sup>; Baozhen Shan<sup>2</sup>; Gilles Lajoie<sup>3</sup>; Bin Ma<sup>4</sup>; <sup>1</sup>CS Dept. of The University of Western Ontario, London, Canada; <sup>2</sup>Bioinformatics Solutions Inc., Waterloo, ON; <sup>3</sup>University of Western Ontario, London, ON; <sup>4</sup>University of Waterloo, Waterloo, ON
- MP 297 **Reversible Amine Capture for Selective Detection of Protein N-Termini by Mass Spectrometry**; Juni T Samos<sup>1</sup>; Joseph A. Loo<sup>2</sup>; Rachel O. Loo<sup>2</sup>; <sup>1</sup>University of California, Los Angeles, Los Angeles, CA; <sup>2</sup>UCLA, Los Angeles, CA
- MP 298 **Characterizing Protein Post-Translational Modifications in Cellulose-Degrading Bacteria by a Combined CAD and ETD Approach**; Andrew B. Dykstra<sup>1,2</sup>; Richard J. Giannone<sup>2</sup>; Adriane Lochner<sup>2</sup>; Kelsey D. Cook<sup>1</sup>; Robert L. Hettich<sup>2</sup>; <sup>1</sup>University of Tennessee, Knoxville, TN; <sup>2</sup>Oak Ridge National Laboratory, Oak Ridge, TN
- MP 299 **Non-Radioactive Targeting of Multiple Classes of Protein Posttranslational Modifications (PTMs) with Click Chemistry**; Xiao-Dong Qian; Courtenay Hart; Tamara Nyberg; Brian Agnew; *Invitrogen Corporation, Eugene, OR*
- MP 300 **An Unbiased Tale of *in vitro* Modifications: In-Depth Analysis of Artifacts Caused by Proteomics Sample Preparation**; Michael L. Nielsen; Juergen Cox; Jesper V. Olsen; Matthias Mann; *Max-Planck-Institute for Biochemistry, Martinsried (near Munich), Germany*
- MP 301 **Determination of Phosphorylation & O-GlcNAcylation Sites on Tensin 1 Via CAD & ETD Implemented on a Chromatographic Time Scale**; Jeremy L. Balsbaugh; Emily H. Hall; Philip D. Compton; Jeffrey Shabanowitz; David L. Brautigan; Donald F. Hunt; *Univ. of Virginia, Charlottesville, VA*
- MP 302 **Development of Mass Spectrometric Tools for the Cellular Characterization of Protein Prenylation**; Jiao Song; Andrew Placzek; Gibbs Richard; *MCMP Purdue University, W Lafayette, IN*
- MP 303 **Protein Identification and Post-Translational Modification Analysis with High Sequence Coverage Using a Dual-Enzyme and Dual-Activation Strategy**; Hao Wang<sup>1</sup>; Jin cao<sup>1</sup>; Robert Straubinger<sup>1</sup>; Xiaotao Duan<sup>1</sup>; John Aletta<sup>2</sup>; Laurie Read<sup>1</sup>; Jun Qu<sup>1</sup>; <sup>1</sup>University at Buffalo, Amherst, NY; <sup>2</sup>CH3 Inc, Amherst, NY
- MP 304 **Proteome-Wide Quantitative Comparison of Growth Factor Responses in Human Cell Lines**; Jesper V. Olsen; Chunaram Choudhary; Juergen Cox; Matthias Mann; *Max-Planck-Institute for Biochemistry, Martinsried, Germany*

### INSTRUMENTATION: ION SOURCES (ESI & APPI), 304 - 338

- MP 304 **Neutral radical Induced Analyte Ion Transformation Processes in Atmospheric Pressure Photoionization (APPI) and Near-VUV Atmospheric Pressure Laser Ionization (VUV APLI)**; Hendrik Kersten<sup>1</sup>; Matthias Lorenz<sup>1</sup>; Valerie Funcke<sup>1</sup>; Klaus J. Brockmann<sup>1</sup>; Thorsten Benter<sup>1</sup>; Rob O'brien<sup>2</sup>; <sup>1</sup>University of Wuppertal Dep. of Phys. Chem, Wuppertal, Germany; <sup>2</sup>ORCAC @ UBC Okanagan, Kelowna, BC
- MP 305 **A Sensitive Method for the Analysis of Neurosteroids by HPLC-MS-APPI (Atmospheric Pressure Photoionization)**; Farooq Azam; Andre Negahban; Steve E. Unger; *Wyeth Pharmaceuticals, Collegeville, PA*
- MP 306 **Methylation of Dihydrotestosterone and Implications for Quantitative Analysis**; Fred Bjorn Lih<sup>1</sup>; Mark A. Titus<sup>2</sup>; James L. Mohler<sup>2</sup>; Kenneth B. Tomer<sup>1</sup>; <sup>1</sup>NIEHS/NIH, Rtp, NC; <sup>2</sup>Roswell Park Cancer Institute, Buffalo, NY
- MP 307 **Quantification of Organic Nitrates in Rat Plasma by LC-MS/MS Using Atmospheric Pressure Photo Ionization and Electropray Sources**; Haiping Wang<sup>1</sup>; Zhongzhou (Andrea) Shen<sup>2</sup>; Shiyao Xu<sup>1</sup>; Lucinda Cohen<sup>1</sup>; Stella Vincent<sup>1</sup>; Gino M. Salituro<sup>1</sup>; <sup>1</sup>Merck Research Laboratory, Rahway, NJ; <sup>2</sup>Pfizer, La Jolla, San Diego, CA
- MP 308 **Design Modifications Enabling Performance Comparison between the Original and Current Generation Commercially Available Atmospheric Pressure Photoionization (APPI) Sources**; Ross McCulloch<sup>1</sup>; Damon Robb<sup>1</sup>; Michael Blades<sup>2</sup>; <sup>1</sup>University of British Columbia, Vancouver, Canada; <sup>2</sup>University of British Columbia, Vancouver, BC
- MP 309 **Comparison of Atmospheric Pressure Photoionization and Atmospheric Pressure Chemical Ionization Mass Spectrometry for the Analysis of Retinoids**; Sean M Backus<sup>1</sup>; Mark Hewitt<sup>1</sup>; Suzanne P. Batchelor<sup>1</sup>; Keith Solomon<sup>2</sup>; <sup>1</sup>Environment Canada, Burlington, ON; <sup>2</sup>University of Guelph, Guelph, Canada
- MP 310 **UPLC-APPI-MS/MS for High Sensitivity and High Throughput Analysis of US EPA Sixteen Priority Pollutants Polynuclear Aromatic Hydrocarbons**; Sheng-Suan (Victor) Cai<sup>1</sup>; Jack A. Syage<sup>1</sup>; Karl A. Hanold<sup>1</sup>; Michael P. Balogh<sup>2</sup>; <sup>1</sup>Syagen Technology, Inc., Tustin, CA; <sup>2</sup>Waters Corporation, Milford, MA
- MP 311 **Ion Losses at the Entrance of a Field-Free Conductance Tube into Vacuum**; Ross C. Willoughby<sup>1</sup>; Edward Sheehan<sup>2</sup>; David Fries<sup>3</sup>; <sup>1</sup>Chem-Space Associates, Pittsburgh, PA; <sup>2</sup>Chem-Space

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- MP 312 *Associates, Inc., Pittsburgh, PA;* <sup>3</sup>*University of South Florida, St Petersburg, FL*  
**Coupling Atmospheric Pressure Optics with Field-Free Ionization Sources;** Ross C. Willoughby<sup>1</sup>; Edward Sheehan<sup>1</sup>; David Fries<sup>2</sup>; <sup>1</sup>*Chem-Space Associates, Pittsburgh, PA;* <sup>2</sup>*U South Florida, St Petersburg, FL*
- MP 313 **Imaging of Surfaces under the Effects of Desorption Electrospray Ionization;** Michael Wood; Devin Busby; Paul B. Farnsworth; *Brigham Young Univ., Provo, UT*
- MP 314 **Obtaining DESI Using the ASAP Probe on an Orbitrap Exactive;** Andrew Harron; Julie Lloyd; Charles N. McEwen; *Univ. of the Sciences in PA, Philadelphia, PA*
- MP 315 **DEEP and DEEPER-MS: Direct Extractive Electrospray Probes for Electrophoretic Recovery and *in vivo* Metabolite Analysis;** Mariam S ElNaggar; Richard A. Mathies; Evan R. Williams; *University of California, Berkeley, CA*
- MP 316 **Real-Time Chemical Weapon Agent Monitoring with a Modified Commercial Atmospheric Pressure Chemical Ionization Direct Inlet Mass Spectrometer;** Charles A. Fancher; Nathan A. Hagan; Doan-Trang Vu; *JHU Applied Physics Lab, Laurel, MD*
- MP 317 **Electrohydrodynamic Charge Separation for Improving Analyte Ionization in the Array of Micromachined UltraSonic Electrospray (AMUSE) Ion Source;** Thomas P. Forbes<sup>1</sup>; R. Brent Dixon<sup>2</sup>; David C. Muddiman<sup>2</sup>; F. Levent Degertekin<sup>1</sup>; Andrei G. Fedorov<sup>1</sup>; <sup>1</sup>*Georgia Institute of Technology, Atlanta, GA;* <sup>2</sup>*North Carolina State University, Raleigh, NC*
- MP 318 **APCI Sensitivity Improvements on a Z-Spray Source;** Steve Bajic; *Waters Corporation, Manchester, UK*
- MP 319 **Systematic DIA Measurements for APLI Method Development;** Matthias Lorenz; Walter Wissdorf; Hendrik Kersten; Sonja Klee; Klaus J. Brockmann; Thorsten Benter; *University of Wuppertal, Wuppertal, Germany*
- MP 320 **Using Laser-Induced Acoustic Desorption/Electrospray Ionization Mass Spectrometry to Directly Characterize Organic Compounds Separated on Thin-Layer Chromatography Plate;** Sy-Chyi Cheng; Chih-Chiang Chou; Jentaie Shiea; *National Sun Yat-Sen Univ., Kaohsiung, Taiwan*
- MP 321 **Ultrasound-Assisted Spray Ionization Mass Spectrometry for the Analysis of Biomolecules in Solution;** Chung-Yi Chen; Jia-Yi Lin; Jen-Yi Chen; Yu-Chie Chen; *National Chiao Tung University, Hsinchu, Taiwan*
- MP 322 **Real-Time Monitoring of Reactions by Probe Electrospray Ionization Using Solid Needle;** Zhan Yu; Lee Chuin Chen; Yutaka Hashimoto; Hajime Ito; Rikiya Iwata; Kenzo Hiraoka; *University of Yamanashi, Kofu, Yamanashi*
- MP 323 **Breath Pattern Recognition in a Control Group by Secondary Electrospray Ionization Mass Spectrometry;** Pablo Martinez-Lozano Sinues<sup>1</sup>; Lorenzo Zingaro<sup>2</sup>; Alessandro Finiguerra<sup>2</sup>; Italia Bongarzone<sup>3</sup>; Rosaria Orlandi<sup>3</sup>; Simone Cristoni<sup>2</sup>; <sup>1</sup>*National Research Council, Segrate (MI), Italy;* <sup>2</sup>*ISB srl, Milan, Italy;* <sup>3</sup>*National Cancer Institute Foundation, Milan, Italy*
- MP 324 **Preventing Electrolysis of Analytes in Electrospray Ionization Mass Spectrometry Using a Redox Polymer Coated Emitter;** Emese Peintler-Krivan; Vilmos Kertesz; Gary J. Van Berkel; *Oak Ridge National Laboratory, Oak Ridge, TN*
- MP 325 **Measuring Relative Electrospray Ionization Efficiency Versus the Electrolyte Counter Ion Type and Concentration Using a Membrane Electrospray Probe;** Craig M. Whitehouse; Thomas White; Shida Shen; *Analytica of Branford, Inc., Branford, CT*
- MP 326 **Ionization Competitors Extend the Upper Linear Dynamic Range of Electrospray Ionization Mass Spectrometry;** Bilal Bazzi; *UTA, Arlington, TX*
- MP 327 **Evaluation of a New Electrospray Ion Source and Interface Combination for Ruggedness and Sensitive in LC-MS/MS;** George Scott<sup>1</sup>; Charles Jolliffe<sup>2</sup>; <sup>1</sup>*Ionics Mass Spectrometry Group, Bolton, ON;* <sup>2</sup>*IONICS Mass Spec Group, Inc., Bolton, ON*
- MP 328 **An Electrospray Ion Source with Heated Auxiliary Vortex Gas;** August Specht; Mingda Wang; Joe Saba; Bethany Erickson; Ken Newton; *Varian Inc., Walnut Creek, CA*
- MP 329 **A Versatile Charge Reduced Electrospray Interface for Flowing Systems;** Kouame Adou; Murray V. Johnston; *University of Delaware, Newark, DE*
- MP 330 **Minimization of Atmospheric Background Contaminants in Nanoelectrospray: Identification and Optimization;** Ben Ngo; Gary Valaskovic; *New Objective, Inc., Woburn, MA*
- MP 331 **ESI Technology with Thermal Gradient Focusing - Theoretical and Practical Aspects;** Alex Mordehai; *Agilent Technologies, Santa Clara, CA*
- MP 332 **Bridging the Micro-Flow LC and Nano-Flow ESI: An Emitter Array Ion Source for Sensitive and Quantitative LC-MS Analyses;** Keqi Tang; Jason Page; Ryan Kelly; Ioan Marginean; Erin Baker; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- MP 333 **Performance of the Electrospray Ion Source during Reversed-Phase LC-MS Analyses;** Ioan Marginean; Ryan Kelly; Ronald Moore; David Prior; Brian L LaMarche; Keqi Tang; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- MP 334 **Regime Changes in Nanoelectrospray Ionization Sources;** Jelena Lusic; Jacob Jones; Peter Nemes; Akos Vertes; *George Washington University, Washington, DC*
- MP 335 **Characterization of Nano-Electrospray Ionization Directly from Glass Microfluidic Devices for Low Flow Rate Liquid Separation Applications;** Andrew G Chambers; J. Scott Mellors; J. Michael Ramsey; *The University of North Carolina, Chapel Hill, NC*
- MP 336 **Development of a Novel Ion Source for Electrospray and APCI Using Flow Entrainment of Ions;** Joshua Ye; Serguei Savtchenko; *Ionics Mass Spectrometry Gro, Bolton, Canada*
- MP 337 **Application of LDTD-APCI-MS to Support Plasma Protein Binding Study in Drug Discovery;** Beijing Tan; Thomas Mcdonald; Christopher Holliman; Rick Steenwyk; *Pfizer, Inc., Groton, CT*
- MP 338 **On-Line HPLC with H/D Exchange in Liquid Electrospray-Assisted Laser Desorption Ionization Mass Spectrometry for The Analysis of Protein Mixture;** Yi-Tzu Cho<sup>1</sup>; Jingyueh Jeng<sup>2</sup>; Jentaie Shiea<sup>1</sup>;

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

<sup>1</sup>National Sun Yat-Sen Univ., Kaohsiung, Taiwan; <sup>2</sup>Chia-Nan Univ. of Pharmacy and Science, Tainan, Taiwan

### LC/MS, 339 - 356

- |  |   |
|--|---|
| <p>MP 339 <b>The Determination of Citric Acid in Human Urine by LC/MS/MS;</b> Ying Li; Gene Ray; Moo-young Kim; <u>Yansheng Liu</u>; Dari Dadgar; <i>AAI Pharma, Shawnee, KS</i></p> <p>MP 340 <b>Withdrawn</b></p> <p>MP 341 <b>Quantitative Analysis Using LC-MS-MS of PGE2, PGE3 and PGD2 in Chicken Ovarian Tissue as Markers of Ovarian Cancer Risk;</b> <u>Rui Yu</u><sup>1,2</sup>; Hongmei Cao<sup>1,2</sup>; Yan Zhuge<sup>1,3</sup>; Jo Ann J. Lagman<sup>1,3</sup>; Kristine Ansenberger<sup>1,3</sup>; Cassandra J. Richards<sup>1,3</sup>; Dale B. Hales<sup>1,3</sup>; Richard B. van Breemen<sup>1,2</sup>; <sup>1</sup><i>University of Illinois at Chicago, Chicago, IL;</i> <sup>2</sup><i>Dept. of Medicinal Chemistry and Pharmacognosy, Chicago, IL;</i> <sup>3</sup><i>Department of Physiology and Biophysics, Chicago, IL</i></p> <p>MP 342 <b>Quantitation of Risperidone and 9-Hydroxyrisperidone in Human Plasma by Liquid Chromatography and Tandem Mass Spectrometry;</b> <u>Dunmin Mao</u>; Gina de Boer; Hong Zhang; Rong Yi; Winnie Lui; Amara Pinnawala; Irene Popov; <i>Cantest, Burnaby, Canada</i></p> <p>MP 343 <b>A Direct LC/MS/MS Method to Determine the Amount of Ciclopirox Penetrated Across Human Nail Plate in in vitro Penetration Studies;</b> <u>Wei Bu</u>; Xiaoqing Fan; Holly Sexton; Irwin Heyman; <i>Anacor Pharmaceuticals, Palo Alto, CA</i></p> <p>MP 344 <b>Method Development and Validation of a Turbo Ion Spray LC/MS/MS Method for Capecitabine and Four Major Metabolites in Human Plasma;</b> <u>Stacey L. Zeman</u>; Sarah Burke; Michael Pennell; Jay E. Belke; Jamison J. Williams; <i>Advion BioSciences, Inc, Ithaca, NY</i></p> <p>MP 345 <b>Structural Determination of the By-Products Obtained in Acetylation of Cysteine and Cysteine-Conjugated Metabolites by LC/MS/MS;</b> <u>Li-quan Wang</u>; Zheming Gu; <i>XenoBiotic Laboratories, Inc, Plainsboro, NJ</i></p> <p>MP 346 <b>Quantitative Profiling of Free Estrogens and Their Conjugates in Biological Fluids by HPLC-Tandem Mass Spectrometry;</b> <u>Feng Qin</u>; Yuli Zhao; Wenjun Zhou; Xing-Fang Li; <i>University of Alberta, Edmonton, Canada</i></p> <p>MP 347 <b>The Study for the Simultaneous Identification of PDE5 Inhibitors and Methyltestosterone with HPLC-ESI Ion Trap Mass Spectrometry.;</b> <u>Xiaodong Li</u>; Yajun Zhang; <i>National Institute for the Control of Pharmaceutic, Beijing, China</i></p> <p>MP 348 <b>Analytical Challenges in the Development and Validation of Column Switching UPLC-MS/MS Methods for the Quantitation of Corticosteroids;</b> James Creegan<sup>2</sup>; <u>Grace O'Maille</u><sup>1</sup>; Tianyi Zhang<sup>2</sup>; Rand G. Jenkins<sup>2</sup>; Bruce J. Hidy<sup>2</sup>; Gen Matsuo<sup>1</sup>; Xiaolu Tao<sup>1</sup>; Sudhakar Pai<sup>1</sup>; <sup>1</sup><i>Akros Pharma Inc., Princeton, NJ;</i> <sup>2</sup><i>PPD, Inc., Richmond, VA</i></p> <p>MP 349 <b>Fast Liquid Chromatography Separation and Multiple Reaction Monitoring Mass Spectrometric Detection of Catecholamines;</b> Loubna A Hammad<sup>1</sup>; <u>Matthew Neely</u><sup>2</sup>; Bob Bridge<sup>2</sup>; Yehia Mechref<sup>1</sup>; <sup>1</sup><i>Indiana University Biochem Ctr, Bloomington, IN;</i> <sup>2</sup><i>Dionex Corporation, Bannockburn, IL</i></p> <p>MP 350 <b>Use of LC/MS to Detect and Identify a Labile Intermediate in the Study of Oxazoline Pro-drug Hydrolysis;</b> <u>Rong-sheng Yang</u><sup>1</sup>; Larry Heimark<sup>2</sup>;</p> | <p>Rebecca Osterman<sup>1</sup>; Tze-Ming Chan<sup>1</sup>; Birendra Pramanik<sup>3</sup>; <sup>1</sup><i>Schering-Plough Research Institute, Kenilworth, NJ;</i> <sup>2</sup><i>Retired, Bloomfield, NJ;</i> <sup>3</sup><i>Schering-Plough Research, Kenilworth, NJ</i></p> <p>MP 351 <b>Validated LC-MS/MS Method for Determination of Alverine and its Hydroxy Metabolite in Human Plasma with Application to a Bioequivalence Study;</b> <u>Mr. Noel Gomes</u>; Mr Ashutosh Pudage; <i>Accutest Research Labs, India, Navi Mumbai, India</i></p> <p>MP 352 <b>Application of a Validated HPLC-ESI-MS Method to Evaluate Degradation of Ziconotide;</b> <u>Jhoana A. Mendoza</u>; John R. Eyler; <i>University of Florida, Gainesville, FL</i></p> <p>MP 353 <b>A High Sensitive and High Throughput LC/MS/MS Method for Determination of Budesonide in Rat Gastrointestinal Tract;</b> Xiaodong Zhu; <i>Covance Laboratories, Madison, WI</i></p> <p>MP 354 <b>Simultaneous Determination of Nucleotide Mono-, Di-, and Triphosphates in Rat Liver Using LC-MS/MS;</b> <u>Donghui Bao</u>; Phillip A. Furman; Michael J. Sofia; <i>Pharmasset, Princeton, NJ</i></p> <p>MP 355 <b>An LC-MS/MS Method for the Quantitation of IDX184 and Its Nucleoside Metabolite in Human Plasma (EDTA);</b> <u>Ginny B. James</u>; Jonathan O. Rathe; Chris J. Kafonek; Alan M. Dzerk; Curtis E. Sheldon; Chad J. Briscoe; <i>MDS Pharma Services, Lincoln, NE</i></p> <p>MP 356 <b>Development of an LC-MS/MS Method for Measurement of Deuterium Incorporation into DNA;</b> <u>Jin Wu</u><sup>1</sup>; Randall Purves<sup>1</sup>; Martine Lamarche<sup>1</sup>; Diane Ethier<sup>1</sup>; Yves Boie<sup>1</sup>; Mark P. Keller<sup>2</sup>; Mary E. Rabaglia<sup>2</sup>; Alan D. Attie<sup>2</sup>; Denis Normandin<sup>1</sup>; Simon Wong<sup>1</sup>; Kevin P. Bateman<sup>1</sup>; <sup>1</sup><i>Merck Frosst Canada, Kirkland, Canada;</i> <sup>2</sup><i>University of Wisconsin-Madison, Madison, WI</i></p> |
| LC/MS SAMPLE PREPARATION, 357 - 375  |   |
| <p>MP 357 <b>Dual Porous CE Capillary for Sample Preconcentration and CE/ESI-MS Analysis;</b> Mehdi Moini<sup>1</sup>; <u>Damaso Rosas</u><sup>1</sup>; Bret See<sup>2</sup>; <sup>1</sup><i>Texas State University, San Marcos, TX;</i> <sup>2</sup><i>University of Texas, Austin, TX</i></p> <p>MP 358 <b>Novel Approaches to Developing LC/MS/MS Bioanalytical Methods for Liposomal Encapsulations;</b> <u>Roger Demers</u>; A. Lynn McGrath; Scott Kepfler; Daria L Wentzel; <i>Tandem Labs, West Trenton, NJ</i></p> <p>MP 359 <b>Dried Blood Spots Assays for Determination of Various Drugs in Whole Blood by LC-MS/MS;</b> <u>Xiaorong Liang</u><sup>1</sup>; Glenn Hanson<sup>1</sup>; Tom Addison<sup>1</sup>; Julie Tollefson<sup>1</sup>; Kevin Jones<sup>1</sup>; David M. Bakes<sup>2</sup>; Lee Goodwin<sup>2</sup>; Phillip Turpin<sup>2</sup>; <sup>1</sup><i>Covance, Madison, WI;</i> <sup>2</sup><i>Covance Laboratories Ltd, Harrogate, UK</i></p> <p>MP 360 <b>Evaluate and Solve an Unusual differential Recovery Problem in Bioanalysis of a Boron-Containing Compound in Mouse Blood;</b> <u>Ji Zhang</u>; Michael Johnson; Cindy Xia; Mark Qian; <i>Millennium :The Takeda Oncology Company, Cambridge, MA</i></p> <p>MP 361 <b>Multi-Class Antibiotic Screening of Honey Using Dual On-line Extraction Columns in Tandem;</b> <u>Catherine Lafontaine</u>; Yang Shi; Francois A. Espourteille; <i>Thermo Fisher Scientific, Franklin, MA</i></p> <p>MP 362 <b>C18-Functionalized Magnetic Nanoparticles as Extraction Sorbent Combined with LC-MS for Analysis of Benzophenones in Urine Sample;</b> Tzung-Jie Yang; <u>Pei-Cheng Wang</u>; Maw-rong Lee; <i>National Chung-Hsing University, Taichung, Taiwan</i></p>  |   |

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 363 **Determination of Nimetazepam and Metabolites in Urine by LC-APCI/MS/MS;** Chun-Hung Wang; Ren-Jye Lee; Maw-Rong Lee; *National Chung-Hsing University, Taichung, Taiwan*
- MP 364 **Use of Fusarate as a Highly-Sensitive Derivative in Liquid Chromatography-Electrospray Ionization Tandem Mass Spectrometric Quantification of Hydroxysteroids;** Kouwa Yamashita; Keiko Yamazaki; Madoka Takahashi; Mitsuteru Numazawa; *Tohoku Pharmaceutical University, Sendai, Japan*
- MP 365 **Sensitivity Enhancement in UPLC/MS/MS for Simultaneous Measurement of Plasma Epinephrine and Norepinephrine Using Reductive Amination Labeling;** Chengjie Ji; Justin Walton; Elizabeth A. Groeber; Christopher Lepsy; *Pfizer Inc, Groton, CT*
- MP 366 **Development of a Rugged LC-MS/MS Method for Risedronate in Human Plasma Using Trimethylsilyl Diazomethane as Derivatization Reagent;** Mei Li; Nicki Hughes; *Biovail Contract Research, Toronto, Canada*
- MP 367 **MS Friendly SALLE as An Optimal Sample Preparation Technique in LC-MS Determination of Simvastatin and Simvastatin Acid in Plasma;** Ramona Rodila; Eric Gage; Jun C. Zhang; Huaqin Wu; Tawakol El-Shourbagy; *Abbott Laboratories, Abbott Park, IL*
- MP 368 **Developing Whole Blood Bioanalytical Method to Analyze ABE-578 with a Mass Spectrometer Friendly Salt Assisted Liquid/Liquid Extraction (SALLE);** Jacob Lee; Leimin Fan; Huaqin Wu; Tawakol El-Shourbagy; *Abbott Labs, Abbott Park, IL*
- MP 369 **Analysis of Highly Hydrophilic Compounds in Biological Matrices with LC/MS/MS Normal Phase LLE for Sample Preparation;** Kristopher King; Chris Tran; Guangyu Zhao; Ling Morgan; *Tandem Labs, Woburn, MA*
- MP 370 **Comparison of Liquid-Liquid Extraction (LLE) and Supported Liquid Extraction (SLE):- Equivalent Limits of Quantitation with Smaller Sample Volumes.;** Lee Williams; Helen Lodder; Rhys Jones; Steve Jordan; Claire Desbrow; Gary Dowthwaite; Joanna Caulfield; Richard Calverley; *Biotage GB Limited, Cardiff, UK*
- MP 371 **Comparison of SLE and SPE Sample Preparation for the Determination of Ibuprofen in Plasma;** Yu Zhou; Amber Awad; Teresa Pekol; *Synomics Pharma, Wareham, MA*
- MP 372 **Extraction of Melamine from Various Matrices Using Resin-Based Mixed-Mode Cation Exchange SPE and Analysis with LC-MS/MS.;** Lee Williams<sup>1</sup>; Elena Gairloch<sup>2</sup>; Rhys Jones<sup>1</sup>; Helen Lodder<sup>1</sup>; Steve Jordan<sup>1</sup>; Richard Calverley<sup>1</sup>; Claire Desbrow<sup>1</sup>; Steve Plant<sup>1</sup>; Gary Dowthwaite<sup>1</sup>; Joanna Caulfield<sup>1</sup>; <sup>1</sup>*Biotage GB Limited, Cardiff, UK*; <sup>2</sup>*Biotage, Charlottesville, VA*
- MP 373 **A New Online SPE/LC/MS/MS Method for Screening Perfluorinated Compounds (PFCs) in Waste Water;** Fredrick D. Foster<sup>1</sup>; Meike Baden<sup>2</sup>; Norbert Helle<sup>2</sup>; Juergen Wendt<sup>3</sup>; <sup>1</sup>*Gerstel GmbH & Co KG, Mülheim an der Ruhr, Germany*; <sup>2</sup>*TeLA GmBH, Bremerhaven, Germany*; <sup>3</sup>*Agilent Technologies, Waldbronn, Germany*
- MP 374 **Human Plasma Renin Activity Assay with On-Line Solid Phase Extraction and LC/MS/MS Detection;** Kheng B. Lim<sup>1</sup>; Daniel B. Kassel<sup>1</sup>; <sup>1</sup>*Takeda San Diego, Inc., San Diego, CA*
- MP 375 **Improved Extraction for the Quantitation of Plasma Total F2-Isoprostanes;** Alan W. Taylor; Maret G. Traber; *Oregon State University, Corvallis, OR*

### CHIRAL ANALYSIS BY MS, 376 - 380

- MP 376 **Determination of Metoprolol Enantiomers in Human Plasma by Liquid Chromatography with Tandem Mass Spectrometry Using Cellobiohydrolase Chiral Stationary Phase;** Xi Chen; Hongliang Jiang; Xiang-yu Jiang; *Covance Laboratories Inc., Madison, WI*
- MP 377 **A Chiral LC-MS/MS Method for the Separation and Quantitation of Lorcaserin and Its S-Enantiomer;** Michael Ma; WeiChao Chen; Yong Q. Tang; *Arena Pharmaceuticals, San Diego, CA*
- MP 378 **Use of Normal Phase Chromatography to Enhance LC/MS/MS Separation of Fluvastatin Stereoisomers;** Nicolas Jean; Chantal Gravel; Sylvain Lachance; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- MP 379 **Chiral LC-MS/MS Analysis with Polysaccharide Based Stationary Phases Using Novel Mobile Phases in RP Elution Mode for Stereoisomeric Pharmaceutical Compounds;** Liming Peng; Tivadar Farkas; Swapna Jayapalan; *Phenomenex, Inc., Torrance, CA*
- MP 380 **Charge-State-Dependent Enantioselective Discrimination of Leucine Enantiomers by Antimony(III)-D/L-Tartrate Elucidated by ESI-MS, Computational Modeling and 1H-NMR.;** Aruna B. Wijeratne<sup>1</sup>; Jose Gracia<sup>2</sup>; Daniel W. Armstrong<sup>1</sup>; Kevin A. Schug<sup>1</sup>; <sup>1</sup>*University of Texas at Arlington, Arlington, TX*; <sup>2</sup>*Schuit Inst. of Catalysis, Eindhoven University, Eindhoven, Netherlands*

### IMMUNOLOGY, 381 - 396

- MP 381 **Detection of Signal Peptides Presented by HLA-A\*0201 in TAP Competent Cells using Nanospray MS3 on a Linear Ion Trap;** Bruce B. Reinhold<sup>1</sup>; Song Ye<sup>2</sup>; Ellis Reinherz<sup>1</sup>; <sup>1</sup>*Dana Farber Cancer Institute, Boston, MA*; <sup>2</sup>*Applied Biosystems, Framingham, MA*
- MP 382 **Evaluating the Antigenicity of Cancer Therapeutic Immunotoxins Using MS-Based Epitope Mapping;** James G. Smedley, III<sup>1</sup>; Johanna Hansen<sup>2</sup>; Masanori Onda<sup>2</sup>; Ira Pastan<sup>2</sup>; Kenneth B. Tomer<sup>1</sup>; <sup>1</sup>*NIEHS, Research Triangle Park, NC*; <sup>2</sup>*NCI, Bethesda, MD*
- MP 383 **The Effect of Interferon-gamma on the Proteome and the MHC-Peptidome of Human Carcinoma Cells;** Elena Milner<sup>1</sup>; Eilon Barnea<sup>1</sup>; Ilan Beer<sup>2</sup>; Arie Admon<sup>1</sup>; <sup>1</sup>*Technion - Israel Institute of Tech, Haifa, Israel*; <sup>2</sup>*IBM Research Laboratory, Haifa, Israel*
- MP 384 **Identification of Novel MHC Class I Presented Epitopes in Lung Cancer by Mass Spectrometry;** Punit Shah; Vivekananda Shetty; Thamby Gomathinayagam; Zacharie Nickens; Ramilla Philip; *Immunotope, Inc., Doylestown, PA*
- MP 385 **MS Analysis of the MHC II Peptide Repertoire of Cell-Based Cancer Vaccines in the Presence or Absence of Invariant Chain.;** Olesya Chornoguz; Alexei Gapeev; Suzanne Ostrand-Rosenberg; *UMBC, Baltimore, MD*
- MP 386 **Utilizing Secreted MHC Molecules (sHLA) to Investigate the Phospho-Immuno-Peptidome of Breast Cancer;** Andrew Norris<sup>1</sup>; A. Michelle English<sup>1</sup>; Jie Qian<sup>1</sup>; Oriana E. Hawkins<sup>2</sup>; Victor H. Engelhard<sup>1</sup>; Jeffrey Shabanowitz<sup>1</sup>; William Hildebrand<sup>2</sup>; Donald F.

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- | <p>Hunt<sup>1</sup>; <sup>1</sup>University of Virginia, Charlottesville, VA; <sup>2</sup>University of Oklahoma, Oklahoma City, OK</p> <p>MP 387 <b>Quantitative Proteomic Analysis Using SILAC Reveals Compartment-Specific Interactions of T-Cell Specific Ligand (TULA/STS-2);</b> <u>Therese Collingwood</u><sup>1,2</sup>; Alexander Tsygankov<sup>1</sup>; Roland S. Annan<sup>1,2</sup>; <sup>1</sup>Temple University School of Medicine, Phila, PA; <sup>2</sup>GlaxoSmithKline, King of Prussia, PA</p> <p>MP 388 <b>Profiling of Real-Time and Dynamic Changes of MyD88 Interactions for Mediating Innate Immune Response by Using iTRAQ and SILAC;</b> <u>Sun Yong Jeong</u>; Yanbao Yu; Xian Chen; <i>University of North Carolina, Chapel Hill, NC</i></p> <p>MP 389 <b>Organelle Membrane Proteomics Reveals New Insights on Phagosome Maturation Mediated by Mycobacterial Lipoglycans;</b> <u>Wenqing Shui</u><sup>2</sup>; Chris Petzold<sup>1</sup>; Alyssa Redding<sup>1</sup>; Austin Pitcher<sup>2</sup>; Leslie Sheu<sup>3</sup>; Tsung-yen Hsieh<sup>3</sup>; Jay D. Keasling<sup>1,4</sup>; Carolyn R. Bertozzi<sup>2,3</sup>; <sup>1</sup>Lawrence Berkeley National Lab, Berkeley, CA; <sup>2</sup>Department of Chemistry, UC Berkeley, Berkeley, CA; <sup>3</sup>Department of Molecular &amp; Cell Biology, UC Berkeley, Berkeley, CA; <sup>4</sup>Department of Chemical Engineering, UC Berkeley, Berkeley, CA</p> <p>MP 390 <b>Quantitative Phosphoproteomics: Deciphering the Essential Role of Gab2 in Mast Cell Signaling;</b> <u>Lulu Cao</u><sup>1</sup>; Kebing Yu<sup>1</sup>; Vinh Nguyen<sup>2</sup>; Arthur Salomon<sup>2</sup>; <sup>1</sup>Brown University Chemistry Department, Providence, RI; <sup>2</sup>Brown University MCB Department, Providence, RI</p> <p>MP 391 <b>The Use of Mass Spectrometry in Immunoassay Development for Nonclinical and Clinical Studies;</b> <u>Ola M. Saad</u>; Jakub Baudys; Keyang Xu; Luna Liu; Cecilia Leddy; Surinder Kaur; <i>Genentech, Inc., South San Francisco, CA</i></p> <p>MP 392 <b>Multiplex Analysis of Food Allergens Using Immunoprecipitation and Mass Spectrometry;</b> <u>Kevin J. Shefcheck</u><sup>1</sup>; Jinxi Li<sup>2</sup>; Catherine Fenselau<sup>2</sup>; John H. Callahan<sup>1</sup>; Steve Musser<sup>1</sup>; <sup>1</sup>FDA/CFSSAN, College Park, MD; <sup>2</sup>University of Maryland, College Park, MD</p> <p>MP 393 <b>High Throughput Bioinformatic and Proteomic Platform to Identify Viral Virulence Genes and Their Cellular Targets;</b> Refugio Martinez; <i>VLST Corporation, Seattle, WA</i></p> <p>MP 394 <b>Antibody-Antigen Binding Affinity Measurement Using HD Exchange and Dilution Strategy;</b> <u>Tingting Tu</u><sup>1</sup>; Don L. Rempel<sup>1</sup>; Alina Petre<sup>2</sup>; Michael Przybylski<sup>2</sup>; Michael L. Gross<sup>1</sup>; <sup>1</sup>Washington University in St. Louis, Saint Louis, MO; <sup>2</sup>University of Konstanz, Konstanz, Germany</p> <p>MP 395 <b>A Temporal Analysis of the Bovine Innate Immune Response: The Identification and Characterization of Antimicrobial Peptides by Mass Spectrometry;</b> <u>Jeffrey A. DeGrasse</u><sup>1</sup>; Jamie L. Boehmer<sup>2</sup>; Kevin J. Shefcheck<sup>1</sup>; Jeffrey L. Ward<sup>2</sup>; John H. Callahan<sup>1</sup>; <sup>1</sup>FDA/CFSSAN, College Park, MD; <sup>2</sup>FDA/CVM, Laurel, MD</p> <p>MP 396 <b>Relative Quantification of Differentially Expressed Proteins in Bovine Milk during Coliform Mastitis Using Spectral Count Data;</b> <u>Jamie L. Boehmer</u><sup>1</sup>; Jeffrey L. Ward<sup>1</sup>; Douglas D. Bannerman<sup>2</sup>; Kevin J. Shefcheck<sup>3</sup>; Melinda A. Mcfarland<sup>3</sup>; John H. Callahan<sup>3</sup>; <sup>1</sup>FDA Center for Veterinary Medicine, Laurel, MD; <sup>2</sup>Department of Veterans Affairs, Washington, DC; <sup>3</sup>FDA/CFSSAN, College Park, MD</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; padding: 5px;">DRUG METABOLISM: QUANTITATION, 397 - 426</th> </tr> <tr> <td style="width: 15%; vertical-align: top; padding: 5px;">MP 397</td> <td style="padding: 5px;"><b>Evaluation of QTOF Technology for the Quantitation of Drugs in Plasma;</b> <u>Julie Marr</u><sup>1</sup>; Walter Korfmacher<sup>2</sup>; Fangbiao Li<sup>2</sup>; Yunsheng Hsieh<sup>2</sup>; Bob Walker<sup>1</sup>; Jim Lau<sup>1</sup>; <sup>1</sup>Agilent Technologies, Mississauga, Canada; <sup>2</sup>Schering-Plough, Kenilworth, NJ</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 398</td> <td style="padding: 5px;"><b>Quantitation of Analytes with a QTOF Versus a QQQ Instrument. How Big is the Penalty for Qualitative Information?;</b> <u>Sian L Avery</u>; Angela Hayes; Frederique Urban; Florence I. Raynaud; <i>The Institute of Cancer Research, Sutton, UK</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 399</td> <td style="padding: 5px;"><b>The Potential for High Resolution Mass Analyzers for Quantification in Pharmaceutical Bioanalysis;</b> <u>Panos Hatsis</u>; Wilmin P. Bartolini; Robert Busby; <i>Ironwood Pharmaceuticals, Cambridge, MA</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 400</td> <td style="padding: 5px;"><b>Screening and Semi-Quantitative Analysis for Pharmaceutical Drug Metabolites in Urine Samples;</b> <u>Yoshifumi Kogure</u>; Masahiro Maeda; Yoshiyuki Ishii; <i>Agilent Technologies, Hachioji, Japan</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 401</td> <td style="padding: 5px;"><b>Development of a Quantitative Chiral HPLC/MS Method to Investigate Secondary Alcohol Epimerization Process Using LC/ Ion Trap FT-MS;</b> <u>Hong Cai</u>; Chiuwa Emily Luk; Xiang-Yang Ye; Jun Dai; Bogdan Slecza; Angela K. Goodenough; Jonathan L. Josephs; <i>Bristol-Myers Squibb, Pennington, NJ</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 402</td> <td style="padding: 5px;"><b>Super-Critical Fluid Chromatography (SFC) with Tandem Mass Spectrometry (MS/MS) to Evaluate the Disposition of Individual Stereo-Isomers of Drugs;</b> Qing Ping Han; Xu Zhang; David P. Budac; Mark J. Hayward; <u>Silke Miller</u>; <i>Lundbeck Research USA, Paramus, NJ</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 403</td> <td style="padding: 5px;"><b>Determination of Resveratrol and its Metabolites in Rat Fetus and Pup Tissues by UPLC-MS/MS;</b> <u>Melanie A. Rehder Silinski</u><sup>1</sup>; Franz K. Thomas<sup>1</sup>; James C. Blake<sup>1</sup>; Reshan E. Fernando<sup>1</sup>; Richard Daw<sup>1</sup>; Timothy R. Fennell<sup>1</sup>; Brian F. Thomas<sup>1</sup>; Bradley J. Collins<sup>2</sup>; <sup>1</sup>RTI International, Research Triangle Park, NC; <sup>2</sup>NIEHS/National Toxicology Program, Research Triangle Park, NC</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 404</td> <td style="padding: 5px;"><b>Withdrawn</b></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 405</td> <td style="padding: 5px;"><b>Determination of Clozapine and its Two Metabolites in Rat Plasma and Brain Tissue Using Ultra-Performance Liquid Chromatography/Tandem Mass Spectrometry;</b> <u>Feng Liang</u><sup>1</sup>; Alvin V. Terry<sup>2</sup>; Michael G. Bartlett<sup>1</sup>; <sup>1</sup>University of Georgia, Athens, GA; <sup>2</sup>Medical College of Georgia, Augusta, GA</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 406</td> <td style="padding: 5px;"><b>Metabolic Stability Study Using Cassette Analysis and Polarity Switching in an Ultra High Performance Liquid Chromatography (UHPLC)-Triple Quadrupole System;</b> <u>Anabel Fandino</u><sup>1</sup>; Edgar Naegele<sup>1</sup>; Stephan Buckenmaier<sup>2</sup>; Bernd Glatz<sup>1</sup>; <sup>1</sup>Agilent Technologies, Santa Clara, CA; <sup>2</sup>Agilent, Waldbronn, Germany</td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 407</td> <td style="padding: 5px;"><b>Quantitative Open Access LC-MS/MS Using QuickQuan and QuickCalc Software.;</b> <u>John G. Swales</u>; Gary Wilkinson; <i>Astrazeneca, Macclesfield, UK</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 408</td> <td style="padding: 5px;"><b>Rapid Method Development and Evaluation for Bioanalysis in Drug Discovery;</b> <u>Hongying Gao</u>; Max Tella; Brian Rago; Steven Hansel; Christopher Holliman; <i>Pfizer Inc, Groton, CT</i></td> </tr> <tr> <td style="vertical-align: top; padding: 5px;">MP 409</td> <td style="padding: 5px;"><b>LDTD-MS/MS Analysis of Eicosanoids and Other Mediators of Inflammation;</b> Pierre Picard<sup>3</sup>; Serge Picard<sup>2</sup>; Nicolas Flamand<sup>4</sup>; Katherine Boulay<sup>2</sup>; <u>E. Real Paquin</u><sup>1</sup>; Pierre Borgeat<sup>2</sup>; <sup>1</sup>Universite Laval, Quebec,</td> </tr> </table> | DRUG METABOLISM: QUANTITATION, 397 - 426 |  | MP 397 | <b>Evaluation of QTOF Technology for the Quantitation of Drugs in Plasma;</b> <u>Julie Marr</u> <sup>1</sup> ; Walter Korfmacher <sup>2</sup> ; Fangbiao Li <sup>2</sup> ; Yunsheng Hsieh <sup>2</sup> ; Bob Walker <sup>1</sup> ; Jim Lau <sup>1</sup> ; <sup>1</sup> Agilent Technologies, Mississauga, Canada; <sup>2</sup> Schering-Plough, Kenilworth, NJ | MP 398 | <b>Quantitation of Analytes with a QTOF Versus a QQQ Instrument. How Big is the Penalty for Qualitative Information?;</b> <u>Sian L Avery</u> ; Angela Hayes; Frederique Urban; Florence I. Raynaud; <i>The Institute of Cancer Research, Sutton, UK</i> | MP 399 | <b>The Potential for High Resolution Mass Analyzers for Quantification in Pharmaceutical Bioanalysis;</b> <u>Panos Hatsis</u> ; Wilmin P. Bartolini; Robert Busby; <i>Ironwood Pharmaceuticals, Cambridge, MA</i> | MP 400 | <b>Screening and Semi-Quantitative Analysis for Pharmaceutical Drug Metabolites in Urine Samples;</b> <u>Yoshifumi Kogure</u> ; Masahiro Maeda; Yoshiyuki Ishii; <i>Agilent Technologies, Hachioji, Japan</i> | MP 401 | <b>Development of a Quantitative Chiral HPLC/MS Method to Investigate Secondary Alcohol Epimerization Process Using LC/ Ion Trap FT-MS;</b> <u>Hong Cai</u> ; Chiuwa Emily Luk; Xiang-Yang Ye; Jun Dai; Bogdan Slecza; Angela K. Goodenough; Jonathan L. Josephs; <i>Bristol-Myers Squibb, Pennington, NJ</i> | MP 402 | <b>Super-Critical Fluid Chromatography (SFC) with Tandem Mass Spectrometry (MS/MS) to Evaluate the Disposition of Individual Stereo-Isomers of Drugs;</b> Qing Ping Han; Xu Zhang; David P. Budac; Mark J. Hayward; <u>Silke Miller</u> ; <i>Lundbeck Research USA, Paramus, NJ</i> | MP 403 | <b>Determination of Resveratrol and its Metabolites in Rat Fetus and Pup Tissues by UPLC-MS/MS;</b> <u>Melanie A. Rehder Silinski</u> <sup>1</sup> ; Franz K. Thomas <sup>1</sup> ; James C. Blake <sup>1</sup> ; Reshan E. Fernando <sup>1</sup> ; Richard Daw <sup>1</sup> ; Timothy R. Fennell <sup>1</sup> ; Brian F. Thomas <sup>1</sup> ; Bradley J. Collins <sup>2</sup> ; <sup>1</sup> RTI International, Research Triangle Park, NC; <sup>2</sup> NIEHS/National Toxicology Program, Research Triangle Park, NC | MP 404 | <b>Withdrawn</b> | MP 405 | <b>Determination of Clozapine and its Two Metabolites in Rat Plasma and Brain Tissue Using Ultra-Performance Liquid Chromatography/Tandem Mass Spectrometry;</b> <u>Feng Liang</u> <sup>1</sup> ; Alvin V. Terry <sup>2</sup> ; Michael G. Bartlett <sup>1</sup> ; <sup>1</sup> University of Georgia, Athens, GA; <sup>2</sup> Medical College of Georgia, Augusta, GA | MP 406 | <b>Metabolic Stability Study Using Cassette Analysis and Polarity Switching in an Ultra High Performance Liquid Chromatography (UHPLC)-Triple Quadrupole System;</b> <u>Anabel Fandino</u> <sup>1</sup> ; Edgar Naegele <sup>1</sup> ; Stephan Buckenmaier <sup>2</sup> ; Bernd Glatz <sup>1</sup> ; <sup>1</sup> Agilent Technologies, Santa Clara, CA; <sup>2</sup> Agilent, Waldbronn, Germany | MP 407 | <b>Quantitative Open Access LC-MS/MS Using QuickQuan and QuickCalc Software.;</b> <u>John G. Swales</u> ; Gary Wilkinson; <i>Astrazeneca, Macclesfield, UK</i> | MP 408 | <b>Rapid Method Development and Evaluation for Bioanalysis in Drug Discovery;</b> <u>Hongying Gao</u> ; Max Tella; Brian Rago; Steven Hansel; Christopher Holliman; <i>Pfizer Inc, Groton, CT</i> | MP 409 | <b>LDTD-MS/MS Analysis of Eicosanoids and Other Mediators of Inflammation;</b> Pierre Picard <sup>3</sup> ; Serge Picard <sup>2</sup> ; Nicolas Flamand <sup>4</sup> ; Katherine Boulay <sup>2</sup> ; <u>E. Real Paquin</u> <sup>1</sup> ; Pierre Borgeat <sup>2</sup> ; <sup>1</sup> Universite Laval, Quebec, |
|--|---|--|--|--------|--|--------|--|--------|---|--------|---|--------|---|--------|---|--------|--|--------|------------------|--------|---|--------|---|--------|--|--------|---|--------|--|
| DRUG METABOLISM: QUANTITATION, 397 - 426   |   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 397   | <b>Evaluation of QTOF Technology for the Quantitation of Drugs in Plasma;</b> <u>Julie Marr</u> <sup>1</sup> ; Walter Korfmacher <sup>2</sup> ; Fangbiao Li <sup>2</sup> ; Yunsheng Hsieh <sup>2</sup> ; Bob Walker <sup>1</sup> ; Jim Lau <sup>1</sup> ; <sup>1</sup> Agilent Technologies, Mississauga, Canada; <sup>2</sup> Schering-Plough, Kenilworth, NJ  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 398   | <b>Quantitation of Analytes with a QTOF Versus a QQQ Instrument. How Big is the Penalty for Qualitative Information?;</b> <u>Sian L Avery</u> ; Angela Hayes; Frederique Urban; Florence I. Raynaud; <i>The Institute of Cancer Research, Sutton, UK</i>  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 399   | <b>The Potential for High Resolution Mass Analyzers for Quantification in Pharmaceutical Bioanalysis;</b> <u>Panos Hatsis</u> ; Wilmin P. Bartolini; Robert Busby; <i>Ironwood Pharmaceuticals, Cambridge, MA</i>   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 400   | <b>Screening and Semi-Quantitative Analysis for Pharmaceutical Drug Metabolites in Urine Samples;</b> <u>Yoshifumi Kogure</u> ; Masahiro Maeda; Yoshiyuki Ishii; <i>Agilent Technologies, Hachioji, Japan</i>   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 401   | <b>Development of a Quantitative Chiral HPLC/MS Method to Investigate Secondary Alcohol Epimerization Process Using LC/ Ion Trap FT-MS;</b> <u>Hong Cai</u> ; Chiuwa Emily Luk; Xiang-Yang Ye; Jun Dai; Bogdan Slecza; Angela K. Goodenough; Jonathan L. Josephs; <i>Bristol-Myers Squibb, Pennington, NJ</i>   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 402   | <b>Super-Critical Fluid Chromatography (SFC) with Tandem Mass Spectrometry (MS/MS) to Evaluate the Disposition of Individual Stereo-Isomers of Drugs;</b> Qing Ping Han; Xu Zhang; David P. Budac; Mark J. Hayward; <u>Silke Miller</u> ; <i>Lundbeck Research USA, Paramus, NJ</i>   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 403   | <b>Determination of Resveratrol and its Metabolites in Rat Fetus and Pup Tissues by UPLC-MS/MS;</b> <u>Melanie A. Rehder Silinski</u> <sup>1</sup> ; Franz K. Thomas <sup>1</sup> ; James C. Blake <sup>1</sup> ; Reshan E. Fernando <sup>1</sup> ; Richard Daw <sup>1</sup> ; Timothy R. Fennell <sup>1</sup> ; Brian F. Thomas <sup>1</sup> ; Bradley J. Collins <sup>2</sup> ; <sup>1</sup> RTI International, Research Triangle Park, NC; <sup>2</sup> NIEHS/National Toxicology Program, Research Triangle Park, NC  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 404   | <b>Withdrawn</b>  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 405   | <b>Determination of Clozapine and its Two Metabolites in Rat Plasma and Brain Tissue Using Ultra-Performance Liquid Chromatography/Tandem Mass Spectrometry;</b> <u>Feng Liang</u> <sup>1</sup> ; Alvin V. Terry <sup>2</sup> ; Michael G. Bartlett <sup>1</sup> ; <sup>1</sup> University of Georgia, Athens, GA; <sup>2</sup> Medical College of Georgia, Augusta, GA   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 406   | <b>Metabolic Stability Study Using Cassette Analysis and Polarity Switching in an Ultra High Performance Liquid Chromatography (UHPLC)-Triple Quadrupole System;</b> <u>Anabel Fandino</u> <sup>1</sup> ; Edgar Naegele <sup>1</sup> ; Stephan Buckenmaier <sup>2</sup> ; Bernd Glatz <sup>1</sup> ; <sup>1</sup> Agilent Technologies, Santa Clara, CA; <sup>2</sup> Agilent, Waldbronn, Germany   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 407   | <b>Quantitative Open Access LC-MS/MS Using QuickQuan and QuickCalc Software.;</b> <u>John G. Swales</u> ; Gary Wilkinson; <i>Astrazeneca, Macclesfield, UK</i>  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 408   | <b>Rapid Method Development and Evaluation for Bioanalysis in Drug Discovery;</b> <u>Hongying Gao</u> ; Max Tella; Brian Rago; Steven Hansel; Christopher Holliman; <i>Pfizer Inc, Groton, CT</i>   |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |
| MP 409   | <b>LDTD-MS/MS Analysis of Eicosanoids and Other Mediators of Inflammation;</b> Pierre Picard <sup>3</sup> ; Serge Picard <sup>2</sup> ; Nicolas Flamand <sup>4</sup> ; Katherine Boulay <sup>2</sup> ; <u>E. Real Paquin</u> <sup>1</sup> ; Pierre Borgeat <sup>2</sup> ; <sup>1</sup> Universite Laval, Quebec,  |  |  |        |  |        |  |        |   |        |   |        |   |        |   |        |  |        |                  |        |   |        |   |        |  |        |   |        |  |

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Canada; <sup>2</sup>Centre de Recherche en Rhumatologie et Immunologie, Québec, Canada; <sup>3</sup>Phytronix Technologies, Inc., Québec, QC; <sup>4</sup>Centre de Recherche de l'hôpital Laval, Québec, Canada
- MP 410 **Determination of Acetylsalicylic Acid and Salicylic Acid in Human Plasma BY LC/MS/MS;** Hongkun Liang; Mojdeh Vahid; Yongdong Zhu; Jamie Zhao; Kristen Singleton; Preeta Bissessar; Yuan-Shek Chen; Kumar Ramu; *Quest Pharmaceutical Service, Newark, DE*
- MP 411 **Quantitation of Free Quercetin in Human Whole Blood by HPLC-MS/MS;** Yuwen Zhao; Lina Tang; Jamie Zhao; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 412 **Simultaneous Quantification of Paclitaxel and Metabolites in Human Plasma by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS);** Seul Oh; Hwa Suk Kim; Jun-hwa Shim; Hyang-Hee Yang; Won-Seok Nam; Seon-Jeong Kim; Seo Hyun Yoon; Kyung-Sang Yu; In-Jin Jang; *Seoul National University, Seoul, South Korea*
- MP 413 **Validation of a Method for the Determination of Lapatinib in Human Plasma by LC-MS/MS;** Robb Harman; Hongkun Liang; Yongdong Zhu; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 414 **Quantitative LC-MS/MS Determination of Melphalan in Human Plasma;** Jared Callan; Hongli Wang; Yuwen Zhao; Jamie Zhao; Yuan-Shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 415 **Determination of 6-Benzylthioinosine in Human and Mouse Plasma by LC-ESI-MS/MS;** Lan Li; *Cleveland State University, Cleveland, OH*
- MP 416 **Simultaneous Quantiation of Methotrexate and its Metabolite 7-Hydroxymethotrexate in Human Plasma by LC/MS/MS Combined with Solid Phase Extraction;** Xiaoping Ao; Jamie Zhao; Lina Tang; Hsun-Wen Chou; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 417 **Quantitative Determination Of Temozolomide In Human Plasma By LC/MS/MS;** Hongkun Liang; Bashir A. Mansoori; Crystal Nguyen; Robert Harman; Yongdong Zhu; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 418 **Determination of Moxifloxacin used as Positive Controls for QT Prolongation in Human Plasma by LC-MS/MS;** Lina Tang; Yuwen Zhao; Kristen Singleton; Jerry Cao; Jamie Zhao; Yongdong Zhu; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 419 **Quantification of Doxorubicinol with the Presence of Excessive Doxorubicin in Human Plasma by Column Switching and LC-MS/MS Techniques;** Moo-young Kim; Yansheng Liu; Ying Li; Sarah Swenson; Gene Ray; Dari Dadgar; *AAI Pharma, Shawnee, KS*
- MP 420 **Determination of Capsaicin and in Human Plasma by LC-MS/MS Following 96-Well Liquid-Liquid Extraction;** Changyu Quang; Xiaodong Zhu; Tom Addison; John Banach; Xiang-yu Jiang; Kevin Jones; *Covance Bioanalytical Servc, Madison, WI*
- MP 421 **Quantitative HPLC-ESI-MS/MS Analysis of bis-N7-Guanine Cross-Links in White Blood Cells of Cancer Patients Receiving Cyclophosphamide Therapy;** Bhaskar Malayappan; Natalia Tretyakova; *University of Minnesota, Minneapolis, MN*
- MP 422 **Optimization of On-Line Coupling of Weak Anion-Exchange and Ion-Pair HPLC Systems for Robust and Sensitive MS/MS Detection of Nucleotide Triphosphates;** Zsuzsanna Kuklennyik; Angela Holder; Ae S. Youngpairoj; Mian-er Cong; Qi Zheng; Gerardo Garcia-Lerma; Walid Heneine; James L. Pirkle; John R. Barr; *Centers for Disease Control and Prevention, Atlanta, GA*
- MP 423 **Determination of Ibandronate (a Complex Biophosphonate) in Human Plasma by LC/MS/MS;** Kristen Singleton; Jasper X. Chu; Jared Callan; Preeta Bissessar; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- MP 424 **On-Line Sample Enrichment, Cleanup, and Phospholipids Removal Using Protein Precipitation for Microdosing Bioanalysis;** Fumin Li; John Zulkoski; Wes Brown; Xiangyu Jiang; Tom Addison; Jacob Maguigad; Kevin Jones; *Covance Inc., Waunakee, WI*
- MP 425 **Effect of Storage and Freeze / Thaw Cycles on Plasma Enzyme Activity, Phospholipids and pH in EDTA Human Plasma;** Steven T. Wu<sup>1</sup>; Zheng Ouyang<sup>1</sup>; Mohammed Jemal<sup>1</sup>; *<sup>1</sup>Bristol-Myers Squibb, Princeton, NJ*
- MP 426 **Comparison of Three MS/MS Techniques for Monitoring Plasma Phospholipids and Effect of Mobile Phase Composition on Phospholipids Elution;** Yuan-qing Xia; Mohammed Jemal; *Bristol-Myers Squibb Company, Princeton, NJ*

### DRUG METABOLISM: HIGH THROUGHPUT, 427 - 453

- MP 427 **An Alternative Screening Strategy for Drug Discover Using Accurate Mass;** Mark Szewc; Josef Ruzicka; Mark Sanders; *Thermo Fisher Scientific, Somerset, NJ*
- MP 428 **Application of an LC-Orbitrap Approach to Complete Metabolite Identification in 2 Injections;** Austin Li<sup>2</sup>; Xiang-yu Jiang<sup>1</sup>; Jon Denissen<sup>1</sup>; *<sup>1</sup>Covance, Waunakee, WI; <sup>2</sup>Covance Laboratory, Inc., Sun Prairie, WI*
- MP 429 **Comparison of Three High-Throughput Methods for the Simultaneous Measurement of Metabolic Stability and Identification of Metabolites;** Alek N. Dooley; Alexandre Wang; Hua-fen Liu; Elliott Jones; Loren Olson; *Applied Biosystems, Foster City, CA*
- MP 430 **An Approach towards Rapid and Definitive Identification of N-Oxidised drug Metabolites Using Structurally Dependent Dissociation Pathways and Extracted Ion Chromatograms;** Stephen Holman<sup>1</sup>; Patricia Wright<sup>2</sup>; G. John Langley<sup>1</sup>; *<sup>1</sup>University of Southampton, Southampton, UK; <sup>2</sup>Pfizer Global Research and Development, Sandwich, UK*
- MP 431 **Live Single Cell Drug Metabolism of Tamoxifen Analyzed by Nano ESI Mass Spectrometry;** Sachiko Date; Hajime Mizuno; Naohiro Tsuyama; Takanori Harada; Tsutomu Masujima; *Hiroshima Univ. BioMed., Hiroshima-shi, Japan*
- MP 432 **Characterization of CVT-3619 Metabolites in Rat Urine and Bile after IV Administration;** Claire Bramwell-German; Nevena Mollova; Lakshmi Bajpai; Eve-Irene Lepist; Kwan Leung; *CV Therapeutics, Palo Alto, CA*
- MP 433 **Pooled-Stream LC/MS/MS: Technical Considerations for Processing Parallel LC Streams with ESI-MS/MS Detection;** John Janiszewski<sup>1</sup>; David Gale<sup>1</sup>; Heather Skor<sup>2</sup>; Sadayappan Rahavendran<sup>3</sup>; *<sup>1</sup>Pfizer Inc., Groton, CT; <sup>2</sup>Pfizer, Inc., San Diego, CA; <sup>3</sup>Pfizer Global R&D, San Diego, CA*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 434 **The Versatility of Parallel HPLC, Data Acquisition and Processing Workflows for Enhanced LC/MS/MS Throughput in Early Drug Discovery;** Veronica Zelesky; Richard Schneider; John Janiszewski; *Pfizer Inc., Groton, CT*
- MP 435 **Automation of Integrated LC-MS/MS Peak Quality Assurance and Analytical Run Quality Control;** Susan Crathern<sup>4</sup>; Kristin Geddes<sup>1</sup>; Lyle Burton<sup>2</sup>; Richard King<sup>3</sup>; <sup>1</sup>*Merck and Co, Inc, West Point, PA*; <sup>2</sup>*MDS Analytical Tech, Sciex, Concord, ON*; <sup>3</sup>*PharmaCadence Analytical, Quakertown, PA*; <sup>4</sup>*Merck and Co., West Point, PA*
- MP 436 **A High Throughput Screening Method for Determining Plasma Protein Binding Using a Six Sigma Approach.;** Matthew Zrada; Kenneth D. Anderson; Chris Kochansky; Ryan Norcross; *Merck and Co., Inc., West Point, PA*
- MP 437 **Application of the BioTrove RapidFire™ Ultra-Fast Online SPE-MS/MS System for Compound-Specific Analysis of *in-vitro* ADME Samples;** Anthony Paiva; Andrew Wagner; Xianmei Cai; Ying Li; Janet Kolb; John Herbst; Charlie Conway; Harold Weller; Wilson Shou; *Bristol-Myers Squibb, Wallingford, CT*
- MP 438 **Evaluation of Accurate Mass TOF-MS for use in High Throughput CYP450 Inhibition Screening;** William A. Lamar; Michelle V. Romm; Nikunj Parikh; Lauren E. Frick; Can "Jon" Ozbal; *BioTrove, Inc., Woburn, MA*
- MP 439 **A Database of Observed Molecular Weight Changes during Drug Metabolism;** Bill Fitch; Bo Wen; Ludmila Alexandrova; *Roche Palo Alto, Palo Alto, CA*
- MP 440 **Quantitative and Qualitative Analysis of Endogenous and Exogenous Metabolites Using Polarity Switching on a Hybrid Quadrupole Linear Ion Trap.;** Renee Huang; Loren Olson; *Applied Biosystems, San Jose, CA*
- MP 441 **Real Time Neutral Loss IDA Trigger on High Performance QqTOF System System and Associated Post-Acquisition Processing Tools;** J.C. Yves Leblanc<sup>1</sup>; Nic Bloomfield<sup>2</sup>; Eva Duchoslav<sup>1</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, On, Canada*; <sup>2</sup>*MDS Analytical Tech- Sciex, Concord, ON*
- MP 442 **High Throughput Identification of Irinotecan Metabolites in Tissue Homogenates Using MSn and a 10 Hz cycle Time Linear iIon Trap;** Maria C. Prieto Conaway<sup>1</sup>; Julie Horner<sup>1</sup>; Yingying Huang<sup>1</sup>; Shousong Cao<sup>2</sup>; Farukh Durrani<sup>2</sup>; Youcef Rustum<sup>2</sup>; Ping Wang<sup>2</sup>; Khin Marlar<sup>2</sup>; A. Latif Kazim<sup>2</sup>; Julian Phillips<sup>1</sup>; <sup>1</sup>*Thermo Fisher Scientific, San Jose, CA*; <sup>2</sup>*Roswell Park Cancer Institute, Buffalo, NY*
- MP 443 **Detection and Structure Characterization of GSH Adducts with One Injection Methodology;** Hua-fen Liu<sup>1</sup>; Yanling Yu<sup>2</sup>; Houfu Lui<sup>2</sup>; Yongming Xie<sup>1</sup>; Jiehui Hu<sup>1</sup>; Zong-ping Zhang<sup>2</sup>; <sup>1</sup>*Applied Biosystems, Foster City, CA*; <sup>2</sup>*GSK, Shanghai, China*
- MP 444 **Evaluating Short Dwell and Pause Times for Quantitation of Multiple Co-Eluting Analytes Utilizing Fast Chromatography;** Scott A. Cassidy; Anthony J. Romanelli; Loren Y. Olson; *Applied Biosystems, Framingham, MA*
- MP 445 **High Throughput Liquid Chromatography/Tandem Mass Spectrometry Method for Quantification of Isoflavones, Their Metabolites and Other Phytoestrogens;** Jeevan Prasain<sup>1</sup>; Ray Moore<sup>1</sup>; Alireza Arabshahi<sup>1</sup>; Gail Greendale<sup>2</sup>; Stephen Barnes<sup>1</sup>; <sup>1</sup>*University of Alabama at Birmingham, Birmingham, AL*; <sup>2</sup>*University of California, Los Angeles, CA*
- MP 446 **Balancing High Throughput and Mass Spectrometric Sensitivity with a New 2mm ID Silica-Monolith C18 Column;** Terrell J Mathews; *Phenomenex, Torrance, CA*
- MP 447 **High Sensitive and High Throughput Analysis of Diltiazem Metabolites Using LC/TOF-MS;** Naohiro Kuriyama<sup>1</sup>; Noriko Shoji<sup>1</sup>; Chie Yokoyama<sup>1</sup>; Jun Watanabe<sup>2</sup>; Haruo Hosoda<sup>2</sup>; Joji Seta<sup>2</sup>; Noriyuki Iwasaki<sup>2</sup>; <sup>1</sup>*YMC Co., Ltd., Komatsu, Japan*; <sup>2</sup>*Bruker Daltonics K. K., Yokohama, Japan*
- MP 448 **Performance Advantages Using Micro-LC Columns Packed with Sub-3 µm Particles in LC/MS/MS.;** David Neyer; Remco Van Soest; Steve Hobbs; *Eksigent Technologies, Dublin, CA*
- MP 449 **Streamlining High-Throughput Drug and Metabolite Method Development Using Thermal Gradient Focusing ESI;** Craig Love; Alex Mordehai; *Agilent Technologies, Santa Clara, CA*
- MP 450 **Rapid Screening of Opiate and Benzodiazepine Drugs in Biological Fluids Using Electrophoretic Fractionation and MALDI Linear Ion Trap Mass Spectrometry;** Lisa Manier<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>*Vanderbilt University, Nashville, TN*; <sup>2</sup>*Vanderbilt Univ Sch of Med, Nashville, TN*
- MP 451 **Improving the Success Rate Using of "Trap and Elute" Chromatography for High-Throughput LC/MS/MS Bioanalysis;** Hui Zhang; John Janiszewski; Richard Schneider; *Pfizer Inc., Groton, CT*
- MP 452 **Drug Metabolite Identification with UPLC-MS Assisted by High Resolution Reconstructed Radiochromatography;** Manfred Zell; Christophe Husser; *F. Hoffmann-La Roche Ltd, Basel, Switzerland*
- MP 453 **Withdrawn**

### PEPTIDES: QUANTITATION – METHODS, 454 - 477

- MP 454 **Identification and Relative Quantitation of peptides in Complex Un-Fractionated Serum Matrices Using MALDI LTQ Orbitrap XL;** Rosa Viner<sup>1</sup>; Iman Mohtashemi<sup>1</sup>; Elizabeth R. Remily<sup>2</sup>; John Koomen<sup>2</sup>; <sup>1</sup>*ThermoFisher Scientific, San Jose, CA*; <sup>2</sup>*H. Lee Moffitt Cancer Center, Tampa, FL*
- MP 455 **High Resolution and High Mass Accuracy LC-MS for Hecpidin Quantitation in Human Serum;** Hongyan Li<sup>1</sup>; Mark J Rose<sup>1</sup>; Bradley J. Hart<sup>2</sup>; Seema Sharma<sup>2</sup>; Christopher A James<sup>1</sup>; <sup>1</sup>*Amgen Inc, Thousand Oaks, CA*; <sup>2</sup>*Thermo Scientific, San Jose, CA*
- MP 456 **High Throughput Protein Quantitation Using Multiple Reaction Monitoring;** Ning Tang; Christine Miller; Keith Waddell; *Agilent Technologies, Santa Clara, CA*
- MP 457 **Quantification of Total Peptide Amount by an Optimized LC-UV Method for Assessing Sample Integrity during Proteome Sample Preparation;** Yanan Tang; Nan Wang; Lu Chen; Andy Lo; Liang Li; *University of Alberta, Edmonton, Canada*
- MP 458 **An New Gradient LC-MS/MS System Establishment Optimized for Polypeptide Quantification;** Ryoya Goda; Hiroshi Masumoto; Kenichi Sudo; Nobuhiro Kobayashi; Osamu Okazaki; *Daiichi Sankyo Co., Ltd., Shinagawa-ku, Tokyo, Japan*
- MP 459 **Improving Fragmentation Efficiency of TMT Labeled Peptides Using Stepped Higher Energy Collisional Dissociation;** Lihua Jiang; Terry Zhang;



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 460 Rosa Viner; Allen Zhang; Vlad Zabrouskov; Mark Sanders; *ThermoFisher Scientific, San Jose, CA*  
**Amino Acid Analysis of Peptides Using Isobaric-Tagged Isotope Dilution LC-MS/MS;** Adrian R Woolfitt<sup>1</sup>; Maria I Solano<sup>1</sup>; Tracie Williams<sup>2</sup>; James L Pirkle<sup>1</sup>; John R. Barr<sup>1</sup>; <sup>1</sup>*CDC, Atlanta, GA*; <sup>2</sup>*Centers for Disease Control and Prevention, Atlanta, GA*
- MP 461 **Withdrawn**
- MP 462 **Dial-In Precision of Peptide Ratio Determination Down to the Low Percent Range;** Johannes Graumann<sup>1</sup>; Juergen Cox<sup>1</sup>; Yong Zhang<sup>2</sup>; Matthias Mann<sup>1</sup>; <sup>1</sup>*Max-Planck-Institute of Biochemistry, Martinsried, Germany*; <sup>2</sup>*Beijing Institute of Genomics, Beijing, China*
- MP 463 **A Sensitive Method for Quantitating Peptides on a New Orbitrap Mass Spectrometer;** Jie Qian; Gene Ciccimaro; Mark Szcwec; *Thermo Scientific, Somerset, NJ*
- MP 464 **Development of a Novel Immunoaffinity Capture-Based LC-MS/MS Method for Quantitation of Adrenomedullin in Human Plasma;** Stone D.-h. Shi<sup>1</sup>; Hendrik Neubert<sup>2</sup>; Simon Bergqvist<sup>1</sup>; Ian T James<sup>2</sup>; Michael Greig<sup>1</sup>; Eugenia Kraynov<sup>1</sup>; <sup>1</sup>*Pfizer Global R&D- La Jolla, San Diego, CA*; <sup>2</sup>*Pfizer Corporation, Sandwich, Kent, UK*
- MP 465 **Bioanalysis of Peptides Using On-Line Two-Dimensional Liquid Chromatography;** Ang Liu<sup>2</sup>; Chad E Wujcik<sup>2</sup>; Joseph A Tweed<sup>1</sup>; <sup>1</sup>*Pfizer Inc., Groton, CT*; <sup>2</sup>*Univ. of Illinois at Chicago, Chicago, IL*; <sup>3</sup>*Monsanto, St. Louis, MO*
- MP 466 **HILIC Chromatography is a Superior Alternative to SCX/RP for Peptide Purification.;** Joseph Caruso; Paul Stemmer; *Wayne State University, Detroit, MI*
- MP 467 **Quantification of Ion Suppression on Peptides in Complex Mixtures by Electrospray Ionization Mass Spectrometry;** Vincent A. Fusaro; Susan E. Abbatiello; Jacob D. Jaffe; Karl R. Clauser; Steven A. Carr; *Broad Institute of MIT and Harvard, Cambridge, MA*
- MP 468 **Preparative Electrophoresis of Peptides and Small Molecules for Quantitative LC/MS/MS Analysis.;** Nghia Chiem; Jay Harkins; Peter Osucha; Chuck Witkowski; Jeremy L. Norris; *Protein Discovery, Inc., Knoxville, TN*
- MP 469 **Understanding Hydrophobicity and Limits of Detection for Biologically Relevant Peptides Using the ALiPHAT Method and Electrospray Ionization;** D. Keith Williams, Jr.; Ibrahim D. Bori; Pauline Ondachi; Daniel L. Comins; Jerry L. Whitten; David C. Muddiman; *North Carolina State Univ., Raleigh, NC*
- MP 470 **Development of an Air Amplifier Assisted Protein-Cleavage Isotope Dilution Mass Spectrometry Method for Prostate Specific Antigen in the Nano-Flow Regime;** R. Brent Dixon; D. Keith Williams, Jr.; Alex Sohn; Jack R. Edwards; Thomas A. Dow; David C. Muddiman; *North Carolina State Univ., Raleigh, NC*
- MP 471 **Rapid MRM Assay Development Strategies - Intelligent Software and Acquisition Strategies for Highest Productivity;** Sahana Mollah; Matthew Champion; Christie L Hunter; *Applied Biosystems, Foster City, CA*
- MP 472 **Mixed Mode LCMS Methods to Reduce Variability of Response in Highly Selective, Sensitive Bioanalyses for Peptide Therapeutics in Human Plasma;** Erin E. Chambers; *Waters Corporation, Milford, MA*
- MP 473 **Using Targeted Charge Separation to Improve Detection Limits in Therapeutic Peptide Quantitation;** J.c. Yves Leblanc<sup>1</sup>; Changtong Hao<sup>2</sup>; J. Larry Campbell<sup>3</sup>; K W Michael Siu<sup>2</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, On, Canada*; <sup>2</sup>*York University, Toronto, ON*; <sup>3</sup>*MDS Analytical Tech, Sciex, Concord, ON*
- MP 474 **Highly Sensitive Peptidomics Profiling of Native Plasma Samples by Efficient Tandem Mass Tag Labeling Avoiding Bias and Proteolytic Artifacts;** Hans-Dieter Zucht; Petra Budde; Christian Baumann; Sasa Koncarevic; Karsten Kuhn; Thorsten Prinz; Peter Schulz-Knappe; *Proteome Sciences, Frankfurt, Germany*
- MP 475 **Fundamental Studies on the Electrophoretic Enrichment of Peptides in Clinical Samples for Quantification Using nanoLC-MS/MS.;** Gary Valaskovic<sup>2</sup>; Mike S. Lee<sup>1</sup>; Chuck Witkowski<sup>3</sup>; Jeremy L. Norris<sup>3</sup>; <sup>1</sup>*Milestone Development Services, Newtown, PA*; <sup>2</sup>*New Objective, Inc., Woburn, MA*; <sup>3</sup>*Protein Discovery, Inc., Knoxville, TN*
- MP 476 **PQD Ion Trap MS Based Quantitation of Complex Cellular Extracts;** Maria Iuliana Lazar; Ina Hoeschele; Jenny Armenta; *Virginia Bioinformatics Institute, Blacksburg, VA*
- MP 477 **Robust and Automated Evaluation of MRM Signals in Quantitative Mass Spectrometry: Detecting Interferences in Peptide Quantitation;** D. R. Mani<sup>1</sup>; Susan E. Abbatiello<sup>2</sup>; Michael Burgess<sup>2</sup>; Hasmik Keshishian<sup>3</sup>; Eric Kuhn<sup>2</sup>; Steven A. Carr<sup>2</sup>; <sup>1</sup>*Broad Institute of MIT, Cambridge, MA*; <sup>2</sup>*Broad Institute, Cambridge, MA*; <sup>3</sup>*Broad Institute of MIT and Harvard, Cambridge, MA*

### CARBOHYDRATE / OLIGOSACCHARIDES, 478 - 499

- MP 478 **Correlation Between Glycan Biomarkers of Human Breast Cancer and a Mouse Model of Metastatic Breast Cancer;** Maria Lorna A. de Leoz<sup>1</sup>; Lawrence J. T. Young<sup>1</sup>; Hyun Joo An<sup>1</sup>; Scott R. Kronewitter<sup>1</sup>; Suzanne Miyamoto<sup>2</sup>; Helen K. Chew<sup>2</sup>; Alexander D. Borowsky<sup>1</sup>; Carlito B. Lebrilla<sup>1</sup>; <sup>1</sup>*University of California, Davis, CA*; <sup>2</sup>*UC Davis Cancer Center, Sacramento, CA*
- MP 479 **The *Caenorhabditis elegans* Bacterial Resistant *bus-2* Mutant Reveals a New Class of O-glycans and is Deficient in Core-I like O-glycans.;** Elizabeth Palaima<sup>1</sup>; Nancy Leymarie<sup>1</sup>; Jonathan Hodgkin<sup>2</sup>; John F Cipollo<sup>1</sup>; Catherine E. Costello<sup>1</sup>; <sup>1</sup>*Boston University School of Medicine, Boston, MA*; <sup>2</sup>*Univ. of Oxford, Oxford, UK*
- MP 480 **A Strategy for Glycomic Characterization of Mucins in Human Pancreatic Juice Using Supported Molecular Matrix Electrophoresis and MALDI-TOF MS;** Yu-ki Matsuno<sup>1</sup>; Weijie Dong<sup>1</sup>; Takuro Saito<sup>2</sup>; Mitsukazu Gotoh<sup>2</sup>; Hisashi Narimatsu<sup>1</sup>; Akihiko Kameyama<sup>1</sup>; <sup>1</sup>*Research Center for Medical Glycoscience, AIST, Tsukuba, Japan*; <sup>2</sup>*Fukushima Medical University, Fukushima, Japan*
- MP 481 **Profiling Reduced and Permethylated Glycans Derived from Human Blood Serum as Potential Cancer Biomarkers by Chip-Based Reversed-Phase Liquid Chromatography-Mass Spectrometry;** William R Alley; Yehia Mechref; Milos V Novotny; *Indiana University, Bloomington, IN*
- MP 482 **Monitoring  $\alpha$ 2-3- and  $\alpha$ 2-6-sialylation of Human Serum and Granulocyte Gangliosides by nano-HPLC/ESI-QTOF Mass Spectrometry;** Stephan



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Kirsch<sup>1</sup>; Jamal Souady<sup>1</sup>; Johannes Muthing<sup>2</sup>; Jasna Peter-Katalinic<sup>1</sup>; Laura Bindila<sup>1</sup>; <sup>1</sup>Institute of Medical Physics and Biophysics, Münster, Germany; <sup>2</sup>Institute of Hygiene, Münster, Germany
- MP 483 **Comparative Mapping of Drosophila Melanogaster Glycome in the Aging Process through Quantitative Permethylation and Stable-Isotope Labeling;** Zhiyu Li; David E. Clemmer; *Indiana Univ., Bloomington, IN*
- MP 484 **N-Glycome Analysis of Membrane Proteins from Intestinal Epithelial Cells;** Milady R. Niñonuevo; Khatareh Motamedchaboki; Caroline Nissan; Lars Bode; *Burnham Institute for Medical Research, La Jolla, CA*
- MP 485 **Quantitative Analysis of High Mannose and Sialylated Glycans as Markers for Cancer;** Hyun Joo An<sup>1</sup>; Maria Lorna De Leoz<sup>1</sup>; Scott Kronewitter<sup>1</sup>; Kyle S. Peacock<sup>1</sup>; Jaehan Kim<sup>1</sup>; Jay V. Solnick<sup>1</sup>; Suzanne Miyamoto<sup>2</sup>; Carlito B. Lebrilla<sup>1</sup>; <sup>1</sup>University of California, Davis, CA; <sup>2</sup>UC Davis Cancer Center, Sacramento, CA
- MP 486 **A Highly Sensitive Method for the Analysis of O-Linked Oligosaccharides;** John A. Goetz<sup>1,2</sup>; Milos V. Novotny<sup>1,2</sup>; Yehia Mechref<sup>1,2</sup>; <sup>1</sup>Indiana University Dept. of Chemistry, Bloomington, IN; <sup>2</sup>National Center for Glycomics and Glycoproteomics, Bloomington, IN
- MP 487 **Determination of Linkages of Oligosaccharides Using Closed-Ring 8-aminopyrene-1,3,6-trisulfonate Labeling/Negative Ion Trap Mass Spectrometry;** Sue-Ting Chen; Guor-Rong Her; *National Taiwan University, Taipei, Taiwan*
- MP 488 **Alterations in the Glycomics of Major and Minor Proteins Fractionated from the Serum of Hepatocellular Carcinoma Patients;** Pilsoo Kang<sup>1</sup>; Milan Madera<sup>1</sup>; William R Alley<sup>1</sup>; Radoslav Goldman<sup>2</sup>; Yehia Mechref<sup>1</sup>; Milos V Novotny<sup>1</sup>; <sup>1</sup>Indiana University, Bloomington, IN; <sup>2</sup>Georgetown Univ., Washington, DC
- MP 489 **The Effects of Various Ionizing Species on the Detection and Fragmentation of Oligosaccharides;** Scott Harrison<sup>1,2</sup>; Geoff A Lane<sup>1</sup>; Mary Blackburn<sup>3</sup>; Karl Fraser<sup>1</sup>; Silas Villas-Boas<sup>2</sup>; Susanne Rasmussen<sup>1</sup>; <sup>1</sup>AgResearch, Palmerston North, New Zealand; <sup>2</sup>Auckland University, Auckland, New Zealand; <sup>3</sup>Thermo Fisher Scientific, Beverly Hills, MI
- MP 490 **A Combination of Proteomic and Glycomic Characterization of Prostate-Specific Antigen Using Chip-Based MALDI-MS;** Yan Li<sup>1</sup>; Lori J. Sokoll<sup>1</sup>; Brian J. Field<sup>2</sup>; Daniel W. Chan<sup>1</sup>; Hui Zhang<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Shimadzu Scientific Instruments, Inc., Columbia, MD
- MP 491 **MALDI and ESI of Oligosaccharides and Their Glycopeptides Conjugates;** Yu-Ling Chang<sup>1</sup>; Sylvain Liao<sup>2</sup>; Wen-Bin Yang<sup>2</sup>; Yuan-Chuan Lee<sup>3</sup>; Chung-Hsuan Chen<sup>1,2</sup>; <sup>1</sup>Department of Chemistry, National Taiwan University, Taipei, Taiwan; <sup>2</sup>Genomics Research Center, Academia Sinica, Taipei, Taiwan; <sup>3</sup>Department of Biology, Johns Hopkins University, Baltimore, MD
- MP 492 **A Mass Spectrometry Based Glycomic Approach for Identification of Carbohydrate Dependant Virulence Factors Using Caenorhabditis Elegans as a Surrogate Host;** Md Mizanur Rahman<sup>1</sup>; Jonathan Hodgkin<sup>2</sup>; John F Cipollo<sup>1</sup>; <sup>1</sup>Food and Drug Administration/CBER, Bethesda, MMD; <sup>2</sup>University of Oxford, Oxford, UK
- MP 493 **Electron Detachment Dissociation of Chloride-Adducted Oligosaccharides;** James R. Kornacki; Julie Adamson; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- MP 494 **Isomer Characterization of N-Linked Glycans from Chicken Ovalbumin by Ion Trap MS;** Jenny Jiao; Hailong Zhang; Vernon N. Reinhold; *The Glycomics Center, University of New Hampshire, Durham, NH*
- MP 495 **Characterization of N-Linked Glycans on Glycophorins by Sequential Mass Spectrometry;** David Ashline<sup>1</sup>; Ewa Jaskiewicz<sup>2</sup>; Vernon N. Reinhold<sup>1</sup>; <sup>1</sup>University of New Hampshire, Lee, NH; <sup>2</sup>Ludwik Hirszfild Inst. of Imm. and Exp. Therapy, Wroclaw, Poland
- MP 496 **Hexose Rearrangements upon Fragmentation of N-Glycopeptides and Reductively Aminated N-Glycans;** Manfred Wuhler; André M. Deelder; *Leiden University Medical Center, Leiden, The Netherlands*
- MP 497 **Ion-Electron Reactions of Sialylated N-Linked Glycans Released from Glycoproteins;** Wen Zhou; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- MP 498 **Production and Fragmentation of Negative Ions from Neutral N-Linked Glycans Ionized by MALDI Mass Spectrometry for Rapid Structural Identification;** David J. Harvey<sup>1</sup>; Paula Domann<sup>2</sup>; Daniel Spencer<sup>2</sup>; Ian Edwards<sup>4</sup>; Rachel L. Martin<sup>4</sup>; <sup>1</sup>University of Oxford, Oxford, UK; <sup>2</sup>LGC Ltd., Teddington, UK; <sup>3</sup>Ludger Ltd, Abingdon, UK; <sup>4</sup>Shimadzu Biotech, Manchester, UK
- MP 499 **Characterization of Glycan Structures by Low and High Energy CID;** Steven L. Cohen; Steven H. Seeholzer; *The Children's Hospital of Philadelphia, Philadelphia, PA*

<b>PEPTIDES: GENERAL, 500 - 516</b>	
-------------------------------------	--

- MP 500 **Arginine Effect in Photodissociation of Charge Tagged Peptides;** Yi He; James P. Reilly; *Indiana University, Bloomington, IN*
- MP 501 **Hypochlorous Acid Modifies N-Terminal Disulfide-Bonded Cysteine: Identification of Reaction Pathway by LC-ESI-MS/MS;** Yi Wang<sup>1</sup>; Grady Blacken<sup>1</sup>; Xiaoyun Fu<sup>1,2</sup>; <sup>1</sup>Puget Sound Blood Center, Seattle, WA; <sup>2</sup>Department of Medicine, University of Washington, Seattle, WA
- MP 502 **Characterization of Methionine Oxidation in a Parathyroid Hormone Formulation Using LC/TOF MS and LC/MS/MS;** Charles Pan; Joseph Valente; Rosario LoBrutto; Jennifer Pickett; Micheal Motto; *Novartis, East Hanover, NJ*
- MP 503 **Analysis of Large Peptides by MALDI Using a Linear Quadrupole Ion Trap with Mass Range Extension;** Daniel P. Magparangan<sup>1</sup>; Timothy J. Garrett<sup>1</sup>; Dieter M. Drexler<sup>2</sup>; Richard A. Yost<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>Bristol-Myers Squibb, Wallingford, CT
- MP 504 **Optimized Condition to Capture Peptides (Bradykinin and Buccalin) for Efficient Fractionation of a Peptide/Protein Mixture;** Ven Ney Wong; Gary R. Kinsel; Daniel Dyer; *Southern Illinois University Carbondale, Carbondale, IL*
- MP 505 **Online Analysis of Metal-Binding Peptides Using an Ion-Selective Membrane Probe Coupled to ESI-MS TOF;** Juan Astorga-Wells<sup>1,2</sup>; Thomas White<sup>3</sup>; Craig M. Whitehouse<sup>3</sup>; Thorleif Lavold<sup>2</sup>; Hans Jörnvall<sup>1</sup>; <sup>1</sup>Karolinska Institutet, Stockholm, Sweden; <sup>2</sup>Biomotif AB, Danderyd, Sweden; <sup>3</sup>Analytica of Branford, Branford, CT

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- MP 506 **Selective Extraction and Fractionation of Peptides from Multi-Protein Digests Using Polymeric and Dendritic Reverse Micelles for MS Analysis;** Andrea Gomez-Escudero; Malar Azagarsamy; Sankaran Thayumanavan; Richard W. Vachet; *University of Massachusetts, Amherst, MA*
- MP 507 **Structural Elucidation of Isocyanate-Peptide Adducts Using Tandem Mass Spectrometry;** Justin M. Hettick; Tinashe B. Ruwona; Paul D. Siegel; *NIOSH, Morgantown, WV*
- MP 508 **Intrinsic Gas Phase Reactivity Trends of a, b and y Peptide Ions: Effects of Size and Shape;** Patricia Verardi Abdelnur<sup>1</sup>; Livia S Eberlin<sup>2</sup>; Marcos N Eberlin<sup>3</sup>; <sup>1</sup>*ThoMson-Unicamp, Campinas, Brazil*; <sup>2</sup>*Purdue University, West Lafayette, IN*; <sup>3</sup>*ThoMson Lab UNICAMP, Campinas, Sp, Brazil*
- MP 509 **Protein/Peptide Labeling Using Novel Acid-Cleavable “Fluorous” Affinity Tags;** Jiang Qian<sup>1,2</sup>; Richard B. Cole<sup>2</sup>; Yang Cai<sup>1,2</sup>; <sup>1</sup>*The Research Institute for Children, New Orleans, New Orleans, LA*; <sup>2</sup>*Department of Chemistry, University of New Orleans, New Orleans, LA*
- MP 510 **Optimization of On-Target Performic Acid Oxidation Method for MALDI Deposited Samples;** Brad J. Williams; William K. Russell; David H. Russell; *Texas A&M University, College Station, TX*
- MP 511 **Conjugation of Glutathione with Oxidized Ascorbate: Structural Analysis of an Adduct and its Detection in Cells;** J. Richard Wagner; Peggy Regulus; Jean-Francois Desilets; Klaus Klarskov; *Université de Sherbrooke, Sherbrooke, Canada*
- MP 512 **Mass Spectrometry Study of the Oxidative Modifications in Glycated Insulin;** Sofia Guedes; Rui Vitorino; Francisco Amado; Pedro Domingues; *University of Aveiro, Aveiro, Portugal*
- MP 513 **Mass Spectrometric Study of the Truncation of Stromal Cell-Derived Factor-1 (SDF-1) by Proteolytic Enzymes in Patients with Myeloproliferative Diseases;** Sool Yeon Cho<sup>1</sup>; Mingjiang Xu<sup>1</sup>; Pratibha Singh<sup>2</sup>; Jonathan Hoggatt<sup>2</sup>; Louis M. Pelus<sup>2</sup>; Ronald Hoffman<sup>1</sup>; John Roboz<sup>1</sup>; <sup>1</sup>*Mount Sinai School of Medicine, New York, NY*; <sup>2</sup>*Indiana University College of Medicine, Indianapolis, IN*
- MP 514 **Substitution of Acetone for Acetonitrile in the LC/MS Analysis of Peptides by Positive ESI;** David D. Weis; *University of Kansas, Lawrence, KS*
- MP 515 **Stopped-Flow Biochemical Kinetics Analyzed by Hadamard Transform Time-of-Flight Mass Spectrometry;** Matthew Robbins; Griffin Barbula; Richard Zare; *Stanford University, Stanford, CA*
- MP 516 **Permethylated Peptides on Chromatographic Media;** James Farmer; Heinz Nika; Fa-yun Che; Louis Weiss; Ruth Hogue Angeletti; *Einstein College of Medicine, Bronx, NY*
- REACTIVE METABOLITES, 517 - 535**
- MP 517 **High Throughput Screening GSH Adducts Using Hybrid Linear Ion Trap Systems Coupling with Fast Chromatography at Clinically Relevant Dose Concentration;** Elliott Jones<sup>1</sup>; Claire Bramwell-German<sup>1</sup>; Hesham Ghobarah<sup>2</sup>; Hua-fen Liu<sup>1</sup>; <sup>1</sup>*Applied Biosystems, Foster City, CA*; <sup>2</sup>*Applied Biosystems / MDS Sciex, Concord, ON*
- MP 518 **An Analytical Strategy to Study *in vivo* Metabolism of Fipexide Using QqQLIT and QqTOF Capabilities;** David Tonoli<sup>1</sup>; Emmanuel Varesio<sup>1</sup>; Hans H. Maurer<sup>2</sup>; Gerard Hopfgartner<sup>1</sup>; <sup>1</sup>*University of Geneva, Geneva, Switzerland*; <sup>2</sup>*University of Saarland, Homburg, Germany*
- MP 519 **MP Mediated Amine-Activation of Reduced Nimesulide : Identification of Metabolites by LC-MS;** Min Yang; Mahendra Chordia; Fengping Li; Timothy L Macdonald; *University of Virginia, Charlottesville, VA*
- MP 520 **Improved Detection of Reactive Drug Metabolites with Bromine-Containing Glutathione Analog Using Mass Defect and Isotope Pattern Matching;** André LeBlanc; Tze Chieh Shiao; René Roy; Lekha Sleno; *UQAM, Montreal, Canada*
- MP 521 **Inexpensive Stable Isotope Labelling Approaches Combined with Mass Spectrometry to Screen and Characterize Reactive Drug Metabolites;** Klaus Klarskov; Daniel Defoy; Witold Neugebauer; Ibrahim Hasibu; *University de Sherbrooke, Sherbrooke, Canada*
- MP 522 **Generation and Identification of Reactive Metabolites Using On-Line Liquid Chromatography/ Electrochemistry/Mass Spectrometry;** Sandra Jahn; Anne Baumann; Wiebke Lohmann; Björn Meermann; Uwe Karst; *University of Münster, Münster, Germany*
- MP 523 **Advantages in Utilizing Smaller Thiols to Trap Reactive Intermediates and Elucidate the Site(s) of Adduct Formation;** Wing W Lam; *Johnson and Johnson Pharmaceutical Research and De, Raritan, NJ*
- MP 524 **Withdrawn**
- MP 525 **Trapping and Detecting Reactive Cyanide Intermediates without Toxic KCN Addition Using UPLC/QToF MSE;** Don Laudicina; Liping Jin; Ajay Madan; Kayvon Jalali; *Neurocrine Biosciences, San Diego, CA*
- MP 526 **Monitoring the Biodistribution and Bioactivity of Anticancer Drugs by MRM-ESI Mass Spectrometry;** Qiyu Qiu; Anne-Laure Larroque; Marcos DiFalco; Line Roy; Bertrand J. Jean-Claude; Bernard F. Gibbs; *McGill University, Montreal, Canada*
- MP 527 **Elucidation of a Novel Bioactivation Pathway of 3,4-Unsubstituted Isoxazole by Mass Spectrometry;** Jian Yu; Maria Ribadeneira; *Astrazenaca, Wilmington, DE*
- MP 528 **The Alternate Metabolism of Abacavir and its Role in Immune-Mediated Hypersensitivity Reactions in HIV Infected Individuals;** Jeremy Netto<sup>1,3</sup>; Niamh Keane<sup>2,3</sup>; Ian Mullaney<sup>3</sup>; David Nolan<sup>2,3</sup>; Simon Mallal<sup>2,3</sup>; Robert Trengove<sup>1,3</sup>; <sup>1</sup>*Separation Science and Metabolomics Laboratory, Perth, Australia*; <sup>2</sup>*Royal Perth Hospital, Perth, Australia*; <sup>3</sup>*Murdoch University, Perth, Australia*
- MP 529 **Reactive Metabolite Trapping and Metabolite Identification Using Multiple Reagents and Specific Survey Scans on a Rapid Scanning Linear Ion Trap;** James A. Ferguson<sup>1</sup>; Stanley Rosenberg<sup>1</sup>; Jenny Moshin<sup>1</sup>; LaHoma Easterwood<sup>2</sup>; Sai Y. Chang<sup>3</sup>; <sup>1</sup>*Applied Biosystems, Framingham, MA*; <sup>2</sup>*CellzDirect, Austin, TX*; <sup>3</sup>*MSMS Science LLC, Sedona, AZ*
- MP 530 **Analysis of Glutathione and Cysteinylglycine Conjugates of (+/-)-anti-7,8-dihydroxy-9,10-epoxy-7,8,9,10-tetrahydro-B[a]P by Liquid Chromatography/ Tandem Mass Spectrometry;** Dipti Mangal<sup>1,2</sup>; Clementina Mesaros<sup>1,2</sup>; Trevor M. Penning<sup>1,2</sup>; Ian A. Blair<sup>1,2</sup>; <sup>1</sup>*center For Cancer Pharmacolo, Philadelphia, PA*; <sup>2</sup>*Centers of Excellence in Environmental Toxicology, Philadelphia, PA*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 531 **Synthesis, Characterization and Identification of Cysteinyl Adduct of 15-Oxo Eicosatetraenoic Acid in Smoker's Urine;** Jasbir S Arora; Ian A. Blair; University of Pennsylvania, Philadelphia, PA
- MP 532 **A Novel Differential Analysis Algorithm for Low/High Resolution LC/MS Data: Applied to the Detection of Drug Metabolites and GSH-trapped Adducts;** Marco Ruijken; MsMetrix, Maarssen, Netherlands
- MP 533 **Profiling of Glutathione Conjugates of Electrophilic Metabolites in Plant Responses to Stress Using LC/TOF and Multiplexed CID;** Xiaoli Gao; Abraham J. K. Koo; Jiangyin Bao; Gregg A. Howe; A. Daniel Jones; Michigan State University, East Lansing, MI
- MP 534 **Novel AccQ•Tag UPLC/MS Method for High-Throughput Analysis of Amino Acids and Glutathione in Normal and HME-Transformed Human Mammary Epithelial Cell;** Diego F. Cortes<sup>1</sup>; Jenny M. Armenta<sup>1</sup>; Suzy Terty<sup>2</sup>; Steven Akman<sup>2</sup>; Vladimir Shulaev<sup>1</sup>; <sup>1</sup>Virginia Bioinformatics Institute, Blacksburg, VA; <sup>2</sup>Wake Forest University, Winston-Salem, NC
- MP 535 **Metabolism and Export of Lipid Peroxidation Products as Assayed in Human Monocytic THP-1 Cells Using Electrospray LC-MS/MS;** Brandi L. Langsdorf; Cristobal Miranda; Heather Kuiper; Ralph Reed; Fred Stevens; Oregon State Univ., Corvallis, OR
- IN VITRO METABOLITE IDENTIFICATION, 536 - 548**
- MP 536 **Application of UV Photodissociation on a QqTOF Enabling Generation and Recording of Unique Fragment Ions on LC Time Scale.;** J.c. Yves Leblanc<sup>1</sup>; Changtong Hao<sup>2</sup>; Chris Lock<sup>1</sup>; Alexandre Loboda<sup>1</sup>; Min J. Yang<sup>1</sup>; K W Michael Siu<sup>2</sup>; Bruce Thomson<sup>1</sup>; <sup>1</sup>MDS Analytical Technologies, Concord, On, Canada; <sup>2</sup>York University, Toronto, ON
- MP 537 **An in vitro Investigation of the Reduction Potential of a Benzothioephene Sulfoxide Metabolite in Liver Microsomes, Cytosol, and Hepatocytes;** Robert M. Iannucci; Carlo Sensenhauser; Shannon Dallas; Waqas Alam; Anthony Streeter; Kao Mark; Jose Silva; Hengkeang Lim; Johnson and Johnson PRD, Raritan, NJ
- MP 538 **Formula Determination and Relative Quantitation from Overlapping Ion Signals;** Yongdong Wang; Ming Gu; Cerno Bioscience, Danbury, CT
- MP 539 **Proteomic Investigation of Microbial Transformation of a Roxarsone, a Chicken Feed Additive.;** Partha Basu<sup>1</sup>; Vadiraja Bhat<sup>2</sup>; Peter Chovanec<sup>1</sup>; Stolz John<sup>1</sup>; <sup>1</sup>Duquesne University, Pittsburgh, PA; <sup>2</sup>Agilent Technologies, Wilmington, DE
- MP 540 **Statistical Differentiation of Xenobiotic Metabolism between Fresh and Cryo-Preserved Hepatocytes Using LC-MS-MS/MS Data from Fast Efficient Tandem Hybrid Instrumentation;** Johnie Brown<sup>1</sup>; Jeffrey Miller<sup>1</sup>; James A. Ferguson<sup>1</sup>; James Hill<sup>2</sup>; <sup>1</sup>Applied Biosystems, Framingham, MA; <sup>2</sup>CellzDirect, Austin, TX
- MP 541 **Metabolism of N $\omega$ -Methylserotonin, a Serotonergic Constituent from Black Cohosh, in Human Liver Microsomes and Intestinal Caco-2 cells;** Dejan Nikolic; Soyoun Ahn; Jinghu Li; Richard B. van Breemen; University of Illinois College of Pharmacy, Chicago, IL
- MP 542 **Investigation of Lycopene Metabolism and Degradation Products by LC-MS-MS and Stable Isotope Labeling;** Jeff Dahl<sup>1</sup>; Richard B. Van Breemen<sup>2</sup>; <sup>1</sup>Jeff Dahl, Chicago, IL; <sup>2</sup>University of Illinois, Chicago, IL
- MP 543 **Characterization of in vitro Metabolites of Troleandomycin, a Metabolism-Dependent Inhibitor of CYP3A4, by UPLC&trade; QTOF Mass Spectrometry;** Joanna Barbara; Phyllis Yerino; David Buckley; Mark Horrigan; Paul Toren; Andrew Parkinson; Xenotech, Lenexa, KS
- MP 544 **Combining Electrochemistry with LC/MS - EC/LC/MS a Powerful Analytical Technique;** Jean-pierre Chervet<sup>1</sup>; Martin Eysberg<sup>1</sup>; Uwe Karst<sup>2</sup>; <sup>1</sup>Antec Leyden BV, Zoeterwoude, Netherlands; <sup>2</sup>University of Münster, Münster, Germany
- MP 545 **Ultra-Trace Metabolite Identification Using UPLC/FTMS Combined With Chip-Based Nano-LC Separations.;** Jesse L. Balcer; Jeffrey R. Gilbert; David G. Mccaskill; Gerrit J. Deboer; Brian M. Wendelberg; Dow AgroSciences, Indianapolis, IN
- MP 546 **Characterization of the P450-Isozyme(s) Responsible For the Formation of 5-OH-CP-448,187 and N-oxide-CP-448,187 in Human Liver Microsomes by HPLC/ESI/MS/MS;** Amin M. Kamel<sup>1</sup>; Wendy Wang<sup>1</sup>; Kevin Colizza<sup>2</sup>; <sup>1</sup>Pfizer, Inc., Groton, CT; <sup>2</sup>Pfizer, Groton, CT
- MP 547 **Identification of in vitro Metabolites of the Potent 5-HT1D Receptor Antagonist CP-448,187 by Using HPLC/RAM/ESI/MS/MS;** Kevin Colizza<sup>2</sup>; Wendy Wang<sup>1</sup>; Amin M. Kamel<sup>1</sup>; <sup>1</sup>Pfizer, Inc., Groton, CT; <sup>2</sup>Pfizer, Groton, CT
- MP 548 **Characterization of in vivo Metabolites of the Potent 5-HT1D Receptor Antagonist, CP-448,187 in Mouse by HPLC/RAM/ESI/MS/MS;** Wendy Wang<sup>1</sup>; Kevin Colizza<sup>2</sup>; Amin M. Kamel<sup>1</sup>; <sup>1</sup>Pfizer, Inc., Groton, CT; <sup>2</sup>Pfizer, Groton, CT
- AGRICULTURE, 549 - 564**
- MP 549 **The Detection of Veterinary Residues in Meat Using LC/MS/MS Analysis.;** Stephen J. Lock<sup>1</sup>; Donna Potts<sup>1</sup>; Francisco Mocholi<sup>2</sup>; <sup>1</sup>Applied Biosystems, Warrington, UK; <sup>2</sup>SAILab, Barcelona, Spain
- MP 550 **Screening of Agrochemicals in Foodstuffs and Water Using Low Temperature Plasma (LTP) Ambient Mass Spectrometry;** Joshua S Wiley<sup>1</sup>; Juan F Garcia-Reyes<sup>1,2</sup>; Jason Harper<sup>1</sup>; Nicholas Charipar<sup>1</sup>; Zheng Ouyang<sup>1</sup>; R. Graham Cooks<sup>1</sup>; <sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>University of Jaen, Jaen, Spain
- MP 551 **High-Performance Liquid Chromatography Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry of Citrus Extracts: Characterization and Comparisons;** Mark R Crosswhite; Florida State University, Tallahassee, FL
- MP 552 **MALDI-TOF/TOF Analysis of Sugar Beet Pectin-Protein Complex;** Alberto Nuñez; Marshall L. Fishman; Laurie Fortis; Hoa K. Chau; USDA-ARS-ERRC, Wyndmoor, PA
- MP 553 **A MALDI Gel Imaging Approach to Improve 2DE Spatial Representation of Highly Homologous Wool Keratin Proteins;** Dr. Santanu Deb-choudhury; S. Clerens; J. E. Plowman; K. Y. Yong; C. D. Cornillion; A. J. Hancock; H. Koehn; A. Thomas; J. M. Dyer; AgResearch Limited, Christchurch, New Zealand
- MP 554 **Mass Spectrometry Identification of Plant Host Proteins that Interact with Secreted Bean Rust Pathogen Proteins;** Ruiqiang Chen<sup>1,2</sup>; Mark L. Tucker<sup>1</sup>;

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Caren Chang<sup>2</sup>; Bret Cooper<sup>1</sup>; <sup>1</sup>USDA-ARS, Beltsville, MD; <sup>2</sup>CBMG, Univ. of Maryland, College Park, MD
- MP 555 **Determination of Coccidiostats in Feed and Animal Produce by LC-MS; Pavel Metalnikov**; Olga Nasyrova; Boris Krapivkin; Alexander Komarov; Alexander Panin; *The All-Russia State Centre for Quality and Standards, Moscow, Russian Federation*
- MP 556 **Solid Phase Extraction Combined with Liquid Chromatography–Mass Spectrometry for Pharmacokinetics Study of Enrofloxacin and Metabolites in Fish.; Wei-Hsun Wang<sup>1</sup>**; Tzung-Jie Yang<sup>1</sup>; Chi-Chung Chou<sup>1</sup>; Shao-Kuang Chang<sup>2</sup>; Maw-Rong Lee<sup>1</sup>; <sup>1</sup>National Chung Hsing University, Taichung, Taiwan; <sup>2</sup>National Taiwan University, Taipei, Taiwan
- MP 557 **Rapid Trace Analysis of Chloramphenicol in Honey Using Molecularly Imprinted Polymer(MIP) LDTD-APCI-MS/MS; Grégory Blachon<sup>1</sup>**; Pierre Picard<sup>2</sup>; E. Real Paquin<sup>1</sup>; <sup>1</sup>Université Laval, Québec, Canada; <sup>2</sup>Phytronix Technologies, Inc., Quebec, QC
- MP 558 **Using Solid Phase Micro Extraction with Direct Analysis in Real Time Mass Spectrometry to Monitor Fruit Ripening; A. John Dane**; Robert B. Cody; *JEOL USA, Inc., Peabody, MA*
- MP 559 **LC/MS/MS Analysis of Aflatoxins from Peanut Butter Using a Novel Two-Stage SPE Clean-Up Process; Sky Countryman**; *Phenomenex, Torrance, CA*
- MP 560 **Comparing GC/MS/MS to GC/MS Methods for the Analysis of Pesticide Residues in Fruits and Vegetables; Philip L. Wylie**; Chin-kai Meng; *Agilent Technologies, Wilmington, DE*
- MP 561 **HPLC-MS Analysis of Pheromone Glucoconjugates in Oral Secretions of Male Anastrepha Fruit Flies; Scott Niemann<sup>1</sup>**; Spencer S. Walse<sup>2</sup>; <sup>1</sup>CSS Analytical Company, Inc., Shawnee, KS; <sup>2</sup>United States Department of Agriculture-Agriculture, Parlier, CA
- MP 562 **In Vino Veritas – Simultaneous LC/MS/MS Analysis of Quality Determining Compounds in Wine without Sample Preparation; Stefanie Wirtz<sup>1</sup>**; Volker Heideger<sup>1</sup>; Juergen Wendt<sup>2</sup>; <sup>1</sup>Institut Heideger, Kesten, Germany; <sup>2</sup>Agilent Technologies, Waldbronn, Germany
- MP 563 **Fast Analysis of Fonicamid and Its Metabolites in Agricultural Foods by RPLC-MS/MS; Andre Szczesniowski<sup>1</sup>**; Elizabeth Culbert<sup>2</sup>; Richard Barry<sup>1</sup>; Vince Herbert<sup>2</sup>; Matt Hengel<sup>3</sup>; <sup>1</sup>Agilent Technologies, Santa Clara, CA; <sup>2</sup>Washington State University-Tri-Cities, Richland, WA; <sup>3</sup>University of California at Davis, Davis, CA
- MP 564 **Simultaneous Analysis of 14 Mycotoxins, and 150 Pesticides in Crude Extracts of Grains by LC/MS/MS; Juergen Kunze<sup>2</sup>**; Andrea Voller<sup>2</sup>; Hermann Schmalstieg<sup>2</sup>; Ingrid Bujara<sup>2</sup>; Kristin Von Czapiewski<sup>1</sup>; Birgit Schlutt<sup>1</sup>; Andre Schreiber<sup>3</sup>; <sup>1</sup>Applied Biosystems part of Life Technologies, Darmstadt, Germany; <sup>2</sup>SGS, Hamburg, Germany; <sup>3</sup>Applied Biosystems, Concord, ON
- MP 565 **Three Dimensional MALDI Plates Employing Collimated-Hole Structures used to Coupling High Capacity, High Flow Separations to MALDI-TOF MS.; Stephen J. Hattan**; Marvin Vestal; *Virgin Instruments Corporation, Sudbury, MA*
- MP 566 **Is Liquid UV-MALDI a Real Alternative to Solid State UV-MALDI? Mark W Towers**; Kieran Rollin; Ali Tiss; Rainer Cramer; *University of Reading, Reading, UK*
- MP 567 **High Sensitivity  $\alpha$ -cyano-4-Chlorocinnamic Acid Liquid Matrices for UV-MALDI MS; Mark W Towers**; Rainer Cramer; *The University of Reading, Reading, UK*
- MP 568 **Concentration and in-situ Detection of Peptides Using MALDI Ionic Liquid Matrices; Siao-huei Yang**; Cing-Hong Cai; Yen-Peng Ho; *National Dong Hwa University, Hualien, Taiwan*
- MP 569 **High Versatility and Quantitative Capability at Femtomol Level of the Liquid Matrix 3-Aminoquinoline/CHCA in MALDI Mass Spectrometry; Yuko Fukuyama**; Kaoru Kaneshiro; Kenichi Taniguchi; Sadanori Sekiya; Shinichi Iwamoto; Koichi Tanaka; *Shimadzu Corporation, Kyoto, Japan*
- MP 570 **Alternative CHCA-Based Matrices for the Low Molecular Weight Compounds Analysis by UV-MALDI-MS; Tiffany Porta**; Chantal Grivet; Emmanuel Varesio; Gerard Hopfgartner; *School of Pharmaceutical Sciences, Geneva, Switzerland*
- MP 571 **New 3D MALDI Plates Composed of Layered, Photo-Etched, Stainless Steel, Sheets.; Joe Fitzpatrick**; Stephen J. Hattan; Kevin Hayden; Marvin Vestal; *Virgin Instruments Corporation, Sudbury, MA*
- MP 572 **LC-NALDI: Using Matrix-Free Nanostructured Targets for Peptide Fractionation and Analysis; Sergei Dikler**; Paul Kowalski; *Bruker Daltonics Inc., Billerica, MA*
- MP 573 **Nanoparticle-Induced Fragmentation for Structure Determination of Carbohydrates by MALDI-TOF MS; Rofe-Amor Obena<sup>2</sup>**; Mei-chun Tseng<sup>1</sup>; Ying-Wei Lu<sup>3</sup>; Po-Chiao Lin<sup>3</sup>; Chun-Cheng Lin<sup>3</sup>; Yu-Ju Chen<sup>1</sup>; <sup>1</sup>Institute of Chemistry, Academia Sinica, Taipei, Taiwan; <sup>2</sup>University of the Philippines-Diliman, Quezon City, Philippines; <sup>3</sup>National Tsing Hua University, Hsinchu, Taiwan
- MP 574 **Inhibitor Encapsulated Nanoparticles for Rapid Fucosidase Identification and Binding-Eptioepes Mapping; Han-Tsung Huang<sup>2</sup>**; Mei-Chun Tseng<sup>2</sup>; Wei Hsu<sup>1,2</sup>; Po-Chiao Lin<sup>2</sup>; Ching-Wen Ho<sup>4</sup>; Chun-Cheng Lin<sup>3</sup>; Chun-Hung Lin<sup>4</sup>; Yu-Ju Chen<sup>2</sup>; <sup>1</sup>Department of Chemistry, NCU, Taoyuan, Taiwan; <sup>2</sup>Institute of Chemistry, Academia Sinica, Taipei, Taiwan; <sup>3</sup>Institute of Chemistry, NTHU, Hsinchu, Taiwan; <sup>4</sup>IBC, Academia Sinica, Taipei, Taiwan
- MP 575 **Study of Surface-Assisted Laser Desorption/Ionization Mass Spectrometry using Metal Sulfide Particles as a Matrix; Akemi Ryoda**; Tsuyoshi Yoshioka; Shuji Kagawa; *Mitsubishi Chemical Group, Science & Technology, Yokohama, Japan*
- MP 576 **Electric Field Enhanced MALDI Sample Preparation via Induction Based Fluidics; Drew Sauter**; *Nanoliter, LLC, Henderson, NV*
- MP 577 **The Design and Preparation of an Adequate Sample Cell Suitable for Solvent-free Multi-Sample MALDI Analysis.; John Sami Maarouf**; Alexandru Cernat; Calvin A. Austin; Sarah Trimpin; *Wayne State University, Detroit, MI*
- MP 578 **Solvent-Free MALDI Analysis Avoids Sample Loss and in vitro Oxidation of Peptides and Lipids; Ellen D. Inutan**; Thushani N. Herath; Sarah Trimpin; *Wayne State University, Detroit, MI*

### MALDI SAMPLE PREPARATION, 565 - 583

- MP 565 **Three Dimensional MALDI Plates Employing Collimated-Hole Structures used to Coupling High Capacity, High Flow Separations to MALDI-TOF MS.; Stephen J. Hattan**; Marvin Vestal; *Virgin Instruments Corporation, Sudbury, MA*
- MP 566 **Is Liquid UV-MALDI a Real Alternative to Solid State UV-MALDI? Mark W Towers**; Kieran Rollin; Ali

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 579 **Optimization of a Modified Aerospray Deposition Device for the Preparation of Samples for Quantitative Analysis by MALDI TOFMS;** April Holcomb; Kevin G. Owens; *Drexel University, Philadelphia, PA*
- MP 580 **On-Line Nano Aerosol Sample Deposition for MALDI Mass Spectrometry;** Yuqian Gao; Murray V. Johnston; *University of Delaware, Newark, DE*
- MP 581 **An Improved Calibrant System for MALDI-TOF MS Characterization of Peptides, Proteins, and Synthetic Polymers;** Scott M. Grayson; *Tulane University, New Orleans, LA*
- MP 582 **Reverse Thin Layer Method for Enhanced Ion Yields of Oligosaccharides in Matrix-Assisted Laser Desorption/Ionization;** Takashi Nishikaze; Junko Amano; *The Noguchi Institute, Itabashi, JAPAN*
- MP 583 **Investigating MALDI Signal Enhancement of Peptides after Selective Extraction by Polymeric Reverse Micelles;** Nadnudda Rodthongkum; Yangbin Chen; Sankaran Thayumanavan; Richard Vachet; *University of Massachusetts, Amherst, MA*
- MALDI TANDEM MS, 584 - 593**
- MP 584 **MALDI-MSn Quantitation by Selective Isolation of Analyte and Internal Standard Ions Using a Multi-Notch SWIFT Waveform;** Richard F. Reich; Kyle N. Cromwell; Richard A. Yost; *University of Florida, Gainesville, FL*
- MP 585 **Tandem Mass Spectrometry and High Resolution/Accurate Mass Analysis of Metal-Cluster Ions of Pigments from Painted Works of Art;** Michael P. Napolitano<sup>1</sup>; Ping-Chung Kuo<sup>2</sup>; Julie Arslanoglu<sup>3</sup>; Richard A. Yost<sup>1</sup>; <sup>1</sup>*University of Florida, Gainesville, FL*; <sup>2</sup>*National Formosa University, Yunlin, Taiwan*; <sup>3</sup>*The Metropolitan Museum of Art, New York, NY*
- MP 586 **MALDI-DITMS/MS for High Mass, High Sensitivity and High Resolution Measurement;** Koichi Tanaka; Sadanori Sekiya; Shinichi Iwamoto; *Shimadzu Corporation, Kyoto, Japan*
- MP 587 **The Solvent-Matrix Effect of Lipidomics Using an array Plate for MALDI-QIT-TOF-MS;** Evelyn H. Kim<sup>1</sup>; Yangsun Kim<sup>2</sup>; David M. Lubman<sup>1</sup>; <sup>1</sup>*University of Michigan, Ann Arbor, MI*; <sup>2</sup>*Hudson Surface Technology, Newark, NJ*
- MP 588 **LC-MALDI with an Ion Trap - Orbitrap Hybrid Instrumentation: Decoupled Method Setup;** Kerstin Strupat<sup>1</sup>; Huy Bui<sup>2</sup>; Rosa Viner<sup>2</sup>; Justin Blethrow<sup>2</sup>; Yue Xuan<sup>1</sup>; Viatcheslav V. Kovtoun<sup>2</sup>; George Stafford<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific (Bremen) GmbH, Bremen, Germany*; <sup>2</sup>*Thermo Fisher Scientific, San Jose, CA*
- MP 589 **Studying Multiple Cupperated Peptides Using MALDI-TOF Mass Spectrometry;** Zhaoxiang Wu; David H. Russell; *Texas A&M University, College Station, TX*
- MP 590 **Laser Desorption/Tandem Mass Spectrometry of Doubly Cationized, Singly Charged Ions Found in Painted Works of Art;** Ping-Chung Kuo<sup>1</sup>; Michael P. Napolitano<sup>2</sup>; Vivian E. Cornélio<sup>3</sup>; Julie Arslanoglu<sup>4</sup>; Richard A. Yost<sup>2</sup>; <sup>1</sup>*National Formosa University, Yunlin, Taiwan*; <sup>2</sup>*University of Florida, Gainesville, FL*; <sup>3</sup>*Federal University of São Carlos, São Carlos, SP Brazil*; <sup>4</sup>*The Metropolitan Museum of Art, New York, NY*
- MP 591 **Screening for Microbial Protein Over-Expression in Complex Matrix, Using MALDI-LTQ-Orbitrap;** Thomas Moehring<sup>1</sup>; Kerstin Strupat<sup>1</sup>; Michiel Akeroyd<sup>2</sup>; Rob van der Hoeven<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific, Bremen, Germany*; <sup>2</sup>*DSM Food Specialties B.V., Delft, The Netherlands*
- MP 592 **Investigation into the Relationship between Proton Affinity and Small Drug-Like Molecule MALDI-QqQ Response;** Kristin Geddes<sup>1</sup>; Debra McLoughlin<sup>1</sup>; Richard King<sup>2</sup>; Emily Adarayan<sup>1</sup>; <sup>1</sup>*Merck and Co, Inc, West Point, PA*; <sup>2</sup>*PharmaCadence Analytical, Quakertown, PA*
- MP 593 **Balancing the MRM Transition of Small Molecules, Substrate/Product Conversion for Enhances Label-Free Enzyme Inhibitor Screening;** Rakesh Rathore<sup>1</sup>; Jay Corr<sup>2</sup>; Kenneth D. Greis<sup>1</sup>; <sup>1</sup>*University of Cincinnati, Cincinnati, OH*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*
- PROTEOMICS: CLINICAL APPLICATIONS, 594 - 621**
- MP 594 **Hemoglobin Analysis Using an LTQ-Orbitrap Top-Down Platform;** Roger Theberge; Weiwei Tong; Giuseppe Infusini; Mark E. McComb; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*
- MP 595 **Deciphering Human Cardiac Troponin Modifications for Understanding and Diagnosis of Heart Failure: A Top-Down Mass Spectrometry-Based Disease Proteomics Approach;** Jiang Zhang<sup>1</sup>; Moltu Guy<sup>1</sup>; Qingge Xu<sup>1</sup>; M Shahriar Salamat<sup>1</sup>; Ken H. Young<sup>1</sup>; Jeffery W. Walker<sup>1,2</sup>; Ying Ge<sup>1</sup>; <sup>1</sup>*University of Wisconsin-Madison, Madison, WI*; <sup>2</sup>*University of Arizona, Tucson, AZ*
- MP 596 **Top-Down Protein Identification in Sera from Colorectal Cancer Patients Using 15 Tesla FTICR-MS;** Simone Nicolardi<sup>1</sup>; Yuri E.M. Van Der Burgt<sup>1</sup>; Hans Dalebout<sup>1</sup>; Wilma E. Mesker<sup>1</sup>; Marco R. Bladergroen<sup>1</sup>; Remco Swart<sup>2</sup>; Jens Fuchser<sup>3</sup>; Magnus Palmblad<sup>1</sup>; Rob A. Tollenaar<sup>1</sup>; André M. Deelder<sup>1</sup>; <sup>1</sup>*Leiden University Medical Ce, Leiden, Netherlands*; <sup>2</sup>*Dionex, Amsterdam, the Netherlands*; <sup>3</sup>*Bruker Daltonik GmbH, Bremen, Germany*
- MP 597 **Mass Spectrometric Approaches to the Identification and Characterization of the Target Proteins of (R)-Lacosamide Drug;** Onrapak Reamtong<sup>1</sup>; Steven W. Cotten<sup>2</sup>; Pierre Morieux<sup>2</sup>; Ki Duk Park<sup>2</sup>; Rihe Liu<sup>2</sup>; Harold Kohn<sup>2</sup>; Claire Evers<sup>1</sup>; Simon J. Gaskell<sup>1</sup>; <sup>1</sup>*University of Manchester, Manchester, UK*; <sup>2</sup>*UNC Eshelman, Chapel Hill, NC*
- MP 598 **A Widely Applicable Methodology for Quantitative Analysis of Therapeutic Proteins in Human Plasma;** Jean-Marie Schmitter<sup>1</sup>; Fabien Xuereb<sup>1</sup>; Stephane Chaignepain<sup>1</sup>; Frederic Godde<sup>1</sup>; Dominique Breilh<sup>1</sup>; Marie-Claude Saux<sup>1</sup>; Christof Lenz<sup>2</sup>; Matthias Glueckmann<sup>2</sup>; <sup>1</sup>*University of Bordeaux, Bordeaux, France*; <sup>2</sup>*Applied Biosystems, Darmstadt, Germany*
- MP 599 **Large-Scale Identification and Quantification of Differentially Expressed Proteins Responding to Cisplatin Treatment in A2780 & A2780CIS Ovarian Cancer Cells;** Steve Nguyen; Michael Lund Nielsen; Chanchal Kumar; Matthias Mann; *Max Planck Institute for Biochemistry, D Martinsried, Germany*
- MP 600 **Proteome Analysis of Superior Temporal Gyrus in Schizophrenics and Non-Human Primates Treated with Anti-Psychotics Demonstrate Disease and Drug Specific Changes;** Nilesh Tannu<sup>1</sup>; Shixin Sun<sup>2</sup>; Richard Pintal<sup>2</sup>; Steven E Arnold<sup>2</sup>; Scott E. Hemby<sup>1</sup>; <sup>1</sup>*Wake Forest University School of Medicine, Winston Salem,*

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 601 NC; <sup>2</sup>Applied Biosystems, Framingham, MA; <sup>3</sup>University of Pennsylvania School of Medicine, Philadelphia, PA  
**Using Stable Isotopes and Tandem MS to Study the Metabolism of CNS-Derived Apolipoprotein E Isoforms;** Kristin R Wildsmith; Wendy C Sigurdson; Randall J Bateman; *Washington Univ., St. Louis, MO*
- MP 602 **iTRAQ 8plex Analysis of a Membrane Enriched Sub-Proteome from Post-Mortem Brain in Schizophrenia and Control Subjects.;** Jane A English<sup>1</sup>; Bruno Manadas<sup>2</sup>; David R Cotter<sup>3</sup>; Michael J Dunn<sup>1</sup>; <sup>1</sup>UCD Conway Institute, University College Dublin, Dublin, Ireland; <sup>2</sup>Center for Neuroscience and Cell Biology, Cantanhede, Portugal; <sup>3</sup>Royal College of Surgeons, Dublin, Ireland
- MP 603 **Characterization of Proteins in Cerebrospinal Fluid of Patients with HIV-Associated Neurocognitive Disorder using iTRAQ and Mass Spectrometry;** Dawn Chen<sup>1</sup>; Caroline F Anderson<sup>1</sup>; Robert J. Cotter<sup>2</sup>; Ned Sacktor<sup>1</sup>; Justin McArthur<sup>1</sup>; Avindra Nath<sup>1</sup>; <sup>1</sup>Department of Neurology, Johns Hopkins University, Baltimore, MD; <sup>2</sup>Middle Atlantic MS Laboratory, Baltimore, MD
- MP 604 **Proteomic Alterations in Response to *in vitro* Treatment with Velcade, Doxorubicin, and Dexamethasone in Multiple Myeloma Using 8-plex iTRAQ;** Dominik Dytfeld<sup>2</sup>; Madhu Prasad<sup>2</sup>; Vadiraja B. Bhat<sup>3</sup>; Rong Zhao<sup>2</sup>; Alexey I. Nesvizhskii<sup>2</sup>; Andrzej J. Jakubowiak<sup>2</sup>; Arun Sreekumar<sup>1</sup>; <sup>1</sup>Medical College of Georgia, Augusta, GA; <sup>2</sup>University of Michigan, Ann Arbor, MI; <sup>3</sup>Agilent Technologies, Wilmington, DE
- MP 605 **Relative Serum Protein Quantification Based upon ICPL and 2D-LC-MS Identifies Potential Frailty Biomarkers in Elderly Patients;** Andrei Turtoi; Gabriel Mazzucchelli; Rowan L. Dobson; Edwin De Pauw; *University of Liege, Liege, Belgium*
- MP 606 **Unambiguous Detection and Quantitation of Full-length Thioredoxin (TRX) and Truncated Thioredoxin (TRX80) in Complex Samples by MALDI;** Susan C Follstaedt<sup>1</sup>; David R Graham<sup>1</sup>; Keling Dong<sup>2</sup>; Marjorie S Minkoff<sup>2</sup>; M. Christine Zink<sup>1</sup>; Christie L Hunter<sup>2</sup>; <sup>1</sup>Johns Hopkins, Baltimore, MD; <sup>2</sup>Applied Biosystems, Foster City, CA
- MP 607 **Development of an srm-based apolipoprotein Panel Assay;** Amol Prakash<sup>3</sup>; Mingming Ning<sup>3</sup>; Taha Rezaei<sup>4</sup>; Bryan Krastins<sup>1</sup>; David Sarracino<sup>4</sup>; Michael Athanas<sup>5</sup>; Mary F Lopez<sup>1</sup>; <sup>1</sup>ThermoFisher, Cambridge, MA; <sup>2</sup>Massachusetts General Hospital, Harvard, Boston, MA; <sup>3</sup>ThermoFisher Scientific, Cambridge, MA; <sup>4</sup>Thermo Fisher Scientific, San Jose, CA; <sup>5</sup>VAST Scientific, Wayland, MA
- MP 608 **Development of Quantitative Mass Spectrometry Assays for Cellular Pathways: Elucidating Drug Resistance in Multiple Myeloma;** Yun Xiang; Lori Hazlehurst; John Koomen; *H. Lee Moffitt Cancer Center, Tampa, FL*
- MP 609 **Proteomic Workflow for Discovery of Serum Carrier Protein-Bound Biomarker Candidates of Alcohol Abuse Using Liquid Chromatography - Tandem Mass Spectrometry;** Heather N. Ringham; Xianyin Lai; David W. Crabb; Suthat Liangpunsakul; Frank Witzmann; *Indiana University School of Medicine, Indianapolis, IN*
- MP 610 **Rapid Proteomics Approach for the Identification of Peptide Hydrazide Adducts by Atmospheric Pressure MALDI MS/MS;** Seshu Gudlavalleti<sup>1,1</sup>; Sudha Chennasamudram<sup>2</sup>; Jane Razumovskaya<sup>1,1</sup>; Appavu Sundaram<sup>1,1</sup>; Vladimir M. Doroshenko<sup>1,1</sup>; <sup>1</sup>Science and Engineering Serv, Columbia, MD; <sup>2</sup>Center for Biologics Evaluation and Research (FDA), Bethesda, MD
- MP 611 **Interest of a MALDI-FTICR Mass Spectrometry Approach for Identification of Protein Targets involved in Photodynamic Therapy;** David Da Silva<sup>1</sup>; Thierry Wasselin<sup>2</sup>; Benoît Maunit<sup>1</sup>; Vincent Carre<sup>1</sup>; Lina Bezdetsnaya<sup>3</sup>; Jean Francois Muller<sup>1</sup>; <sup>1</sup>LSMCL Université Paul Verlaine, Metz, France; <sup>2</sup>LSMBO, Strasbourg, France; <sup>3</sup>CRAN-CAV, Nancy, France
- MP 612 **Sample Preparation and Instrumental Protocols for Improved Reflectron and LIFT Detection of Ions Up to 10 kDa;** Christine Bunai<sup>1</sup>; Julius Nyalwidhe<sup>2</sup>; Lisa H. Cazares<sup>2</sup>; Dennis Manos<sup>1</sup>; William E. Cooke<sup>1</sup>; Dariya Malyarenko<sup>1</sup>; <sup>1</sup>College of William and Mary, Williamsburg, VA; <sup>2</sup>Eastern Virginia Medical Sch, Norfolk, VA
- MP 613 **Proteomic Analysis of FFPE Amyloid Plaques Using Laser Microdissection and Nano-Flow LC-MS/MS;** Jason D Theis; Jeff D Gamez; Julie A Vrana; Karen L Grogg; Ahmet Dogan; *Mayo Clinic, Rochester, MN*
- MP 614 **Mining the Archival Formalin-Fixed Proteome: Method Optimisation and Validation of an Efficient Label-Free Quantitative Shotgun Proteomic Strategy;** Niroshini Nirmalan<sup>1</sup>; Christopher Hughes<sup>2</sup>; Therese McKenna<sup>2</sup>; Jianhe Peng<sup>1</sup>; James Langridge<sup>2</sup>; Patricia Harnden<sup>1</sup>; Peter Selby<sup>1</sup>; Rosamonde E. Banks<sup>1</sup>; <sup>1</sup>University of Leeds, Leeds, UK; <sup>2</sup>Waters Corporation, Manchester, UK
- MP 615 **Rapid Detection of Proteins in Complex Mixtures by Extractive Electropray Ionization Mass Spectrometry;** Shuiping Yang<sup>1</sup>; Huanwen Chen<sup>1,2</sup>; Jianqiang Li<sup>1</sup>; Bin Hu<sup>1</sup>; Xie Zhang<sup>1</sup>; Yufen Zhou<sup>1</sup>; Lili Zhang<sup>2</sup>; <sup>1</sup>East China Institute of Technology, Fuzhou, P. R. China; <sup>2</sup>Jilin University, Changchun, P. R. China
- MP 616 **Development of a Breast Cancer Tissue Specific AMT Database: A New Tool for Biomarker Discovery;** Arzu Umar<sup>1</sup>; Heather M. Mottaz<sup>2</sup>; Samuel O. Purvine<sup>2</sup>; Anita M. Trapman-Jansen<sup>1</sup>; Astric Thakoursingh<sup>1</sup>; Theo M. Luider<sup>3</sup>; John A. Foekens<sup>1</sup>; Ljiljana Pasa-tolic<sup>2</sup>; <sup>1</sup>Erasmus MC, Medical Oncology, Rotterdam, Netherlands; <sup>2</sup>Pacific Northwest National Laboratory - Battelle, Richland, WA; <sup>3</sup>Erasmus MC, Neuro-oncology, Rotterdam, Netherlands
- MP 617 **Approaching Solid Tumor Heterogeneity by Tissue Proteomics Using Laser Capture Microdissection and Biological Mass Spectrometry;** Donald Johann<sup>1</sup>; Jaime Rodriguez-Canales<sup>2</sup>; Sumana Mukherjee<sup>1</sup>; Darue A. Prieto<sup>2</sup>; Jeffrey Hanson<sup>1</sup>; Michael Emmert-Buck<sup>1</sup>; Timothy D. Veenstra<sup>3</sup>; Josip Blonder<sup>3</sup>; <sup>1</sup>NIH, Bethesda, MD; <sup>2</sup>NIC-Frederick (SAIC), Frederick, MD; <sup>3</sup>SAIC-Frederick, Inc., Frederick, MD
- MP 618 **Statistical Significance in MS-Based Label-Free Protein Quantification Analysis Applied in Clinical Research;** Daniel C. Chamrad<sup>1</sup>; Barbara Sitek<sup>2</sup>; Sebastian Link<sup>2</sup>; Christian Stephan<sup>2</sup>; Katharina Podwojski<sup>2</sup>; Kai Stühler<sup>2</sup>; Martin Blueggel<sup>1</sup>; Korte Birgit<sup>2</sup>; Helmut E. Meyer<sup>2</sup>; <sup>1</sup>Protagen AG, Dortmund, Germany; <sup>2</sup>Ruhr-University Bochum, Dortmund, Germany
- MP 619 **Optimized Two-Dimensional Chromatographic Methods for Peptide Biomarker Discovery and**

## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- MP 620 **Validation in Clinical Samples;** Keith Fadgen<sup>1</sup>; Martha Stapels<sup>1</sup>; Jim Langridge<sup>1</sup>; J. Will Thompson<sup>2</sup>; Arthur Moseley<sup>2</sup>; <sup>1</sup>Waters Corporation, Milford, MA; <sup>2</sup>Duke University School of Medicine, Durham, NC
- MP 621 **Application of Peptide Library-Based Affinity-Chromatography to Analysis of Saliva Proteome;** Zhiguo Zheng<sup>2</sup>; Nagarajan Chandramouli<sup>1</sup>; Weimin Mao<sup>2</sup>; Zhiqiang Ling<sup>2</sup>; Qing Fang<sup>1</sup>; Daniel Malamud<sup>3</sup>; Haiteng Deng<sup>1,3</sup>; <sup>1</sup>The Rockefeller University, New York, NY; <sup>2</sup>Zhejiang Cancer Research Institute, Hangzhou, China; <sup>3</sup>New York University, New York, NY
- MP 622 **Labeling of Plasma Glutathione and Ophthalmate from 2H-Enriched Body Water: A Noninvasive Probe of the Redox Status of the Liver;** Rajan S. Kombu<sup>1</sup>; Guofang Zhang<sup>1</sup>; John J. Mieyal<sup>1</sup>; Vernon E. Anderson<sup>1</sup>; Joanne K. Kelleher<sup>2</sup>; Juan R. Sanabria<sup>1</sup>; Henri Brunengraber<sup>1</sup>; <sup>1</sup>Case Western Reserve University, Cleveland, OH; <sup>2</sup>Massachusetts Institute of Technology, Cambridge, MA
- ION ACTIVATION / DISSOCIATION, 622 - 644**
- MP 622 **Ion Conformation Changes in the Ion Trap / Drift Cell Interface on the Microsecond Timescale;** Gregg Schieffer<sup>1</sup>; Qin Zhao<sup>1</sup>; Derrick L. Morast<sup>1</sup>; Ethan R. Badman<sup>2</sup>; R. Sam Houk<sup>1</sup>; <sup>1</sup>Iowa State University, Ames, IA; <sup>2</sup>Hoffmann-La Roche Inc., Nutley, NJ
- MP 623 **Discrimination of Steroidal Glycoside Isomers by Collisionally Activated Dissociation of Transition Metal Complexes;** Xiaoji Cao; *Zhejiang university of Technology, Hangzhou, China*
- MP 624 **The Thermochemical Studies of Protonated Amine-Crown Ether Complexes: Extension of the Kinetic Method.;** Michael Zickus; Sara Koepke; Kevin Chong; Victor Ryzhov; *Northern Illinois University, DeKalb, IL*
- MP 625 **Multi-Pass UV-Photodissociation Implemented on a Hybrid QqTOF Mass Spectrometer for LC Analysis;** Changtong Hao<sup>1</sup>; J.C. Yves Le Blanc<sup>2</sup>; Alexandre Loboda<sup>2</sup>; Bruce Thomson<sup>1,2</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>CRMS, York University, Toronto, Canada; <sup>2</sup>MDS Analytical Technologies, Concord, ON, Canada
- MP 626 **Infrared Multiphoton Dissociation of DNA Anions and Cations in a Dual-Cell Linear Ion Trap;** Suncerae Smith<sup>1</sup>; Myles Gardner<sup>1</sup>; James Madsen<sup>1</sup>; Aaron Ledvina<sup>2</sup>; Jennifer Brodbelt<sup>1</sup>; <sup>1</sup>University of Texas - Austin, Austin, TX; <sup>2</sup>UW Madison, Madison, WI
- MP 627 **UV Photodissociation of Carboxy-Modified Peptides;** Byoung Joon Ko<sup>1</sup>; Jennifer Brodbelt<sup>2</sup>; <sup>1</sup>UT-Austin, Austin, TX; <sup>2</sup>The University of Texas, Austin, TX
- MP 628 **Top-Down Protein Fragmentation by Infrared Multiphoton Dissociation in a Dual Cell Linear Ion Trap;** James Madsen<sup>1</sup>; Myles Gardner<sup>1</sup>; Suncerae Smith<sup>1</sup>; Aaron Ledvina<sup>2</sup>; Jennifer Brodbelt<sup>1</sup>; <sup>1</sup>Univ. of Texas, Austin, TX; <sup>2</sup>UW Madison, Madison, WI
- MP 629 **Mass-Analyzed-Threshold-Ionization: A Versatile Method for the stUdy of the Structure of Halogenated Aromatic Compounds and Noble Gas Clusters.;** Jurgen Grotemeyer; Frank Witte; *Christian-Albrechts-Univ, Kiel, Germany*
- MP 630 **Protonated Tryptophan Radicals in the Gas Phase;** Joshua A Gregersen; Frantisek Turecek; *University of Washington, Seattle, WA*
- MP 631 **Metastable Atom-Activated Dissociation (MAD) within a Quadrupole Ion Trap Mass Spectrometry (QIT-MS).;** Shannon Cook; Glen Jackson; *Ohio University, Athens, OH*
- MP 632 **Comparison of Metastable Atom-Activation Dissociation (MAD), ETD and CAD of Peptides and Modified Peptides;** Carolyn M. Zimmermann<sup>1</sup>; Shannon Cook<sup>1</sup>; Glen Jackson<sup>1</sup>; Ralf Hoffmann<sup>2</sup>; <sup>1</sup>Ohio University, Athens, OH; <sup>2</sup>Universität Leipzig, Leipzig, Germany
- MP 633 **Study by FTICRMS and SORI-CID, ECD and IRMP FTICRMS<sup>n</sup> of Cluster Ions Produced by Electro sprayed KBrO<sub>3</sub> Solutions;** Frédéric Aubriet; *LSMCL Université Paul Verlaine, Metz, France*
- MP 634 **Higher Efficiency Protein Tandem Mass Spectrometry Using Multiple Correlated Harmonic Excitation Fields- (multi-CHEF)-ECD-FTICR-MS;** N Murat Karabacak<sup>1</sup>; Qi Wang<sup>1</sup>; Michael Easterling<sup>2</sup>; Jeffrey Agar<sup>1</sup>; <sup>1</sup>Brandeis University, Waltham, MA; <sup>2</sup>Bruker Daltonics, Inc., Billerica, MA
- MP 635 **Investigation into the Use of Lys-N Combined with Electron Transfer Dissociation on a Quadrupole Time-of-Flight Mass Spectrometer for Peptide Sequencing;** Jim Langridge<sup>1</sup>; Jeff Brown<sup>2</sup>; Shabaz Mohammed<sup>3</sup>; Nadia Taouatas<sup>3</sup>; Iain D G Campuzano<sup>1</sup>; Albert J.R. Heck<sup>3</sup>; <sup>1</sup>Waters Corporation, Manchester, UK; <sup>2</sup>Waters Micromass MS Technologies, Manchester, UK; <sup>3</sup>Utrecht University, Utrecht, Netherlands
- MP 636 **Radio Frequency-Free Electromagnetostatic Cell for ECD, CID and Combined ECD/CID Mass Spectrometry;** Valery Voinov<sup>1,2</sup>; Joseph S Beckman<sup>1</sup>; Max L. Deinzer<sup>1</sup>; Douglas F. Barofsky<sup>1</sup>; <sup>1</sup>OSU, Corvallis, OR; <sup>2</sup>PIBOC, RAS, Vladivostok, Russia
- MP 637 **Activated Ion ECD in Radio Frequency Ion Trap for Precise de novo Peptide Sequencing;** Hiroyuki Satake; Akihito Kaneko; Naomi Manri; Atsumu Hirabayashi; Takeshi Sakamoto; *Central Research Laboratory, Hitachi Ltd., Tokyo, Japan*
- MP 638 **Probing ECD Charge Reduced Ions Using ECD and CID (ECD/ECD and ECD/CID);** Daniel A Thomas; Takashi Baba; Gary L. Glish; *University of North Carolina, Chapel Hill, NC*
- MP 639 **IR Activated Ion-Electron Capture Dissociation in an rf Ion Trap;** Natalie Thompson<sup>1</sup>; Jared Bushey<sup>2</sup>; Takashi Baba<sup>1</sup>; Gary L. Glish<sup>1</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>Agilent Technologies, Wilmington, DE
- MP 640 **Gas-Phase Ion-Electron Reactions and Vibrational Activation of Electro sprayed Intact Proteins in Negative Ion Mode;** Hangtian Song; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- MP 641 **Electron Transfer Dissociation of Intact Protein Complexes;** Shaynah Browne<sup>1</sup>; Jonathan Wilson<sup>2</sup>; Desmond Kaplan<sup>2</sup>; Richard Vachet<sup>1</sup>; <sup>1</sup>University of Massachusetts, Amherst, MA; <sup>2</sup>Bruker Daltonics, Inc., Billerica, MA
- MP 642 **Enhanced Electron Transfer Dissociation Efficiency through Fixed Charge Derivatization of Peptides;** Lisa A Vasicsek<sup>1</sup>; Jennifer Brodbelt<sup>1</sup>; <sup>1</sup>University of Texas, Austin, TX
- MP 643 **From Molecular Structure to Thermodynamics: Amino Acid Property Role in Activated Ion Electron Capture Dissociation of Peptides;** Aleksey Vorobyev; Hisham Ben Hamidane; Yury O. Tsybin; *Ecole Polytechnique Federale, Lausanne, Switzerland*
- MP 644 **Effect of Charge state and Size on the Fragmentation of Oligonucleotides under EDD : Role of Radical site;**



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

Viet hung Nguyen; Carlos Afonso; Jean-Claude Tabet;  
*Université Paris 6, Paris, France*

### ELEMENTAL ANALYSIS AND ISOTOPE RATIO MS, 645 - 652

- MP 645 **Ultra-Trace Measurements of Lead-210 in Natural Occurring Radioactive Materials by ICP-MS;** Khalid A. Al-saad<sup>1</sup>; Mohamed Amr<sup>1</sup>; Nagwa Zahran<sup>2</sup>; Abdul-Fattah Helal<sup>2</sup>; <sup>1</sup>*Qatar University, Doha, Qatar*; <sup>2</sup>*Atomic Energy Authority, Cairo, Egypt*
- MP 646 **Analytical Strategies for Lanthanum Speciation in Human Serum by Liquid Chromatography Coupled to ICP-MS, ESI-Q-TOF-MS and QIT-MS;** Lidia Siemieniako<sup>2</sup>; Josephine Bunch<sup>1</sup>; Alan G. Cox<sup>2</sup>; Cameron W. Mcleod<sup>2</sup>; <sup>1</sup>*University of Birmingham, Birmingham, UK*; <sup>2</sup>*University of Sheffield, Sheffield, UK*
- MP 647 **Chemical Speciation of Bismuth by Gas Chromatography Coupled with High-Resolution ICP-MS;** Jerzy Mierzwa; *University of Central Florida, Orlando, FL*
- MP 648 **Application of Cluster SIMS for the Analysis of Nanomaterials;** Sidhartharaja Rajagopalachary; Stanislav Verhoturov; Chih-Hao Hsia; Dong Hee Son; Emile A. Schweikert; *Texas A&M University, College Station, TX*
- MP 649 **Effect of External Energy on Isotope Abundances of 1-2-4-Triazole and 2-Methyl Imidazole;** Harish K. Shettigar<sup>1</sup>; Rama Mohan R. Tallapragada<sup>2</sup>; <sup>1</sup>*Adjunct Scientist, MGV's Pharmacy College, Mumbai, India*; <sup>2</sup>*Retired Professor - I.I.T. Bombay, Mumbai, India*
- MP 650 **Effect of External Energy on Isotope Abundances of 2-Chloroacetamide, 2-4-Dichloro Phenol And Resorcinol;** Archana Bulbulc<sup>1</sup>; Rama Mohan R. Tallapragada<sup>2</sup>; <sup>1</sup>*Adjunct Scientist, MGV's Pharmacy College, Mumbai, India*; <sup>2</sup>*Retired Professor - I.I.T. Bombay, Mumbai, India*
- MP 651 **Effect of External Energy on Isotope Abundances of 2,6-Diaminopyridine, 4- Methoxyphenol and 2,4-Dichlorophenol;** Mahendra K. Trivedi<sup>1</sup>; Rama Mohan R. Tallapragada<sup>2</sup>; <sup>1</sup>*Adjunct Scientist, M. G. Vidyamandir's Pharmacy Col, Mumbai, India*; <sup>2</sup>*Retired Professor, I.I.T. Bombay, Mumbai, India*
- MP 652 **Change in Isotope Abundance and Crystal Characteristics of Acrylamide, P-Anisidine and Butylated Hydroxytoluene Treated with External Energy;** Shrikant A. Patil<sup>1</sup>; Rama Mohan R. Tallapragada<sup>2</sup>; <sup>1</sup>*Adjunct Scientist, MGV's Pharmacy College, Nashik, Mumbai, India*; <sup>2</sup>*Retired Professor - I.I.T. Bombay, Mumbai, India*

### GC/MS, 653 - 672

- MP 653 **The Use of Low-Pressure Positive Chemical Ionization GC/MS for the Characterization of Fatty Acid Methyl Esters (FAME);** Gail A Harkey<sup>1</sup>; Douglas Cameron<sup>2</sup>; James Chang<sup>1</sup>; <sup>1</sup>*Thermo Fisher Scientific, Schaumburg, IL*; <sup>2</sup>*Montana Tech, Butte, MT*
- MP 654 **Comparison of Alternative GC/MS Carrier Gases;** William D. Goodman; Andy N. Tipler; Adam J. Patkin; *PerkinElmer, Inc, Shelton, CT*
- MP 655 **Introducing a New Advanced Data Processing Software for Mass Spectrometry Using Spectral Deconvolution and Chemometric Data Analysis;** Gerhard Horner; Nick Bukowski; Gareth Roberts; *ALMSCO International, Bridgend, UK*

- MP 656 **High Speed Quantitative GC/MS-MS Data Acquisition;** Bill Russ; Thomas P Doherty; Jeffrey Kernan; Randy Roushall; Nora Gee; Jim Foote; Knute Kresie; Congshi Huang; Harry Bunting; *Agilent Technologies, Santa Clara, CA*
- MP 657 **Unique para-Effect in Electron Ionization Mass Spectra of Di(perfluoroacyl) Derivatives of Bifunctional Aminobenzenes;** Kirill Tretyakov<sup>1</sup>; Roman Borisov<sup>2</sup>; Nino Todua<sup>1</sup>; Stephen Stein<sup>1</sup>; Vladimir Zaikin<sup>2</sup>; <sup>1</sup>*National Institute of Standards and Technology, Gaithersburg, MD*; <sup>2</sup>*Topchiev Institute of Petrochemical Synthesis RAS, Moscow, Russia*
- MP 658 **Enhanced Sensitivity for Biomarker Characterization in Crude Oil by GC-SRM;** J. Michael Moldowan<sup>1</sup>; David A. Zinniker<sup>1</sup>; Melissa Churley<sup>2</sup>; Harry Prest<sup>2</sup>; Matthew S. Klee<sup>4</sup>; Celso Blatt<sup>3</sup>; <sup>1</sup>*Stanford University, Stanford, CA*; <sup>2</sup>*Agilent Technologies, Santa Clara, CA*; <sup>3</sup>*Agilent Technologies Brazil, Sao Paulo, Brazil*; <sup>4</sup>*Agilent Technologies Office, Wilmington, DE*
- MP 659 **Applications of TG-MS and TG-GC/MS to Polymers;** Kevin Menard; William Goodman; *PerkinElmer LAS, Shelton, CT*
- MP 660 **Investigation of Hazardous, Volatile Hydrocarbons in Commercial Beverages;** Sarah J Saylor<sup>1</sup>; Catherine Bentzley<sup>1</sup>; <sup>1</sup>*University of the Sciences in Philadelphia, Philadelphia, PA*
- MP 661 **Fragmentation of Isomers of 4-keto C10H20O as a Means of Understanding EI Behavior for Purposes of Structural Elucidation of Unknowns;** O. David Sparkman; Matthew Curtis; Monika Kaur; Jianhua Ren; Patrick R. Jones; *University of the Pacific, Antioch, CA*
- MP 662 **Using Comprehensive Gas Chromatographic Retention Index Collection to Aid Compound Identification from GC/MS Data;** Valeri I Babushok<sup>2</sup>; Stephen E. Stein<sup>2</sup>; Igor Zenkevich<sup>3</sup>; Peter Linstrom<sup>2</sup>; O. David Sparkman<sup>1</sup>; <sup>1</sup>*University of the Pacific, Antioch, CA*; <sup>2</sup>*NIST, Gaithersburg, MD*; <sup>3</sup>*Chemical Research Institute of St. Petersburg Sta, St. Petersburg, Russia*
- MP 663 **Development and Validation of a GC/MS Method to Detect Sulfonic Acid Esters in Mesylate Salt Drug Substances and Drug Products;** Alina Domin-Turza; Samantha Leidner; Esther Hwang; Paul M. Bigwarfe Jr.; *Hospira, Inc., Lake Forest, IL*
- MP 664 **Sensitivity Comparison of Electron and Negative Chemical Ionizations for Derivatized Aldehydes;** Josef Beranek; Alena Kubatova; *University of North Dakota, Chemistry Department, Grand Forks, ND*
- MP 665 **A Sensitive and Specific Methodology for Furfural Determination in a Pharmaceutical Product Using Headspace GC/MS and GC/FID;** Yieng-hau Han; Jennifer Jakubowski; Zhong Li; Qingxi Wang; *Merck Co., West Point, PA*
- MP 666 **Applying Headspace Trap Technology to the GC/MS Analysis of Volatiles in Children's Products;** William D. Goodman; Adam J. Patkin; Andrew N. Tipler; *PerkinElmer, Inc, Shelton, CT*
- MP 667 **Relative Area Quantitation of Natural Product Compounds Using GC/MS and Deconvolution Algorithms;** Michelle Lee; Albert Robbat; *Tufts University, Medford, MA*
- MP 668 **Mass Spectra of Polyethylene Glycols, Glycol Acids, and Derivatives by GC-MS;** Yufang Zheng; Yuxue



## MONDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

Liang; Edward White V; Stephen E. Stein; *NIST, Gaithersburg, MD*

MP 669 **Withdrawn**

MP 670 **Confident Unknown Identification of SVOC Compounds by Combining NIST Library Search with Elemental Composition Determination; Jianping Chen<sup>1</sup>; O. David Sparkman<sup>2</sup>; Ming Gu<sup>3</sup>; <sup>1</sup>*Connecticut State Department of Environmental, Windsor, CT*; <sup>2</sup>*University of the Pacific, Antioch, CA*; <sup>3</sup>*Cerno Bioscience, Yardley, PA***

MP 671 **The Measurement of Native Compounds in a Candidate Urine Standard Reference Material (SRM 3671 Smokers' Urine) by Gas Chromatography/Mass Spectrometry; Bruce A. Benner, Jr.; Lane C. Sander; *NIST, Gaithersburg, MD***

MP 672 **Using a Novel Heartcut Device for Multidimensional GC to Reveal Small Peaks Otherwise Obscured by Large Peaks in Mass Chromatograms; Andrew Tipler<sup>1</sup>; William D. Goodman<sup>3</sup>; Adam J. Patkin<sup>2</sup>; <sup>1</sup>*PerkinElmer Inc., Trumbull, CT*; <sup>2</sup>*PerkinElmer, Inc, Shelton, CT*; <sup>3</sup>*PerkinElmer, Shelton, CT***

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Proteomics: Quantitation Techniques (001 - 037)  
 Bioinformatics (038 - 071)  
 Proteomics: Biomarker Discovery (072 - 103)  
 Metabolomics (104 - 120)  
 Proteomics: New Approaches (121 - 149)  
 Small Scale Separations (150 - 173)  
 Imaging MS: Instrumentation and Method Development (174 - 202)  
 Ion Mobility (203 - 236)  
 Clinical Chemistry (237 - 259)  
 Proteomics: PTM Dewtermination - Histones (260 - 273)  
 Instrumentation: FTMS (274 - 291)  
 Direct Ionization - DESI, DART and ASAP (292 - 310)  
 LC/MS (311 - 325)  
 LC/MS Sample Preparation (236 - 343)  
 Peptides Fragmentation and Sequencing (344 - 371)  
 Homeland Security (372 - 386)  
 Drug Metabolism: Quantitation (387 - 408)  
 Drug Metabolism: Pharmacokinetics (409 - 423)  
 Protein Confirmation (424 - 456)  
 Non-Covalent Interactions (457 - 486)  
 Peptides: Quantitation - Applications (487 - 513)  
 Protein Glycoprotein (514 - 531)  
 Proteomics: Systems Biology (532 - 558)  
 Novel Metabolite Identification Techniques (559 - 585)  
 Environmental (586 - 608)  
 Proteomics: Clinical Applications (609 - 628)  
 Ionization Mechanisms (629 - 647)  
 Forensics (648 - 665)
- TP 007 **Variable Mass H/D-Isotope Dipeptide Tags for Simultaneous Peptide Sequencing and Protein Quantitation;** Seung Koo Shin; Jongcheol Seo; Min-Soo Suh; Hye-Joo Yoon; *POSTECH, Pohang, South Korea*
- TP 008 **Title: Solid-Phase SCX Column Digestion Coupled with iTRAQ™ Labeling of Immuno-Precipitated, Low-Abundant Proteins;** Vivian Nguyen<sup>1</sup>; Andrew James<sup>1</sup>; Kelly Williton<sup>1</sup>; Anna Yue Dai<sup>1</sup>; Brett Larsen<sup>1</sup>; Tony Pawson<sup>1</sup>; Claus Jorgensen<sup>1</sup>; Karen Colwill<sup>1</sup>; Tony Pawson<sup>1,2</sup>; <sup>1</sup>*Samuel Lunenfeld Research Institute, Toronto, Canada*; <sup>2</sup>*University of Toronto, Toronto, Canada*
- TP 009 **Comparison of SCX and OGE Fractionation Approaches in Quantitative Shotgun Analysis of iTRAQ Labeled Arabidopsis Plant Extracts;** Yong Yang<sup>1</sup>; Xiangjun Zhou<sup>2</sup>; Li Li<sup>1,2</sup>; Sheng Zhang<sup>2</sup>; Theodore W Thannhauser<sup>1</sup>; <sup>1</sup>*USDA-ARS at Cornell University, Ithaca, NY*; <sup>2</sup>*Cornell University, Ithaca, NY*
- TP 010 **siRNA-Mediated Target Silencing and Quantitative Proteomics Using iTRAQ Reagent Chemistry;** Albina Abdrakhmanova<sup>1</sup>; Rita Schlichting<sup>1</sup>; Christie L. Hunter<sup>3</sup>; Christof Lenz<sup>2</sup>; Birte Sönnichsen<sup>1</sup>; Christophe J. Echeverri<sup>1</sup>; Dietmar Waidelich<sup>2</sup>; Cornelia Weiss-Haljiti<sup>1</sup>; Matthias Glueckmann<sup>2</sup>; Volker Kruff<sup>2</sup>; <sup>1</sup>*Cenix BioScience GmbH, Dresden, Germany*; <sup>2</sup>*Applied Biosystems Germany, Darmstadt, Germany*; <sup>3</sup>*Applied Biosystems, Foster City, CA*
- TP 011 **Compatibility of Various Sample Handling Methods with Amine-based Isotope Labeling Reactions in Quantitative Proteomics;** Lu Chen; Andy Lo; Yanan Tang; Liang Li; *University of Alberta, Edmonton, Canada*
- TP 012 **Towards the Validation of an Absolute Quantification Method using LC-MS/MS for IGF-1 and IGFBP-3;** Stéphanie Kirsch; Joelle Widart; Edwin De Pauw; *University of Liege, Liege, Belgium*
- TP 013 **Problems Encountered in Absolute Quantification and Stoichiometry Determination of Protein Complexes;** Johann Holzmann<sup>1</sup>; Mathias Madalinski<sup>1</sup>; Robert Kurzbauer<sup>1</sup>; Peter Pichler<sup>1</sup>; Michael Schutzbier<sup>1</sup>; Otto Hudecz<sup>1</sup>; Lukas A Huber<sup>2</sup>; Karl Mechtler<sup>1</sup>; <sup>1</sup>*IMP, Vienna, Austria*; <sup>2</sup>*Biocenter, Innsbruck, Austria*
- TP 014 **Optimization of Digestion Parameters for Protein Quantification;** Jessica Norrgran; Tracie L. Williams; Adrian R Woolfitt; Maria L. Solano; James L. Pirkle; John R. Barr; *CDC, Atlanta, GA*
- TP 015 **Comparison of Peptide Fractionation by Basic pH Reversed Phase vs. SCX for Verification of Protein Biomarker Candidates in Plasma;** Michael Burgess<sup>1</sup>; Hasmik Keshishian<sup>1</sup>; Veronica Saenz-vash<sup>2</sup>; Terri Addona<sup>1</sup>; Steven A. Carr<sup>1</sup>; <sup>1</sup>*Broad Institute, Cambridge, MA*; <sup>2</sup>*Novartis Institutes for BioMedical Research, Cambridge, MA*
- TP 016 **Rapid Method Development for Protein Quantiation Using MRM with Isotopically Labeled Protein as a Global Internal Standard;** Bryan Prazen<sup>1</sup>; Jayson A. Falkner<sup>2</sup>; Philip Mayer<sup>3</sup>; Tomas Vaisar<sup>3</sup>; <sup>1</sup>*Insilicos, Seattle, WA*; <sup>2</sup>*Single Organism Software Inc, Beaverton, OR*; <sup>3</sup>*University of Washington, Seattle, WA*
- | PROTEOMICS: QUANTITATION TECHNIQUES, 001 - 037 |   |
|--|---|
| TP 001   | <b>Inferring Physically Adjacent Interactions of Yeast Proteins from Fabricated Quantitative Profiles Generated by Free Flow Electrophoresis;</b> <u>Zhi-bin Ning</u> ; Qing-run Li; Rong-xia Li; Rong Zeng; <i>Shanghai Institutes for Biological Sciences, Shanghai, China</i>  |
| TP 002   | <b>Application of Guanidination Chemistry for Protein Identification and Quantitation by LC-ESI MS/MS and LC-MALDI MS;</b> <u>Michael Harder</u> <sup>1</sup> ; Vic Spicer <sup>1</sup> ; John P. Cortens <sup>2</sup> ; Werner Ens <sup>1</sup> ; Kenneth G. Standing <sup>1</sup> ; John A. Wilkins <sup>1</sup> ; Oleg V. Krokhin <sup>1</sup> ; <sup>1</sup> <i>University of Manitoba, Winnipeg, Canada</i> ; <sup>2</sup> <i>Manitoba Centre for Proteomics and Systems Biology, Winnipeg, Canada</i> |
| TP 003   | <b>Top-Down Quantitation and Characterization of Reductive Alkylation-Modified Proteins;</b> Zhiguo Zheng <sup>2</sup> ; <u>Weiming Wang</u> <sup>1</sup> ; Yong Liang <sup>1</sup> ; Joseph Fernandez <sup>1</sup> ; Haiteng Deng <sup>1</sup> ; <sup>1</sup> <i>The Rockefeller University, New York, NY</i> ; <sup>2</sup> <i>Zhejiang Cancer Research Institute, Hangzhou, China</i>  |
| TP 004   | <b>DiART (Deuterium isobaric Amine Reactive Tag) Reagents for Quantitative Proteomics;</b> Shuwei Li; <i>Center for Advanced Research in Biotechnology, Rockville, MD</i>   |
| TP 005   | <b>Trypsin-Catalyzed 18O-Monolabeling of Peptide Fragments for Quantitative Proteomics;</b> <u>Masaru Mori</u> <sup>1</sup> ; Kohei Abe <sup>1,2</sup> ; Hiroaki Yamaguchi <sup>1,2</sup> ; Junichi Goto <sup>2</sup> ; Miki Shimada <sup>1,2</sup> ; Nariyasu Mano <sup>1,2</sup> ; <sup>1</sup> <i>Tohoku University, Sendai, Japan</i> ; <sup>2</sup> <i>Tohoku University Hospital, Sendai, Japan</i>   |
| TP 006   | <b>An Attempt to Quantitative Analysis for Clinical Proteomics by Liquid Chromatography/ESI-Ion Trap MS Using Stable Isotope-Labeled Small Organic Molecules;</b> <u>Sadamu Kurono</u> <sup>1,2</sup> ; Yuka Kaneko <sup>1,2</sup> ; Takeshi Ueda <sup>3</sup> ; Masayuki Maruoka <sup>3</sup> ; Hanjoung Cho <sup>4</sup> ; Satomi Niwayama <sup>4</sup> ; <sup>1</sup> <i>Osaka University</i>  |

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 017 **Identification of Differentially Expressed Proteins In Transgenic Mouse Models of Psoriasis Using Label Free Analyses;** Kathleen C. Lundberg; Chao Yuan; Julie Wolfram; Nicole Ward; Mark Chance; *Case Western Reserve Univ., Cleveland, OH*
- TP 018 **What Is A Better Approach to Quantifying Endogenous Molecules: Using A Labeled Compound, Surrogate Matrix, or Non-Labeled Compound?;** Bob Xiong; Kojo Abdul-Hadi; Patrick Bennett; Lily Li; *Tandem Labs, A LabCorp Company, Woburn, MA*
- TP 019 **Development of a Novel Solid-Phase Isotope-Coded Cysteine Label to Study Protein Abundance During Marek's Disease Virus (MDV) Infection;** Mialy F. Ramarosan; Hsiao-Ching S. Liu; Michael B. Goshe; *NC State University, Raleigh, NC*
- TP 020 **Investigation of Mitochondrial Protein Changes in Response to RNA Interference Knock-down of Mitochondrial Superoxide Dismutase (SOD2) in Drosophila melanogaster;** David C. Simpson; Ian Martin; Mike Grotewiel; Scott Gronert; *Virginia Commonwealth University, Richmond, VA*
- TP 021 **Quantitative Proteomics to Investigate Hypoxia in Renal Carcinoma Cells;** Wendy D. Haffey; Olga Mikhaylova; Maria F. Czyzyk-krzeska; Kenneth D. Greis; *University of Cincinnati, Cincinnati, OH*
- TP 022 **Differential Isotopic Labeling of Interfibrillary Mitochondrial Thiol Proteins;** Jing Wang; Claudia Maier; *Oregon State University, Corvallis, OR*
- TP 023 **OxMRM: Further Developments to Quantify Oxidation of Endogenous Redox-Sensitive Cysteines Using Multiple Reaction Monitoring;** Jason Held; Steven R. Danielson; Judy Campisi; Chris Benz; Bradford W. Gibson; *Buck Institute for Age Research, Novato, CA*
- TP 024 **Deciphering the Phosphorylation "Bar Code" of the  $\beta$ 2 Adrenergic Receptor and Monitoring its Dynamics;** Kunhong Xiao<sup>1</sup>; Kelly Nobles<sup>1</sup>; Kazuishi Kubota<sup>2</sup>; Judit Villen<sup>2</sup>; Wilhelm Haas<sup>2</sup>; Bo Zhai<sup>2</sup>; Xue Li<sup>2</sup>; Jinpeng Sun<sup>1</sup>; Makoto Hara<sup>1</sup>; Seungkirl Ahn<sup>1</sup>; Erin Whalen<sup>1</sup>; Sudha Shenoy<sup>1</sup>; Steven Gygi<sup>2</sup>; Robert Lefkowitz<sup>1</sup>; <sup>1</sup>Duke University Medical Cent, Durham, NC; <sup>2</sup>Harvard Medical School, Boston, MA
- TP 025 **Quantitative Mouse Tissue Phosphoproteomics: Adapting a Chemical Labeling Strategy (Reductive Dimethylation: ReDi) to a Phosphoproteomics Pipeline;** Joshua T. Wilson-Grady; Jan Seebacher; Steven Gygi; *Dept. of Cell Biology, Harvard Medical School, Boston, MA*
- TP 026 **Quantifying Cell Cycle-Dependent Changes in Posttranslational Modifications and Interacting Network of the Yeast 26S Proteasome;** Robyn Kaake<sup>1</sup>; Peter Kaiser<sup>1</sup>; Lan Huang<sup>2</sup>; <sup>1</sup>Univ. of California, Irvine, Irvine, CA; <sup>2</sup>University of California, Irvine, CA
- TP 027 **Determination of ChIP Antibody Specificity for Histone H3 Modifications by SILAC and a Specialized Search Engine;** Jacob D. Jaffe<sup>1</sup>; Emily Rudomin<sup>2</sup>; Karl R. Clauser<sup>3</sup>; Steven A. Carr<sup>2</sup>; <sup>1</sup>The Broad Institute of Harvard, Cambridge, MA; <sup>2</sup>Broad Institute, Cambridge, MA; <sup>3</sup>Broad Institute of MIT and Har, Cambridge, MA
- TP 028 **Characterization of Non-Canonical Polyubiquitin Chains by Quantitative Mass Spectrometry;** Lilian Phu; Anita Izrael-Tomasevic; Domagoj Vucic; Ivan Bosanac; Sarah Hymowitz; David Arnott; Donald S Kirkpatrick; *Genentech, Inc., South San Francisco, CA*
- TP 029 **Development of Scheduled Multiple Reaction Monitoring (sMRM) Methods for Relative Quantification of Proteins Involved in ShcA-Mediated Signalling Network;** Cunjie Zhang<sup>1</sup>; Yong Zhang<sup>1</sup>; Lorne E B Taylor<sup>1</sup>; Andrew James<sup>1</sup>; Stephen A Tate<sup>2</sup>; Tony Pawson<sup>1</sup>; <sup>1</sup>SLRI, Mt. Sinai, Toronto, ON; <sup>2</sup>MDS Sciex, Toronto, ON
- TP 030 **Absolute Quantitation of Phosphorylation Dynamics in the Analysis of Human Breast Cancer Signaling Pathways Using Multiple Reaction Monitoring Mass Spectrometry;** Dominik Domanski; Michael Kuzyk; Leanne B Ohlund; Tyra Cross; Christoph Borchers; *UVic-GBC Proteomics Centre, Victoria, BC*
- TP 031 **Relative Quantitation of Differential Phosphorylation Patterns in the Activation Loop of Cell Cycle Checkpoint Protein Chk-2;** Michael D. Ward; Cindy Guo; Julius Nyalwidhe; Jessica Tiedebohl; Oliver John Semmes; *Eastern Virginia Medical School, Norfolk, VA*
- TP 032 **Label-Free Relative Quantification of Control/Treated IMAC Enriched C Elegans Proteins Using an Alternative Scanning LCMS Approach;** Joanne B Connolly<sup>1</sup>; Holger Husi<sup>2</sup>; Fiona McAllister<sup>2</sup>; M W Walkinshaw<sup>2</sup>; V J Butler<sup>3</sup>; A P Page<sup>3</sup>; Perdita E Barran<sup>2</sup>; <sup>1</sup>Waters, Manchester, UK; <sup>2</sup>The University of Edinburgh, Edinburgh, UK; <sup>3</sup>University of Glasgow, Glasgow, UK
- TP 033 **Quantitative Proteomic Approaches for the Determination of Serum Proteome and Phosphoproteome in Patients with Benign Prostate Hyperplasia and Prostate Cancer;** Theodoros Roumeliotis<sup>1</sup>; Nicolaie Eugen Damoc<sup>2</sup>; Michaela Scigelova<sup>2</sup>; Thomas Moehring<sup>2</sup>; Martin Hornshaw<sup>2</sup>; Spiros D. Garbis<sup>1</sup>; <sup>1</sup>Academy of Athens, Athens, Greece; <sup>2</sup>Thermo Fisher Scientific, Bremen, Germany
- TP 034 **Label-Free Quantification Approach on Enriched Phosphopeptides;** Xiaolei Xie<sup>1</sup>; Shun Feng<sup>1</sup>; Huy Vuong<sup>1</sup>; Yashu Liu<sup>1</sup>; Steve Goodison<sup>2</sup>; David M. Lubman<sup>1</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>University of Florida, Jacksonville, FL
- TP 035 **A Simple Label-free LC-MS/MS Strategy Towards Comprehensive Phosphoproteomics View that Depict the Mechanisms of Cancer Cell Invasion;** Yi Ting Wang<sup>1</sup>; Chia-feng Tsai<sup>2</sup>; Tzu-Chan Hong<sup>3</sup>; Chih-chiang Tsou<sup>4</sup>; Pei-yi Lin<sup>6</sup>; Tse-Ming Hong<sup>5</sup>; Pan-Chyr Yang<sup>3,5</sup>; Ting-yi Sung<sup>4</sup>; Wen-Lian Hsu<sup>4</sup>; Yu-Ju Chen<sup>6,7</sup>; <sup>1</sup>Department of Applied Chemistry National, Chia-Yi University, Chiayi, Taiwan; <sup>2</sup>National Taiwan Normal University, Taipei, Taiwan; <sup>3</sup>School of Medicine, National Taiwan University, Taipei, Taiwan; <sup>4</sup>Inst. Info Sci, Acad. Sinica, Nankang, TAIWAN; <sup>5</sup>Institute of Biomedical Science, Academia sinica, Taipei, Taiwan; <sup>6</sup>Institute of chemistry and Genomics Research Cente, Academia Sinica, Taipei, Taiwan; <sup>7</sup>National Core Facilities for Proteomics Research, National Science Council, Taipei, Taiwan
- TP 036 **Simplified Method for Quantifying Phosphopeptides from In-Gel Digestions Using 8-Plex iTRAQ Reagents;** Tatiana N. Boronina; Chen Qiu; Daniel J. Leahy; Robert N. Cole; *Johns Hopkins School of Medicine, Baltimore, MD*
- TP 037 **Comparison of Protein Identification and Quantification between PQD/LTQ and Hybrid Triple**

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

**Quadrupole/Linear Ion Trap;** Wells Wu<sup>1</sup>; Guanghui Wang<sup>1</sup>; Eric M. Billings<sup>1</sup>; Panthip Rattanasinganchan<sup>2</sup>; Paul A. Insel<sup>3</sup>; Rong-Fong Shen<sup>4</sup>; <sup>1</sup>*NIH, Bethesda, MD*; <sup>2</sup>*Huachiew Chalermprakiet University, Thailand, Thailand*; <sup>3</sup>*Department of Pharmacology, UC San Diego, La Jolla, CA*; <sup>4</sup>*NIH, NIA, Baltimore, MD*

### BIOINFORMATICS, 038 - 071

- |        |  |        |   |
|--------|--|--------|---|
| TP 038 | <b>The Effects of Mass Accuracy on the Statistical Validation of Peptide Identifications from MS/MS Data;</b> Ron Orlando <sup>1</sup> ; George Zohrabyan <sup>1</sup> ; <u>Art Nuccio</u> <sup>1</sup> ; James Atwood <sup>2</sup> ; Brent Weatherly <sup>2</sup> ; <sup>1</sup> <i>University of Georgia, Athens, GA</i> ; <sup>2</sup> <i>BioInquire, LLC, Athens, GA</i>   | TP 050 | <b>Sets;</b> <u>Tamanna Sultana</u> ; Rick Jordan; James Lyons-Weiler; <i>University of Pittsburgh, Pittsburgh, PA</i>  |
| TP 039 | <b>Simulating an LC-MS Analysis of a Virtual Proteome: Does Mass Resolution Matter?</b> <u>Marc V. Gorenstein</u> ; Scott Geromanos; Dan Golick; Jim Langridge; <i>Waters Corporation, Milford, MA</i>   | TP 051 | <b>Novel Probability-Based Consensus Scoring Improves Identification Rates in Tandem Mass Spectrometry-Based Peptide Identification;</b> <u>Sven Nahnsen</u> <sup>1,2</sup> ; Andreas Bertsch <sup>2</sup> ; Alfred Nordheim <sup>1</sup> ; Oliver Kohlbacher <sup>2</sup> ; <sup>1</sup> <i>Proteome Center, University of Tuebingen, Tuebingen, Germany</i> ; <sup>2</sup> <i>Center of Bioinformatics, University of Tuebingen, Tuebingen, Germany</i>   |
| TP 040 | <b>Peptide Database Search Strategies to Improve Peptide Identifications Using High Resolution Mass Spectrometry;</b> <u>Edward J. Hsieh</u> ; Michael R. Hoopmann; Brendan Maclean; Michael J. Maccoss; <i>University of Washington, Seattle, WA</i>  | TP 052 | <b>Analysis of Large-Scale Shotgun Proteomic Datasets Containing Multiple Replicates;</b> <u>Damian Fermin</u> <sup>1</sup> ; Hyungwon Choi <sup>1</sup> ; Alexey Nesvizhskii <sup>2</sup> ; <sup>1</sup> <i>University of Michigan, Pathology Department, Ann Arbor, MI</i> ; <sup>2</sup> <i>University of Michigan, Ann Arbor, MI</i>  |
| TP 041 | <b>Orthogonal Criteria for Validation of MS/MS Based Peptide Identifications in Shotgun Proteomics;</b> <u>Anton A. Goloborodko</u> <sup>1</sup> ; Corina Mayerhofer <sup>2</sup> ; Alexander R. Zubarev <sup>2</sup> ; Irina A. Tarasova <sup>1</sup> ; Alexander V. Gorshkov <sup>3</sup> ; Roman A. Zubarev <sup>2</sup> ; Mikhail V. Gorshkov <sup>1</sup> ; <sup>1</sup> <i>Institute of Energy Problems of Chemical Physics, Moscow, Russian Federation</i> ; <sup>2</sup> <i>Uppsala University, Uppsala, Sweden</i> ; <sup>3</sup> <i>N.N. Semenov's Institute of Chemical Physics, Moscow, Russian Federation</i> | TP 053 | <b>Identifying Proteins Directly from Tandem Mass Spectra;</b> <u>Marina Spivak</u> <sup>1</sup> ; Jason Weston <sup>1</sup> ; Michael J. MacCoss <sup>2</sup> ; William Stafford Noble <sup>2</sup> ; <sup>1</sup> <i>NEC, Princeton, NJ</i> ; <sup>2</sup> <i>UW, Seattle, WA</i>   |
| TP 042 | <b>Using NISTMSQC to Monitor Changes in the Proteolytic Products of Human Serum Albumin During Tryptic Digestion;</b> <u>Lisa E. Kilpatrick</u> <sup>1</sup> ; Yuri Mirokhin <sup>2</sup> ; Jeri Roth <sup>2</sup> ; Paul Rudnick <sup>2</sup> ; Stephen E. Stein <sup>2</sup> ; <sup>1</sup> <i>NIST, Hollings Marine Lab, Charleston, SC</i> ; <sup>2</sup> <i>NIST, Gaithersburg, MD</i>  | TP 054 | <b>Peptide Identification with Direct Computation of the Significance Level of the Results;</b> <u>Jan Eriksson</u> <sup>1</sup> ; David Fenyo <sup>2</sup> ; <sup>1</sup> <i>Swedish University of Agricultural Sciences, Uppsala, Sweden</i> ; <sup>2</sup> <i>The Rockefeller University, New York, NY</i>   |
| TP 043 | <b>Unbiased Statistical Analysis for Multi-Stage Proteomic Search Strategies;</b> <u>Logan J Everett</u> ; Charlene Bierl; Stephen R Master; <i>University of Pennsylvania, Philadelphia, PA</i>   | TP 055 | <b>Computational Analysis of Unassigned High Quality Spectra from Human T Leukemic Cells;</b> <u>Kang Ning</u> ; Alexey Nesvizhskii; <i>University of Michigan, Ann Arbor, MI</i>   |
| TP 044 | <b>Quality of Database Matches for MS/MS Spectra Can Be Computed Analytically;</b> <u>Andrey Gorin</u> ; Nikita Arnold; Robert M. Day; Tamah Fridman; <i>Oak Ridge National Laboratory, Oak Ridge, TN</i>  | TP 056 | <b>Improving Confidence in Spectrum Mill's Sequence/Spectrum Matching Using a Refined Peptide MS/MS Fragmentation Model;</b> <u>Karl R. Clauser</u> ; Steven A. Carr; <i>Broad Institute of MIT and Harvard, Cambridge, MA</i>  |
| TP 045 | <b>Assessment of Peptide-Spectrum Matches Without Using a Decoy Database;</b> <u>Yong Li</u> ; Predrag Radivojac; Randy J. Arnold; Haixu Tang; <i>Indiana University, Bloomington, IN</i>  | TP 057 | <b>A Computer Model for Predicting CID Spectra of Glycopeptides;</b> <u>Zhongqi Zhang</u> <sup>1</sup> ; Bhavana Shah <sup>2</sup> ; <sup>1</sup> <i>Amgen, Inc., Thousand Oaks, CA</i> ; <sup>2</sup> <i>Amgen Inc., Thousand Oaks, CA</i>   |
| TP 046 | <b>Local Target-Decoy: A Simple and Effective Validation Method for Shotgun Proteomics Using High Resolution Mass Spectrometry;</b> <u>Jong Wha Joanne Joo</u> <sup>1</sup> ; Seungjin Na <sup>2</sup> ; Je-hyun Baek <sup>1</sup> ; Cheolju Lee <sup>1</sup> ; Eunok Paek <sup>2</sup> ; <sup>1</sup> <i>Korea Institute of Science and Technology, Seoul, Rep. of Korea</i> ; <sup>2</sup> <i>Univ. of Seoul, Seoul, Rep. of Korea</i>   | TP 058 | <b>Withdrawn</b>  |
| TP 047 | <b>Improved peptide identification using implicit properties learned from transduction support vector machines;</b> <u>Michael J Sweredoski</u> ; Sonja Hess; <i>Caltech, Pasadena, CA</i>   | TP 059 | <b>Improving Tandem Mass Spectra Identification Rate Based on Calibrating the Masses and Charges of Precursors by Continuous MS Scans;</b> <u>Zuofei Yuan</u> <sup>1,2</sup> ; Haipeng Wang <sup>1,2</sup> ; Yan Fu <sup>1,2</sup> ; Hao Chi <sup>1,2</sup> ; You Li <sup>1,2</sup> ; Liyun Xiu <sup>1,2</sup> ; Wenping Wang <sup>1,2</sup> ; Chao Liu <sup>1,2</sup> ; Leheng Wang <sup>1,2</sup> ; Ruixiang Sun <sup>1,2</sup> ; Simin He <sup>1,2</sup> ; <sup>1</sup> <i>Institute of Computing Technology, CAS, Beijing, China</i> ; <sup>2</sup> <i>Key Lab of Intelligent Information Processing, CAS, Beijing, China</i> |
| TP 048 | <b>Finding Peptides with Confidence;</b> <u>Shane L Hubler</u> ; Graeme Mcalister; Joshua J. Coon; Gheorghe Craciun; <i>Univ of Wisconsin-Madison, Madison, WI</i>   | TP 060 | <b>Processing Extreme ESI Data Using a New Peak Modelling Method;</b> Jenny Albanese <sup>1</sup> ; Tony Ferrige <sup>2</sup> ; Stuart Ray <sup>2</sup> ; <u>Song Ye</u> <sup>3</sup> ; Robert Alecio <sup>2</sup> ; <sup>1</sup> <i>Applied Biosystems, South Lake Tahoe, CA</i> ; <sup>2</sup> <i>Positive Probability Limited, Isleham, Cambs, UK</i> ; <sup>3</sup> <i>Applied Biosystems, Framingham, MA</i>   |
| TP 049 | <b>Evaluation of Consensus Method Performance in Peptide Identification of Two Known Protein Data</b>  | TP 061 | <b>Non-Empirical Approach for Isotopic Distribution Deconvolution in Mass Spectra of Complex Organic Compounds;</b> <u>Ilva A Agron</u> <sup>1,2</sup> ; Dmitriy M. Avtonomov <sup>1,2</sup> ; Eugene Nikolaev <sup>1,3</sup> ; <sup>1</sup> <i>Institute for Energy Problems of Chemical Physics, Moscow, Russian Federation</i> ; <sup>2</sup> <i>The Institute of Biomedical Chemistry, Moscow, Russia</i> ; <sup>3</sup> <i>Emanuel Institute of Biochemical Physics, Moscow, Russia</i>  |

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 062 **Combining High Resolution Separation Techniques and High Frequency Acquisition to Improve the Deconvolution of Information from FragALL Experiments;** Gordana Ivosev; Ron Bonner; J.c. Yves Leblanc; Nic Bloomfield; Stephen A Tate; *MDS Analytical Technologies, Concord, On, ON*
- TP 063 **The Need for Speed: An Evaluation of Automated Charge State Deconvolution of LC/MS Data;** Timothy R. Croley<sup>1</sup>; Denis Andrzejewski<sup>2</sup>; John H. Callahan<sup>3</sup>; Steve Musser<sup>4</sup>; Tracie Williams<sup>5</sup>; <sup>1</sup>*Commonwealth of Virginia, Richmond, VA*; <sup>2</sup>*US Food & Drug Administration, College Park, MD*; <sup>3</sup>*FDA/CFSSAN, College Park, MD*; <sup>4</sup>*US FDA, College Park, MD*; <sup>5</sup>*Centers for Disease Control and Prevention, Atlanta, GA*
- TP 064 **Statistical Approach for High Throughput Analysis of Ultra-High Resolution Mass Spectra of Plant Extracts;** Dong Wan Lim; Kyu Hwan Park; Jang Mi Jin; Jong Shin Yoo; Hyun Sik Kim; *Korea Basic Science Institute (KBSI), Seoul, South Korea*
- TP 065 **On the Usage of the Information About the Number of Carbon Atoms in Peptides for Protein Identification;** Dmitriy M. Avtonomov<sup>1,2</sup>; Ilya A Agron<sup>1,2</sup>; Eugene Nikolaev<sup>1,3</sup>; <sup>1</sup>*Institute for Energy Problems of Chemical Physics, Moscow, Russian Federation*; <sup>2</sup>*Institute of Biomedical Chemistry, Moscow, Russia*; <sup>3</sup>*Emanuel Institute of Biochemical Physics, Moscow, Russia*
- TP 066 **Metabolic Labeling Validation of Peptide MS/MS Spectral Library and Development of a New Spectral Matching Algorithm for Protein Identification;** Mingguo Xu; Liang Li; *University of Alberta, Edmonton, Canada*
- TP 067 **The Development of a Summarization and Visualization Method for MSn Information Based on Social Network Analysis;** Shinichi Yamaguchi; *Shimadzu Corporation, Kyoto, Japan*
- TP 068 **On the Application of a New MALDI/MS NIST Library to Cancer Disease Diagnosis;** Simone Crisanti<sup>1</sup>; Sinues Pablo<sup>2</sup>; Luigi Rossi Bernardi<sup>3</sup>; <sup>1</sup>*ISB srl, Milan, Italy*; <sup>2</sup>*National Council for Research ITB - CNR, Milan, Italy*; <sup>3</sup>*Multimedica Lab, Milan, Italy*
- TP 069 **Merged Spectrum for Metabolite Identification in MassBank;** Hisayuki Horai<sup>1</sup>; Masanori Arita<sup>2</sup>; Yoshito Nihei<sup>1</sup>; Takaaki Nishioka<sup>1</sup>; <sup>1</sup>*IAB, Keio Univ. & BIRD, Tsuruoka, Japan*; <sup>2</sup>*University of Tokyo, Kashiwa, Japan*
- TP 070 **Cluster Analysis for Q-TOF MS/MS Data;** Xiaoyu Yang; Pedatsur Neta; Yamil Simon; Stephen Stein; *NIST, Gaithersburg, MD*
- TP 071 **A Systematic Investigation on the Improvement in Sensitivity of Spectral Library Searching over Sequence Database Searching in Proteomics;** Xin Zhang; Wenguang Shao; Henry H. Lam; *Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong*
- PROTEOMICS: BIOMARKER DISCOVERY, 072 - 103**
- TP 072 **Comparative Proteomic Analysis of Normal and Malignant Breast Epithelial Cells Using Laser Capture Microdissection/ LC-MS/ and Label-Free Quantification;** Sangwon Cha<sup>1</sup>; Elizabeth Ann Richardson<sup>2</sup>; Dipak A Thakur<sup>1</sup>; Tomas Rejtar<sup>1</sup>; Shiawlin Wu<sup>1</sup>; Dennis C. Sgroi<sup>2</sup>; Barry L. Karger<sup>1</sup>; <sup>1</sup>*Barnett Institute, Northeastern University, Boston, MA*; <sup>2</sup>*Massachusetts General Hospital, Boston, MA*
- TP 073 **Cell Surface and Secreted Protein Profiles of Human Thyroid Cancer Cell Lines Reveal Distinct Glycoprotein Patterns;** Ten-yang Yen<sup>1</sup>; Arthur Arcinas<sup>1</sup>; Nicole Haste<sup>1</sup>; Angela Castanieto<sup>1</sup>; Bruce Macher<sup>1</sup>; Electron Kebebew<sup>2</sup>; <sup>1</sup>*San Francisco State University, San Francisco, CA*; <sup>2</sup>*University of California at San Francisco, San Francisco, CA*
- TP 074 **Reproducibility and Repeatability in Proteomic Analyses by LC-MS/MS;** David L. Tabb<sup>1</sup>; Lorenzo Vega-Montoto<sup>2</sup>; Asokan Mulayath Variyath<sup>2</sup>; Amy-Joan L. Ham<sup>1</sup>; David M. Bunk<sup>3</sup>; Lisa E. Kilpatrick<sup>4</sup>; Paul Rudnick<sup>3</sup>; Dean D. Billheimer<sup>5</sup>; Amanda Paulovich<sup>6</sup>; Daniel C. Liebler<sup>1</sup>; Cliff Spiegelman<sup>2</sup>; Clinical Proteomic Technology Assessment for Cancer Network<sup>7</sup>; <sup>1</sup>*Vanderbilt University, Nashville, TN*; <sup>2</sup>*Texas A&M University, College Station, TX*; <sup>3</sup>*National Institute of Standards and Technology, Gaithersburg, MD*; <sup>4</sup>*NIST, Hollings Marine Laboratory, Charleston, SC*; <sup>5</sup>*University of Arizona, Tucson, AZ*; <sup>6</sup>*Fred Hutchinson Cancer Research Center, Seattle, WA*; <sup>7</sup>*National Cancer Institute, Bethesda, MD*
- TP 075 **The Search for a Chitin Pattern Recognition Receptor;** Karina Vega; Diana Diaz Arevalo; Teresa Hong; Karine Bagramyan; Markus Kalkum; *City of Hope, Duarte, CA*
- TP 076 **Secretory Proteome Analysis Identifies New Markers for Detection of High Risk Papillomavirus-Positive Cervical Cancer;** Tapas Manna; Rajeev Samant; Lewis Pannell; *Mitchell Cancer Institute, Univ of South Alabama, Mobile, AL*
- TP 077 **Proteomic Profiling of Maternal Plasma in First and Third Trimester by Combinatorial Peptide Affinity Chromatography and SELDI-TOF Mass Spectrometry;** Mike Hartenstine; Danielle Ippolito; Peter Napolitano; *Madigan Army Medical Center, Tacoma, WA*
- TP 078 **Finding Preeclampsia Biomarkers in Chorion Villus Biopsies by Mass Spectrometry;** Coskun Güzel; Eric A.P. Steegers; Joke A. Polak-Knook; Robert-Jan J.H. Galjaard; Pieter Derkx; Theo M. Luider; *Erasmus MC, Rotterdam, Netherlands*
- TP 079 **Label-Free Quantitation of Proteins by Liquid Chromatography-Multiple Reaction Monitoring Mass Spectrometry in Human Tissues;** Haixia Zhang<sup>1</sup>; Qinfeng Liu<sup>2</sup>; Dean D. Billheimer<sup>3</sup>; Robbert J.C. Slebos<sup>1</sup>; Daniel C. Liebler<sup>1</sup>; <sup>1</sup>*Vanderbilt University, Nashville, TN*; <sup>2</sup>*Campbell University, Buies Creek, NC*; <sup>3</sup>*University of Arizona, Tucson, Arizona*
- TP 080 **MALDI-TOF MS is Perspective Method for Profiling Biomarkers Bound to Albumine to Detection Lung Cancer;** Valeriy Shevchenko; Natalia Arnotskaya; Elena Alekseeva; Elena Isaeva; Bakhrom Akhmedov; Irina Zborovskaya; Boris Polotskii; *N. N. Blokhin Russian Cancer Research Center, Moscow, Russian Federation*
- TP 081 **A Label-free Approach to Quantitate Novel Ectopic and Intrauterine Pregnancy Serum Biomarkers;** Lynn A. Beer<sup>1</sup>; Kurt T. Barnhart<sup>2</sup>; David W. Speicher<sup>3</sup>; <sup>1</sup>*The Wistar Institute, Philadelphia, PA*; <sup>2</sup>*University of Pennsylvania, Philadelphia, PA*; <sup>3</sup>*Wistar Institute, Philadelphia, PA*
- TP 082 **Rapid Differential Mass Spectrometry (dMS) for Biomarker Discovery;** Yi Du; Matthew Mazur; Nathan Yates; Ronald Hendrickson; *Merck Research Laboratories, Rahway, NJ*

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 083 **Analysis of Human Pancreatic Tissue and Plasma Peptidome Reveals Potential Biomarkers for Pancreatic Cancer;** Kwasi Antwi<sup>1</sup>; Galen Hostetter<sup>2</sup>; Michael J. Demeure<sup>2</sup>; G. Anton Decker<sup>3</sup>; Yvette Ruiz<sup>1</sup>; Tim Sielaff<sup>5</sup>; Larry Koep<sup>4</sup>; Paul Hanavan<sup>1</sup>; Douglas Lake<sup>1</sup>; <sup>1</sup>*School of Life Sciences, Arizona State University, Tempe, AZ*; <sup>2</sup>*Translational Genomics Research Institute, Phoenix, AZ*; <sup>3</sup>*Mayo Clinic Scottsdale, Scottsdale, AZ*; <sup>4</sup>*Banner Good Samaritan Medical Center, Phoenix, AZ*; <sup>5</sup>*Virginia Piper Cancer Center, Rochester, MN*
- TP 084 **Discovery of Protein Biomarkers for Identification of Bacterial Isolates from Indoor Air;** Jennifer Intelicato-Young; Karen Fox; Alvin Fox; *University of South Carolina, Columbia, SC*
- TP 085 **Proteomic Analyses of Pancreatic Cyst Fluids;** Bhavinkumar B. Patel; Eileen Ke; Tiffany Liu; Xin-Ming Li; Oleh Haluszka; John P. Hoffman; Hormoz Ehya; Nancy A. Young; James C. Watson; David Weinberg; Minhuyen T. Nguyen; Steven J. Cohen; Neal J. Meropol; Samuel Litwin; Jeffrey L. Tokar; Anthony T. Yeung; *Fox Chase Cancer Center, Philadelphia, PA*
- TP 086 **Identification and Quantification of Potential Bladder Cancer Biomarkers in Urine by Isotope Labeling and Mass Spectrometry;** YI-TING CHEN<sup>1</sup>; Hsiao-Wei CHEN<sup>1</sup>; Ting Chung<sup>1</sup>; Chih-Ching Wu<sup>1</sup>; Jau-Song Yu<sup>1</sup>; Meng-Chieh CHEN<sup>1</sup>; Chien-Lun CHEN<sup>2</sup>; <sup>1</sup>*Chang Gung University, TAOYUAN, TAIWAN*; <sup>2</sup>*Chang Gung Memorial Hospital, Taoyuan, TAIWAN*
- TP 087 **Proteome Analysis and Evaluation of *Bacillus amyloliquefaciens* and *Bacillus subtilis* Secretomes;** Maria Claret B. Lauan<sup>1</sup>; Ilyn Lyzette D Santos<sup>2</sup>; Sun Min Park<sup>2</sup>; Jinkyu Lim<sup>1</sup>; <sup>1</sup>*Kyungpook University, Daegu, South Korea*; <sup>2</sup>*Kyungpook National University, Daegu, SOUTH KOREA*
- TP 088 **Exploring Biomarkers in Rat Urine for  $\alpha$ -Naphthylisothiocyanate Induced Cholestasis;** Jianzhong Chen<sup>1,3</sup>; Rhonda L. Pitsch<sup>1</sup>; Nicholas J. DelRaso<sup>2</sup>; Kari Green-church<sup>3</sup>; John J. Schlager<sup>2</sup>; Pavel Shiyonov<sup>1</sup>; <sup>1</sup>*Henry M. Jackson Foundation/Air Force Research Lab, Dayton, OH*; <sup>2</sup>*Air Force Research Lab, Dayton, OH*; <sup>3</sup>*The Ohio State University, Columbus, OH*
- TP 089 **Novel Strategies in Peptidomics for Osteoarthritis Biomarker Discovery;** Jurre Kamphorst<sup>1,3</sup>; Rob van der Heijden<sup>1</sup>; Jeroen DeGroot<sup>2</sup>; Theo Reijmers<sup>1</sup>; Ubbo Tjaden<sup>1</sup>; Jan Van Der Greef<sup>1,2</sup>; Thomas Hankemeier<sup>1,3</sup>; <sup>1</sup>*Division of Analytical Biosciences, LACDR, Leiden, The Netherlands*; <sup>2</sup>*TNO Quality of Life, Zeist, The Netherlands*; <sup>3</sup>*Centre for Medical Systems Biology, Leiden, The Netherlands*
- TP 090 **Selection and Validation of Liver Cancer Biomarker Candidates from Human Plasma Proteome;** Ju Yeon Lee<sup>1</sup>; Jin young Kim<sup>1</sup>; Jeong Hwa Lee<sup>1</sup>; Gun Wook Park<sup>1</sup>; Kyung-Hoon Kwon<sup>1</sup>; Young Ki Paik<sup>2</sup>; Jong Shin Yoo<sup>1</sup>; <sup>1</sup>*Korea Basic Science Institute, Deajeon, South Korea*; <sup>2</sup>*Yonsei Proteome Research Center, Yonsei University, Seoul, South Korea*
- TP 091 **Global Phospho-Proteomics Screens to Define 14-3-3 Protein Targets of Specific Cell Signalling Pathways;** Silvia Synowsky; Sandra Crowther; Carol MacKintosh; *Medical Research Council-PPU, Dundee, UK*
- TP 092 **The SILAC Zebrafish Project;** Ann Westman-Brinkmalm<sup>1</sup>; Alexandra Abramsson<sup>1</sup>; Chen Gang<sup>2</sup>; Malin E Andersson<sup>1</sup>; Gunnar Brinkmalm<sup>1</sup>; Josef Pannee<sup>1</sup>; Mikael K Gustavsson<sup>1</sup>; Kaj Blennow<sup>1</sup>; Ulla Rüttschi<sup>1</sup>; Hermann Heumann<sup>2</sup>; Henrik Zetterberg<sup>1</sup>; <sup>1</sup>*University of Gothenburg, Molndal, Sweden*; <sup>2</sup>*Silantes, Martinsried, Germany*
- TP 093 ***In vivo* Characterization of Endogeneous Neuropeptides and -Proteins on a Chromatographic Time-scale Using Nanoflow LC/FTICR-MS/MS;** Gunnar Brinkmalm; Erik Portelius; Annika Öhrfelt; Henrik Zetterberg; Ann Westman-Brinkmalm; Kaj Blennow; *University of Gothenburg, Molndal, Sweden*
- TP 094 **Quantitative MALDI-FT-ICR Analysis of Cerebrospinal Fluid of Relapsing Remitting and Primary Progressive Multiple Sclerosis Patients;** Marcel P Stoop; Mark K Titulaer; Peter C Burgers; Christoph Stingl; Peter A E Sillevius Smitt; Rogier Q Hintzen; Theo M Luider; *ErasmusMC, Rotterdam, Netherlands*
- TP 095 **Diagnosis of Prenatal Disorders – the Search for Biomarkers in Maternal Human Plasma Using a Robust Analytical Approach;** Susan E. Slade<sup>1</sup>; Konstantinos Thalassinou<sup>1</sup>; Nisha Patel<sup>1</sup>; Joanne B. Connolly<sup>2</sup>; Chris Hughes<sup>2</sup>; Jim Langridge<sup>3</sup>; Steve Thornton<sup>1</sup>; Kypros Nicolaides<sup>4</sup>; James Scrivens<sup>1</sup>; <sup>1</sup>*University of Warwick, Coventry, UK*; <sup>2</sup>*Waters, Manchester, UK*; <sup>3</sup>*Waters Corporation, Manchester, UK*; <sup>4</sup>*King's College Hospital, London, UK*
- TP 096 **ProteoMiner™ Treatment Combined to Mass Spectrometry Analysis for Biomarker Discovery: Evaluation on Human Plasma;** Damien Lavigne<sup>1</sup>; Jean Pierre Le Caer<sup>2</sup>; Olivier Meilhac<sup>3</sup>; Jeannette Fareh<sup>1</sup>; Luc Guerrier<sup>4</sup>; Thibaut Léger<sup>3</sup>; Jean Baptiste Michel<sup>3</sup>; Egisto Boschetti<sup>4</sup>; Olivier Laprèvote<sup>2,5</sup>; <sup>1</sup>*Sysdiag, Montpellier, France*; <sup>2</sup>*CNRS-ICSN, Gif Sur Yvette, France*; <sup>3</sup>*Inserm U698, Paris, France*; <sup>4</sup>*Bio-Rad, Gif sur Yvette, France*; <sup>5</sup>*Paris Descartes University, Paris, France*
- TP 097 **Protein Expression in Human Female Parotid Saliva is Age Specific;** Kiran S Ambatipudi<sup>1</sup>; Bingwen Lu<sup>2</sup>; John Yates<sup>2</sup>; James E Melvin<sup>1</sup>; <sup>1</sup>*University of Rochester, Rochester, NY*; <sup>2</sup>*The Scripps Research Institute, La Jolla, CA*
- TP 098 **Proteolytic Peptides as Potential Biomarkers for  $\alpha$ -Thalassemia with Stop Codon Mutations;** Duangmanee Sanmun<sup>1</sup>; Jing Y. Chia<sup>1</sup>; Robin Philp<sup>2</sup>; Bin Li<sup>1</sup>; Thongperm Munkongdee<sup>3</sup>; Saovaras Svasti<sup>3</sup>; Pranee Winichagoon<sup>3</sup>; Suthat Fuchareon<sup>3</sup>; Hai Y. Law<sup>4</sup>; Angeline Lai<sup>4</sup>; Ivy Ng<sup>4</sup>; Kai Tang<sup>4</sup>; <sup>1</sup>*Nanyang Technological University, Singapore, Singapore*; <sup>2</sup>*Agilent Technologies Singapore Pte Ltd, Singapore, Singapore*; <sup>3</sup>*Mahidol University, Puttamonthon, Thailand*; <sup>4</sup>*KK Women's and Children's Hospital, Singapore, Singapore*
- TP 099 **Identification of Potential Biomarkers in Low Molecular Weight Human Serum Fraction for Hepatocellular Carcinoma Detection Using Proteomic Strategies;** Yanming An; Christopher Loffredo; Habtom Resson; Radoslav Goldman; *Georgetown University Hospital, Washington, DC*
- TP 100 **Quantitative Proteomic Analysis of Parental and adh1 Mutant Isolates of *Candida albicans* in Mature Phase Biofilm;** Ali A. Lattif<sup>2,3</sup>; Pranab K. Mukherjee<sup>2,3</sup>; Elizabeth Johannes<sup>1,3</sup>; Hong Zhao<sup>1,3</sup>; Mark Chance<sup>1,3</sup>; Mahmoud A. Ghannoum<sup>2,3</sup>; <sup>1</sup>*Center for Proteomics, Cleveland, OH*; <sup>2</sup>*Center for Medical Mycology, Dept. of*

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Dermatology, Cleveland, OH; <sup>3</sup>Case Western Reserve University, Cleveland, OH*
- TP 101 **Lectins Based Identification of Cancer Associated Glycoproteins in Cancer Patient Plasma;** Qiang Gao; Dawn Watson; Catherine P Riley; Wonryeon Cho; Jiri Adamec; Fred E Regnier; *Purdue University, West Lafayette, IN*
- TP 102 **Proteomic Analysis of Co-Regulators in a Novel Prostate Cancer Progression Line;** John Lapek; Michael Moses; Katherine Marshall; Kevin Welle; Lauren Jensen; Karin Williams; William Ricke; Alan Friedman; *University of Rochester Medical Center, Rochester, NY*
- TP 103 **Discovery of Biomarkers in Patients with Visceral Leishmaniasis;** Manfred Fussi; Brian J. Ward; Momar Ndao; Christine Straccini; Bernard F. Gibbs; *McGill University, Montreal, Canada*
- 
- METABOLOMICS, 104 - 120**
- TP 104 **Quantitative Phosphorus Metabolomics Using Nano-Flow Liquid Chromatography-Tandem Mass Spectrometry and Culture-Derived Comprehensive Global Internal Standards;** Taisuke Uehara<sup>1,2</sup>; Akira Yokoi<sup>1</sup>; Ken Aoshima<sup>1,2</sup>; Satoshi Tanaka<sup>1,2</sup>; Tadashi Kadowaki<sup>1</sup>; Masayuki Tanaka<sup>1</sup>; Yoshiya Oda<sup>1,2</sup>; *<sup>1</sup>Eisai, Tsukuba, JAPAN; <sup>2</sup>CREST, Saitama, Japan*
- TP 105 **Metabolomics of Soybean Root Hairs Inoculated with *Bradyrhizobium japonicum*;** Zhentian Lei<sup>1</sup>; Laurent Brechenmacher<sup>2</sup>; Seth Findley<sup>2</sup>; Marc Libault<sup>2</sup>; Gary Stacey<sup>2</sup>; Lloyd W. Sumner<sup>1</sup>; *<sup>1</sup>The Samuel Roberts Noble Foundation, Ardmore, OK; <sup>2</sup>University of Missouri, Columbia, MO*
- TP 106 **Oxidative Metabolism Drives Stem Cell Differentiation;** Oscar Yanas; Julie Clark; Diana Wong; Paul H Benton; Sunia Trauger; Caroline Despons; Sheng Ding; Gary Siuzdak; *The Scripps Research Institute, La Jolla, CA*
- TP 107 **Differential <sup>13</sup>C-/<sup>12</sup>C-Isotope Dansylation Labeling and Fast LC FT-ICR MS for Quantitative Metabolome Analysis;** Kevin Guo; Liang Li; *University of Alberta, Edmonton, Canada*
- TP 108 **Evaluation of the Cellodextrin Profiles of the Enzymatic Digests of Switchgrass;** Bruce A. Tomkins; Gary J. Van Berkel; Timothy J. Tschaplinski; Nancy L. Engle; *Oak Ridge National Laboratory, Oak Ridge, TN*
- TP 109 **Identification of Biomarkers in Biofluids: Introduction of a Comprehensive Analytical Strategy Based on LC-MS/MS and Candidate Confirmation Tools;** Ravane Mohamed<sup>1</sup>; Emmanuel Varesio<sup>1</sup>; Ron Bonner<sup>2</sup>; Gerard Hopfgartner<sup>1</sup>; *<sup>1</sup>University of Geneva, Geneva, Switzerland; <sup>2</sup>MDS Analytical Tec, Sciex, Concord, ON*
- TP 110 **A generic Calibration Method to Improve Data Precision and Accuracy in Label Free Metabolomics, a First Step Towards Quantitative Metabolomics;** Elwin Verheij; Frans van der Kloet; Renger Jellema; Ivana Bobeldijk; *TNO Quality of Life, Zeist, Netherlands*
- TP 111 **Application of Supercritical Fluid Technologies to Profiling of Various Lipophilic Metabolites;** Takeshi Bamba; Atsuki Matsubara; Eiichiro Fukusaki; *Graduate School of Engineering, Osaka University, Suita, Osaka, Japan*
- TP 112 **A Novel Method for Robust LC/MS-TOF Analysis of Hydrophilic Metabolite Classes by Aqueous Normal Phase on a Silica Hydride-Based Column;** Joseph J. Pesek<sup>1</sup>; Maria Matyska<sup>1</sup>; William Ciccone<sup>2</sup>; Steven M. Fischer<sup>3</sup>; Theodore R. Sana<sup>3</sup>; *<sup>1</sup>San Jose State University, San Jose, CA; <sup>2</sup>Microsol Technologies, Eatontown, NJ; <sup>3</sup>Agilent Technologies, Santa Clara, CA*
- TP 113 **LC/MS-TOF Analysis of Metabolites in Plasmodium Falciparum-Infected Red Blood Cells (RBCs) Exposed to the Cell Membrane Permeabilization Agent Streptolysin O;** Theodore R. Sana<sup>1</sup>; Steven M. Fischer<sup>1</sup>; William L. Gosnell<sup>2</sup>; Abby Collier<sup>2</sup>; Sandra Chang<sup>2</sup>; *<sup>1</sup>Agilent Technologies, Santa Clara, CA; <sup>2</sup>John A. Burns School of Medicine, Honolulu, HI*
- TP 114 **Metabolic Profiling of a Single Live Cells by Laser Ablation Electrospray Ionization Mass Spectrometry;** Bindesh Shrestha; Akos Vertes; *George Washington University, Washington*
- TP 115 **Toward Simultaneous Determination of Ionic Metabolites by Capillary Electrophoresis-Mass Spectrometry;** Yoshiaki Ohashi<sup>1</sup>; Takushi Ooga<sup>1</sup>; Hajime Sato<sup>1</sup>; Atsushi Nagashima<sup>1</sup>; Masaru Tomita<sup>1,2</sup>; Tomoyoshi Soga<sup>1,2</sup>; *<sup>1</sup>Human Metabolome Technologies, Inc., Tsuruoka, Japan; <sup>2</sup>Institute for Advanced Biosciences, Keio University, Tsuruoka, Japan*
- TP 116 **Pathway Identification by <sup>13</sup>C Metabolomics Using Liquid Chromatography High-Resolution Mass Spectrometry: Elucidation of the Ethylmalonyl-CoA Pathway for Glyoxylate Regeneration;** Patrick Kiefer<sup>1</sup>; Rémi Peyraud<sup>1</sup>; Philipp Christen<sup>1</sup>; Jean-Charles Portais<sup>2</sup>; Julia A. Vorholt<sup>1</sup>; *<sup>1</sup>Swiss Federal Institute of Technology, Zurich, Switzerland; <sup>2</sup>LISBP, INSA, Toulouse, France*
- TP 117 **Study of Metabolites Including  $\alpha$ -Tomatine by Femtosecond Laser-Induced Ionization/Dissociation (fs-LID);** Nelson S. Winkler; Christine L. Kalcic; A. Daniel Jones; Marcos Dantus; *Michigan State University, East Lansing, MI*
- TP 118 **Biomarker Discovery in Diabetic Nephropathy by Targeted Metabolomics;** Ulrika Lundin; Klaus M. Weinberger; *Biocrates Life Sciences AG, Innsbruck, Austria*
- TP 119 **Improving the Analytical Strategies for LC-MS of Polar Metabolites;** Thomas Hankemeier<sup>1,2</sup>; Toshi Mikami<sup>1</sup>; Miguel Rojas<sup>1,2</sup>; Rob Vreeken<sup>1,2</sup>; Theo Reijmers<sup>1,2</sup>; *<sup>1</sup>Leiden University, Leiden, Netherlands; <sup>2</sup>Netherlands Metabolomics Centre, Leiden, The Netherlands*
- TP 120 **Optimisation of a Method for Metabolomic Analysis of Tissue Culture and Plasma Using a UHPLC/QTOF System;** Florence Raynaud<sup>1</sup>; Rupinder Pandher<sup>1</sup>; Celine Ducruix<sup>1</sup>; Edgar Naegel<sup>2</sup>; *<sup>1</sup>The Institute of Cancer Research, Sutton, UK; <sup>2</sup>Agilent Technologies, Waldbronn, Germany*
- 
- PROTEOMICS: NEW APPROACHES, 121 - 149**
- TP 121 **Microwave Assisted Chemical and Enzymatic Proteolysis for Mass Spectrometric Identification of Protein Variants;** Asif Alam<sup>1,2</sup>; Yuanzhong Yang<sup>2</sup>; Reinhard I. Boysen<sup>2</sup>; Donald K. Bowden<sup>3</sup>; Milton T. W. Hearn<sup>2</sup>; *<sup>1</sup>Biochemistry & Molecular Biology, Monash University, Vic, Australia; <sup>2</sup>ARC Special Research Centre for Green Chemistry, Monash University, Vic, Australia; <sup>3</sup>Thalassaemia Service, Monash Medical Centre, Clayton, Victoria, Australia*
- TP 122 **Lys-N: A novel Protease Ideal, in Combination with SCX and ETD, for Proteomics;** Nadia Taouatas; A.F. Maarten Altelaar; Madalina M. Drugan; Andreas O.

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 123 Helbig; Albert J.R. Heck; Shabaz Mohammed; *Utrecht University, Utrecht, Netherlands*  
**Proteome Analysis by an On-Target Digestion MALDI-FTICR Approach;** Chunyan Li<sup>1</sup>; Peng Zhao<sup>1</sup>; Lance Wells<sup>2</sup>; Jon Amster<sup>1</sup>; <sup>1</sup>*University of Georgia, Athens, GA*; <sup>2</sup>*CCRC/UGA, Athens, GA*
- TP 124 **On-Substrate Labeling of Peptides Using Cleavable Fluorous Labels Immobilized on Fluorous Silica Support;** Manoj Pal<sup>1,2</sup>; Bruhaspathy Miriyala<sup>2</sup>; Marvin S. Yu<sup>2</sup>; Eric C. Peters<sup>1</sup>; <sup>1</sup>*GNF (Novartis), San Diego, CA*; <sup>2</sup>*Fluorous Technologies Inc., Pittsburgh, PA*
- TP 125 **Ultra-Rapid Pressure Digestion and Label-Free Quantitative Proteomics of *Yersinia* Infected Mice Tissues;** Kim K. Hixson<sup>1</sup>; Daniel Lopez Ferrer<sup>1</sup>; Matthew Bender<sup>2</sup>; Patricia L. Worsham<sup>3</sup>; Karl K. Weitz<sup>1</sup>; Nate Lawrence<sup>4</sup>; Amy Rasley<sup>5</sup>; Therese W. Claus<sup>5</sup>; Ljiljana Pasa-tolic<sup>1</sup>; Richard D. Smith<sup>1</sup>; Mary S. Lipton<sup>1</sup>; <sup>1</sup>*Pacific Northwest National Lab, Richland, WA*; <sup>2</sup>*NBACC, Washington, DC*; <sup>3</sup>*USAMRIID, Frederick, MD*; <sup>4</sup>*Pressure Biosciences, Inc., South Easton, MA*; <sup>5</sup>*Lawrence Livermore National Lab, Livermore, CA*
- TP 126 **Use of Proteinase K to Improve Resolution in Hydrogen/Deuterium Exchange Mass Spectrometry;** John Venable; Linda Okach; William Scuba; Ansgar Brock; *Genomics Institute for the Novartis Research Found, San Diego, CA*
- TP 127 **A Comparison of Proteolytic Digestion Techniques on Different Sample Formats;** Tommy K. Cheung; Teerapat Rosajjakul; David Arnott; Qui Phung; *Genentech, Inc., South San Francisco, CA*
- TP 128 **Optimization of Microwave-Assisted Proteolysis for Highly Efficient and More Comprehensive Protein Profiling;** Yi Huang<sup>1,2</sup>; Fang Xu<sup>1,3</sup>; Sun Yong Jeong<sup>1</sup>; Yanbao Yu<sup>1,2</sup>; Xian Chen<sup>1</sup>; <sup>1</sup>*University of North Carolina, Chapel Hill, NC*; <sup>2</sup>*Fudan University, Shanghai, China*; <sup>3</sup>*Jiaotong University, Shanghai, China*
- TP 129 **Proteomics Under Pressure: Rapid Extraction and Digestion in a Single Tube;** Alexander V. Lazarev<sup>1</sup>; Emily Freeman<sup>2</sup>; Vera S. Gross<sup>1</sup>; Greta Carlson<sup>1</sup>; Edmund Ting<sup>1</sup>; Alexander R. Ivanov<sup>2</sup>; <sup>1</sup>*Pressure BioSciences, Woburn, MA*; <sup>2</sup>*Harvard School of Public Health, Boston, MA*
- TP 130 **'Genome Free' Proteomics; de novo Sequence Analysis by a Combination of LysN Protein Digestion and Electron Transfer Dissociation;** A.F. Maarten Altelaar<sup>1,2</sup>; Madalina M. Drugan<sup>1,2</sup>; Nadia Taouatas<sup>1,2</sup>; Nikolai Mischerikow<sup>1,2</sup>; Bas van Breukelen<sup>1,2</sup>; Shabaz Mohammed<sup>1,2</sup>; Albert J.R. Heck<sup>1,2</sup>; <sup>1</sup>*Utrecht University, Utrecht, Netherlands*; <sup>2</sup>*Netherlands Proteomics Centre, Utrecht, The Netherlands*
- TP 131 **An Efficient On-pellet-Digestion Procedure Coupled to Extensive Nano-LC Separation/ Orbitrap for Comprehensive and Large-scale Profiling of Swine Heart Mitochondrial Proteome;** Jun Qu<sup>1,2</sup>; John Canty<sup>1,2</sup>; Rebecca Young<sup>1,2</sup>; Xiaotao Duan<sup>1,2</sup>; Robert Straubinger<sup>1,2</sup>; <sup>1</sup>*University at Buffalo, SUNY, Amherst, NY*; <sup>2</sup>*New York State Center of Excellence, Buffalo, NY*
- TP 132 **High-Pressure Assisted In-Gel Tryptic Digest: Qualitative and Quantitative Aspects;** Michail Alterman<sup>1</sup>; Melkamu Getie-Kehtie<sup>1</sup>; Alexander Lazarev<sup>2</sup>; Vera S. Gross<sup>3</sup>; <sup>1</sup>*FDA, CBER, Rockville, MD*; <sup>2</sup>*Pressure Biosciences, Inc, Woburn, MA*; <sup>3</sup>*Pressure BioSciences, Woburn, MA*
- TP 133 **A Novel Target Peptide Quantification Method: Multiple Products Monitoring (MpM);** Je-Hyun Baek<sup>1</sup>; Hokeun Kim<sup>1</sup>; Byunghee Shin<sup>1</sup>; Sun Young Ahn<sup>2</sup>; Youngmi Kim Pak<sup>2</sup>; Myeong-Hee Yu<sup>\*1</sup>; <sup>1</sup>*FPC at KIST, Seoul, South Korea*; <sup>2</sup>*Kyung Hee University, Seoul, South Korea*
- TP 134 **Quantitative Cell Surface Proteome Profiling of the Human Pathogen *Staphylococcus aureus*  $\Delta$ sigB Using the Biotinylation Approach;** Kristina Hempel; Andreas W. Otto; Michael Hecker; Dörte Becher; *University of Greifswald, Greifswald, Germany*
- TP 135 **Determination of the Number of Apolipoprotein Molecules in Reconstituted High Density Lipoprotein Complexes Using MALDI-MS;** R.A. Gangani D. Silva<sup>2</sup>; John B. Massey<sup>3</sup>; Henry Pownall<sup>3</sup>; Matthew R. Tubb<sup>2</sup>; Jamie Morris<sup>2</sup>; Larry Sallans<sup>1</sup>; Stephen F. Macha<sup>1</sup>; <sup>1</sup>*University of Cincinnati, Department of Chemistry, Cincinnati, OH*; <sup>2</sup>*Department of Pathology and Laboratory Medicine, University of Cincinnati, OH*; <sup>3</sup>*Department of Medicine, Baylor College of Medicine, Houston, TX*
- TP 136 **Determination of Cancer Biomarkers Using Targeted MS Analysis of Isotope-Labeled Formalin-Fixed Paraffin-Embedded Tissue Samples;** Leroi V. Desouza<sup>1</sup>; Marlene M. Darfler<sup>2</sup>; David B. Krizman<sup>3</sup>; Casimir Eitner<sup>4</sup>; Alexander D. Romaschin<sup>5</sup>; Terence J. Colgan<sup>6</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>*York University, Toronto, Canada*; <sup>2</sup>*Expression Pathology Inc., Gaithersburg, MD*; <sup>3</sup>*Expression Pathology Incorporated, Gaithersburg, MD*; <sup>4</sup>*Expression Pathology, Inc., Gaithersburg, MD*; <sup>5</sup>*St Michael's Hospital, Toronto, Canada*; <sup>6</sup>*Mt. Sinai Hospital, Toronto, Canada*
- TP 137 **Withdrawn**
- TP 138 **Novel High-Throughput SRM (/MRM) Based Proteomic Strategy;** Bruno Domon<sup>1</sup>; Paola Picotti<sup>1</sup>; Nathalie Selevsek<sup>1</sup>; Reiko Kiyonami<sup>2</sup>; Alan E. Schoen<sup>2</sup>; Amol Prakash<sup>2</sup>; Scott Peterman<sup>2</sup>; Andreas F Huhmer<sup>2</sup>; Ruedi Aebersold<sup>1</sup>; <sup>1</sup>*ETH Zurich, Zurich, Switzerland*; <sup>2</sup>*ThermoFisher Scientific, San Jose, CA*
- TP 139 **Quantitative Proteomic Analysis of Syk-Interacting Protein Complexes Using Novel Labeling Reagents and a Single-Chain Anti-GFP Antibody;** Jacob A. Galan<sup>1,3</sup>; Leela L. Paris<sup>2,3</sup>; Hua-Jie Zhang<sup>1,3</sup>; Robert L. Geahlen<sup>2,3</sup>; W. Andy Tao<sup>1,3</sup>; <sup>1</sup>*Dept of Biochemistry, Purdue University, West Lafayette, IN*; <sup>2</sup>*Dept of Medicinal Chemistry, Purdue University, West Lafayette, IN*; <sup>3</sup>*Purdue Cancer Center, West Lafayette, IN*
- TP 140 **PAcIFIC: How to Quantify Deeper Into the Proteomics Ocean;** Alexandre Panchaud; Scott A. Shaffer; David R. Goodlett; *University of Washington, Seattle, WA*
- TP 141 **Rapid, Near Proteome-Wide Quantitative Analysis of Aneuploid Budding Yeast;** Noah E. Dephoure<sup>1</sup>; Eduardo M. Torres<sup>2</sup>; Judit Villen<sup>1</sup>; Angelika Amon<sup>2</sup>; Steven Gygi<sup>1</sup>; <sup>1</sup>*Harvard Medical School, Boston, MA*; <sup>2</sup>*Howard Hughes Medical Institute, MIT, Cambridge, MA*
- TP 142 **Subunit Stoichiometry and Absolute Quantification of Protein Complexes Using an Integrated Bottom Up Approach;** Lin Huang<sup>1</sup>; Yingying Yang<sup>1</sup>; Yimeng Dou<sup>2</sup>; Jenny Wu<sup>2</sup>; Lei Fang<sup>1</sup>; Rick Lathrop<sup>1,2</sup>; Wes Hatfield<sup>1,2</sup>; Ruslan Aphasizhev<sup>1</sup>; Xiaojie Qi<sup>1</sup>; Suzanne



## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Sandmeyer<sup>1</sup>; <sup>1</sup>University of California, Irvine, CA; <sup>2</sup>CODA Genomics, Inc, Laguna Hills, CA
- TP 143 **Chemoproteomics Technology for Target Protein Profiling and its Applications for Drug Discovery;** Hua Tang; Scott Warder; Paul Richardson; Robert Hubbard; Michael Michaelides; Todd Hansen; Shaun McLoughlin; *Abbott laboratories, Abbott Park, IL*
- TP 144 **Functionalized Nano-chemical Probes for Resolving Protein Complexes Related to Estrogen Action Using MS-Based Quantitative Proteomics;** Pai-Chiao Cheng; Hsiang-Kai Chang; Shu-Hui Chen; *National Cheng Kung University, Tainan, Taiwan*
- TP 145 **CCMS – A Unique Technology Enabling Improved In-Depth Proteomic Analysis and Drug Development Through Functional Isolation of Sub-Proteomes;** Mirko Gliński<sup>1</sup>; Thomas Lenz<sup>1</sup>; Yan Luo<sup>1</sup>; Peter Poot<sup>2</sup>; Christian Blex<sup>1</sup>; Olivia Baessler<sup>1</sup>; Jenny J. Fischer<sup>1</sup>; Christian Dalhoff<sup>1</sup>; Michael Hueben<sup>2</sup>; Elmar Weinhold<sup>2</sup>; Mathias Dreger<sup>1</sup>; Michael Sefkow<sup>1</sup>; Hubert Koester<sup>1</sup>; <sup>1</sup>caprotec bioanalytics GmbH, Berlin, Germany; <sup>2</sup>RWTH Aachen, Aachen, Germany
- TP 146 **Identification of HuD Specific Antibodies Related to Paraneoplastic Neurological Syndrome by Advanced Mass Spectrometry;** Lennard Dekker; Peter Maat; Eric Brouwer; Theo Luider; Peter Sillevius Smitt; *Erasmus Medical Center, Rotterdam, Netherlands*
- TP 147 **Deciphering the Dynamic Structure and Function of the 26S Proteasome Complex Upon Oxidative Stress;** Xiaorong Wang; Lan Huang; *University of California, Irvine, CA*
- TP 148 **Dissection of the MAPK Signal Cascades Using *in vivo* Profiling Endogenous Interactions with Knock-out (iPEIK) in Mammalian Cells;** Ling Xie; linhong Jing; Yu Yanbao; Kazuhiro Nakamura; Gary L Johnson; Xian Chen; *University of North Carolina, Chapel Hill, NC*
- TP 149 **Identification of a Viral Protein that Inhibits Insulin Receptor Activation – a Slow, Deliberate, Massively Serial Analysis of Viral Interactomes;** Richard S. Johnson; Refugio Martinez; Stefan Ponko; Steve Wiley; Kaykas Ajamete; *VLST Corp, Seattle, WA*
- SMALL SCALE SEPARATIONS, 150 - 173**
- TP 150 **Top Down Proteomics Using Online Polymer Reversed Phase (PLRP) Nanocapillary-LC Coupled Fourier Transform Mass Spectrometry;** Adaikkalam Vellaichamy<sup>1</sup>; John Kellie<sup>1</sup>; John C. Tran<sup>1</sup>; Ji Eun Lee<sup>1</sup>; Jaeyun Sung<sup>1</sup>; Nathan D. Price<sup>1</sup>; Gary Valaskovic<sup>2</sup>; Neil L. Kelleher<sup>1</sup>; <sup>1</sup>Universtiy of Illinois, Urbana, IL; <sup>2</sup>New Objective, Inc., Woburn, MA
- TP 151 **Comparison of Chromatographic Media for Nano ESI LC-MS/MS: Applications to Biomarker Discovery;** Michael Gardner<sup>1</sup>; Megan Rowland<sup>2</sup>; Jonathan L. Bundy<sup>1</sup>; James Stephenson<sup>1</sup>; Gary Valaskovic<sup>3</sup>; Mike S. Lee<sup>4</sup>; <sup>1</sup>Research Triangle Institute, Rtp, NC; <sup>2</sup>RTI International, Cary, NC; <sup>3</sup>New Objective, Inc., Woburn, MA; <sup>4</sup>Milestone Development Services, Newtown, PA
- TP 152 **High Resolution Dual Nano-LC/MS Source for Increasing Sample Throughput of Gradient LC Methods;** Arthur J. Fogiel; Arthur J. Fogiel Jr; Sau Lan Tang Staats; Katherine Heaton; Lee Heineman; *Phoenix S & T, Inc, Chester, PA*
- TP 153 **Optimal Approach for Multiplexed NanoLC-MS;** Sau Lan Tang Staats; Arthur Fogiel; Andris Suna; Arthur Fogiel, Jr; Katherine Heaton; *Phoenix S & T, Inc, Chester, PA*
- TP 154 **Automated 2D Peptide Separation on a 1D Nano-LC-MS System;** Paul Taylor<sup>2</sup>; Peter Nielsen<sup>3</sup>; Morten B Trelle<sup>3</sup>; Ole Hørning<sup>3</sup>; Michael Barrett Andersen<sup>3</sup>; Ole Vorm<sup>3</sup>; Michael Moran<sup>2</sup>; Thomas Kislinger<sup>1</sup>; <sup>1</sup>University of Toronto, Toronto, ON; <sup>2</sup>Hospital for Sick Children, Toronto, ON; <sup>3</sup>Proxeon, Odense, Denmark
- TP 155 **An Investigation into the Reproducibility of LC-MS Analysis of Complex Peptide Mixtures Using Formalin-Fixed Paraffin-Embedded (FFPE) Tissue;** Chris Hughes<sup>1</sup>; Thérèse Mckenna<sup>1</sup>; Jim Langridge<sup>1</sup>; Niroshini Nirmalan<sup>2</sup>; Rosamonde Banks<sup>2</sup>; <sup>1</sup>Waters Manchester UK, Manchester, UK; <sup>2</sup>University of Leeds, Leeds, UK
- TP 156 **Ruggedness of Nanobore LCMS for Qualitative and Quantitative Biomarker Analysis Using an Automated Emitter Positioning and Rinsing System;** Amanda Berg; Carla Marshall-Waggett; Gary Valaskovic; *New Objective, Inc., Woburn, MA*
- TP 157 **Improved Throughput for Clinical Proteomics Using a Dual Channel NanoLC-Nanospray Source;** Cheryl F. Lichti<sup>1</sup>; Ben Ngo<sup>2</sup>; Marjorie A. Case<sup>1</sup>; R. Reid Townsend<sup>1</sup>; Gary A. Valaskovic<sup>2</sup>; <sup>1</sup>Washington University School of Medicine, St. Louis, MO; <sup>2</sup>New Objective, Inc., Woburn, MA
- TP 158 **Reduced Carry-Over, Fast Nanoflow LC/MS Using a Parallel Analysis / Wash Approach;** Tom Van De Goor; Lukas Trojer; Hans-Georg Weissgerber; *Agilent Technologies, Waldbronn, Germany*
- TP 159 **Increased Peak Capacity for Nano HPLC Separation of Peptides by Using Long Packed Columns;** Goran Mitulovic<sup>1</sup>; Sebastiaan Eeltink<sup>3</sup>; Remco Swart<sup>3</sup>; Mark van Gils<sup>2</sup>; Karl Mechtler<sup>4</sup>; <sup>1</sup>IMBA Inst. of Mol. Biotech., Vienna, Austria; <sup>2</sup>Dionex, Sunnyvale, CA; <sup>3</sup>Dionex Benelux, Amsterdam, The Netherlands; <sup>4</sup>IMP Research Institute of Mo, Vienna, AUSTRIA
- TP 160 **Comparison of Conventional, Sub-2-um, and Superficially Porous (Fused-Core) Particles for Long and Short Gradient Nanobore LC/MS;** Robert Moody<sup>1</sup>; Gary Valaskovic<sup>2</sup>; Mike S. Lee<sup>3</sup>; <sup>1</sup>MAC-MOD Analytical, Chadds Ford, PA; <sup>2</sup>New Objective, Inc., Woburn, MA; <sup>3</sup>Milestone Development Services, Newtown, PA
- TP 161 **Temperature Control Effects in Packed Emitter Nanobore LC-MS/MS for Protein Digest Analysis;** Mike S. Lee<sup>1</sup>; Lee Sawdey<sup>2</sup>; Amanda Berg<sup>2</sup>; Gary Valaskovic<sup>2</sup>; <sup>1</sup>Milestone Development Services, Newtown, PA; <sup>2</sup>New Objective, Inc., Woburn, MA
- TP 162 **The Effect of Chromatographic Resolution on Peptide Identification;** Remco Van Soest; David Neyer; J. Bryce Young; *Eksigent Technologies, Dublin, CA*
- TP 163 **Withdrawn**
- TP 164 **High Voltage Programming for Optimum MS/MS Sensitivity of Neuropeptides;** David P. Budac<sup>1</sup>; Mark J. Hayward<sup>2</sup>; Arthur Fogiel<sup>3</sup>; <sup>1</sup>Lundbeck Research US, Paramus, NJ; <sup>2</sup>Lundbeck Research USA, Stockton, NJ; <sup>3</sup>Phoenix S&T, Chester, PA
- TP 165 **Nano LCMS with Simultaneous Low Volume Fractionation Followed by Low Flow Infusion for the Analyses of Complex Proteomic Samples;** Reinaldo Almeida<sup>2</sup>; Leonie F. Waanders<sup>1</sup>; Peter Bandila<sup>1</sup>; Mark Allen<sup>2</sup>; Matthias Mann<sup>1</sup>; <sup>1</sup>Max Planck Institute for

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Biochemistry, D Martinsried, Germany; <sup>2</sup> Advion Biosciences Ltd, Norwich, Norfolk, UK
- TP 166 **EWOD Digital Microfluidic Platform for Protein Capture and Analysis**; Adam A. Stokes; Yifan Li; William Parkes; David J Clarke; Pat Langridge Smith; Anthony J. Walton; C. Logan Mackay; *University of Edinburgh, Edinburgh, UK*
- TP 167 **Gangliosides Analysis by Capillary Electrophoresis/Electrospray Ionization/Mass Spectrometry Using Nonvolatile Borate Buffer**; Ju-Li Huang; Yun-Hung Hsueh; Guor-Rong Her; *National Taiwan University, Taipei, Taiwan*
- TP 168 **Comprehensive LC-CE-MS with Capillary Chromatography Coupled to a Microfabricated Device with Integrated Lossless Sample Transfer, Electrophoretic Separation, and Electrospray Ionization**; J. Scott Mellors; J. Michael Ramsey; *University of North Carolina, Chapel Hill, NC*
- TP 169 **Step Elution SPE Multichannel CE-MS: A High Throughput Two-dimensional Separation Approach for Protein Analysis**; Wei-Han Lee; Guor-rong Her; *National Taiwan University, Taipei, Taiwan*
- TP 170 **Reversed Phase Monolithic Column Array Devices for Analysis of Peptide Mixtures**; Jian Liu; Daniel Higbee; Michael Schilling; Ranu Nayak; Daniel R. Knapp; *Medical University of SC, Charleston, SC*
- TP 171 **High Capacity Separations for Complex Proteomic Mixtures Using Multiple Microfluidic Chip Columns in Series**; J. Bryce Young; David Wyrick; Erika Lin; Remco van Soest; Nicole Hebert; *Eksigent Technologies, Dublin, CA*
- TP 172 **Profiling Stress-Induced Neuropeptidomic Changes with Capillary Electrophoresis-Mass Spectrometry and Stable Isotopic Labeling Technique**; Junhua Wang; Feng Xiang; Yuzhuo Zhang; Zichuan Zhang; Lingjun Li; *UW-Madison, Madison, WI*
- TP 173 **Application and Evaluation of Porous Tip CE-MS Interface Design to Narrow Bore (~5 µm) CE Capillaries**; Mehdi Moini<sup>1</sup>; Michelle Hentz<sup>1</sup>; Emily Chen<sup>2</sup>; <sup>1</sup>Texas State University, San Marcos, TX; <sup>2</sup>University of Texas at Austin, Austin, TX
- TP 174 **Principal Component Analysis (PCA) Applied to MALDI-MS Images, Unsupervised Data Interrogation Directing Peptide Selection from Trypsin-Digested Tissue Sections**; Emrys A Jones<sup>1</sup>; Adam McMahon<sup>1</sup>; Alex Henderson<sup>1</sup>; Herve Boutin<sup>1</sup>; Emmanuel Raptakis<sup>2</sup>; Patricia Price<sup>1</sup>; <sup>1</sup>University of Manchester, Manchester, UK; <sup>2</sup>Kratos Analytical, Manchester, UK
- TP 175 **Locating Spatially-Localized Molecules in MALDI-Images**; Jocelyne Bruand<sup>1</sup>; Maxence Wisztorski<sup>2</sup>; Isabelle Fournier<sup>3</sup>; Michel Salzet<sup>4</sup>; Eduardo R. Macagno<sup>1</sup>; Vineet Bafna<sup>5</sup>; <sup>1</sup>UCSD, La Jolla, CA; <sup>2</sup>University of Lille 1, Villeneuve D'ascq, France; <sup>3</sup>University of Lille 1, FRE-C, Villeneuve D'ascq Cedex, France; <sup>4</sup>FRE-CNRS 2933, University, Villeneuve D'ascq Cedex, France; <sup>5</sup>Univ. Cal. San Diego, San Diego, CA
- TP 176 **Imaging mzML (imzML) – a Common Data Format for Imaging Mass Spectrometry**; Andreas Roempp<sup>1</sup>; Thorsten Schramm<sup>1</sup>; Ivo Klinkert<sup>2</sup>; Alfons Hester<sup>1</sup>; Jean-Pierre Both<sup>3</sup>; Marc Bruleat<sup>4</sup>; Alain Brunelle<sup>4</sup>; Olivier Laprevote<sup>4,5</sup>; Ron M.A. Heeren<sup>2</sup>; Markus Stoeckli<sup>6</sup>; Bernhard Spengler<sup>1</sup>; <sup>1</sup>Justus Liebig University, Giessen, Germany; <sup>2</sup>FOM Inst. Atomic/Molecular Physics, Amsterdam, Netherlands; <sup>3</sup>CEA, Saclay, France; <sup>4</sup>ICSN - CNRS, Gif Sur Yvette, France; <sup>5</sup>Paris-Descartes University, Paris, France; <sup>6</sup>Novartis Institutes for BioMedical Research, Basel, Switzerland
- TP 177 **Automated Classification and Grading of Tumors in Mass Spectrometric Images Using Postprocessed Random Forests**; Michael Hanselmann<sup>1</sup>; Ullrich Köthe<sup>1</sup>; Marc Kirchner<sup>1</sup>; Bernhard Y. Renard<sup>1</sup>; Erika R. Amstalden<sup>2</sup>; Kristine Glunde<sup>3</sup>; Ron M.A. Heeren<sup>2</sup>; Fred A. Hamprecht<sup>1</sup>; <sup>1</sup>University of Heidelberg, Heidelberg, Germany; <sup>2</sup>FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands; <sup>3</sup>Johns Hopkins University SOM, Baltimore, MD
- TP 178 **MALDI Imaging: Interpretation of Gastric Cancer MALDI Images by Hierarchical Clustering**; Arndt Asperger<sup>1</sup>; Sören-Oliver Deininger<sup>1</sup>; Matthias Ebert<sup>2</sup>; Michael Becker<sup>1</sup>; Arne Fütterer<sup>1</sup>; Christoph Röcken<sup>3</sup>; <sup>1</sup>Bruker Daltonik GmbH, Bremen, Germany; <sup>2</sup>Department of Medicine II, Technical University, Munich, Germany; <sup>3</sup>Institute of Pathology, Charité Univ. Medizin, Berlin, Germany
- TP 179 **A Novel Statistical Approach to the Interpretation of Complete MALDI Mass Spectrometry Imaging Datasets**; Emmanuelle Claude<sup>1</sup>; Pr. Chen<sup>2</sup>; Keith Richardson<sup>1</sup>; Thérèse Mckenna<sup>1</sup>; Jim Langridge<sup>1</sup>; <sup>1</sup>Waters corporation, Manchester, UK; <sup>2</sup>Academia Sinica, Taipei, Taiwan
- TP 180 **Withdrawn**
- TP 181 **3D Imaging Mass Spectrometry...Putting Humpty-Dumpty Together Again**; Erin H. Seeley; Tuhin K. Sinha; Zhengyu Yang; Richard M. Caprioli; *Vanderbilt University, Nashville, TN*
- TP 182 **Imaging Mass Spectrometry in Prostate Cancer - Looking Beyond Histology**; Kristina Schwamborn<sup>1</sup>; Reid Groseclose<sup>1</sup>; Peter Wild<sup>2</sup>; Richard M. Caprioli<sup>1</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>Institute of Surgical Pathology, Zurich, Switzerland
- TP 183 **On-tissue Chemical Derivatization for the Analysis of Drugs by MALDI Imaging MS**; Almary Chacon; Irene Zagol-Ikapitte; Venkataraman Amarnath; John A. Oates; Olivier Boutaud; Richard M. Caprioli; *Vanderbilt University, Nashville, TN*
- TP 184 **Tissue Imaging Using Simultaneous Chemical Derivatization and Desorption Electrospray Ionization**; Chunping Wu; Demian R. Ifa; Nicholas Manicke; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- TP 185 **Developments in Instrumentation for Atmospheric Pressure, Nanoscale Chemical Imaging via Tip-Enhanced, Near-Field Desorption/Ionization Mass Spectrometry**; Douglas E. Goeringer; James A. Bradshaw; Kent A. Meyer; Olga S. Ovchinnikova; *Oak Ridge National Laboratory, Oak Ridge, TN*
- TP 186 **Towards Nanoscale Molecular Analysis and Chemical Imaging at Atmospheric Pressure by Near Field Laser Ablation Mass Spectrometry: Current Challenges**; Liang Zhu; Gerardo Gamez; Thomas A. Schmitz; Renato Zenobi; *Swiss Federal Institute of Technology, Zurich, Switzerland*
- TP 187 **Profiling and Imaging Mass Spectrometry by Probe Electrospray Ionization Using Solid Needle**; Lee

<b>IMAGING MS: INSTRUMENTATION AND METHOD DEVELOPMENT, 174 - 202</b>
--

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Chuin Chen; Zhan Yu; Rikiya Iwata; Hajime Ito; Yutaka Hashimoto; Sen Takeda; Kenzo Hiraoka; *University of Yamanashi, Kofu, Japan*
- TP 188 **Development of a Prototype Mass Spectrometer for MS Imaging Using a High Spatial/Temporal Resolution Ion Detector**; Masahiro Hayashi<sup>1,2</sup>; Yasuhide Naito<sup>1</sup>; <sup>1</sup>*GPI, Hamamatsu, Japan*; <sup>2</sup>*Hamamatsu Photonics K.K., Hamamatsu, Japan*
- TP 189 **Quantitative Evaluation of Sensitivity for Microscopic AP-MALDI-MS Imaging in Direct Tissue Analysis**; Takahiro Harada<sup>1</sup>; Kazuteru Takahashi<sup>1</sup>; Kiyoshi Ogawa<sup>1</sup>; Yoshikazu Yoshida<sup>1</sup>; Yuki Sugiura<sup>2</sup>; Takahiro Hayasaka<sup>3</sup>; Mitsutoshi Setou<sup>3</sup>; <sup>1</sup>*Shimadzu Corporation, Soraku-gun, Japan*; <sup>2</sup>*Tokyo Institute of Technology, Yokohama, Japan*; <sup>3</sup>*Hamamatsu University School of Medicine, Hamamatsu, Japan*
- TP 190 **Full Integration of Lab-Made DESI-MS Imaging Ion Source into Commercial MALDI-FTICR-MS Imaging System**; Michael Volny<sup>1</sup>; Martin Strohal<sup>1</sup>; Veronika Vidova<sup>1,2</sup>; Gary Kruppa<sup>1</sup>; Jaroslav Pol<sup>1,3</sup>; Petr Novak<sup>1</sup>; Vaclav Koblíha<sup>1</sup>; Karel Lemr<sup>1,2</sup>; Vladimir Havlicek<sup>1,2</sup>; <sup>1</sup>*Institute of Microbiology, Prague 4, Czech Republic*; <sup>2</sup>*Palacky University, Olomouc, Czech Republic*; <sup>3</sup>*University of Helsinki, Helsinki, Finland*
- TP 191 **Tissue Imaging by 5 kHz High-Performance MALDI-TOF**; Christina Vestal<sup>1</sup>; Kenneth Parker<sup>1</sup>; Kevin Hayden<sup>1</sup>; George Mills<sup>1</sup>; Marvin Vestal<sup>1</sup>; Shannon Cornett<sup>2</sup>; Richard M. Caprioli<sup>3</sup>; <sup>1</sup>*Virgin Instruments Corp., Sudbury, MA*; <sup>2</sup>*Vanderbilt University, Nashville, TN*; <sup>3</sup>*Vanderbilt Univ Sch of Med, Nashville, TN*
- TP 192 **Development of New Microscopic Micro-MALDI-Q-FTICR-MS Instrument**; Katsutoshi Takahashi; *Natl Institute Advan. Indus. Sci Tech, Tokyo, Japan*
- TP 193 **Measuring Lipid and Peptide Collision Cross Sections Directly from Tissue Using Imaging MALDI Travelling-Wave IM-MS**; Whitney B. Ridenour<sup>1</sup>; Michal Kliman<sup>2</sup>; John A. McLean<sup>2</sup>; Richard M. Caprioli<sup>1</sup>; <sup>1</sup>*Vanderbilt University Medical Center, Nashville, TN*; <sup>2</sup>*Vanderbilt University, Nashville, TN*
- TP 194 **Atmospheric Pressure UV and IR MALDI Imaging Mass Spectrometry for Peptides, Carbohydrates and Small Molecules**; Berk Oktem; Thomas D. Saul; Vladimir M. Doroshenko; *MassTech Inc., Columbia, MD*
- TP 195 **Enhanced MALDI FTMS Imaging of Drug Metabolism and Targeted Lipids with Gold and Silver Nanoparticle Matrices**; Katherine A. Kellersberger<sup>1</sup>; Claire M. Sauvageot<sup>2</sup>; Santosh Kesari<sup>2</sup>; Steven Oldenburg<sup>3</sup>; Michael L. Easterling<sup>1</sup>; Matt Spencer<sup>3</sup>; Paul Speir<sup>1</sup>; Nathalie Y.R. Agar<sup>4</sup>; <sup>1</sup>*Bruker Daltonics, Inc., Billerica, MA*; <sup>2</sup>*Dana Farber Cancer Institute, Harvard Med. School, Boston, MA*; <sup>3</sup>*Nanocomposix Inc., San Diego, CA*; <sup>4</sup>*Harvard Medical School, Neurosurgery, Boston, MA*
- TP 196 **Sub-Cellular Imaging of Neuronal Cells Cultured on Silicon Using Secondary Ion Mass Spectrometry**; Kevin Tucker; Zhen Li; Ann Knolhoff; Stanislav Rubakhin; Jonathan Sweedler; *University of Illinois, Urbana, IL*
- TP 197 **A MALDI Matrix Deposition Method for Imaging Mass Spectrometry using Low Volatile Solvent**; Myoung Ha<sup>2,3</sup>; Eun-il Park<sup>2</sup>; Sehwan Moon<sup>2</sup>; OkPyo Zee<sup>3</sup>; Yangsun Kim<sup>1,2</sup>; <sup>1</sup>*Hudson surface Technology, Inc., Newark, NJ*; <sup>2</sup>*Applied Surface Technology, Inc., Suwon, Korea*; <sup>3</sup>*College of Pharmacy, Sungkyunkwan University, Suwon, Korea*
- TP 198 **Targeting of Hypoxia-Related Proteins in AQ4N Treated Solid Tumour Xenografts by MALDI-Ion Mobility Separation- Mass Spectrometry Imaging**; Marie Claude Djidja<sup>1</sup>; Emmanuelle Claude<sup>2</sup>; Paul M. Loadman<sup>3</sup>; Chris W. Sutton<sup>3</sup>; Vikki Carolan<sup>1</sup>; Malcolm Clench<sup>1</sup>; <sup>1</sup>*Sheffield Hallam University, Sheffield, UK*; <sup>2</sup>*Waters corporation, Manchester, UK*; <sup>3</sup>*Institute of Cancer Therapeutics, Bradford, UK*
- TP 199 **3-Dimensional Reconstruction of Breast Tumor Xenografts with Combined Mass Spectrometry Imaging and Magnetic Resonance Spectroscopy Imaging**; Erika R. Amstalden Van Hove<sup>1</sup>; Tiffany R. Greenwood<sup>2</sup>; Ivo Klinkert<sup>1</sup>; Kamila Czornak<sup>1</sup>; Ron M.A. Heeren<sup>1</sup>; Kristine Glunde<sup>2</sup>; <sup>1</sup>*FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands*; <sup>2</sup>*Johns Hopkins University SOM, Baltimore, MD*
- TP 200 **Improved On-Tissue Protein Identification in MALDI Imaging Mass Spectrometry (MSI) Using the Metalloendopeptidase Lys-N**; Kamila Czornak<sup>1</sup>; Luke MaCaleese<sup>1</sup>; Shabaz Mohammed<sup>2,3</sup>; Albert J.R. Heck<sup>2,3</sup>; Ron M.A. Heeren<sup>1</sup>; A.F. Maarten Altelaa<sup>2,3</sup>; <sup>1</sup>*FOM-Institute for Atomic and Molecular Physics, Amsterdam, The Netherlands*; <sup>2</sup>*Utrecht University, Utrecht, The Netherlands*; <sup>3</sup>*Netherlands Proteomics Centre, Utrecht, The Netherlands*
- TP 201 **Automated Sample Handling for High Throughput Imaging Mass Spectrometry**; Liam McDonnell; Hans Dalebout; Alexandra van Remoortere; René J.M. van Zeijl; André M. Deelder; *LUMC, Leiden, Netherlands*
- TP 202 **Animal Tissue Slicing: A Critical Step for Successful MALDI-MS Imaging**; Fangbiao Li<sup>1</sup>; Walter Korfmacher<sup>2</sup>; Yunsheng Hsieh<sup>2</sup>; <sup>1</sup>*Schering-Plough Research Institute, Kenilworth, NJ*; <sup>2</sup>*Schering-Plough, Kenilworth, NJ*

### ION MOBILITY, 203 - 236

- TP 203 **Enhance Sensitivity for Comprehensive Phosphoproteomics Analyses Using High Field Asymmetric Waveform Ion Mobility Spectrometry and Electron Transfer Dissociation**; Tara L Muratore-Schroeder<sup>1</sup>; Eric Bonneil<sup>1</sup>; Gaëlle Bridon<sup>1</sup>; Julian Saba<sup>2</sup>; Brenda Kessler<sup>2</sup>; Pierre Thibault<sup>1</sup>; <sup>1</sup>*Université de Montréal, Montréal, QC*; <sup>2</sup>*Thermo Fisher Scientific, San Jose, CA*
- TP 204 **Towards intracellular Analysis by Laser Desorption-Ion Mobility-TOFMS**; J. Albert Schultz<sup>1</sup>; Thomas Egan<sup>1</sup>; Ernest K. Lewis<sup>1</sup>; Kelley Waters<sup>1</sup>; Valerie Vaughn<sup>1</sup>; Valeriy Raznikov<sup>2</sup>; Jerry F. Moore<sup>3</sup>; Amina S. Woods<sup>4</sup>; <sup>1</sup>*Ionwerks, Inc., Houston, TX*; <sup>2</sup>*Russian Academy of Science, Chernogolovka, Russia*; <sup>3</sup>*MassThink LLC, Naperville, IL*; <sup>4</sup>*NIDA-IRP, NIH, Baltimore, MD*
- TP 205 **Vacuum Ultra Violet Post-Ionization Combined with Ion-Mobility for the Characterization and Application of Functionalized Nanomaterials as MALDI Matrices**; Ernest K. Lewis<sup>1</sup>; Thomas Egan<sup>1</sup>; Kelley Waters<sup>1</sup>; Sandy Yates<sup>2</sup>; Jerry F. Moore<sup>3</sup>; Carter Kittrell<sup>4</sup>; Steven R. Ripley<sup>4</sup>; K. Steven Ho<sup>4</sup>; Virginia Womack<sup>1</sup>; Robert H. Hauge<sup>4</sup>; Valery N. Khabashesku<sup>5</sup>; Amina S. Woods<sup>6</sup>; J. Albert Schultz<sup>1</sup>; <sup>1</sup>*Ionwerks, Inc., Houston, TX*; <sup>2</sup>*Bruker Daltonics, Fremont, CA*; <sup>3</sup>*MassThink LLC, Naperville, IL*; <sup>4</sup>*Rice University,*

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Houston, TX; <sup>5</sup>University of Houston, Houston, TX; <sup>6</sup>NIDA IRP, NIH, Baltimore, MD
- TP 206 **Detailed Kinetic Studies of Solution-Phase Protein Unfolding by Time-Resolved ESI and IMS/MS Using a DMA QTOF;** John Van Nostrand<sup>1</sup>; Tamanna Rob<sup>1</sup>; Bruce Thomson<sup>1,2</sup>; Derek Wilson<sup>1</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>York University - CRMS, Toronto, Canada; <sup>2</sup>MDS Analytical Technologies, Concord, ON
- TP 207 **Combining Microfluidic Cell Trapping with Real Time Monitoring of Biomolecular Exudates by Ion Mobility-Mass Spectrometry;** Jeffrey Enders; Sevugarajan Sundarapandian; Kevin Seale; John P. Wikswo; John A. McLean; *Vanderbilt University, Nashville, TN*
- TP 208 **Design of a Spherical FAIMS Cell;** Marilyn Prieto; Richard A. Yost; *University of Florida, Gainesville, FL*
- TP 209 **Study on Factors Affecting Separation and Detection of Explosives by High-Field Asymmetric Waveform Ion Mobility Spectrometry (FAIMS) / Mass Spectrometry;** Alex C. Wu; Richard A. Yost; *University of Florida, Gainesville, FL*
- TP 210 **A Software Tool for Processing Visualising, and Manipulating Multi Dimensional IMS-MS and LC-IMS-MS Data;** Martin Green; Kieran Neeson; Keith Richardson; Marc V. Gorenstein; Kevin Giles; *Waters Corporation, Manchester, UK*
- TP 211 **Optimization of Ion Injection into a Planar FAIMS Cell;** Leonard Rorrer; Richard A. Yost; *University of Florida, Gainesville, FL*
- TP 212 **Characterization of a Novel Ion Mobility-Tandem Mass Spectrometry Approach;** Yehia Ibrahim; Mikhail Belov; David Prior; William Danielson III; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- TP 213 **A New Unified Data Format for Ion Mobility-Time-of-Flight Mass Spectrometry;** William F. Danielson; Yan Shi; Anoop M. Mayampurath; Brian H. Clowers; Nathaniel Beagley; Anuj R. Shah; Gordon A. Anderson; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- TP 214 **Comparison of Square and Sinusoidal Waveforms on a Miniaturized FAIMS Planar Cell for Explosives Detection;** Chia-wei Tsai<sup>1</sup>; Marilyn Prieto<sup>1</sup>; Ilya Kaminsky<sup>2</sup>; Robert Ferran<sup>2</sup>; Said Boumsellek<sup>2</sup>; Richard A. Yost<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>Implant Sciences Corporation, San Diego, CA
- TP 215 **Evidence for Promotion of H/D Exchange During Transitions between Conformations of the [M+11H]<sup>11+</sup> State of Ubiquitin;** Brian C. Bohrer; Natalya Atlasevich; David E. Clemmer; *Indiana University, Bloomington, IN*
- TP 216 **The Interaction of Metal Counter Ions with Heparin Octasaccharides: An Ion Mobility / Mass Spectrometry Study;** You Jin Seo; Matthew R. Schenauer; Julie A. Leary; *UC Davis, Davis, CA*
- TP 217 **Ion Mobility Spectrometry for determining binding, bridging and the formation of Non-Covalent Complexes;** Bruce Andrien; Rekha Patel; Christine Nowak; Adam W. Lucka; *Alexion Pharmaceuticals, Chesire, CT*
- TP 218 **Data Analysis Pipeline for LC-IMS-MS Based Proteomics;** Gordon Anderson; Anuj Shah; Erin Baker; Ashoka D. Polpitiya; Nikola Tolić; Anoop M. Mayampurath; Brian H. Clowers; Rui Zhao; Mikhail Belov; Richard D. Smith; *Pacific Northwest National Laboratory, West Richland, WA*
- TP 219 **Conformation Analysis of Carbonic Anhydrase2 Using Ion Mobility and Collision-Induced Dissociation Combined with Electrospray Ionization;** Yoshiaki Nabuchi<sup>1</sup>; Kenji Hirose<sup>2</sup>; Mitsuo Takayama<sup>1</sup>; <sup>1</sup>Yokohama City University, Yokohama, Kanagawa, Japan; <sup>2</sup>Nihon Waters K.K., Osaka, Japan
- TP 220 **A Comparison of Travelling Wave and Drift Tube Ion Mobility Separations in a Novel rf Confined Helical Geometry Ion Guide;** Steven D Pringle; John B Hoyes; David Langridge; Tony Gilbert; *Waters Corporation, Manchester, UK*
- TP 221 **Travelling Wave Ion Mobility Mass Spectrometry-based Conformational Studies of Prion Protein - Comparison of Recombinant Truncated Mouse and Syrian Hamster;** Gillian R. Hilton<sup>1</sup>; Konstantinos Thalassinos<sup>1</sup>; Narinder Sanghera<sup>1</sup>; Susan E. Slade<sup>1</sup>; Teresa J. T. Pinheiro<sup>1</sup>; James Scrivens<sup>2</sup>; <sup>1</sup>University of Warwick, Coventry, UK; <sup>2</sup>Univ of Warwick, Coventry, UK
- TP 222 **Coupling Direct Analysis in Real Time to Atmospheric Pressure Drift Tube Ion Mobility Spectrometry for Gaseous, Solid and Liquid Sample Analysis;** Glenn A Harris<sup>1</sup>; Mark Kwasnik<sup>2</sup>; Facundo Fernandez<sup>3</sup>; <sup>1</sup>Georgia Institute of Technol, Atlanta, GA; <sup>2</sup>Georgia Tech, Atlanta, GA; <sup>3</sup>Georgia Institute of Technology, Atlanta, GA
- TP 223 **Evaluating Gas Phase Structure of Oligosaccharide by Positive/Negative MALDI-IM-TOFMS;** Pei-Jing Pai; Kent J. Gillig; Liuxi Chen; Lei Tao; David H. Russell; *Texas A&M University, College Station, TX*
- TP 224 **Computational Methods for Analyzing Liquid Chromatography Ion Mobility Spectrometry Mass Spectrometry Data;** Anoop M. Mayampurath<sup>1</sup>; Hyejin Yoon<sup>1</sup>; Stephen Valentine<sup>2</sup>; Ruwan Kurulugama<sup>1</sup>; Manolo D. Plasencia<sup>1</sup>; David E. Clemmer<sup>1</sup>; Haixu Tang<sup>1</sup>; <sup>1</sup>Indiana University, Bloomington, IN; <sup>2</sup>Predictive Physiology and Medicine, Inc., Bloomington, IN
- TP 225 **Exploring Electrostatic Interactions in the Denatured States of Proteins by Positive/Negative MALDI-IM-TOF;** Liuxi Chen; Lei Tao; Kent Gillig; David H. Russell; *Texas A&M University, College Station, TX*
- TP 226 **An Electrospray Ion Funnel Interface for Ion Mobility-Mass Spectrometry;** Junho Jeon; Jody May; Kent Gillig; David H. Russell; *Texas A&M University, College Station, TX*
- TP 227 **Enhancements to the Ion Mobility Performance of a Travelling Wave Separation Device;** Kevin Giles; Tony Gilbert; Martin Green; Garry Scott; *Waters Corporation, Manchester, UK*
- TP 228 **Gas Phase Stability of Protein-Ligand Complexes: Unfolding and Dissociation Pathways Studied by Electrospray Ionisation-Ion Mobility-Mass Spectrometry;** Jonathan Hopper; *Univeristy of Nottingham, Nottingham, UK*
- TP 229 **Metals in Medicine: Ion Mobility Derived Gas Phase Atomic Radii;** Iain D G Campuzano<sup>1</sup>; Keith Richardson<sup>1</sup>; Kevin Giles<sup>1</sup>; Jonathan P. Williams<sup>3</sup>; Alison E. Ashcroft<sup>2</sup>; Tom Knapman<sup>2</sup>; Tijana Bugarcic<sup>3</sup>; Abraha Habtemariam<sup>3</sup>; Mark Rodger<sup>3</sup>; Peter Sadler<sup>3</sup>; <sup>1</sup>Waters Corporation, Manchester, UK; <sup>2</sup>University of Leeds, Leeds, UK; <sup>3</sup>Univ. of Warwick, Coventry, UK

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 230 **Multiply Charged Ionic Liquid Nanodroplets as Mobility Standards for Tandem Ion Mobility – Mass Spectrometry**; Christopher J. Hogan; Juan Fernandez de la Mora; *Yale University - Mechanical Engineering, New Haven, CT*
- TP 231 **Ion Mobility Spectrometry for Rapid Direct Analysis of Swabs for Pharmaceutical Manufacturing Equipment Cleaning Verification**; Mark A. Stregge; *Eli Lilly and Company, Indianapolis, IN*
- TP 232 **On-Line Chromatography/ Dynamically Multiplexed Ion Mobility/Time-of-Flight Mass Spectrometry for High Throughput Proteomics**; Mikhail Belov; Yehia Ibrahim; David Prior; William F. Danielson; Erin Baker; Rui Zhao; Daniel Lopez-Ferrer; Brianne O Petritis; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- TP 233 **Compensation Voltage and Experimental Conditions Standardization in FAIMS**; Alexander Aksenov; Alexander Aksenov; *LGC Limited, Teddington, UK*
- TP 234 **Fundamentals of Ion/Ion Interactions in Ion Mobility Spectrometry**; Aleksey V. Tolmachev; Brian H. Clowers; Mikhail E. Belov; Richard D. Smith; *Pacific Northwest National Lab, Richland, WA*
- TP 235 **Characterisation of Oligomers during Amyloid Fibril Formation Using Electrospray Ionisation – Travelling Wave Ion Mobility Spectrometry – Mass Spectrometry (ESI-TWIMS-MS)**; Alison E. Ashcroft; David Smith; Tom W. Knappman; Joshua T. Berryman; Sheena E. Radford; *Astbury Centre for Structural Molecular Biology, University of Leeds, Leeds, UK*
- TP 236 **Separation and Characterization of Copolymers by Ion Mobility Mass Spectrometry**; Chrys Wesdemiotis<sup>1</sup>; Nilufer Solak<sup>1</sup>; Andrew Baker<sup>2</sup>; *<sup>1</sup>The University of Akron, Akron, OH; <sup>2</sup>Waters, Inc., Pleasanton, CA*
- CLINICAL CHEMISTRY, 237 - 259**
- TP 237 **In Vitro Stability of GLP-1 in Human Serum and Plasma**; Jizu Yi; Yan-Qiu Song; David Craft; *BD Diagnostics, Franklin Lakes, NJ*
- TP 238 **Neonatal Diagnosis of Mucopolysaccharidosis II (Hunter Syndrome) Using Dried Bloodspots for Enzymatic Assay by Tandem Mass Spectrometry**; Brian J. Wolfe; Sophie Blanchard; C. Ronald Scott; Michael Gelb; Frantisek Turecek; *University of Washington, Seattle, WA*
- TP 239 **A Cross-validated Quantitative MALDI-TOF Assay for the Rapid Analysis of Hepcidin in Biofluids**; Damon Anderson<sup>1</sup>; Udo Roth<sup>2</sup>; Christoph Menzel<sup>2</sup>; Matthew Heeney<sup>1</sup>; Mark Fleming<sup>1</sup>; Hanno Steen<sup>1</sup>; *<sup>1</sup>Harvard Medical School/Children's Hospital Boston, Boston, MA; <sup>2</sup>qiagen GmbH, Hilden, Germany*
- TP 240 **Simulation of the Oxidative Metabolism of Caspase Binding Radioligands (CBRs) by Online Electrochemistry-HPLC-MS**; Anne Baumann<sup>1</sup>; Andreas Faust<sup>2</sup>; Klaus Kopka<sup>2</sup>; Uwe Karst<sup>1</sup>; *<sup>1</sup>University Münster, Inst. of Inorg. & Anal. Chem., Münster, Germany; <sup>2</sup>University Hospital Münster, Nuclear Medicine, Münster, Germany*
- TP 241 **Specieanalysis of Cisplatinum Complexes in the Human Body**; Christine Brauckmann; Björn Meermann; Uwe Karst; *University of Muenster, Münster, Germany*
- TP 242 **MALDI-TOF Mass Spectrometry Based Identification of Clinically Important Microorganisms**; Steven K. Drake; Lindsay G. Stevenson; Nayana Patel; Patrick R. Murray; *National Institute of Health, Bethesda, MD*
- TP 243 **Application of Electrospray Ionisation for Analysis of Mice Liver – a Bioprospection Issue**; Maria Francesca Riccio Fonseca<sup>1,2</sup>; Luciane Carla Alberici<sup>1</sup>; Rosana Maria Alberici<sup>2</sup>; Helena C F de Oliveira<sup>3</sup>; Rodrigo Catharino<sup>1</sup>; Anibal Eugênio Vercesi<sup>1</sup>; Marcos N Eberlin<sup>2</sup>; *<sup>1</sup>Departamento de Patologia Clínica - UNICAMP, Campinas, Brazil; <sup>2</sup>Thomson Lab UNICAMP, Campinas, Sp, Brazil; <sup>3</sup>Depto Fisiologia e Biofísica – IB – UNICAMP, Campinas, Brazil*
- TP 244 **LC-MS Measurement of Alpha-Ketoglutarate Levels in Blood as an Indicator of Human Health**; William E. Holmes<sup>1</sup>; Andrew S. Mcdaniel<sup>1</sup>; Stefan Pierzynowski<sup>2</sup>; Randal K. Buddington<sup>3</sup>; *<sup>1</sup>Mississippi State University, Mississippi State, MS; <sup>2</sup>Lunds Universitet, Lund, Sweden; <sup>3</sup>University of Memphis, Memphis, TN*
- TP 245 **Determination of the Enzyme Activity of 3-Methyl-Crotonyl CoA Carboxylase by Liquid Chromatography-Mass Spectrometry**; Eszter Javorszky; Laszlo Szonyi; Zoltan Takats; *Semmelweis University, Budapest, Hungary*
- TP 246 **Novel ATP7B Peptide Quantitation in Dried Blood Spots by LC-MS/MS for Newborn Screening of Wilson Disease**; Sandra Kerfoot<sup>1</sup>; Sihoun Hahn<sup>1,2</sup>; *<sup>1</sup>Seattle Childrens Research Institute, Seattle, WA; <sup>2</sup>University of Washington School of Medicine, Seattle, WA*
- TP 247 **Analysis of Urinary Nucleosides as Potential Tumor Markers in Human Colorectal Cancer by LC/MS/MS**; Chien-chen Lai<sup>1</sup>; Wei-Yi Hsu<sup>2</sup>; Fuu-Jen Tsai<sup>2</sup>; *<sup>1</sup>National Chung Hsing University, Taichung, Taiwan; <sup>2</sup>China Medical University Hospital, Taichung, Taiwan*
- TP 248 **Characterization of Pathogenic Bacteria from Clinical Samples by Combining Functional Nanoparticle-Based Capture with MALDI MS Analysis**; Ya-Shiuan Lin<sup>1</sup>; Wei-Jen Chen<sup>1</sup>; Te-Lung Tsai<sup>2</sup>; Yu-Chie Chen<sup>1</sup>; *<sup>1</sup>National Chiao Tung University, Hsinchu, Taiwan; <sup>2</sup>Hsinchu Mackay Memorial Hospital, Hsinchu, Taiwan*
- TP 249 **A System Biology Approach for Identification of Biomarker Candidates for IgAN and TBMN via Proteomic Profiling of Human Urinary Exosomes**; Pyeong-gon Moon<sup>1</sup>; Jeong-Eun Lee<sup>1</sup>; Sungyong You<sup>2</sup>; In-San Kim<sup>1</sup>; Tae-Hwan Kwon<sup>1</sup>; Chan-Duck Kim<sup>1</sup>; Sun-Hee Park<sup>1</sup>; Daehee Daehee<sup>2</sup>; Yong-Lim Kim<sup>1</sup>; Moonchang Baek<sup>1</sup>; *<sup>1</sup>Kyungpook Nat'l Univ., Deagu, South Korea; <sup>2</sup>POSTECH, Pohang, South Korea*
- TP 250 **Cholesterol and Dehydrocholesterols Analysis from Patients with the Smith-Lemli-Opitz Syndrome by Atmospheric Pressure Thermal Desorption Chemical Ionization Mass Spectrometry (APTDCI-MS)**; Giuseppe Paglia<sup>1</sup>; Oceania D'Apolito<sup>1</sup>; Antonio Dello Russo<sup>2</sup>; Gaetano Corso<sup>1</sup>; *<sup>1</sup>Dept. Biomedical Sciences, Foggia, Italy; <sup>2</sup>Dept of Biochemistry & Medical Biotechnology, Napoli, Italy*
- TP 251 **A New Approach for Acute Clinical Toxicology Based on Ion Trap MSMS Library Search**; Roman Mylonas<sup>1</sup>; Yann Mauron<sup>1</sup>; Alexandre Masselot<sup>2</sup>; Olivier Philippe<sup>2</sup>; Pierre-Alain Binz<sup>1,2</sup>; Veronique Viette<sup>3,4</sup>; Marc Fathi<sup>3</sup>; Denis F Hochstrasser<sup>3,5</sup>; Frederique Lisacek<sup>1</sup>; Sebastian Goetz<sup>6</sup>; Birgit Schneider<sup>6</sup>; Jens Vagts<sup>6</sup>; Carsten Baessmann<sup>6</sup>; *<sup>1</sup>Swiss Institute of*

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Bioinformatics, Geneva, Switzerland; <sup>2</sup>Geneva Bioinformatics (GeneBio), Geneva, Switzerland; <sup>3</sup>Geneva University Hospital, Geneva, Switzerland; <sup>4</sup>ADMed Foundation, La Chaux-de-Fonds, Switzerland; <sup>5</sup>Swiss Center for Applied Human Toxicology, Geneva, Switzerland; <sup>6</sup>Bruker Daltonik GmbH, Bremen, Germany
- TP 252 **Selective Detection of Polyethylene Glycol Based Laxatives in Children Stool**; Martin Sadilek<sup>1</sup>; Kenneth Feldman<sup>2,3</sup>; Karen F. Murray<sup>2,3</sup>; Melissa Young<sup>3</sup>; Suzan Mazor<sup>2,3</sup>; <sup>1</sup>University of Washington, Department of Chemistry, Seattle, WA; <sup>2</sup>University of Washington, School of Medicine, Seattle, WA; <sup>3</sup>Seattle Children's, Seattle, WA
- TP 253 **Precise Determination of Glomerular Filtration Rate by Iothalamate Clearance Using LC-MS/MS**; Jesse C. Seegmiller; Bradley E. Burns; John C. Lieske; Timothy S. Larson; Mayo Clinic, Rochester, MN
- TP 254 **Speciation Analysis of Gd-Based MRI Contrast Agents in Human Body Fluids**; Lena Telgmann<sup>1</sup>; Jens Kuennemeyer<sup>1</sup>; Faruk Tokmak<sup>2</sup>; Uwe Karst<sup>1</sup>; <sup>1</sup>University of Münster, Münster, Germany; <sup>2</sup>University of Bochum, Bochum, Germany
- TP 255 **Mass Spectrometry in Sports Drug Testing: Characterization and Detection of RYCALs – Endurance-Enhancing Ryanodine-Calstabin-Complex Stabilizers**; Mario Thevis<sup>1</sup>; Simon Beuck<sup>1</sup>; Andreas Thomas<sup>1</sup>; Maxie Kohler<sup>1</sup>; Mathias Schäfer<sup>2</sup>; Wilhelm Schänzer<sup>1</sup>; <sup>1</sup>German Sport University, Cologne, Germany; <sup>2</sup>University of Cologne, Cologne, Germany
- TP 256 **Quantitation of Hepcidin in Body Fluids for Diagnosis and Monitoring of Iron Disorders**; Melvin CL Gay<sup>1</sup>; Debbie Trinder<sup>2,3</sup>; John K Olynyk<sup>2,3</sup>; Ian Mullaney<sup>1</sup>; Robert Trengove<sup>1</sup>; <sup>1</sup>Murdoch University, Murdoch, Australia; <sup>2</sup>Western Australian Institute for Medical Research, Perth, Australia; <sup>3</sup>University of Western Australia, Perth, Australia
- TP 257 **A Sensitive Proteomics Approach for the Determination of Carbohydrate Deficient Transferrin in Serum by Isotope Dilution Tandem Mass Spectrometry**; Coleman T Turgeon; H. Robert Bergen, III; Linda M Benson; Mark J Magera; John F O'Brien; Devin D Oglesbee; Mayo Clinic College of Medicine, Rochester, MN
- TP 258 **Urinary Biomarker Discovery for Early Diagnostics of Human Contrast Induced Kidney Injury Using 2-D DIGE Followed by MS Analyses**; Ling Wang<sup>3</sup>; Zhaohui Ni<sup>3</sup>; Jim M. Jia<sup>1</sup>; Fuquan Yang<sup>2</sup>; Ran Zheng<sup>4</sup>; <sup>1</sup>KBI, Kunming, China; <sup>2</sup>Institute of Biophysics, China Academy of Science, Beijing, China; <sup>3</sup>Renji Hospital, Jiao Tong Univ. School of Medicine, Shanghai, China; <sup>4</sup>ICBR/UF, Gainesville, FL
- TP 259 **Automated SPE-LC/MS/MS Assay for Immunosuppressant Drugs from Whole Blood**; Kimberly Eaton<sup>1</sup>; Kimberly Gamble<sup>2</sup>; Tony Brand<sup>3</sup>; M.p. George<sup>3</sup>; Ken Lewis<sup>1</sup>; <sup>1</sup>OpAns, LLC, Durham, NC; <sup>2</sup>MicroLiter Analytical Supplies, Inc., Suwanee, GA; <sup>3</sup>Agilent Technologies, Raleigh, NC
- TP 261 **Mass Spectrometric Screening of Histone Modifications Uncovers Global Resistance Mechanism to Apoptosis in Yeast**; Neil L. Kelleher; Cong Wu; Lihua Jiang; Mingxi Li; Manjui V. Lee; University of Illinois at Urbana-Champaign, Urbana, IL
- TP 262 **Automated On-Line Sample Preparation for Profiling Changes in Histone Modifications Using a QTOF Mass Spectrometer**; Paul Drogaris<sup>1</sup>; Eric Bonneil<sup>2</sup>; Christelle Pomies<sup>3</sup>; Kevin Killeen<sup>4</sup>; Pierre Thibault<sup>2</sup>; <sup>1</sup>Université de Montréal, Montréal, Canada; <sup>2</sup>Université de Montréal, Montréal, QC; <sup>3</sup>IRIC/University of Montreal, Montreal, QC; <sup>4</sup>Agilent Laboratories, Santa Clara, CA; <sup>5</sup>Univ. of Montreal, Montreal, QC
- TP 263 **Mapping the Post-Translational Modifications of Human RNA Pol II C-Terminal Domain**; William Drury<sup>1</sup>; Christine Jelinek<sup>2</sup>; Luis A. Rojas<sup>1</sup>; Robert J. Cotter<sup>3</sup>; Danny Reinberg<sup>1,1</sup>; <sup>1</sup>NYU-SOM/HHMI, New York, NY; <sup>2</sup>Johns Hopkins School of Medicine, Baltimore, MD; <sup>3</sup>Middle Atlantic MS Laboratory, Baltimore, MD
- TP 264 **Identification and Quantitation of Messenger Ribonucleoprotein Complexes (mRNPs) in the Presence and Absence of Arginine Methylation**; Ambrosius Snijders; Guillaume Hautbergue; Stuart Wilson; Mark Dickman; University of Sheffield, Sheffield, UK
- TP 265 **Initial Characterization of Lysine Propionylation Pathway**; Yue Chen<sup>1</sup>; Zhongyi Cheng<sup>1</sup>; Yi Tang<sup>2</sup>; Sung Chan Kim<sup>1</sup>; Wei Gu<sup>2</sup>; Yingming Zhao<sup>1</sup>; <sup>1</sup>The University of Chicago, Chicago, IL; <sup>2</sup>Columbia University, New York, NY
- TP 266 **Histone Post Translational Modifications Associated with Transcription**; Jessica R. Chapman<sup>1</sup>; Kristie L. Rose<sup>1</sup>; Klaas W. Mulder<sup>2</sup>; F.M.A. Richard van Schaik<sup>2</sup>; Jeffrey Shabanowitz<sup>1</sup>; H.Th. Marc Timmers<sup>2</sup>; Donald F. Hunt<sup>1</sup>; <sup>1</sup>University of Virginia, Charlottesville, VA; <sup>2</sup>University Medical Centre-Utrecht, Utrecht, The Netherlands
- TP 267 **Hyperpropionylation of Histone H3 lysine 23 is Specific in U937 Cell Line**; Kangling Zhang<sup>1</sup>; Yihui Lin<sup>2</sup>; Xuehui Song<sup>2</sup>; Agus Darmanto<sup>1</sup>; Quoling Xu<sup>2</sup>; <sup>1</sup>Loma Linda University, Loma Linda, CA; <sup>2</sup>Institute of biochem. & cell biol., Shanghai, China
- TP 268 **MS Identification of A Redox-dependent Pathway for Regulating Histone Deacetylase in Cardiac Myocytes**; Hong Li; Tong Liu; Tetsuro Ago; Wei Chen; Junichi Sadoshima; UMDNJ, Newark, NJ
- TP 269 **A Fast Screening Method for Detecting Difference in Post-Translational Modifications of Proteins by Bioinformatics and FTICR/ECD/MS/MS**; Frank Li; Shenheng Guan; Feixia Chu; Raisa Talroze; Al Burlingame; University of California San Francisco, San Francisco, CA
- TP 270 **Improved Analysis of Histones Using a LTQ-Orbitrap with ETD and a Nanoacuity Chromatography System**; David A. Maltby; Shannon M Eliuk; A.I. Burlingame; University of California, San Francisco, CA
- TP 271 **Identification of Post-Translational Modifications on Nucleoplasm from Xenopus laevis Oocytes Using High Resolution Front-End Electron Transfer Dissociation Mass Spectrometry**; Josh Nicklay<sup>1</sup>; David Shechter<sup>2</sup>; Philip Compton<sup>1</sup>; C. David Allis<sup>2</sup>; Donald F.

### PROTEOMICS: PTM DETERMINATION (HISTONES), 260 - 273

- TP 260 **Determination of Sirtuin Deacetylation Sites Using Biotinylation Combined with Mass Spectrometry**; Stephen Swatkoski; Poonam Bheda; Cynthia Wolberger; Robert J. Cotter; Johns Hopkins University School of Medicine, Baltimore, MD

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Hunt<sup>1</sup>; <sup>1</sup>University of Virginia, Charlottesville, VA; <sup>2</sup>Rockefeller University, New York, NY
- TP 272 **Progress Towards the Human Chromatome;** Mariana D. Plazas-Mayorca; Nicolas L. Young; Benjamin A. Garcia; Princeton University, Princeton, NJ
- TP 273 **Combining ChIP Antibodies and Mass Spectrometry to Study Post-Translational Modifications on Histones;** Katherine Stamper<sup>1</sup>; Robert J. Cotter<sup>2</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Middle Atlantic MS Laboratory, Baltimore, MD
- INSTRUMENTATION: FTMS, 274 - 291**
- TP 274 **The Analytical Method to Find the Conditions of Coalescence Onset in FT-ICR;** Ivan Boldin; Eugene Nikolaev; Institute for Energy Problems of Chemical Physics, Moscow, Russian Federation
- TP 275 **Study on the Space-Charge Mediated Shift in Magnetron Frequency and its Utility for Quantitative Measurements in FT-ICR Mass Spectrometry;** Pavel N. Sagulenko<sup>1,2</sup>; Alexander Yu. Agapov<sup>1,2</sup>; Dmitry A. Tolmachev<sup>1</sup>; Mikhail V. Gorshkov<sup>1</sup>; <sup>1</sup>Institute for Energy Problems of Chemical Physics, Moscow, Russia; <sup>2</sup>Moscow Institute of Physics and Technology, Dolgoprudny, Russia
- TP 276 **Particle-in-Cell Algorithm Implemented on MIMD-Class Supercomputers for Simulating Ion Cloud Dynamics with Injection in the FT-ICR Cell and Sidekick;** Andriy Kharchenko<sup>1</sup>; Gleb Vladimirov<sup>2</sup>; Eugene Nikolaev<sup>2</sup>; Ron Heeren<sup>1</sup>; <sup>1</sup>FOM Institute for Atomic and Molecular Physics, Amsterdam, Netherlands; <sup>2</sup>Institute for Energy Problems of Chem. Physics, Moscow, Russia
- TP 277 **Particle-In-Cell Ion Trajectory Simulations To Model Observed FTICR-MS Space Charge Frequency Shifts;** Franklin E. Leach III<sup>1</sup>; Jon Amster<sup>1</sup>; Andriy Kharchenko<sup>2</sup>; Eugene Nikolaev<sup>3</sup>; Ron M.a. Heeren<sup>4</sup>; <sup>1</sup>University of Georgia, Athens, GA; <sup>2</sup>FOM Institute for Atomic and Molecular Physics, Amsterdam, Netherlands; <sup>3</sup>The Institute for Energy Problems of Chemical Phys, Moscow, Russian Federation; <sup>4</sup>FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands
- TP 278 **Limits of FT-ICR MS Resolution and Dynamic Range from Supercomputer Modeling of Ion Cloud Motion in an ICR cell;** Eugene Nikolaev<sup>1</sup>; Gleb Vladimirov<sup>1</sup>; Ivan Boldin<sup>1</sup>; Ron M.a. Heeren<sup>2</sup>; Chris Hendrickson<sup>3</sup>; Greg Blakney<sup>3</sup>; Alan G. Marshall<sup>4</sup>; <sup>1</sup>The Institute for Energy Problems of Chemical Phys, Moscow, Russian Federation; <sup>2</sup>FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands; <sup>3</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>4</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- TP 279 **Exchange of Axial and Radial Kinetic Energy During Ion Transfer Through Multipole Ion Guides in a Strong Magnetic Field Gradient;** Steve Beu<sup>1</sup>; Chris Hendrickson<sup>2</sup>; Alan G. Marshall<sup>3</sup>; <sup>1</sup>S C Beu Consulting, Austin, TX; <sup>2</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>3</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- TP 280 **Low Cost Higher Frequency RF Power Supplies for Quadrupole Ion Guides in FT-ICR Instruments with External Ion Sources;** Jan E. Szulejko; Behrooz Zekavat; David LaBrecque; Touradj Solouki; University of Maine, Orono, ME
- TP 281 **Improved Broadband Phase Correction of Complex FT-ICR Mass Spectra: Baseline Roll and Apodization;** Feng Xian<sup>1</sup>; Chris Hendrickson<sup>2</sup>; Greg T. Blakney<sup>3</sup>; Steve Beu<sup>4</sup>; Alan G. Marshall<sup>5</sup>; <sup>1</sup>Department of Chemistry and Biochemistry, FSU, Tallahassee, FL; <sup>2</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>3</sup>National ICR Program at NHMFL, Tallahassee, FL; <sup>4</sup>S C Beu Consulting, Austin, TX; <sup>5</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- TP 282 **Applications of a Compensated Trap to Top-Down Proteomics in FTMS;** Don L. Rempel; Adam Brustkern; Michael L. Gross; Washington University, St Louis, MO
- TP 283 **Cluster Ion Source Designed for 9.4 T FT-ICR Identification of Products of Mass-Selected Ion-Molecule Reactions;** Alan G. Marshall<sup>1,2</sup>; Nathan K. Kaiser<sup>1</sup>; Christopher L. Hendrickson<sup>1,2</sup>; Paul W. Dunk<sup>2</sup>; Harold W. Kroto<sup>2</sup>; <sup>1</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>2</sup>Florida State University, Tallahassee, FL
- TP 284 **Design and Performance of a Novel 9.4 Tesla FT-ICR Mass Spectrometer for Proteome and Petroleum Analysis;** Nathan K. Kaiser<sup>1</sup>; John Paul Quinn<sup>1</sup>; Gregory T. Blakney<sup>1</sup>; Daniel G. McIntosh<sup>1</sup>; Christopher L. Hendrickson<sup>1,2</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>2</sup>Florida State University, Tallahassee, FL
- TP 285 **A 5T Bench Top FT-ICR Instrument with Compact Cryogen-Free Superconducting Magnet System;** Alexander S. Misharin; Andrey N. Vilkov; Vladimir M. Doroshenko; MassTech Inc., Columbia, MD
- TP 286 **Advanced Data Acquisition Strategy for a 14.5 T Hybrid Linear Ion Trap Fourier Transform Ion Cyclotron Resonance Mass Spectrometer;** Greg T. Blakney<sup>1</sup>; Chris Hendrickson<sup>1,2</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup>National ICR Program at NHMFL, Tallahassee, FL; <sup>2</sup>Florida State University, Tallahassee, FL
- TP 287 **High Resolution Broadband FTMS Data via Data Streaming for Complex Mixture Analysis;** Christopher Thompson<sup>1</sup>; Steve Van Orden<sup>1</sup>; Joe Meier<sup>1</sup>; Christoph Gosteli<sup>2</sup>; Michael Schenkel<sup>2</sup>; <sup>1</sup>Bruker Daltonics Inc., Billerica, MA; <sup>2</sup>Bruker BioSpin, Fallanden, Switzerland
- TP 288 **Precision Proteomics on Ultrahigh Resolving Power 12 and 15 Tesla FTICR Mass Spectrometers;** Yuri E.M. Van Der Burgt; Magnus Palmblad; André M. Deelder; Leiden University Medical Ce, Leiden, Netherlands
- TP 289 **Withdrawn**
- TP 290 **Separation of Isobaric Phosphopeptides by High Field Asymmetric Waveform Ion Mobility Spectrometry Confirmed by LTQ Orbitrap XL ETD Mass Spectrometry;** Yue Xuan<sup>1</sup>; Andrew Creese<sup>2</sup>; Julie Horner<sup>3</sup>; Helen J. Cooper<sup>2</sup>; Thomas Moehring<sup>1</sup>; <sup>1</sup>ThermoFisherScientific, Bremen, Germany; <sup>2</sup>School of Biosciences, University of Birmingham, Birmingham, UK; <sup>3</sup>ThermoFisher Scientific, San Jose, CA
- TP 291 **Simplified DREAMS Device Implemented on Bruker 7T Apex-Qe FTICR;** Dale Whittington<sup>1</sup>; Ryan M. Danell<sup>2</sup>; Gary Kruppa<sup>3</sup>; Ross F. Lawrence<sup>1</sup>; William N. Howald<sup>1</sup>; David R. Goodlett<sup>1</sup>; <sup>1</sup>University of Washington, Seattle, WA; <sup>2</sup>Danell Consulting, Greenville, NC; <sup>3</sup>Bruker Daltonics Inc., New York, NY



**TUESDAY POSTERS**

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

<b>DIRECT IONIZATION (DESI, DART AND ASAP), 292 - 310</b>		
TP 292	<b>Analysis of Post-Blast Pipe Bomb Fragments Using DESI-Mass Spectrometry;</b> <u>Joseph H Kennedy</u> <sup>1</sup> ; John V Goodpaster <sup>2</sup> ; Erica Lotspeich <sup>2</sup> ; Justin Wiseman <sup>1</sup> ; <sup>1</sup> <i>Prosolia Inc, Indianapolis, IN;</i> <sup>2</sup> <i>IUPUI, Indianapolis, IN</i>	TP 303
TP 293	<b>Direct Characterization of Complex Viscous Mixtures by Extractive Electrospray Ionization Mass Spectrometry;</b> <u>Wai Siang Law</u> <sup>1</sup> ; Huanwen Chen <sup>2,3</sup> ; Jianhua Ding <sup>2,3</sup> ; Liang Zhu <sup>1</sup> ; Gerardo Gamez <sup>1</sup> ; Konstantin Chingin <sup>1</sup> ; Shuiping Yang <sup>3</sup> ; Yulin Ren Ren <sup>3</sup> ; Renato Zenobi <sup>1</sup> ; <sup>1</sup> <i>ETH Zurich, Zurich, Switzerland;</i> <sup>2</sup> <i>East China Institute of Technology, Fuzhou, China;</i> <sup>3</sup> <i>Jilin University, Changchun, China</i>	TP 304
TP 294	<b>In vivo Detection of Intramuscular Injected Ephedrine in Breath by EESI-MS;</b> <u>Jianhua Ding</u> <sup>1,2</sup> ; Haiwei Gu <sup>1,3</sup> ; Bin Hu <sup>1</sup> ; Zhuangzhang Wu <sup>1</sup> ; Yulin Ren <sup>2</sup> ; Huanwen Chen <sup>1,2</sup> ; <sup>1</sup> <i>East China Institute of Technology, Fuzhou, P.R.China;</i> <sup>2</sup> <i>Jilin University, Changchun, P.R.China;</i> <sup>3</sup> <i>Validation Resources, LLC, Bend, OR</i>	TP 305
TP 295	<b>DESI-MS as a Tool for Obtaining Quick Answers to Practical Pharmaceutical Questions;</b> <u>Laura Sharon</u> <sup>1</sup> ; Peter M. Yehl <sup>1</sup> ; Peng Wang <sup>2</sup> ; Hong Gao <sup>2</sup> ; Margaret Figus <sup>2</sup> ; Fanyu Meng <sup>2</sup> ; Xiaoyi Gong <sup>2</sup> ; <sup>1</sup> <i>Merck &amp; Co., Inc., West Point, PA;</i> <sup>2</sup> <i>Merck &amp; Co., Inc, Rahway, NJ</i>	TP 306
TP 296	<b>Direct Analysis of Reversed-Phase HPTLC Separated Peptides from Protein Tryptic Digests Using a Surface Sampling Probe/ESI-MS System;</b> <u>Joshua F. Emory</u> <sup>1</sup> ; Matthew J. Walworth <sup>1</sup> ; Vilmos Kertesz <sup>1</sup> ; Gary J. Van Berkel <sup>1</sup> ; Michael Schulz <sup>2</sup> ; Susanne Minarik <sup>2</sup> ; <sup>1</sup> <i>Oak Ridge National Laboratory, Oak Ridge, TN;</i> <sup>2</sup> <i>Merck, Darmstadt, Germany</i>	TP 307
TP 297	<b>Extractive Electrospray Ionization Ion Cyclotron Resonance Mass Spectrometry for Rapid Unambiguous Detection of Phthalates in Complex Matrices;</b> <u>Huanwen Chen</u> <sup>1,2</sup> ; Konstantin Chingin <sup>1</sup> ; Liang Zhu <sup>1</sup> ; Gerardo Gamez <sup>1</sup> ; Renato Zenobi <sup>1</sup> ; <sup>1</sup> <i>ETH Zurich, Zurich, Switzerland;</i> <sup>2</sup> <i>East China Institute of Technology, Fuzhou, China</i>	TP 308
TP 298	<b>Rapid Desorption Electrospray Ionization Using Hadamard Transform Time-of-Flight Mass Spectrometry;</b> <u>Griffin K. Barbula</u> ; Matthew D. Robbins; Richard N. Zare; <i>Stanford Univ., Stanford, CA</i>	TP 309
TP 299	<b>DESI-MS of <i>Francisella tularensis</i> Inoculation Pathways;</b> <u>Tamara Sibray</u> <sup>1</sup> ; Richard Bowen <sup>2</sup> ; John T. Belisle <sup>2</sup> ; Franco Basile <sup>1</sup> ; <sup>1</sup> <i>University of Wyoming, Laramie, WY;</i> <sup>2</sup> <i>Colorado State Univ., Fort Collins, CO</i>	TP 310
TP 300	<b>Novel Chromatographic Separations Using an Atmospheric Solids Analysis Probe (ASAP) Mass Spectrometry;</b> <u>Richard G. McKay</u> <sup>1</sup> ; Barbara S. Larsen <sup>2</sup> ; Charles N. McEwen <sup>3</sup> ; <sup>1</sup> <i>M&amp;M Mass Spec Consulting LLC, Hockessin, DE;</i> <sup>2</sup> <i>The DuPont Company, Wilmington, DE;</i> <sup>3</sup> <i>Univ. of the Sciences in PA, Philadelphia, PA</i>	TP 311
TP 301	<b>A Desorption Corona Beam Ionization Source for Direct Analysis of Samples from Surface;</b> <u>Wenjian Sun</u> ; Xiaohui Yang; Junsheng Zhang; Tao Lin; Li Ding; <i>Shimadzu Research Laboratory (Shanghai), Shanghai, China</i>	TP 312
TP 302	<b>Open Probe – A Novel Method and Device for Ultra Fast Electron Ionization Mass Spectrometry Analysis;</b> <u>Aviv Amirav</u> ; Marina Poliak; Alexander Gordin; <i>Tel-Aviv University, Tel-aviv, Israel</i>	TP 313
		<b>LC/MS, 311 - 325</b>
		TP 314
		TP 315
		TP 316
		TP 317
		TP 318
		TP 319
		TP 320
		TP 321
		TP 322
		TP 323
		TP 324
		TP 325



## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

		LC/MS SAMPLE PREPARATION, 326 - 343
	<b>Proteomics Applications;</b> <u>Oleg V. Krokhin</u> ; Michael Harder; Vic Spicer; <i>University of Manitoba, Winnipeg, Canada</i>	TP 326 <b>A Rapid Visualized Indicator of Surfactant Residual (VISR) for the Generic and Membrane Proteomics Application;</b> <u>Chao-Jung Chen</u> ; Mei-Chun Tseng; Yet-Ran Chen; <i>Academia Sinica, Taipei, Taiwan</i>
TP 316	<b>Development of an On-Line Two-Dimensional LC-MS Method with Multiple Peak Trapping Capabilities for the Characterization of MABs;</b> <u>Melissa Alvarez</u> <sup>1</sup> ; <u>Oleg Borisov</u> <sup>2</sup> ; <u>Victor Ling</u> <sup>1</sup> ; <u>Guillaume Tremintin</u> <sup>3</sup> ; <i><sup>1</sup>Genentech, Inc., So San Francisco, CA; <sup>2</sup>Genentech, South San Francisco, CA; <sup>3</sup>Dionex Corporation, Sunnyvale, CA</i>	TP 327 <b>Withdrawn</b>
TP 317	<b>Determination of 12 Aminoglycosides in Swine Muscle by Liquid Chromatography with Tandem Mass Spectrometry;</b> <u>Chae-mi Lim</u> ; <u>Byung-hoon Cho</u> ; <u>Hyun-Jeong Kwon</u> ; <u>Su-Jeong Park</u> ; <u>Gap-Su Jeong</u> ; <i>National Veterinary Research &amp; Quarantine Service, Anyang, South Korea</i>	TP 328 <b>Label free Comparative Analysis of FFPE Specimen for Biomarker Discovery;</b> <u>Javad Nazarian</u> ; <u>Yetrib Hathout</u> ; <u>Tobey MacDonald</u> ; <i>Children's Natl. Medical Center, Washington, DC</i>
TP 318	<b>A Simple and Rapid Analysis of Speciation of Selenium in Se-Enriched Rice and Green Tea by Foliar Enrichment Using HPLC-ICPMS;</b> <u>Yong Fang</u> <sup>1,2</sup> ; <u>Yaofang Zhang</u> <sup>1</sup> ; <u>Qilin Chan</u> <sup>1</sup> ; <u>Qihui Hu</u> <sup>2</sup> ; <u>Joseph A. Caruso</u> <sup>1</sup> ; <i><sup>1</sup>University of Cincinnati, Cincinnati, OH; <sup>2</sup>Nanjing Agricultural University, Nanjing, Jiangsu, China</i>	TP 329 <b>Affinity-Enrichment Does, but Affinity-Depletion Does Not, Improve the Identification of Serum Proteins by 2D LC-MS/MS;</b> <u>Wenbo Zhi</u> ; <u>Meiyao Wang</u> ; <u>Sharad Purohit</u> ; <u>Jin-Xiong She</u> ; <i>Medical College of Ga, Augusta, GA</i>
TP 319	<b>LC-MS/MS Identification of b-N-Methylamino-L-Alanine in Cyanobacteria;</b> <u>Zdenek Spacil</u> <sup>1,2</sup> ; <u>Johan Eriksson</u> <sup>1</sup> ; <u>Leopold L. Ilag</u> <sup>1</sup> ; <i><sup>1</sup>Stockholm University, Stockholm, Sweden; <sup>2</sup>Faculty of Pharmacy, Charles University in Prague, Hradec Kralove, Czech Republic</i>	TP 330 <b>Electrophoretic Enrichment and Fractionation of Low Molecular Weight Proteins for Bottom-Up Proteomic Analysis;</b> <u>Wes E Steiner</u> ; <u>Benjamin Katz</u> ; <u>Chuck Witkowski</u> ; <u>Jeremy L. Norris</u> ; <i>Protein Discovery, Inc., Knoxville, TN</i>
TP 320	<b>Screening of Botanical Extracts for Ligands to Quinone Reductase-2 Using Ultrafiltration LC-MS;</b> <u>Xi Qiu</u> <sup>1</sup> ; <u>Yongsoo Choi</u> <sup>1</sup> ; <u>Hongjie Zhang</u> <sup>1</sup> ; <u>Yegao Chen</u> <sup>2</sup> ; <u>Minghua Qiu</u> <sup>2</sup> ; <u>Harry H.S. Fong</u> <sup>1</sup> ; <u>Richard B. Van Breemen</u> <sup>1</sup> ; <i><sup>1</sup>University of Illinois at Chicago, Chicago, IL; <sup>2</sup>Yunnan Normal University, Yunnan, China P. R; <sup>3</sup>Chinese Academy of Sciences, Kunmin, China P. R</i>	TP 331 <b>An SDS-PAGE-Based Sample Clean-up Method for LC-MS/MS Detection of Low Amounts of Protein in Complex Protein Mixtures Containing Contaminants;</b> <u>Wenzhu Zhang</u> ; <u>Elizabeth Heller</u> ; <u>Nathaniel Heintz</u> ; <u>Brian Chait</u> ; <i>The Rockefeller University, New York, NY</i>
TP 321	<b>Fine Analysis of Asian Lacquer tree Extracts (Urushiols) by High Performance Liquid Chromatography/Tandem Mass Spectrometry;</b> <u>Su-Min Park</u> ; <u>Yu-Kyung Jung</u> ; <u>Jin San Kim</u> ; <u>Ki-Jung Paeng</u> ; <i>Yonsei university, Wonju, South Korea</i>	TP 332 <b>Assessing the Variability of Peptide Peak Areas in Online Pepsin Digestion;</b> <u>Joomi Ahn</u> <sup>1</sup> ; <u>Martha Stapels</u> <sup>1</sup> ; <u>Keith Faden</u> <sup>1</sup> ; <u>John R. Engen</u> <sup>2</sup> ; <i><sup>1</sup>Waters Corporation, Milford, MA; <sup>2</sup>Northeastern University, Boston, MA</i>
TP 322	<b>LC-APCI-MS/MS Analysis of Redox Status of Coenzymes CoQ9 and CoQ10 in Biological Samples as a Biomarker for Oxidative Stress;</b> <u>Sergiu P. Paliu</u> <sup>1</sup> ; <u>Timothy J. Garrett</u> <sup>1</sup> ; <u>Christiaan Leeuwenburgh</u> <sup>1</sup> ; <u>Nigel A. Calcutt</u> <sup>2</sup> ; <u>Peter W. Stacpoole</u> <sup>1</sup> ; <i><sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>Univ. of California, San Diego, CA</i>	TP 333 <b>Identification of Multiple Sources of Partial Tryptic Peptides in LC-MS/MS Experiments and The Importance of Using Partial Trypsin Search Parameters;</b> <u>Kaye D. Speicher</u> ; <u>Peter Hembach</u> ; <u>Thomas Beer</u> ; <u>Hsin-yao Tang</u> ; <u>David W. Speicher</u> ; <i>The Wistar Institute, Philadelphia, PA</i>
TP 323	<b>Multipesticides Analysis of Water Samples by Direct Injection Using Ultra-Fast LC/MS/MS and Continuous Polarity Switching;</b> <u>Detlev Schleuder</u> <sup>1</sup> ; <u>Jianru Stahl-Zeng</u> <sup>1</sup> ; <u>Jan Lembcke</u> <sup>1</sup> ; <u>Wolfram seitz</u> <sup>2</sup> ; <u>Schulz Wolfgang</u> <sup>2</sup> ; <u>Walter Weber</u> <sup>2</sup> ; <i><sup>1</sup>Applied Biosystems, Germany, Darmstadt, Germany; <sup>2</sup>Landeswasserversorgung Langenau, Langenau, Germany</i>	TP 334 <b>Coomassie Stains: Choices and Concerns: An evaluation of ESI-MS Compatibility;</b> <u>David Sumpton</u> ; <u>Willy Vincent Bienvenut</u> ; <i>Beatson Inst. Cancer Res., Glasgow, UK</i>
TP 324	<b>Analysis of Ketamine and its Metabolites in Urine by LC-FAIMS-MS;</b> <u>Chung-Yu Chen</u> ; <u>Maw-rong Lee</u> ; <i>National Chung-Hsing University, Taichung, Taiwan</i>	TP 335 <b>Application and Optimization of Various Phosphopeptide Enrichment Strategies for Selective Isolation and Enrichment of Sphingoid Base 1-Phosphates;</b> <u>YouXun Jin</u> <sup>2</sup> ; <u>YunHwa Shi</u> <sup>2</sup> ; <u>Jun Young Kwak</u> <sup>2</sup> ; <u>Hwan-Soo Yoo</u> <sup>2</sup> ; <u>Yong-Moon Lee</u> <sup>2</sup> ; <u>Hun-Young So</u> <sup>1</sup> ; <u>Yong-Hyeon Yim</u> <sup>1</sup> ; <i><sup>1</sup>KRISS, Daejeon, South Korea; <sup>2</sup>Chungbuk National Univ., Chongju, South Korea</i>
TP 325	<b>Determination of Red Dye #7 in Imported Candy by HPLC/MS/MS, a Food Safety Issue for the Modern Spectrometry Laboratory;</b> <u>Patrick Sasso</u> ; <i>Scientist, Hainesport, NJ</i>	TP 336 <b>In-Depth Identification of Proteins and Modifications by Multi-Dimensional Protein Separation and LC-MS/MS and MRM Methods;</b> <u>Manfred R. Raida</u> ; <u>Rong Li</u> ; <u>Kim Huey Ee</u> ; <u>Rosalind Yc Tan</u> ; <u>Gina YB Tan</u> ; <u>Bernad PM Tham</u> ; <u>Choon Keow Ng</u> ; <i>Experimental Therapeutics Ce, Singapore</i>
		TP 337 <b>Rapid In-Gel Digestion of Proteins Using Surface Acoustic Waves;</b> <u>Sri H. Ramarathinam</u> <sup>1</sup> ; <u>Ketav P. Kulkarni</u> <sup>2</sup> ; <u>Nicholas A. Williamson</u> <sup>1</sup> ; <u>James Friend</u> <sup>3</sup> ; <u>Leslie Yeo</u> <sup>3</sup> ; <u>Anthony W. Purcell</u> <sup>1</sup> ; <u>Patrick Perlmutter</u> <sup>2</sup> ; <i><sup>1</sup>Department of Biochemistry, University of Melbourne, Parkville, Australia; <sup>2</sup>Department of Chemistry, Monash University, Clayton, Australia; <sup>3</sup>Dept. of Mechanical Engineering, Monash University, Clayton, Australia</i>
		TP 338 <b>Systematical Optimization of LTQ-Orbitrap Platform for Protein Identification and Peptide</b>

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Quantitation;** Ping Xu; Duc Duong; Junmin Peng; Emory University, Atlanta, GA
- TP 339 **Evaluating Peptide Adsorptive Loss to HPLC Autosampler Vials;** Lynn Spruce<sup>1</sup>; Jessica Y. Lee<sup>1</sup>; Todd M Greco<sup>1,2</sup>; Steven L. Cohen<sup>1</sup>; Steven H. Seeholzer<sup>1</sup>; <sup>1</sup>Children's Hospital of Philadelphia, Philadelphia, PA; <sup>2</sup>University of Pennsylvania, Philadelphia, PA
- TP 340 **Reproducing Peptide nano-LC/MS Data: Looking beyond the Sample;** Jason S Harrington<sup>1</sup>; Anthony J. Makusky<sup>1</sup>; Jeffrey A. Kowalak<sup>1</sup>; Sanford P. Markey<sup>2</sup>; <sup>1</sup>NIH, Bethesda, MD; <sup>2</sup>NIMH, NIH, Bethesda, MD
- TP 341 **Novel Strategy to Screen Various Chemical Modifications on a Target Peptide: Combination of Group-Specific Immunoaffinity Extraction and Mass Spectrometry;** Takaaki Goto; Shota Kojima; Seon Hwa Lee; Tomoyuki Oe; Tohoku University, Sendai, Japan
- TP 342 **Development of an On-Bead Digestion Procedure for Immunoprecipitated Proteins;** Matthew J Berberich<sup>1</sup>; Dhaval Nanavati<sup>2</sup>; Anthony J. Makusky<sup>2</sup>; Brian Martin<sup>2</sup>; Detlef Vullhorst<sup>1</sup>; Andres Buonanno<sup>1</sup>; Sanford P. Markey<sup>2</sup>; <sup>1</sup>NICHD, NIH, Bethesda, MD; <sup>2</sup>NIMH, NIH, Bethesda, MD
- TP 343 **Extraction of Activatable Cell Penetrating Peptides from Mouse Organs and Analysis with Orbitrap Mass Spectrometer;** Larry Gross<sup>1,2</sup>; Tao Jiang<sup>1,2</sup>; Emilia S. Olson<sup>3</sup>; Todd A. Aguilera<sup>1</sup>; Mike Whitney<sup>1</sup>; Jessica L. Crisp<sup>1</sup>; Roger Y. Tsien<sup>1,2</sup>; <sup>1</sup>UCSD, La Jolla, CA; <sup>2</sup>Howard Hughes Medical Institute, La Jolla, CA; <sup>3</sup>UCSD School of Medicine, La Jolla, CA
- PEPTIDES FRAGMENTATION AND SEQUENCING,  
344 - 371**
- TP 344 **Effect of Ring Substituents on the Dissociation Behavior of Model, Benzoic Acid Terminated Peptides and Esters;** Dale R Kerstetter<sup>1</sup>; Anthony Vu<sup>1</sup>; Adam M Graichen<sup>2</sup>; Idia Tokunboh<sup>1</sup>; Richard Vachet<sup>2</sup>; Michael J. Van Stipdonk<sup>1</sup>; <sup>1</sup>Wichita State University, Wichita, KS; <sup>2</sup>University of Massachusetts, Amherst, MA
- TP 345 **Comparison of Free Radical Initiated Peptide Sequencing (FRIPS) and Electron Capture Dissociation for Characterization of Modified Peptides;** Ashley Brant<sup>1</sup>; Jason W Kieltyka<sup>2</sup>; Kristina Hakansson<sup>1</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>Abbott Laboratories, Abbott Park, IL
- TP 346 **Application of a Novel Site Selective N-Terminal Labeling Method on Peptide Sequencing;** Min Bian; Suping Zheng; Steve Becht; Xiaoya Ding; PPD, Inc., Middleton, WI
- TP 347 **Identification of the [14C]HKL-272 Covalent Binding Site on Human Serum Albumin Using In-Gel Tryptic Digestion and LC/MS Analysis;** Jianyao Wang<sup>1</sup>; Lin Deng<sup>2</sup>; <sup>1</sup>Wyeth Pharmaceuticals, Collegeville, PA; <sup>2</sup>Wyeth, Collegeville, PA
- TP 348 **TEMPO-Based FRIPS Approach for Gas-Phase Peptide Sequencing;** Minhee Lee; Minhyuck Kang; Bongjin Moon; Han Bin Oh; Sogang University, Dept. of Chemistry, Seoul, South Korea
- TP 349 **Role of Amino Acid Side Chains in Apparent Selective Ring Opening of Cyclic b5 Ions;** Sam Molesworth; Sandra M. Osburn; Stephanie Curtice; Michael J. Van Stipdonk; Wichita State University, Wichita, KS
- TP 350 **Structure and Fragmentation Pathways of Doubly-Protonated Pro-His-Xxx Tripeptides;** Bela Paizs<sup>1</sup>; Michaela Knapp-Mohammady<sup>1</sup>; Alex G. Harrison<sup>2</sup>; <sup>1</sup>DKFZ, Heidelberg, Heidelberg, Germany; <sup>2</sup>University of Toronto, Toronto, ON
- TP 351 **Fragmentation Pathways of Non-Tryptic Peptides: Formation of the b<sub>n-1</sub>+OH Ion;** Irina Perdivara<sup>1,2</sup>; Leesa Deterding<sup>1</sup>; Michael Przybylski<sup>2</sup>; Kenneth B. Tomer<sup>1</sup>; <sup>1</sup>NIEHS, Rtp, NC; <sup>2</sup>Universitat Konstanz, Konstanz, GERMANY
- TP 352 **Experimental and Theoretical Investigation of the Influence of Specific Residues on Formation of b-Type Ions from Protonated Peptides;** Stephanie S. Curtice; Sandra M. Osburn; Sam Molesworth; Michael J. Van Stipdonk; Wichita State University, Wichita, KS
- TP 353 **Predictions of Dominant Channels in Peptides Mass Spectra Using Density Functional Theory Calculations;** Oleg Obolensky; Yi-Kuo Yu; National Center for Biotechnology Information, NLM, Bethesda, MD
- TP 354 **A Systematic Study into Phosphopeptide Ionization and Fragmentation;** Teresa Allen-Michaud<sup>1,3</sup>; Chao-Hung Chang<sup>2</sup>; Adam Proff<sup>1,2</sup>; Emmanuel Chang<sup>1,2</sup>; <sup>1</sup>York College/CUNY, Jamaica, NY; <sup>2</sup>The Graduate School and University Center/CUNY, New York, NY; <sup>3</sup>Queens College/CUNY, Flushing, NY
- TP 355 **Establishing the Mechanism for Dominant c-Ion Formation in Deprotonated C-Terminal Amide Peptides Using Collision-Induced Dissociation;** Samantha S. Bokatzian-Johnson; Carolyn J. Cassidy; University of Alabama, Tuscaloosa, AL
- TP 356 **Withdrawn**
- TP 357 **Gas-Phase Basicity Measurements of Singly- and Doubly-Charged bn Fragment Ions Using ESI/FT-ICR MS;** Behrooz Zekavat; Abdullah H. Al-fdeilat; Touradj Solouki; University of Maine, Orono, ME
- TP 358 **Intramolecular Proton Relay Revealed by Substituent Effect and Energy-Resolved Mass Spectrometry;** Xudong Yao; Pamela Ann Diego; Hui Jiang; University of Connecticut, Storrs, CT
- TP 359 **Fragmentation of Peptide Ions during Electrospray Ionization;** Yu Xia; He Wang; Marco Pazzi; Zheng Ouyang; R. Graham Cooks; Purdue University, West Lafayette, IN
- TP 360 **Fragmentation of Singly Protonated Ions via Interaction with Metastable Rare Gas Atoms;** Vadym Berkout; MassTech, Inc., Columbia, MD
- TP 361 **Liquid Chromatography - Electron Transfer Dissociation - Ion Mobility on a Quadrupole Time of Flight Mass Spectrometer;** Jeffery M Brown; Steven D Pringle; Iain D G Campuzano; Richard C Chapman; John B Hoyes; WATERS, Manchester, UK
- TP 362 **Simplifying Fragmentation Patterns of Multiply Charged Peptides by N-terminal Derivatization and Electron Transfer Collision Activated Dissociation;** James Madsen; Jared Shaw; Jennifer Brodbelt; The University of Texas, Austin, TX
- TP 363 **Abundant b Ion Formation in Electron Capture Dissociation of Supercharged Peptides;** Neil D Hershey; Anastasia Kalli; Kristina Hakansson; University of Michigan, Ann Arbor, MI
- TP 364 **New Improvements and Understandings of the In-Source Decay (ISD) of Peptides in MALDI-TOF Mass Spectrometry;** Kevin Demeure; Valerie Gabelica; Frederic Rosu; Loic Quinton; Edwin Depauw; University of Liege, Liege, Belgium

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 365 **Valence Parity for c/z Ions from ECD of Peptides: Effect of Enzyme Digestion, H<sup>+</sup> Atom Transfer and Charge State;** Yuan Mao<sup>1,2</sup>; Jeremiah Tipton<sup>1</sup>; Greg T. Blakney<sup>1</sup>; Chris Hendrickson<sup>1,2</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup>National High Magnetic Field Laboratory, Tallahassee, FL; <sup>2</sup>Florida State University, Tallahassee, FL
- TP 366 **Atmospheric Pressure Collection of Peptide fragments after Thermal Dissociation;** Livia S. Eberlin<sup>1</sup>; Hao Chen<sup>2</sup>; R. Graham Cooks<sup>1</sup>; <sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>Ohio Univ., Athens, OH
- TP 367 **A Comparison of Tandem MS Search Algorithms Using Electron Transfer Dissociation Data;** Henrik Molina<sup>1,2</sup>; Akhilesh Pandey<sup>2</sup>; Kumaran Kandasamy<sup>2</sup>; <sup>1</sup>Centre de Regulacio Genomica (CRG), Barcelona, Spain; <sup>2</sup>The Johns Hopkins University, Baltimore, MD
- TP 368 **Activated-Ion ETD for Sequence Analysis of Peptides in Low Charge States;** Aaron Ledvina<sup>1</sup>; Graeme McAlister<sup>1</sup>; Myles Gardner<sup>2</sup>; Suncerae Smith<sup>2</sup>; James Madsen<sup>2</sup>; Jennifer Brodbelt<sup>2</sup>; Joshua J. Coon<sup>1</sup>; <sup>1</sup>Univ of Wisconsin-Madison, Madison, WI; <sup>2</sup>University of Texas, Austin, TX
- TP 369 **Implementation of Beam-Type CAD with Ion Trap Product Detection, on a Hybrid QLT-Orbitrap Mass Spectrometer; Large-Scale Comparisons to Resonant Excitation;** Graeme Mcalister<sup>1</sup>; Doug Phanstiel<sup>2</sup>; M. Violet Lee<sup>3</sup>; Craig Wenger<sup>2</sup>; Joshua J. Coon<sup>4</sup>; <sup>1</sup>The University of Wisconsin, Madison, WI; <sup>2</sup>University of Wisconsin, Madison, WI; <sup>3</sup>University of Wisconsin-Madi, Madison, WI; <sup>4</sup>Univ of Wisconsin-Madison, Madison, WI
- TP 370 **Comparison Of Ion Fragmentation Methods For Sequencing Phosphopeptides;** Robert Brown<sup>1</sup>; Stephane Houel<sup>2</sup>; William Old<sup>1</sup>; Katheryn Resing<sup>1</sup>; <sup>1</sup>University Of Colorado, Boulder; <sup>2</sup>Howard Hughes Medical Instit, Boulder, CO
- TP 371 **Electron Capture Dissociation of Non-Covalent (12-crown-4)-Peptide Complex Ions;** Wai Yi Chan<sup>1</sup>; Takwah Dominic Chan<sup>2</sup>; <sup>1</sup>The Chinese University of Hong Kong, Hong Kong SAR, China; <sup>2</sup>The Chinese Univ. of Hong Kong, Hong Kong Sar, China
- HOMELAND SECURITY, 372 - 386**
- TP 372 **Autonomous Light-Weight Integrated Direct Sampling Mass Spectrometer for TIC and CWA Detection;** J. Mitchell Wells<sup>1</sup>; Miriam Fico<sup>1</sup>; Adam Keil<sup>1</sup>; Jane Likens<sup>1</sup>; Jonell Smith<sup>2</sup>; Daniel Sutton<sup>1</sup>; Bruce Solomon<sup>1</sup>; Brent Rardin<sup>1</sup>; Garth Patterson<sup>1</sup>; Robert J. Noll<sup>2</sup>; R. Graham Cooks<sup>2</sup>; Dennis Barket, Jr. <sup>1</sup>; <sup>1</sup>ICx Griffin Analytical Technologies, West Lafayette, IN; <sup>2</sup>Purdue University, West Lafayette, IN
- TP 373 **Rapid Mass Spectrometric Detection of Chemical Warfare Agents, Simulants, and Toxic Industrial Chemicals Using a Field-Portable GC-TMS;** Christopher R. Bowerbank; Tiffany C. Wirth; Patricia E. Oliphant; Joseph L. Oliphant; Edgar D. Lee; Douglas W. Later; *Torion Technologies Inc., American Fork, UT*
- TP 374 **On-Site Detection of Chemical Warfare Agents by Mass Spectrometry and Ion Mobility Spectrometry;** Yasuo Seto<sup>1</sup>; Shintaro Kishi<sup>1</sup>; Takeshi Ohmori<sup>1</sup>; Mieko Kanamori-Kataoka<sup>1</sup>; Kouichiro Tsuge<sup>1</sup>; Akihiko Okumura<sup>2</sup>; Yasuaki Takada<sup>2</sup>; Naoya Ezawa<sup>2</sup>; Susumu Watanabe<sup>3</sup>; Hiroaki Hashimoto<sup>3</sup>; Masanori Kidara<sup>4</sup>; Kazuya Takahashi<sup>4</sup>; <sup>1</sup>National Research Institute of Police Science, Kashiwa, Japan; <sup>2</sup>Hitachi, Ltd., Kokubunji, Japan; <sup>3</sup>Hitachi High-Tech Control Systems Co., Hitachinaka, Japan; <sup>4</sup>The Institute of Physical and Chemical Research, Wako, JAPAN
- TP 375 **High Throughput Desorption Electrospray Ionization Analysis of Chemical Warfare Agents in Liquids Using Tandem Mass Spectrometry and Ion Mobility Separation;** Paul A. D'Agostino; Claude L. Chenier; *DRDC Suffield, Medicine Hat, Canada*
- TP 376 **Monitoring of Diphenylchloroarsine and Diphenylcyanoarsine in Air Using Atmospheric Pressure Chemical Ionization Ion Trap Mass Spectrometry with Direct Air Introduction;** Akihiko Okumura<sup>1</sup>; Susumu Watanabe<sup>2</sup>; Hiroaki Hashimoto<sup>2</sup>; Yasuaki Takada<sup>1</sup>; Naoya Ezawa<sup>1</sup>; Yasuo Seto<sup>3</sup>; Shintaro Kishi<sup>3</sup>; <sup>1</sup>Hitachi, Ltd., Tokyo, Japan; <sup>2</sup>Hitachi High-Tech Control Systems Co., Ibaraki, Japan; <sup>3</sup>National Research Institute of Police Science, Chiba, Japan
- TP 377 **High-Throughput Walkthrough Portal with Wire Linear Ion-Trap to Detect Improvised Explosive Devices (IEDs);** Masuyuki Sugiyama, Yuichiro Hashimoto, Hisashi Nagano, Hideki Hasegawa, Akihiko Okumura, Yasutaka Suzuki, Yasuaki Takada; *Hitachi, Tokyo, Japan*
- TP 378 **High-Precision Measurements of RDX in C4 by GC/NCI-MS;** Marcela C Najjarro; Greg Gillen; Eric Windsor; *NIST, Gaithersburg, MD*
- TP 379 **Evidence for Sulfur Oxidation in the Perhydrolysis of the Chemical Warfare Agent VX;** Andrew M. McAnoy<sup>1</sup>; J Williams<sup>1</sup>; Stephen J Blanksby<sup>2</sup>; Martin R. L. Paine<sup>2</sup>; <sup>1</sup>Defence Science and Technology Organisation, Melbourne, Australia; <sup>2</sup>University of Wollongong, Wollongong, Australia
- TP 380 **Low Femtomole Detection and Quantification of Ricin in Serum;** David M. Schieltz<sup>1</sup>; Sara C. Mcgrath<sup>1</sup>; Lisa G. Mcwilliams<sup>2</sup>; John R. Barr<sup>1</sup>; <sup>1</sup>Centers for Disease Control and Prevention, Atlanta, GA; <sup>2</sup>Battelle Memorial Institute, Atlanta, GA
- TP 381 **Microfluidic Cell Culture Device Coupled to MALDI-TOF MS for Identification of Microorganisms;** Jeonghoon Lee; Steven A. Soper; Kermit K. Murray; *Louisiana State University, Baton Rouge, LA*
- TP 382 **Detection of Functional Anthrax Edema Factor in Human and Animal Plasma by Liquid Chromatography-Tandem Mass Spectrometry;** Elodie Duriez<sup>1</sup>; Pierre L. Goossens<sup>2</sup>; Francois Becher<sup>1</sup>; Eric Ezan<sup>1</sup>; <sup>1</sup>CEA, Gif Sur Yvette, France; <sup>2</sup>Institut Pasteur, Paris, France
- TP 383 **The Advantages of MS/MS Typing for Differentiating Between Close Neighbors;** Jane Razumovskaya; Appavu Sundaram; Seshu Gudlavalleti; Sergey Kurnosenko; Vladimir M. Doroshenko; *Science and Engineering Services, Inc., Columbia, MD*
- TP 384 **Evaluation of Mass-Spectrometry Based Proteomic Approach for Bacterial Identification and Classification Using Blinded Microbial Samples;** Rabih Jabbour<sup>1</sup>; Jacek P. Dworzanski<sup>2</sup>; Samir Deshpande<sup>3</sup>; Charles H. Wick<sup>4</sup>; Michael F. Stanford<sup>4</sup>; Alan W. Zulich<sup>4</sup>; <sup>1</sup>SAIC INC., Apg, MD; <sup>2</sup>SAIC, Bel Air, MD; <sup>3</sup>Science & Technology Corporation, Edgewood, MD; <sup>4</sup>Edgewood chemical biological Center, APG, MD
- TP 385 **On-Line analysis of Airborne Trace Level Toxic Chemicals Using Thermal Desorption Preconcentration and a New Time of Flight Mass**

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 386 **Spectrometer**; Gareth Roberts; Gerhard Horner; Nick Bukowski; *ALMSCO International, Bridgend, UK*
- TP 387 **Vapor Detection at 1 ppt with Secondary Electrospray Ionization (SESI) and a Single Quadrupole MS**; Juan A. Sillero<sup>1</sup>; Juan Rus<sup>1</sup>; Juan Fernandez De La Mora<sup>2</sup>; <sup>1</sup>*SEADM, Boecillo, Spain*; <sup>2</sup>*Yale University - Mechanical Engineering Department, New Haven, CT*
- DRUG METABOLISM: QUANTITATION, 387 - 408**
- TP 387 **Mood Stabilizer-Induced Changes in the Postsynaptic Density Proteome**; Dhaval Nanavati<sup>1</sup>; Lisa A. Catapano<sup>3</sup>; Anthony J. Makusky<sup>1</sup>; Ayse Dosemeci<sup>2</sup>; Daniel Austin<sup>3</sup>; Guang Chen<sup>3</sup>; Hussein K. Manji<sup>3</sup>; Sanford P. Markey<sup>1</sup>; <sup>1</sup>*NIMH/LNT, Bethesda, MD*; <sup>2</sup>*NINDS/NIH, Bethesda, MD*; <sup>3</sup>*NIMH/LMP, Bethesda, MD*
- TP 388 **Strategies in Method Development of Rivastigmine and its Metabolite NAP226-90 in Human Plasma by Liquid Chromatography Tandem Mass Spectrometry**; Xuejun Peng; Amara Pinnawala; Rong Yi; Winnie Lui; Eliot Chung; Alison Pyner; Sarah Ostonal; *Can Test Ltd, Burnaby, Canada*
- TP 389 **Morphine Metabolites, Plasma, Quantification, Pharmacokinetic**; Vivek V Tummala; Sherwin Jiang; Robb Harman; Yongdong Zhu; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- TP 390 **Determination of Low Concentration of Oxymorphone and 6β-Hydroxyoxymorphone in Human Plasma by LC-MS/MS**; Hongkun Liang; Crystal Nguyen; Hongzhuan Chen; Mojdeh Vahid; Kristen Singleton; Jared Callan; Yongdong Zhu; Yuan-Shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- TP 391 **Simultaneous Determination of Oxycodone, Noroxycodone and Oxymorphone in Human Plasma by Liquid Chromatography Electrospray Ionization Tandem Mass Spectrometry**; Rong Yi; Gina de Boer; Winnie Lui; Hong Zhang; Xuejun Peng; *Can Test Ltd, Burnaby, Canada*
- TP 392 **Withdrawn**
- TP 393 **Rapid Method for Identification and Quantitation of Dantrolene and its Metabolite in Plasma Using Two Linear Ion Trap Mass Spectrometers**; Julian J Phillips<sup>1</sup>; Julie Horner<sup>1</sup>; Dan McKemie<sup>2</sup>; Anne Taylor<sup>2</sup>; Heather Knych<sup>2</sup>; Scott Stanley<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific, San Jose, CA*; <sup>2</sup>*University of California - Davis, Davis, CA*
- TP 394 **An Improved HPLC/MSMS Assay for Aprepitant in Plasma Utilizing a Mobile Phase Containing Ethylenediaminetetraacetic acid to Improve Calibration Curve Linearity**; Cynthia M. Chavez-Eng; Ryan Lutz; Marvin Constanzer; Eric Woolf; *Merck & Co., West Point, PA*
- TP 395 **Stabilization of Troglitazone Extracts with Ascorbic Acid for the LC/MS/MS Analysis of Blood and Plasma Samples**; Bahanu Habulihaz; Gino M. Salituro; Lawrence Colwell; Lucinda Cohen; *Merck & CO. INC., Rahway, NJ*
- TP 396 **Overcoming Challenges in Developing a Rugged LC-MS/MS Method for Mycophenolate Mofetil and Mycophenolic Acid in Human Plasma**; Nick Peng; Iffat Balkhi; Justine Lam; Nicola Hughes; *Biovail Contract Research, Toronto, Canada*
- TP 397 **Quantification of Sirolimus in Human Whole Blood by LC-MS/MS**; Hongkun Liang; Crystal Nguyen; David J Quirico; Jamie Zhao; Yongdong Zhu; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- TP 398 **Quantification of Naringenin, Bergamottin, and 6',7'-dihydroxybergamottin- Three Major Components in Grapefruit Juice by LC-MS/MS**; Yafei Xu; Jing Ke; Harry Zhao; Zhongping John Lin; *Frontage Laboratories, Inc., Malvern, PA*
- TP 399 **Simultaneous Determination of Tolbutamide, Omeprazole, Midazolam and Dextromethorphan by LC-MS/MS – A High Throughput Approach to Evaluate Drug-Drug Interactions**; Wei Zhang<sup>1</sup>; Futian Han<sup>1</sup>; Ping Guo<sup>1</sup>; Harry Zhao<sup>1</sup>; Zhongping (John) Lin<sup>1</sup>; Mike-Qingtao Huang<sup>2</sup>; Naidong Weng<sup>2</sup>; *Frontage Laboratories, Inc., Malvern, PA*; <sup>2</sup>*Johnson & Johnson PRD, Raritan, NJ*
- TP 400 **Quantification of Itraconazole and Its Metabolite Hydroxyitraconazole in Human Plasma by LC-MS/MS**; Venkatraman Junnotula; Hongli Wang; Lina Tang; Angel Tseng; Yuwen Zhao; Jamie Zhao; Yuan-Shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- TP 401 **An LC MS/MS Assay of the "Pittsburgh Cocktail": Six CYP Probe-Drug/Metabolites from Human Plasma and Urine Using Standard Isotope Dilution**; Nicolas A. Stewart<sup>1</sup>; Thomas P. Conrads<sup>2</sup>; Robert A. Branch<sup>1</sup>; <sup>1</sup>*University of Pittsburgh, Center for Clin. Pharm., Pittsburgh, PA*; <sup>2</sup>*University of Pittsburgh, Cancer Institute, Pittsburgh, PA*
- TP 402 **Method Development Strategy in the Analysis of Testosterone by LC-FAIMS-MS/MS**; Kimberly Dunn-Meynell; Sam Wainhaus; Walter Korfmacher; *Schering-Plough, Kenilworth, NJ*
- TP 403 **Quantitative Analysis of 17-Desacetyl Norgestimate in Human Plasma By LC MS/MS**; Colin Patrick; Yongdong Zhu; Yuan-shek Chen; Jerry Cao; Hongzhuang Chen; Kelly Whetstone; Kumar Ramu; *QPS, LLC, Newark, DE*
- TP 404 **The Combined Quantitation of Two Challenging Compounds, Fluticasone and Salmeterol, on a New Tandem Mass Spectrometer**; Edward Brewer<sup>2</sup>; Min Meng<sup>2</sup>; Patrick Bennett<sup>2</sup>; Spencer Carter<sup>2</sup>; George Scott<sup>1</sup>; Robert Horton<sup>2,2</sup>; Gerard Dalglish<sup>2,2</sup>; <sup>1</sup>*Ionics Mass Spectrometry Group, Bolton, Canada*; <sup>2</sup>*Tandem Labs, Levittown, PA*
- TP 405 **Determination of Bicalutamide in Human Plasma by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)**; Jun-hwa Shim; Hwa Suk Kim; Seul Oh; Hyang Hee Yang; Won Seok Nam; Seon Jeong Kim; Seo Hyun Yoon; Kyung-Sang Yu; In-Jin Jang; *Seoul National University, Seoul, South Korea*
- TP 406 **Simultaneous Determination of Udenafil and its Active Metabolite, DA-8164, in Free Fraction Human Plasma by LC-ESI/MS/MS**; Hwa Suk Kim; Seul Oh; Jun-Hwa Shim; Hyang Hee Yang; Won Seok Nam; Seon Jeong Kim; Seo Hyun Yoon; Kyung-Sang Yu; In-Jin Jang; *Seoul National University, Seoul, South Korea*
- TP 407 **Determination of Rifabutin and 25-O-Deacetyl Rifabutin in Human Plasma by LC/MS/MS**; Hongkun Liang; Crystal Nguyen; Mojdeh Vahid; Yongdong Zhu; Jamie Zhao; Kristen Singleton; Preeta Bissessar; Yuan-Shek Chen; Kumar Ramu; *QPS, LLC., Newark, DE*
- TP 408 **The Quantitative Analysis of Voriconazole in Human Plasma by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)**; Seo Hyun Yoon; Jun-hwa Shim; Hwa Suk Kim; Seul Oh; Hyang Hee Yang; Won

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

Seok Nam; Seon Jeong Kim; Kyung-Sang Yu; In-Jin Jang; Seoul National University, Seoul, South Korea

- | DRUG METABOLISM: PHARMACOKINETICS, 409 - 423 |  |
|--|--|
| TP 409                                       | <b>Identification of Urinary Metabolites of Tolcapone, an Inhibitor of Catechol-O-methyl Transferase, by LC/MS-based Metabonomics Analysis;</b> <u>Jinchun Sun</u> <sup>1</sup> ; Laura K. Schnackenberg <sup>1</sup> ; Linda S. Von Tungeln <sup>1</sup> ; Frederick A. Beland <sup>1</sup> ; Marja-Leena Toivonen <sup>2</sup> ; Wade Hines <sup>3</sup> ; Richard D. Beger <sup>1</sup> ; <sup>1</sup> NCTR, Jefferson, AR; <sup>2</sup> Orion Pharmaceuticals, Espoo, Finland; <sup>3</sup> BG Medicine, Waltham, WA   |
| TP 410                                       | <b>A Highly Effective and Sensitive LC-MS/MS Assay for Itraconazole and Hydroxy-Itraconazole in Human Plasma for Bioequivalence, Bioavailability and Pharmacokinetic Studies;</b> <u>Wei Zhang</u> <sup>1</sup> ; Futian Han <sup>1</sup> ; Harry Zhao <sup>1</sup> ; Zhongping (John) Lin <sup>1</sup> ; Guillermo Tous <sup>2</sup> ; <sup>1</sup> Frontage Laboratories, Inc., Malvern, PA; <sup>2</sup> Stiefel Laboratories, Inc., Princeton, NJ  |
| TP 411                                       | <b>Pharmacokinetic Analysis of Di(2-ethylhexyl)phthalate (DEHP) and its Major Metabolites in Plasma and Urine using UPLC with ES/MS/MS;</b> <u>Nathan C. Twaddle</u> ; Steven J. Moon; Luisa Camacho; K. Barry Delclos; Daniel R. Doerge; NCTR/FDA, Jefferson, AR  |
| TP 412                                       | <b>Plasma Pharmacokinetics of NSC 265959, a Novel 3,11-Diazasteroid, in Mice;</b> <u>Lawrence R. Phillips</u> <sup>1</sup> ; John P. Carter <sup>2</sup> ; Eva Majerova <sup>2</sup> ; Dianne L. Newton <sup>2</sup> ; Melinda G. Hollingshead <sup>1</sup> ; <sup>1</sup> National Cancer Institute at Frederick, Frederick, MD; <sup>2</sup> SAIC-Frederick, Inc., Frederick, MD   |
| TP 413                                       | <b>Metabolism and Pharmacokinetics of Oxazoles with anti-Tuberculosis Activity;</b> <u>Yang Song</u> ; Valentina Petukhova; Larry. L Klein; Richard B. Van Breemen; scott Franzblau; university of Illinois, Chicago, IL   |
| TP 414                                       | <b>Determination of Dexamethasone to 13 pg/g (mL) in Ocular Fluids and Tissues following Unilateral, Topical Administration;</b> <u>Matthew Marchewka</u> ; Hillary Decker; Michael Wynalda; Wasser Carol; James Vrbanac; PharmOptima, Portage, MI   |
| TP 415                                       | <b>In vitro Metabolic Interactions between Black Cohosh (Cimicifuga racemosa) and Tamoxifen;</b> <u>Jinghu Li</u> ; Tanja Gödecke; Shaonong Chen; Guido F. Pauli; Richard B. van Breemen; Dejan Nikolic; University of Illinois College of Pharmacy, Chicago, IL   |
| TP 416                                       | <b>24 High Throughput LDTD-MS/MS IC50 Determination of CYPinhibition in Human Liver Microsomes (HLM);</b> <u>Patrice Tremblay</u> <sup>1</sup> ; Pierre Picard <sup>1</sup> ; Limin He <sup>2</sup> ; Jae Chang <sup>2</sup> ; Jane Huang <sup>2</sup> ; <sup>1</sup> Phytronix Technologies, Quebec, Canada; <sup>2</sup> DMPK, Roche Palo Alto, Palo Alto, CA  |
| TP 417                                       | <b>PD/PK Characterization of Drug Release From Nanoparticles Independent of Formulation: Acute Pharmacokinetics and Cardiovascular Effects of Intravenous Nifedipine;</b> <u>James Vrbanac</u> <sup>1</sup> ; Steven Humphrey <sup>1</sup> ; Michael Wynalda <sup>1</sup> ; Allen Buhl <sup>1</sup> ; Mike Morgan <sup>2</sup> ; <sup>1</sup> PharmOptima, Portage, MI; <sup>2</sup> Bend Research, Inc, Bend, Oregon  |
| TP 418                                       | <b>Quantitation of Drug Candidates in Pharmacokinetic Studies Using High Resolution Accurate MS – A Different Approach for Bioanalysis;</b> <u>Rena Zhang</u> <sup>1</sup> ; Sean Yu <sup>2</sup> ; Philip Tiller <sup>3</sup> ; Suzie Yeh <sup>4</sup> ; Elizabeth A. Mahan <sup>2</sup> ; William Bart Emary <sup>5</sup> ; <sup>1</sup> Merck & Co., Inc, West Point, PA; <sup>2</sup> Merck & Co., West Point, PA; <sup>3</sup> RMI  |
| TP 419                                       | <b>laboratories, Collegeville, PA; <sup>4</sup>Merck &amp; Co., Inc., West Point, PA; <sup>5</sup>Merck Research Labs, West Point, PA</b><br><b>Quantitation of Small Molecules with Simultaneous Structural Characterization of Metabolites using High Resolution Mass Spectrometry for Accelerating Drug Discovery;</b> <u>Melis Coraggio</u> <sup>1</sup> ; Young Shin <sup>2</sup> ; Jonathan C. McNally <sup>3</sup> ; Sheerin Shahidi <sup>2</sup> ; Yan Chen <sup>3</sup> ; Yingying Huang <sup>4</sup> ; Cornelis Hop <sup>5</sup> ; Patrick J. Rudewicz <sup>1</sup> ; <sup>1</sup> Genentech, Inc., South San Francisco, CA; <sup>2</sup> Genentech, South San Francisco, CA; <sup>3</sup> ThermoFisher Scientific, San Francisco, CA; <sup>4</sup> Thermo Fisher Scientific, San Jose, CA; <sup>5</sup> Genetech, South San Francisco, CA |
| TP 420                                       | <b>Why a Q-TOF Mass Spectrometer Could Detect Homspira® More Than Two Orders of Magnitude Lower Than a Triple Quadrupole;</b> <u>Earl L. White</u> <sup>1</sup> ; Veronica P. Rodriguez <sup>1</sup> ; Kenyon Hood <sup>1,2</sup> ; Kasey Benson <sup>3</sup> ; Hal Siegel <sup>3</sup> ; <sup>1</sup> MDx BioAnalytical, Inc., Tucson, AZ; <sup>2</sup> Ventana Medical Systems, Inc., Tucson, AZ; <sup>3</sup> ImmuneRegen BioSciences, Inc, Scottsdale, AZ  |
| TP 421                                       | <b>An Improved Predicted MRM Method for in vivo Metabolite Detection Method Using a Hybrid LIT/Triple Quadrupole Mass Spectrometer;</b> <u>Hua-fen Liu</u> <sup>1</sup> ; Elliott Jones <sup>1</sup> ; Robert Cho <sup>2</sup> ; Ji Ma <sup>3</sup> ; <sup>1</sup> Applied Biosystems, Foster City, CA; <sup>2</sup> Amgen, Inc, South San Francisco, CA; <sup>3</sup> Amgen Inc., South San Francisco, CA   |
| TP 422                                       | <b>Simultaneous Pharmacokinetic Quantitation and Metabolic Identification Using pMRM Survey Mode on a High Scan Rate QqQ/LIT LCMS;</b> <u>Rolf Kern</u> ; Theresa Lee; Richard Lauman; Elliott Jones; Dale H. Patterson; Loren Olson; Applied Biosystems, San Jose, CA   |
| TP 423                                       | <b>Development of a HPLC-MS/MS Assay to Measure the Novel Proteasome Inhibitor CEP-18770 in Plasma. Preliminary Pharmacokinetic Evaluation in Cancer Patients;</b> <u>Elena Marangon</u> <sup>1</sup> ; Federica Sala <sup>1</sup> ; Cristiana Sessa <sup>3</sup> ; Elisa Dall'O <sup>2</sup> ; Roberta Cereda <sup>4</sup> ; Valeria Livi <sup>4</sup> ; Maurizio D'Incalci <sup>1</sup> ; Massimo Zucchetti <sup>1</sup> ; <sup>1</sup> Istituto di Ricerche Farmacologiche Mario Negri, Milano, Italy; <sup>2</sup> SENDO, Milano, Italy; <sup>3</sup> Istituto Oncologico della Svizzera Italiana, Bellinzona, Switzerland; <sup>4</sup> EOS, Milano, Italy  |
| PROTEIN CONFIRMATION, 424 - 456              |  |
| TP 424                                       | <b>Characterization of a Microfabricated Electrospray Ionization (ESI) Device for Solution-Phase H/D Exchange in Non-Denaturing Media;</b> <u>Abdullah H. Al-Fdeilat</u> ; Behrooz Zekavat; Scott D. Collins; Rosemary Smith; Touradj Solouki; University of Maine, Orono, ME  |
| TP 425                                       | <b>Investigation of Rapid Two-Dimensional Peptic Peptide Fractionation for HD Exchange by Nano-LC MALDI;</b> <u>Wayne Chou</u> ; Nicholas Sam-Soon; Tom Poulos; Paul Gershon; UC-Irvine, Irvine, CA  |
| TP 426                                       | <b>Reduced Back-Exchange by Modified RPLC Mobile Phase Separation of Proteolytic Peptides for MS Analysis of H/D Exchange of Solution-Phase Proteins;</b> <u>Santosh G Valeja</u> <sup>1,2</sup> ; Mark R. Emmett <sup>1,2</sup> ; Alan G. Marshall <sup>1,2</sup> ; <sup>1</sup> Natl High Magnetic Field Lab, Tallahassee, FL; <sup>2</sup> Florida State university, Tallahassee, FL  |
| TP 427                                       | <b>H/D Exchange Combined with Top-Down Electron Capture Dissociation for Protein Complex Structural Characterization: Development and Early Results;</b> Magalie Duchateau; Charlotte Boisseau; Julia Chamot-  |

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- rooke; Guillaume Van Der Rest; *Ecole Polytechnique, Palaiseau, France*
- TP 428 **Tandem MS with a Label Reduction Strategy Enables a Proteomics Approach to H/DX Experiments**; Andrew Percy; David Schriemer; *University of Calgary, Calgary, Canada*
- TP 429 **Deuterium Exchange Mass Spectrometry Using a Semiautomatic Interface for Data Acquisition and Automatic Data Analysis and Reporting**; Maria T. Villar; Danny E. Miller; Aron W. Fenton; Antonio Artigues; *University of Kansas Medical Center, Kansas City, KS*
- TP 430 **Towards a Standardized Approach in Presenting Hydrogen-Deuterium Exchange Mass Spectrometry (HDX MS) Data in Comparability Studies of Biopharmaceutical Products**; Cedric Bobst<sup>1</sup>; Rinat Abzalimov<sup>1</sup>; Damian Houde<sup>2,3</sup>; Marek Kloczewiak<sup>2</sup>; Steven A. Berkowitz<sup>2</sup>; John R. Engen<sup>3</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>*University of Massachusetts, Amherst, MA*; <sup>2</sup>*Biogen Idec, Inc., Cambridge, MA*; <sup>3</sup>*Northeastern University, Boston, MA*
- TP 431 **ESI-MS Identifies Protein Oxidation as Major Contributor to Irreversible Thermal Denaturation**; Jenna-Jiangjiang Liu; Lars Konermann; *Univ. of Western Ontario, London, ON*
- TP 432 **A New Approach to Assessing Conformational Stability and Functional Competence of Protein Therapeutics using Mass Spectrometry**; Cedric Bobst<sup>1</sup>; Rinat Abzalimov<sup>1</sup>; Damian Houde<sup>2</sup>; Steven A. Berkowitz<sup>2</sup>; Rohin Mhatre<sup>2</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>*University of Massachusetts, Amherst, MA*; <sup>2</sup>*Biogen Idec, Inc., Cambridge, MA*
- TP 433 **Protein Equilibrium Population Snapshot (PEPS) MS Method for Measuring Protein Folding Energies Using H/D exchange and Oxidation of Methionine**; Rohana Liyanage; Nagarjuna Devarapalli; Latisha M. Puckett; N.H. Phan; Joel A. Starch; Jennifer Gidden; Wesley E. Stites; Jackson O. Lay; *University of Arkansas, Fayetteville, AR*
- TP 434 **His-HDX Method to Probe the Microenvironment of Histidine Residues in *Escherichia coli* Dihydrofolate Reductase**; Masaru Miyagi; Chris Dealwis; *Case Western Reserve Univ, Cleveland, OH*
- TP 435 **Metal-Catalyzed Hydrogen/Deuterium Exchange and MS as a New Way to Determine Metal-Protein Binding Sites**; Adam M Graichen; Richard Vachet; *University of Massachusetts, Amherst, MA*
- TP 436 **Structural and Dynamic Investigation of *umuD* Gene Products by Hydrogen Exchange Mass Spectrometry**; Jing Fang; Penny J. Beuning; John R. Engen; *Northeastern University, Boston, MA*
- TP 437 **Differences in Structural Dynamics of Factor VIII and Lactadherin C2 Domains in Relation to Membrane Binding Employing DXMS Analysis**; Dennis Pantazatos<sup>3</sup>; Virgil Woods, Jr.<sup>5</sup>; Gary E. Gilbert<sup>1,2</sup>; Chris Gessner<sup>4</sup>; <sup>1</sup>*VA Boston Health Care System, West Roxbury, MA*; <sup>2</sup>*Brigham and Women's Hospital, Boston, MA*; <sup>3</sup>*Harvard Medical School, Boston, MA*; <sup>4</sup>*Ohio State University, Columbus, OH*; <sup>5</sup>*University of California, La Jolla, CA*
- TP 438 **The Interaction of Myristoylated HIV Nef with N-Myristoyltransferase-1 as Determined by Hydrogen Exchange Mass Spectrometry**; Chris Morgan<sup>1</sup>; Purushottam S. Narute<sup>2</sup>; Brian V. Miglionico<sup>1</sup>; Thomas E. Smithgall<sup>2</sup>; John R. Engen<sup>1</sup>; <sup>1</sup>*Northeastern University, Boston, MA*; <sup>2</sup>*University of Pittsburgh, Pittsburgh, PA*
- TP 439 **Conformational Dynamics of the Transcription Regulator VraR are Modulated by Phosphorylation: A Hydrogen/Deuterium Exchange ESI-MS Study**; Yu-Hong Liu<sup>1</sup>; Antoaneta Belcheva<sup>2</sup>; Dasantila Golemi-Kotra<sup>2</sup>; Lars Konermann<sup>1</sup>; <sup>1</sup>*The University of Western Ontario, London, Canada*; <sup>2</sup>*York University, Toronto, Canada*
- TP 440 **HIV-1 Vif Conformation Upon Phosphorylation by MAPK and Its Implications in Elongin-BC Binding**; Sean R. Marcsisin; John R. Engen; *Northeastern University, Boston, MA*
- TP 441 **Post-Translational Modifications Alter Intact IgG1 Conformation and Influence Fc-Gamma-RIII Binding**; Damian Houde<sup>1,2</sup>; Steven Berkowitz<sup>1</sup>; John R. Engen<sup>2</sup>; <sup>1</sup>*Biogen Idec, Inc., Cambridge, MA*; <sup>2</sup>*Northeastern University, Boston, MA*
- TP 442 **Protein Dynamics of Peroxiredoxins Studied by Hydrogen/Deuterium Exchange Mass Spectrometry**; Sasidhar N Nirudodhi; Claudia Maier; *Oregon State University, Corvallis, OR*
- TP 443 **Dynamic Studies and Structural Delineation of Truncated Human Cardiac Troponin Using HDX**; Dev Kowlessur; Larry Tobacman; *University of Illinois, Chicago, IL*
- TP 444 **Isotopic Depletion for the Structural Mapping of the Troponin Complex by Hydrogen/Deuterium Exchange Combined with FT-ICR Mass Spectrometry**; George M. Bou-assal<sup>1,2</sup>; Jean E. Chamoun<sup>2,3</sup>; Mark R. Emmett<sup>1,2</sup>; Piotr G. Fajer<sup>2,4</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup>*Ion Cyclotron Resonance Prog, Tallahassee, FL*; <sup>2</sup>*NHMF/FSU, Tallahassee, FL*; <sup>3</sup>*Department of Chemistry, Macquarie University, Sydney, Australia*; <sup>4</sup>*Institute of Molecular Biophysics / FSU, Tallahassee, FL*
- TP 445 **How Do the Four Keys (Ca<sup>2+</sup>) Change the World? A PLIMSTEX Study of Troponin C**; Richard Yu-cheng Huang; Don L. Rempel; Michael L. Gross; *Washington University, St. Louis, MO*
- TP 446 **Accelerated Protein Folding due to Chaperone Action is Revealed by SUPREX**; Stefan Esswein<sup>1</sup>; Hannah Florance<sup>2</sup>; Perdita Barran<sup>2</sup>; <sup>1</sup>*University of Edinburgh, Edinburgh, UK*; <sup>2</sup>*The University of Edinburgh, Edinburgh, UK*
- TP 447 **Analysis of Histone Dynamics in the Higher Order Folding of Nucleosome Arrays Using Hydrogen/Deuterium Exchange Coupled to Mass Spectrometry**; Tanya Panchenko<sup>1</sup>; Sandya Ajith<sup>1</sup>; Mike Resch<sup>2</sup>; Jeffrey C. Hansen<sup>2</sup>; Ben E. Black<sup>1</sup>; <sup>1</sup>*University of Pennsylvania, Philadelphia, PA*; <sup>2</sup>*Colorado State University, Fort Collins, Colorado*
- TP 448 **Structural Mass Spectrometry of the  $\alpha\beta$ -Tubulin Dimer Supports a Revised Model of Microtubule Assembly**; Melissa J. Bennett<sup>1</sup>; John Chik<sup>1</sup>; Gordon Slysz<sup>1</sup>; Tyler Luchko<sup>2</sup>; Dan L. Sackett<sup>3</sup>; David Schriemer<sup>1</sup>; <sup>1</sup>*University of Calgary, Calgary, AB*; <sup>2</sup>*Cross Cancer Institute, Edmonton, Canada*; <sup>3</sup>*National Institutes of Health, Bethesda, MD*
- TP 449 **Allosteric Effects in the Abl Kinase Upon Inhibitor Binding**; Roxana E. Jacob<sup>1,3</sup>; Jianming Zhang<sup>2</sup>; Nathanael S. Gray<sup>2</sup>; John R. Engen<sup>1,3</sup>; <sup>1</sup>*Northeastern University, Boston, MA*; <sup>2</sup>*Dana-Farber Cancer Institute,*

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Harvard Medical, Boston, MA; <sup>3</sup>Barnett Institute, Boston, MA
- TP 450 **Identification of an Allosteric Pathway in the Regulation of  $\alpha$ -Isopropylmalate Synthase from Mycobacterium Tuberculosis by Solution-phase H/D Exchange FT-ICR MS;** Mark R. Emmett<sup>1</sup>; Hui-Min Zhang<sup>1</sup>; Patrick A. Frantom<sup>2</sup>; John S. Blanchard<sup>2</sup>; Alan G. Marshall<sup>1</sup>; <sup>1</sup>Nat'l High Magnetic Field Lab/Florida State Univ., Tallahassee, FL; <sup>2</sup>Albert Einstein College of Medicine, Bronx, NY
- TP 451 **Folding of the Protein Cex in Solution and in the Gas Phase Studied by Hydrogen/Deuterium Exchange;** Peran Terrier; D. J. Douglas; *University of British Columbia, Vancouver, BC*
- TP 452 **Investigation of Transferrin/Transferrin Receptor Interaction by Hydrogen-Deuterium Exchange Mass Spectrometry (HDX MS);** Cedric Bobst<sup>1</sup>; Anne B. Mason<sup>2</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>University of Massachusetts, Amherst, MA; <sup>2</sup>University of Vermont Medical School, Burlington, VT
- TP 453 **Study of the Conformation of Myoglobin Adsorbed on Nanoparticles with Hydrogen/Deuterium Exchange Mass Spectrometry;** Yaoling Long; David Barber; John R. Eycler; *University of Florida, Gainesville, FL*
- TP 454 **Hydrogen/Deuterium Exchange Analysis of RXR-Rexinoid Interactions in the Presence and Absence of Coactivator GRIP-1;** LeeAnn J. Boerma<sup>1</sup>; Gang Xia<sup>1</sup>; Cheng Qui<sup>1</sup>; Donald D. Muccio<sup>1</sup>; Matthew B. Renfrow<sup>2</sup>; <sup>1</sup>UAB at Birmingham, Birmingham, AL; <sup>2</sup>University of Alabama at Birmingham, Birmingham, AL
- TP 455 **Probing the Effects of GTP Hydrolysis State on the Conformation of RhoA Using HDX MS;** Madonna-Lily Choi; Michael P. Walsh; John K. Chik; *University of Calgary, Calgary, Canada*
- TP 456 **Probing Host-Guest Complex Formation between Cyclodextrins and Pharmaceutical Drugs Using Hydrogen-Deuterium Exchange;** Adedamola Onipepe; Christian Granados; Jon Robinson; Xiomara Soto; David Sierra; Dil Ramanathan; *Kean University, Union, NJ*
- NON-COVALENT INTERACTIONS, 457 - 486**
- TP 457 **ETD Dissociation of the Non-Covalent Complexes between Calmodulin and Dopamine or Adenosine A2A Receptor Epitopes;** Amina S. Woods<sup>1</sup>; Sucharita Dutta<sup>2</sup>; Shelley N Jackson<sup>3</sup>; <sup>1</sup>NIDA IRP, NIH, Baltimore, MD; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA; <sup>3</sup>NIDA-IRP, NIH, Baltimore, MD
- TP 458 **Identifying the Sites of Small Molecules and Amyloid Beta-Protein Noncovalent Interactions Using Top-Down Mass Spectrometry;** Eric Pang<sup>1</sup>; David B. Teplow<sup>2</sup>; Joseph A. Loo<sup>1</sup>; <sup>1</sup>UCLA, Los Angeles, CA; <sup>2</sup>David Geffen School of Medic, Los Angeles, CA
- TP 459 **Enhanced Stoichiometry Measurements of Heterogeneous sub-MDa Protein Assemblies by Tandem MS: Elucidation of Subunit Exchange Mechanism in GroEL;** Rinat Abzalimov<sup>1</sup>; Sarah C. Wehri<sup>2</sup>; George H. Lorimer<sup>2</sup>; Igor A. Kaltashov<sup>1</sup>; <sup>1</sup>University of Massachusetts, Amherst, MA; <sup>2</sup>University of Maryland College Park, College Park, MD
- TP 460 **How Bacteria Defend Themselves Against Pathogens: The Structure and Topology of the Cascade Protein Complex Revealed by Macromolecular Mass Spectrometry;** Kristina Lorenzen<sup>1</sup>; Esther Van Duijn<sup>1</sup>; Arjan Barendregt<sup>1</sup>; Stan Brouns<sup>2</sup>; Matthijs Jore<sup>2</sup>; John van der Oost<sup>2</sup>; Albert J.R. Heck<sup>1</sup>; <sup>1</sup>Utrecht University, Utrecht, Netherlands; <sup>2</sup>Wageningen University, Wageningen, Netherlands
- TP 461 **Mass Spectrometry Study of the Interaction Between Calmodulin And ER $\alpha$ 17p, a Peptide that Corresponds to the Estrogen Receptor  $\alpha$ /Calmodulin-Binding Site;** Sandrine Voillard<sup>1</sup>; Francoise Fournier<sup>1</sup>; Carlos Afonso<sup>1</sup>; Yves Jacquot<sup>1</sup>; Guy Leclercq<sup>2</sup>; Jean-Claude Tabet<sup>1</sup>; <sup>1</sup>University Paris VI (UPMC), Paris Cedex 05, France; <sup>2</sup>Institut Jules Bordet, Brussels, Belgium
- TP 462 **Probing the Solution Structure of TNF- $\alpha$  Homo- and Heterotrimers Before and After Complex Perturbation;** Eric Beil; Sheng-Jiun Sam Wu; George A. Heavner; Jennifer F. Nemeth; *Centocor R&D, Radnor, PA*
- TP 463 **Small Heat Shock Proteins (sHSPs) are Thermodynamically Regulated Molecular Chaperones with Polydisperse Substrate Binding Behaviour;** Florian Stengel<sup>1</sup>; Alex J Painter<sup>1</sup>; Andrew J Baldwin<sup>2</sup>; Nomalie Jaya<sup>2</sup>; Eman Basha<sup>2</sup>; Lewis E Kay<sup>2</sup>; Elizabeth Vierling<sup>3</sup>; Carol V Robinson<sup>1</sup>; Justin LP Benesch<sup>1</sup>; <sup>1</sup>University of Cambridge, Cambridge, UK; <sup>2</sup>University of Toronto, Toronto, Canada; <sup>3</sup>University of Arizona, Tucson, Arizona
- TP 464 **Application of CE-MS to the Determination of Autoinducer Inactivation Enzyme A-metal Stoichiometry;** Mehdi Moini<sup>1</sup>; Selynda Garza<sup>2</sup>; <sup>1</sup>Texas State University, San Marcos, TX; <sup>2</sup>Cedra Corp, Austin, TX
- TP 465 **Structures and Binding Energies of Noncovalent Complexes of Peptidomimetic Complexes of Protonated Nitrogen Bases with 18-Crown-6;** Yu Chen; Mary T. Rodgers; *Wayne State University, Detroit, MI*
- TP 466 **Investigation of Non-covalent Complexes Between Synthetic Polymers and Biomolecules Using Mass Spectrometry;** Danijela Smiljanic; Chrys Wesdemiotis; *The University of Akron, Akron, OH*
- TP 467 **Non-Covalent Interactions between the PEBP/RKIP Protein and Nucleotide Analogs;** Lucie Jaquillard<sup>1</sup>; Guillaume Gabant<sup>1</sup>; Françoise Schoentgen<sup>2</sup>; Luigi Agrofoglio<sup>3</sup>; Martine Cadene<sup>1</sup>; <sup>1</sup>CBM CNRS UPR4301 (INC) Rue Charles Sadron, Orléans, France; <sup>2</sup>IMPMC, Université de Paris 6, Paris, France; <sup>3</sup>ICOA UMR6005 Université d'Orléans, Orléans, France
- TP 468 **Comprehensive Analysis of the TRAP-Anti-TRAP Complex by ESI-MS and X-Ray Crystallography;** Satoko Akashi<sup>1</sup>; Masahiro Watanabe<sup>1</sup>; Jonathan G. Heddle<sup>1,2</sup>; Satoru Unzai<sup>1</sup>; Sam-Yong Park<sup>1</sup>; Jeremy R. H. Tame<sup>1</sup>; <sup>1</sup>Yokohama City University, Yokohama, Kanagawa, Japan; <sup>2</sup>Global Edge Inst., Tokyo Institute of Technology, Yokohama, Japan
- TP 469 **Withdrawn**
- TP 470 **Non-Covalent Interactions between Food-Derived Proteins and Polyphenols Assessed by Ultra-Filtration and Mass Spectrometry – a Matter of Bioavailability and Perception;** Kornel Nagy; Marie-Claude Courtet-Compondu; Martin Kussmann; *Nestle Research Center, Lausanne 26, Switzerland*
- TP 471 **CCR2 Di-Sulfated N-Terminal Peptide and Arixtra Bind Competitively to MCP-1/CCL2;** Connie Jen; Julie A. Leary; *UC Davis, Davis, CA*



## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 472 **Characterization and Structure Elucidation by FT-ICR-MS/MS and NMR of a Protein-Complex Contaminant Produced from a 96 Well-Plate Cover Adhesive;** Marshall M. Siegel; Xidong Feng; Franklin Moy; Walter Massefski; Brooke Swalm; Mehul Patel; Lee Jennings; *Wyeth Research, Pearl River, NY*
- TP 473 **Spatially Ordered Surfactant Assemblies in Gas Phase : Bis(2-ethylhexyl)sulfosuccinate-Alkaline Metal Ion Aggregate;** Gianluca Giorgi<sup>1</sup>; Vincenzo Turco Liveri<sup>2</sup>; <sup>1</sup>*University of Siena, Siena, Italy*; <sup>2</sup>*University of Palermo, Palermo, Italy*
- TP 474 **Solution-Phase Chelators for the Suppression of Nonspecific Metal-Protein Interactions in ESI-MS;** Jingxi Pan; Lars Konermann; *Univ. of Western Ontario, London, ON*
- TP 475 **Quantitating Zinc Deposition in the ESI Source during Zinc-Peptide Analysis;** Haritha Mattapalli; Colin S. Burns; Allison S. Danell; *East Carolina University, Greenville, NC*
- TP 476 **Energy and Entropy Effects in the Dissociation of Non-Covalent Ionic Polymer/Substrate Complexes;** Eric Martineau; Abdulrahman Alhazmi; Justin Renaud; Paul Michael Mayer; *University of Ottawa, Ottawa, Canada*
- TP 477 **Monitoring Polymer Growth in the Interior of a Protein-Cage and Overcoming Challenges in Assigning Charge States to Native-Spray Mass Spectra;** Lars Liepold; Luke Oltrogge; Joynal Abedin; Peter Suci; Mark Young; Trevor Douglas; *Montana State University, Bozeman, MT*
- TP 478 **From Metal Binding to Nanoparticle Formation: Monitoring Biomimetic Iron Oxide Synthesis within Protein Cages Using Mass Spectrometry;** Sebyung Kang<sup>1,2</sup>; Craig C. Jolley<sup>1,2</sup>; Lars O. Liepold<sup>1,2</sup>; Mark Young<sup>1,2</sup>; Trevor Douglas<sup>1,2</sup>; <sup>1</sup>*Montana State University, Bozeman, MT*; <sup>2</sup>*Center for BioInspired Nanomaterials, Bozeman, MT*
- TP 479 **Why do Mass Spectrometric Measurements of Noncovalent Binding Constants Give Accurate Results?** Renato Zenobi<sup>1</sup>; Matthias C Jecklin<sup>1</sup>; Rui Wang<sup>1</sup>; David Touboul<sup>2</sup>; <sup>1</sup>*ETH Zurich, Zurich, Switzerland*; <sup>2</sup>*CNRS, Gif-sur-Yvette, France*
- TP 480 **Determination of Protein-Ligand Binding Constants Using Mass Spectrometry and Validation Using Surface Plasmon Resonance and Isothermal Titration Calorimetry;** Matthias Jecklin<sup>1</sup>; Stefan Schauer<sup>2</sup>; Christoph Dumelin<sup>3</sup>; Renato Zenobi<sup>4</sup>; <sup>1</sup>*ETH Zürich, Zürich, Switzerland*; <sup>2</sup>*Functional Genomics Center Zürich, Zürich, Switzerland*; <sup>3</sup>*Philochem AG, Zürich, Switzerland*; <sup>4</sup>*ETH Zurich, Zurich, Switzerland*
- TP 481 **Determination of Dimerization Constants of CH3-CH3 Interactions in IgG4 Antibodies by Native Mass Spectrometry;** Rebecca J. Rose<sup>1</sup>; Aran F. Labrijn<sup>2</sup>; Ewald T.J. van den Bremer<sup>2</sup>; Janine Schuurman<sup>2</sup>; Patrick H.C. van Berkel<sup>2</sup>; Paul W.H.I. Parren<sup>2</sup>; Albert J.R. Heck<sup>1</sup>; <sup>1</sup>*Utrecht University, Utrecht, Netherlands*; <sup>2</sup>*Genmab, Utrecht, Netherlands*
- TP 482 **Mass spectrometry Contribution for Stability Constants Measurement of Protein/Protein Complexes;** Aurélie Mème<sup>1</sup>; Peran Terrier<sup>1</sup>; Frank Hannemann<sup>2</sup>; Rita Bernhardt<sup>2</sup>; Hélène Nierengarten<sup>1</sup>; Noelle Potier<sup>1</sup>; Emmanuelle Leize-Wagner<sup>1</sup>; <sup>1</sup>*LDSM2 - Institut de Chimie-CNRS-ULP, Strasbourg, France*; <sup>2</sup>*Biochemie Universität des Saarlandes, Saarbrücken, Germany*
- TP 483 **Imaging of Noncovalent Complexes by MALDI-MS;** Shelley N Jackson<sup>1</sup>; Amina S. Woods<sup>2</sup>; <sup>1</sup>*NIDA-IRP, NIH, Baltimore, MD*; <sup>2</sup>*NIDA IRP, NIH, Baltimore, MD*
- TP 484 **Withdrawn**
- TP 485 **Noncovalent Interactions between Polyethyleneimine and Cibacron Blue 3GA Studied by Mass Spectrometry;** Ömür Celikbıçak<sup>1,2</sup>; Bekir Salih<sup>2</sup>; Chrys Wesdemiotis<sup>1</sup>; <sup>1</sup>*The University of Akron, Akron, OH*; <sup>2</sup>*Hacettepe University, Ankara, Turkey*
- TP 486 **Characterization of Binding Sites of Insulin and IGF-2 for a Genome-Inspired DNA Binding Ligand by MALDI-TOF-Mass Spectrometry;** Junfeng Xiao; Dmitri Zagorevski; Linda McGown; *Rensselaer Polytechnic Institute, Troy, NY*

### PEPTIDES: QUANTITATION – APPLICATIONS, 487 - 513

- TP 487 **Novel Aspects of Quantitation of Immunogenic Gluten Peptides by LC/MS/MS;** Jennifer A. Voyksner<sup>1</sup>; Robert D. Voyksner<sup>1</sup>; Chaitan Khosla<sup>2</sup>; James Jorgenson<sup>3</sup>; <sup>1</sup>*LCMS Limited, Durham, NC*; <sup>2</sup>*Stanford University, Stanford, CA*; <sup>3</sup>*University of North Carolina at Chapel Hill, Chapel Hill, NC*
- TP 488 **Quantification of Oxidative Modification in Hemoglobin Using iTRAQ/Isobaric Tags and Tandem Mass Spectrometry;** Tatiana Pimenova<sup>1</sup>; Claudia P. Pereira<sup>2</sup>; Peter M. Gehrig<sup>3</sup>; Dominik J. Schauer<sup>2</sup>; Renato Zenobi<sup>1</sup>; <sup>1</sup>*ETH Zurich, Zurich, Switzerland*; <sup>2</sup>*University of Zurich, Zurich, Switzerland*; <sup>3</sup>*Functional Genomics Center, Zurich, Switzerland*
- TP 489 **High Sensitive Simultaneous Quantification Method of Hepcidin-20, 22, and -25 in Human Serum by LC/MS/MS;** Naoaki Murao; Hideyuki Yasuno; Yasushi Shimonaka; Masaki Ishigai; *Chugai Pharmaceutical Co., Ltd., Gotemba, Japan*
- TP 490 **Stable Isotope Free Direct MALDI-MS Quantitation of Beta Defensin 2 Regulated by TLR Activation in Chicken Heterophils;** Lakshmi Kannan<sup>1</sup>; Rohana Liyanage<sup>1</sup>; Narayan C Rath<sup>2</sup>; Jackson O. Lay<sup>1</sup>; <sup>1</sup>*University of Arkansas, Fayetteville, AR*; <sup>2</sup>*PPPSRU, ARS, USDA, Fayetteville, AR*
- TP 491 **Identification and Measurement of Pituitary Peptides during Development;** Adriana Bora; Lori Raetzman; Jonathan Sweedler; *University of Illinois, Urbana, IL*
- TP 492 **Quantification of NMDA Receptor Binding Proteins in Normal and Schizophrenic Human Brain Tissue;** Eugene Ciccimaro<sup>1</sup>; Mark Szewc<sup>1</sup>; Mark Sanders<sup>1</sup>; Chang-gyu Hahn<sup>2</sup>; Matthew L Macdonald<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific, Somerset, NJ*; <sup>2</sup>*University of Pennsylvania, Philadelphia, PA*
- TP 493 **Quantitation of Exenatide in Human Plasma Using LC-MS/MS/MS (LC-MS<sup>3</sup>) on a Linear Q-Trap API-5500 System;** Yan Xu; John-Paul Gutierrez; Tian-sheng Lu; Haiqing Ding; Xiuying Chen; Kristin Miller; Yong-Xi Li; *Medpace Bioanalytical Laboratories, Cincinnati, OH*
- TP 494 **Quantitation of Formaldehyde-Hemoglobin Adducts;** Maria Ospina; Adrienne K. Barry; Hubert Vesper; *Centers for Disease Control & Prevention, Atlanta, GA*
- TP 495 **Measuring Acrylamide-Hemoglobin Adducts by LC/MS/MS;** Adrienne K. Barry; Maria Ospina; Hubert Vesper; *Centers for Disease Control Prevention, Atlanta, GA*



## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- TP 496 **Increased  $\alpha$ -Synuclein 3-Nitrotyrosine Levels at Tyrosine 39 in a Parkinson's Disease Model;** Steven R. Danielson; Jason Held; May Oo; Birgit Schilling; Bradford W. Gibson; Julie K. Andersen; *Buck Institute for Age Research, Novato, CA*
- TP 497 **Quantitative Peptidomic Analysis of Peptide Amidation in Mouse Pituitary with Liquid Chromatography-Mass Spectrometry;** Ping Yin<sup>1</sup>; Suresh P. Annangudi<sup>1</sup>; Danielle Bousquet-Moore<sup>2</sup>; Eipper A. Betty<sup>2</sup>; Richard E. Mains<sup>2</sup>; Jonathan V. Sweedler<sup>1</sup>; <sup>1</sup>*University of Illinois, Urbana, IL*; <sup>2</sup>*University of Connecticut Health Center, Farmington, CT*
- TP 498 **Mass Spectrometry-Based Quantification of Acrolein-Modified Thiol-Containing Peptides in an *in vivo* Model of Oxidative Stress;** Jianyong Wu; Claudia Maier; *Oregon State University, Corvallis, OR*
- TP 499 **Development of the Plant Signaling Peptides Discovery Platform Using Mass Spectrometry;** Ying Lan Chen<sup>1,2</sup>; Mei-chun Tseng<sup>3</sup>; Yet-ran Chen<sup>1,2</sup>; <sup>1</sup>*Agricultural Biotechnology Research Center, Academ, Taipei, Taiwan*; <sup>2</sup>*National Taiwan Ocean University, Keelung City, taiwan*; <sup>3</sup>*Institute of Chemistry, Academia Sinica, Taipei, Taiwan*
- TP 500 **A MRM-based Mass Spectrometry Method for Optimization of Protein Expression to Increase Biofuel Production in *E. coli*;** Christopher J. Petzold; Alyssa M. Redding; Tanveer S. Batth; Farnaz F. Nowroozi; Aindriia Mukhopadhyay; *JBEI, Lawrence Berkeley National Laboratory, Emeryville, CA*
- TP 501 **LC/MS/MS Analysis of Murine Fibrinopeptide A in Lung Tissue : a Candidate Biomarker for Pulmonary Fibrosis;** Joe Palandra; Theodore Baginski; Sharon Rouw; Josef Ozer; Dean J Welsch; *Pfizer, Chesterfield, MO*
- TP 502 **The Quantification of Urocortin 2, a Large Synthetic Peptide, from Rat Plasma by UPLC/MS/MS;** Don Laudicina; Liping Jin; Ajay Madan; Haig Bozigian; Kayvon Jalali; *Neurocrine Biosciences, San Diego, CA*
- TP 503 **Withdrawn**
- TP 504 **Evaluation of Novel Front-End Technologies to Facilitate the Study of BNP-32 by High Performance Mass Spectrometry;** Christopher M. Shuford<sup>1</sup>; Genna L. Andrews<sup>1</sup>; D. Keith Williams, Jr.<sup>1</sup>; John C. Burnett, Jr.<sup>2</sup>; Adam M. Hawkrigde<sup>1</sup>; David C. Muddiman<sup>1</sup>; <sup>1</sup>*N.C. State Univeristy, Raleigh, NC*; <sup>2</sup>*Mayo Clinic College of Medicine, Rochester, MN*
- TP 505 **Detection of Peanut, Milk, Egg and Wheat Allergens by LC-MS/MS: Towards a Multi-Allergen Assay for Major Allergens in Food;** Catherine S Lane<sup>1</sup>; Phil J Jackson<sup>1</sup>; Donna Potts<sup>1</sup>; Jianru Stahl-zeng<sup>1</sup>; Antonio Serna<sup>1</sup>; Bert Popping<sup>2</sup>; Stephen J. Lock<sup>1</sup>; <sup>1</sup>*Applied Biosystems, Warrington, UK*; <sup>2</sup>*Eurofins, Pocklington, UK*
- TP 506 **Quantitative Analysis of N –and C-Terminal Phosphorylation of FRS-2 by Immuno-Enrichment and LC-MSMS – Method-Validation;** Stephan Bek; Francois Legay; Denis Herzog; *Novartis, Basel, Switzerland*
- TP 507 **Comparing the Levels of Endogenous Peptides Using Isotopic Labels and Mass Spectrometry;** Fang Xie<sup>1</sup>; Jonathan Sweedler<sup>2</sup>; <sup>1</sup>*University of Illinois at Urbana-Champaign, Urbana, IL*; <sup>2</sup>*Univ. of Illinois, Urbana, IL*
- TP 508 **Quantitative Determination of Relative Concentrations of the Amyloid-Beta Peptide with Aspartic Acid in Different Isomeric Forms;** Igor Popov<sup>1,2</sup>; Maria Indevkina<sup>3</sup>; Sergey Kozin<sup>2,3</sup>; Alexey Kononikhin<sup>1,4</sup>; Oleg Kharybin<sup>2</sup>; Alexander Makarov<sup>3</sup>; Alexander Archakov<sup>2</sup>; Eugene Nikolaev<sup>1,2</sup>; <sup>1</sup>*Emanuel Institute of Biochemical Physics RAS, Moscow, Russia*; <sup>2</sup>*Orekhovich Institute of Biomedical Chemistry RAMS, Moscow, Russia*; <sup>3</sup>*Engelhardt Institute of Molecular Biology, Moscow, Russia*; <sup>4</sup>*Institute for Energy Problems of Chemical Physics, Moscow, Russia*
- TP 509 **The Grb2ome: Development of a Robust & Quantitative LC-On-Chip sMRM Assay for Proteins Associated with Human Grb2;** Lorne E. B. Taylor<sup>1</sup>; Nicolas Bisson<sup>1</sup>; Andrew James<sup>1</sup>; Brett Larsen<sup>1</sup>; J. Bryce Young<sup>3</sup>; Nicole Hebert<sup>3</sup>; Stephen A Tate<sup>2</sup>; Tony Pawson<sup>1</sup>; <sup>1</sup>*Samuel Lunenfeld Research Institute, Toronto, Canada*; <sup>2</sup>*MDS Sciex, Concord, ON*; <sup>3</sup>*Eksigent Technologies, Dublin, CA*
- TP 510 **Quantitating the Cellular Response to DNA Double Strand Breaks through the MRN Complex;** Andrea M De Santis; Philip Compton; Jeffrey Shabanowitz; Patrick Concannon; Donald F. Hunt; *University of Virginia, Charlottesville, VA*
- TP 511 **Quantification of Antigenic Components in Influenza Vaccines by Isotope Dilution Bottom Up Proteomics;** John R. Barr; Tracie Williams; Jessica Norrgran; Carrie L Pierce; Adrian R Woolfitt; Maria I Solano; James Stevens; Reuben O Donis; James L Pirkle; *CDC, Atlanta, GA*
- TP 512 **Quantitating Stress-Activated Changes of Gene Expression and Protein Abundance in *Saccharomyces cerevisiae*;** M. Violet Lee; Scott E. Topper; Audrey P. Gasch; Joshua J. Coon; *University of Wisconsin-Madison, Madison, WI*
- TP 513 **Measurement of Protein Abundance in Mouse and Rat Organs;** Martha Stapels<sup>1</sup>; Jim Langridge<sup>1</sup>; Chelsea Piper<sup>2</sup>; An Zhou<sup>2</sup>; <sup>1</sup>*Waters Corporation, Milford, MA*; <sup>2</sup>*Legacy Research, Portland, OR*

### PROTEIN GLYCOPROTEIN, 514 - 531

- TP 514 **Defining IgA1 O-glycan Heterogeneity by Use of ECD and IgA1 Specific Proteases;** Kazuo Takahashi; Stephanie B. Wall; Archer Smith IV; Hitoshi Suzuki; Stacy Hall; Jiri Mestecky; Bruce A. Julian; Jan Novak; Matthew B. Renfrow; *University of Alabama at Birmingham, Birmingham, AL*
- TP 515 **N-glycosylation Microheterogeneity and Site Occupancy of an Asn-X-Cys Sequon in Plasma-Derived and Recombinant Protein C;** Geun-cheol Gil<sup>1</sup>; Kevin Van Cott<sup>2</sup>; William H. Velander<sup>2,3</sup>; <sup>1</sup>*U. of Nebraska-Lincoln, Lincoln, NE*; <sup>2</sup>*University of Nebraska, Lincoln, NE*; <sup>3</sup>*Progenetics LLC, Blacksburg, VA*
- TP 516 **Proteolytic *Clostridium botulinum*: Combined mass Spectrometry and Microarray analyses of Diversity of Flagellar Glycosylation;** Susan Twine<sup>1</sup>; Luc Tessier<sup>1</sup>; Michael Peck<sup>2</sup>; Catherine Paul<sup>1,3</sup>; John Austin<sup>3</sup>; Susan Logan<sup>1</sup>; Andrew Carter<sup>2</sup>; John F. Kelly<sup>4</sup>; <sup>1</sup>*National Research Council, Ottawa, Canada*; <sup>2</sup>*Institute of Food Research, Norwich, UK*; <sup>3</sup>*Health Canada, Ottawa, ON*; <sup>4</sup>*National Research Council of Canada, Ottawa, ON*
- TP 517 **Microbial Glycosylation: The Outer Surface of the Archaeon *Methanosarcina mazei*;** Deborah R. Francoleon<sup>1</sup>; A. Jimmy Ytterberg<sup>1</sup>; Pimmanee

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 518 **Boontheung<sup>1</sup>; Unmi Kim<sup>1</sup>; Patricia A. Denny<sup>2</sup>; Paul C. Denny<sup>2</sup>; Joseph A. Loo<sup>1</sup>; Robert P. Gunsalus<sup>1</sup>; Rachel R. Ogorzalek Loo<sup>1</sup>; <sup>1</sup>University of California, Los Angeles, CA; <sup>2</sup>University of Southern California, Los Angeles, CA**  
**Identification and Quantitation of Phosphorylated and O-GlcNAcylated Proteins Associated with Mitotic Spindles and Midbodies during Cytokinesis (Part A);** Chad Slawson<sup>1</sup>; Zihao Wang<sup>1</sup>; Namrata Udeshi<sup>2</sup>; Philip Compton<sup>2</sup>; Jeffrey Shabanowitz<sup>2</sup>; Donald F. Hunt<sup>2</sup>; Gerald W. Hart<sup>1</sup>; <sup>1</sup>Johns Hopkins School of Medicine, Baltimore, MD; <sup>2</sup>University of Virginia, Charlottesville, VA
- TP 519 **Sialylation and Metastasis: A Biological Interplay;** Giuseppe Palmisano; Rikke Leth-Larsen; Martin Rossel Larsen; <sup>1</sup>Southern University of Denmark, Odense, Denmark
- TP 520 **Glycoproteomic Analysis of Zebrafish Embryos by Novel Shotgun LC-MS/MS Approaches;** Chia-wei Lin<sup>1</sup>; Sz-wei Wu<sup>1,2</sup>; Kay-hooi Khoo<sup>1,2</sup>; <sup>1</sup>Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan; <sup>2</sup>NRPGM Core facilities, Taipei, TAIWAN
- TP 521 **N-Linked Glycosylation Profiling and Comparisons of Five *Saccharomyces cerevisiae* Strains Using Label-Free and High Resolution Data Acquisition;** Michael R. Hoopmann; Edward J. Hsieh; Michael J. Maccoss; <sup>1</sup>University of Washington, Seattle, WA
- TP 522 **Mass Spectroscopic Characterization of Glycosylation in the Immune Adherence Receptor CD35;** Thomas J. Allen<sup>1</sup>; Haowei Song<sup>1</sup>; Richard Hauhart<sup>1</sup>; John P. Atkinson<sup>1</sup>; John Turk<sup>1</sup>; Jan Crowley<sup>2</sup>; <sup>1</sup>Washington University School of Medicine, St. Louis, MO; <sup>2</sup>Washington University, St. Louis, MO
- TP 523 **Isolation and Glycosylation Profile of Prostate Specific Antigen (PSA) from Urine;** Lewis K. Pannell; Sharon D Rose; Tapas Manna; Lalita A Shevde; <sup>1</sup>Mitchell Cancer Institute, Mobile, AL
- TP 524 **Rapid Simultaneous Detection and Quantification of Allergenic Proteins Including Posttranslational Modification in Dietetic Food by Using Tandem LC/MS/MS;** Marco Euler<sup>1</sup>; Jianru Stahl-Zeng<sup>2</sup>; Marko Mank<sup>1</sup>; Gilda Georgi<sup>1</sup>; Bernd Stahl<sup>1</sup>; <sup>1</sup>Danone Research Centre for Specialised Nutrition, Friedrichsdorf, Germany; <sup>2</sup>Applied Biosystems, Darmstadt, Germany
- TP 525 **Proteomic Techniques for Micro-Determination of Tissue-Derived Proteoglycans, Bikunin and Decorin;** Tatiana Laremore<sup>1</sup>; Rick T. Owens<sup>2</sup>; Dmitri Zagorevski<sup>1</sup>; Franklin E. Leach III<sup>3</sup>; Jon Amster<sup>3</sup>; Robert J. Linhardt<sup>1</sup>; <sup>1</sup>Rensselaer Polytechnic Institute, Troy, NY; <sup>2</sup>LifeCell Corporation, Branchburg, NJ; <sup>3</sup>University of Georgia, Athens, GA
- TP 526 **Systematic Identification of Glyco-Alteration in a Glycoprotein Using Multiple Glycan Profiling Tools;** Hiroimi Ito<sup>1</sup>; Atsushi Kuno<sup>1</sup>; Hiromichi Sawaki<sup>1</sup>; Maki Sogabe<sup>1</sup>; Hidenori Ozaki<sup>1</sup>; Yasuhito Tanaka<sup>2</sup>; Masashi Mizokami<sup>2</sup>; Jun-ichi Shoda<sup>3</sup>; Takashi Angata<sup>1</sup>; Takashi Sato<sup>1</sup>; Jun Hirabayashi<sup>1</sup>; Yuzuru Ikehara<sup>1</sup>; Hisashi Narimatsu<sup>1</sup>; <sup>1</sup>RCMG, AIST, Tsukuba, Japan; <sup>2</sup>Nagoya City University, Nagoya, Japan; <sup>3</sup>University of Tsukuba, Tsukuba, Japan
- TP 527 **Structural Study of Non-Enzymatic Glycation in Human Serum Albumin;** Zheling Zhang<sup>1</sup>; Malwina Huzarska<sup>1</sup>; Jeremiah Tipton<sup>2</sup>; Mark R. Emmett<sup>3</sup>; Alan G. Marshall<sup>4</sup>; Nicolas Polfer<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>NHMFL, Tallahassee, FL; <sup>3</sup>Natl High Magnetic Field Lab, Tallahassee, FL; <sup>4</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- TP 528 **Proteomic and Functional Characterisation of the Key Adipocytokine, Adiponectin;** Michelle Colgrave<sup>1</sup>; Ayanthi Richards<sup>2</sup>; Alun Jones<sup>3</sup>; Elaine Preston<sup>4</sup>; Donna Wilks<sup>4</sup>; Greg Cooney<sup>4</sup>; Jon P. Whitehead<sup>2</sup>; <sup>1</sup>CSIRO, St Lucia, Australia; <sup>2</sup>Diamantina Institute, Brisbane, Australia; <sup>3</sup>University of Queensland, Brisbane, Australia; <sup>4</sup>Garvan Institute of Medical Research, Sydney, Australia
- TP 529 **Characterization of Group 1 Grass Pollen Allergens using High Resolution / High Mass Accuracy Mass Spectrometry;** Francois Fenaille<sup>1</sup>; Emmanuel Nony<sup>2</sup>; Henri Chabre<sup>2</sup>; Thierry Batard<sup>2</sup>; Philippe Moingeon<sup>2</sup>; Eric Ezan<sup>1</sup>; <sup>1</sup>CEA Saclay, DSV/iBiTec-S/SPI/LEMM, Gif Sur Yvette, France; <sup>2</sup>Stallergenes SA, Antony, France
- TP 530 **Quantifying N-Glycosylation Distribution in Therapeutic Recombinant IgG Using MRM Strategies and Triple Quadrupole Linear Ion Trap MS Technology;** Jenny Albanese<sup>1</sup>; Christie L Hunter<sup>2</sup>; Carmen Fernández-Metzler<sup>3</sup>; <sup>1</sup>Applied Biosystems, South Lake Tahoe, CA; <sup>2</sup>Applied Biosystems, Foster City, CA; <sup>3</sup>Merck and Co., West Point, PA
- TP 531 **Facile Isolation of Glycopeptides from Proteolytic Peptide Mixtures Using Custom-Made Cellulose-based Separation Cartridges;** Sergei Snovida; Ed Bodnar; Helene Perreault; <sup>1</sup>University of Manitoba, Winnipeg, Canada

### PROTEOMICS: SYSTEMS BIOLOGY, 532 - 558

- TP 532 **A Target Discovery Platform for Identifying Breast Cancer-Associated MicroRNA Targets Utilizing Quantitative Proteomics;** Nicholas W. Bateman<sup>1,2</sup>; Brian L Hood<sup>1,2</sup>; Thomas P. Conrads<sup>1,2</sup>; <sup>1</sup>Department of Pharmacology & Chemical Biology, Pittsburgh, PA; <sup>2</sup>Univ. of Pittsburgh Cancer Institute, Pittsburgh, PA
- TP 533 **Global Analysis of the Yeast Osmotic Stress Response Using High Resolution Mass Spectrometry Based Quantitative Proteomics;** Boumediene Soufi<sup>1</sup>; Christian Dahl Kelstrup<sup>1</sup>; Tobias C. Walther<sup>2</sup>; Florian Fröhlich<sup>2</sup>; Jesper V. Olsen<sup>1</sup>; <sup>1</sup>Department of Proteomics and Signal Transduction, Martinsried, Germany; <sup>2</sup>Organelle Architecture and Dynamics, Martinsried, Germany
- TP 534 **Comparative Transcriptomic and Proteomic Profiling for Analysis of Cellular Responses to Oxidative Stress;** Michael W. Schmidt<sup>2</sup>; Shuangding Wu<sup>1</sup>; Khatereh Motamedchaboki<sup>1</sup>; Dieter A. Wolf<sup>1</sup>; Laurence M. Brill<sup>1</sup>; <sup>1</sup>Burnham Instit for Med Res, La Jolla, CA; <sup>2</sup>Tumitek LLC, Encinitas, CA
- TP 535 **Cataloguing the Drosophila Melanogaster Interactome by Parallel Affinity Purification and MS Analysis of Protein Complexes;** Johanna Rees<sup>1</sup>; Irina Armean<sup>1</sup>; Nick Lowe<sup>1</sup>; Edward Ryder<sup>2</sup>; Daniel StJohnston<sup>1</sup>; Kathryn S Lilley<sup>1</sup>; <sup>1</sup>University of Cambridge, Cambridge, UK; <sup>2</sup>Sanger Center, Cambridge, UK
- TP 536 **Reducing Tissue Heterogeneity for the Specific Proteomic Analysis of Proximally Convoluted Tubule Apical Membranes;** Scott Walmsley<sup>1</sup>; Corey Broeckling<sup>1,2</sup>; Jessica Prenni<sup>1,2</sup>; Norman Curthoys<sup>1</sup>; <sup>1</sup>Colorado State University, Fort Collins, CO; <sup>2</sup>Proteomics and Metabolomics Facility, Fort Collins, CO
- TP 537 **Withdrawn**

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 538 **A Systems-Approach to Studying Histone H4 and Its Epigenetic Regulatory Role in Human Embryonic Stem Cells;** Justin Brumbaugh<sup>1</sup>; Doug Phanstiel<sup>1</sup>; James A Thomson<sup>1</sup>; Joshua J. Coon<sup>2</sup>; <sup>1</sup>University of Wisconsin, Madison, WI; <sup>2</sup>Univ of Wisconsin-Madison, Madison, WI
- TP 539 **Quantitative Proteomic Analysis of MyD88-Dependent Signal Regulation for Innate Immune Response;** Ying Du; Yanbao Yu; Qianchuan He; Xian Chen; <sup>1</sup>University of North Carolina, Chapel Hill, NC
- TP 540 **Dynamic Remodeling of CEBP $\alpha$  Protein Complexes in Myeloid Differentiation and Leukemogenesis;** Rositsa Koleva; Scott Ficarro; Manor Askenazi; Jignesh Parikh; Shaojuan Li; Jarrod Marto; <sup>1</sup>Dana Farber Cancer Insttit, Boston, MA
- TP 541 **Shotgun Proteomic Analysis of a Model 7-Member Human Gut Microbiota Created in Gnotobiotic Mice;** Alison L. Russell<sup>1,2</sup>; Nathan C. Verberkmoes<sup>2</sup>; Nathan McNulty<sup>3</sup>; Manesh Shah<sup>2</sup>; Jeffrey Gordon<sup>3</sup>; Robert Hettich<sup>2</sup>; <sup>1</sup>Genome Sciences & Technology, UT-Knoxville, Knoxville, TN; <sup>2</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>3</sup>Center for Genome Sciences, Washington University, St. Louis, MO
- TP 542 **Probing Changes in Biochemical Pathways in Environmentally Important Methanotrophs;** Konstantinos Thalassinos<sup>1</sup>; Nisha Patel<sup>1</sup>; Susan E. Slade<sup>1</sup>; Vibhuti Patel<sup>1</sup>; Andrew Crombie<sup>1</sup>; J. Colin Murrell<sup>1</sup>; Chris Hughes<sup>2</sup>; Joanne B. Connolly<sup>2</sup>; Jim Langridge<sup>3</sup>; James Scrivens<sup>1</sup>; <sup>1</sup>University of Warwick, Coventry, UK; <sup>2</sup>Waters, Manchester, UK; <sup>3</sup>Waters Corporation, Manchester, UK
- TP 543 **Translational Effect of MicroRNA-21 on Protein Expression Studied with Metabolically Labeled TGF- $\beta$  1 Transgenic Mice;** Jihyeon Lim<sup>1</sup>; Huimin Shang<sup>1</sup>; Vikram Padmanabhan<sup>1</sup>; Xiaohong Jing<sup>1</sup>; Christine Esau<sup>2</sup>; Ruth Hogue Angeletti<sup>1</sup>; Markus Bitzer<sup>1</sup>; <sup>1</sup>Albert Einstein College of Medicine, Bronx, NY; <sup>2</sup>Regulus Therapeutics, Carlsbad, CA
- TP 544 **Altered Proteolytic Events in Experimental Autoimmune Encephalomyelitis Discovered by iTRAQ Shotgun Proteomics Analysis of Spinal Cord;** Mohit R Jain; Shengjie Bian; Tong Liu; Jun Hu; Stella Elkabes; Hong Li; <sup>1</sup>New Jersey Medical School Cancer Research Center, Newark, NJ
- TP 545 **Fed and Fasted Physiology Plays Significant Role in Shaping the Rat Liver Lipid Droplet Proteome;** Bindu Abraham<sup>2</sup>; Michael Sweredoski<sup>1</sup>; Carole Sztalryd<sup>3</sup>; Sonja Hess<sup>1</sup>; <sup>1</sup>Caltech, Pasadena, CA; <sup>2</sup>FDA, Bethesda, MD; <sup>3</sup>University of Maryland, Baltimore, MD
- TP 546 **Systems Approach to Identify, Explore Components and Interactions of Presynapse Protein Network;** Rong Wang<sup>1</sup>; Georgia Dolios<sup>2</sup>; Noura S. Abul-Husn<sup>2</sup>; Avi Ma'ayan<sup>2</sup>; Lakshmi A. Devi<sup>2</sup>; <sup>1</sup>Mount Sinai School of Med, New York, NY; <sup>2</sup>Mount Sinai School of Medicine, New York, NY
- TP 547 **Signaling Proteins are Less Abundant in Lipid Raft Proteomes of Tumorigenic Human Breast Cells;** Joseph Caruso; Paul Stemmer; <sup>1</sup>Wayne State University, Detroit, MI
- TP 548 **Proteomics Analysis Reveals Overexpression of the Tyrosine Kinase AXL as a Novel Mechanism of Lapatinib Resistance in Breast Tumor Cells;** Roland S. Annan; Therese Collingwood; Francesca Zappacosta; Dean McNulty; James Greger; Michael Huddleston; Anne-Marie Martin; Hong Shi; Yuan Liu; Joel Greshock; Ganesh Sathe; Li Liu; Tona Gilmer; <sup>1</sup>GlaxoSmithKline, King of Prussia, PA
- TP 549 **Knock Down, Drag Out Proteomics for Biomarker Validation;** Devanand M. Pinto<sup>1</sup>; Stephen A Tate<sup>2</sup>; Christie L Hunter<sup>3</sup>; Kenneth Chisholm<sup>1</sup>; <sup>1</sup>NRC, Halifax, Canada; <sup>2</sup>MDS Analytical Technologies, Concord, ON; <sup>3</sup>Applied Biosystems, Foster City, CA
- TP 550 **Proteomic Identification of Novel Protein Targets and Downstream Effects of MicroRNA-155 in B Cell Lymphoma;** Shi-jian Ding; Yulei Shen; Miao Liu; Steven Hinrichs; John Chan; <sup>1</sup>Univ of Nebraska Med Center, Omaha, NE
- TP 551 **Systems Biology Analyses of Leukemia Stem Cells to Identify Novel Regulators of Self-Renewal;** Matthias Trost<sup>1</sup>; Olivier Herault<sup>1,2</sup>; Martin Sauvageau<sup>1,3</sup>; Amelie Faubert<sup>1,3</sup>; Nadine Mayotte<sup>1</sup>; Guy Sauvageau<sup>1,4</sup>; Pierre Thibault<sup>1,5</sup>; <sup>1</sup>Institute for Research in Immunology and Cancer, Montréal, Canada; <sup>2</sup>INSERM ESPRI-EA3855, Tours, France; <sup>3</sup>Dept. of Molecular Biology, Université de Montréal, Montréal, Canada; <sup>4</sup>Dept. of Medicine, Université de Montréal, Montréal, Canada; <sup>5</sup>Dept. of Chemistry, Université de Montréal, Montréal, Canada
- TP 552 **Application of Label-Free Quantitative LC-MS-Based Proteomics for Biomarker Identification in Salmonella Typhimurium;** Charles Ansong<sup>1</sup>; Hyunjin Yoon<sup>2</sup>; Marina A. Gritsenko<sup>1</sup>; Heather M. Mottaz-Brewer<sup>1</sup>; Joshua N. Adkins<sup>1</sup>; Fred Heffron<sup>2</sup>; Richard D. Smith<sup>1</sup>; <sup>1</sup>Pacific NW National Lab, Richland, WA; <sup>2</sup>Oregon Health and Science University, Portland, OR
- TP 553 **Determination of Cytokine Signaling-Dependent Protein Stability by Pulse-Chase SILAC Experiments;** Joseph Anthony; Shujun Lin; Vincent Duronio; Juergen Kast; <sup>1</sup>University of British Columbia, Vancouver, Canada
- TP 554 **Effects of Strain Type and Growth Conditions on the Secretome of Tetrahymena thermophila;** Casey Madinger<sup>1</sup>; Kathleen Collins<sup>2</sup>; Christopher Taroni<sup>1</sup>; Jack Benner<sup>1</sup>; <sup>1</sup>New England BioLabs, Ipswich, MA; <sup>2</sup>University of California, Berkeley, Berkeley, CA
- TP 555 **Proteomic Analysis of Trypanosoma cruzi Intracellular Amastigotes;** Xiang Zhu; James A Atwood Iii; Brent Weatherly; Todd A Minning; Rick L. Tarleton; Ron Orlando; <sup>1</sup>Univ. of Georgia, Athens, GA
- TP 556 **Quantitative Proteomics Analysis of Ionizing Radiation-Induced Dose-dependent Dynamics of ATM-Associated Complexes;** YuanYu Lee<sup>1</sup>; Yanbao Yu<sup>3</sup>; Nedyalka Dicheva<sup>2</sup>; Xian Chen<sup>1,2</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>UNC-Duke Proteomics Center, Chapel Hill, NC; <sup>3</sup>Institute of Biomedical Studies, Fudan University, Shanghai, China
- TP 557 **Leaf Development and Cellular Differentiation of the Maize Leaf Organ Defined by Large Scale Quantitative Proteomics and Cluster Analysis;** Klaas J. Van Wijk; Giulia Friso; Wojciech Majeran; <sup>1</sup>Cornell University, Ithaca, NY
- TP 558 **Quantitative Global Proteome and Phosphoproteome Profiling of Plant Immune Signaling Triggered by Pathogen Effector;** Zhouxin Shen; Chris C.N. van Schie; Amanda G. Mason; Steven P. Briggs; <sup>1</sup>University of California, San Diego, La Jolla, CA

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

### NOVEL METABOLITE IDENTIFICATION TECHNIQUES, 559 - 585

- TP 559 **Metabolomics Study of Radiotherapy-Induced Changes in Brain Malignancies;** Izabella Surowiec<sup>1</sup>; Carl Wibom<sup>2</sup>; Lina Mören<sup>2</sup>; Henrik Antti<sup>1</sup>; A. Tommy Bergenheim<sup>2</sup>; <sup>1</sup>Department of Chemistry, Umeå University, Umeå, Sweden; <sup>2</sup>Department of Neurosurgery, Umeå University Hospit, Umeå, Sweden
- TP 560 **The Creation and Application of Theoretical Mass Spectra for Radio-Labelled Pharmaceutical Compounds;** Richard T. Gallagher<sup>2</sup>; Tim Smith<sup>2</sup>; Kirsten Hobby<sup>1</sup>; <sup>1</sup>Kisotopic Solutions, Manchester, UK; <sup>2</sup>AstraZeneca, Macclesfield, UK
- TP 561 **Mass Defect Trigger IDA to Improve Selection of Candidate Ions for MSMS Confirmation of Metabolites From *in-vivo* Samples;** J.c. Yves Leblanc<sup>1</sup>; Eva Duchoslav<sup>1</sup>; Nic Bloomfield<sup>2</sup>; <sup>1</sup>MDS Analytical Technologies, Concord, On, Canada; <sup>2</sup>MDS Analytical Tech- Sciex, Concord, ON
- TP 562 **Integrated Approach to API Quantitation and Rapid *in vivo* Metabolic Profiling in Early Discovery PK Assays;** Asoka Ranasinghe; Bogdan Slecza; Celia Darienzo; Ragu Ramanathan; William Humphreys; Timothy Olah; Bristol-Myers Squibb Company, Princeton, NJ
- TP 563 **Intelligent Workflows (MS<sup>M</sup>) for Metabolite Screening and Characterization Using an LTQ Orbitrap;** Yingying Huang<sup>1</sup>; Ji Ma<sup>2</sup>; Jae C. Schwartz<sup>1</sup>; Robert Cho<sup>2</sup>; Yan Chen<sup>1</sup>; Tim Carlson<sup>2</sup>; <sup>1</sup>Thermo Fisher Scientific, San Jose, CA; <sup>2</sup>Amgen Inc., South San Francisco, CA
- TP 564 **Application of Statistical Uncertainty Derived from Experimental *in situ* Mass Spectrometer Performance Can Differentiate between Probable and Improbable Candidate Formulae;** Kirsten Hobby<sup>1</sup>; Richard T. Gallagher<sup>2</sup>; <sup>1</sup>Kisotopic Solutions, Manchester, UK; <sup>2</sup>AstraZeneca, Macclesfield, UK
- TP 565 **Small Molecule Characterization from Molecular Formula Determination to Automated Structure Verification;** Herbert Thiele<sup>1</sup>; Sebastian Goetz<sup>1</sup>; Aiko Barsch<sup>1</sup>; Ulrich Braumann<sup>2</sup>; Manfred Spraul<sup>2</sup>; <sup>1</sup>bruker Daltonik GmbH, Bremen, Germany; <sup>2</sup>Bruker Biospin, Rheinstetten, Germany
- TP 566 **Novel Metabolite Search Using Stable Isotope Labeled Docosahexaenoic Acid Coupled to HPLC/MS/MS;** Jeongrim Lee; Karl Kevala; Hee-yong Kim; National Institutes of Health, Bethesda, MD
- TP 567 ***In vivo* Metabolic Profiling of Carbamazepine in Brain and CSF Using an Advanced Hybrid Quadrupole-Ion Trap System and Fast Chromatography;** Ru Qiu (Sophie) Pan<sup>2</sup>; Hesham Ghobarah<sup>1</sup>; Tanya Gamble<sup>1</sup>; Henrianna Y. Pang<sup>2</sup>; Yingbo Yang<sup>2</sup>; Julia Izhakova<sup>2</sup>; Douglas J. Turk<sup>2</sup>; <sup>1</sup>Applied Biosystems / MDS Analytical Technologies, Concord, Canada; <sup>2</sup>NoAb BioDiscoveries Inc., Mississauga, Canada
- TP 568 **Intelligent Data Acquisition and Metabolite Detection in Complex Matrices Using an Automated Mass Exclusion Calculator;** Tim J Stratton<sup>1</sup>; Shichang Miao<sup>1</sup>; Yingying Huang<sup>2</sup>; Thomas D McClure<sup>2</sup>; <sup>1</sup>ChemoCentryx, Mountain View, CA; <sup>2</sup>ThermoFisher Scientific, San Jose, CA
- TP 569 **Identification of Metabolites by Microbore Liquid Chromatography and Accurate Mass Triggered**
- TP 570 **Data-Dependent Mass Analysis Using an LTQ/Orbitrap;** Heng-Keang Lim; Jose Silva; Johnson and Johnson PRD, Raritan, NJ
- TP 571 **Development of a Metabolite Identification Workflow Using MALDI-QToF and Multivariate Statistical Analysis;** Stephen Mcdonald<sup>2</sup>; Andrew Baker<sup>2</sup>; Henry Y. Shion<sup>1</sup>; <sup>1</sup>Waters Corp., Milford, MA; <sup>2</sup>Waters Corporation, Beverly, MA
- TP 572 **Application of Multivariate Analysis for Determining Metabolic Profiles of Drugs: A Case Study Using Nefazodone;** Richard Schneider; Hui Zhang; Lillian Mu; Amit Kalgutkar; Pfizer Inc., Groton, CT
- TP 573 **Metabolite Profiling of Acetaminophen in Human Saliva Using UPLC-MS and MetaboLynx®;** Jordan Richardson<sup>1</sup>; Dr David Douce<sup>2</sup>; Dr Catherine Duckett<sup>1</sup>; <sup>1</sup>Keele University, Stoke-on-trent, UK; <sup>2</sup>Waters Corporation, Manchester, UK
- TP 574 **A Study of Tetrapyrroles Compounds, *i.e.* Bile Pigment Metabolites, Using ESI-MS/MS Method;** Nhu Quynh, Thi Nguyen; Nhu Quynh, Thi Nguyen; Chemistry Department, SUNY B, Buffalo, NY
- TP 575 **Fast and Sensitive Metabolite Identification of Amiodarone in Human Bile with UPLC Coupled with a Benchtop oaTOF MS;** Xiaoyan Chen<sup>1</sup>; Kate Yu<sup>2</sup>; Jose Castro-perez<sup>2</sup>; Dafang Zhong<sup>1</sup>; Ke Li<sup>1</sup>; John P. Shockcor<sup>2</sup>; Tiangen You<sup>3</sup>; <sup>1</sup>Shanghai Institute of Materia Medica, Shanghai, China; <sup>2</sup>Waters Corporation, Milford, MA; <sup>3</sup>Shanghai Eastern Hospital, Shanghai, China
- TP 576 **A Rapid Automated Approach to Estimate Metabolite Exposure in Pooled Human Plasma Using a Combination of Tecan and LC-MS;** Nirmala Raghavan; Ming Yao; S.Nilgun Comezoglu; William G Humphreys; Ragu Ramanathan; Bristol-Myers Squibb, Princeton, NJ
- TP 577 **Investigation of Isotope Patterns of Pharmaceutical Molecules by Two Independent Detectors in a LTQ/Orbitrap Instrument;** Lin Deng<sup>1</sup>; Jianyao Wang<sup>2</sup>; Ming Gu<sup>3</sup>; <sup>1</sup>Wyeth, Collegeville, PA; <sup>2</sup>Wyeth Pharmaceuticals, Collegeville, PA; <sup>3</sup>Cerno Bioscience, Yardley, PA
- TP 578 **Increasing the Hit-Rate in the Automated Structural Elucidation of Product Ions and Drug Metabolites Using an Exhaustive Bond Disconnection Approach;** Laurent Leclercq<sup>1</sup>; Michael Hartshorn<sup>2</sup>; Alastair Hill<sup>2</sup>; Russel Mortishire-Smith<sup>1</sup>; Filip Cuyckens<sup>1</sup>; Jose Castro-Perez<sup>3</sup>; <sup>1</sup>Johnson & Johnson Pharmaceutical Research and Deve, Beerse, BELGIUM; <sup>2</sup>Dotmatics, Bishops Stortford, UK; <sup>3</sup>Waters Corp., Milford, MA
- TP 579 **High-Throughput and Sensitive Analysis of Phosphorylated Metabolic Intermediates Using MALDI Mass Spectrometry;** Daichi Yukihira; Daisuke Miura; Hiroyuki Wariishi; Kyushu University, Fukuoka, Japan
- TP 580 **Development of High-Throughput Metabolic Profiling Method Using Highly Sensitive MALDI Mass Spectrometry;** Daisuke Miura<sup>1</sup>; Yoshinori Fujimura<sup>1</sup>; Shinichi Yamaguchi<sup>2</sup>; Hirofumi Tachibana<sup>1</sup>; Hiroyuki Wariishi<sup>1</sup>; <sup>1</sup>Kyushu University, Fukuoka, Japan; <sup>2</sup>Shimadzu Corporation, Kyoto, Japan

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- |                                 |   |        |   |
|---------------------------------|---|--------|---|
| TP 581                          | <p>Impey; <i>Applied Biosystems/MDS Analytical Technologies, Concord, Canada</i></p> <p><b>In vivo Metabolic Profiling of Carbamazepine at Physiologically Relevant Concentrations Using Hybrid Quadrupole-Linear Ion Trap Technology;</b> Tanya Gamble<sup>1</sup>; Henrianna Y. Pang<sup>2</sup>; Sophie Pan<sup>2</sup>; Yingbo Yang<sup>2</sup>; William Cui<sup>2</sup>; Douglas J. Turk<sup>2</sup>; <u>Hesham Ghobarah</u><sup>1</sup>; <sup>1</sup><i>Applied Biosystems/MDS Analytical Technologies, Concord, Canada;</i> <sup>2</sup><i>NoAb BioDiscoveries Inc., Mississauga, Canada</i></p> | TP 592 | <p><b>LC-MS Analysis of Spectrophotometric Chemical Indicator Impurities: Toward Understanding the Impact of Impurities in All Spectrophotometric Analytical Techniques;</b> <u>Brian P. Gregson</u>; Xuewu Liu; David Fries; <i>University of South Florida College of Marine Scie, St. Petersburg, FL</i></p>   |
| TP 582                          | <p><b>Evaluation of U-HPLC for Multiple Data Dependent Scan Experiments using LTQ-Orbitrap for Rapid Metabolite Identification and Quantitation;</b> <u>C. Emily Luk</u>; Petia Shipkova; Jonathan L. Josephs; <i>Bristol-Myers Squibb Co., Hopewell, NJ</i></p>  | TP 593 | <p><b>Identification of New Photolytic and Photocatalytic Transformation Products of Antibiotic Trimethoprim in Aqueous Solutions by Combination NanoESI-QqTOF-MS-MS and LC-MS-MS;</b> <u>Despina Tsipti</u><sup>1</sup>; Helen V. Botitsi<sup>1</sup>; Sotirios N. Katsikis<sup>3</sup>; Anastasios Economou<sup>3</sup>; Spiros D. Garbis<sup>2</sup>; <sup>1</sup><i>General Chemical State Laboratory, Athens, Greece;</i> <sup>2</sup><i>B.R.F.A.A., Athens, Greece;</i> <sup>3</sup><i>University of Athens, Athens, Greece</i></p> |
| TP 583                          | <p><b>An Accurate-Mass-Based Isotope-Pattern-Filtering Algorithm for Extraction of Drug Metabolites Containing a Fixed Ratio of Isotopes in LC/MS Data;</b> Peijuan Penny Zhu; <u>Wei Tong</u>; Kevin Alton; Swapan K. Chowdhury; <i>Schering-Plough Research Institute, Kenilworth, NJ</i></p>   | TP 594 | <p><b>Determination of Six Antibiotics in Surface Water by On-Line SPE(Solid-Phase Extraction)-Liquid Chromatography Tandem Mass Spectrometry;</b> Keun-joo Choi<sup>1</sup>; Soo-jeon Yoo<sup>1</sup>; Jae-soon Roh<sup>1</sup>; <u>Seung-Hyun kim</u><sup>2</sup>; <sup>1</sup><i>waterworks institute, Kimhae, South Korea;</i> <sup>2</sup><i>Civil Engineering Department, Kyungnam University, Masan, South Korea</i></p>   |
| TP 584                          | <p><b>Determination of Ibuprofen Drug Metabolites in Urine by the Use of Multivariate Analysis;</b> <u>Masahiro Maeda</u>; Yoshifumi Kogure; Yoshiyuki ishii; <i>Agilent Technologies, Tokyo, Japan</i></p>   | TP 595 | <p><b>Fully Automated Quantification of Different Classes of Cyanobacterial Toxins by Online SPE-LC-ESI-MS/MS;</b> Liza Viglino<sup>1</sup>; Pascal Lemoine<sup>1</sup>; Michèle Prévost<sup>2</sup>; <u>Sébastien Sauvé</u><sup>3</sup>; <sup>1</sup><i>University, Montreal, Canada;</i> <sup>2</sup><i>Polytechnique de Montréal, Montréal, Canada;</i> <sup>3</sup><i>Université de Montréal, Montreal, QC</i></p>  |
| TP 585                          | <p><b>A Rapid Metabolite Identification and Reaction Phenotyping Strategy to Reduce Drug Interaction Potentials at Early Drug Discovery Stage;</b> <u>Shihong Wang</u>; Weiping Jia; Elaine Ginn; Song Lin; <i>Novartis Institute for Biomedical Research, Emeryville, CA</i></p>   | TP 596 | <p><b>LDTD-APCI-MS/MS: Optimization and Method Application for Selected Endocrine Disrupting Compounds in Water Matrices;</b> <u>Paul B. Fayad</u><sup>1</sup>; Michèle Prévost<sup>2</sup>; Sébastien Sauvé<sup>1</sup>; <sup>1</sup><i>Université de Montréal, Montreal, Quebec, Canada;</i> <sup>2</sup><i>École Polytechnique de Montréal, Montreal, Quebec, Canada</i></p>   |
| <b>ENVIRONMENTAL, 586 - 608</b> |   |        |   |
| TP 586                          | <p><b>Improved LC/MS/MS Methods for the Analysis of Perfluorinated Compounds (PFCs) in Whole Fish and Fish Livers;</b> <u>Amy Delinsky</u><sup>1</sup>; Andrew B. Lindstrom<sup>1</sup>; Mark J. Strynar<sup>1</sup>; Jerry L. Varns<sup>2</sup>; Shoji F. Nakayama<sup>3</sup>; <sup>1</sup><i>U.S. EPA, Rtp, NC;</i> <sup>2</sup><i>NCBA Inc, SEE Program, Durham, NC;</i> <sup>3</sup><i>ORISE, Oak Ridge, TN</i></p>  | TP 597 | <p><b>High Throughput Analysis of Some Endocrine Disrupting Compounds (EDCs) in Solid Matrices by LDTD-MS/MS;</b> <u>Liza Viglino</u><sup>1</sup>; Paul Fayad<sup>2</sup>; Michèle Prévost<sup>3</sup>; Sébastien Sauvé<sup>4</sup>; <sup>1</sup><i>University, Montreal, Canada;</i> <sup>2</sup><i>Université de Montréal, Montreal, QC;</i> <sup>3</sup><i>École Polytechnique de Montréal, Montréal, Canada;</i> <sup>4</sup><i>Université de Montréal, Montreal, QC</i></p>  |
| TP 587                          | <p><b>A Novel Tool for Exposure Source Identification of Perfluoroalkyl Substances Using Enantiospecific HPLC-MS/MS;</b> <u>Yuan Wang</u><sup>1</sup>; Jonathan W. Martin<sup>2</sup>; <sup>1</sup><i>University of Alberta, Edmonton, Canada;</i> <sup>2</sup><i>University of Alberta, Edmonton, Canada</i></p>   | TP 598 | <p><b>Analysis of Hydroxylated Polybrominated Diphenyl Ether Metabolites Using Atmospheric Pressure Chemical Ionization Liquid Chromatography Mass Spectrometry (APCI LC/MS);</b> <u>Sara J. Lupton</u><sup>1</sup>; Troy Wood<sup>2</sup>; Diana Aga<sup>2</sup>; <sup>1</sup><i>State University of New York, Buffalo, NY;</i> <sup>2</sup><i>University at Buffalo, Buffalo, NY</i></p>  |
| TP 588                          | <p><b>Pitfalls and Prospects: Analysis of Perfluorinated Compounds (PFCs) Utilizing LC/MS/MS;</b> <u>Alexander Ruderisch</u><sup>1</sup>; Christian Dausch<sup>1</sup>; Juergen Wendt<sup>2</sup>; Stefan Fenzel<sup>2</sup>; <sup>1</sup><i>Agrolab Labor GmbH, Bruckberg, Germany;</i> <sup>2</sup><i>Agilent Technologies, Waldbronn, Germany</i></p>  | TP 599 | <p><b>A Comparison of Direct Injection and On-Line Solid Phase Extraction for the Detection of Acidic Herbicides in Water;</b> Stephen J. Lock<sup>1</sup>; Pamela Stoddart<sup>1</sup>; <u>Iain Gibb</u><sup>1</sup>; James Thomas<sup>2</sup>; <sup>1</sup><i>Applied Biosystems, Warrington, UK;</i> <sup>2</sup><i>SEPA, Glasgow, UK</i></p>  |
| TP 589                          | <p><b>Perfluorinated Compounds in Standard Reference Materials;</b> <u>Jessica L. Reiner</u>; Jennifer M. Keller; John R. Kucklick; Steven G. O'Connell; Michele M. Schantz; <i>NIST, Charleston, SC</i></p>  | TP 600 | <p><b>LC/MS/MS Analysis of Imidazolinone Herbicides in Sprinkler Irrigation Leachate;</b> John Headley; <u>Kerry M. Peru</u>; Jonathan Bailey; Allan Cessna; <i>Environment Canada, Saskatoon, Canada</i></p>   |
| TP 590                          | <p><b>Study on the Oxidative Degradation Reaction of Sertraline Catalyzed by Fe-TAML/Hydrogen Peroxide System Using Liquid Chromatography/Tandem Mass Spectrometry;</b> <u>Longzhu Shen</u>; Mark E. Bier; Terrence J. Collins; <i>Carnegie Mellon University, Pittsburgh, PA</i></p>   | TP 601 | <p><b>Use of Accurate Mass Screening to Detect Drugs of Abuse in Sacramento River;</b> William T. Jewell; <i>UC Davis, Davis, CA</i></p>  |
| TP 591                          | <p><b>Ozonation of Ethinyl Estradiol (a Synthetic Steroidal Estrogen) in Aqueous-Methanolic Solution: Monitoring by Direct Infusion Electrospray Ionization Mass Spectrometry;</b> <u>Rodinei Augusti</u>; Clésia C. Nascentes; Karla M. Vieira; <i>Federal University of Minas Gerais, Belo Horizonte/ MG, Brazil</i></p>  | TP 602 | <p><b>Improved Method for the Determination of Organochlorine, Organophosphate and Pyrethroid Pesticides in House Dust Using Solid Phase Extraction and GC/EI-MS/MS;</b> <u>Cariton Kubwabo</u>;</p>  |

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 603 **Assessment of Occurrence and Removal of Pesticides and Their Degradation Byproducts in Missouri Natural and Treated Drinking Water by LC-MS/MS;** Yinfa Ma<sup>1</sup>; Xiaoliang Cheng<sup>1</sup>; Honglan Shi<sup>2</sup>; Craig Adams<sup>3</sup>; Terry Timmons<sup>4</sup>; <sup>1</sup>Missouri S&T, Rolla, MO; <sup>2</sup>Missouri S&T/ERC, Rolla, MO; <sup>3</sup>University of Kansas, Lawrence, KS; <sup>4</sup>Missouri Department of Natural Resources, Jefferson City, MO
- TP 604 **Comparison of Semivolatile Disinfection By-Products Formation in Water Treatment Process with Classic and Perspective Disinfecting Agents;** Olga Polyakova; Maria Khrushcheva; Albert Lebedev; <sup>Moscow State University, Moscow, Russian Federation</sup>
- TP 605 **Long Term, On-line Monitoring of Disinfection Byproducts in a Public Swimming Pool Using an Un-Supervised MIMS;** Gert H. Kristensen<sup>1</sup>; Morten M. Klausen<sup>1</sup>; Vagn A. Hansen<sup>3</sup>; Frants R Lauritsen<sup>2</sup>; <sup>1</sup>DHI - Water - Environment - Health, Copenhagen, Denmark; <sup>2</sup>Chemistry, Copenhagen University, Copenhagen, Denmark; <sup>3</sup>Mikrolab Aarhus A/S, Aarhus, Denmark
- TP 606 **Ion Chromatography and MS/MS Quantification of Polyphosphonates and Scale Inhibitors in High Ionic Strength Samples;** Stacy Henday<sup>1</sup>; Jinyuan Wang<sup>1</sup>; Charles T. Yang<sup>2</sup>; William C. Schnute<sup>1</sup>; <sup>1</sup>Dionex Corporation, Sunnyvale, CA; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA
- TP 607 **Food and Environmental Contaminates: Toxic Metals in Food;** Marc E. Engel; <sup>FDACS, Tallahassee, FL</sup>
- TP 608 **Identification of New Arsenic Species in Construction and Demolition Debris Landfill Leachate and Groundwater using Off-Line IC ICP-MS;** Jianye Zhang<sup>1</sup>; Yong Cai<sup>2</sup>; Timothy Townsend<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>Florida International University, Miami, FL
- PROTEOMICS: CLINICAL APPLICATIONS, 609 - 628**
- TP 609 **Identification of Novel Tumor Marker in Human Oral Cancer by Mass Spectrometry-Based Proteomics;** Tsung-ching Lai; Yi-Hua Jan; Chung-Hsuan Chen; Michael Hsiao; <sup>The Genomics Research Center, Academia Sinica., Taipei, Taiwan</sup>
- TP 610 **Altered Glycosylation Pattern of Total Serum IgG in Patients with Rheumatoid Arthritis Analyzed by MALDI-TOF MS;** Ray Sanchez<sup>1</sup>; Katrin Sparbier<sup>2</sup>; Hassan Dihazi<sup>3</sup>; Sabine Blaschke<sup>3</sup>; Gerhard-Anton Mueller<sup>3</sup>; Thomas Flad<sup>4</sup>; Markus Kostrzewa<sup>2</sup>; Arndt Asperger<sup>2</sup>; <sup>1</sup>Bruker Daltonics Inc., Billerica, MA; <sup>2</sup>Bruker Daltonik GmbH, Bremen, Germany; <sup>3</sup>University of Göttingen, Göttingen, Germany; <sup>4</sup>PANATEcs, Tübingen, Germany
- TP 611 **Wnt Signaling Related Biomarker Discovery and Targeted Detection in Colon Cancer;** Yi Chen; Mike Gruidl; Richard Z. Liu; Ann Chen; Steven Eschrich; Timothy Yeatman; John Koomen; <sup>H. Lee Moffitt Cancer Center, Tampa, FL</sup>
- TP 612 **Mass Spectrometry Based Analysis and Identification of Candidate Biomarkers in Liver Cancer;** Yi-hua Jan; Tsung-ching Lai; Po-sheng Huang; Michael Hsiao; <sup>Genomic Research Center, Academia Sinica, Taipei, Taiwan</sup>
- TP 613 **Characterization of Secreted Proteins during the Differentiation of Human Preadipocytes to Adipocytes;** Jun Zhong<sup>1</sup>; Sarah Krawczyk<sup>2</sup>; Raghothama Chaerkady<sup>1,3</sup>; G. William Wong<sup>1</sup>; Barbara E. Corkey<sup>2</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Boston University, Boston, MA; <sup>3</sup>Institute of Bioinformatics, Bangalore, India
- TP 614 **Direct Orthotopic Human Glioma Models: Protein Analysis Using MALDI-IMS;** Sara L. Frappier<sup>1</sup>; Anuraag Sarangi<sup>1</sup>; Michael K. Cooper<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>Vanderbilt Univ Sch of Med, Nashville, TN
- TP 615 **Characterization of Transferrin Isoforms in Cerebrospinal Fluid Using Accurate Mass and MS<sup>n</sup>;** Kristy J. Brown<sup>1</sup>; Yetrib Hathout<sup>1</sup>; Fanny Mochele<sup>2,3</sup>; Raphael Schiffmann<sup>3</sup>; Adeline Vanderver<sup>1</sup>; <sup>1</sup>Children's National Medical Center, Washington, DC; <sup>2</sup>Hospital de la Salpetriere, Paris, France; <sup>3</sup>Baylor Research Institute, Dallas, TX
- TP 616 **Identificaton of Biomarkers in Patients with Aspergillosis;** Josée Chabot; Donald C. Sheppard; Momar Ndao; Brian J. Ward; Christine Straccini; Bernard F. Gibbs; <sup>McGill University, Montreal, Canada</sup>
- TP 617 **Proteomic Analysis of Innate Defenses in the Small Intestine: Correlation with Disease Pathophysiology;** Dipankar Ghosh<sup>1</sup>; S. K. Venugopal<sup>1</sup>; Sunil Kumar<sup>2</sup>; Uday Ghoshal<sup>2</sup>; <sup>1</sup>Jawaharlal Nehru University, New Delhi, India; <sup>2</sup>Sanjay Gandhi PG Institute of Medical Sciences, Lucknow, India
- TP 618 **A Label-Free Proteomic Analysis of Low Abundance Multiple Myeloma Clinical Samples;** Rick Edmondson; Sheeno Thyparambil; Veronica Macleod; Bart Barlogie; John D. Shaughnessy, Jr; <sup>Univ Arkansas Med Sci., Little Rock, AR</sup>
- TP 619 **Unique Insights into Disease Progression Using Quantitative Bottom-Up Proteomics: A Phenotypic Characterization of Chlamydia Infection Using Gel-Free Label-Free LC/MS/MS;** J. Will Thompson; Alex Saka; Laura G. Duboise; Arthur Moseley; Raphael Valdivia; <sup>Duke Univ. School of Medicine, Durham, NC</sup>
- TP 620 **Quantitative Proteome Analysis of CSF Samples Using a Label-Free Proteomics Technology;** Barbara Sitek<sup>1</sup>; Sebastian Link<sup>1</sup>; Birgit Korte<sup>1</sup>; Christian Stephan<sup>1</sup>; Wolfgang Jabs<sup>2</sup>; Daniel C. Chamrad<sup>3</sup>; Klaus Marquart<sup>3</sup>; Martin Blueggel<sup>3</sup>; Carsten Baessmann<sup>2</sup>; Beate Gleissner<sup>4</sup>; Helmut E. Meyer<sup>5</sup>; Kai Stühler<sup>1</sup>; <sup>1</sup>Ruhr-University Bochum, Dortmund, Germany; <sup>2</sup>Bruker Daltonik GmbH, Bremen, GERMANY; <sup>3</sup>Protagen AG, Dortmund, Germany; <sup>4</sup>Universitätsklinikum des Saarlandes, Homburg, Germany; <sup>5</sup>Ruhr University of Bochum, Bochum, Germany
- TP 621 **Revealing the Mystery Behind 'The Elephant Man': Proteomic Characterization of Proteus Syndrome;** Shama P. Mirza; Kelly Duffy; Marla A. Chesnik; Regina Cole; David P. Bick; Michael Olivier; <sup>Medical College of Wisconsin, Milwaukee, WI</sup>
- TP 622 **An Extensive Peptide Identification List of MALDI MS Profile Peaks from the Analysis of Human Blood Serum;** Ali Tiss<sup>1</sup>; Celia Smith<sup>1</sup>; Usha Menon<sup>2</sup>; Ian Jacobs<sup>2</sup>; John Timms<sup>2</sup>; Rainer Cramer<sup>1</sup>; <sup>1</sup>University of Reading, Reading, UK; <sup>2</sup>UCL, London, UK
- TP 623 **Identification and Quantification of N-Linked Glycoproteins in Human Cerebrospinal Fluid Unique to Parkinson's Disease or Its Progression;** Hyejin Hwang<sup>1</sup>; Kathy Chung<sup>2</sup>; Joseph Quinn<sup>2</sup>; Elaine Peskind<sup>1</sup>;

## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- TP 624 **Jing Zhang**<sup>1</sup>; <sup>1</sup>University of Washington, Seattle, WA; <sup>2</sup>Oregon Health and Science University, Portland, OR  
**Plasma Methylglyoxal and Correlation with the Severity of Diabetic Albuminuria**; Hussein Yassine; Mike Kimzey; Irene Alvarez; Steve Stratton; Craig Stump; George Tsapralis; Michael A Galligan; Serrine S. Lau; *University of Arizona, Tucson, AZ*
- TP 625 **Identification of Biomarkers in Urine and Cell Lines Relating to Bladder Carcinoma**; Wassim Kassouf; Jordan R Steinberg; David W. Blank; Bernard F. Gibbs; *McGill University, Montreal, Canada*
- TP 626 **Tandem Mass Spectrometry Reveals Novel Insulin Stimulated IRS-1 Interacting Partners**; Zhengping Yi; Moulun Luo; Rebekka Mapes; Natalie Lefort; Paul Langlais; Benjamin Bowen; Lawrence J. Mandarino; *Arizona state university, Tempe, AZ*
- TP 627 **Quantitative Mass Spectrometry Reveals Targets of the Cytotoxic Response to DNA Damage**; Aaron Aslanian<sup>1</sup>; John Yates<sup>2</sup>; Tony Hunter<sup>1</sup>; <sup>1</sup>Salk Institute, La Jolla, CA; <sup>2</sup>The Scripps Research Institute, La Jolla, CA
- TP 628 **Identification of Subtype-specific Glycoproteins in Triple-Negative Breast Cancer**; Li-Hui Tseng<sup>1,4</sup>; Pedram Argani<sup>1</sup>; Yan Li<sup>1</sup>; Yuan Tian<sup>1</sup>; Mary Lopez<sup>2</sup>; Michael Athanas<sup>3</sup>; Chiu-Sheng Huang<sup>4</sup>; Kuan-Ting Kuo<sup>4</sup>; Daniel Chan<sup>1</sup>; Hui Zhang<sup>1</sup>; <sup>1</sup>Pathology, Johns Hopkins Medical Institutions, Baltimore, MD; <sup>2</sup>Thermo Fisher Scientific, Cambridge, MA; <sup>3</sup>VAST Scientific, Cambridge, MA; <sup>4</sup>National Taiwan University Hospital, Taipei, Taiwan
- IONIZATION MECHANISMS, 629 - 647**
- TP 629 **Insights into the Mechanism of Protein Oxidation during Electrospray Ionization**; Brian Boys; Jamie Noel; Lars Konermann; *Univ. of Western Ontario, London, ON*
- TP 630 **Proton Distribution in ESI Nanodroplets: Is the "Surface Charge Concept" Really Tenable?** Elias Ahadi<sup>1</sup>; Lars Konermann<sup>2</sup>; <sup>1</sup>The University of Western On, London, Canada; <sup>2</sup>Univ. of Western Ontario, London, ON
- TP 631 **Origin of the Proton Required for the Formation of Gaseous [M+H]<sup>+</sup> Ions from Aprotic Solvents**; Changching Chan<sup>1</sup>; Mark S. Bolgar<sup>2</sup>; Athula B. Attygalle<sup>3</sup>; <sup>1</sup>Stevens Institute of Technology, Hoboken, NJ; <sup>2</sup>Bristol-Myers Squibb, New Brunswick, NJ; <sup>3</sup>Stevens Institute of Technology, Hoboken, NJ
- TP 632 **Probing Temperature Changes in the Electrospray Plume Using Laser-Induced Fluorescence Spectroscopy**; Stephen C. Gibson<sup>1</sup>; Yu Zhu<sup>2</sup>; Charles S. Feigerle<sup>1</sup>; Kelsey D. Cook<sup>1</sup>; <sup>1</sup>University of Tennessee, Knoxville, TN; <sup>2</sup>SABIC Innovative Plastics, Washington, WV
- TP 633 **Spatial Mapping of Analyte Ion Intensity of Nanoelectrospray in the Plume-Inlet Region**; Gary Valaskovic<sup>1</sup>; Mike S. Lee<sup>2</sup>; <sup>1</sup>New Objective, Inc., Woburn, MA; <sup>2</sup>Milestone Development Services, Newtown, PA
- TP 634 **Corona Discharge Initiated Electrochemical Ionization**; John R Lloyd<sup>2</sup>; Sonja Hess<sup>1</sup>; <sup>1</sup>Caltech, Pasadena, CA; <sup>2</sup>NIH/NIDDK, Germantown, MD
- TP 635 **Mass Spectrometry of Monolayer Protected Clusters**; Christina A. Fields-Zinna; Royce W. Murray; *UNC-Chapel Hill Chemistry Dept., Chapel Hill, NC*
- TP 636 **The Effects of Matrix, Electrospray Solution, and Laser on Desorption and Ionization Mechanisms in Electrospray-Assisted Laser Desorption Ionization Mass Spectrometry**; Chu-Nian Cheng; Min-Zong Huang; Jentaie Shiea; *National Sun Yat-Sen Univ., Kaohsiung, Taiwan*
- TP 637 **Mechanisms Involved in Positive Atmospheric Pressure Chemical Ionization (APCI) of an LDTD Source**; Pierre Picard<sup>1</sup>; E. Real Paquin<sup>2</sup>; Patrice Tremblay<sup>3</sup>; <sup>1</sup>Phytronix Technologies, Inc., Quebec, Canada; <sup>2</sup>Université Laval, Québec, QC; <sup>3</sup>Phytronix Technologies, Quebec, QC
- TP 638 **Detection of Security Relevant Substances with Single Photon Ionization Mass Spectrometry within complex Matrices**; Jasper Hoelzer<sup>1</sup>; Elisabeth Schramm<sup>1</sup>; Ralf Zimmermann<sup>2</sup>; <sup>1</sup>Helmholtz-Zentrum Muenchen, Neuherberg, Germany; <sup>2</sup>University of Augsburg, Augsburg, Germany
- TP 639 **Nanopost Array (NAPA) Photonic Ion Sources for Soft Laser Desorption Ionization**; Bennett N Walker<sup>1</sup>; Jessica A. Stolee<sup>1</sup>; Deanna Pickel<sup>2</sup>; Scott Reterrer<sup>2</sup>; Akos Vertes<sup>1</sup>; <sup>1</sup>George Washington University, Washington, DC; <sup>2</sup>Oak Ridge National Laboratory, Oak Ridge, TN
- TP 640 **Ionization Mechanisms in MALDI – A Case Study of Fullerene C60**; Ilko Bald; Benedikt Ómarsson; Oddur Ingolfsson; *University of Iceland, Reykjavik, Iceland*
- TP 641 **Examining Matrix Ion-Pair Hypothesis of MALDI Mechanism Using Synchronized Dual-Polarity MALDI-TOF Mass Spectrometry**; Yi-Sheng Wang; Bo-Hong Liu; Yuan T. Lee; *Academia Sinica, Taipei, Taiwan*
- TP 642 **Ion Transport Processes in API Sources: Temporally and Spatially Resolved APLI Measurements**; Matthias Lorenz; Walter Wisssdorf; Sonja Klee; Hendrik Kersten; Klaus J. Brockmann; Thorsten Benter; *University of Wuppertal, Wuppertal, Germany*
- TP 643 **Proton Source of Matrix-Assisted Laser Desorption/Ionization Using an Infrared Laser**; Sachiko Suzuki; Tamami Fujita; Satoshi Fukumoto; Hiroshi Horiike; Kunio Awazu; *Osaka University, Osaka, Japan*
- TP 644 **Laser Desorption Ionization Mass Spectrometry of Heavy Alkali Earth Metal Cations**; Freneil Jariwala<sup>1</sup>; Athula B. Attygalle<sup>2</sup>; <sup>1</sup>Stevens Institute of Tech, Hoboken, NJ; <sup>2</sup>Stevens Institute of Technology, Hoboken, NJ
- TP 645 **Distinct Features of Matrix-Assisted 6 μm Infrared Laser Desorption/Ionization Mass Spectrometry**; Yoshinao Wada<sup>1</sup>; Michiko Tajiri<sup>2</sup>; Takae Takeuchi<sup>3</sup>; <sup>1</sup>Osaka MCHRI, Osaka, Japan; <sup>2</sup>CREST, JST, Izumi, Osaka, Japan; <sup>3</sup>Nara Women's University, Nara, Japan
- TP 646 **Ab Initio Study on ionization and Fragmentation in Matrix-Assisted Infrared and Ultraviolet Laser Desorption/Ionization Mass Spectrometry**; Takae Takeuchi<sup>1,2</sup>; Seika Nabei<sup>1</sup>; Yoshinao Wada<sup>3</sup>; Michiko Tajiri<sup>4</sup>; <sup>1</sup>Nara Women's University, Nara, Nara, Japan; <sup>2</sup>AIST, Ikeda, Osaka, Japan; <sup>3</sup>Osaka MCHRI, Izumi, Osaka, Japan; <sup>4</sup>CREST, Izumi, Osaka, Japan
- TP 647 **Fast Photography of Infrared Laser Plume Ejection in Ambient Mass Spectrometry**; Xing Fan; Kermit K. Murray; *Louisiana State University, Baton Rouge, LA*
- FORENSICS, 648 - 665**
- TP 648 **Orthogonal Array Optimization of Microwave-Assisted Derivatization for Determination of Trace Amphetamine and Methamphetamine Using Negative Chemical Ionization Gas Chromatography-**



## TUESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Mass Spectrometry**; Li-wen Chung<sup>1</sup>; Keh-Liang Lin<sup>2</sup>; Thomas Ching-Cherng Yang<sup>3</sup>; Maw-Rong Lee<sup>1</sup>; <sup>1</sup>National Chung-Hsing University, Taichung, Taiwan; <sup>2</sup>Chung Shan Medical University, Taichung, Taiwan; <sup>3</sup>National Kaohsiung Normal University, Kaohsiung, Taiwan
- TP 649 **Drug Screening in Non-Derivatized Urine by Automated Solid Phase Microextraction (SPME) and Comprehensive Multidimensional Gas Chromatography Time-of-Flight Mass Spectrometry (GCxGC-TOFMS)**; Scott Pugh; John R. Heim; Mark Libardoni; *LECO Corporation, St. Joseph, MI*
- TP 650 **LC/MS/MS Analysis of Rodenticide Anticoagulants in Hair**; Juergen Wendt<sup>1</sup>; Joerg Roehrich<sup>2</sup>; Siegfried Zoerntlein<sup>2</sup>; Juergen Becker<sup>2</sup>; Reinhard Urban<sup>2</sup>; <sup>1</sup>Agilent Technologies, Waldbronn, Germany; <sup>2</sup>Institute of Legal Medicine, Uni Mainz, Mainz, Germany
- TP 651 **Characterization of Homemade Explosives (HMEs) and Other Compounds of Military Interest by Ion Chromatography – Tandem Mass Spectrometry (IC-MS/MS)**; John A. Tokarz; Joy M. Ginter; *US Army - ECBC, Aberdeen Proving Ground, MD*
- TP 652 **LC/MS/MS Reveals Unexpected Metabolism of 6-Acetylmorphine in Pain Management Patients**; Bridgit Crews<sup>1</sup>; Charles Mikel<sup>1</sup>; Sergey Latyshev<sup>1</sup>; Robert West<sup>1</sup>; Amadeo Pesce<sup>1</sup>; Patrick Friel<sup>2</sup>; Ann Smith<sup>3</sup>; <sup>1</sup>Millenium Laboratories, San Diego, CA; <sup>2</sup>Toxicology Laboratory WSP Forensic Laboratory, Seattle, Wa; <sup>3</sup>eLab, Atlanta, GA
- TP 653 **High Throughput Analysis of Performance Enhancing Drugs by Automated Solid-Phase Extraction and Liquid Chromatography Time-of-Flight Mass Spectrometry**; Brian Shofran; *LECO Corporation, St. Joseph, MI*
- TP 654 **Withdrawn**
- TP 655 **Direct Surface Analysis of Inorganic Salts by Desorption Electrospray Ionization (DESI)**; Ewa Sokol; Ayanna Jackson; Nathaniel Sanders; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- TP 656 **MALDI-TOF-MS Fingerprinting of Condom Lubricants and Residues and Their Differentiation from Biological Fluids**; Sandra Spencer<sup>1</sup>; Kevin Schug<sup>2</sup>; <sup>1</sup>Univ. of Texas at Arlington, Arlington, TX; <sup>2</sup>University of Texas at Arlington, Arlington, TX
- TP 657 **Mass Spectrometry and Illicit Drug Testing: Application of GC/MS for the Study of Liposomes as Masking Agents in Sport Doping**; Alessandra Tieri<sup>1,2</sup>; Xavier de la Torre<sup>2</sup>; Simone Esposito<sup>2</sup>; Francesco Botre<sup>1,2</sup>; <sup>1</sup>Sapienza University of Rome, Rome, Italy; <sup>2</sup>Laboratorio Antidoping FMSI, Rome, Italy
- TP 658 **Withdrawn**
- TP 659 **Analysis of Gabapentin in Equine Plasma by Liquid Chromatography-Tandem Mass Spectrometry**; Ying Liu<sup>1</sup>; Xiaoqing Li<sup>1</sup>; Cornelius Uboh<sup>2</sup>; Lawrence R Soma<sup>1</sup>; Fuyu Guan<sup>1</sup>; Youwen You<sup>3</sup>; Jeffrey Rudy<sup>4</sup>; Jinwen Chen<sup>1</sup>; <sup>1</sup>University of Pennsylvania, Kennett Square, PA; <sup>2</sup>West Chester University, West Chester, PA; <sup>3</sup>University of Pennsylvania, West Chester, PA; <sup>4</sup>PA Equine Toxicology, West Chester, PA
- TP 660 **Soot as a Forensic Tool in the Mass Spectrometric Detection of Chemical Warfare Agents in the Field**; Ronny Robbins; William M. Lagna; *US Army, Gunpowder, MD*
- TP 661 **Forensic Identification of Binary and Ternary Microbial DNA Mixtures Utilizing ESI-TOF Mass Spectrometry**; Joshua K. Stone<sup>2</sup>; Bruce Budowle<sup>1</sup>; James M. Robertson<sup>1</sup>; Brian Eckenrode<sup>1</sup>; <sup>1</sup>Fed Bureau of Investigation, Quantico, VA; <sup>2</sup>Oak Ridge Institute for Science and Education, Oak Ridge, TN
- TP 662 **GCxGC-MS Analysis of Ricin Processing Carbohydrate Markers**; David Wunschel; Heather A Colburn; Antolick Kate; Jon H Wahl; Helen Kreuzer; Angie Melville; Karen L. Wahl; *Pacific Northwest National Laboratory, Richland, WA*
- TP 663 **Extreme Dilution and Large-Volume Injection: Eliminates Matrix Effects while Maintaining Sensitivity for the Analysis of Drugs in Urine**; Syam Sundar Andra<sup>1</sup>; Patrick N. Friel<sup>2</sup>; Jennifer A. Field<sup>1</sup>; <sup>1</sup>Oregon State University, Corvallis, OR; <sup>2</sup>Washington State Toxicology Laboratory, Seattle, WA
- TP 664 **Withdrawn**
- TP 665 **Laser Desorption Mass Spectrometry of Inorganic Compounds of Forensic Interest**; Josette Marrero; Emily O'Neill; Trevor Cornell; John Allison; *The College of New Jersey, Ewing, NJ*



## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Proteomics: Quantitation Techniques (001 - 034)  
 Bioinformatics (035 - 064)  
 Proteomics: Biomarker Discovery (065 - 095)  
 Metabolomics (096 - 130)  
 Proteomics: New Approaches (131 - 157)  
 Small Molecule Analysis (158 - 177)  
 Imaging MS: Peptides and Proteins (178 - 195)  
 Ion Mobility (196 - 217)  
 Quantitation: Small Molecule (218 - 246)  
 Clinical Chemistry (247 - 275)  
 Proteomics: PTM Determination - Oxidative Modification and Othes (276 - 308)  
 Instrumentation: New Concepts (309 - 328)  
 LC/MS (329 - 344)  
 LC/MS Sample Preparation (345 - 359)  
 Peptides Fragmentation and Sequencing (360 - 370)  
 Natural Products (371 - 392)  
 Proteins: Phosphoproteins (393 - 414)  
 Protein Conformation (415 - 451)  
 Non-Covalent Interactions (452 - 464)  
 Carbohydrate / Oligosaccharides (465 - 491)  
 Proteins, Glycoproteins (492 - 512)  
 Plasma Proteomics (513 - 524)  
 Proteomics: Tissue (525 - 560)  
 Metabolite Profiling (561 - 582)  
 Environmental (583 - 609)  
 Polymers (610 - 630)  
 Hydrocarbon and Petrochemical (631 - 659)  
 Ion Structures / Energetics (660 - 677)  
 Computer Applications (678 - 697)
- PROTEOMICS: QUANTITATION TECHNIQUES, 001 - 034**
- WP 001 **Use of iTRAQ and MudPIT to Quantify Synaptic Protein Expression Changes in Post-Synaptic Density Isolated from Individual Mouse Brains;** Zhongping Liao; Yunhu Wan; Sarah Rynarzewski; Stefani Thomas; Austin J. Yang; *Univ of Maryland Baltimore, Baltimore, MD*
- WP 002 **Identification of Potential Kidney Stem Cell Markers using Quantitative Proteomics;** Lorraine Anderson<sup>1</sup>; Md Abedin<sup>1</sup>; Pratik Jagtap<sup>2</sup>; Sunayan Bandyopadhyay<sup>1</sup>; Chad Myers<sup>1</sup>; Raj Kasthuri<sup>3</sup>; Sandeep Gupta<sup>1</sup>; <sup>1</sup>University of Minnesota, Minneapolis, MN; <sup>2</sup>Minnesota Supercomp. Inst., Minneapolis, MN; <sup>3</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC
- WP 003 **Discovery of New Lysosomal Protein Candidates by iTRAQ 8-Plex Analysis of Rat Liver Gradient Fractions;** Maria Cecilia Della Valle<sup>1</sup>; Michel Jadot<sup>2</sup>; Haiyan Zheng<sup>1</sup>; David E. Sleat<sup>1</sup>; Peter Lobel<sup>1</sup>; <sup>1</sup>CABM/UMDNJ, Piscataway, NJ; <sup>2</sup>Facultes Universitaires Notre-Dame de la Paix, Namur, Belgium
- WP 004 **Quantitative Proteomic Analysis Of Mycobacterium Semegmatis by iTRAQ labeling and LC/MALDI-TOF-TOF;** Fa-yun Che; Eleanor Russell Goldman; Edward Nieves; John Chan; Ruth Hogue Angeletti; *Albert Einstein College of Medicine, Bronx, NY*
- WP 005 **Identification of New Markers of Mesenchymal Stem Cell Differentiation with iTRAQ&#174; Technology;** Leeann Higgins; Troy C. Lund; Lorraine Anderson; Amanda J. Kobs; Paul J. Orchard; Jakub Tolar; *University of Minnesota, Minneapolis, MN*
- WP 006 **Is Diversity Library Dynamic Range Leveling a Valid Approach for Quantitative Proteomics?** Lashanda N. Waller; Susana Comte-Walters; Daniel R. Knapp; *Medical University of SC, Charleston, SC*
- WP 007 **Validation of Protein Quantification Strategies for Complex Samples: Comparison of iTRAQ and Multiple Reaction Monitoring (MRM) Quantitation Schemes;** Gregg A. Czerwiec; Jason M. Held; Sung W. Choi; Birgit Schilling; Simon Melov; Bradford W. Gibson; *Buck Institute for Age Research, Novato, CA*
- WP 008 **Tandem Mass Tags for Selection and Absolute Quantification of Brain Damage Markers in CSF;** Loïc Dayon<sup>1</sup>; Natacha Turck<sup>1</sup>; Alexander Scherl<sup>1</sup>; Stefan Kienle<sup>2</sup>; Jean-Charles Sanchez<sup>1</sup>; <sup>1</sup>Geneva University, Geneva, Switzerland; <sup>2</sup>Proteome Sciences R&D GmbH & Co. KG, Frankfurt am Main, Germany
- WP 009 **Candidate Verification of Iron-Sensitive Meningococcal Proteins Using TMT SRM;** Helen Byers<sup>1</sup>; James Campbell<sup>1</sup>; Karsten Kuhn<sup>2</sup>; Malcolm Ward<sup>1</sup>; Peter Schulz-knappe<sup>2</sup>; Peter van Ulsen<sup>3</sup>; Jan Tommassen<sup>3</sup>; Thorsten Prinz<sup>2</sup>; <sup>1</sup>Proteome sciences plc, London, UK; <sup>2</sup>Proteome Sciences R&D, Frankfurt/Main, Germany; <sup>3</sup>University of Utrecht, Utrecht, Holland
- WP 010 **Age Dependent Changes in the Mitochondrial Proteome of APP/PS1 Transgenic Mice;** You-Jun Fu; Shuling Xiong; Mark A Lovell; Bert C Lynn; *University of Kentucky, Lexington, KY*
- WP 011 **Elucidation of Thioredoxin Targeted Protein Networks in Mouse Heart;** Cexiong Fu; Changgong Wu; Tong Liu; Tetsuro Ago; Peiyong Zhai; Junichi Sadoshima; Hong Li; *UMDNJ, Newark, NJ*
- WP 012 **Maturation of Toxins in the Venom Duct of Conus Textile;** Rowan L. Dobson<sup>1</sup>; Mike Colloredo<sup>1</sup>; Nicolas Gilles<sup>2</sup>; Stéphanie Kirsch<sup>1</sup>; Edwin De Pauw<sup>1</sup>; Loic Quinton<sup>1</sup>; <sup>1</sup>Liege University, Liege, Belgium; <sup>2</sup>CEA Saclay, Gif sur Yvette, France
- WP 013 **Quantitative Proteomic Analysis in Transformed Astrocytes Using Spectral Counting and SILAC Methods;** Kiyonaga Fujii<sup>1</sup>; Ken Sasai<sup>2</sup>; Taichi Kimura<sup>2</sup>; Shinya Tanaka<sup>2</sup>; Fuyuhiko Inagaki<sup>1</sup>; <sup>1</sup>Hokkaido University, Sapporo, Japan; <sup>2</sup>Hokkaido University Graduate School of Medicine, Sapporo, Japan
- WP 014 **Comparative Analyses of Proteins from Two Distinct Bacterial Populations Using SILAC;** Deborah Post<sup>1</sup>; Margaret Ketterer<sup>2</sup>; Jason Johnston<sup>2</sup>; Michael Apicella<sup>2</sup>; Bradford W. Gibson<sup>1</sup>; <sup>1</sup>Buck Institute, Novato, CA; <sup>2</sup>The University of Iowa, Iowa City, IA
- WP 015 **Evaluating the Protein Stoichiometry within Protein-RNA Complexes by Multiple Reaction Monitoring in Comparison to MS Standard Methods;** Carla Schmidt<sup>1</sup>; Michael Grote<sup>3</sup>; Christof Lenz<sup>2</sup>; Reinhard Lührmann<sup>3</sup>; Henning Urlaub<sup>1</sup>; <sup>1</sup>MPI for Biophysical Chemistry, Bioanalytical MS, Göttingen, Germany; <sup>2</sup>PSM Support, Applied Biosystems, Darmstadt, Germany; <sup>3</sup>MPI for Biophysical Chemistry, Cell Biochemistry, Göttingen, Germany
- WP 016 **A Comparison of Analytical Approaches to the Detection and Quantitation of Proteins in Complex Biological Matrices;** Anita Izrael-Tomasevic; Lilian Phu; Qui Phung; Jennie Lill; David Arnott; *Genentech, Inc., South San Francisco, CA*
- WP 017 **Quantitative Mitochondrial Proteome of Pancreatic INS-1 $\beta$  Cells Stimulated with Prolonged High Glucose Using SILAC;** Xiulan Chen; Ziyou Cui; Junjie Hou; Zhensheng Xie; Peng Xue; Jing Li; Peng Wu;

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 018 **Protein Profiles of Cisplatin Treated CEM Cells - An Interesting Insight from Three Different Techniques;** Linan Shi; Tanxi Cai; Fuquan Yang; *Institute of Biophysics, CAS, Beijing, China*
- WP 019 **Proteome-Wide Quantitative Mass Spectrometry of Astrocyte Protein Secretion;** Todd M. Greco; Lynn A. Spruce; Adrian Mak; Steven H. Seeholzer; Harry Ischiropoulos; *Children's Hospital of Philadelphia, Philadelphia, PA*
- WP 020 **Can Quantitative Proteomics Predict the Effects of Autophagy Inhibition on Mitochondrial Function?** Rongxiao Sa; Marian Navratil; Xin Xu; Edgar A. Arriaga; *University of Minnesota, Minneapolis, MN*
- WP 021 **Stoichiometry and Absolute Quantification of Ribosomal Proteins by Mass Spectrometry using QconCAT Technology;** Zubida Al-Majdoub; Simon J. Gaskell; Jill Barber; *University of Manchester, Manchester, UK*
- WP 022 **Determination of Clp Protease Complex Composition in Arabidopsis Thaliana Chloroplasts by Quantitative Mass Spectrometry;** Paul Dominic B. Olinares<sup>1</sup>; Boris Zybailov<sup>1</sup>; Qi Sun<sup>2</sup>; Klaas J. Van Wijk<sup>1</sup>; *<sup>1</sup>Plant Biology, Cornell University, Ithaca, NY; <sup>2</sup>Computational Biology Unit, Cornell University, Ithaca, NY*
- WP 023 **Circadian Differences of Photoreceptor Outer Segment Proteome Observed by Proteolytic <sup>18</sup>O Labeling;** Dagmar Hajkova<sup>1</sup>; Chao Yuan<sup>2</sup>; Masaru Miyagi<sup>3</sup>; *<sup>1</sup>Case Western Reserve Univ, Cleveland, OH; <sup>2</sup>Case Western Reserve Univ., Cleveland, OH; <sup>3</sup>Case Western Reserve Univers, Cleveland, OH*
- WP 024 **<sup>18</sup>O Labeling and Mass Spectrometry as a Simple Tool for High Confidence Protein-Protein Interaction Analysis;** Karel Bezstarosti; Alireza Ghamari; Frank Grosveld; Jeroen Demmers; *Erasmus Medical Center, Rotterdam, Netherlands*
- WP 025 **Quantitative Proteomic Elucidation of the Core AAA+ Vacuolar Protein Sorting 4B ATPase Protein Interaction Complex;** Stefani N. Thomas<sup>1</sup>; Yunhu Wan<sup>1</sup>; Zhongping Liao<sup>1</sup>; David K. Ann<sup>2</sup>; Phyllis I. Hanson<sup>3</sup>; Austin J. Yang<sup>1</sup>; *<sup>1</sup>Univ of Maryland Baltimore, Baltimore, MD; <sup>2</sup>City of Hope, Duarte, CA; <sup>3</sup>Washington University, St. Louis, MO*
- WP 026 **Discovery of Disease-Related Proteins in the Min Mouse Model for Colorectal Cancer via <sup>15</sup>N Metabolic Labeling and Microarray Analysis;** Edward L. Huttlin<sup>1,2</sup>; Xiaodi Chen<sup>1</sup>; Gregory Barrett-Wilt<sup>1</sup>; Richard Halberg<sup>1</sup>; Adrian D. Hegeman<sup>3</sup>; Melanie M. Ivancic<sup>1</sup>; Michael A. Newton<sup>1</sup>; Amy C. Harms<sup>1</sup>; William F. Dove<sup>1</sup>; Michael R. Sussman<sup>1</sup>; *<sup>1</sup>University of Wisconsin, Madison, WI; <sup>2</sup>Harvard Medical School, Boston, MA; <sup>3</sup>University of Minnesota, Saint Paul, MN*
- WP 027 **The Role of Nascent Peptide-Ribosome Interactions in Gene Regulation Using Quantitative Mass Spectrometry with <sup>15</sup>N-Stable Isotope Labeling;** Blanca Martínez-Garriga; Hua Xu; Krishna Kannan; Alexander Mankin; *Univ Illinois at Chicago, Chicago, IL*
- WP 028 **Quantification and Proteotyping of  $\alpha$ -1-Antitrypsin Deficiency by a Peptide MRM Assay;** Linda M Benson; Yuhong Chen; Melissa R. Snyder; Jerry A. Katzmann; H. Robert Bergen, III; *Mayo Clinic, Rochester, MN*
- WP 029 **Dynamic Changes in the Proteome of the Postnatally Developing Mouse Brain: A Combination of 2-D DIGE and Isobaric Mass Tagging;** Babs Van de Plas<sup>1</sup>; Martijn Pinkse<sup>2</sup>; Gert Van den Bergh<sup>1</sup>; Stefan Clerens<sup>1,3</sup>; Peter D. Verhaert<sup>2</sup>; Lutgarde Arckens<sup>1</sup>; *<sup>1</sup>K.U.Leuven, Leuven, Belgium; <sup>2</sup>Delft University of Technology, Delft, Netherlands; <sup>3</sup>AgResearch, Christchurch, New Zealand*
- WP 030 **Proteomic Analysis of the Helicobacter pylori ArsRS regulon by DIGE/MS;** John T. Loh; David B. Friedman; Timothy L. Cover; *Vanderbilt University School of Medicine, Nashville, TN*
- WP 031 **Quantitative Proteomics to Identify MicroRNA Target Proteins in Human Neoplasias;** Christopher Löbner; Jan Meier; Uwe Warnken; Peter Lichter; Armin Pscherer; Martina Schnölzer; *German Cancer Research Center, Heidelberg, Germany*
- WP 032 **Identification of Biomarkers to Estrogen Exposure Using MCF-7/BOS Cell Line Exposed to 17 $\beta$ -Estradiol and Phytoestrogens;** Mike Collodoro; Pascale Lemaire; Virginie Bertrand; Rowan L. Dobson; Gabriel Mazzucchelli; Joelle Widart; Edwin De Pauw; Marie-claire Gillet; *University of Liège, Liège, Belgium*
- WP 033 **Label-Free Proteomics with MS<sup>F</sup>: Applications to Protein Functional Biology and the Biology of Adult Stem Cells;** Lewis M. Brown; Grégory Boël; Nidhi Gangadhar; Brent R. Stockwell; Stuart Firestein; John F. Hunt; *Columbia University, New York, NY*
- WP 034 **Comprehensive Overview on Hyperosmotic Conditions in Corynebacterium Glutamicum;** Benjamin Fränzel; Dirk Wolters; *University Bochum, Bochum, Germany*

#### BIOINFORMATICS, 035 - 064

- WP 035 **Babel Fish: Interconversion of MS File Formats and Standards;** Paul Gershon<sup>1</sup>; Panagiotis T. Papoulias<sup>2</sup>; Bryan Smith<sup>2</sup>; Philip Andrews<sup>2</sup>; *<sup>1</sup>UC-Irvine, Irvine, CA; <sup>2</sup>University of Michigan, Ann Arbor, Michigan*
- WP 036 **New Functionality for the Trans-Proteomic Pipeline: Tools for the Analysis of Proteomics Data;** Luis Mendoza<sup>1</sup>; David Shteynberg<sup>1</sup>; Natalie Tasman<sup>1</sup>; Brian S Pratt<sup>2</sup>; Jimmy K. Eng<sup>3</sup>; Henry H. Lam<sup>4</sup>; Alexey Nesvizhskii<sup>5</sup>; Eric W. Deutsch<sup>1</sup>; Ruedi Aebersold<sup>1,6</sup>; *<sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Insilicos LLC, Seattle, WA; <sup>3</sup>University of Washington, Seattle, WA; <sup>4</sup>Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong; <sup>5</sup>University of Michigan, Ann Arbor, MI; <sup>6</sup>Swiss Federal Institute of Technology, Zurich, Switzerland*
- WP 037 **Peptidome: NCBI Peptide Data Resource;** Douglas J. Slotta; Tanya Barrett; Ron Edgar; *NIH/NLM/NCBI, Bethesda,*
- WP 038 **Annotation and Project Management Resource Integrated with the ProteomeCommons.org Tranche Repository;** James Hill<sup>1</sup>; Bryan Smith<sup>1</sup>; Mark Gjukich<sup>1</sup>; Panagiotis G Papoulias<sup>1</sup>; Jayson Falkner<sup>2</sup>; Philip Andrews<sup>1</sup>; *<sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>SOSI, Portland, OR*

## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 039 **Custom Mass-Informatics Algorithms and Workflows with MultiplierZ**; Manor Askenazi<sup>1,2</sup>; Jignesh Parikh<sup>2</sup>; Shaojuan Li<sup>2</sup>; Jarrod Marto<sup>2</sup>; <sup>1</sup>Hebrew University, Jerusalem, Israel; <sup>2</sup>Dana-Farber Cancer Institute, Boston, MA
- WP 040 **Yale Protein Expression Database (YPED) – Tools to Support Targeted Proteomic Analysis**; Christopher Colangelo; Tom Abbott; Mark Shifman; Yale University, New Haven, CT
- WP 041 **Scalable Cyberinfrastructure for Proteomics Research**; Claudiu Farcas; To-Ju Huang; Roy Liu; Vineet Bafna; Ingolf Krueger; Pavel Pevzner; Nuno Bandeira; *Univ. of California, San Diego, La Jolla, CA*
- WP 042 **DAMAGE - Boosting Peptide MSMS Identification Computing Times Using Nvidia Graphic Cards with a GPGPU Engine**; Ivan Topolsky<sup>1</sup>; Olivier Evalet<sup>2</sup>; Jacques Colinge<sup>3</sup>; Anne Niknejad<sup>2</sup>; Pierre-Alain Binz<sup>2,4</sup>; Alexandre Masselot<sup>2</sup>; <sup>1</sup>Geneva University, Geneva, Switzerland; <sup>2</sup>Geneva Bioinformatics (GeneBio), Geneva, Switzerland; <sup>3</sup>CeMM, Vienna, Austria; <sup>4</sup>Swiss Institute of Bioinformatics, Geneva, Switzerland
- WP 043 **Using Peptide and Spectrum Indexing To Speed Up Mass Spectrometry Based Protein Identification**; You Li; Leheng Wang; Hao Chi; Haipeng Wang; Yan Fu; Zuofei Yuan; Ruixiang Sun; Simin He; *Institute of Computing Technology and Key Lab of I, Beijing, china, China*
- WP 044 **Analytical System of LC/MS Proteomics Data and Application**; Xinjian Yan; Dmitrii Tchekhovskoi; Bhaskar Godugu; Stephen E. Stein; *NIST, Gaithersburg, MD*
- WP 045 **Integrated Informatics Solution for Streamlining Biopharmaceutical Data Management and Reporting**; Fredrick W. Schmidt; Chris L Stumpf; *Waters Corporation, Milford, MA*
- WP 046 **Improving the Sensitivity of Peptide Identification from Tandem Mass Spectra using Meta-Search, Grid-Computing, and Machine-Learning**; Nathan J. Edwards; *Georgetown University Medical Center, Wasington, DC*
- WP 047 **SPIRE: Systematic Protein Identification and Relative Expression Analysis Resource for High-Throughput Proteomics**; Roger Higdon<sup>1</sup>; Gregory Hather<sup>1</sup>; Andrew T Bauman<sup>1</sup>; Brent Louie<sup>1</sup>; Bill Broomall<sup>1</sup>; Simon Fortenly<sup>1</sup>; Natali Kolker<sup>1</sup>; Gerald van Belle<sup>2</sup>; Eugene Kolker<sup>1</sup>; <sup>1</sup>Seattle Children's Research Institute, Seattle, WA; <sup>2</sup>University of Washington, Seattle, WA
- WP 048 **High-Throughput Autonomous Proteomic Pipeline**; Kebing Yu; Arthur Salomon; *Brown University, Providence, RI*
- WP 049 **STRAP: Open-Source Software for Protein Annotation and Data Visualization**; Vivek N. Bhatia; David H. Perlman; Catherine E. Costello; Mark E. McComb; *Boston University School of Medicine, Boston, MA*
- WP 050 **A New Comprehensive Software Tool for Proteomics Data Generated by Less Specific Enzymes**; Malte Schürken; Michael Karas; *JW Goethe Univ. of Frankf, Frankfurt Am Main, Germany*
- WP 051 **Invigorating the Mass Spectrometer: Software Solution for Tandem MS**; Anuj Shah; Andrei Liyu; Yan Shi; Navdeep Jaitly; Ashoka D. Polpitiya; Joshua Adkins; Adam Wynne; Mikhail Belov; Ian Gorton; Gordon Anderson; Richard D. Smith; *Pacific Northwest National Laboratory, West Richland, WA*
- WP 052 **IDSieve: An Automated Algorithm for Peptide pI Filtering of MS/MS Data to Lower False Positive and False Negative Identifications**; Nikhil Garge; Benjamin J. Cargile; Jonathan L. Bundy; Maureen K. Bunger; James L. Stephenson Jr; *Research Triangle Institute, Durham, NC*
- WP 053 **Computational MS/MS Spectra Preprocessing – a Free Lunch**; Bernhard Y. Renard<sup>1,2</sup>; Flavio Monigatti<sup>3</sup>; Marc Kirchner<sup>1,3</sup>; Alexander R. Ivanov<sup>4</sup>; Juri Rappsilber<sup>5</sup>; Judith A. J. Steen<sup>3</sup>; Fred A. Hamprecht<sup>1,2</sup>; Hanno Steen<sup>3</sup>; <sup>1</sup>Univ. of Heidelberg, Heidelberg, Germany; <sup>2</sup>Children's Hospital Boston, Boston, MA; <sup>3</sup>Harvard Medical School/Children's Hospital Boston, Boston, MA; <sup>4</sup>Harvard Univ. HSPH, Boston, MA; <sup>5</sup>Wellcome Trust Centre for Cell Biology, Edinburgh, UK
- WP 054 **Consolidated Statistical Approach to Identify Cancer Biomarkers in Humoral Immune Response Study**; Huy Vuong; Evelyn H. Kim; Chen Li; Tasneem Patwa; Manoj Pal; Mack Ruffin; Diane M. Simeone; David M. Lubman; *University of Michigan, Ann Arbor, MI*
- WP 055 **Evaluation of Clustering Algorithms for Protein Complex and Protein Interaction Network Assembly**; Mihaela Sardu; Laurence Florens; Michael Washburn; *Stowers Institute for Medical Research, Kansas City, MO*
- WP 056 **Express Biological Pathway Analysis of Mass Spectrometry Based Proteomics Datasets**; Alexandre Podtelejnikov; Christian Ravensborg Ingrell; Morten Bern; Ole Vorm; *Proxeon A/S, Odense, Denmark*
- WP 057 **Development of Methods and Tools for Performing Protein Set Expression Analysis (PSEA)**; Roger Higdon<sup>1</sup>; Gregory Hather<sup>1</sup>; Andrew T Bauman<sup>1</sup>; Brent Louie<sup>1</sup>; Gerald van Belle<sup>2</sup>; Simon Fortenly<sup>1</sup>; Natali Kolker<sup>1</sup>; Bill Broomall<sup>1</sup>; Eugene Kolker<sup>1</sup>; <sup>1</sup>Seattle Children's Research Institute, Seattle, WA; <sup>2</sup>University of Washington, Seattle, WA
- WP 058 **Molecular Networks Derived from Proteomic Analysis of Oral Epithelial Cells from HIV Patients Show High Correspondence with Known HIV-Interacting Proteins**; Gaurav S.J.B. Rana; Elizabeth H. Yohannes; Santosh Gosh; Bin Jiang; Thomas McCormick; Aaron Weinberg; Mark Chance; *Case Western Reserve Univers, Cleveland, OH*
- WP 059 **Simultaneous Multiple Alignment for LC/MS Peak Lists**; Bjoern Voss<sup>1</sup>; Bernhard Y. Renard<sup>1</sup>; Anna Kreshuk<sup>1</sup>; Michael Hanselmann<sup>1</sup>; Ullrich Koethe<sup>1</sup>; Hanno Steen<sup>2</sup>; Judith A. J. Steen<sup>2</sup>; Marc Kirchner<sup>1,3</sup>; Fred A. Hamprecht<sup>1</sup>; <sup>1</sup>University of Heidelberg, Heidelberg, Germany; <sup>2</sup>Harvard Medical School/Children's Hospital Boston, Boston, MA; <sup>3</sup>Children's Hospital Boston / Harvard Medical, Boston, MA
- WP 060 **A Peak Alignment Algorithm for Two-Dimensional Gas Chromatography/Time-of-Flight Mass Spectrometry Based Metabolomics**; Bing Wang<sup>1,2</sup>; Aiqin Fang<sup>1</sup>; Charles Buck<sup>3</sup>; Xiaodong Huang<sup>3</sup>; Xiang Zhang<sup>1</sup>; <sup>1</sup>University of Louisville, Louisville, KY; <sup>2</sup>Anhui University of Technology, Ma An Shan, China; <sup>3</sup>Purdue University, West Lafayette, IN
- WP 061 **Improving Untargeted Differential Analysis of Mass Spectrometric Data by Recursive Feature Extraction**;

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Norton Kitagawa; Steven M. Fischer; Theodore Sana; David Peterson; Ed Darland; Xiangdong Li; *Agilent Technologies, Inc., Santa Clara, CA*
- WP 062 **Noise Analysis on Liquid Chromatography Mass Spectrometry Data on Elution Time Profile**; Dimension; Elias Gonzalez; Michelle Zhang; *Universiyt of Texas at San Antonio, Universal City, TX*
- WP 063 **The Comparison of Peak-Detection Algorithms for LC/MS**; Jian Cui<sup>1</sup>; gonzalez Elias<sup>1</sup>; William Haskins<sup>2</sup>; Huang Huang<sup>1</sup>; Jianqiu Zhang<sup>1</sup>; *Dept. of ECE, University of Texas at San Antonio, San Antonio, TX; <sup>2</sup>University of Texas, San Antonio, TX*
- WP 064 **Robust Statistical Reconstruction of Protein Profiles in Mass Spectrometry**; Pierre P. Grangeat<sup>1</sup>; Grégory Strubel<sup>1</sup>; Jean-François Giovannelli<sup>2</sup>; Virginie Brun<sup>3</sup>; Laurent Gerfault<sup>1</sup>; Caroline Paulus<sup>1</sup>; Alain Dupuis<sup>3</sup>; Jérôme Garin<sup>3</sup>; *CEA, LETI, MINATEC, Grenoble, France; <sup>2</sup>Université de Bordeaux, IMS/LAPS, Talence, France; <sup>3</sup>CEA, INSERM, UJF, U880, iRTSV, Grenoble, France*
- PROTEOMICS: BIOMARKER DISCOVERY, 065 - 095**
- WP 065 **Testing for Differences between Complex Samples in Proteomics Datasets**; Brian C. Searle<sup>1</sup>; David Tabb<sup>2</sup>; Jayson A. Falkner<sup>3</sup>; Jeffrey A. Kowalak<sup>4</sup>; Karen Meyer-arendt<sup>5</sup>; Lennart Martens<sup>6</sup>; Manor Askenazi<sup>7</sup>; Paul Rudnick<sup>8</sup>; Sean L. Seymour<sup>9</sup>; William S. Lane<sup>10</sup>; *<sup>1</sup>Proteome Software Inc., Portland, OR; <sup>2</sup>Vanderbilt University, Nashville, TN; <sup>3</sup>Single Organism Software Inc, Beaverton, Or, OR; <sup>4</sup>NIH, Bethesda, MD; <sup>5</sup>University of Colorado, Boulder, CO; <sup>6</sup>European Bioinformatics Institute, Cambridge, UK; <sup>7</sup>Dana-Farber Cancer Institute and Hebrew University, Boston, MA; <sup>8</sup>NIST, Gaithersburg, MD; <sup>9</sup>Applied Biosystems, Foster City, CA; <sup>10</sup>Harvard University, Cambridge, MA*
- WP 066 **Identification of Intracellular Modified Proteins by the Lipid Peroxidation Aldehyde DODE**; Peter G. Slade; Michelle Williams; Viral Brahmhbtt; John S. Wishnok; Steve Tannenbaum; *Massachusetts Institute of Technology, Cambridge, MA*
- WP 067 **Withdrawn**
- WP 068 **Identification of Candidate Biomarkers from Integrated Proteomic Analysis of Human Cancer Cells and Plasma from an Ovarian Cancer Mouse Model**; Sharon J. Pitteri<sup>1</sup>; Lellean JeBailey<sup>2</sup>; Vitor M. Faca<sup>1</sup>; Melissa A. Silva<sup>1</sup>; Renee C. Ireton<sup>1</sup>; Jason D. Thorpe<sup>1</sup>; Marc B. Horton<sup>2</sup>; Hong Wang<sup>1</sup>; Liese Pruitt<sup>2</sup>; Qing Zhang<sup>1</sup>; Kuang H. Cheng<sup>2</sup>; Nicole Urban<sup>1</sup>; Daniela M. Dinulescu<sup>2</sup>; Samir M. Hanash<sup>1</sup>; *<sup>1</sup>Fred Hutchinson Cancer Research Center, Seattle, WA; <sup>2</sup>Harvard Medical School, Boston, MA*
- WP 069 **Artifact-Free Quantitation of Free and Protein-Bound Nitrotyrosine and Chlorotyrosine in Human Serum by NICI GC/MS**; Yu Zeng; Kari E. Schlicht; Viral Brahmhbhatt; Peter G. Slade; Lizz Liffbrig; John S. Wishnok; Steven R. Tannenbaum; *MIT, Cambridge, MA*
- WP 070 **Comparison Of Label-Free, <sup>18</sup>O/<sup>16</sup>O And Glycopeptide Enrichment For Differential Proteomics Analysis Of Human Plasma After Branched-Chain Amino Acid Infusion**; Kenneth L. Johnson<sup>1,2</sup>; Carrie Holtz-Heppelmann<sup>1,2</sup>; Cristine Charlesworth<sup>1,2</sup>; Michael W. Holmes<sup>1,2</sup>; Jeanette Eckel-Passow<sup>1,3</sup>; Terry Therneau<sup>1,3</sup>; K Sreekumaran Nair<sup>1,4</sup>; H. Robert Bergen, III<sup>1,2</sup>; *<sup>1</sup>Mayo Clinic, Rochester, MN; <sup>2</sup>Mayo Proteomics Research Center, Rochester, MN;*
- <sup>3</sup>Division of Biomedical Statistics and Informatics, Rochester, MN; <sup>4</sup>Endocrinology, Rochester, MN
- WP 071 **Mass Spectrometry-Based Analysis of Cerebrospinal Fluid Peptidome and Proteome for Biomarker Discovery in Alexander Disease**; Robert Cunningham<sup>1</sup>; Xin Wei<sup>2</sup>; Paige Jany<sup>3</sup>; Albee Messing<sup>3</sup>; Lingjun Li<sup>4</sup>; *<sup>1</sup>Univ. of Wisconsin-Madison, Madison, WI; <sup>2</sup>Univ. of Wisconsin-Madison, Madison, WI; <sup>3</sup>Waisman Center, University of Wisconsin-Madison, Madison, WI; <sup>4</sup>University of Wisconsin, Madison, WI*
- WP 072 **Proteomic Analysis of Gynecological Mucus Samples Provides Insight into the Early Detection of Endometrial Cancer**; Guangyu Zhang<sup>1</sup>; Michael Finan<sup>1</sup>; Rodney Rocconi<sup>1</sup>; Madhuri Mulekar<sup>2</sup>; Lewis K. Pannell<sup>1</sup>; *<sup>1</sup>Mitchell Cancer Institute, Mobile, AL; <sup>2</sup>University of South Alabama, Mobile, AL*
- WP 073 **Murine Colorectal Tumor Tissue Analysis by 2D-LC/MS/MS**; Wenhong Zhu; *The Burnham Institute, La Jolla, CA*
- WP 074 **Discovery of Mitochondrial Protein and Phosphoprotein Biomarkers of Atrial Fibrillation**; Mark M. Ross<sup>1</sup>; Maryam Goudarzi<sup>1</sup>; Weidong Zhou<sup>1</sup>; Amy VanMeter<sup>1</sup>; Lance Liotta<sup>1</sup>; Emanuel Petricoin<sup>1</sup>; Lisa Martin<sup>2</sup>; Niv Ad<sup>2</sup>; *<sup>1</sup>George Mason University, Manassas, VA; <sup>2</sup>Inova Heart & Vascular Institute, Falls Church, VA*
- WP 075 **Quantitative and Qualitative Analysis of Urinary Biomarkers by Selected Reaction Monitoring**; Nathalie Selevsek<sup>1</sup>; Mariette Matondo<sup>1</sup>; Marta Sánchez-Carbayo<sup>2</sup>; Ruedi Aebersold<sup>1</sup>; Bruno Domon<sup>1</sup>; *<sup>1</sup>ETH Zurich, Zurich, Switzerland; <sup>2</sup>Centro Nacional de Investigaciones Oncológicas, Madrid, Spain*
- WP 076 **Proteomics Analysis of Stem Cell Secretome**; Hsin-Chieh Wu<sup>1</sup>; Ming-Hui Yang<sup>2</sup>; Shiang-Bin Jong<sup>1</sup>; Yu-Chang Tyan<sup>1</sup>; *<sup>1</sup>Kaohsiung Medical University, Kaohsiung, Taiwan; <sup>2</sup>National Sun Yat-sen University, Kaohsiung, Taiwan*
- WP 077 **Identification of Glycoprotein Biomarkers in Prostate Cancer by Quantitative Proteomics**; Vivekananda Shetty; Thamby Gomathinayagam; Punit Shah; Zacharie Nickens; Ramila Philip; *Immunotope, Inc., Doylestown, PA*
- WP 078 **A Quantitative Proteomic Approach for the Discovery of Prion Disease Biomarkers**; Xin Wei; Allen Herbst; Judd Aiken; Lingjun Li; *Univ. of Wisconsin-Madison, Madison, WI*
- WP 079 **Identification of Amyloid Beta Peptides in Cerebrospinal Fluid Using Isotope Dilution Liquid Chromatography and Electrospray Ionization Tandem Mass Spectrometry**; Alfred N. Fonteh<sup>1</sup>; Rachel D. Fisher<sup>1</sup>; John Rush<sup>2</sup>; Michael G. Harrington<sup>1</sup>; *<sup>1</sup>Huntington Med. Res. Insts., Pasadena, CA; <sup>2</sup>Cell Signaling Technology, Beverly, MA*
- WP 080 **SILAC-Labeled Cell/Tissue Lysates as a Generic Source of Proteotypic Peptides in Multiple Reaction Monitoring Analyses**; Stephan Jung<sup>1</sup>; Stuart Pengelley<sup>1</sup>; Karsten Krug<sup>1</sup>; Ana Velic<sup>2</sup>; Boris Macek<sup>1</sup>; *<sup>1</sup>Proteome Center Tubingen, Tubingen, Germany; <sup>2</sup>Max-Planck Institute for Biochemistry, Martinsried, Germany*
- WP 081 **Proteomic analysis of Sera from Prostate Cancer Patients with MALDI-TOF-MS**; Corinna Henkel<sup>1</sup>; Joachim Grosse<sup>2</sup>; Gerhard Jakse<sup>2</sup>; Nadine Reulen<sup>1</sup>; Axel Heidenreich<sup>2</sup>; Ruth Knuechel<sup>1</sup>; Kristina Schwamborn<sup>1,3</sup>; *<sup>1</sup>Pathology, RWTH Aachen University Hospital, Aachen,*

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Germany; <sup>2</sup>Urology, RWTH Aachen University Hospital, Aachen, Germany; <sup>3</sup>Mass Spectrometry Research Center, Biochemistry, Nashville, TN
- WP 082 **Comprehensive Proteomics Analysis of Human Placental BeWo Cell Model for Preterm Birth Biomarker Discovery;** Vineet Sangar<sup>1</sup>; Sumit Shah<sup>1</sup>; Samuel I Parry<sup>1</sup>; Ian A. Blair<sup>2</sup>; <sup>1</sup>University of Pennsylvania, Philadelphia, PA; <sup>2</sup>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA
- WP 083 **A Quantitative Proteomics Method for the Measurement of Immune Responses in HIV Resistant Women;** Derek R Stein<sup>1</sup>; Terry B Ball<sup>1,2</sup>; Garrett Westmacott<sup>2</sup>; Keding Cheng<sup>2</sup>; Francis A Plummer<sup>2</sup>; <sup>1</sup>University of Manitoba, Winnipeg, Canada; <sup>2</sup>Public Health Agency of Canada, Winnipeg, Canada
- WP 084 **Identification of Biomarkers in Cochlear Pathogenesis in the Usher Syndrome 1F Mouse Model;** Giridharan Gokulrangan<sup>1</sup>; Daniel Chen<sup>2</sup>; Sunitha Shyam<sup>1</sup>; Rebecca Levinson<sup>1</sup>; Nam Kim<sup>2</sup>; Mark Chance<sup>1</sup>; Kumar Alagramam<sup>2</sup>; <sup>1</sup>Case Center for Proteomics, Cleveland, OH; <sup>2</sup>Otolaryngology, Case Western Reserve University, Cleveland, OH
- WP 085 **Identification of Tumor-Specific Proteins in Plasma;** Yuan Tian<sup>1</sup>; Karen S. Kelly-Spratt<sup>2</sup>; Christopher J. Kemp<sup>2</sup>; Hui Zhang<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Fred Hutchinson Cancer Research Center, Seattle, WA
- WP 086 **Elucidation of Potential Diagnostic Biomarkers from Archival Fibrohistiocytic Tumor Tissue;** Brian L. Hood<sup>1,2</sup>; Arash Radfar<sup>3</sup>; Adar T. Berghoff<sup>4</sup>; Mai Sun<sup>1,2</sup>; Uma Rao<sup>4</sup>; Thomas P. Conrads<sup>1,2</sup>; <sup>1</sup>University of Pittsburgh, Pittsburgh, PA; <sup>2</sup>The University of Pittsburgh Cancer Institute, Pittsburgh, PA; <sup>3</sup>Department of Dermatopathology, Pittsburgh, PA; <sup>4</sup>Department of Pathology, Pittsburgh, PA
- WP 087 **Halogenated-Peptides as Internal Standards (H-PINS) for Liquid Chromatography Mass Spectrometry;** Hamid Mirzaei<sup>1</sup>; Mi-Youn Bruisnak<sup>1</sup>; Lukas N. Mueller<sup>1</sup>; Simon Letarte<sup>1</sup>; Julian D Watts<sup>1</sup>; Ruedi Aebersold<sup>1,2</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Institute of Molecular Systems Biology, ETH Zurich, Switzerland
- WP 088 **Comparison of High Abundance Protein Depletion Techniques for Biomarker Discovery with Two Proteomics Workflows;** Tim Wehr<sup>1</sup>; Chengjun Sun<sup>1</sup>; Lei Li<sup>1</sup>; Steve Freeby<sup>1</sup>; Ning Liu<sup>1</sup>; John Walker<sup>1</sup>; Aran Paulus<sup>1</sup>; Katrina Academia<sup>1</sup>; Chris Sutton<sup>2</sup>; <sup>1</sup>Bio-Rad Labs, Hercules, CA; <sup>2</sup>Univ. of Bradford, Bradford, UK
- WP 089 **Use of Pre-Spotted ProteinChip Arrays for Qualification of a MALDI TOF-TOF Instrument in Linear, Reflectron, and MS/MS Modes;** Diane Mccarthy; Vanitha Thulasiraman; Amanda Bulman; Enrique Dalmasso; Fiona Plows; Bio-Rad Laboratories, Inc., Hercules, CA
- WP 090 **Oxythiamine Specifically Inhibits Heat Shock Protein 27 (Hsp27) Phosphorylation and Cell Proliferation in MIA Pancreatic Cancer Cells;** Rui Cao<sup>1</sup>; Hengwei Zhang<sup>1</sup>; W. Paul Lee<sup>2</sup>; Caishu Deng<sup>1</sup>; Yingchun Zhao<sup>1</sup>; Qingmei Xie<sup>1</sup>; Joan Lappe<sup>1</sup>; Robert Recker<sup>1</sup>; Songping Liang<sup>3</sup>; Gary Guishan Xiao<sup>1</sup>; <sup>1</sup>Creighton University, Omaha, NE; <sup>2</sup>Harbor - UCLA Medical Center, Torrance, CA; <sup>3</sup>College of Life Science, Hunan Normal University, Changsha, China
- WP 091 **Diagnostic Feature Detection in 2-200 kDa TOF-MS Spectra of Leukemia Serum Proteins;** Maureen B. Tracy; Dariya Malyarenko; Karl W. Kuschner; Eugene R. Tracy; William E. Cooke; Dennis Manos; College of William and Mary, Williamsburg, VA
- WP 092 **Proteomic Analysis of Interstitial Fluid from Head and Neck Tumors;** Matthew Stone; Rick M Odland; Tim Griffin; University of Minnesota, Minneapolis, MN
- WP 093 **Discovery of Protein Markers for Lung Cancer by Label Free Mass Spectrometry and Validation in Serum;** Jenny L. Heidbrink<sup>1</sup>; Tao He<sup>2</sup>; Aiqun Li<sup>1</sup>; Yeoun Jin Kim<sup>3</sup>; William FitzHugh<sup>4</sup>; Elizabeth Joseloff<sup>5</sup>; Gulshan Dhariwal<sup>1</sup>; Sudepta Aggarwal<sup>1</sup>; Charles E. Birse<sup>1</sup>; Steven M. Ruben<sup>1</sup>; <sup>1</sup>Celera, Rockville, MD; <sup>2</sup>Wyeth, Cambridge, MA; <sup>3</sup>Bristol-Myers Squibb, Princeton, NJ; <sup>4</sup>5 AM Solutions, Reston, VA; <sup>5</sup>Cystic Fibrosis Foundation, Bethesda, MD
- WP 094 **Secretome Profiling in Pancreatic Cancer Cells in Response to Transketolase Inhibitor Oxythiamine Using 15N Amino Acid Labeling and Serum-Depleted Medium;** Yingchun Zhao<sup>1</sup>; Jing Xiao<sup>1</sup>; W. Paul Lee<sup>2</sup>; Rui Cao<sup>1</sup>; Robert Recker<sup>1</sup>; Vay Liang Go<sup>2</sup>; Gary Guishan Xiao<sup>1</sup>; <sup>1</sup>Creighton University, Omaha, NE; <sup>2</sup>Harbor - UCLA Medical Center, Torrance, CA
- WP 095 **Identification of Diagnostic Serum Biomarkers for Chagas Disease in Asymptomatic Subjects;** Omar Ndao; Brian J. Ward; Christine Straccini; Bernard F. Gibbs; McGill University, Montreal, Canada

#### METABOLOMICS, 096 - 130

- WP 096 **Derivatization of Amino Acids in Human Plasma for Quantitation by Comprehensive Two Dimensional Gas Chromatography Time of Flight Mass Spectrometry;** Elizabeth A. McGaw; Gauthier Eppe; Mark S. Lowenthal; Nathan G. Dodder; Karen W. Phinney; NIST, Gaithersburg, MD
- WP 097 **High Resolution, High Accuracy Measurement and Fragmentation Analysis for Metabolite Identification in Broccoli Samples – Meta-Phor Research Initiative Results;** Helmut Muenster<sup>1</sup>; Eugen Damoc<sup>1</sup>; Catharina Crone<sup>1</sup>; Thomas Moehring<sup>1</sup>; Martin Hornshaw<sup>2</sup>; Madalina Oppermann<sup>1,2</sup>; <sup>1</sup>Thermo Fisher Scientific (Bremen) GmbH, Bremen, GERMANY; <sup>2</sup>Thermo Fisher Scientific, Hemel Hempstead, UK
- WP 098 **Investigative Renal Toxicity Study in Mice Using MS-Based Metabolomics;** Joanna R. Pols; Anthony Srnka; Swapan K. Chowdhury; Kevin B. Alton; Schering-Plough Research Institute, Kenilworth, NJ
- WP 099 **Metal Chelating Agent Enhances Polar Anionic Metabolome Analysis in Nano-LC/MS;** Khin Than Myint<sup>1,2</sup>; Yoshiya Oda<sup>1,2</sup>; <sup>1</sup>Eisai Co, Tsukuba, Japan; <sup>2</sup>CREST, Japan Science and Technology, Saitama, Japan
- WP 100 **Characterizing Free Radical-Induced Indole Binding in Plasma Proteins of Huntington Disease (HD) Patients Using Liquid Chromatography/ Electrochemical Array (LCECA) and LCMS<sup>n</sup>;** Erika N. Ebbel<sup>1</sup>; Lei Wang<sup>2</sup>; Wayne R. Matson<sup>3</sup>; Samantha Matson<sup>3</sup>; Swati Sharma<sup>3</sup>; Giuseppe Infusini<sup>1</sup>; Mikhail B. Bogdanov<sup>2</sup>; Steven Hersch<sup>4</sup>; Catherine E. Costello<sup>1</sup>; <sup>1</sup>Boston University School of Medicine, Boston, MA; <sup>2</sup>Weill Medical College of Cornell, New York, NY; <sup>3</sup>Bedford VA Medical Center, Bedford, MA; <sup>4</sup>Mass. General Hospital, Harvard Medical School, Charlestown, MA

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 101 **Absolute Quantification of Amino Acids in Plasma Using Stable Isotope Dilution LC-MS/MS – Application to a Reference Material for Metabolomics**; Mark S. Lowenthal; Gauthier Eppe; Elizabeth A. McGaw; Nathan G. Dodder; Karen W. Phinney; *National Institute of Standards and Technology, Gaithersburg, MD*
- WP 102 **Characterizing Active Metabolism in Quiescent Human Fibroblasts**; Johanna M Scarino; Hilary A Coller; Joshua D Rabinowitz; Aster Legesse-Miller; Bryson Bennett; Xiao-Jiang Feng; *Princeton University, Princeton, NJ*
- WP 103 **GCxGC-TOFMS Data Interpretation of Metabolic Biomarkers from Diabetic and Nondiabetic Urine Utilizing Fisher Ratios Prior to Multivariate Analysis**; John R. Heim; Scott Pugh; Mark Libardoni; *LECO Corporation, St. Joseph, MI*
- WP 104 **Global Quantitation of Carbonyl Metabolites in Human Urine and Plasma Using <sup>12</sup>C-/<sup>13</sup>C-Dansylhydrazine Labeling and Nanolc/FT-ICR-MS**; Margot R. Dawe; Kevin Guo; Liang Li; *University of Alberta, Edmonton, Canada*
- WP 105 **Optimization of Mass Accuracy, Spectral Accuracy, and Resolution in Metabolite Identification Using LTQ-FT Ultra Hybrid Mass Spectrometer**; Wei Zou<sup>1</sup>; Yongdong Wang<sup>2</sup>; Ming Gu<sup>2</sup>; Vladimir Tolstikov<sup>1</sup>; <sup>1</sup>*University of California, Genome Center, Davis, CA*; <sup>2</sup>*Cerno Bioscience, Yardley, PA*
- WP 106 **Direct Single Organelle Metabolomics in a Live Single RBL-2H3 Cell by Video-Mass Spectrometry**; Hajime Mizuno; Naohiro Tsuyama; Takanori Harada; Tsutomu Masujima; *Hiroshima Univ. BioMed., Hiroshima, Japan*
- WP 107 **Comprehensive Analysis of Urinary Acylglycines Using Ultra-Performance Liquid Chromatography Coupled with a Hybrid Linear Ion Trap Mass Spectrometer**; Avalyn Lewis; Liang Li; *University of Alberta, Edmonton, Canada*
- WP 108 **Phosphate-Containing Metabolite Enrichment Using TiO<sub>2</sub> and ZrO<sub>2</sub> Microcolumns**; Hyun Ju Yoo; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- WP 109 **A Metabolomics Study of a Breast Cancer Rat Model with Compound Identification Using an Accurate Mass Retention Time Database**; Steven M. Fischer; Theodore Sana; *Agilent Technologies, Santa Clara, CA*
- WP 110 **Biomonitoring of 2-Amino-1-Methyl-6-Phenylimidazo[4,5-b]Pyridine (PhIP) and Its Carcinogenic Metabolites in Urine**; Robert J. Turesky<sup>1</sup>; Jean-Marie Fedé<sup>1</sup>; Nigel J. Gooderham<sup>2</sup>; <sup>1</sup>*Wadsworth Center, Albany, NY*; <sup>2</sup>*Imperial College London, London, UK*
- WP 111 **Uncovering the Hidden Biology of 5'-Methylthioadenosine in Cancer Research Using Mass Spectrometry**; Yibai Chen; Baiqing Tang; Warren Kruger; Anthony Yeung; *Fox Chase Cancer Center, Philadelphia, PA*
- WP 112 **Assessing the Reproducibility of Direct Infusion Mass Spectrometric Analyses using Thermometer Ions**; Paolo Lecchi; Jinghua Zhao; Wesley S. Wiggins; Tzong-Hao Chen; Greg P. Bertenshaw; Ping F. Yip; Brian C. Mansfield; John M. Peltier; *Correlogics Systems, Inc., Rockville, MD*
- WP 113 **An Optimized UPLC-QToF-MS Method for Plant Metabolomics and Secondary Metabolism**; David V. Huhman; Lloyd W. Sumner; *The Samuel Roberts Noble Foundation, Inc., Ardmore, OK*
- WP 114 **Metabolomics Analysis of *Saccharomyces Cerevisiae* by LC/MS-TOF Using a Robust Milling Protocol for Extraction**; Stefan Jenkins; Sally Webb; Theodore R. Sana; *Agilent Technologies, Santa Clara, CA*
- WP 115 **Predicting Human Developmental Toxicity Using Human Embryonic Stem Cells and Metabolomics**; Paul R. West; April M. Weir; Alan Smith; Sudeepa Bhattacharyya; Gabriela G. Cezar; *Stemina Biomarker Discovery, Madison, WI*
- WP 116 **Electrospray Ionization and Collision Induced Dissociation of tert-Butyldimethylsilyl Derivatives of Endogenous Metabolites from Human Cancer Cells**; Ruth N. Udey; Chrysoula Vasileiou; Babak Borhan; A. Daniel Jones; *Michigan State Univ., East Lansing, MI*
- WP 117 **Measuring Cell to Cell Differences in the Metabolome of Individual Neurons Using Capillary Electrophoresis with Electrospray Ionization Mass Spectrometry**; Theodore Lapainis<sup>1</sup>; Stanislav Rubakhin<sup>2</sup>; Jonathan V. Sweedler<sup>1</sup>; <sup>1</sup>*Univ. of Illinois, Urbana, IL*; <sup>2</sup>*Beckman Institute, UIUC, Urbana, IL*
- WP 118 **GC/APCI-TOF MS: A New Valuable Tool for Analysis of Biofluids in Metabolomics Studies**; Alegria Carrasco-Pancorbo<sup>1</sup>; Ekaterina Nevedomskaya<sup>1</sup>; Tiziana Pacchiarotta<sup>1</sup>; Ali Kettani<sup>2</sup>; Thomas Arthen-Engelard<sup>3</sup>; Gabriela Zurek<sup>3</sup>; Carsten Baessmann<sup>3</sup>; Oleg Mayboroda<sup>1</sup>; Andre Deelder<sup>1</sup>; <sup>1</sup>*LUMC, Leiden, NL*; <sup>2</sup>*Bruker Daltonics Inc., Fremont, CA*; <sup>3</sup>*Bruker Daltonik GmbH, 28359 Bremen, Germany*
- WP 119 **A Laboratory Information Management System (LIMS) for High-Throughput LC-MS Metabolomics-Based Biomarker Discovery**; Alan Smith<sup>1</sup>; Yuerong Zhu<sup>2</sup>; Paul R. West<sup>1</sup>; April M. Weir<sup>1</sup>; Sudeepa Bhattacharyya<sup>1</sup>; Gabriela G. Cezar<sup>1</sup>; <sup>1</sup>*Stemina Biomarker Discovery, Madison, WI*; <sup>2</sup>*BioInfoRx, Inc., Madison, WI*
- WP 120 **Challenges in the Investigation of the Metabolic Changes in *Nicotiana Attenuata* during Insect Herbivory Using an Improved HPLC-TOF-MS Method**; Matthias Schoettner<sup>1</sup>; Beatrice Berger<sup>1</sup>; Emmanuel Gaquerel<sup>1</sup>; Eva Rothe<sup>1</sup>; Birgit Schneider<sup>2</sup>; Gabriela Zurek<sup>2</sup>; Aiko Barsch<sup>2</sup>; Mike McDonell<sup>3</sup>; Ian T. Baldwin<sup>1</sup>; <sup>1</sup>*MPI Chemical Ecology, Jena, Germany*; <sup>2</sup>*Bruker Daltonik GmbH, Bremen, Germany*; <sup>3</sup>*Bruker Bioscience, Delta, BC*
- WP 121 **Identification of Metabolites in a Human Plasma Standard Reference Material by Comprehensive two Dimensional Gas Chromatography-Time-of-Flight Mass Spectrometry**; Gauthier Eppe; Elizabeth A. McGaw; Nathan G. Dodder; Bruce A. Benner Jr; Karen W. Phinney; Michele M. Schantz; *NIST, Gaithersburg, MD*
- WP 122 **Metabolomics-Based Approach to Antibiotic Resistance in *Staphylococcus Aureus***; Kyu Rhee<sup>2</sup>; Steven M. Fischer<sup>1</sup>; Elizabeth Alexander<sup>2</sup>; <sup>1</sup>*Agilent Technologies, Santa Clara, CA*; <sup>2</sup>*Weill Cornell Medical College, NY, NY*
- WP 123 **Metabolite Profiling of the Novel NIST Standard Human Plasma Using a Multi-Target Calibration Approach in GC/Quadrupole MS**; Mine Palazoglu; Sevini Shahbaz; Oliver Fiehn; *UC Davis, Davis, CA*
- WP 124 **Precision and Accuracy of Carbon Isotope Ratios is Critical for Isotopomer-Based Metabolomics: A Comparative study of FTICR and NMR**; Bogdan

## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Bogdanov<sup>1</sup>; Teresa W Fan<sup>1,2</sup>; Andrew N Lane<sup>1,2</sup>; Richard M Higashi<sup>1,2</sup>; <sup>1</sup>University of Louisville Department of Chemistry, Louisville, KY; <sup>2</sup>James Graham Brown Cancer Center, Louisville, KY
- WP 125 **Metabolomics of Volatile Compounds by a New BinBase Mass Spectral Database**; Gert Wohlgemuth; Kirsten Skogerson; Oliver Fiehn; UC Davis, Davis, CA
- WP 126 **The Metabolomic Analysis of Simvastatin Dosed Rat Plasma by GC/TOF/MS**; Henry Y. Shion<sup>1</sup>; John P. Shockcor<sup>1</sup>; Douglas Stevens<sup>2</sup>; Jose Castro-perez<sup>1</sup>; Kate Yu<sup>1</sup>; Emma Marsden-edwards<sup>2</sup>; Eleni Gika<sup>4</sup>; Georgios Theodoridis<sup>4</sup>; Ian Wilson<sup>5</sup>; <sup>1</sup>Waters Corp., Milford, MA; <sup>2</sup>Waters Corporation, manchester, UK; <sup>3</sup>Waters Corp, Holden, MA; <sup>4</sup>Aristotle University, Thessaloniki, Greece; <sup>5</sup>Astra Zeneca, Macclesfield, UK
- WP 127 **Identification of Key Metabolic Pathways in Polycystic Ovary Syndrome by Mass Spectrometry, NMR and Cavity Ring Down Spectroscopy**; Michael R. Shortreed<sup>1</sup>; Fariba Assadi-Porter<sup>1</sup>; Leah D. Whigham<sup>1</sup>; Mark E. Cook<sup>1</sup>; Butz Daniel<sup>1</sup>; Warren P. Porter<sup>1</sup>; David H. Abbott<sup>1</sup>; John L. Markley<sup>1</sup>; Hamid Eghbalnia<sup>2</sup>; Lloyd M. Smith<sup>1</sup>; <sup>1</sup>University of Wisconsin, Madison, WI; <sup>2</sup>University of Cincinnati, Cincinnati, OH
- WP 128 **Comparison and Combination of Direct Infusion- and LC-FTMS for Comprehensive Plant Metabolomics**; Jun Han<sup>1</sup>; Ryan M Danell<sup>2</sup>; Monica H Elliott<sup>1</sup>; Michael Deyholos<sup>3</sup>; Christoph H Borchers<sup>1</sup>; <sup>1</sup>UVic-GBC Proteomics Centre, Victoria, Canada; <sup>2</sup>Danell Consulting, Greenville, NC; <sup>3</sup>Dept Biological Sciences, University of Alberta, Edmonton, AB, Canada
- WP 129 **Single Cell Differential Metabolomics for Stimulated Allergy Cells**; Shoko Inoue; Hajime Mizuno; Naohiro Tsuyama; Takanori Harada; Tsutomu Masujima; Hiroshima Univ. BioMed., Hiroshima City, Japan
- WP 130 **Biomarker Discovery in a Glaucoma Study Using Targeted and Non-Targeted Metabolomics Approaches**; Richard Schneider<sup>1</sup>; Marielle Delnomdedieu<sup>1</sup>; Andy Butler<sup>1</sup>; Poulabi Banerjee<sup>1</sup>; Klaus Weinberger<sup>2</sup>; Denise Sontag<sup>2</sup>; <sup>1</sup>Pfizer Global R&D, Groton, CT; <sup>2</sup>Biocrates Life Sciences, Innsbruck, Austria
- PROTEOMICS: NEW APPROACHES, 131 - 157**
- WP 131 **Extending the Dynamic Range of Proteome Measurement in a Natural Microbial Community with IEF Protein Fractionation and Multidimensional LC-MS/MS**; Brian D. Dill<sup>1</sup>; Paul Wilmes<sup>2</sup>; Vincent Deneff<sup>2</sup>; Manesh Shah<sup>1</sup>; Michael P. Thelen<sup>3</sup>; Brian Erickson<sup>1,4</sup>; Robert Hettich<sup>1</sup>; Jill F. Banfield<sup>2</sup>; Nathan C. VerBerkmoes<sup>1</sup>; <sup>1</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>University of California, Berkeley, Berkeley, CA; <sup>3</sup>Pacific Northwest National Laboratory, West Richland, WA; <sup>4</sup>University of Tennessee, Knoxville, TN
- WP 132 **Love It or Leave It... On the Use of SDS in GELFrEE for Protein Prefractionation and MS Analysis**; Alan A. Doucette; Fang Liu; Dalhousie University, Halifax, Canada
- WP 133 **Use of Low Conductivity Buffers in Isoelectric Trapping Separations and MS Analysis**; Stephanie M. Cologna; William K. Russell; Gyula Vigh; David H. Russell; Texas A&M University, College Station, TX
- WP 134 **Proteome Prefractionation Using Three Complimentary 2D Solution Phase Platforms**; Mark J. Wall; Alan A. Doucette; Dalhousie University, Halifax, Canada
- WP 135 **Comparison of 2-D and 3-D Protein Profiling of Melanoma Cells: Depth of Analysis and Reproducibility of Protein Detection**; Huan Wang; Tony Chang-Wong; Hsin-Yao Tang; David W. Speicher; The Wistar Institute, Philadelphia, PA
- WP 136 **Protein Separation and Identification Using Thin-Layer Chromatography Coupled With Electrospray-Assisted Laser Desorption Ionization Mass Spectrometry**; Min-Zong Huang; Ya-Ting Chan; Jentaie Shiea; National Sun Yat-Sen Univ., Kaohsiung, Taiwan
- WP 137 **Surface-Enhanced Protein Analysis: Effect of Different Surfaces on Reflectron Profiling and MS/MS Analysis Using ToF-ToF Instrumentation**; Fiona Plows<sup>1</sup>; Vanitha Thulasiraman<sup>1</sup>; Matthew Hammond<sup>1</sup>; Steve Roth<sup>1</sup>; Mariana Rusa<sup>1</sup>; Diane McCarthy<sup>2</sup>; <sup>1</sup>Bio-Rad Laboratories, Inc., Hercules, CA; <sup>2</sup>Bio-Rad, Malvern, PA
- WP 138 **Selective Purification of Azide-Containing Peptides from Complex Mixtures**; Merel A. Nessen; Gertjan Kramer; Jaap Willem Back; Linde E.J. Smeenk; Jan H. van Maarseveen; Leo J. de Koning; Luitzen de Jong; Henk Hiemstra; Chris G. de Koster; University of Amsterdam, Amsterdam, Netherlands
- WP 139 **Withdrawn**
- WP 140 **Merging Single-Particle Electron Microscopy and Mass-Spectrometry-Based Proteomics - EM Carbon-Film-Assisted Endoprotease Digestion (ECAD)**; Florian M. Richter<sup>1</sup>; Monika M. Golas<sup>2</sup>; Björn Sander<sup>2</sup>; Berthold Kastner<sup>3</sup>; Reinhard Lührmann<sup>3</sup>; Holger Stark<sup>4</sup>; Henning Urlaub<sup>1</sup>; <sup>1</sup>Bioanalytical MS, MPI Biophysical Chemistry, Göttingen, Germany; <sup>2</sup>EM Research Laboratory, University of Århus, Århus, Denmark; <sup>3</sup>Cellular Biochemistry, MPI Biophysical Chemistry, Göttingen, Germany; <sup>4</sup>3D Electron Microscopy, MPI Biophysical Chemistry, Göttingen, Germany
- WP 141 **Novel Efficient and Automated On-Line Enrichment Strategy for Phosphopeptide Analysis**; Yelena Margolin<sup>1</sup>; Bogdan A. Budnik<sup>2</sup>; Emily Freeman<sup>1</sup>; William S. Lane<sup>2</sup>; Alexander R. Ivanov<sup>1</sup>; <sup>1</sup>Harvard University, HSPH, Boston, MA; <sup>2</sup>Harvard University, Cambridge, MA
- WP 142 **Dynamic Range Compression via Hexapeptide Libraries for Increased Proteome Coverage in Whole Human Saliva**; Sricharan Bandhakavi; Matthew D Stone; Timothy J Griffin; University of Minnesota, Minneapolis, MN
- WP 143 **Squid Neuron Analysis: Applying Proteomic Software Tools to LC/MS/MS Data from Species without Annotated Genomes**; Anthony J. Makusky<sup>2</sup>; Joseph A. DeGiorgis<sup>1</sup>; Jeffrey A. Kowalak<sup>2</sup>; Sanford P. Markey<sup>2</sup>; <sup>1</sup>Providence College, Providence, RI; <sup>2</sup>NIMH, NIH, Bethesda, MD
- WP 144 **Comparison of Proteogenomic Approaches Across Kingdoms: A Joint Effort in Gene Modeling**; Samuel O. Purvine<sup>1</sup>; Kim K. Hixson<sup>1</sup>; Muktak Aklujkar<sup>2</sup>; Ellen Panisko<sup>1</sup>; Lee Ann McCue<sup>1</sup>; Matthew Monroe<sup>1</sup>; Lykidis Athanasios<sup>3</sup>; Kyrpides Nikos<sup>3</sup>; Deanna Auberry<sup>1</sup>; Derek Lovely<sup>2</sup>; Grigoriev Igor<sup>3</sup>; Scott Baker<sup>1</sup>; Mary Lipton<sup>1</sup>; Gordon Anderson<sup>1</sup>; Richard D. Smith<sup>1</sup>; <sup>1</sup>Pacific Northwest National Laboratory - Battelle, Richland, WA; <sup>2</sup>University of Massachusetts, Amherst, Massachusetts; <sup>3</sup>Joint Genome Institute, Walnut Creek, California



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- WP 145 **Deconvolution of Isotopically Unresolved Multiply Charged States of Intact Proteins and Peptides;** Natalia Belyaeva; Tonya Second; *Thermo Fisher Scientific, San Jose, CA*
- WP 146 **Optimization of a LC-FTMS Proteomics Pipeline for High Throughput and Confident Peptide Identifications;** Ronald J. Moore; Aleksey Tolmachev; Anil K. Shukla; Therese R.W. Clauss; Rui Zhang; David J. Anderson; Karl K. Weitz; Brianne O. Petritis; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- WP 147 **A Novel Way to Observe Protein Interaction Environments Using the Global Proteome Machine Database;** Chengcheng Zhang; Dan Evans; Ronald Beavis; Juergen Kast; *University of British Columbia, Vancouver, Canada*
- WP 148 **A Comparison of Calibration Equations for Improving Mass Accuracy by Internal Recalibration of TOF MS/MS Data Sets From Whole-cell Digests;** Cesar Costa Vera<sup>1</sup>; André M. Deelder<sup>2</sup>; Magnus Palmblad<sup>2</sup>; <sup>1</sup>*Escuela Politécnica Nacional / Dept. de Física, Quito, Ecuador*; <sup>2</sup>*Leiden University, Leiden, Netherlands*
- WP 149 **Quantifying Multiplexed MS/MS Spectral "Chimeras" in Shotgun Proteomics;** Stephane Houel; Robert A. Abernathy; Kutralanathan Renganathan; Eric S. Witze; Chia-yu Yen; Karen Meyer-Arendt; Katheryn A. Resing; Natalie G. Ahn; William M. Old; *Univ. of Colorado, Boulder, CO*
- WP 150 **An Information-Dependent Iterative MS/MS Acquisition (IMMA) Tool for Non-redundant Protein Identification on a LC MALDI MS/MS Platform;** Haichuan Liu<sup>1</sup>; Lee Yang<sup>2</sup>; Nikita Khainovski<sup>3</sup>; Simon Allen<sup>1</sup>; Ming Dong<sup>2</sup>; Evelin D. Szakal<sup>1</sup>; Megan Choi<sup>2</sup>; Steven Hall<sup>1</sup>; Susan Fisher<sup>1</sup>; Jian Jin<sup>2</sup>; H. Ewa Witkowska<sup>1</sup>; Mark D. Biggin<sup>2</sup>; <sup>1</sup>*UCSF Sandler-Moore Mass Spectrometry Core Facility, San Francisco, CA*; <sup>2</sup>*Lawrence Berkeley National Laboratory, Berkeley, CA*; <sup>3</sup>*Consultant, Framingham, MA*
- WP 151 **Statistical Calibration of XCorr is More Important for Spectra Derived Using Data-Independent Acquisition;** Sean McIlwain; Michael J. Maccoss; William Noble; *University of Washington, Seattle, WA*
- WP 152 **Fast and Accurate Identification of Cross-Linked Peptides for the Structural Analysis of Large Protein Complexes and to Elucidate Interaction Networks;** Salman Tahir; Jimi-Carlo Bukowski-Wills; Morten Rasmussen; Juri Rappsilber; *Wellcome Trust Centre for Cell Biology, Edinburgh, UK*
- WP 153 **Development of a Mass-Spectrometry Identifiable Cross-Linker and Application to a the 34K-Actin Protein System;** Lisabeth Hoffman<sup>1</sup>; Paul Griffin<sup>1</sup>; Marcus Fechheimer<sup>1</sup>; Evgeniy Petrotchenko<sup>2</sup>; Christoph Borchers<sup>2</sup>; Jon Amster<sup>1</sup>; <sup>1</sup>*University of Georgia, Athens, GA*; <sup>2</sup>*UVic-GBC Proteomics Centre, Victoria, BC*
- WP 154 **Analysis of Crosslinked Proteins Using a Marker-Ion Labeled Crosslinker;** Tobias Beckhaus; N. Arrey Tabiwang; Florian Durst; Volker Doetsch; Michael Karas; *Goethe-University of Frankfurt, Frankfurt Am Main, Germany*
- WP 155 **Mapping Protein-Protein Interactions in Human Serum with the Protein Interaction Reporter (PIR)/Chemical Cross-Linking Strategy;** Chad Weisbrod<sup>2</sup>; Li Yang<sup>1</sup>; Xiaoting Tang<sup>2</sup>; James Bruce<sup>2</sup>; <sup>1</sup>*Washington State University, Pullman, WA*; <sup>2</sup>*University of Washington, Seattle, WA*
- WP 156 **Novel Photo-Cleavable Protein Interaction Reporter (pcPIR) Cross-Linking and Data-Dependent MS/MS Strategy for Studying Protein-Protein Interactions;** Li Yang<sup>1</sup>; Xiaoting Tang<sup>2</sup>; Gerhard Munske<sup>1</sup>; James Bruce<sup>2</sup>; <sup>1</sup>*Washington State University, Pullman, WA*; <sup>2</sup>*University of Washington, Seattle, WA*
- WP 157 **Monitoring Protein Conformation Changes as an Activating Step for Protein Interactions with Cross-Linking/MS Analysis;** Zhuo Chen<sup>1</sup>; Morten Rasmussen<sup>1</sup>; Salman Tahir<sup>1</sup>; C.A.C. Clark<sup>2</sup>; Paul Barlow<sup>2</sup>; Juri Rappsilber<sup>1</sup>; <sup>1</sup>*Wellcome Trust Centre for Cell Biology, Edinburgh, UK*; <sup>2</sup>*School of Chemistry, University of Edinburgh, Edinburgh, UK*
- SMALL MOLECULE ANALYSIS, 158 - 177**
- WP 158 **Top-Down Identification of Dihydroergoloids in Equine Plasma by MS<sup>n</sup> Ion Tree Mass Spectrometry and High Resolution Accurate Mass Analysis;** Jeffrey Rudy<sup>1</sup>; Carisa Dixon<sup>2</sup>; Cornelius Uboh<sup>1,2</sup>; Lawrence Soma<sup>2</sup>; <sup>1</sup>*PA Equine Toxicology, West Chester, PA*; <sup>2</sup>*University of Pennsylvania, Kennett Square, PA*
- WP 159 **Investigations into Drug Stability Using LC-MS-MS Data Combined with Statistical Analysis;** Stephen Rumbelow<sup>1</sup>; Johnie Brown<sup>2</sup>; <sup>1</sup>*Croda Inc, New Castle, DE*; <sup>2</sup>*Applied Biosystems, Framingham, MA*
- WP 160 **LC/MS/MS Determination of Gemcitabine Incorporation into DNA as a Useful Surrogate for Optimizing Drug Exposure;** Barry R. Jones<sup>1</sup>; Barry Lutzke<sup>2</sup>; Enaksha R Wickremsinhe<sup>2</sup>; Bradley L. Ackermann<sup>2</sup>; Angela M. Bones<sup>2</sup>; Angela B. Freeman<sup>2</sup>; Susan E. Pratt<sup>2</sup>; Christopher A. Schmalz<sup>2</sup>; Gary A. Schultz<sup>1</sup>; <sup>1</sup>*Advion BioServices, Inc., Ithaca, NY*; <sup>2</sup>*Eli Lilly & Company, Indianapolis, IN*
- WP 161 **Unambiguous Assignment of the Elemental Composition through the Use of a Fuzzy Logic Algorithm;** Richard Gedamke<sup>1</sup>; Serhiy Hnatyshyn<sup>1,2</sup>; <sup>1</sup>*Bristol-Myers Squibb, New Brunswick, NJ*; <sup>2</sup>*BMS Co., Princeton, NJ*
- WP 162 **Laser Desorption Mass Spectrometric Analysis of Paints and Pigments Used by Modern Artists;** Daniel P. Kirby; Narayan Khandekar; Lynn Lee; *Straus Center, Harvard, Cambridge, MA*
- WP 163 **Gas Chromatography SALDI: Importance of Proton Affinity and Laser Fluence to Sensitivity and Ion Fragmentation;** Sergey Alimpiev<sup>2</sup>; Alexander Grechnikov<sup>3</sup>; Jan Sunner<sup>1</sup>; Alexey Borodkov<sup>3</sup>; Serfey Nikiforov<sup>2</sup>; Yaroslav Simanovsky<sup>2</sup>; <sup>1</sup>*University of Portsmouth, Portsmouth, UK*; <sup>2</sup>*Prokhorov General Physics Inst Russ Acad Sci, Moscow, Russia*; <sup>3</sup>*Vernadsky Institute Geochemistry Analytical Chem, Moscow, Russia*
- WP 164 **Distinguishing Regioisomers of Carboxylated Aromatic Analytes via Atmospheric Pressure Chemical Ionization and Tandem Mass Spectrometry;** Lucas Amundson<sup>1</sup>; Steven Habicht<sup>1</sup>; Vanessa Gallardo<sup>1</sup>; Mingkun Fu<sup>1</sup>; Ryan Shea<sup>2</sup>; Allen Mossman<sup>2</sup>; Hilikka Kenttamaa<sup>3</sup>; Hilikka Kenttamaa<sup>3</sup>; <sup>1</sup>*Purdue University, West Lafayette, IN*; <sup>2</sup>*BP Chemicals, Naperville, IL*; <sup>3</sup>*Chemistry Department, West Lafayette, IN*
- WP 165 **A New Robust Library Search Algorithm for LC-MS/MS of Small Molecules and its Spectral Library Sharing Mechanism;** Yann Mauron<sup>1</sup>; Roman Mylonas<sup>1</sup>; Alexandre Masselot<sup>2</sup>; Pierre-Alain Binz<sup>1,2</sup>; Marc Fathi<sup>3</sup>; <sup>1</sup>*University of Geneva, Geneva, Switzerland*; <sup>2</sup>*Novartis, Basel, Switzerland*; <sup>3</sup>*Novartis, Basel, Switzerland*



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Veronique Viette<sup>4</sup>; Denis F Hochstrasser<sup>3,5</sup>; Frederique Lisacek<sup>1</sup>; <sup>1</sup>Swiss Institute of Bioinformatics, Geneva, Switzerland; <sup>2</sup>Geneva Bioinformatics (GeneBio), Geneva, Switzerland; <sup>3</sup>Geneva University Hospitals, Geneva, Switzerland; <sup>4</sup>ADMed Foundation, La Chaux-de-Fonds, Switzerland; <sup>5</sup>Swiss Center for Applied Human Toxicology, Geneva, Switzerland
- WP 166 **New Qualitative Screening Software for Automated Small Molecule Multi-Target Analysis;** Graham A. McGibbon<sup>1</sup>; Mark A. Bayliss<sup>1</sup>; Vitaly Lashin<sup>2</sup>; <sup>1</sup>Advanced Chemistry Development Inc., Toronto, ON; <sup>2</sup>Advanced Chemistry Development, Ltd, Moscow, Russia
- WP 167 **Determination of Relative Affinities of Staurosporine Derivatives for Quinone Reductase-2 Using Ultrafiltration of LC-MS;** Yongsoo Choi<sup>1</sup>; Megan Sturdy<sup>1</sup>; Katherine Maloney<sup>2</sup>; Sang Jip Nam<sup>2</sup>; Shunyan Mo<sup>1</sup>; Andrew D Mesecar<sup>1</sup>; John M Pezzuto<sup>3</sup>; William Fenical<sup>2</sup>; Jimmy Orjala<sup>1</sup>; Richard B. van Breemen<sup>1</sup>; <sup>1</sup>University of Illinois College of Pharmacy, Chicago, IL; <sup>2</sup>University of California, La Jolla, California; <sup>3</sup>University of Hawaii at Hilo, Hilo, Hawaii
- WP 168 **Live Single Cell Video-Mass Spectrometry for Straightforward Analysis of Cellular Pathways;** Tsutomu Masujima; Naohiro Tsuyama; Hajime Mizuno; *Hiroshima Univ. BioMed., Hiroshima, Japan*
- WP 169 **Mass Spectrometric Analysis of Small Molecules Using Nano-Assisted Laser Desorption/Ionization (NALDI) MS;** Chul Yoo<sup>1</sup>; Michael Ronk<sup>1</sup>; David J. Semin<sup>1</sup>; Sam Fu<sup>2</sup>; Joseph P. Fox<sup>2</sup>; Gongyi Shi<sup>2</sup>; <sup>1</sup>Amgen, Inc., Thousand Oaks, CA; <sup>2</sup>Bruker Daltonics, Fremont, CA
- WP 170 **Purity Analysis of HTS Compounds for the National Toxicology Program Utilizing Liquid Chromatography Mass Spectrometry;** Lisa L. Haney<sup>1</sup>; Leslie L. Moody<sup>1</sup>; Kim T. Thornton<sup>1</sup>; Bart A. O'Brien<sup>1</sup>; Roger K. Harris<sup>1</sup>; Peter J. Schebler<sup>1</sup>; Joseph W. Algaier<sup>1</sup>; Beby Jayaram<sup>2</sup>; Cynthia S. Smith<sup>2</sup>; <sup>1</sup>Midwest Research Institute, Kansas City, MO; <sup>2</sup>National Toxicology Program - NIEHS, Research Triangle Park, NC
- WP 171 **A Sensitive LC-MS/MS Method for the Determination of KX2-391 in Human Plasma;** Xinping Fang<sup>1</sup>; Dawei Zhou<sup>1</sup>; Anh Pharm<sup>1</sup>; David, G. Hangauer<sup>2</sup>; Jinn Wu<sup>1</sup>; <sup>1</sup>XenoBiotic Laboratories, Inc., Plainsboro, NJ; <sup>2</sup>Kinex Pharmaceuticals, LLC, Buffalo, NY
- WP 172 **New Algorithm for Determination of Isotopic Envelopes on Labelled Compounds, Comparison of MS and MS/MS Platforms for Isotopic Abundance Measurements;** Gustaf Hulthe; Sofia Essén; Magnus Johansson; *Medicinal Chemistry, Mölndal, Sweden*
- WP 173 **Monitoring Levels of Salsolinol and Neurotransmitters in the Brain of Alcohol Preferring Rats Exposed to Alcohol and Treated with Ceftriaxone;** Youssef Sari<sup>2</sup>; Loubna A. Hammad<sup>1</sup>; Marwa M. Saleh<sup>1</sup>; George V. Rebec<sup>2</sup>; Yehia Mechref<sup>1</sup>; <sup>1</sup>Department of Chemistry, Indiana University, Bloomington, IN; <sup>2</sup>Department of Psychological, Indiana University, Bloomington, IN
- WP 174 **Feasibility and Reliability of Low and High-Resolution MS Approaches for Accurate Mass and Molecular Formula Determination in Drug Discovery;** Vladimir Capka<sup>1</sup>; Ming Gu<sup>2</sup>; <sup>1</sup>Astra Zeneca R&D Boston, Waltham, MA; <sup>2</sup>Cerno Bioscience, Yardley, PA
- WP 175 **Optimizing Mass Spectrometric Detection for Ion Chromatography: I. Common Anions and Organic Acids;** Jinyuan Wang; Stacy Henday; William C. Schnute; *Dionex Corporation, Sunnyvale, CA*
- WP 176 **Investigation of Infrared Multiphoton Dissociation with Potential Application to Pharmaceutically-Relevant Compounds;** K Wayne Taylor; *Lilly, Indianapolis, IN*
- WP 177 **Mass Spectral Method for the Quantification of Host-Guest Interactions Including Ionophore-Siderophore Assemblies;** Esther M. Tristani; George R. Dubay; Alvin L. Crumbliss; *Duke University, Durham, NC*

#### IMAGING MS: PEPTIDES AND PROTEINS, 178 - 195

- WP 178 **Spatially-Resolved Proteomic Analysis of Chick Heart Valves;** Andrew K. Gelasco<sup>1</sup>; Angus C. Grey<sup>2</sup>; Ricardo A. Moreno-Rodriguez<sup>1</sup>; Edward L. Krug<sup>1</sup>; Kevin L. Schey<sup>2</sup>; <sup>1</sup>Medical University of South Carolina, Charleston, SC; <sup>2</sup>Vanderbilt University, Nashville, TN
- WP 179 **MALDI Imaging of Prostate Cancer Tissue Toward Validation of Biomarker Identification;** Christopher Hattan<sup>1</sup>; Barbara Leinweber<sup>1</sup>; Raymond Nagle<sup>2</sup>; Jaime Gard<sup>2</sup>; Gary Pestano<sup>3</sup>; Phillip Miller<sup>3</sup>; Jan Froehlich<sup>3</sup>; Gongyi Shi<sup>4</sup>; Gary Kruppa<sup>4</sup>; George Tsapraillis<sup>5</sup>; Serrine S. Lau<sup>1</sup>; <sup>1</sup>Univ of Arizona, Pharmacy, Tucson, AZ; <sup>2</sup>Univ of Arizona, Medicine, Tucson, AZ; <sup>3</sup>Ventana Medical Systems, Tucson, AZ; <sup>4</sup>Bruker Daltonics, Billerica, MA; <sup>5</sup>Center for Toxicology, Tucson, AZ
- WP 180 **Mapping VEGF Splice Variants in the Rat Model of Retinopathy by MALDI IMS;** Joey C. Latham; Susan E. Yanni; John S. Penn; Richard M. Caprioli; *Vanderbilt Univ Sch of Med, Nashville, TN*
- WP 181 **Imaging Therapeutic "Decoy" Oligodeoxynucleotide within Tissue Sections by MALDI MS;** Rita Casadonte<sup>1</sup>; Joseph M. Amann<sup>1</sup>; Jennifer R. Grandis<sup>2</sup>; David P. Carbone<sup>1</sup>; Richard M. Caprioli<sup>1</sup>; <sup>1</sup>Vanderbilt Univ Sch of Med, Nashville, TN; <sup>2</sup>University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania
- WP 182 **MALDI Mass Spectrometric Imaging of Nervous Tissue Using the Stretched Sample Method;** Tyler A Zimmerman<sup>1</sup>; Stanislav Rubakhin<sup>2</sup>; Elena Romanova<sup>1</sup>; Jonathan Sweedler<sup>1</sup>; <sup>1</sup>University of Illinois, Urbana, IL; <sup>2</sup>Beckman Institute, UIUC, Urbana, IL
- WP 183 **Utilizing NIMS and MALDI Imaging Mass Spectrometric Techniques for Lipidomic and Peptidomic Studies of Crab and Murine Brain;** Robert Sturm<sup>1</sup>; Ruibing Chen<sup>1</sup>; Hin-Koon Woo<sup>2</sup>; Oscar Yanes<sup>2</sup>; Gary Siuzdak<sup>2</sup>; Lingjun Li<sup>1</sup>; <sup>1</sup>University of Wisconsin-Madison, Madison, WI; <sup>2</sup>The Scripps Research Institute, La Jolla, CA
- WP 184 **Imaging Mass Spectrometry Reveals Peptide Partitioning in MALDI Samples;** Delphine Debois; Pascale Lemaire; Loic Quinton; Valerie Gabelica; Edwin De Pauw; *University of Liege, LSM-CART, Liège, Belgium*
- WP 185 **Visualization of Mouse Cardiovascular Modeling from Embryonic Day 14.5 to Adult by High Resolution MALDI Imaging;** Peggi Angel<sup>1</sup>; Pierre Chaurand<sup>1</sup>; Joey V. Barnett<sup>1,2</sup>; H. Scott Baldwin<sup>1,2</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>Vanderbilt University Medical Center, Nashville, Tennessee; <sup>2</sup>Vanderbilt Univ Sch of Med, Nashville, TN

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- WP 186 **Comparison of Laser Desorption 7.87 eV Postionization Mass Spectrometry with MALDI for Detection of Peptides in Bacterial Biofilms;** Artem Akhmetov<sup>1</sup>; Gerald Gasper<sup>1</sup>; Chhavi Bhardwaj<sup>1</sup>; Peter Koin<sup>1</sup>; Ross Carlson<sup>2</sup>; Jerry F. Moore<sup>3</sup>; Luke Hanley<sup>1</sup>; <sup>1</sup>University Illinois Chicago, Chicago, IL; <sup>2</sup>Montana State University, Bozeman, MT; <sup>3</sup>MassThink LLC, Naperville, IL
- WP 187 **Analysis of Potential Biomarkers in Human Ovarian Cancer Using MALDI Imaging Mass Spectrometry;** Yanfeng Chen; Ying Liu; Rebecca Shaner; DeEtte Walker; John McDonald; Alfred Merrill; Mark Cameron Sullards; *Georgia Institute of Technology, Atlanta, GA*
- WP 188 **MALDI Imaging of Posttranslationally Modified Proteins;** Kevin L. Schey; Angus Grey; *Vanderbilt University, Nashville, TN*
- WP 189 **Isobaric Mass Tags for Quantitative Multiplexed Imaging of mRNA Distributions by *in-situ* Hybridisation and MALDI-MS;** Emrys A Jones<sup>1</sup>; Adam McMahon<sup>1</sup>; Andrew Thompson<sup>2</sup>; Emmanuel Raptakis<sup>3</sup>; <sup>1</sup>University of Manchester, Manchester, UK; <sup>2</sup>Trillion Genomics, Cambridge, UK; <sup>3</sup>Kratos Analytical, Manchester, UK
- WP 190 **Multiple Sequential Imaging of PL's, Proteins, and Peptides on a Single Tissue Section using MALDI IMS;** William Hardesty<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>Vanderbilt Univ Sch of Med, Nashville, TN
- WP 191 **Imaging Mass Spectrometry Comparative Analysis of Human Pancreatic Adenocarcinoma, Insulinoma and Control;** Alexandra van Remoortere; René J.M. van Zeijl; Stefan M. Willems; André M. Deelder; Liam McDonnell; *LUMC, Leiden, Netherlands*
- WP 192 **Chemical Molecular Imaging for Nanoparticles Induced Brain and Lung Damage Animal Models by MALDI-TOF MS;** Jen-kun Chen; Yi-Ting Wu; Jui-Ping Li; Chia-Hua Chen; Chung-Shi Yang; *National Health Research Institutes, Zhunan, Taiwan*
- WP 193 **FT-ICR and SIMS-TOF Imaging Mass Spectrometry for the Characterization of Human Pancreatic Disease;** Donald F. Smith<sup>1</sup>; Marc C. Duursma<sup>1</sup>; Michael Hanselmann<sup>2</sup>; Fred A. Hamprecht<sup>2</sup>; Nathalia A. Giese<sup>2</sup>; Ron M.A. Heeren<sup>1</sup>; <sup>1</sup>FOM-AMOLF, Amsterdam, Netherlands; <sup>2</sup>University of Heidelberg, Heidelberg, Germany
- WP 194 **Enhancement of Au and Silica Nanoparticle Matrices for Tissue Imaging utilizing MALDI-TOF MS;** Jeremy D. Post<sup>1</sup>; Alice Delvolve<sup>1</sup>; J. Albert Schultz<sup>2</sup>; Steven Oldenburg<sup>3</sup>; Amina S. Woods<sup>4</sup>; <sup>1</sup>NIH/NIDA-IRP, Baltimore, MD; <sup>2</sup>Ionwerks, Inc., Houston, TX; <sup>3</sup>nanoComposix, San Diego, CA; <sup>4</sup>NIDA IRP, NIH, Baltimore, MD
- WP 195 **LC-SIMS: The Doors Wide Open for Biological Applications of SIMS in Imaging Mass Spectrometry;** Luke MacAleese; Leendert A. Klerk; Donald F. Smith; Marc C. Duursma; Ron M.A. Heeren; *FOM Institute AMOLF, Amsterdam, Netherlands*
- WP 196 **Gating in Ion Mobility Spectrometry;** Bill Siems<sup>1</sup>; Eric J. Davis<sup>1</sup>; Kristyn Roscioli<sup>1</sup>; Christina Crawford<sup>1</sup>; Herbert H Hill<sup>2</sup>; <sup>1</sup>Washington State University, Pullman, WA; <sup>2</sup>Washington State Universtiy, Pullman, WA
- WP 197 **Tissue Imaging of Pharmaceuticals by Ion Mobility Mass Spectrometry;** Stacey R. Oppenheimer<sup>1</sup>; Tasneem Bahrainwala<sup>2</sup>; Emmanuelle Claude<sup>2</sup>; <sup>1</sup>Pfizer, Groton, CT; <sup>2</sup>Waters Corporation, Beverly, MA
- WP 198 **Development and Evaluation of a DMS-Based Method for the Detection of Insecticides;** Erick Molina<sup>1</sup>; Erkinjon Nazarov<sup>3</sup>; Ulrich R. Bernier<sup>2</sup>; Richard A. Yost<sup>1</sup>; <sup>1</sup>University of Florida, Gainesville, FL; <sup>2</sup>USDA-ARS-CMAVE, Gainesville, FL; <sup>3</sup>Sionex, Bedford, MA
- WP 199 **Ion/Ion Reaction Effects on the Conformation of Proteins, Peptides, and Small Biomolecules;** Derrick L. Morast<sup>1</sup>; R. Sam Houk<sup>1</sup>; Gregg Schieffer<sup>1</sup>; Ethan R. Badman<sup>2</sup>; <sup>1</sup>Iowa State University, Ames, IA; <sup>2</sup>Hoffmann-La Roche Inc., Nutley, NJ
- WP 200 **Structural Transitions of the [M + 10H]<sup>10+</sup> of Ubiquitin by Overtone Mobility Spectrometry (OMS);** Sunyoung Lee; Fabiane M Nachtigall; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 201 **Hydrogen/Deuterium Exchange of Mobility Selected Ubiquitin Ions Using a High-Resolution Circular Ion Mobility Spectrometry Instrument in Ring-Down Mode;** Rebecca S. Glaskin; Samuel Merenbloom; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 202 **Developing Techniques for Characterizing the Serum Glycoproteome with LC-IMS-MS;** Nicholas A Pierson; Huilin Shi; Stephen Valentine; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 203 **Differential Mobility Spectrometer Coupled with LTQ FT to Evaluate Improvement of Proteomic Coverage of Complex Protein Mixtures;** Sergei Ilchenko<sup>1</sup>; Daniela M Schlatter<sup>1</sup>; Mark Chance<sup>1</sup>; Evgeny V Krylov<sup>2</sup>; Erkinjon Nazarov<sup>2</sup>; <sup>1</sup>Case Western Reserve University, Cleveland, OH; <sup>2</sup>Sionex Corp., Bedford, MA
- WP 204 **Accurate and Reproducible Reduced Mobility Values in Ion Mobility Spectrometry;** Christina L. Crawford<sup>1</sup>; Roberto Fernandez Maestre<sup>1</sup>; Charles S. Harden<sup>2</sup>; Vincent M. McHugh<sup>3</sup>; William F. Siems<sup>1</sup>; Herbert H. Hill<sup>1</sup>; <sup>1</sup>Washington State University, Pullman, WA; <sup>2</sup>SAIC/ECBC Operations, Aberdeen Proving Ground, MD; <sup>3</sup>US Army Edgewood Chem Bio Center, Aberdeen Proving Ground, MD
- WP 205 **Developing IMS-IMS-MS for Analysis of Large Protein Complexes;** Natalya Atlasevich; Joshua Maze; Brian Bohrer; Martin Jarrold; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 206 **Ion Mobility-Mass Spectrometry: A Novel Approach to the Analysis of Gold Monolayer Protected Clusters;** Kellen M. Harkness; David E. Cliffl; John A. Mclean; *Vanderbilt University, Nashville, TN*
- WP 207 **Accelerated Detection of Biomarkers Using DMS-Prefiltered Mass Spectrometry;** Stephen L. Coy<sup>1</sup>; Evgeny V Krylov<sup>1</sup>; Erkinjon Nazarov<sup>2</sup>; <sup>1</sup>Sionex Corp., Bedford, MA; <sup>2</sup>Sionex, Bedford, MA
- WP 208 **Middle-Down Sequencing of Monoclonal Antibodies by Ion Mobility Q-TOF Mass Spectrometry;** Dhanashri Bagal<sup>1</sup>; Himanshu Gadgil<sup>2</sup>; Paul Schnier<sup>1</sup>; <sup>1</sup>Amgen, Thousand Oaks, CA; <sup>2</sup>Amgen Inc, Seattle, WA
- WP 209 **Ion Mobility-Mass Spectrometry Measurements of Insulin;** Rune Salbo<sup>1</sup>; Claus G Nielsen<sup>1</sup>; Ingrid, V. Pettersson<sup>1</sup>; Kim F. Haselmann<sup>1</sup>; Iain D G Campuzano<sup>2</sup>; Peter, K. Nielsen<sup>1</sup>; Helle Naver<sup>1</sup>; <sup>1</sup>Novo Nordisk, Maaloev, Denmark; <sup>2</sup>Waters Corporation, Manchester, UK
- WP 210 **Collision Cross-Section Calculation of Serine Octamer Clusters Using Travelling Wave-Based**

#### ION MOBILITY, 196 - 217

- WP 196 **Gating in Ion Mobility Spectrometry;** Bill Siems<sup>1</sup>; Eric J. Davis<sup>1</sup>; Kristyn Roscioli<sup>1</sup>; Christina Crawford<sup>1</sup>; Herbert H Hill<sup>2</sup>; <sup>1</sup>Washington State University, Pullman, WA; <sup>2</sup>Washington State Universtiy, Pullman, WA
- WP 197 **Tissue Imaging of Pharmaceuticals by Ion Mobility Mass Spectrometry;** Stacey R. Oppenheimer<sup>1</sup>; Tasneem

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Ionmobility Mass Spectrometer;** Gustavo H M F Souza<sup>1,2</sup>; Marcos N Eberlin<sup>3</sup>; <sup>1</sup>Waters Corporation, Sao Paulo, Brazil; <sup>2</sup>Waters Corporation, Manchester, UK; <sup>3</sup>Thermo Lab UNICAMP, Campinas, SP, Brazil
- WP 211 **Determining the Structures and the Assembly of AAA+ Motor, Sliding Clamp Loader By Ion Mobility and Tandem Mass Spectrometry;** Ahyoung Park; Brandon Ruotolo; Argyris Politis; Daniel Barsky; Carol Robinson; *University of Cambridge, Cambridge, UK*
- WP 212 **Development of a Circular Drift Tube for High Resolution Ion Mobility Spectrometry;** Samuel I. Merenbloom; Rebecca S. Glaskin; Zachary B. Henson; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 213 **Periodic Focusing Field Electrodes for High Resolution Ion Mobility Spectrometry;** Ryan Blase; Kent Gillig; David H. Russell; *Texas A&M University, College Station, TX*
- WP 214 **Withdrawn**
- WP 215 **Identifying Human Plasma N-linked Glycan Isomers Using Combined Ion Mobility-Mass Spectrometry and Molecular Modeling Methods;** Manolo D. Plasencia; V. Blake Champlin; David E. Clemmer; *Indiana University, Bloomington, IN*
- WP 216 **Separation of Isomeric Carotenoids Using Atmospheric Pressure Chemical Ionization Ion Mobility Spectrometry-Time-of-Flight Mass Spectrometry;** Linlin Dong<sup>1</sup>; Roderick Davis<sup>2</sup>; Richard B. Van Breemen<sup>1</sup>; <sup>1</sup>University of Illinois College of Pharmacy, Chicago, IL; <sup>2</sup>Univ. of Illinois at Chicago Research Resources Ctr, Chicago, IL
- WP 217 **Application of Ion Mobility Techniques in the Analysis of the Impurities in a Mixture of Liquid Crystals;** Sung-Chan Jo<sup>1</sup>; Kyoung-Wook Kim<sup>2</sup>; Weonsik Oh<sup>1</sup>; <sup>1</sup>Samsung Electronics Co., Ltd., Yongin, South Korea; <sup>2</sup>Waters Korea Limited, Seoul, Korea
- QUANTITATION: SMALL MOLECULE, 218 - 246**
- WP 218 **LC/MS/MS Determination of Emtricitabine and Tenofovir in Human Plasma;** Lina Tang; Hsun-Wen Chou; Venketraman Junnotula; Yuwen Zhao; Kris Singleton; Jamie Zhao; Yuan-shek Chen; Kumar Ramu; *QPS, LLC, Newark, DE*
- WP 219 **Evaluation of Free and Protein-Bound 3-Nitrotyrosine in Human Plasma By Isotope Dilution LC-QqQ with an Artificial Nitration-Free Proteolysis;** Thierry Delatour; Janique Richoz; Christophe Cavin; Aurélien Desmarchelier; *Nestle Research Center, Lausanne, Switzerland*
- WP 220 **Studies of Intestinal Absorption and Serum Levels of Novel Chemopreventive Agents;** Soyoun Ahn<sup>1</sup>; Mark S Cushman<sup>2,2</sup>; John M Pezzuto<sup>2</sup>; Richard B. Van Breemen<sup>1</sup>; <sup>1</sup>University of Illinois, Chicago, IL; <sup>2</sup>Purdue University, West Lafayette, IN
- WP 221 **Increasing the Selectivity of Clenbuterol Detection in Urine Samples By Using MS3 on a Hybrid Quadrupole-Linear Ion Trap;** Mauro Aiello; Rolf Kern; Beth Fernandez; Loren Olson; *Applied Biosystems, San Jose, CA*
- WP 222 **Software Assisted Chiral Chromatographic Method Development for the Quantitation of Four Chiral Drugs in Human Plasma using LC/MS/MS;** Patrick Bennett; Min Meng; Lisa Rohde; *Tandem Labs, Salt Lake City, UT*
- WP 223 **Application of High pH Mobile Phase in LC-ESI(+)/MS/MS under HILIC Mode to Reach Optimal**
- Sensitivity for Bioanalysis;** Eugénie-Raphaëlle Bérubé; Jean-Nicholas Mess; Milton Furtado; Fabio Garofolo; *Algorithme Pharma Inc., Laval (Montreal), Quebec, Canada*
- WP 224 **A Novel Algorithm for Quantitative LC Peak Integration;** Lyle Burton; Gordana Ivosev; Lau Adam; Ron Bonner; *MDS Analytical Tech, Sciex, Concord, Canada*
- WP 225 **Trace Analysis (ppt) Via LC/MS/MS to Assess Removal of Various Pharmaceutical Compounds by Activated Carbon Based Drinking Water Filters;** Hong Jian Dai; Todd Branch; Peter Beerse; Stanley Cummins; Tom Huggins; *Procter & Gamble, Mason, OH*
- WP 226 **Comparison of Linear Ion Trap and Triple Quadrupole Mass Analyzer for Quantitation: An Antibiotics Case Study;** Susie Dai<sup>1,2</sup>; Timothy Herrman<sup>1,2</sup>; <sup>1</sup>Office of the Texas State Chemist, College Station, TX; <sup>2</sup>Texas A&M University, College Station, TX
- WP 227 **Development and Validation of an LC-MS/MS Method for Farnesol Quantitation in Candida Albicans Biofilms;** Marie-Claude Denis; Karine Venne; Annie Leduc; Jean Barbeau; Alexandra Furtos; *Universite de Montreal, Montreal, Canada*
- WP 228 **HPLC/MS/MS with In-Source Collision-Induced Dissociation for Direct Measurement of PEGylated Compounds in Biological Matrices;** Mark Dreyer<sup>1</sup>; Linda Chen<sup>1</sup>; Dale Schoener<sup>2</sup>; Oanh Dang<sup>2</sup>; <sup>1</sup>Elan Pharmaceuticals, South San Francisco, CA; <sup>2</sup>Alta Analytical Laboratory, El Dorado Hills, CA
- WP 229 **Quantification of Illegal Drugs in Urine Using Magnetic Nanoprobes and MALDI-TOF MS;** Chi-Yi Ho<sup>1</sup>; Po-Chiao Lin<sup>2</sup>; Chun-Cheng Lin<sup>2</sup>; Ying-Wei Lu<sup>2</sup>; Mei-Chun Tseng<sup>3</sup>; Yu-Ju Chen<sup>3</sup>; Ming-Ren Fuh<sup>1</sup>; <sup>1</sup>Department of Chemistry, Soochow University, Taipei, Taiwan; <sup>2</sup>Department of Chemistry, Tsing Hua University, Hsinchu, Taiwan; <sup>3</sup>Institute of Chemistry, Academia Sinica, Taipei, Taiwan
- WP 230 **500 Discovery Samples a Day: Maximizing Throughput and Minimizing Matrix Effects in Discovery Analysis;** Rob Horton; Gerard Dalglisch; Edward Brewer; *Tandem Labs, West Trenton, NJ*
- WP 231 **Preparation of Quantum Dots and Concentration Measurements via ICP-MS for The Application of Neurotransmitter Sensing;** Jong Sung Kim; Jeong Ha Yoo; *Kyungwon University, Seongnam, South Korea*
- WP 232 **Summation of Multiple Transitions Monitoring in LC/MS/MS to Enhance Signal to Noise and to Reduce Variability;** François Viel; Isabelle M. Levesque; Sebastien Gagne; Sylvain Lachance; Philippe Belanger; Jean Couture; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- WP 233 **Quantitation without Standards via Electrosprayed Clusters: Determining Solution Molar Fractions of Peptides and Small Molecules;** Ryan D. Leib; Tawnya G. Flick; Evan R. Williams; *University of California, Berkeley, CA*
- WP 234 **Overcome Non-Phospholipid Related Matrix Effect and Continuing Improvement for the Quantification of Naltrexone and 6β-Naltrexol in Human Plasma by LC/MS/MS;** Min Meng; Lin Tan; Troy Volker; Ryan Alder; Patrick Bennett; *Tandem Labs, Salt Lake City, UT*

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 235 **A Unique Approach for ‘Top down Analysis’ of Melamine in Herbal Matrix Using HCD and High Resolution Mass Spectrometry**; Ge Xiao Wei<sup>1</sup>; Nargund Sandy<sup>2</sup>; Martina Monique<sup>2</sup>; <sup>1</sup>Health Sciences Authority, Singapore, Singapore; <sup>2</sup>Alpha Analytical [S] Pte Ltd, Singapore, Singapore
- WP 236 **The Simultaneous Detection of Metabolites and Quantification of Drug Molecules in Bioanalytical Assays**; Rob Plumb<sup>1</sup>; Paul Rainville<sup>1</sup>; Joanne Mather<sup>2</sup>; Ian Wilson<sup>3</sup>; <sup>1</sup>Waters, Milford, MA; <sup>2</sup>waters corporation, Milford, MA; <sup>3</sup>Astra Zeneca, Macclesfield, UK
- WP 237 **Ways to Handle Matrix Effect in Quantitative Bio-Analysis in Real Time Analysis**; Ashutosh Pudage; Noel Gomes; *Accutest Research Laboratory, Navi Mumbai, India*
- WP 238 **Hydrophobic Interaction Chromatography (HILIC) Analysis of 6MPR For Targeted Drug Delivery to the Brain Using Gold Nanoparticles (AuNP) via LC/MS/MS**; Brian Rago; Julie Poe; Lisa Buchholz; Ayman El-Kattan; Charles Rotter; Manthena Varma; Paul Nkansah; *Pfizer, Groton, CT*
- WP 239 **Monitoring Matrix Interferences in Biological Samples Utilizing Dual Scan MRM Mode Mass Spectrometry**; Paul Rainville<sup>1</sup>; Robert Plumb<sup>2</sup>; Joanne Mather<sup>3</sup>; <sup>1</sup>Waters, Milford, MA; <sup>2</sup>Imperial College, London, UK; <sup>3</sup>waters corporation, Milford, MA
- WP 240 **Development of the New Method for Quantitation and Screening Analysis of Organic Acids by Means of Using IC/MS/MS**; Kaori Saito<sup>1</sup>; Tomoko Hamasaka<sup>1</sup>; Yoko Yamagishi<sup>1</sup>; Shigeru Sakamoto<sup>1</sup>; Takahiro Suzuki<sup>2</sup>; <sup>1</sup>Thermo Fisher Scientific K.K., Yokohama, Japan; <sup>2</sup>Nippon Dionex K.K., Tokyo, Japan
- WP 241 **Quantitative Bioanalysis using Time of Flight Mass Spectrometry and Fast Liquid Chromatography**; Gunnar Stenhagen; *AstraZeneca R&D, Mölndal, Sweden*
- WP 242 **Withdrawn**
- WP 243 **Successful Applications of Autosampler Needle Seat Back-Flush to Reduce Carryover Using Common HPLC Hardware When Standard Washing Procedures Are Ineffective**; Marie-Pierre Taillon; Nikolay Youhnovski; Simon Robert; Louis-Philippe Morin; Milton Furtado; Fabio Garofolo; *Algorithm Pharma Inc., Laval (Montreal), Quebec, Canada*
- WP 244 **Quadratic Behavior in Standard Curves in LC-MS/MS Bioanalytical Assays: Is a Wide Curve Range the Root Cause?** Long Yuan; Yunlin Fu; Anne-Francoise Aubry; Duxi Zhang; *Bristol-Myers Squibb, Princeton, NJ*
- WP 245 **Development of an Automation Assisted Generic Approach for LC-MS/MS Method Validation**; Jie Zhang; Shimin Wei; H Tom Smith; Francis Tse; *DMPK, Novartis Pharmaceuticals Corp., East Hanover, NJ*
- WP 246 **Multidimensional Molecular Identification by Laser Control Mass Spectrometry**; Xin Zhu; *East Lansing, MI*
- WP 247 **Evaluation of 3-Iodothyronamine (TIAM) in Cell Preparation, Tissue Homogenates and Biological Fluids by HPLC-ESI-MS-MS**; Alessandro Saba<sup>1</sup>; Grazia Chiellini<sup>2</sup>; Sabina Frascarelli<sup>2</sup>; Sandra Ghelardoni<sup>2</sup>; Maja Marchini<sup>2</sup>; Andrea Raffaelli<sup>3</sup>; Riccardo Zucchi<sup>2</sup>; <sup>1</sup>University of Pisa - Chemistry Dept., Pisa, Italy; <sup>2</sup>University of Pisa - Medical School, Pisa, Italy; <sup>3</sup>CNR ICCOM, Pisa, Italy
- WP 248 **Application of Diels-Alder Derivatization and 96 Well Plate Solid Phase Extraction to Increase the Throughput of 25-Hydroxyvitamin D3 Analysis**; Pavel A. Aronov<sup>1</sup>; Jun Yang<sup>2</sup>; Laura M. Hall<sup>2</sup>; Charles B. Stephensen<sup>2</sup>; Bruce D. Hammock<sup>2</sup>; <sup>1</sup>Stanford, Stanford, CA; <sup>2</sup>University of California, Davis, CA
- WP 249 **Rapid Analysis of Catecholamines and Metanephrines in Biological Fluids by Automated Online Solid-Phase Extraction LC/MS/MS**; Sylvie Beaudet<sup>1</sup>; Martin Sibum<sup>2</sup>; Luce Boulanger<sup>2</sup>; <sup>1</sup>MDS Analytical Technologies, Concord, Canada; <sup>2</sup>Spark Holland Inc., Emmen, Netherlands; <sup>3</sup>CHUM St-Luc Hospital, Montreal, Canada
- WP 250 **Development of a Reference Method for B6 Vitamer Pyridoxal 5'-Phosphate in Serum Using Isotope-Dilution Liquid Chromatography-Electrospray Ionization Tandem Mass Spectrometry**; Johanna E. Camara; Karen W. Phinney; *NIST, Gaithersburg, MD*
- WP 251 **Determination of Plasma Free Metanephrines by On-Line Extraction and Hydrophilic Liquid Chromatography Coupled to Tandem Mass Spectrometry**; Karina Helena Morais Cardozo; Marlene Freitas Madeira; *Fleury Medicine and Health, São Paulo, Brazil*
- WP 252 **Quantitation of Underivatized Acylcarnitines and Acyl CoA Fatty Acid Esters in Rat Tissue Samples Using Triple Quadrupole Mass Spectrometry**; James Carlson<sup>1</sup>; Jeff Miller<sup>1</sup>; Jenny Moshin<sup>1</sup>; Susan Leonard<sup>1</sup>; Yan Wang<sup>2</sup>; Irving Wainer<sup>2</sup>; <sup>1</sup>Applied Biosystems, Framingham, MA; <sup>2</sup>NIH/NIA, Baltimore, MD
- WP 253 **High-Throughput Isotope-Dilution Liquid Chromatography-Tandem Mass Spectrometry Assay for Simultaneous Measurement of Vitamins D2 and D3 25-Hydroxy Metabolites in Human Serum**; Valdemir Melechco Carvalho; Odete Hirata Nakamura; Marlene de Freitas Madeira; José Gilberto Vieira; *Fleury Medicine and Health, Sao Paulo, Brasil*
- WP 254 **Detection of Specific Porphyrins Using Tandem Mass Spectrometry**; Autumn W. Burns; John Choiniere; Frantisek Turecek; Michael H. Gelb; C. Ronald Scott; *University of Washington, Seattle, WA*
- WP 255 **Simple and Fast Method for Determination of Acetaminophen in Serum**; Jose Luiz Costa<sup>1</sup>; Rafael Lanaro<sup>2</sup>; Anna Slyvia Ferrari Marques<sup>1</sup>; Helio Martins<sup>1</sup>; <sup>1</sup>Applied Biosystems, Sao Paulo, Brazil; <sup>2</sup>Poison Control Center, Faculty of Medical, Campinas, Brazil
- WP 256 **A LC-MS/MS Platform for the Simultaneous TDM Analysis of Opiates and Benzodiazepines with Direct Urine Injection**; Christopher L. Esposito<sup>1</sup>; Francois A. Espourteille<sup>2</sup>; Matthew Berube<sup>2</sup>; <sup>1</sup>Thermo Scientific, Franklin, MA; <sup>2</sup>Thermo Fisher Scientific, Franklin, MA
- WP 257 **Free and Total Sialic Acid in CSF by UPLC-MS/MS**; Sabrina Forni; Xiaowei Fu; Raphael Schiffmann; Lawrence Sweetman; *Inst. of Metabolic Disease, Baylor Res. Institute, Dallas, Texas*
- WP 258 **Analysis of Antidepressants and Neuroleptics in Serum/Plasma by LC/MS/MS**; Tanya Gamble<sup>2</sup>; Tania A. Sasaki<sup>1</sup>; Lisa Sapp<sup>1</sup>; <sup>1</sup>Applied Biosystems, Foster City, CA; <sup>2</sup>Applied Biosystems/MDS Analytical Technologies, Concord, Canada
- WP 259 **Quantification of Plasma S-Adenosyl Homocysteine and S-Adenosyl Methionine by Stable Isotope Dilution Positive Ion ESI LC/MS/MS with On-Line Concentration**; David Hasman<sup>1,2</sup>; Sheila M Innis<sup>2</sup>;

#### CLINICAL CHEMISTRY, 247 - 275

- WP 247 **Evaluation of 3-Iodothyronamine (TIAM) in Cell Preparation, Tissue Homogenates and Biological Fluids by HPLC-ESI-MS-MS**; Alessandro Saba<sup>1</sup>; Grazia Chiellini<sup>2</sup>; Sabina Frascarelli<sup>2</sup>; Sandra Ghelardoni<sup>2</sup>; Maja Marchini<sup>2</sup>; Andrea Raffaelli<sup>3</sup>; Riccardo Zucchi<sup>2</sup>; <sup>1</sup>University of Pisa - Chemistry Dept., Pisa, Italy; <sup>2</sup>University of Pisa - Medical School, Pisa, Italy; <sup>3</sup>CNR ICCOM, Pisa, Italy

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>1</sup>Procyon Research Inc., Vancouver, Canada;  
<sup>2</sup>University of British Columbia, Vancouver, BC Canada
- WP 260 **Analysis of Leukotriene B4 and Cysteinyl-Leukotrienes in Human Sputum;** Gloria P. Lee; Xiaoyao Xiao; Arnaldo Pica-Mendez; Omar Laterza; Wesley K. Tanaka; Merck & Company, Inc., Rahway, NJ
- WP 261 **Automated SPE-LC/MS/MS Assay for 25-OH Vitamin D Metabolites in Blood;** Kimberly Eaton<sup>1</sup>; M. P. George<sup>2</sup>; Tony Brand<sup>2</sup>; Kimberly Gamble<sup>3</sup>; Ken Lewis<sup>1</sup>; <sup>1</sup>OpAns, LLC, Durham, NC; <sup>2</sup>Agilent Technologies, Santa Clara, CA; <sup>3</sup>MicroLiter Analytical Supplies, Inc., Suwanee, GA
- WP 262 **A New Software Application Enabling User Walk-up LC-MS Quantification of Immunosuppressants for the Clinical Laboratory;** Dennis G. Nagtalon; Thermo Fisher Scientific, San Jose, CA
- WP 263 **Endogenous Prednisolone and Prednisone Interference Elucidation by Linear Ion Trap in a Clinical Assay;** Brian C Netzel; Ravinder J. Singh; Molly A. VanNorman; Tania A. Sasaki<sup>2</sup>; Mayo Clinic, Rochester, MN; <sup>2</sup>Applied Biosystems
- WP 264 **Improved Sensitivity in Mass Spectrometric Quantification of Cardiolipin in Human Serum by HPLC/ESI-MS;** Elizabeth W. Ogbonna<sup>1</sup>; Hee-Yong Kim<sup>2</sup>; Alfred L. Yergey<sup>1</sup>; Peter S. Backlund<sup>1</sup>; <sup>1</sup>NICHD/NIH, Bethesda, MD; <sup>2</sup>NIAAA/NIH, Bethesda, MD
- WP 265 **An Isotope-Dilution GC/MS Method for the Quantitation of 25-Hydroxy-Vitamin D<sub>3</sub> in Human Serum;** Anna M. Przyborowska<sup>1</sup>; Graham D. Carter<sup>2</sup>; Julia C. Jones<sup>2</sup>; John M. Halket<sup>1,2</sup>; <sup>1</sup>King's College London, London, UK; <sup>2</sup>Imperial College Healthcare NHS Trust, London, UK
- WP 266 **In-Source Water Loss As a Source of Analytical Error in Vitamin D LC/MS/MS Quantitative Analysis;** Eduard Rogatsky; Daniel Stein; Albert Einstein College of Medicine, Bronx, NY
- WP 267 **Simultaneous Determination of Alpha-Amino adipic Semialdehyde, Piperidine-6-Carboxylate, and Pipelic Acid in Human Plasma by Liquid Chromatography-Mass Spectrometry;** Katerina Sadilkova<sup>1</sup>; Si Houn Hahn<sup>1,2</sup>; <sup>1</sup>Seattle Children's, Seattle, WA; <sup>2</sup>University of Washington, Seattle, WA
- WP 268 **Method Development for the Determination of 25-Hydroxyvitamin D<sub>3</sub> and 25-Hydroxyvitamin D<sub>2</sub> in Serum Using Isotope Dilution Liquid Chromatography-Tandem Mass Spectrometry;** Susan Tai; NIST, Gaithersburg, MD
- WP 269 **Plasma Free Metanephrine and Normetanephrine Quantitation Using On-line Sample Extraction Coupled with Tandem Mass Spectrometry;** Yang Shi; Catherine Lafontaine; Tim Haney; Joseph J. Takarewski; Francois A. Espourteille; Thermo Fisher Scientific, Franklin, MA
- WP 270 **Increased Throughput of Vitamin D Analysis Using a Multiple Parallel LC-MS System;** Adrian Taylor; David Cox; Min J. Yang; John Gibbons; MDS Analytical Technologies, Concord, Canada
- WP 271 **Fast Analysis of 15 Endogenous Estrogens using Positive Ion Electrospray with Cumulative Multicolumn Sequential Chromatography for Low Femtogram Analysis;** Timothy D. Veenstra<sup>1</sup>; Xia Xu<sup>1</sup>; Haleem Isaaq<sup>1</sup>; King Chan<sup>1</sup>; Robert Classon<sup>2</sup>; William A Hedgepeth<sup>2</sup>; <sup>1</sup>SAIC-Frederick, Inc., Frederick, MD; <sup>2</sup>Shimadzu Scientific Instruments, Inc, Columbia, MD
- WP 272 **A Novel Derivatisation Reagent to Enhance the Detection Characteristics of Keto-Steroids via LC-MS;** Brian L. Williamson; Marjorie Minkoff; Scott B. Daniels; Subhakar Dey; Babu Purkayastha; Applied Biosystems, Framingham, MA
- WP 273 **High-Throughput Analysis of Serum 5 $\alpha$ -Dihydrotestosterone by 2D-LC-MS/MS;** Bingfang Yue<sup>1</sup>; Mark M. Kushnir<sup>1</sup>; A Wayne Meikle<sup>1,2</sup>; Alan L. Rockwood<sup>1,3</sup>; <sup>1</sup>ARUP Laboratories, Salt Lake City, UT; <sup>2</sup>Dept. Medicine and Pathology, University of Utah, Salt Lake City, UT; <sup>3</sup>Dept. of Pathology, University of Utah, Salt Lake City, UT
- WP 274 **Simultaneous Screening, Quantitation and Confirmation of Regulated Chemicals for the Treatment of Erectile Dysfunction in Dietary Supplements;** Hwami Lee<sup>1</sup>; Hansoon Kwon<sup>3</sup>; Sunghoon Yeon<sup>3</sup>; Jiehui Hu<sup>2</sup>; Huaian Zhu<sup>2</sup>; Yongming Xie<sup>2</sup>; Sanghwa Kim<sup>3</sup>; Myunghee Kang<sup>1</sup>; Youngmi Jang<sup>1</sup>; <sup>1</sup>Korea Food & Drug Administration, Incheon, South Korea; <sup>2</sup>Applied Biosystems I, Shanghai, China; <sup>3</sup>Applied Biosystems, Seoul, South Korea
- WP 275 **Detection and Quantification of the Endocrine Disruptor Clomiphene Citrate in Serum and Meconium by LC-ESI-MSn;** Justin Lygrisse; Kelsey Witherspoon; Michael J. Van Stipdonk; Wichita State University, Wichita, KS

#### PROTEOMICS: PTM DETERMINATION (OXIDATIVE MODIFICATIONS AND OTHERS), 276 - 308

- WP 276 **Methodological Development for Mural Painting Ageing Study;** Sophie Dallongeville; Sylvia Turrell; Christian Rolando; Caroline Tokarski; Univ. des Science/Tech de Lille, Villeneuve D'ascq, France
- WP 277 **Proteomics and Redox Proteomics Analyses to Understand the Role of Oxidative Stress in Immunosenscence of Aging Mice;** Renā A. Sowell; D. Allan Butterfield; University of Kentucky, Lexington, KY
- WP 278 **Top-Down Identification of Protein Modifications Induced by Cigarette Smoke Condensate;** Pauline Le Faouder<sup>1</sup>; Iman Emami<sup>2</sup>; Caroline Tokarski<sup>1</sup>; Christian Rolando<sup>1</sup>; <sup>1</sup>Univ. des Science/Tech de Lille, Villeneuve D'ascq, France; <sup>2</sup>Biosyntech, Paris, France
- WP 279 **Post-Translational Modifications of Model Proteins with 4-Hydroxynonenal, a Quantitative Analysis of Reactivity at Specific Sites;** Qingyuan Liu; Scott Gronert; Virginia Commonwealth Univ., Richmond, VA
- WP 280 **Identification and Characterization of 3-Nitrotyrosine Modified Proteins in Cerebrospinal Fluid;** Ashley Beasley<sup>1</sup>; Avindra Nath<sup>1</sup>; Robert J. Cotter<sup>2</sup>; <sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, MD; <sup>2</sup>Middle Atlantic MS Laboratory, Baltimore, MD
- WP 281 **Modification Specific Proteomics: Specific Enrichment and Identification of Carbonylated Sites in Proteins;** Angela Pereira Da Rocha; Adelina Rogowska-Wrzesinska; Kenneth Bendix Jensen; Peter Roepstorff; University of Southern Denmark, Odense, Denmark
- WP 282 **Primary Sequence and Site-Selective Hydroxylation of Prolines in Isoforms of the Peanut Allergen Protein Ara h 2;** Jinxi Li<sup>1</sup>; Kevin J. Shefcheck<sup>2</sup>; John H. Callahan<sup>2</sup>; Catherine Fenselau<sup>1</sup>; <sup>1</sup>University of

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Maryland, College Park, MD; <sup>2</sup>FDA/CFSAN, College Park, MD
- WP 283 **High-Content Quantitation of the S-Nitrosylated Proteins in Parkinson's Disease Paradigms;** FanJun Meng<sup>1,2</sup>; Fan Wei<sup>2</sup>; Siqi Liu<sup>2</sup>; Zezong Gu<sup>1,3</sup>; <sup>1</sup>University of Missouri-Columbia School of Medicine, Columbia, MO; <sup>2</sup>Chinese Academy of Sci Beijing Genomics Institute, Beijing, China; <sup>3</sup>Burnham Institute for Medical Research, La Jolla, CA
- WP 284 **Optimization of a 2DE-Based Biotin Switch Method for Proteomics Analysis of Nitrosylated Proteins;** Changgoog Wu; Tong Liu; Cexiong Fu; Wei Chen; Mohit Jain; Hong Li; *UMDNJ, Newark, NJ*
- WP 285 **Identification of Sites and Tissue-Dependent Protein Targets for Posttranslational Modifications by 4-Hydroxy-2-Nonenal, an End-Product of Lipid Peroxidation, in the Mitochondria;** Navin Rauniyar; Katalin Prokai-Tatrai; Laszlo Prokai; *UNT Health Science Center, Fort Worth, TX*
- WP 286 **Characterization and Performance of a Multicomponent Protein Mixture for the Analysis of Tyrosine Nitration Using Several Mass Spectrometry Platforms;** Bensheng Li; Birgit Schilling; Jason M. Held; Bradford W. Gibson; *Buck Institute for Age Research, Novato, CA 94945*
- WP 287 **Quantitative Profiling of Site-Specific Hydroxylation on the Hypoxia-Inducible Factors HIF1 $\alpha$  and HIF2 $\alpha$**  Dean E. McNulty; Melissa B. Pappalardi; Lusong Luo; Roland S. Annan; *GlaxoSmithKline, King of Prussia, PA*
- WP 288 **Withdrawn**
- WP 289 **Label-Free Strategy for Site-Specific Quantitation of S-Nitrosylome;** Hsiao-Chiao Chou<sup>1,3</sup>; Yi-Ju Chen<sup>2,3</sup>; Wei-Chi Ku<sup>3</sup>; Yu-Ju Chen<sup>3</sup>; <sup>1</sup>Department of Chemistry, NTU, Taipei City, Taiwan; <sup>2</sup>IBS, National Taiwan University, Taipei City, Taiwan; <sup>3</sup>Institute of Chemistry, Academia Sinica, Taipei City, Taiwan
- WP 290 **A Strategy for Direct Identification of Protein S-Nitrosylation Sites by Quadrupole Time-of-Flight Mass Spectrometry;** Tong Liu; Yan Wang; Changgong Wu; Hong Li; *UMDNJ, Newark, NJ*
- WP 291 **Peroxynitrite-Mediated Oxidative Post-Translational Modifications of Mitochondrial Complex II in the Post-Ischemic Myocardium;** Liwen Zhang; Chwen-Lih Chen; kari. B Green-Church; Yoeng-Renn Chen; *Ohio State University, Columbus, OH*
- WP 292 **Mass Spectrometry-Based Site-Specific Identification of S-Nitrosylome in Cardiovascular System;** Yi-Ju Chen<sup>1,2</sup>; Hsiao-chiao Chou<sup>2,3</sup>; Wei-Chi Ku<sup>2</sup>; Kay-hooi Khoo<sup>1,4</sup>; Yu-Ju Chen<sup>2</sup>; <sup>1</sup>IBS, National Taiwan University, Taipei City, Taiwan; <sup>2</sup>Institute of Chemistry, Academia Sinica, Taipei City, Taiwan; <sup>3</sup>Institute of Chemistry, National Taiwan University, Taipei City, Taiwan; <sup>4</sup>IBC, Academia Sinica, Taipei City, Taiwan
- WP 293 **Detection of Oxidation-Associated *in vivo* Carbonylation of Biologically Significant Proteins during Early Development of Zebrafish Embryos;** Tatjana Talamantes; Navin Rauniyar; Katalin Prokai-Tatrai; Laszlo Prokai; *University of North Texas Health Science Center, Fort Worth, TX*
- WP 294 **Analysis of Arginine and Lysine Methylation using Electron Transfer Dissociation Mass Spectrometry and Peptide Separations at Neutral pH;** Ambrosius PL Snijders; Ming-Lung Hung; Stuart A Wilson; Mark J Dickman; *University of Sheffield, Sheffield, UK*
- WP 295 **Towards the Development of a Method for the Quantitation of Methylation to Lysine Residues in Proteins;** Anthony Berardinelli<sup>1</sup>; Bruce Snyder<sup>2</sup>; Amanda Bryant-Friedrich<sup>1</sup>; Wendell P. Griffith<sup>1</sup>; <sup>1</sup>University of Toledo, Toledo, OH; <sup>2</sup>Emmanuel Christian High School, Toledo, OH
- WP 296 **Post-Translational Modifications on the Subunit p65 of NFkB;** Benlian Wang<sup>1</sup>; Tao Lu<sup>2</sup>; Masaru Miyagi<sup>1</sup>; George R. Stark<sup>2</sup>; Mark Chance<sup>1</sup>; <sup>1</sup>Case Western Reserve University, Cleveland, OH; <sup>2</sup>Lerner Research Institute, Cleveland, OH
- WP 297 **An Unusual Case Study: MS/MS Spectrum of a Lysine-Methylated Peptide Looks Almost Perfectly Like That of a Serine Methylated Peptide;** Junmei Zhang<sup>1</sup>; Yue Chen<sup>2</sup>; Zhihong Zhang<sup>2</sup>; Joanna Wysocka<sup>3</sup>; Yingming Zhao<sup>4</sup>; <sup>1</sup>University of Texas Southwestern Medical Center, Dallas, TX; <sup>2</sup>University of Chicago, Chicago, IL; <sup>3</sup>Stanford University, Stanford, CA; <sup>4</sup>The University of Chicago, Chicago, IL
- WP 298 **Microtubules of Toxoplasma Gondii Contain C-Terminal Methylated  $\alpha$ - and  $\beta$ -Tubulins;** Hui Xiao<sup>1</sup>; Kamal El Bissati<sup>1</sup>; pascal Verdier-Pinard<sup>2</sup>; Kami Kim<sup>1</sup>; Berta Burd<sup>1</sup>; Ruth Hogue Angeletti<sup>1</sup>; Louis M. Weiss<sup>1</sup>; <sup>1</sup>Albert Einstein College of Medicine, Bronx, NY; <sup>2</sup>Aix-Marseille Université, Marseille cedex, France
- WP 299 **Screening of Ubiquitin K11 Linkage Specific Substrates by Quantitative Differential Display Proteomics Approach;** Ping Xu<sup>1</sup>; Duc Duong<sup>1</sup>; Nicholas Seyfried<sup>2</sup>; D. Jessica Cheng<sup>1</sup>; John Rush<sup>3</sup>; Mark Hochstrasser<sup>2</sup>; Daniel Finley<sup>5</sup>; Junmin Peng<sup>1</sup>; <sup>1</sup>emory university, Atlanta, GA; <sup>2</sup>Department of Human Genetics, Atlanta, GA; <sup>3</sup>Cell Signaling Technology, Danvers, MA; <sup>4</sup>Yale University, New Haven, CT; <sup>5</sup>Harvard University, Boston, MA
- WP 300 **Identification of EGF-Stimulation Specific PCMI Interaction Partners by Quantitative Proteomics;** Vyacheslav Akimov; Kristoffer T. G. Rigbolt; Blagoy Blagoev; *Uni. of Southern Denmark, Odense, Denmark*
- WP 301 **Characterisation of SUMOylated RanGAP1 by Ion Mobility/Time of Flight Mass Spectrometry;** Mark Skehel; Helen Flynn; Sarah Maslen; *Cancer Research UK, Hertfordshire, UK*
- WP 302 **Mapping Endogenous SUMO Sites: A Novel Approach Using ESI-MS and Modified Database Search with Common Search Engines;** He-Hsuan Hsiao<sup>1</sup>; Erik Meulmeester<sup>2</sup>; Benedikt T.C. Frank<sup>3</sup>; Frauke Melchior<sup>2</sup>; Henning Urlaub<sup>1</sup>; <sup>1</sup>Bioanalytical Mass Spectrometry Group, MPIIbpc, Goettingen, Germany; <sup>2</sup>Faculty of Medicine, University of Goettingen, Goettingen, Germany; <sup>3</sup>Department of NMR Based Structural Biology, MPIIbpc, Goettingen, Germany
- WP 303 **Proteomic Analysis of SUMOylated Proteins in Mammalian Cells;** Xiaoyan Liu; Fujian Zhang; Jianjun Zhai; Haining Zhu; *Univ. of Kentucky, Lexington, KY*
- WP 304 **A Quantitative Proteomics Approach to Characterize A Cellular TDP-43 Proteinopathy Model;** Nicholas Seyfried<sup>1,3</sup>; Yair M. Gozal<sup>2,3</sup>; Qiangwei Xia<sup>1,3</sup>; Duc Duong<sup>1,3</sup>; Allan I. Levey<sup>2,3</sup>; James J. Lah<sup>2,3</sup>; Junmin Peng<sup>1,3</sup>; <sup>1</sup>Department of Human Genetics, Atlanta, GA; <sup>2</sup>Department of Neurology, Atlanta, GA; <sup>3</sup>Emory University, School of Medicine, Atlanta, GA

## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 305 **Quantitative Identification of Acyl Modifications in SDS Resistant Pellets of *S. Cerevisiae***; Hongying Zhong; Jianjian Li; Yingxia Yue; *Central China Normal University, Wuhan, China*
- WP 306 **Probing Huntingtin Palmitoylation Sites by Mass Spectrometry**; Fiona BJ Young<sup>2,3</sup>; Michael R Hayden<sup>2,3</sup>; Bernd O Keller<sup>1,3</sup>; <sup>1</sup>*University of British Columb, Vancouver, Canada*; <sup>2</sup>*UBC-CMMT, Vancouver, BC*; <sup>3</sup>*UBC-Child&Family Res. Institute, Vancouver, BC*
- WP 307 **GIomics: Global Analysis of Glycosylphosphatidylinositol (GPI)-Anchored Molecules of *Trypanosoma cruzi* by Tandem Mass Spectrometry**; Ernesto S. Nakayasu<sup>1</sup>; Dmitry V. Yashunsky<sup>2</sup>; Lilian L. Nohara<sup>1</sup>; Ana C.T. Torrecilhas<sup>3</sup>; Andrei V. Nikolaev<sup>2</sup>; Igor C. Almeida<sup>1</sup>; <sup>1</sup>*University of Texas at El Paso, El Paso, TX*; <sup>2</sup>*University of Dundee, Dundee, UK*; <sup>3</sup>*University of Sao Paulo, Sao Paulo, Brazil*
- WP 308 **Identification and Profiling of Novel Fatty Acid Modifications to Lens Major Intrinsic Protein AQP0**; Zhen Wang<sup>1</sup>; Danielle B Gutierrez<sup>2</sup>; Angus C Grey<sup>1</sup>; Kevin L Schey<sup>1</sup>; <sup>1</sup>*Vanderbilt University, Nashville, TN*; <sup>2</sup>*Medical University of South Carolina, Charleston, SC*
- INSTRUMENTATION: NEW CONCEPTS, 309 - 328**
- WP 309 **Characterization of the “Ion-CCD” Used as Position Sensitive Detector for Charged Particles**; Omar Hadjar; Gottfried Kibelka; Scott Shill; Scott Kassan; Chad Cameron; *O.I. Analytical, Pelham, AL*
- WP 310 **Single Large Biomolecular Ion Detection**; Chien-Hsun Chen<sup>1</sup>; Jung-Lee Lin<sup>1</sup>; Ming-Lee Chu<sup>2</sup>; Yi-Sheng Wang<sup>1</sup>; Chung-Hsuan Chen<sup>1</sup>; <sup>1</sup>*Genomics Research Center, Academia Sinica, Taipei, Taiwan*; <sup>2</sup>*Institute of Physics, Academia Sinica, Taipei, Taiwan*
- WP 311 **M2 Ion Detector for High Speed and Wide Dynamic Range**; Motohiro Suyama; *Hamamatsu Photonics K.K., Iwata, Japan*
- WP 312 **Improvements in Charge Detection Mass Spectrometry**; Joshua Maze; Lloyd Zilch; John Smith; Nathan C. Contino; Haitao Tu; George E. Ewing; Martin Jarrold; *Indiana University, Bloomington, IN*
- WP 313 **Increased Quantitative Throughput and Selectivity for Triple Quadrupole Mass Spectrometer Based Assays Using Intelligent SRM (iSRM)**; Reiko Kiyonami<sup>1</sup>; Alan E. Schoen<sup>1</sup>; Amol Prakash<sup>1</sup>; Huy Nguyen<sup>1</sup>; Scott Peterman<sup>1</sup>; Vlad Zabrouskov<sup>1</sup>; Charles T. Yang<sup>1</sup>; Dipankar Ghosh<sup>1</sup>; Kristi D. Akervik<sup>1</sup>; Nathalie Selevsek<sup>2</sup>; Andreas F Huhmer<sup>1</sup>; Bruno Domon<sup>2</sup>; <sup>1</sup>*ThermoFisher Scientific, San Jose, CA*; <sup>2</sup>*ETH Zurich, Zurich, Switzerland*
- WP 314 **Web-Enabled Management of an Ionization Source and Data Processing with the Apple iPod Touch**; Peter Leopold<sup>1</sup>; Elizabeth Crawford<sup>2</sup>; Joseph Tice<sup>2</sup>; Michael Festa<sup>2</sup>; <sup>1</sup>*BioAnalyte Inc., Portland, ME*; <sup>2</sup>*IonSense, Inc., Saugus, MA*
- WP 315 **RePlay® Combined with an Exclusion List Script Significantly Improves Number of Protein Assignments from Complex Proteomic Samples**; Daniel Eikel<sup>1</sup>; Christian Albers<sup>2</sup>; Geoffrey S. Rule<sup>3</sup>; Simon J. Prosser<sup>4</sup>; <sup>1</sup>*AdvionBioSystems, Ithaca, NY*; <sup>2</sup>*Bruker Daltonik, Bremen, GERMANY*; <sup>3</sup>*Advion BioSystems, Salt Lake City, UT*; <sup>4</sup>*Advion BioSciences, Inc., Ithaca, NY*
- WP 316 **The Sensitivity of Laser-Induced Acoustic Desorption/Electron Ionization in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer**; Zhicheng Jin<sup>1</sup>; Hilikka Kenttamaa<sup>2</sup>; <sup>1</sup>*Purdue University, West Lafayette, IN*; <sup>2</sup>*Chemistry Department, West Lafayette, IN*
- WP 317 **Development of Multiplexed Protein Separation and Identification Using Digital Microfluidics and Mass Spectrometry**; Adam A. Stokes; Yifan Li; William Parkes; David J. Clarke; Pat Langridge-Smith; C. Logan Mackay; Anthony J. Walton; *The University of Edinburgh, Edinburgh, Scotland*
- WP 318 **Development of an Integrated High-Pressure Microfluidic Nano-LC Platform**; James Murphy; Geoff Gerhardt; Angela Doneanu; Jay Johnson; Joseph Michienzi; Keith Fadgen; *Waters Corporation, Milford, MA*
- WP 319 **High Efficiency Mass Spectrometry Systems with Discontinuous Atmospheric Pressure Interface**; Nicholas A. Charipar; Jason D. Harper; Matthew A. Kirleis; Wei Xu; Zheng Ouyang; *Purdue University, Lafayette, IN*
- WP 320 **In-Source Atmospheric Pressure-Electron Capture Dissociation (AP-ECD): A New Tool for Structural Characterization of Peptides**; Damon Robb<sup>1</sup>; Jason Rogalski<sup>1</sup>; Juergen Kast<sup>1</sup>; Michael Blades<sup>2</sup>; <sup>1</sup>*University of British Columbia, Vancouver, Canada*; <sup>2</sup>*University of British Columb, Vancouver, BC*
- WP 321 **Online Bioaffinity- Electropray Mass Spectrometry: Combining Molecular Identification and Bioaffinity Quantification in Biopolymer Interactions**; Michael Przybylski<sup>1</sup>; Mihaela Dragusanu<sup>1</sup>; Stefan Slamnoi<sup>1</sup>; Alina Petre<sup>1</sup>; Tingting Tu<sup>2</sup>; Michael L. Gross<sup>2</sup>; <sup>1</sup>*University of Konstanz, Konstanz, Germany*; <sup>2</sup>*Washington University, Saint Louis, MO*
- WP 322 **Electrochemistry / Electropray Mass Spectrometry for Investigation of Reaction Kinetics**; Boguslaw Pozniak; Richard B. Cole; *University of New Orleans, New Orleans, LA*
- WP 323 **Theoretical Studies of the Effect of Swirling Flow on Ion Focusing in a Coaxial Flow Electropray Ion Source**; Serguei Savtchenko<sup>2</sup>; Lisa Cousins<sup>2</sup>; Nasser Asgriz<sup>1</sup>; <sup>1</sup>*University of Toronto, Toronto, ON, Canada*; <sup>2</sup>*IONICS Mass Spectrometry Group Inc., Toronto, ON*
- WP 324 **Simulations for Determining Mass Spectral Quality from  $\mu$ -Cylindrical Ion Traps Using a Hard-Sphere Collision Buffer Gas Model**; Friso H. W. van Amerom; Ashish Chaudhary; Tim Short; *SRI International, St Petersburg, FL*
- WP 325 **A Carbon Nanotube Ionization Source for a Low Power Ion Trap Mass Spectrometer for Martian Organic Analysis**; Theresa Evans-Nguyen<sup>1</sup>; Charles Parker<sup>2</sup>; Christina Hammock<sup>3</sup>; Vladimir M. Doroshenko<sup>4</sup>; Jeffrey Glass<sup>2</sup>; Luann Becker<sup>5</sup>; Robert J. Cotter<sup>1</sup>; <sup>1</sup>*Johns Hopkins School of Medicine, Baltimore, MD*; <sup>2</sup>*Duke University, Durham, NC*; <sup>3</sup>*Johns Hopkins Applied Physics Lab, Laurel, MD*; <sup>4</sup>*MassTech, Inc., Columbia, MD*; <sup>5</sup>*Johns Hopkins University, Baltimore, MD*
- WP 326 **A Rotating Ball LC/SALDI Interface Surface Activation and Analytical Performance**; Sergey Alimpiev<sup>3</sup>; Alexander Gretchnikov<sup>2</sup>; Jan Sunner<sup>1</sup>; Sergey Nikiforov<sup>3</sup>; Yaroslav Simanovsky<sup>3</sup>; <sup>1</sup>*University of Portsmouth, Portsmouth, UK*; <sup>2</sup>*Vernadsky Inst Geochem Anal Chem, Russ Acad Sci, Moscow, Russia*



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>3</sup>Prokhorov General Physics Inst Russ Acad Sci, Moscow, Russia
- WP 327 **Automated Vacuum Compatible Sample Positioning Device for Imaging Mass Spectrometry;** Konstantin Aizikov<sup>1</sup>; Donald Smith<sup>2</sup>; David A. Chargin<sup>3</sup>; Sergei Ivanov<sup>3</sup>; David H. Perlman<sup>4</sup>; Tzu-yung Lin<sup>5</sup>; Nadezda P. Sargaeva<sup>5</sup>; Ron M.A. Heeren<sup>6</sup>; Peter B. O'Connor<sup>7</sup>; <sup>1</sup>BUSM Mass Spectrometry Re, Boston, MA; <sup>2</sup>FOM-AMOLF, Amsterdam, Netherlands; <sup>3</sup>Fraunhofer CMI, Boston, MA; <sup>4</sup>Boston U. Sch. of Medicine, Boston, MA; <sup>5</sup>Boston University, Boston, MA; <sup>6</sup>FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands; <sup>7</sup>University of Warwick, Coventry, UK
- WP 328 **No Portable Mass Spec Required: Adaptive Sampling in the Field Using a Portable Automated Purification Robot with Lab MS ID;** David Fries; Brian Gregson; Geran Barton; Stan Ivanov; U South Florida, St Petersburg, FL
- LC/MS, 329 - 344**
- WP 329 **Compatibility of UHPLC with MS, Are We More Productive?** Marc Elliott<sup>1</sup>; Sean Mchugh<sup>1</sup>; Mark Woodruff<sup>2</sup>; Ken Butchart<sup>2</sup>; <sup>1</sup>Resolution Analytical Systems, Holland, MI; <sup>2</sup>Fortis Technologies Ltd, Neston, UK
- WP 330 **Open Access with Open Arms: Implementation of a Single System that Meets the Varying Needs of Different Compounds;** Zachary S Giles; GlaxoSmithKline, Rtp, NC
- WP 331 **A Postcolumn Device for Signal Intensity Improvement of Peptides in TFA-containing Mobile Phase LC/MS;** Nan-Hsuan Wang; Wan-Li Lee; Guor-Rong Her; National Taiwan University, Taipei, Taiwan
- WP 332 **LC-MS/MS Bioanalysis of Variety of Pharmaceutical Compounds in High-pH Mobile Phases;** Jian Wang; Mohammed Jemal; Bristol-Myers Squibb, Princeton, NJ
- WP 333 **Development of a Desalting Interface for LC/MS Mobile Phase Containing Non-volatile Salts;** Yutaka Takahashi<sup>1,2</sup>; Kanae Teramoto<sup>1</sup>; Kazumi Yoshida<sup>3</sup>; Kazuhiro Chiba<sup>3</sup>; <sup>1</sup>JEOL, Tokyo, Japan; <sup>2</sup>TUAT-TLO. Co. Ltd, Tokyo, Japan; <sup>3</sup>Tokyo University of Agriculture and Technology, Tokyo, Japan
- WP 334 **Reduce Column Related Carryover for Bioanalysis by Alternating the Column Flow Direction in LC/MS/MS;** Susan Chen; Ji Zhang; Debra Liao; Michael Johnson; Shaoxia Yu; Justin Gordon; Jing-Tao Wu; Mark Qian; Millennium: The Takeda Oncology Company, Cambridge, MA
- WP 335 **Novel Automated Online Column Switching HILIC-RP-LC/MS Method for the Analysis of Complex Samples;** Egidijus Machtejevas<sup>1</sup>; Sven Andrecht<sup>1</sup>; Robertus Hendriks<sup>1</sup>; Klaus K. Unger<sup>2</sup>; <sup>1</sup>Merck KGaA, Darmstadt, Germany; <sup>2</sup>Johannes Gutenberg University, Mainz, Germany
- WP 336 **A Novel Micro-Affinity Column for LC ICP-MS Analysis of Trace Metalloproteins in Bio-Fluids;** Sabrina Tachdjian<sup>2</sup>; Naoki Furuta<sup>1</sup>; Kazunori Iwata<sup>3</sup>; Takashi Kotsuka<sup>3</sup>; <sup>1</sup>Chuo University, Tokyo, Japan; <sup>2</sup>Showa Denko America, Inc., New York, NY; <sup>3</sup>Showa Denko KK, Tokyo, Japan
- WP 337 **Method Development Strategies for Ultra High-Throughput LC-MS/MS Analysis of Small Polar Molecules Utilizing HILIC Mechanisms;** Brian Rappold; Russell Grant; Patricia Holland; Labcorp, Burlington, NC
- WP 338 **Application of a Structured Approach for Method Development in Bioanalytical HILIC-MS/MS Applications;** A. Carl Sanchez; Monika M. Kansal; Phenomenex, Torrance, CA
- WP 339 **Identification and Separation of an Environmental Contaminant (Synephrine) During the Measurement of Free Phenylephrine in Human Plasma using ESI-HILIC-LC/MS/MS;** Michael P. Waldron; Jordan Honrine; Patricia E. Paterson; Bruce Hidy; Rand G. Jenkins; PPD, Richmond, VA
- WP 340 **Alternative LC Columns for Hydrophilic Compounds for Better Detection and Separation in LC/MS;** Kazuko Haseyama; Hiroko Arai; Isao Yanagisawa; Taketoshi Kanda; Osamu Shirota; Shiseido, Tokyo, Japan
- WP 341 **The Separation of Popular Cold, Sinus, and Allergy Medications using TSK-GEL ODS-140HTP Columns;** Atis Chakrabarti; Shigeru Nakatani; J. Kevin O'Donnell; Tosoh Bioscienc LLC, Montgomeryville, PA
- WP 342 **High Throughput Qualitative and Quantitative LC/MS Analyses Based on Fused-Core&trade; Columns;** Nelson Huang; Peter Tate; Ning Pan; Franklin Schlerman; Oliver McConnell; Wyeth, Cambridge, MA
- WP 343 **Recent Advancements in Accelerated Bioanalytical LC/MS Using Fused-Core Columns;** Richard L. Beardsley; Ethan R. Badman; Zhenmin Liang; Surendra Bansal; Hoffmann-La Roche Inc., Nutley, NJ
- WP 344 **Evaluation of C18 Sub 2 Micron Particle Columns for UPLC Analysis of Drug-like Molecules;** Iris Scherer; Melissa Gomez; Luke Miller; GlaxoSmithKline, Rtp, NC
- LC/MS SAMPLE PREPARATION, 345 - 359**
- WP 345 **Sample Preparation of Phosphorus-Containing Amino Acid Herbicides Using TiO<sub>2</sub>-Coated Monolithic Spin Column;** Shota Miyazaki; GL Sciences Inc., Saitama, Japan
- WP 347 **In Preparative LC/MS, Loadability and Peak Shape Changes with pH and Concentration are Rationalized Based on Eluent Conditions and Analyte;** Xu Zhang; Mark J. Hayward; Lundbeck Research USA, Paramus, NJ
- WP 347 **Norbornene-Based Monolithic Pre-Columns for LC/MS Analysis in Nanomedical Research;** Christina Gatschelhofer<sup>1</sup>; Agnes Mautner<sup>1</sup>; Michael R. Buchmeiser<sup>2</sup>; Andreas Zimmer<sup>3</sup>; Karin Wernig<sup>3</sup>; Thomas R. Pieber<sup>1,4</sup>; Frank M. Sinner<sup>1</sup>; <sup>1</sup>Joanneum Research, Graz, Austria; <sup>2</sup>Leibniz Institute for Surface Modification e.V., Leipzig, Germany; <sup>3</sup>University of Graz, Graz, Austria; <sup>4</sup>Medical University Graz, Graz, Austria
- WP 348 **LC Autosampler with "Straight-to-Column" Structure Desigend for Ultimate Separation Efficiency and Anti-Carryover Performance in LC-MS;** Osamu Shirota; Shiseido, Yokohama, Japan
- WP 349 **Automatic Non-Volatile Salt and Ion-Pair Reagent Removal System for Impurity Determination in Pharmaceutical Products;** Satoshi Yamaki; Naoki Hamada; Yoshihiro Hayakawa; Shuzo Maruyama; Junko Iida; Shimadzu Corporation, Kanagawa, Japan
- WP 350 **Automated Extraction of Pharmaceutical Compounds in Plasma;** William Hudson; Yung-Lin Chen; Varian, Inc., Lake Forest, CA
- WP 351 **Two Dimensional Online Solid-Phase Extraction Combined with Liquid Chromatography - Mass**



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- WP 352 **Spectrometry**; Martin Sibum; Emile Koster; *Spark Holland Inc., Plainsboro, NJ*
- WP 353 **Comparing ESI and APCI Sources to Screen Dairy-Based Foods for Melamine by Rapid On-line Extraction with LC-MS/MS**; Joseph Di Bussolo<sup>1</sup>; Rory Rohm<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific, West Chester, PA*; <sup>2</sup>*West Chester University of PA, West Chester, PA*
- WP 354 **Analysis of Melamine and Cyanuric Acid from Baby Formula with Clean Up Using Solid Phase Extraction (SPE)**; Shahana Huq; *Phenomenex, Torrance, CA*
- WP 355 **Quantitative Determination of Drug Concentrations in Tissue Homogenates Using LC-MS/MS Plasma Assays**; Hao Jiang; Jianing Zeng; Mark Arnold; *Bristol-Myers Squibb, Princeton, NJ*
- WP 356 **Understanding the Role of Oleic Acid and Its Metabolite in Atherosclerosis by Determining Their Levels in Human Plasma Using SPE-LC-MS/MS**; Huiling Liu<sup>1</sup>; Qunjie Wang<sup>1</sup>; Changyong Xue<sup>2</sup>; Yinghua Liu<sup>2</sup>; Jin Wang<sup>2</sup>; Yuehong Zhang<sup>2</sup>; Xiaoxing Lv<sup>2</sup>; Junyan Zhang<sup>1</sup>; Jie Liao<sup>2</sup>; <sup>1</sup>*Agela Technologies Inc, Newark, NJ*; <sup>2</sup>*General Hospital of Chinese PLA, Beijing, China*
- WP 357 **Impact of Side Reactions Involving Strong Cation Exchange SPE Mechanism on Bioanalytical Assay Accuracy by Using LC-MS/MS**; Catherine Fontaine; Jean-Nicholas Mess; Milton Furtado; Fabio Garofolo; *Algorithme Pharma Inc., Laval (Montreal), Quebec, CANADA*
- WP 358 **Modification of the QuEChERS Extraction Procedure for the Analysis of Veterinary Medicine Residues in Animal Tissue by SPE-LC-MS/MS**; Richard Schriener<sup>1</sup>; Jason Causon<sup>2</sup>; Jason Clague<sup>1</sup>; <sup>1</sup>*Hill Laboratories, Hamilton, New Zealand*; <sup>2</sup>*University of Surrey, Guilford, UK*
- WP 359 **Analysis of Drugs of Abuse Using Automated Disposable Pipette Extraction and LC/MS/MS**; Fred Foster<sup>1</sup>; William Brewer<sup>2</sup>; Sparkle Ellison<sup>2</sup>; Stephen Morgan<sup>2</sup>; Tom Gluodenis<sup>3</sup>; <sup>1</sup>*Gerstel, Inc., Linthicum, MD*; <sup>2</sup>*University of South Carolina, Columbia, SC*; <sup>3</sup>*Agilent Technologies, Wilmington, DE*
- WP 360 **Multiresidue Analysis of Aminoglycoside Antibiotics Using Disposable Pipette Extraction and Liquid Chromatography-Tandem Mass Spectrometry**; Katerina Mastovska; Alan R. Lightfield; *USDA-ARS-ERRC, Wyndmoor, PA*
- WP 361 **Oxidative Cleavage of Disulfide Bond for Sequencing and Disulfide Mapping in Polypeptides**; Yu Xia; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- WP 362 **ESI- and MALDI-MS/MS Analysis of Intramolecular Cross-Linked Peptides with a Photoactivated NHS-Diazirine Cross-linker**; Alexandre F. Gomes; Fabio C Gozzo; *Institute of Chemistry - University of Campinas, Campinas, Brazil*
- WP 363 **Fragmentation of Intermolecular Cross-Linked Peptides by ECD and IRMPD**; Luiz Fernando Arruda Santos; Amadeu H Iglesias; Fabio C Gozzo; *IQ - University of Campinas, Campinas, BRAZIL*
- WP 364 **TxXIII, an Atypical Homodimeric Conotoxin Found in the *Conus textile* Venom**; Loic Quinton<sup>1</sup>; Nicolas Gilles<sup>2</sup>; Edwin De Pauw<sup>1</sup>; <sup>1</sup>*University of Liege, Liège, Belgium*; <sup>2</sup>*CEA, iBiTec-S, SIMOPRO, Gif-sur-Yvette, France*
- WP 365 **Characterization of Peptides Linked by Disulfide-containing Crosslinkers with Various Tandem Mass Spectrometric Approaches**; Tyler J. Greer; Bo Wang; Kristina Hakansson; *Univ. of Michigan, Ann Arbor, MI*
- WP 366 **Characterization of Peptides from Skin Secretions of Amphibians by Composition-Based *de novo* Sequencing**; Markus Langsdorf<sup>1</sup>; Alireza Ghassempour<sup>2</sup>; Andreas Roempp<sup>1</sup>; Bernhard Spengler<sup>1</sup>; <sup>1</sup>*Justus Liebig University, Giessen, Germany*; <sup>2</sup>*Shahid Beheshti University, Tehran, Iran*
- WP 367 **Sequencing of Peptides Produced in the Process of Mimicking Prebiotic Syntheses from Amino Acids by Thermocycling**; Alexey Kononikhin<sup>1,3</sup>; Olga Demina<sup>3</sup>; Erast Kunenkov<sup>2</sup>; Andrey Khodonov<sup>3</sup>; Maria Indeykina<sup>2</sup>; Igor Popov<sup>1,3</sup>; Sergey Varfolomeev<sup>2,3</sup>; Eugene Nikolaev<sup>1,3</sup>; <sup>1</sup>*The Institute for Energy Problems of Chemical Phys, Moscow, Russian Federation*; <sup>2</sup>*Lomonosov Moscow State University, Moscow, Russian Federation*; <sup>3</sup>*Emanuel Institute of Biochemical Physics, Moscow, Russian Federation*
- WP 368 **New Insights into Human Chromium Binding Peptides**; Heather Watson; Yuan Chen; Carolyn J. Cassidy; John B. Vincent; *University of Alabama, Tuscaloosa, AL*

#### NATURAL PRODUCTS, 371 - 392

#### PEPTIDES FRAGMENTATION AND SEQUENCING, 360 - 370

- WP 371 **Top Down Approaches for the Identification of Peptidic Toxins Containing Disulfide Bonds**; Chafia Bennaceur<sup>1</sup>; Carlos Afonso<sup>1</sup>; Sandra Alves<sup>1</sup>; Anne Bossée<sup>2</sup>; Jean-Claude Tabet<sup>1</sup>; <sup>1</sup>*Université Paris 6, Paris, France*; <sup>2</sup>*Centre d'Etudes du Bouchet, Vert-le-Petit, France*
- WP 372 **Characterization of Peptide-Hormone Somatostatin Using Different Tandem Mass Spectrometry Methods**; Marija Mentinova; Hongling Han; Scott A. McLuckey; *Purdue University, West Lafayette, IN*
- WP 373 **Relevance of Peak Assignment Criteria in the Analysis of Disulfide-Bonded Peptides Using Collision Induced Dissociation Spectra**; Daniel Clark; Melinda L Toumi; Eden P Go; Heather Desaire; *University of Kansas, Lawrence, KS*
- WP 374 **Identification of a Novel Wasp Venom Peptide via Micro-Scale Chemical Modifications and Tandem Mass Spectrometry**; Zhihua Yang; Athula B. Attygalle; Václav Čeřovský; *Stevens Institute of Technology, Hoboken, NJ*
- WP 375 **Natural Product Screening and Identification Using a Combination of High-throughput UPLC-TOF and Hybrid Linear Ion Trap - FTMS LC/MS**; Jeffrey R. Gilbert; Paul Lewer; Dennis O. Duebelbeis; Don R. Hahn; *Dow AgroSciences, Indianapolis, IN*
- WP 376 **Mass Spectrometric Analysis of Polyketide Biosynthesis: Direct Infusion FTICR-MS Versus Low-Resolution LC-MS for Analysis of Active-Site Bound Intermediates**; Christopher M Rath; David H Sherman; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- WP 377 **Structural Characterization of New Statin-Like Flavonoid Glycosides in Citrus *Bergamia* by High Resolution Mass Spectrometry**; Leonardo Di Donna; Giuseppina De Luca; Anna Napoli; Fabio Mazzotti; Domenico Taverna; Giovanni Sindona; *Università della*

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Calabria, Dipartimento di Chimica, Arcavacata di rende (CS), Italy
- WP 375 **High-Resolution TOF LC/MS Characterization of the Enzymatic Glycosylation of Stevia Rebaudiana: A Comparison of Natural and Enzyme-Treated Stevia Extracts;** Katrina Emmel<sup>1</sup>; Ted Waszkuc<sup>1</sup>; Susan Kraemer-Berkman<sup>1</sup>; Andre Szczesniowski<sup>2</sup>; Sue D'antonio<sup>2</sup>; <sup>1</sup>NOW Foods, Bloomington, IL; <sup>2</sup>Agilent Technologies, Schaumburg, IL
- WP 376 **The Development of a New Algorithm for Empirical Formula Calculations Based On Multiple Molecular Ion Data;** Ichiro Hirano<sup>1</sup>; Yusuke Inohana<sup>1</sup>; Yutaro Yamamura<sup>1</sup>; Norio Mukai<sup>1</sup>; Michizane Hashimoto<sup>2</sup>; Neil Loftus<sup>3</sup>; John Warrander<sup>3</sup>; <sup>1</sup>Shimadzu Corporation, Kyoto, Japan; <sup>2</sup>Astellas Pharma Inc., Tsukuba, Japan; <sup>3</sup>Shimadzu ISS, Manchester, UK
- WP 377 **High Precision Molecular Formula Determinations of Phytochemicals in Plant Extracts using the Isotope Fine Structure obtained by 15T FT-ICR MS;** Jang Mi Jin; Kyu Hwan Park; Dong Wan Lim; Jong Shin Yoo; Hyun Sik Kim; *Korea Basic Science Institute, Daejeon, South Korea*
- WP 378 **Characterization of Phenolic Compounds in Almond Agricultural Wastes by Negative Ion ESI LC/MS for Potential Nutraceutical Applications;** Carina Minardi; Crisand Anderson; Anuradha Prakash; Christine A. Hughey; *Chapman University, Orange, CA*
- WP 379 **Developmental Validation for the Simultaneous Quantification of Multiple Bioactive Polyphenolic Compounds in Herbal Extracts by a High Throughput LC-MS/MS Method;** Xiao Chuan Li<sup>1,2</sup>; Kim B. Plath<sup>2</sup>; Richard E. Staub<sup>3</sup>; Uwe Christians<sup>1,2</sup>; Isaac Cohen<sup>3</sup>; Yan Ling Zhang<sup>1,2</sup>; <sup>1</sup>Univ. of Colorado Health Science, Aurora, CO; <sup>2</sup>bioNovo CO, Aurora, CO; <sup>3</sup>bioNovo CA, Emeryville, CA
- WP 380 **Determination of Cytotoxic Alkaloids in Houttuynia Cordata by Liquid Chromatography/Electrospray Ionization-Tandem Mass Spectrometry;** Fang-Ju Chou; Ting-Ting Jong; Maw-Rong Lee; *National Chung Hsing University, Taichung, Taiwan*
- WP 381 **Determination of Digoxin and Digitoxin by Electrospray Ionization Ion Trap Time-Of-Flight Tandem Mass Spectrometry;** Kang Ma<sup>2</sup>; Leren Wan<sup>1</sup>; Jing Dong<sup>1</sup>; Hashi Yuki<sup>1</sup>; Li Hongmei<sup>2</sup>; <sup>1</sup>Shimadzu Shanghai Office, Shanghai, China; <sup>2</sup>National Institute of Metrology of China, Beijing, China
- WP 382 **Use of GC-QTOF MS to Identify Unknown Compounds in Herbal Extracts;** Viorica Lopez-Avila; Adrian P. Land; George Yefchak; *Agilent Laboratories, Santa Clara, CA*
- WP 383 **Identification & Confirmation of Hydrolysable Tannins from Phyllagathis Preatermisssa with Coupling of NMR & FTMS;** Hooi Poay Tan<sup>1,2</sup>; Sui Kong Ling<sup>3</sup>; Cheng Hock Chuah<sup>2</sup>; Hun Teong Cheah<sup>3</sup>; <sup>1</sup>Forest Research Institute Malaysia, Kepong, Selangor; <sup>2</sup>University of Malaya, Kuala Lumpur, W.Persekutuan; <sup>3</sup>Alpha Analytical Malaysia, Shah Alam, Malaysia
- WP 384 **Tandem Mass Spectrometric Characterization of Echinomycin and Related Compounds;** Takemichi Nakamura<sup>1</sup>; Kenji Watanabe<sup>2</sup>; Hiroki Oguri<sup>3</sup>; Hideaki Oikawa<sup>3</sup>; Hiroyuki Koshino<sup>1</sup>; <sup>1</sup>RIKEN, Wako, Japan; <sup>2</sup>Okayama University, Okayama, Japan; <sup>3</sup>Hokkaido University, Sapporo, Japan
- WP 385 **A Shotgun Approach for Profiling Traditional Chinese Medicine Samples Using UPLC/TOF MSE Coupled with Multi-Variant Statistical Data Analysis;** Kate Yu<sup>1</sup>; Baijing Ma<sup>2</sup>; John P. Shockcor<sup>1</sup>; Jose Castro-perez<sup>1</sup>; Heshui Yu<sup>2</sup>; Liping Kang<sup>2</sup>; Jie Zhang<sup>2</sup>; Yue Gao<sup>2</sup>; <sup>1</sup>Waters Corp, Milford, MA; <sup>2</sup>Beijing Institute of Radiation Medicine, Beijing, China
- WP 386 **PCA Analysis of MS Spectroscopic Fingerprints to Differentiate Skullcap (Scutellaria lateriflora) from Germanders (Teucrium canadense, T. chamaedrys);** Pei Chen<sup>1</sup>; Fenhong Song<sup>2</sup>; James Harnly<sup>1</sup>; Longze Lin<sup>1</sup>; <sup>1</sup>USDA, Beltsville, MD; <sup>2</sup>FDA, Lenexa, KS
- WP 387 **Multidimensional Scaling (MDS) of Matrix Assisted Laser Desorption/Ionization Mass Spectra to Evaluate Hydrolysable Tannins and Anthocyanins;** Rachael Leverage; Martha M. Vestling; Jess D. Reed; *University of Wisconsin, Madison, WI*
- WP 388 **Microbial Volatile Organic Compounds of Aspergillus sp;** Takae Takeuchi<sup>1,2</sup>; Haruna Tanaka<sup>2</sup>; Takahito Suzuki<sup>2</sup>; Shin-ich Iwaguchi<sup>2</sup>; Sachiyo Kaneko<sup>2</sup>; Masato Kiuchi<sup>1</sup>; Masako Iwamatsu<sup>1</sup>; Mamoru Okubo<sup>3</sup>; Takaomi Matsutani<sup>4</sup>; Yoshinori Hosokawa<sup>5</sup>; Yoshio Hashimoto<sup>6</sup>; Hajime Ishitani<sup>6</sup>; <sup>1</sup>National Institute of Advanced Industrial Science, Ikeda, Osaka, Japan; <sup>2</sup>Nara Women's University, Nara, JAPAN; <sup>3</sup>Soda Kogyo Co., Ltd., Higashi-Osaka,, Japan; <sup>4</sup>Kinki University, Higashi-Osaka, Japan; <sup>5</sup>X-ray Precision Inc., Kyoto, Japan; <sup>6</sup>Shimihondenko Co.Ltd., Osaka, Japan
- WP 389 **Quantitation of Pterostilbene in Blueberry Juice by Liquid Chromatography Electrospray Ionization Tandem Mass Spectrometry and Isotope Dilution;** Fabio Mazzotti<sup>1</sup>; Hicham Benabdelkamel<sup>1</sup>; Bartolo Gabriele<sup>2</sup>; Leonardo Di Donna<sup>1</sup>; Anna Napoli<sup>1</sup>; Giovanni Sindona<sup>1</sup>; <sup>1</sup>Università della Calabria, Dipartimento di Chimica, Arcavacata Di Rende, ITALY; <sup>2</sup>Facolta' di Farmacia e Scienze della Nutrizione e, Rende, Italy
- WP 390 **Analysis of the Skin Secretion of Odorrana Schmackeri, the Chinese Odorous Frog;** Martijn Pinkse<sup>1</sup>; Geisa Caprini<sup>1</sup>; Tianbao Chen<sup>2</sup>; Chris Shaw<sup>2</sup>; Peter Verhaert<sup>1</sup>; <sup>1</sup>Delft University of Technology, Delft, Netherlands; <sup>2</sup>School of Pharmacy, Queen's University of Belfast, Belfast, UK
- WP 391 **Direct Live Plant Molecular Analysis of Single Cell from Different Tissues;** Mónica Lorenzo Tejedor; Hajime Mizuno; Naohiro Tsuyama; Takanori Harada; Tsutomu Masujima; *Hiroshima Univ. BioMed., Hiroshima, JAPAN*
- WP 392 **Elucidation of the Mass Fragmentation Processes of the Polyether Marine Toxins, Dinophysistoxins, with Isomer Discrimination using Sodiated Adduct Ions;** Kevin James; Bebhine Carey; zuzana skrabakova; ambrose furey; *Proteobio, Cork, Ireland*
- PROTEINS: PHOSPHOPROTEINS, 393 - 414**
- WP 393 **Highly Efficient Phosphopeptide Enrichment Using TiO2 Coated Magnetic Beads: Phosphoproteomic Analysis of Drosophila Kc167 Cell Lysates;** Lei Cheng<sup>1</sup>; Sven Andrecht<sup>2</sup>; Joerg von Hagen<sup>2</sup>; Clause Juel Jensen<sup>3</sup>; Morten Frodin<sup>3</sup>; Ole N. Jensen<sup>1</sup>; <sup>1</sup>Univ. of Southern Denmark, Odense, Denmark; <sup>2</sup>Merck KGaA, Darmstadt, Germany; <sup>3</sup>Biotech Research & Innovation Center, Copenhagen, Denmark
- WP 394 **Development of PolyMAC-Ti, A Novel Soluble Nanopolymer-Based Phosphopeptide Enrichment Method;** Anton Iliuk; Bethany Alicie; Vicky Martin;

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Robert Geahlen; Weiguo Andy Tao; *Purdue University, West Lafayette, IN*
- WP 395 **High Performance Phosphoproteomics Using Phase Transfer Surfactant; Takeshi Masuda<sup>1</sup>**; Mio Iwasaki<sup>1,2</sup>; Yasuyuki Igarashi<sup>1</sup>; Masaru Tomita<sup>1,2</sup>; Yasushi Ishihama<sup>1,3</sup>; <sup>1</sup>*Institute for Advanced Biosciences Keio University, Tsuruoka, Japan*; <sup>2</sup>*Keio University, Yamagata, Japan*; <sup>3</sup>*PRESTO, Japan Science and Technology Agency, Tokyo, Japan*
- WP 396 **A High-Throughput Analysis of Phosphopeptides Using a Biphasic Pre-Column; Tabiwang N. Arrey**; Thorsten Wolfgang Jaskolla; Dominic Baemlisberger; Björn Meyer; Michael Karas; *University of Frankfurt, Frankfurt Am Main, Germany*
- WP 397 **Enrichment of Phosphopeptides Using Polymer-Titanium(IV) Hybrid Materials on MALDI Plates; Wei-Han Wang**; Yu-Jing Tan; Merlin L. Bruening; *Michigan State University, East Lansing, MI*
- WP 398 **Direct on-TiO<sub>2</sub> Isotopic Labeling of Phosphopeptides by iTRAQ – Qualitative and Quantitative Validation of TiO<sub>2</sub> Phosphopeptide Enrichment Parameters; Martin R. Larsen**; *Univ. Southern Denmark, Odense, Denmark*
- WP 399 **A Screening Method for the Detection of Phosphorylated Peptides in High-Resolution Mass Spectra; Dirk Valkenburg<sup>1,2</sup>**; Raf Van De Plas<sup>2</sup>; Rita Derua<sup>2</sup>; Etienne Waelkens<sup>2</sup>; Tomasz Burzykowski<sup>1</sup>; <sup>1</sup>*UHasselt, Hasselt, Belgium*; <sup>2</sup>*K.U.Leuven, Leuven, Belgium*
- WP 400 **High Speed MALDI TOF/TOF Analysis – Its Advantages for Identification of Digested Proteins and Screening for Phosphorylated Peptides in LC-MSMS; Dietmar Waidelich**; Christof E. Lenz; Dietrich Merkel; Matthias Glueckmann; *Applied Biosystems, Darmstadt, Germany*
- WP 401 **Lys-N and Trypsin Cover Complementary Parts of the Phosphoproteome in a Refined SCX-Based Phosphoproteomics Approach; Shabaz Mohammed**; Sharon Gauci; Andreas Helbig; Nadia Taouatas; A.f. Maarten Altelaar; Albert J.r. Heck; *Utrecht University, Utrecht, Netherlands*
- WP 402 **Improved Sample Preparation for Phosphoproteome Analysis of Rat Brain Tissue; Erol E. Gulcicek**; Kathryn L Stone; Can Bruce; Raimund I Herzog; Robert S Sherwin; *Yale University, New Haven, CT*
- WP 403 **Application of Acid Hydrolysis on Bovine Beta-Casein to Investigate the Integral Phosphorylation; Jinhee Kim**; Seongjae Shin; Hyo-jik Yang; Jeongkwon Kim; *Chungnam National University, Daejeon, South Korea*
- WP 404 **The Determination of Flavin Binding to Rnf Family of Membrane Proteins by MALDI-MS/MS; Dmitri Zagorevski**; Blanca Barquera; *Rensselaer Polytechnic Institute, Troy, NY*
- WP 405 **Characterization of the Auto-Phosphorylation Mechanisms of an Oncogenic Fusion Protein NPM-ALK Using Tandem Affinity Purification-Mass Spectrometry; Peng Wang**; Fang Wu; Leah C Young; Raymond Lai; Liang Li; *University of Alberta, Edmonton, Canada*
- WP 406 **Dun1 FHA Domain-Dependent Dun1 Phosphorylation by Mass Spectrometry; Eric S.-W. Chen<sup>1,2</sup>**; Hyun Lee<sup>1</sup>; Ming-Daw Tsai<sup>1,2</sup>; <sup>1</sup>*Genomic Research Center, Academia Sinica, Taipei, Taiwan*; <sup>2</sup>*National Taiwan University, Taipei, Taiwan*
- WP 407 **Regulation of Protein Phosphorylation at the Postsynaptic Density: Global Analysis Targeting Specific Kinase and Phosphatase Activities; Howard Jaffe<sup>2</sup>**; Ayse Dosemeci<sup>1</sup>; <sup>1</sup>*NINDS/NIH, Bethesda, MD*; <sup>2</sup>*NIH, NINDS, Gaithersburg, MD*
- WP 408 **LC-MS<sup>E</sup> Phosphopeptide Mapping of RhoA and RhoC following in vitro Phosphorylation by PKC $\epsilon$ ; Gregory S. Cavey<sup>1</sup>**; Caryn L. Lehner<sup>1</sup>; Joan C. Krilich<sup>2</sup>; Quintin Pan<sup>3</sup>; <sup>1</sup>*Van Andel Research Institute, Grand Rapids, MI*; <sup>2</sup>*Nanosphere Inc., Northbrook, IL*; <sup>3</sup>*Ohio State University Comprehensive Cancer Center, Columbus, OH*
- WP 409 **Identification of Protein Phosphorylation Sites of Human APPL1 Using MS, MS/MS, and IM-MS; Randi L. Gant -Branum**; John A. Mclean; *Vanderbilt University, Nashville, TN*
- WP 410 **Quantitative Cancer Stem Cell Phosphoprotein Profiling by Use of Tandem Mass Tags and LC-HCD-MS/MS in an LTQ-Orbitrap; Carol L. Nilsson<sup>6</sup>**; Arugadoss Devakumar<sup>1</sup>; Roslyn Dillon<sup>1</sup>; John C. Rogers<sup>2</sup>; Bryan Krastins<sup>5</sup>; Mary Lopez<sup>5</sup>; Michael Rosenblatt<sup>3</sup>; Barbara Kaboord<sup>2</sup>; Charles A. Conrad<sup>4</sup>; <sup>1</sup>*Pfizer Global R & D, San Diego, CA*; <sup>2</sup>*ThermoFisher Scientific, Rockford, IL*; <sup>3</sup>*Thermo Scientific, Rockford, IL*; <sup>4</sup>*University of Texas, M.D.A.C.C., Houston, TX*; <sup>5</sup>*Thermo Fisher Scientific, BRIMS Center, Cambridge, MA*; <sup>6</sup>*Pfizer Inc., San Diego, CA*
- WP 411 **Temporal Analysis of Nocodazole-Induced Phosphorylation Using LTQ Orbitrap; Kohji Nagano**; Takashi Shinkawa; Hironori Mutoh; Osamu Kondoh; Sayuki Morimoto; Noriyuki Inomata; Motooki Ashihara; Nobuya Ishii; Yuko Aoki; Masayuki Haramura; *Chugai Pharmaceutical, Kamakura, Japan*
- WP 412 **Phosphorylation of Arginine Guanidyl Groups as Posttranslational Protein Modification; Andreas Schmidt<sup>2</sup>**; Goran Mitulovic<sup>3</sup>; Jakob Fuhrmann<sup>1</sup>; Tim Clausen<sup>1</sup>; Karl Mechtler<sup>1,3</sup>; <sup>1</sup>*IMP Research Institute of Mo, Vienna, Austria*; <sup>2</sup>*CD Laboratory / Vienna, Vienna, Austria*; <sup>3</sup>*IMBA Inst. of Mol. Biotech., Vienna, Austria*
- WP 413 **Mass Spectrometry Characterization of hCenexin1 Phosphorylation Vital to Polo-like Kinase 1 (Plk1) Interaction for Mitotic Functions; Li-Rong Yu<sup>1</sup>**; Nak-Kyun Soung<sup>2</sup>; Jung-Eun Park<sup>2</sup>; Kyung H. Lee<sup>2</sup>; Jung-Min Lee<sup>3</sup>; Jeong K. Bang<sup>4</sup>; Timothy D. Veenstra<sup>5</sup>; Kunsoo Rhee<sup>3</sup>; Kyung S. Lee<sup>2</sup>; <sup>1</sup>*National Center for Toxicological Research/FDA, Jefferson, AR*; <sup>2</sup>*National Cancer Institute/NIH, Bethesda, MD*; <sup>3</sup>*Seoul National University, Seoul, South Korea*; <sup>4</sup>*Korea Basic Science Institute, Busan, South Korea*; <sup>5</sup>*SAIC-Frederick, Inc., Frederick, MD*
- WP 414 **Label-Free Quantitation by LC-MS of the Global and Phosphoenriched Heart Tissue Proteome Reveals Novel Nitrite-Mediated Pathways to Cardioprotection; David H. Perlman**; Giuseppe Infusini; Selena Bauer; Bernadette O. Fernandez; Vivek N. Bhatia; Mark E. McComb; Martin Feelisch; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*

WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

PROTEIN CONFORMATION, 415 - 451	
WP 415	<b>AMOM: Investigational New Analytical Marker of Oxidation for Monoclonal Antibodies using RP-LC/MS, Peptide Maps and SPR;</b> <u>John C. Le</u> ; Justin T. Paroski; Bernice Yeung; Byeong S. Chang; <i>Symyx Technologies Inc., Camarillo, CA</i>
WP 416	<b>Thermodynamic Measurements of Enzyme Stabilities Using H/D exchange and MALDI-TOF MS;</b> <u>Cheng-Ying Lin</u> ; Yen-Peng Ho; <i>National Dong Hwa University, Hualien, Taiwan</i>
WP 417	<b>Ligand Binding to Cytochrome P450 46A1 as Assessed by Hydrogen - Deuterium Exchange and Mass Spectrometry;</b> Wei-Li Liao <sup>1</sup> ; Nathan Dodder <sup>2</sup> ; Natalia Mast <sup>3</sup> ; Irina A Pikuleva <sup>3</sup> ; <u>Illarion V. Turko</u> <sup>1</sup> ; <sup>1</sup> <i>Center for Advanced Research in Biotechnology, Rockville, MD</i> ; <sup>2</sup> <i>NIST, Gaithersburg, MD</i> ; <sup>3</sup> <i>Case Western Reserve University, Cleveland, OH</i>
WP 418	<b>Allosteric Networks and Regulation of Protein Kinase A: Amide H/D Exchange Mass Spectrometry Reveals Parallels between cAMP Binding and Phosphorylation;</b> <u>Ganesh S. Anand</u> <sup>1</sup> ; Tanushree Bishnoi <sup>1</sup> ; Susan Taylor <sup>2</sup> ; Elizabeth Komives <sup>2</sup> ; <sup>1</sup> <i>National University of Singapore, Singapore, Singapore</i> ; <sup>2</sup> <i>University of California, La Jolla, CA</i>
WP 419	<b>70S Ribosomal-Protein Dynamics in Translocation Revealed by H/D Exchange and Mass Spectrometry;</b> <u>Tatsuya Yamamoto</u> <sup>1</sup> ; Yoshihiro Shimizu <sup>2</sup> ; Takuya Ueda <sup>2</sup> ; Yoshitsugu Shiro <sup>1</sup> ; <sup>1</sup> <i>RIKEN, Sayo-gun, Japan</i> ; <sup>2</sup> <i>Grad. Sch. Frontier Sci., Univ. Tokyo, Kashiwa, Japan</i>
WP 420	<b>Two New Tools for Applying Chromatographic Retention Data to the Mass-Identification of HDX Peptides during HD-Exchange Experiments by NanoLC-MALDI;</b> Enrique Cauich; <u>Paul Gershon</u> ; <i>UC-Irvine, Irvine, CA</i>
WP 421	<b>Combined Ion Mobility and Rapid Gas-Phase Deuterium Labeling in a Synapt Mass Spectrometer for Enhanced Detection of Protein Conformations;</b> <u>Kasper D. Rand</u> <sup>1</sup> ; James P. Murphy III <sup>2</sup> ; Keith Fadgen <sup>2</sup> ; John R. Engen <sup>1</sup> ; <sup>1</sup> <i>Northeastern University, Boston, MA</i> ; <sup>2</sup> <i>Waters Corporation, Milford, MA</i>
WP 422	<b>Generation of Native Protein Ions and H/D Exchange in Liquid Sample Desorption Electrospray Ionization Mass Spectrometry (DESI-MS);</b> <u>Zhixin Miao</u> ; Hao Chen; <i>Ohio University, Athens, OH</i>
WP 423	<b>New Developments to HD Desktop Software for the Data Analysis of Hydrogen Exchange Mass Spectra;</b> <u>Bruce Pascal</u> ; Michael Chalmers; Jun Zhang; Scott Busby; Patrick R. Griffin; <i>The Scripps Research Institute, Scripps Florida, Jupiter, FL</i>
WP 424	<b>Characterization of Thermal Unfolding in Proteins Using Electrospray Ionization Time of Flight Mass Spectrometry and Top Down Fragmentation;</b> <u>Douglas Rehder</u> ; Sabine Paterson; David Hambly; Jaby Jacob; Michael J Treuheit; Bruce Kerwin; Himanshu Gadgil; <i>Amgen Inc., Seattle, WA</i>
WP 425	<b>IR Photodissociation Spectra of Gaseous Protein Ions: Hydrogen Bonding of Side-Chain Protonated Amino Groups is Unusually Strong;</b> <u>Xianglei Kong</u> <sup>1</sup> ; Kathrin Breuker <sup>2</sup> ; Fred W. McLafferty <sup>1</sup> ; <sup>1</sup> <i>Cornell University, Ithaca, NY</i> ; <sup>2</sup> <i>University of Innsbruck, Innsbruck, Austria</i>
WP 426	<b>New ECD Kinetic Probes of the Unfolding and Folding of Protein Conformers after Electrospray;</b> <u>Sergio Castro</u> <sup>1</sup> ; Kathrin Breuker <sup>2</sup> ; Fred W. McLafferty <sup>1</sup> ; <sup>1</sup> <i>Cornell University, Ithaca, NY</i> ; <sup>2</sup> <i>University of Innsbruck, Innsbruck, Austria</i>
WP 427	<b>Fragmentation of of Gas Phase Ions of Ubiquitin Produced from Different Solution Conformations in a 3D Ion Trap;</b> John Wright; <i>Varian Inc., Wood Dale, IL</i>
WP 428	<b>Mass spectrometry-Based Studies of the Vancomycin Resistance Pathway in <i>Enterococcus faecalis</i>;</b> <u>Charlotte A. Scarff</u> ; Andrew M. Quigley; Adrian J. Lloyd; David I. Roper; James H. Scrivens; <i>University of Warwick, Coventry, UK</i>
WP 429	<b>Development of Mass Spectrometry-Based Experimental Strategies for Detection and Characterization of Proteins with Non-Native Disulfide Bonds;</b> <u>Adriana Zeledon</u> ; Igor A. Kaltashov; <i>University of Massachusetts, Amherst, MA</i>
WP 430	<b>Computational Methods for Incorporation of Structural Mass Spectrometry Data in Structure Determination;</b> <u>Xiaoqing Zheng</u> <sup>1</sup> ; Robert M Vernon <sup>2</sup> ; David Baker <sup>2</sup> ; Mark Chance <sup>3</sup> ; <sup>1</sup> <i>Case Western Reserve Univ., Cleveland, OH</i> ; <sup>2</sup> <i>University of Washington, Seattle, WA</i> ; <sup>3</sup> <i>Case Western Reserve Univ., Cleveland, OH</i>
WP 431	<b>MS Cleavable Crosslinker for Protein Interactions;</b> <u>Billy Clifford-Nunn</u> ; Eric Simon; Philip Andrews; <i>University of Michigan, Ann Arbor, MI</i>
WP 432	<b>"MALDI-MS3" Analysis of CID-Cleavable Isotopically Coded Crosslinker TEABS;</b> <u>Jamie Thomas</u> ; Evgeniy Petrotchenko; Christoph Borchers; <i>UVic-GBC Proteomics Centre, Victoria, Canada</i>
WP 433	<b>Probing the Electrostatic Surface Topology of Proteins Using Combinatorial Collision-Induced Dissociative Chemical Crosslinking Reagents and Mass Spectrometry Analysis;</b> Fan Liu; <u>Michael B. Goshe</u> ; <i>NC State University, Raleigh, NC</i>
WP 434	<b>Structural Proteomics Revisited: A Top-Down Approach to Chemical Crosslinking and Protein Interactions;</b> <u>Giuseppe Infusini</u> ; Weiwei Tong; David H. Perlman; Roger Theberge; Catherine E. Costello; <i>Boston University School of Medicine, Boston, MA</i>
WP 435	<b>A Strategy for Efficient Identification of Chemically-Crosslinked Sites in Large Protein Complexes Using Label-Free LC-MS/MS Pattern Comparisons and Targeted MS/MS;</b> <u>Donghai Li</u> <sup>1</sup> ; Sandra L. Harper <sup>1</sup> ; Hsin-yao Tang <sup>1</sup> ; David W. Speicher <sup>1,2</sup> ; <sup>1</sup> <i>The Wistar Institute, Philadelphia, PA</i> ; <sup>2</sup> <i>Wistar Institute, Philadelphia, PA</i>
WP 436	<b>Development of Polyproline Linked Bifunctional Crosslinkers as Molecular Rulers for the Structural Investigation of Protein Assemblies;</b> <u>Timothy Garrett Jr.</u> ; Kevin B. Turner; Daniele Fabris; <i>U. Maryland Baltimore County, Baltimore, MD</i>
WP 437	<b>Structure Determination of Proteins from the Endoplasmic Reticulum Using Chemical Cross-Linking, Mass Spectrometry and Bioinformatics;</b> <u>Morten Rasmussen</u> <sup>1</sup> ; Tina Nielsen <sup>1</sup> ; Gunnar Houen <sup>3</sup> ; Juri Rappilber <sup>2</sup> ; Peter Hojrup <sup>1</sup> ; <sup>1</sup> <i>BMB, University of Southern Denmark, Odense M, Denmark</i> ; <sup>2</sup> <i>Wellcome Trust Centre for Cell Biology, Edinburgh, UK</i> ; <sup>3</sup> <i>Statens Serum Institut, Copenhagen, Denmark</i>
WP 438	<b>Use of N-Terminal Modification with Isotopically Coded Reagents for Selective Identification of Inter-Peptide Crosslinks;</b> <u>Jason Serpa</u> ; Evgeniy Petrotchenko;

## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Christoph Borchers; *UVic-GBC Proteomics Centre, Victoria, Canada*
- WP 439 **Crosslinking Techniques for Structural Studies of Large, Multi-chain Coagulation-Related Proteins;** Susan T. Lord<sup>1</sup>; Maria Warren Hines<sup>2</sup>; Evgeniy Petrotchenko<sup>3</sup>; Carol E. Parker<sup>2</sup>; Barbara Cardinali<sup>1</sup>; <sup>1</sup>*Department of Pathology & Lab.Medicine, UNC-CH, Chapel Hill, NC;* <sup>2</sup>*UNC-Duke Proteomics Center, UNC-CH, Chapel Hill, NC;* <sup>3</sup>*UVic-GBC Proteomics Centre, Victoria, BC*
- WP 440 **Out-gel Digest Procedure for Protein Cross-Linking Applications;** Ashley Cabecinha; Evgeniy Petrotchenko; Christoph Borchers; *UVic-GBC Proteomics Centre, Victoria, Canada*
- WP 441 **Probability Based Shotgun Approach for Cross-Linking Sites Analysis by Mass Spectrometry;** Young Jin Lee; *Iowa State University, Ames, IA*
- WP 442 **Characterization of  $\beta$ 2m Dimer Formation using Covalent Labeling, Bottom-Up, and Top-Down Strategies;** Vanessa Leah Mendoza<sup>1</sup>; Jonathan Wilson<sup>2</sup>; Desmond Kaplan<sup>2</sup>; Richard Vachet<sup>1</sup>; <sup>1</sup>*University of Massachusetts, Amherst, MA;* <sup>2</sup>*Bruker Daltonics, Inc., Billerica, MA*
- WP 443 **Structural Study of C3b-H Complex Using Gamma and Synchrotron Irradiation Coupled with Semi-Quantitative Mass Spectrometry;** Maxime Le Mignon<sup>1,2</sup>; Florence Gonnet<sup>1,2</sup>; Sebastien Brier<sup>1,2</sup>; Delphine Pflieger<sup>1,2</sup>; Bianca Sclavi<sup>3</sup>; Serge Pin<sup>4,5</sup>; Quentin Raffy<sup>4,5</sup>; Jean-Philippe Renault<sup>4,5</sup>; Régis Daniel<sup>1,2</sup>; <sup>1</sup>*Université Evry-Val-d'Essonne, Evry, France;* <sup>2</sup>*CNRS UMR 8587, LAMBE, Evry, France;* <sup>3</sup>*CNRS UMR 8113, LBPA, Cachan, France;* <sup>4</sup>*CNRS URA 331 LCF, Gif-sur-Yvette, France;* <sup>5</sup>*CEA IRAMIS, Gif-sur-Yvette, France*
- WP 444 **Probing the Structure of Proinsulin by MS-Based Footprinting;** Janna Kiselar; Nelson B. Phillips; Mark R Chance; Michael A. Weiss; *Case Western Reserve Univ, Cleveland, OH*
- WP 445 **Computational Methods for Examining Covalently Labeled Biomolecules Using Structural Mass Spectrometry;** Parminder Kaur; Janna Kiselar; Mark Chance; *Case Western Reserve Univ., Cleveland, OH*
- WP 446 **Characterizing the ATP-Induced Structural Changes of the N-Terminal Domain of Pms1 by Oxidative Surface Mapping and Mass Spectrometry;** Allison N Schorzman<sup>1</sup>; Lalith Perera<sup>1</sup>; Lars C. Pedersen<sup>1</sup>; Jenny M. Cutalo<sup>2</sup>; Thomas A. Darden<sup>1</sup>; Thomas A. Kunkel<sup>1</sup>; Kenneth B. Tomer<sup>1</sup>; <sup>1</sup>*NIEHS, RTP, NC;* <sup>2</sup>*FBI, Washington, D.C., DC*
- WP 447 **Autoantigen Structural Studies: Photolytic Oxidation and Chemical Modification Combined with Mass Spectrometry;** Jinglan Wang; James G Smedley III; Piotr J Bilski; Jeffrey F Kuhn; Kenneth B. Tomer; Leesa Deterding; *NIEHS, Research Triangle Park, NC*
- WP 448 **Laser-Induced Oxidative Labeling of Proteins for Probing Folding Kinetics and Mechanisms;** Bradley B. Stocks; Lars Konermann; *Univ. of Western Ontario, London, Canada*
- WP 449 **Structural Characterization of an Integral Membrane Protein by Oxidative Methionine Labeling and Mass Spectrometry;** Yan Pan; *Uni. of Western Ontario, London, Canada*
- WP 450 **High Sensitivity Characterization of Conformational Differences in Pharmaceutical Proteins by Rapid Hydroxyl Radical Footprinting;** Caroline Watson<sup>1</sup>; Sergio G Tisminetzky<sup>2</sup>; Marshall W. Bern<sup>3</sup>; Joshua S. Sharp<sup>1</sup>; <sup>1</sup>*Complex Carbohydrate Research Center/UGA, Athens, GA;* <sup>2</sup>*Biotechnology Development Group, ICGB, Trieste, Italy;* <sup>3</sup>*Palo Alto Research Center, Palo Alto, CA*
- WP 451 **MS-based Carboxyl Group Protein Footprinting for Probing the Orientation of FMO Protein in Photosynthetic Bacterial Membranes;** Hao Zhang; Jianzhong Wen; Robert E. Blankenship; Michael L. Gross; *Washington University, Saint Louis, MO*
- NON-COVALENT INTERACTIONS, 452 - 464**
- WP 452 **Investigation of Protein-Protein Complex Noncovalent Interactions by Quadrupole, Ion Mobility Separation Time-of-Flight Mass Spectrometry;** Sheng Zhang<sup>1</sup>; Abiola Pollard<sup>1</sup>; Michael Daly<sup>2</sup>; Brian Crane<sup>1</sup>; <sup>1</sup>*Cornell University, Ithaca, NY;* <sup>2</sup>*Waters Corp, Oakland, CA*
- WP 453 **Determining Stoichiometry of Noncovalent Protein Complexes using LC-MS/MS Label-Free Protein Quantification;** Shirley H. Lomeli; Pinmanee Boonthueung; Joseph A. Loo; *UCLA, Los Angeles, CA*
- WP 454 **Towards the Elucidation of the Protein Complexes Involved in Prokaryotic Origin Independent DNA Replication Restart – An ESI-MS Study;** Lindsey Easton; Jingshu Guo; Timothy Mueser; Wendell P. Griffith; *University of Toledo, Toledo, OH*
- WP 455 **Antibody / Antigen Complexes: Characterization of Immune Complexes Using Noncovalent Mass Spectrometry;** Cédric Atmanene<sup>1</sup>; Elsa Wagner-Rousset<sup>2</sup>; Nathalie Corvaia<sup>2</sup>; Alain Van Dorsselaer<sup>1</sup>; Alain Beck<sup>2</sup>; Sarah Sanglier-Cianferani<sup>1</sup>; <sup>1</sup>*CNRS - IPHC - University of Strasbourg, Strasbourg, France;* <sup>2</sup>*Centre d'Immunologie Pierre Fabre, Saint-Julien-en-Genevois, France*
- WP 456 **Optimization of Hydroxyl Radical Surface Mapping Method Combined with Molecular Dynamics Simulations for Characterizing Macromolecular Interactions;** Olga Charvatova<sup>1</sup>; Daniel Nesbitt<sup>1</sup>; Marshall W. Bern<sup>2</sup>; Joshua S. Sharp<sup>1</sup>; Ron Orlando<sup>1</sup>; Robert J. Woods<sup>1</sup>; <sup>1</sup>*University of Georgia, Athens, GA;* <sup>2</sup>*Palo Alto Research Center, Palo Alto, CA*
- WP 457 **Protein Aggregates: Fast Semi-Quantitation Analysis by High-Mass MALDI ToF Analysis;** Alexis Nazabal; Marc Dodeller; Nathalie Riesen; Benoit Plet; Ryan Wenzel; *CovalX AG, Zürich, Switzerland*
- WP 458 **CLIP: A Crosslinker for Enrichment and Confident Identification of Protein Crosslinking Sites by Mass Spectrometry;** Saiful M. Chowdhury<sup>1</sup>; Xiuxia Du<sup>2</sup>; Nikola Tolic<sup>1</sup>; Ashoka D. Polpitiya<sup>1</sup>; Ronald J. Moore<sup>1</sup>; John R. Cort<sup>1,3</sup>; Uljana M. Mayer<sup>1</sup>; Richard D. Smith<sup>1</sup>; Joshua N. Adkins<sup>1</sup>; <sup>1</sup>*Pacific Northwest National Laboratory, Richland, WA;* <sup>2</sup>*University of North Carolina, Charlotte, NC;* <sup>3</sup>*Washington State University, Tri-cities, Richland, WA*
- WP 459 **Technology Development for Studying Transient Protein-Protein Interactions on Chromosomes: Identification of a Transient Acetyltransferase Interactome;** Samuel G. Mackintosh<sup>1</sup>; Sherri K. Smart<sup>1</sup>; Sean D. Taverna<sup>2</sup>; Ricky D. Edmondson<sup>1</sup>; Alan J. Tackett<sup>1</sup>; <sup>1</sup>*University of Arkansas for Medical Sciences, Little Rock, AR;* <sup>2</sup>*Johns Hopkins Medical School, Baltimore, MD*

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- WP 460 **Structural Characterization of Macromolecular Protein Complexes Using Chemical Cross-Linking and Mass Spectrometry**; Pragya Singh; Richard A. Pfuetzner; Scott A. Shaffer; Alexandre Panchaud; Eri Nakatani; Carlos E. Catalano; Samuel I. Miller; David R. Goodlett; *University of Washington, Seattle, WA*
- WP 461 **Defining Topological Features of Membrane Proteins by Electrospray Ionization Mass Spectrometry**; Lynsey N. Jones; Stephen A. Baldwin; Peter J. F. Henderson; Alison E. Ashcroft; *Asbury Centre for Structural Molecular Biology, University of Leeds, Leeds, UK*
- WP 462 **Photo-Crosslinking and Complementary Use of ESI and MALDI Mass Spectrometry to Map Interaction Sites between Transcriptional Activators and Mediator 15**; Bo Wang; Chinmay Majmudar; Anna Mapp; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*
- WP 463 **An Integrative Proteomic Approach to Identify Huntingtin Protein Networks Using a Novel BAC Transgenic Model of Huntington's Disease**; Dyna I. Shirasaki<sup>1</sup>; Erin R. Greiner<sup>1</sup>; Pinmanee Boonthueung<sup>1</sup>; Steve Horvath<sup>2</sup>; X. William Yang<sup>3</sup>; Joseph A. Loo<sup>1</sup>; <sup>1</sup>*UCLA, Department of Chemistry and Biochemistry, Los Angeles, CA*; <sup>2</sup>*UCLA, Department of Biostatistics, Los Angeles, CA*; <sup>3</sup>*UCLA, Brain Research Institute, Los Angeles, CA*
- WP 464 **Characterization of Protein Complexes from Human Pancreatic Cancer Cell Using a Combination of Native-PAGE and Mass Spectrometry**; Xinli Wang; Guoqiang Chen; Zhiyun Zhao; Zhili Li; *Institute of Basic Medical Sciences, CAMS & PUMC, Beijing, China*
- CARBOHYDRATE / OLIGOSACCHARIDES, 465 - 491**
- WP 465 **A Comprehensive Method for Separating Neutral, Sialylated, and Sulfated N-linked Glycans in Their Native and Permethylated Forms**; Sergei Snovida; Ed Bodnar; Helene Perreault; *University of Manitoba, Winnipeg, Canada*
- WP 466 **Profiling and Quantitation of Recombinant Monoclonal Antibody Glycosylation by Nano-LC/ESI-MS with the On-Chip Deglycosylation: Comparison to MALDI-TOF MS and CE-LIF**; Tomasz K. Baginski<sup>1</sup>; Maggie Bynum<sup>2</sup>; Rodney Keck<sup>1</sup>; <sup>1</sup>*Genentech, Inc., South San Francisco, CA*; <sup>2</sup>*Agilent Technologies, Santa Clara, CA*
- WP 467 **An LC/MS Platform for Aminated Oligosaccharide Analysis in Both Positive and Negative Modes: towards More Complete Structural Assignment**; Ewa Jankowska; John F. Cipollo; *Food and Drug Administration CBER, Bethesda, MD*
- WP 468 **Withdrawn**
- WP 469 **N-glycans Profiling Using Capillary Liquid Chromatography and High Mass Accuracy Electrospray Mass Spectrometry: Application to the Characterization of Therapeutic Glycoproteins**; Valegh Faïd; Magali Andre; Nicolas Bihoreau; Guillaume Chevreux; *LFB, Courtaboeuf, France*
- WP 470 **An Integrated Microfluidic LC/MS Chip Workflow for Rapid On-line Deglycosylation and Characterization of N-glycans from IgG Antibodies**; Maggie A. Bynum<sup>1</sup>; Hongfeng Yin<sup>1</sup>; Katie Felts<sup>2</sup>; Yvonne Lee<sup>2</sup>; Craig Monell<sup>2</sup>; Kevin Killeen<sup>1</sup>; <sup>1</sup>*Agilent Laboratories, Santa Clara, CA*; <sup>2</sup>*Agilent Technologies, La Jolla, CA*
- WP 471 **Profiling and Characterization of N- and O-Linked Glycans Released from Glycoproteins Using RP-HPLC with Charged Aerosol Detection and Mass Spectrometry**; Andrew Hanneman; Jason Rouse; *Wyeth BioPharma, Andover, MA*
- WP 472 **High Resolution CE-MS Separation of APTS-Labeled Glycans**; Tomas Rejtar; Dipak Thakur; Zhenke Liu; Andras Guttman; Barry L. Karger; *Northeastern University, Boston, MA*
- WP 473 **Structure Library for Oligosaccharides Built on Retention Times and Accurate Masses**; Shuai Wu<sup>1</sup>; Nannan Tao<sup>1</sup>; J. B. German<sup>1</sup>; Rudi Grimm<sup>2</sup>; Carlito B. Lebrilla<sup>1</sup>; <sup>1</sup>*UC Davis, Davis, CA*; <sup>2</sup>*Agilent Technologies, Palo Alto, California*
- WP 474 **Combining Fully Automated Chip-Nanoelectrospray Ion Trap Mass Spectrometry and GanglioSoft 1.2 Computer Software for Identification of Human Hemangioma Gangliosides**; Catalin C. Schiopu<sup>1</sup>; Alina F. Serb<sup>2</sup>; Eugen Sisu<sup>2</sup>; Zeljka Vukelic<sup>3</sup>; Alina D. Zamfir<sup>4</sup>; <sup>1</sup>*National Institute for R&D in Electrochemistry, Timisoara, Romania*; <sup>2</sup>*University of Medicine and Pharmacy, Timisoara, Romania*; <sup>3</sup>*University of Zagreb, Zagreb, Croatia*; <sup>4</sup>*University Aurel Vlaicu Arad, Arad, Romania*
- WP 475 **Software Utilities for Automated Glycomics**; Sergey Y. Vakhrushev; Denis Dadimov; Jasna Peter-Katalinic; *Institute of Medical Phys, Muenster, Germany*
- WP 476 **Can a Peptide Map Replace The Traditional Glycan Map for N-Glycan Analysis?** Bhavana Shah; Xinzhao Grace Jiang; Louise Chen; Zhongqi Zhang; *Amgen, Inc., Thousand Oaks, CA*
- WP 477 **Multiple Reaction Monitoring Liquid Chromatography Mass Spectrometry for Monosaccharide Compositional Analysis of Glycoproteins**; Loubna A. Hammad; Marwa Saleh; Milos V. Novotny; Yehia Mechref; *Indiana University Biochem Ctr, Bloomington, IN*
- WP 478 **Optimization of Three Atmospheric Pressure Mass Spectrometry (AP-MS) Techniques to Observe Oligosaccharide Degradation Products in Naturally and Artificially Aged Paper**; Catherine H. Stephens<sup>1,2</sup>; Bindesh Shrestha<sup>3</sup>; Paul M. Whitmore<sup>1,2</sup>; Mark E. Bier<sup>2</sup>; Akos Vertes<sup>3</sup>; <sup>1</sup>*Art Conservation Research Center, Pittsburgh, PA*; <sup>2</sup>*Carnegie Mellon University, Pittsburgh, PA*; <sup>3</sup>*George Washington University, Washington, DC*
- WP 479 **Differentiation of Lithium Cation-Attached Mono- and Disaccharide Isomers by Wavelength-Dependent CO<sub>2</sub> Laser Photofragmentation and FTICR Mass Spectrometry**; John R. Eyler; Sarah E. Stefan; *University of Florida, Gainesville, FL*
- WP 480 **Structural Characterization of 1-octyl-β-D-Glucopyranoside Using Zinc Cationization. An Electrospray Ionization and Tandem Mass Spectrometry Study**; Khaled Edbey<sup>1</sup>; Grainne Moran<sup>2</sup>; Gary Willett<sup>2</sup>; <sup>1</sup>*University of Garyounis, Benghazi, Libya*; <sup>2</sup>*The University of New South Wales, Sydney, NSW*
- WP 481 **Changes in Modifications of Cell Wall Oligosaccharides from Lignocellulosic Biomass During AFEX Pretreatment Using LC/TOFMS and Multiplexed CID**; Ramin Vismeh; Shishir P

WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Chundawat; Venkatesh Balan; Bruce E Dale; A. Daniel Jones; *Michigan State University, East Lansing, MI*
- WP 482 **Infrared Multiple Photon Dissociation (IRMPD) Spectra of Rubidium Cation-Tagged D-Glucuronic and L-Iduronic Acids;** Emilio Cagmat; Jan Szczepanski; Nicolas Polfer; David H. Powell; John R. Eyler; *Department of Chemistry, University of Florida, Gainesville, FL*
- WP 483 **Compositional and Structural Analysis of Gangliosides in Human Cerebrospinal Fluid by Chip-Based Nanoelectrospray Ionization Tandem Mass Spectrometry;** Alina F. Serb<sup>1</sup>; Catalin C. Schiopu<sup>2</sup>; Dragana Marincic<sup>3</sup>; Zeljka Vukelic<sup>3</sup>; Alina D. Zamfir<sup>4</sup>; <sup>1</sup>*University of Medicine and Pharmacy, Timisoara, Romania*; <sup>2</sup>*National Institute for R&D in Electrochemistry, Timisoara, Romania*; <sup>3</sup>*University of Zagreb, Zagreb, Croatia*; <sup>4</sup>*Aurel Vlaicu University of Arad, Arad, Romania*
- WP 484 **Characterization of Protein Glycosylation Intermediates by LC-MS/MS on Porous Graphitic Carbon: Discovery of C45 and C60 Polyisoprenyl-Oligosaccharide Lipid Carriers;** Jacek Stupak<sup>1</sup>; Christopher Reid<sup>1</sup>; Christine M. Szymanski<sup>2</sup>; Jianjun Li<sup>1</sup>; <sup>1</sup>*National Research Council, Ottawa, ON*; <sup>2</sup>*AICCS, University of Alberta, Edmonton, AB*
- WP 485 **MALDI Tandem MS Analysis of Cellulose and Related Biomolecules: Potential for MS Imaging of Cellulosic Tissues;** Kyle A. Lunsford; Gary F. Peter; Richard A. Yost; *University of Florida, Gainesville, FL*
- WP 486 **Analysis of Mycothiol and Mycothione Levels from Wild-Type and *mtt* Mutant Strains from *Mycobacterium smegmatis*;** Cynthia M Holsclaw<sup>1</sup>; Wilson B Muse<sup>3</sup>; Kate Carroll<sup>3</sup>; Julie A. Leary<sup>1,2</sup>; <sup>1</sup>*Section of MCB, University of California, Davis, CA*; <sup>2</sup>*Department of Chemistry, University of California, Davis, CA*; <sup>3</sup>*Life Sciences Institute, University of Michigan, Ann Arbor, MI*
- WP 487 **Analysis of Brain Chondroitin/Dermatan Sulfate Glycosaminoglycans by Fully Automated Chip-Based Nanoelectrospray Multistage Mass Spectrometry;** Corina Flangea<sup>2</sup>; Eugen Sisu<sup>2</sup>; Daniela Seidler<sup>3</sup>; Alina D. Zamfir<sup>1</sup>; <sup>1</sup>*University Aurel Vlaicu Arad, Arad, Romania*; <sup>2</sup>*University of Medicine and Pharmacy, Timisoara, Romania*; <sup>3</sup>*University of Muenster, Muenster, Germany*
- WP 488 **Strategies toward Characterizing Sulfated Glycans in Recombinant Proteins;** John J. Thomas<sup>1</sup>; Paul Salinas<sup>1</sup>; Gregory O Staples<sup>2</sup>; Hicham Naimy<sup>2</sup>; Joseph Zaia<sup>2</sup>; Philip J. Savickas<sup>1</sup>; <sup>1</sup>*Shire HGT, Cambridge, MA*; <sup>2</sup>*Boston University School of Medicine, Boston, MA*
- WP 489 **The Occurrence of Rare, Unsubstituted Glucosamine-Containing Disaccharides in Heparan Sulfate from Bovine and Rat Tissues: an SEC LC/MS Study;** Xiaofeng Shi; Joseph Zaia; *Boston University School of Medicine, Boston, MA*
- WP 490 **On-Line Tandem Mass Spectrometry for Characterization of Protein Binding Heparan Sulfate Octasaccharides;** Hicham Naimy; Nancy Leymarie; Joseph Zaia; *Boston University School of Medicine, Boston, MA*
- WP 491 **Improved HILIC LC/MS Analysis of Heparinoids Using a Chip with Post-column Make-Up Flow;** Gregory O. Staples<sup>1</sup>; Hicham Naimy<sup>1</sup>; Hongfeng Yin<sup>2</sup>; Karsten Kraiczek<sup>3</sup>; Kevin Killeen<sup>2</sup>; Catherine E. Costello<sup>1</sup>; Joseph Zaia<sup>1</sup>; <sup>1</sup>*Boston University School of Medicine, Boston, MA*; <sup>2</sup>*Agilent Laboratories, Santa Clara, CA*; <sup>3</sup>*Agilent Technologies, Waldbronn, Germany*
- PROTEINS, GLYCOPROTEINS, 492 - 512**
- WP 492 **Biological Activities and Compositions of Protein Extracted from *Kaempferia Parviflora* Wall. Ex.** Baker; Polkit Sangvanich; *Chuklalangkorn University, Bangkok, Thailand*
- WP 493 **Characterization of the Disulfide Connectivity and N-linked Glycosylation of KLH using a LTQ with CID and ETD;** Justin B. Sperry; Halyna E. Narepekha; Qin Zou; James A. Carroll; *Pfizer, Saint Louis, MO*
- WP 494 **A Novel Approach for Identification and Quantitation of Protein Glycosylation Pattern by Precursor Ion Scan and H-SRM on QQQ Instrument;** Andreas F.R Hühmer<sup>1</sup>; Reiko Kiyonami<sup>1</sup>; Shiao-lin Wu<sup>2</sup>; Barry L. Karger<sup>2</sup>; Vlad Zabrouskov<sup>1</sup>; William S. Hancock<sup>2</sup>; <sup>1</sup>*ThermoFisher Scientific, San Jose, CA*; <sup>2</sup>*Barnett Institute, Northeastern University, Boston, MA*
- WP 495 **Electron Capture Dissociation of Sialated Glycopeptides;** Prasanna Ramachandran; Sheng Yin; Rachel R Ogorzalek Loo; Joseph A. Loo; *University of California, Los Angeles, CA*
- WP 496 **Parallel Structural Characterization of Glycopeptides and Glycoprotein Quantification by Electrospray Quadrupole Ion-Mobility Time-of-Flight Mass Spectrometry with Ultra Performance Liquid Chromatography;** Hui Wei<sup>1</sup>; Wen Ding<sup>2</sup>; John Kelly<sup>2</sup>; <sup>1</sup>*Waters Corporation, Milford, MA*; <sup>2</sup>*National Research Council of Canada, Ottawa, Ontario, Canada*
- WP 497 **Combined Analysis Of Protein Glycosylation and Label-Free-Glycoprotein-Bacteria Interactions Using MALDI-FTICR MS and Scanning Optical Microscope Based on OI-RD;** Mariana Barboza; Yiyan Fei; David A. Mills; Bruce J. German; XiangDong Zhu; Carlito Lebrilla; *University of California, Davis, CA*
- WP 498 **Analysis of Site-Specific Glycosylation Profile of Glycoproteins by LC-ECD-MS/MS in a Radio Frequency Linear Ion Trap;** Takeshi Sakamoto; Naomi Manri; Hiroyuki Satake; Akihito Kaneko; *Central Res. Lab., Hitachi, Ltd., Tokyo, Japan*
- WP 499 **Site-Specific Glycoprofiling of N-Linked Glycopeptides Using MALDI-TOF MS;** Morten Thaysen-Andersen; Simon Mysling; Peter Hojrup; *BMB, University of Southern Denmark, Odense M, Denmark*
- WP 500 **Withdrawn**
- WP 501 **A Glycoproteomics Approach for Profiling of Pharmaceutical Compounds Using Quantitative Glycopeptide Enrichment and Online LC (HILIC/RP) – Mass Spectrometry;** Jessica Wohlgemuth; Thomas Eichhorn; Robertus Hendriks; Sven Andrecht; *Merck KGaA, Darmstadt, Germany*
- WP 502 **Comprehensive Characterization of Haptoglobin Glycosylation Using a PLOT LC column with a Thermo LTQ-ETD-MS;** Dongdong Wang; Marina Hincapie; Shiao-Lin Wu; Barry L. Karger; *Northeastern University, Boston, MA*
- WP 503 **Assigning the Glycosylation Sites of Glycoproteins Using Endo-M in Conjunction with LC/MSMS;** Ahmed Hussein<sup>1,2</sup>; Zaneer, M. Segu<sup>1,3</sup>; Milos, V. Novotny<sup>1,2</sup>; Yehia Mechref<sup>1,2</sup>; <sup>1</sup>*Dept of Chemistry, Indiana University, Bloomington, IN*; <sup>2</sup>*National Center for glycomics and glycoproteomics, Bloomington, IN*;



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>3</sup>METACyt Biochemical Analysis Center, Bloomington, IN
- WP 504 **Identification and Quantitation of Sialylated glycopeptides as Cancer Biomarkers Using TiO2 Chromatography Combined with iTRAQ, O18-Labeling and MRM;** Sara Eun Lendal<sup>1,2</sup>; Søren Cold<sup>3</sup>; Martin R. Larsen<sup>2</sup>; <sup>1</sup>Protein Research Group, Odense, Denmark; <sup>2</sup>Univ. Southern Denmark, Odense, Denmark; <sup>3</sup>Odense University Hospital, Odense, Denmark
- WP 505 **Identification and Quantification of Glycoproteins Using Ion-Pairing Normal-Phase Liquid Chromatography and Mass Spectrometry;** Wen Ding<sup>1</sup>; Harald Nothaft<sup>2</sup>; Christine Szymanski<sup>2</sup>; John F. Kelly<sup>1</sup>; <sup>1</sup>National Research Council of Canada, Ottawa, ON; <sup>2</sup>University of Alberta, Edmonton, AB
- WP 506 **Method Optimization for the Determination of Protein Site of N-Glycosylation: Case Study for SynCAM 1;** Edward Voss<sup>1</sup>; Thomas Biederer<sup>1</sup>; Terence Wu<sup>1</sup>; Michael L. Easterling<sup>2</sup>; Mary LoPresti<sup>1</sup>; Kenneth R. Williams<sup>1</sup>; Tukiet T. Lam<sup>1</sup>; <sup>1</sup>Yale University, New Haven, CT; <sup>2</sup>Bruker Daltonic, Billerica, MA
- WP 507 **Pancreatic Cancer Serum Detection Using A Lectin/Glyco-Antibody Array Method;** Chen Li<sup>1</sup>; Eugene Zolotarevsky<sup>1</sup>; Michelle A. Anderson<sup>1</sup>; Dean E. Brenner<sup>1</sup>; Diane M. Simeone<sup>1</sup>; David M. Lubman<sup>1</sup>; Fan Xiang<sup>2</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>Shimadzu Biotech, Pleasanton, CA
- WP 508 **A Novel Enrichment Method for Analysis of Sulfated Glycopeptides with MALDI TOF MS;** Masaaki Toyoda; Hisashi Narimatsu; Akihiko Kameyama; Research Center for Medical Glycoscience, AIST, Tsukuba, Ibaraki, Japan
- WP 509 **Glycoprotein Capturing through Functionalized Magnetic Nanoparticles;** Hyo-jik Yang<sup>1</sup>; Seongjae Shin<sup>1</sup>; Eun Hye Park<sup>1</sup>; Jinhee Kim<sup>1</sup>; Yangsun Kim<sup>2</sup>; Jeongkwon Kim<sup>1</sup>; <sup>1</sup>Chungnam National University, Daejeon, South Korea; <sup>2</sup>Hudson Surface Technology, Newark, NJ
- WP 510 **Highly Sensitive MALDI-MS<sup>n</sup> for Identification of Glycopeptides by a Simple Pyrene-Derivatization Method;** Junko Amano; Takashi Nishikaze; Fumio Tougasaki; The Noguchi Institute, Itabashi, Japan
- WP 511 **Enrichment and Identification of Glycoproteins and Glycan Using Nano-Scale Chelating Con A Monolithic Capillary;** Shun Feng<sup>1</sup>; Na Yang<sup>1</sup>; Subramaniam Pennathur<sup>1</sup>; Steve Goodison<sup>2</sup>; David M. Lubman<sup>1</sup>; Fan Xiang<sup>3</sup>; <sup>1</sup>University of Michigan, Ann Arbor, MI; <sup>2</sup>University of Florida, Jacksonville, FL; <sup>3</sup>Shimadzu Biotech, Pleasanton, CA
- WP 512 **A Comparison Study of Glycopeptides Enrichment of Boronic Acid Derived Magnetic Beads and Bare Silica-Coated Magnetic Nanoparticles;** Ming-yi Ho; Chung-lin Liao; Academia Sinica, Taipei, Taiwan
- WP 513 **Method for Purification and Identification of Protein Biomarker from Human Serum Using TOF-TOF Instrument;** Vanitha Thulasiraman<sup>1</sup>; Matthew Hammond<sup>1</sup>; Amanda Bulman<sup>1</sup>; Steve Roth<sup>1</sup>; Mariana Rusa<sup>1</sup>; Enrique Dalmasso<sup>1</sup>; Diane Mccarthy<sup>2</sup>; Fiona Plows<sup>3</sup>; <sup>1</sup>Bio-Rad Laboratories, San Jose, CA; <sup>2</sup>Bio-Rad, Malvern, PA; <sup>3</sup>Bio-Rad Laboratories, Inc., Hercules, CA
- WP 514 **Quantitative Analysis of Chaotropic & Solvent Effects on the Trypsin Digestion Efficiency of Human Plasma;** Michael A. Kuzyk<sup>1</sup>; Darryl Hardie<sup>1</sup>; Juncong Yang<sup>1</sup>; Derek Smith<sup>1</sup>; Angela M. Jackson<sup>1</sup>; N. Leigh Anderson<sup>2</sup>; Jennifer Proc<sup>1</sup>; Christoph H. Borchers<sup>1</sup>; <sup>1</sup>UVic-Genome BC Proteomics Centre, Victoria, Canada; <sup>2</sup>Plasma Proteome Institute, Washington, D.C.
- WP 515 **Analysis of Native Proteins by NanoLC-FT-ICR-MS : Application to the Identification of Apolipoprotein A-I Modifications Induced by Oxidative Stress;** Alexia Ortiz<sup>1</sup>; Gérald Luc<sup>2</sup>; Caroline Tokarski<sup>1</sup>; Christian Rolando<sup>1</sup>; <sup>1</sup>Univ. des Science/Tech de Lille, Villeneuve d'Ascq, France; <sup>2</sup>Université du Droit et de la Santé, Lille, France
- WP 516 **Changes in the Maternal Serum Proteome between the 1st and 3rd Trimesters of Uncomplicated Pregnancy in Nepal;** Peter Scholl<sup>1,3</sup>; Marjan Gucek<sup>2</sup>; Roberto Diez<sup>2</sup>; Ingo Ruczinski<sup>3</sup>; Alissa Rennie<sup>3</sup>; Chris Nathasingh<sup>3</sup>; Robert N. Cole<sup>2</sup>; James Yager<sup>3</sup>; John D. Groopman<sup>3</sup>; Kerry Schulze<sup>3</sup>; Parul Christian<sup>3</sup>; Keith West<sup>3</sup>; <sup>1</sup>US FDA, College Park, MD; <sup>2</sup>Johns Hopkins University, School of Medicine, Baltimore, MD; <sup>3</sup>JHU, Bloomberg School of Public Health, Baltimore, MD
- WP 517 **A Recovery Strategy of Co-Depleted Proteins in Affinity-Based Separation Workflows for Plasma and serum;** Yanbao Yu<sup>1,2</sup>; Harsha P. Gunawardena<sup>1,2</sup>; Xian Chen<sup>1,2</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>UNC-Duke Proteomics Centre, Chapel Hill, NC
- WP 518 **Proteomic Analysis of Human Plasma Proteins by IEF-LC-MS/MS Analysis following Depletion of High-Abundance Proteins;** Chengjian Tu; Misti Yates; Kristin Cheek; Robbert Slebos; David Tabb; Daniel C. Liebler; Department of Biochemistry, Vanderbilt University, Nashville, TN
- WP 519 **Enhanced Analytical Resolution Due to Efficient Depletion of Albumin and IgG from Human Plasma Using New Prepacked Columns;** Inger Salomonsson; Susanna Lindman; Ulf Hellberg; Staffan Lindqvist; Gunnar Glad; Lena Jonsson; Ann Bergh; GE Healthcare, Uppsala, Sweden
- WP 520 **FT-ICR MS Profiling of Small Molecule Derived from Plasma Obtained from Gaucher Disease Patients;** Tukiet T. Lam<sup>1</sup>; Mei Yang<sup>1</sup>; Michael Easterling<sup>2</sup>; Edward Voss<sup>1</sup>; Pramod K. Mistry<sup>1</sup>; Kenneth R. Williams<sup>1</sup>; <sup>1</sup>Yale University, New Haven, CT; <sup>2</sup>Bruker Daltonics, Inc., Billerica, MA
- WP 521 **A High Quality Human Plasma Proteome Available in the PeptideAtlas;** Terry Farrah<sup>1</sup>; Eric Deutsch<sup>1</sup>; David Shteynberg<sup>1</sup>; David S Campbell<sup>1</sup>; Henry H. Lam<sup>2</sup>; Zhi Sun<sup>1</sup>; Gilbert Omenn<sup>1,3</sup>; Ruedi Aebersold<sup>1,4</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong; <sup>3</sup>University of Michigan, Ann Arbor, MI; <sup>4</sup>Swiss Federal Institute of Technology, Zurich, Switzerland
- WP 522 **Development of Metrics for Assessment of Plasma Quality;** Lisa J Zimmerman<sup>1</sup>; Julie A Coleman<sup>1</sup>; Douglas P Hardin<sup>1</sup>; Alexander Statnikov<sup>1</sup>; Constantin Aliferis<sup>2</sup>; Daniel C. Liebler<sup>3</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>New York University, New York, NY; <sup>3</sup>Vanderbilt Univ. School of Medicine, Nashville, TN
- WP 523 **LC-MS/MS Analysis of HDL Complexes Isolated by IgY Immuno-Capture;** Yunan Miao<sup>1</sup>; Junji Watanabe<sup>2</sup>; George Katselis<sup>1</sup>; Srinivasa T. Reddy<sup>2</sup>; Terry Lee<sup>1</sup>; <sup>1</sup>City of Hope, Duarte, CA; <sup>2</sup>University of California, Los Angeles, Los Angeles, CA

#### PLASMA PROTEOMICS, 513 - 524



## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 524 **Quantitative Study of Plasma Proteome Dynamics in Genetically Leptin Deficient Patients during Leptin Replacement Treatment;** Victor Andreev<sup>2</sup>; Ravi Dwivedi<sup>1</sup>; Gilberto Paz-Filho<sup>2</sup>; Oleg V. Krokhin<sup>1</sup>; Ma-Li Wong<sup>2</sup>; John Wilkins<sup>1</sup>; Julio Licinio<sup>2</sup>; <sup>1</sup>University of Manitoba, Winnipeg, Canada; <sup>2</sup>University of Miami, Miami, FL
- PROTEOMICS: TISSUE, 525 - 560**
- WP 525 **iTRAQ Labeling for Tissue Proteomics of Gastric Cancer;** Arivusudar Marimuthu<sup>1,2</sup>; Yashwanth Subbannayya<sup>2</sup>; Harsha H.C.<sup>1,2</sup>; Santhosh Renuse<sup>2</sup>; Ghantasala S. Sameer Kumar<sup>2</sup>; Manoj K Kashyap<sup>1,2</sup>; Vijayakumar M<sup>3</sup>; Veerendra Kumar K.V.<sup>3</sup>; Vijayalakshmi Deshmane<sup>3</sup>; Girija Ramaswamy<sup>3</sup>; Rekha V Kumar<sup>3</sup>; Raghothama Chaerkady<sup>1,2</sup>; Pradip Kumar Acharya<sup>2</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Institute of Bioinformatics, Bangalore, Karnataka; <sup>3</sup>Kidwai Memorial Institute of Oncology, Bangalore, India
- WP 526 **Discovering Novel Components of the Dystrophin-Associated Protein Complex Using Mass Spectrometry-Based Approaches;** Aaron Lorzong; Yetrib Hathout; Eric Hoffman; *Children's Natl. Medical Center, Washington, DC*
- WP 527 **Quantitative Proteomics Analysis of Alcohol-Induced Cardiomyopathy Using Label Free LC-MS Approache;** Elizabeth Yohannes<sup>1</sup>; Helen Anni<sup>2</sup>; Gregory E Gonye<sup>2</sup>; Sergei Ilchenko<sup>1</sup>; Emanuel Rubin<sup>2</sup>; Mark R. Chance<sup>1</sup>; <sup>1</sup>Case Western Reserve University, Cleveland, OH; <sup>2</sup>Thomas Jefferson University, Philadelphia, PA
- WP 528 **2D DIGE Proteomics of Rat Mammary Gland Intact Proteins to Identify Basis of Anti-Cancer Activity by Chemopreventive Polyphenols;** Mark B. Cope<sup>1,2</sup>; Landon Wilson<sup>1</sup>; Richie Herring<sup>1</sup>; Gloria Robinson<sup>1</sup>; Xiangqin Cui<sup>1,2</sup>; Stephen Barnes<sup>1,2</sup>; Helen Kim<sup>1,2</sup>; <sup>1</sup>University of Alabama at Birmingham, Birmingham, AL; <sup>2</sup>UAB Center for Nutrient-Gene Interaction, Birmingham, AL
- WP 529 **Uncovering Changes to the Zebrafish Skeletal Muscle Proteome Induced by Hypoxia;** Kan Chen; Richard B. Cole; Bernard B. Rees; *University of New Orleans, New Orleans, LA*
- WP 530 **Quantitative Analysis of Central Nervous System Myelin by NanoUPLC-MSE;** Stefan Tenzer<sup>1</sup>; Hauke B Werner<sup>2</sup>; Olaf Jahn<sup>2</sup>; Hansjörg Schild<sup>1</sup>; <sup>1</sup>University of Mainz, Mainz, Germany; <sup>2</sup>Max Planck Institute of Experimental Medicine, Goettingen, Germany
- WP 531 **Quantitative Proteomic Profiling Reveals a Role for miR-128 in Prostate Cancer Progression;** Arun Sreekumar<sup>1</sup>; Amjad Khan<sup>2</sup>; Laila Poisson<sup>2</sup>; Vadiraja B. Bhat<sup>3</sup>; Rong Zhao<sup>4</sup>; Javed Siddiqui<sup>2</sup>; Alexey Nesvizhskii<sup>2</sup>; Gilbert Omenn<sup>2</sup>; Arul Chinnaiyan<sup>4</sup>; <sup>1</sup>Medical College of Georgia, Augusta, GA; <sup>2</sup>University of Michigan, Ann Arbor, Michigan; <sup>3</sup>Agilent Technologies, Wilmington, DE; <sup>4</sup>University of Michigan, Pathology, Ann Arbor, MI
- WP 532 **Studying Mammalian Peroxisomes by Quantitative High Resolution Mass Spectrometry;** Sebastian Wiese<sup>1</sup>; Thomas Gronemeyer<sup>1</sup>; Rob Ofman<sup>2</sup>; Christian Bunse<sup>1</sup>; Martin Eisenacher<sup>1</sup>; Christian Stephan<sup>1</sup>; Hans R. Waterham<sup>2</sup>; Ronald J.A. Wanders<sup>2</sup>; Helmut E. Meyer<sup>1</sup>; Bettina Warscheid<sup>1</sup>; <sup>1</sup>Ruhr-University Bochum, Bochum, Germany; <sup>2</sup>University of Amsterdam, Amsterdam, The Netherlands
- WP 533 **MALDI-MS Analyses of Time-Dependent Changes in Tissue Protein Signals after Ethanol Fixation;** Hay-Yan J. Wang; Cheng Bin Liu; Jr Shin Kuo; Hsiao-Han Wang; *National Sun Yat-Sen University, Kaohsiung, Taiwan*
- WP 534 **A Novel Closed ESI Interface Improved LC-MRM Assays for Biomarker Verification on Large-Cell Neuroendocrine Lung Cancer (LCNEC);** Toshihide Nishimura<sup>1</sup>; Tetsuya Fukuda<sup>2</sup>; Hiroshi Hike<sup>3</sup>; Kiyonaga Fujii<sup>4</sup>; Hiroko Hamasaki<sup>5</sup>; Masaharu Nomura<sup>1</sup>; Yasuhiko Bando<sup>2</sup>; Norihiko Ikeda<sup>1</sup>; Harubumi Kato<sup>1</sup>; <sup>1</sup>Tokyo Medical University, Tokyo, Japan; <sup>2</sup>Biosys Technologies, Inc., Tokyo, Japan; <sup>3</sup>AMR Inc., Tokyo, Japan; <sup>4</sup>Hokkaido University, Sapporo, JAPAN; <sup>5</sup>The University of Tokyo, Tokyo, Japan
- WP 535 **Proteomic Profiling of Populus trichocarpa for the Interrogation of Molecular Mechanisms behind Wood Formation;** Taufika Islam Williams; Ying-Hsuan Sun; Ting-Feng Yeh; Jason S. Sampson; David C. Muddiman; Vincent Chiang; *North Carolina State University, Raleigh, NC*
- WP 536 **Top-Down High Resolution Electron Capture Dissociation Mass spectrometry for Characterization of Post-Translational Modifications in Mouse Cardiac Troponin;** Serife Avaz Guner<sup>1</sup>; Lin Li<sup>1</sup>; Chris Doedel<sup>1</sup>; Jeffery W. Walker<sup>1,2</sup>; Ying Ge<sup>1</sup>; <sup>1</sup>University of Wisconsin-Madison, Madison, WI; <sup>2</sup>University of Arizona, Tucson, AZ
- WP 537 **Proteomic Analysis of ADAM17 Metalloproteinase-Cleaved Proteins from PMA-Stimulated Human Platelets;** Karen Pei Yi Fong<sup>1</sup>; Colin G. Barry<sup>1</sup>; Tilo Grosser<sup>1</sup>; Anh Tran<sup>1</sup>; Hsin-yao Tang<sup>2</sup>; Ian A. Blair<sup>3</sup>; David W. Speicher<sup>2</sup>; Lawrence Brass<sup>1</sup>; <sup>1</sup>University of Pennsylvania, Philadelphia, PA; <sup>2</sup>The Wistar Institute, Philadelphia, PA; <sup>3</sup>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA
- WP 538 **Quantitative Protein Profiling of Drosophila Parkin Null Mutants Using Stable Isotope Labeling and Label-Free Proteomics;** Zhiyin Xun<sup>1</sup>; Thomas C Kaufman<sup>2</sup>; David E. Clemmer<sup>2</sup>; <sup>1</sup>UC-davis, Davis, CA; <sup>2</sup>Indiana University, Bloomington, IN
- WP 539 **Proteomic Foray into White Rhinoceros (Ceratotherium simum) Horn Keratin;** Stefan Clerens; Santanu Deb-Choudhury; Anita J. Hancock; Charisa D. Cornellison; Jeff E. Plowman; Henning Koehn; Ancy Thomas; Jolon M. Dyer; *AgResearch Limited, Christchurch, New Zealand*
- WP 540 **Identification and Quantification of NMDA Receptor Complex Proteins in Human Postmortem Brain Tissue Samples;** Matthew L Macdonald<sup>1</sup>; Eugene F. Ciccimaro<sup>3</sup>; Anamika Banerjee<sup>1</sup>; Chang-gyu Hahn<sup>1</sup>; Ian A. Blair<sup>2</sup>; <sup>1</sup>University of Pennsylvania, Philadelphia, PA; <sup>2</sup>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA; <sup>3</sup>Thermo Fisher Scientific, Somerset, NJ
- WP 541 **Quantitative Proteomic Analysis of Diabetic Cardiomyopathy Using Label-free Mass Spectrometry;** Chao Yuan<sup>1</sup>; Gregg DiNuoscio<sup>1</sup>; Andrew Keller<sup>2</sup>; Gaurav S.J.B. Rana<sup>1</sup>; Andrea Romani<sup>1</sup>; Mark Chance<sup>1</sup>; <sup>1</sup>Case Western Reserve Univ., Cleveland, OH; <sup>2</sup>Rosetta Biosoftware, Seattle, WA
- WP 542 **Withdrawn**

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- WP 543 **GeLC-MS/MS Analysis of Rat Lens Proteins and Associated Effects From Aging/Environment;** Kyle A. Floyd; David R. Stella; Landon Wilson; Michael R. Heaven; Stephen Barnes; *University of Alabama at Birmingham, Birmingham, AL*
- WP 544 **Proteomic Profiling of Rat Heart Aging;** Zongming Fu<sup>1</sup>; Chunling Fan<sup>1</sup>; Lesley Kane<sup>1</sup>; Marjan Gucek<sup>1</sup>; Geoffrey Hesketh<sup>1</sup>; Liqun Jiang<sup>2</sup>; Jing Zhang<sup>2</sup>; Mingyi Wang<sup>2</sup>; Allen Everett<sup>1</sup>; Jennifer Van Eyk<sup>1</sup>; Edward Lakatta<sup>2</sup>; *Johns Hopkins School of Medicine, Baltimore, MD*; <sup>2</sup>*National Institute on Aging, Baltimore, MD*
- WP 545 **Evaluation of Sample Preparation Methods for Improved Extraction of Membrane Proteins for Effective Proteomic Analysis of Small Number of Cells;** Dipak Thakur<sup>1</sup>; Tomas Rejtar<sup>1</sup>; Buffie Clodfelder-Miller<sup>2</sup>; Dennis Sgroi<sup>3</sup>; Barry L. Karger<sup>1</sup>; *Northeastern University, Boston, MA*; <sup>2</sup>*University of Alabama, Birmingham, AL*; <sup>3</sup>*Massachusetts General Hospital, Charlestown, MA*
- WP 546 **Withdrawn**
- WP 547 **Comparison of Human Uridine Glucuronosyltransferase Enzyme Expression Levels within Human Liver, Intestine and Kidney using nanoLC Tandem Mass Spectrometry;** David Harbour<sup>1</sup>; John Fallon<sup>1</sup>; Shinya Ito<sup>2</sup>; Takashi Baba<sup>4</sup>; Joseph K Ritter<sup>3</sup>; Philip C. Smith<sup>1</sup>; Gary L. Glish<sup>2</sup>; *UNC Chapel Hill, Chapel Hill, NC*; <sup>2</sup>*University of North Carolina, Chapel Hill, NC*; <sup>3</sup>*Virginia Commonwealth University Medical Center, Richmond, VA*; <sup>4</sup>*Univ. North Carolina, Chapel Hill, NC*
- WP 548 **Tissue Proteomics: A SILAM-Based Workflow For Targeted Differential Analysis Applied To Sleep Nuclei;** Ronald A. Miller<sup>1</sup>; Christopher J. Winrow<sup>1</sup>; Daniel S. Spellman<sup>1</sup>; Rhonda R. Taylor<sup>1</sup>; Duane R. Reiss<sup>1</sup>; James P. Conway<sup>2</sup>; Francisco J. Dieguez-Acuna<sup>1</sup>; John J. Renger<sup>1</sup>; Ronald C. Hendrickson<sup>2</sup>; *Merck Research Laboratories, West Point, PA*; <sup>2</sup>*MRL, Rahway, NJ*
- WP 549 **Characterization of the Biological Effects of Naphthenic Acid Exposure on Zebrafish (*Danio rerio*) Gill Proteome using 2MEGA Stable Isotope Labeling;** Andrea G. De Souza; Tyson J. MacCormack; Andy Lo; Greg G. Goss; Liang Li; *University of Alberta, Edmonton, Canada*
- WP 550 **Characterization of Tubulin Isoforms in Human Tumor Tissue;** Leah M. Miller; Phyllis M. Novikoff; Susan Band Horwitz; Ruth Hogue Angeletti; *Albert Einstein College of Med, Bronx, NY*
- WP 551 **Proteomic Analysis of the Effect of the Gut Microbiome on Host Cells;** Xinxin Zhang<sup>1</sup>; Nikhil Garge<sup>1</sup>; Dallas Donohoe<sup>2</sup>; Sarah Bortvedt<sup>2</sup>; Scott Bultman<sup>2</sup>; Maureen K. Bunker<sup>1</sup>; *Research Triangle Institute, Research Triangle Park, NC*; <sup>2</sup>*University of North Carolina-Chapel Hill, Chapel Hill, NC*
- WP 552 **Large Scale Analysis of Breast Cancer Tissue Proteomes Using an Accurate Mass and Time (AMT) Tag Approach;** V.S. Kumar Kolli<sup>1</sup>; Tao Liu<sup>2</sup>; Brianne Petritis<sup>2</sup>; Luke Weaver<sup>1</sup>; Brenda Deyarmin<sup>1</sup>; Jennifer Kane<sup>1</sup>; Richard Katenhusen<sup>1</sup>; David Kirchner<sup>1</sup>; Karin Rodland<sup>2</sup>; David Camp<sup>2</sup>; Richard D. Smith<sup>2</sup>; Craig Shriver<sup>3</sup>; Richard J. Mural<sup>1</sup>; *Windber Research Institute, Windber, PA*; <sup>2</sup>*Pacific Northwest National Laboratory, Richland, WA*; <sup>3</sup>*Walter Reed Army Medical Center, Washington, DC*
- WP 553 **Development of a Reproducible Sample Processing Method for Quantification of Proteins in Muscle Tissue;** Ekaterina G. Deyanova<sup>1</sup>; Zhenlian/vivian Ke<sup>2</sup>; Kevin Nennig<sup>1</sup>; Yi Du<sup>1</sup>; Kai Zhou<sup>1</sup>; Francisco Dieguez<sup>2</sup>; Nathan Yates<sup>1</sup>; Ronald Hendrickson<sup>1</sup>; *Merck Research Laboratories, Rahway, NJ*; <sup>2</sup>*Merck, West Point, PA*
- WP 554 **Cell Type Specific Protein Cataloging of Barrett's Esophagus: Workflow Design and Evaluation;** Christoph Stingl<sup>1</sup>; Frederike G.I. van Vilsteren<sup>2</sup>; Coskun Guzel<sup>1</sup>; Theo M. Luidert<sup>1</sup>; Jacques J. Bergman<sup>2</sup>; *Erasmus MC, Rotterdam, The Netherlands*; <sup>2</sup>*Academic Medical Center, Amsterdam, The Netherlands*
- WP 555 **Mining the Human Placenta Proteome  $\geq$  8000 Proteins Deep Using CID/ETD on a Novel Ion Trap Mass Spectrometer;** Simone M Lemeer<sup>1</sup>; Andrea Schneider<sup>2</sup>; Markus Lubeck<sup>3</sup>; Bernhard Kuster<sup>1</sup>; *Technical University Munich, Freising, Germany*; <sup>2</sup>*Bruker Daltonics, Bremen, Germany*; <sup>3</sup>*Bruker Daltonik GmbH, Bremen, Germany*
- WP 556 **Comparison of First-dimension Separations for "MudPIT" Proteomic Studies on Endometrial Tissue;** Steven L. Young<sup>1</sup>; Maria Warren Hines<sup>2</sup>; Nedyalka Dicheva<sup>2</sup>; Mihaela Mocanu<sup>2</sup>; Marc Fritz<sup>1</sup>; Scotchie Jessica<sup>1</sup>; Carol E. Parker<sup>2</sup>; *Div. of Reprod. Endocrin. & Infertility, UNC-CH, Chapel Hill, NC*; <sup>2</sup>*UNC-Duke Proteomics Center, UNC-CH, Chapel Hill, NC*
- WP 557 **MS(E) Differential Proteomic Analysis of Archival Formalin Fixed, Celloidin Embedded Human Inner Ear Tissue;** Karin Green<sup>1</sup>; Antti A. Aarnisalo<sup>2</sup>; Jennifer O'Malley<sup>2</sup>; Joe Adams<sup>2</sup>; Saumil N. Merchant M.D.<sup>2</sup>; James E. Evans<sup>1</sup>; *U-MASS Medical School, Worcester, MA*; <sup>2</sup>*Mass. Eye & Ear Infirmary, Harvard Medical School, Boston, MA*
- WP 558 **Quantitative Proteome Analysis of Slow and Fast Skeletal Muscle Tissue Using *in vivo* SILAC;** Marcus Krueger<sup>1</sup>; Hannes Drexler<sup>2</sup>; Anne Konzer<sup>1</sup>; Aaron Ruhs<sup>1</sup>; Luca Mendler<sup>1</sup>; Thomas Braun<sup>1</sup>; *MPI for Heart and Lung Research, Bad Nauheim, Germany*; <sup>2</sup>*MPI for Molecular Biomedicine, Muenster, Germany*
- WP 559 **Tissue-Specific N-Glycopeptide Profiling Maps;** Carey Sheu<sup>1</sup>; Kelly Cooke<sup>1</sup>; David S Campbell<sup>1</sup>; Mi-young Brusniak<sup>1</sup>; Simon Letarte<sup>1</sup>; Julian D Watts<sup>1</sup>; Ruedi Aebersold<sup>1,2</sup>; *Institute for Systems Biology, Seattle, WA*; <sup>2</sup>*ETH - Swiss Federal Institute of Technology, Zurich, Switzerland*
- WP 560 **Quantitative Analysis of Proteomic Changes in Alix Knockout Mice for High-Throughput Profiling of the Regulated Protein Expression by Poorly-Characterized Proteins;** Robert Dejournett<sup>1</sup>; Yanbao Yu<sup>1</sup>; Oliver Bogler<sup>2</sup>; Xian Chen<sup>1</sup>; *University of North Carolina, Durham, NC*; <sup>2</sup>*UT M.D. Anderson Cancer Center, Houston, TX*

#### METABOLITE PROFILING, 561 - 582

- WP 561 **Cell Type Classification by Phenotype Specific Markers of Live Single Cells;** Akinori Hosokawa; Naohiro Tsuyama; Hajime Mizuno; Takanori Harada; Tsutomu Masujima; *Hiroshima Univ. BioMed., Hiroshima, Japan*
- WP 562 **What Do We Learn about Hepatotoxicity Using Coumarin-Treated Rat Model?** Ming-chih D. Ho<sup>1</sup>; Bob Xiong<sup>1</sup>; S. Stellar<sup>2</sup>; J. Silva<sup>2</sup>; H. K. Lim<sup>2</sup>; Patrick Bennett<sup>1</sup>; Lily Li<sup>1</sup>; J. Proctor<sup>2</sup>; *Tandem Labs New England, Boxborough, MA*; <sup>2</sup>*Johnson & Johnson PRD, Raritan, NJ*

## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 563 **Characterization of Metabolites in *Stachybotrys chartarum* by LC/TOF-MS;** Masahiko Takino<sup>1</sup>; Eri Ochiai<sup>2</sup>; Katsuhiko Kamei<sup>2</sup>; Yoshiko Sugita-Konishi<sup>3</sup>; <sup>1</sup>Agilent Technologies, Hachioji-shi, Japan; <sup>2</sup>Medical mycology reserach Center, Chiba University, Chiba-shi, Japan; <sup>3</sup>National Institute of Health Sciences, Tokyo, Japan
- WP 564 **Mass Spectrometric Analysis of Metabolites in Corn (Zea Mays) Root by Mid-Infrared Laser Ablation Electrospray Ionization at Atmospheric Pressure;** Jennifer A Day; Peter Nemes; Akos Vertes; George Washington University, Washington, DC
- WP 565 **Mass Spectrometry Study of Vine Defense Mechanisms Against *Plasmopara viticola*;** Gregory Hamm<sup>1</sup>; Benoit Maunit<sup>2</sup>; Anne Poutaraud<sup>3</sup>; Vincent Carré<sup>1</sup>; Didier Merdinoglu<sup>3</sup>; Jean Francois Muller<sup>1</sup>; <sup>1</sup>LSMCL, Metz, France; <sup>2</sup>ICOA, Orléans, France; <sup>3</sup>INRA, Colmar, France
- WP 566 **Quantitation of Several HIV Antiretroviral Drugs in Human Plasma by LC Tandem MS;** David W. Blank; Brian J. Gilfix; Marcos DiFalco; Line Roy; Bernard F. Gibbs; McGill University, Montreal, Canada
- WP 567 **Comprehensive Profiling of Human Plasma Phospholipids by Combining Direct Infusion and LC FTMS;** Rachel Kozlowski; Jun Han; Christoph H. Borchers; GBC UVic Proteomics Centre, Victoria,, Canada
- WP 568 **Identification of Cell Cycle Specific Metabolite Profile by Single Cell Mass Spectrometry in NIH3T3 Cells;** Yuka Miho; Naohiro Tsuyama; Hajime Mizuno; Takanori Harada; Tsutomu Masujima; Hiroshima Univ. BioMed., Hiroshima, Japan
- WP 569 **Characterization of Methylated Flavonoid Regioisomers using Tandem Mass Spectrometry;** Chao Li<sup>1</sup>; Feng Shi<sup>1</sup>; Adam Schmidt<sup>2</sup>; Eran Pichersky<sup>2</sup>; A. Daniel Jones<sup>1</sup>; <sup>1</sup>Michigan State University, East Lansing, MI; <sup>2</sup>University of Michigan, Ann Arbor, MI
- WP 570 **Spatially Resolved Non-Targeted Metabolic Profiling of Medicago Truncatula and Medicago Sativa Border Cells;** Mohamed Bedair<sup>1</sup>; Bonnie S. Watson<sup>1</sup>; Ewa Urbanczyk-Wochniak<sup>2</sup>; David Huhman<sup>3</sup>; Lloyd W. Sumner<sup>4</sup>; <sup>1</sup>Samuel Roberts Noble Foundation, Ardmore, OK; <sup>2</sup>Monsanto, St. Louis, MO; <sup>3</sup>The Samuel Roberts Noble Foundation, Ardmore, OK; <sup>4</sup>The Noble Foundation, Ardmore, OK
- WP 571 **An Unusual Mass Spectrometric Fragmentation Pattern of a Group of Sulfonyl Compounds: Beta-Elimination and Subsequent Retro-Diels-Alder Ring Opening;** Hlaing (Holly) Maw; Hongbin Yu; Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT
- WP 572 **Acyl CoA-Profiling in Biological Tissues Using Online SPE-LC-FTMS (Orbitrap);** Christoph Magnes<sup>1</sup>; Maria Suppan<sup>1</sup>; Petra Kienesberger<sup>2</sup>; Tarek Moustafa<sup>3</sup>; Thomas Pieber<sup>1,3</sup>; Frank Michael Sinner<sup>1</sup>; <sup>1</sup>Joanneum Research Forschungsgesellschaft mbH, Graz, Austria; <sup>2</sup>University of Graz, Graz, Austria; <sup>3</sup>Medical Univ. of Graz, Graz, Austria
- WP 573 **Lipidomic Profiling of Steroid and Fatty Acid Derivatives Using High-Temperature Gas Chromatography-Mass Spectrometry;** Hyun-Jin Jung<sup>1,2</sup>; Won-Yong Lee<sup>2</sup>; Bong Chul Chung<sup>1</sup>; Man-ho Choi<sup>1</sup>; <sup>1</sup>Life Sciences Division / KIST, Seoul, South Korea; <sup>2</sup>Yonsei University, Seoul, Korea
- WP 574 **Quantitative Steroid Signatures by Gas Chromatography-Mass Spectrometry for Multiple-Substrate Enzyme Assays;** Ju-Yeon Moon<sup>1,2</sup>; Hyun-Jin Jung<sup>1,2</sup>; Man-ho Choi<sup>1</sup>; Myeong Hee Moon<sup>2</sup>; Bong Chul Chung<sup>1</sup>; <sup>1</sup>Life Sciences Division / KIST, Seoul, South Korea; <sup>2</sup>Yonsei University, Seoul, South Korea
- WP 575 **Plant Gibberellins: LC-MS/MS and GC-MS for Profiling, Identification and Quantification;** Baichen Zhang<sup>1</sup>; Leslie M. Hicks<sup>2</sup>; <sup>1</sup>Donald Danforth Center, St Louis, MO; <sup>2</sup>Danforth Center, St. Louis, MO
- WP 576 **Accelerating Japanese Green Tea Quality Assessment by Ultra Fast LC-IT-TOF MS Based Profiling Studies Using High Mass Accuracy MSN Analysis;** Tairo Ogura<sup>1</sup>; Takushi Yamamoto<sup>1</sup>; Satoshi Yamaki<sup>1</sup>; Tatsunari Yoshida<sup>1</sup>; Hirohisa Mikami<sup>1</sup>; Rui Kawahara<sup>2</sup>; Takeshi Bamba<sup>2</sup>; Eiichiro Fukusaki<sup>2</sup>; <sup>1</sup>Shimadzu corporation, Kyoto, Japan; <sup>2</sup>Osaka University, Osaka, Japan
- WP 577 **Quantitation of Amino Acids in Dried Blood Spots by iTRAQ&#174;Regent Derivatization Reaction and LC/MS/MS Analysis;** Songhyun Yang<sup>1</sup>; Jungsun Han<sup>1</sup>; Chuljin Moon<sup>1</sup>; Hansoon Kwon<sup>2</sup>; Sanghwa Kim<sup>2</sup>; Jim Krol<sup>3</sup>; Scott B. Daniels<sup>3</sup>; Susan Leonard<sup>3</sup>; <sup>1</sup>Green Cross Reference Laboratory, Yongin, South Korea; <sup>2</sup>Applied Biosystems, Seoul, South Korea; <sup>3</sup>Applied Biosystems I, Framingham, MA
- WP 578 **Embryonic Cell Metabolite Profiling during Neuronal Differentiation by Single Cell Mass Spectrometry;** Naohiro Tsuyama; Hajime Mizuno; Takanori Harada; Tsutomu Masujima; Hiroshima Univ. BioMed., Hiroshima, Japan
- WP 579 **Complementarity of Plasma Proteome and Urinary Metabolome Changes Associated with Extreme Obesity, Metformin Therapy and Bariatric Surgery;** Stephen B. Harvey; Todd Kellogg; Therese Swan; Gary Nelsestuen; University of Minnesota, Minneapolis, MN
- WP 580 **Fast HPLC-MS Analysis of Acylcarnitines in Biological Matrices;** Paul Minkler; Stephen Ingalls; Charles Hoppel; Case Western Reserve Univ., Cleveland, OH
- WP 581 **Identification of Cryptorchidism in Horses by Analysing Their Urine Samples with Gas Chromatography Mass Spectrometry;** Jenny K.Y. Wong; David K.K. Leung; Francis P.W. Tang; Terence S.M. Wan; The Hong Kong Jockey Club, Hong Kong, China
- WP 582 **Measuring the Quantity of Gold Nanoparticles Uptake into Mammalian Cells by Mass Spectrometry;** Huan-Chang Lin<sup>1</sup>; Hsin-Hung Lin<sup>1</sup>; Cai-Yu Kao<sup>2</sup>; Alice L. Yu<sup>1</sup>; Wen-ping Peng<sup>1,2</sup>; Chung-Hsuan Chen<sup>1</sup>; <sup>1</sup>Genomics Research Center, Academia Sinica, Taipei, Taiwan; <sup>2</sup>National Dong Hwa University, Shoufeng, Hualien, Taiwan

### ENVIRONMENTAL, 583 - 609

- WP 583 **Molecular Characterization of Sea-Surface Microlayers in the Adriatic Using Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Boris P. Koch<sup>2,3</sup>; Matthias Witt<sup>1</sup>; Blazenka Gasparovic<sup>4</sup>; Sanja Frka<sup>4</sup>; Gerhard Kattner<sup>2</sup>; Christian Albers<sup>1</sup>; <sup>1</sup>Brüker Daltonik GmbH, Bremen, Germany; <sup>2</sup>Alfred Wegener Institute for Polar and Marine Res, Bremerhaven, Germany; <sup>3</sup>University of Applied Sciences, Bremerhaven, Germany; <sup>4</sup>Ruder Boskovic Institute, Zagreb, Croatia

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 584 **Characterization of Perfluorinated Acids by MALDI-TOF/TOF Mass Spectrometry;** Bing Guan<sup>1</sup>; Joseph B. Ferrario<sup>2</sup>; Richard B. Cole<sup>1</sup>; <sup>1</sup>University of New Orleans, New Orleans, LA; <sup>2</sup>USEPA, Stennis Space Center, MS
- WP 585 **Rapid Analysis of Pharmaceutical Contaminants in Groundwater with Ambient Mass Spectrometry;** Ian S. Campbell; Alain Ton; Christopher C. Mulligan; *Illinois State University, Normal, IL*
- WP 586 **Fast Screening for Explosives at Ultra-High Resolution: Utilization of Simple Method Development Using a Benchtop Orbitrap Mass Spectrometer;** Josef Ruzicka; Kevin J. Mchale; Mark Sanders; *Thermo Fisher Scientific, Somerset, NJ*
- WP 587 **Dioxin Analysis by Gas Chromatography-Fourier Transform Mass Spectrometry;** Vincent Y. Taguchi<sup>1</sup>; Ray E. Clement<sup>1</sup>; Stefan Krolik<sup>3</sup>; Robert Niecekarz<sup>1,2</sup>; Robert Williams<sup>4</sup>; <sup>1</sup>Ministry of the Environment, Toronto, ON; <sup>2</sup>University of Waterloo, Waterloo, Canada; <sup>3</sup>Consultant to Varian Inc, Montreal, Canada; <sup>4</sup>Varian Inc, Lake Forest, CA
- WP 588 **Melamine Screening in Milk Using Low Temperature Plasma Ionization on a Portable Mass Spectrometer;** Guangming Huang; Zheng Ouyang; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- WP 589 **Combinatorial Library-Building Based on GC-GC/MS Heartcuts and Spectral Deconvolution to Identify Alkylated PAH in Crude Oils;** Albert Robbat; Christian Zeigler; *Tufts University, Medford, MA*
- WP 590 **Determination and Reduction of the Effects of Fragment Ion Interferences in High-Resolution Environmental Analyses;** Jerry Hart; Carla Lyon; Yves Tondeur; *Analytical Perspectives, Wilmington, NC*
- WP 591 **Application of a Novel GC-MS Method for Assessing Endogenous Metabolites in Exhaled Breath Condensate;** Heidi F Hubbard; Joachim D Pleil; Jon R Sobus; Michael C Madden; *US EPA, Rtp, NC*
- WP 592 **Chemical Ionization Detection of Haloamines in Real Time Using SIFT-MS;** Murray J. Mcewan<sup>1</sup>; John Gray<sup>2</sup>; Wan Ping Hu<sup>2</sup>; Daniel Milligan<sup>2</sup>; Vaughan Langford<sup>2</sup>; <sup>1</sup>University of Canterbury, Christchurch, New Zealand; <sup>2</sup>Syft Technologies Ltd, 3 Craft Pl, Christchurch, New Zealand
- WP 593 **GC-Tandem Quadrupole Mass Spectrometry as an Alternative to High-Resolution Mass Spectrometry for the Investigation of Polychlorinated Dioxins and Furans;** Anthony Macherone; *Agilent Technologies, Elkton, MD*
- WP 594 **Comparative Evaluation of Target/Non-Target Screen and Quantitation Techniques of 250 Pesticides in Potable Water;** Peter Stone; Michael Flanagan; *Agilent Technologies, Santa Clara, CA*
- WP 595 **Pharmaceutical Contaminant Screen in Drinking Water and Surface Water by Direct Online Analysis;** Francois A. Espourteille; Catherine Lafontaine; *Thermo Fisher Scientific, Franklin, MA*
- WP 596 **Host-Guest Chemistry to Improve LC-MS Detection Limits for Pharmaceuticals Present as Pollutants in Drinking Water;** Nirmala Viswanathan; Regina Nardi; Lauren Pettit; David Sierra; Dil Ramanathan; *Kean University, Union, NJ*
- WP 597 **Wastewater Impurity Screening Coming from Large Chemical Plants Using a Combination of Polarity Switching ESI & APCI LC-MS/MS Analysis;** Markus Mickel; *Applied Biosystems, Darmstadt, Germany*
- WP 598 **LC/TOF-MS for the Analysis of Pharmaceuticals and their Degradates in Water;** Imma Ferrer; Michael Thurman; *University of Colorado, Boulder, CO*
- WP 599 **HPLC/MS/MS Characterization of a Putative New Nitrosamine Disinfection By-Product: N-Nitroso-3-Methylindole;** Jessica M. Boyd; Feng Qin; Xing-fang Li; *University of Alberta, Edmonton, Canada*
- WP 600 **LC-MS/MS Analysis of Selected Perfluorinated Alkyl Acids in Drinking Water, EPA Method 537, a Validation Study;** Jia Wang<sup>1</sup>; Charles Neslund<sup>1</sup>; Jonathan Beck<sup>2</sup>; <sup>1</sup>Lancaster Laboratories, Lancaster, PA; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA
- WP 601 **Low Femtogram Target Screening and Quantitation of Polyfluorinated Compounds (PFCs) in Food Matrices;** Peter Stone<sup>1</sup>; Linda Cote<sup>2</sup>; <sup>1</sup>Agilent Technologies Inc, Santa Clara, CA; <sup>2</sup>Agilent Technologies, Saint-laurent, QC
- WP 602 **LC-TOF/MS and UPLC-MS/MS Methods for the Analysis of Perfluorooctanesulfonate (PFOS) and the Reduction of Matrix Interference in Complex Biological Matrices;** Mark J. Strynar<sup>1</sup>; Amy D. Delinsky<sup>1</sup>; Andrew B. Lindstrom<sup>1</sup>; Shoji F. Nakayama<sup>2</sup>; Jessica L. Reiner<sup>3</sup>; <sup>1</sup>U.S. EPA NERL, Durham, NC; <sup>2</sup>U.S. EPA NRMRL, Cincinnati, OH; <sup>3</sup>NIST Hollings Marine Laboratory, Charleston, SC
- WP 603 **Comparison of Conventional and Low Flow LC-ESI-MS For Analysis of Free and Conjugated Estrogens in Environmental Matrices;** Jerry Tso; Diana Aga; *University at Buffalo, Buffalo, NY*
- WP 604 **Dynamic MRM Acquisition Method Optimization for UHPLC-QQQ Multi-Residue Analytical Applications;** Michael Flanagan; Bruce Wang; Harry Bunting; *Agilent Technologies, Santa Clara, CA*
- WP 605 **Multi-Target Screening of up to 500 Pesticides in a Single LC/MS Run by xact Ion Traces;** Petra Decker<sup>1</sup>; Marcus Macht<sup>2</sup>; Arndt Ingendoh<sup>1</sup>; Laurie Allen<sup>3</sup>; <sup>1</sup>Bruker Daltonik GmbH, Bremen, Germany; <sup>2</sup>Bruker Daltonics GmbH, Bremen, Germany; <sup>3</sup>Bruker Canada Inc., East Milton, Canada
- WP 606 **Single Step LC-MS Method for the Simultaneous Determination of Organochlorine and Phenoxy Acid Pesticides;** Giorgio Famigliini; Pierangela Palma; Elisabetta Pierini; Veronica Termopoli; Helga Truffelli; Achille Cappiello; *Università di Urbino, Urbino, Italy*
- WP 607 **Withdrawn**
- WP 608 **Using Bonded Silica Solid Phase Microextraction Fibers as a Screening Tool for Pharmaceuticals and Personal Care Products in Drinking Water;** Carmen T. Santasania; Katherine Stenerson; Robert Shirey; An Trinh; Craig Aurand; *Supelco/Sigma-Aldrich, Bellefonte, PA*
- WP 609 **Hyphenated Techniques as Modern Detection Systems in Ion Chromatography;** Jörg Kleimann; Stefanie Czyborra; Andrea Wille; *Metrohm AG, Herisau, Switzerland*
- 
- POLYMERS, 610 - 630**
- 
- WP 610 **Qualitative and Quantitative Determination of Cellulose Polymer Derivatives Using Size-Exclusion Chromatography and ELSD-MS Detection;** Louis-philippe Labranche<sup>1</sup>; Audrey Tousignant<sup>3</sup>; Yves G. Leblanc<sup>2</sup>; Alain Carrier<sup>2</sup>; <sup>1</sup>Sandoz, Boucherville, Canada; <sup>2</sup>Sandoz Canada, Boucherville, QC; <sup>3</sup>Sandoz Canada Inc., Boucherville, QC

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 611 **On-Line Coupling of Liquid Chromatography at Critical Conditions with Electrospray Tandem Mass Spectrometry for the Structural Characterization of Block Copolymers;** Marion Girod; Trang N.T. Phan; Laurence Charles; *University Aix-Marseille I & III, Marseille Cedex 20, France*
- WP 612 **LC-MS of EO-PO Block Copolymers Using Ultrasonic Degradations and the Mechanism of Degradation;** Ryuichi Arakawa<sup>1</sup>; Masanori Okabayashi<sup>1</sup>; Takehiro Watanabe<sup>1</sup>; Yukari Nishimoto<sup>2</sup>; Tomoyuki Ozawa<sup>3</sup>; Hideya Kawasaki<sup>1</sup>; <sup>1</sup>*Kansai University, Osaka, Japan*; <sup>2</sup>*Nippon Synthetic Chemical Industry, Osaka, Japan*; <sup>3</sup>*Nissan Chemical Industries, Chiba, Japan*
- WP 613 **Characterization of the Physical and Chemical Networks in Filled Rubber Compounds by Pyrolysis - GC/MS;** Alesia Salberg<sup>1</sup>; Abdulkareem Melaiye<sup>2</sup>; Ed Johnson<sup>2</sup>; Chrys Wesdemiotis<sup>1</sup>; <sup>1</sup>*The University of Akron, Akron, OH*; <sup>2</sup>*The Goodyear Tire & Rubber Company, Akron, OH*
- WP 614 **Comprehensive Two Dimensional Liquid Chromatography/Mass Spectrometric (LCxLC/MS) Analyses for Characterization of Solid Epoxy Resins;** Samir Julka; Hernan Cortes; Bob Harfmann; Bruce Bell; Andreas Schweizer-Theobaldt; Matthias Pursch; David West; Shawn Maynard; *Dow Chemical Company, Midland, MI*
- WP 615 **Characterization of Povidones in Ophthalmic Solution by GPC-ELSD / LC-MS Analysis;** Audrey Tousignant<sup>1</sup>; Louis-philippe Labranche<sup>3</sup>; Yves G. Leblanc<sup>1</sup>; Alain Carrier<sup>2</sup>; <sup>1</sup>*Sandoz Canada Inc., Boucherville, Canada*; <sup>2</sup>*Sandoz Canada, Boucherville, QC*; <sup>3</sup>*Sandoz, Boucherville, QC*
- WP 616 **Collision Induced Dissociation Processes in Azofunctional Oligoesters;** Cristian Peptu<sup>1</sup>; Valeria Harabagiu<sup>2</sup>; Bogdan C. Simionescu<sup>2</sup>; Marek Kowalczyk<sup>1</sup>; <sup>1</sup>*Jan Dlugosz University, Czestochowa, Poland*; <sup>2</sup>*“Petru Poni” Institute, Iasi, Romania*
- WP 617 **Solvent Effect on the DESI Mass Spectra of Industrial Polymers and Additives;** Matthieu Loriau<sup>1</sup>; Sandra Alves<sup>1</sup>; Florence Churlaud<sup>2</sup>; Jean-Claude Tabet<sup>1</sup>; <sup>1</sup>*University Paris VI (UPMC), Paris Cedex 05, France*; <sup>2</sup>*Arkema - CERDATO, Serquigny, France*
- WP 618 **MALDI Characterization of Polymers Using Accurate Mass Measured Data for Accelerated Material Understanding;** Sean Bennett<sup>1</sup>; Sucharita Dutta<sup>1</sup>; William Nichols<sup>2</sup>; Andrew J. Hoteling<sup>2</sup>; <sup>1</sup>*Thermo Fisher Scientific, San Jose, CA*; <sup>2</sup>*Eastman Kodak Company, Newark, NY*
- WP 619 **Characterization of Poly(organophosphazene)s by Mass Spectrometry Techniques;** Vincenzo Scionti; Claire Tessier; Wiley Youngs; Chrys Wesdemiotis; *The University of Akron, Akron, OH*
- WP 620 **Derivatization Strategies for Improved MALDI Mass Spectrometry of MAA-MMA Copolymers;** Rémi Giordanengo<sup>1</sup>; Stéphane Viel<sup>1</sup>; André Thévand<sup>1</sup>; Laurence Charles<sup>1</sup>; Béatrice Allard-Breton<sup>2</sup>; <sup>1</sup>*University Aix-Marseille I & III, Marseille Cedex 20, France*; <sup>2</sup>*ARKEMA, Pierre-Bénite, France*
- WP 621 **Overcoming the Limitations of MALDI-TOF-MS Analysis of Polymers Using GPC-MALDI and a Hybrid Ion Trap Time of Flight MALDI MS;** Brian Feild<sup>1</sup>; Fan Xiang<sup>2</sup>; Martin Resch<sup>3</sup>; Chrys Wesdemiotis<sup>4</sup>; <sup>1</sup>*Shimadzu, Columbia, MD*; <sup>2</sup>*Shimadzu Biotech, Pleasanton, CA*; <sup>3</sup>*Shimadzu Europe, Duisburg, Germany*; <sup>4</sup>*The University of Akron, Akron, OH*
- WP 622 **Comparative Study of Fatty Alcohol Alkoxyate Copolymers Fragmentation Patterns by MALDI-MS/MS Using Low Energy and High Energy CID;** Volker Wulf<sup>1</sup>; Martin Resch<sup>2</sup>; Oliver J. Schmitz<sup>1</sup>; Hans-Willi Kling<sup>3</sup>; Siegmund Gaeb<sup>1</sup>; Michaela Wirtz<sup>3</sup>; <sup>1</sup>*University of Wuppertal, Wuppertal, Germany*; <sup>2</sup>*Shimadzu Europe, Duisburg, Germany*; <sup>3</sup>*Cognis GmbH, Duesseldorf, Germany*
- WP 623 **End-Group Determination in Minor Components of Polyalkylene Glycoles by MALDI-ToF Mass Spectrometry Following Preliminary Derivatization;** Roman Borisov; Nikolai Yu. Polovkov; Vladimir Zaikin; *Topchiev Institute of Petrochemical synthesis, Moscow, Russian Federation*
- WP 624 **Identification of Functional Additives in Polybutadiene by Tandem Mass Spectrometry;** David E. Dabney; Jon Janoski; Roderic P. Quirk; Chrys Wesdemiotis; *The University of Akron, Akron, OH*
- WP 625 **Quantitation of PEG Contaminants in Ethoxylated Surfactant Samples by MALDI TOFMS Using Standard Additions and Internal Standards Methods;** Scott D. Hanton<sup>2</sup>; Diane M. Henning<sup>3</sup>; Kevin G. Owens<sup>1</sup>; Renata Szyszka<sup>1</sup>; <sup>1</sup>*Drexel University, Philadelphia, PA*; <sup>2</sup>*Air Products & Chemicals, Inc, Allentown, PA*; <sup>3</sup>*Air Products and Chemicals, Inc., Milton, WI*
- WP 626 **Positive and Negative Mode Mass Spectrometry of Poly(electrolytes);** Bethany Subel<sup>1</sup>; Chrys Wesdemiotis<sup>2</sup>; <sup>1</sup>*University of Akron, Akron, OH*; <sup>2</sup>*The University of Akron, Akron, OH*
- WP 627 **Mass Spectrometry of Polyethylene Glycols: Evidence of Structural And Genetic Interdependence;** Antony Memboeuf<sup>1</sup>; Ron M.A. Heeren<sup>2</sup>; Andreas Nasioudis<sup>3</sup>; Oscar F. Van Den Brink<sup>4</sup>; Karoly Vekey<sup>5</sup>; Laszlo Drahos<sup>1</sup>; <sup>1</sup>*hungarian Academy Of Sciences, Budapest, Hungary*; <sup>2</sup>*FOM Inst. Atomic/Molecular Phy, Amsterdam, Netherlands*; <sup>3</sup>*AkzoNobel, Arnhem, Netherlands*; <sup>4</sup>*Akzo Nobel, Utrecht, Netherlands*; <sup>5</sup>*Hungarian Academy of Science, Budapest, Hungary*
- WP 628 **Development of a Novel Analytical Technique for the Identification of Organic Contamination on Spaceflight-Related Substrates Utilizing a DART-TOF;** Kathleen Brooks Loftin<sup>1</sup>; Timothy P. Griffin<sup>2</sup>; Christian A. Clausen III<sup>3</sup>; <sup>1</sup>*NASA- Kennedy Space Center, Kennedy Space Center, FL*; <sup>2</sup>*NASA, Kennedy Space Center, FL*; <sup>3</sup>*University of Central Florida, Orlando, FL*
- WP 629 **Characteristic Fragmentation of Polysiloxanes in Monolayer by Monoatomic and Polyatomic Ions Bombardment in ToF-SIMS;** Hye Kyoung Moon; David D. Wells; Joseph A. Gardella; *SUNY Buffalo, Buffalo, NY*
- WP 630 **Surface Analysis of Polyacetylene Thin Films by UV-LDI-FTMS;** Sasa Miladinovic<sup>1</sup>; Valérie De Vriendt<sup>2</sup>; Scott A. Robotham<sup>3</sup>; Stéphane Lucas<sup>2</sup>; Charles L. Wilkins<sup>1</sup>; <sup>1</sup>*University of Arkansas, Fayetteville, AR*; <sup>2</sup>*University of Namur-PMR, Namur, Belgium*; <sup>3</sup>*Nebraska Wesleyan University, Lincoln, NB*

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

#### HYDROCARBON AND PETROCHEMICAL, 631 - 659

- WP 631 **Matrix Optimization for the MALDI-TOF-MS Analysis of Biodiesel Components;** Casey R. Mcalpin<sup>1,2</sup>; Kent J. Voorhees<sup>1</sup>; Robert L. McCormick<sup>2</sup>; Teresa L. Alleman<sup>2</sup>; <sup>1</sup>Colorado School of Mines, Golden, CO; <sup>2</sup>National Renewable Energy Laboratory, Golden, CO
- WP 632 **Working Toward a Petroleomic Analysis of Bio-oils;** Erica Smith<sup>1,2</sup>; David Perdian<sup>1,2</sup>; Young Jin Lee<sup>1,2</sup>; <sup>1</sup>Department of Chemistry, Iowa State University, Ames, IA; <sup>2</sup>Ames Laboratory- U.S. DOE, Ames, IA
- WP 633 **Characterization of Sterol Glucosides Found in B100 Biodiesels by Gas and Liquid Chromatography/Mass Spectrometry;** Ryan Shea; Rick Pauls; BP Chemicals, Naperville, IL
- WP 634 **MALDI-TOF MS Screening of Aged Biofuels;** Julie Herniman<sup>1</sup>; G. John Langley<sup>1</sup>; Tom Lynch<sup>2</sup>; <sup>1</sup>University of Southampton, Southampton, UK; <sup>2</sup>BP Castrol Global Lubricants Technology, Pangbourne, UK
- WP 635 **Biodiesel Identification: Distinguishing individual Fatty Acid Methyl Esters and Identifying Oxidation Products Using MS Coupled to Chromatographic Techniques;** Christianne Wicking<sup>1</sup>; G. John Langley<sup>1</sup>; Tom Lynch<sup>2</sup>; <sup>1</sup>University of Southampton, Southampton, UK; <sup>2</sup>BP Castrol Global Lubricants Technology, Pangbourne, UK
- WP 636 **Identification of Oxidation Products of Biodiesel under Accelerated Oxidation Condition;** Jungju Seo<sup>1</sup>; Myung Hee Nam<sup>1</sup>; Manhoi Hur<sup>3</sup>; Jae-Kon Kim<sup>2</sup>; Mi-Jin Lee<sup>1</sup>; <sup>1</sup>Korea Basic Science Institute, Seoul, South Korea; <sup>2</sup>Korea Institute of Petroleum Quality, Ochang-eup, Korea; <sup>3</sup>BNF Technology Inc, Daejeon, Korea
- WP 637 **Analysis of Carbohydrates and Lipids in Microalgal Biomass Samples with HPAEC-MS and LC/MS;** Linda Lopez<sup>1</sup>; Ting Zheng<sup>1</sup>; Rodney Corpuz<sup>2</sup>; Rosanne Slingsby<sup>1</sup>; Srinivasa Rao<sup>1</sup>; <sup>1</sup>Dionex Corporation, Sunnyvale, CA; <sup>2</sup>General Atomics, San Diego, CA
- WP 638 **Ionization Techniques and Reagents for Improved Heteroatom Speciation in Crude Oils by Ultrahigh Resolution FT-ICR MS;** Priyanka Juval<sup>1,2</sup>; Amy Mckenna<sup>4</sup>; Ryan P. Rodgers<sup>3</sup>; Alan G. Marshall<sup>3</sup>; <sup>1</sup>Nalco Company, Sugar Land, TX; <sup>2</sup>Nat'l High Magnetic Field Laboratory, Tallahassee, FL; <sup>3</sup>Nat'l High Magnetic Field Lab, Tallahassee, FL; <sup>4</sup>Nat'l High Magnetic Field Laboratory, Tallahassee, FL; <sup>5</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- WP 639 **Identification, Characterization and Quantitation of Vanadyl Porphyrins in Heavy Crude Oil by FT-ICR Mass Spectrometry;** Ryan P. Rodgers<sup>1</sup>; Jeremiah M. Purcell<sup>2</sup>; Amy Mckenna<sup>1</sup>; Alan G. Marshall<sup>1</sup>; <sup>1</sup>Nat'l High Magnetic Field Laboratory, Tallahassee, FL; <sup>2</sup>Shell Global Solutions, Houston, TX
- WP 640 **Exploring Solvent and Concentration Effects on Average Molecular Weight (MW) Data for Petroleum Samples using Electrospray Ionization Mass Spectrometry (ESI-MS);** Melisa Clements; Thomas Oldenburg; Steve Larter; PRG, University of Calgary, Calgary, Canada
- WP 641 **Identification of Chemical Components in Shale Oils by ESI and APPI Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Eun Suk Park<sup>1</sup>; Jeol Geol Na<sup>2</sup>; Soo Hyun Chung<sup>2</sup>; Manhoi Hur<sup>4</sup>; Hojoon Seo<sup>4</sup>; Sunghwan Kim<sup>3</sup>; Young Hwan Kim<sup>1</sup>; Jong Shin Yoo<sup>1</sup>; <sup>1</sup>Korea Basic Science Institute, Chungwon-kun, Chungbuk-do, South Korea; <sup>2</sup>Korean Institute of Energy Research, Daejeon, South Korea; <sup>3</sup>Korean Basic Science Institute, Ochang-myun, SOUTH KOREA; <sup>4</sup>BNF Technology Inc., Daejeon, South Korea
- WP 642 **Isolation and Characterization of Naphthenic Acids in Crude Oils by Electrospray Ionization FT-ICR Mass Spectrometry;** Mmili Myles Mapolelo<sup>1</sup>; Ryan P. Rodgers<sup>2</sup>; Alan G. Marshall<sup>3</sup>; <sup>1</sup>Florida State Univ, Dept of Chemistry, Tallahassee, FL; <sup>2</sup>Nat'l High Magnetic Field Lab, Tallahassee, FL; <sup>3</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL
- WP 643 **Analysis of Fresh and Used Lubricating Oils Using ASAP in Conjunction with Ion Mobility Mass Spectrometry;** Hilary J. Major<sup>1</sup>; Martin Selby<sup>2</sup>; Martin Green<sup>1</sup>; Alistair Wallace<sup>1</sup>; <sup>1</sup>Waters Corporation, Manchester, UK; <sup>2</sup>Shell Global Solutions (UK), Chester, UK
- WP 644 **Identification of Low Abundant Impurities in Gas Oil by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Matthias Witt; Jochen Friedrich; Bruker Daltonik GmbH, Bremen, Germany
- WP 645 **The Effect of Operating Conditions on Petroleum Analysis by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Haiyan Wang; Gil Jones; Matthew Unterfenger; Victor Kovar; Howard Greenberg; Hung Pham; Stella Cabanban; Paul Adams; Andrzej Ringwelski; UOP LLC, A Honeywell Company, Des Plaines, IL
- WP 646 **Geochemical Applications of Electron Ionization GC-MS with Supersonic Molecular Beams;** David A. Zinniker<sup>1</sup>; Pierre Metzger<sup>2</sup>; J. Michael Moldowan<sup>1</sup>; Alexander B. Fialkov<sup>3</sup>; Aviv Amirav<sup>4</sup>; <sup>1</sup>Stanford University, Stanford, CA; <sup>2</sup>Ecole Nationale Supérieure de Chimie de Paris, Paris, France; <sup>3</sup>Tel Aviv University, Tel Aviv, ISRAEL; <sup>4</sup>Tel-Aviv University, Tel-aviv, ISRAEL
- WP 647 **Element Speciation in Petroleum and Petroleum Products by HPLC-ICP MS;** Guilhem Caumette<sup>1,2</sup>; Charles-Philippe Lienemann<sup>1</sup>; Isabelle Merdrignac<sup>1</sup>; Brice Bouyssiere<sup>2</sup>; Ryszard Lobinski<sup>2</sup>; <sup>1</sup>IFP - Lyon, Vernaison, France; <sup>2</sup>LCABIE - CNRS UMR 5254, Pau, France
- WP 648 **Development of an Analytical Protocol to Investigate Solid Well Bore Deposits: Determination of Heterocyclic Compounds by FT-ICR MS;** Saroj Panda<sup>1</sup>; Jan T. Andersson<sup>2</sup>; Wim Genuit<sup>3</sup>; Mark Grutters<sup>3</sup>; Andrew G. Shepherd<sup>3</sup>; Wolfgang Schrader<sup>1</sup>; <sup>1</sup>Max-Planck Inst Coal Res., Mülheim / Ruhr, Germany; <sup>2</sup>Inst. Inorg. and Analytical Chem, Univ. Muenster, Muenster, Germany; <sup>3</sup>Shell Global Solutions, Amsterdam, Netherlands
- WP 649 **Investigations into Asphaltene Molecular-Mass Distribution and Plasma-Phase Aggregation Using Two-Step Laser Mass Spectrometry and LDI-MS;** Amy L. Morrow<sup>1</sup>; Andrew E. Pomerantz<sup>2</sup>; Matthew R. Hammond<sup>1</sup>; Oliver C. Mullins<sup>2</sup>; Richard N. Zare<sup>1</sup>; <sup>1</sup>Stanford University, Stanford, CA; <sup>2</sup>Schlumberger-Doll Research, Cambridge, MA
- WP 650 **GCxGC TOF MS and Electrospray FT-ICR-MS Identification of Asphaltene Precipitate Components - Understanding Water-In-Oil Emulsion Stability;** Brendan F Graham<sup>2</sup>; Eric F. May<sup>2</sup>; Robert Trengove<sup>1</sup>; <sup>1</sup>Murdoch University, Murdoch,

### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- Australia; <sup>2</sup>University of Western Australia, Crawley, Australia
- WP 651 **Evidence of Paraffin Trapping by Asphaltene Detected by LDI TOF MS;** Brice Bouyssi<sup>3</sup>; Socrates Acevedo<sup>1</sup>; Ryszard Lobinski<sup>3</sup>; Jasmelith M. Cordero T.<sup>1</sup>; Hervé Carrier<sup>2</sup>; <sup>1</sup>Universidad Central de Venezuela, Caracas 1053, Venezuela; <sup>2</sup>Laboratoire des Fluides Complexe, Université de Pau, Pau, France; <sup>3</sup>LCABIE - CNRS/UPPA UMR 5254, Pau, France
- WP 652 **Observation of Fullerenes from PAH's in MALDI TOF;** Robert E. Haufler<sup>2</sup>; Alexandre Loboda<sup>2</sup>; L. P. Felipe Chibante<sup>1</sup>; Brad McCann<sup>1</sup>; <sup>1</sup>University of New Brunswick, Fredericton, Canada; <sup>2</sup>MDS Analytical Technologies, Concord, Canada
- WP 653 **REMPI Measurements of Aromatics in Hydrocarbon Model Flames;** Tina Kasper; Nils Hansen; Sandia Nat. Labs., CRF, Livermore, CA
- WP 654 **Compositional Analysis of Petroleum Distillation Residue by APCI FT-ICR Mass Spectrometer;** Eunyoung Kim<sup>1,1</sup>; Myoung-han No<sup>1,2</sup>; Jaesuk Koh<sup>1,2</sup>; Sunghwan Kim<sup>1,3</sup>; Manhoi Hur<sup>1,4,1</sup>; <sup>1</sup>Daejeon, South Korea; <sup>2</sup>SK energy Institute of Tech., Daejeon, South Korea; <sup>3</sup>Korean Basic Science Institute, Ochang-myun, South Korea; <sup>4</sup>BNF Technology, 556, Youngsan-dong, Yuseong-gu, Daejeon, South Korea
- WP 655 **Molecular Analysis of a Coal Liquefaction Product by FT-ICR/MS – Comparison of ASAP, ESI, APCI and APPI Ionization Techniques;** Jeremie Ponthus; Lyes Assam; Institut Français du Pétrole, Solaize, France
- WP 656 **What Color Is Your Fuel Spill? Solvent Dyes in Fuels and Fuel Spill Samples by Electrospray Ionization Mass Spectrometry;** Colleen Rostad; USGS, WRD, NRP, Lakewood, CO
- WP 657 **The Petroleum: A Mass Spectral Database of Petroleum Composition;** Jade Velasquez<sup>1,3</sup>; Amy McKenna<sup>1,2</sup>; Ryan P. Rodgers<sup>1,2</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup>Natl High Magnetic Field Laboratory, Tallahassee, FL; <sup>2</sup>Department of Chemistry and Biochemistry, FSU, Tallahassee, FL; <sup>3</sup>Florida State Univ., Tallahassee, FL
- WP 658 **Statistical Interpretation of Crude Oil High Resolution Spectra Obtained by ESI and APPI FT-ICR Mass Spectrometry Using Principal Components Analysis;** Manhoi Hur<sup>1</sup>; Somi Shin<sup>1</sup>; Hojoon Seo<sup>1</sup>; InJoon Yeo<sup>2</sup>; Eun Suk Park<sup>2</sup>; Eunyoung Kim<sup>3</sup>; Myoung-han No<sup>3</sup>; Young Hwan Kim<sup>2</sup>; Sunghwan Kim<sup>2</sup>; <sup>1</sup>BNF Technology Inc., Daejeon, South Korea; <sup>2</sup>Korea Basic Science Institute, Chungwon-kun, Chungbuk-do, South Korea; <sup>3</sup>SK energy Institute of Tech., Daejeon, South Korea
- WP 659 **The Analysis of Mass Spectra in Petroleomics – A Novel Application for Machine Learning;** Jennifer Hauschild; Hugh Cartwright; University of Oxford, Oxford, UK
- ION STRUCTURES / ENERGETICS, 660 - 677**
- WP 660 **Structural Characterization of Gas-phase Uranyl Trihalide Anions Using IRMPD Spectroscopy;** Gary Groenewold<sup>2</sup>; Michael Kullman<sup>1</sup>; Ryan Dain<sup>1</sup>; Jos Oomens<sup>3</sup>; Jeffrey Steill<sup>3</sup>; Michael J. Van Stipdonk<sup>1</sup>; <sup>1</sup>Wichita State University, Wichita, KS; <sup>2</sup>Idaho National Laboratory, Idaho Falls, ID; <sup>3</sup>FOM Rijnhuizen, Nieuwegein, Netherlands
- WP 661 **Measuring Infrared “Fingerprint” Spectra of Gas-Phase Zwitterions Using a Continuous Wave OPO Laser;** Warren K Mino Jr; Jan Szczapanski; David H. Powell; John R. Eyler; Nicolas Polfer; University of Florida, Gainesville, FL
- WP 662 **IRMPD Spectroscopy Investigation of Gas-Phase Sodium and Potassium Chlorate Anions;** Ryan P. Dain<sup>1</sup>; Christopher M. Leavitt<sup>1</sup>; Jos Oomens<sup>2</sup>; Jeffrey Steill<sup>2</sup>; Gary Groenewold<sup>3</sup>; Michael J. Van Stipdonk<sup>1</sup>; <sup>1</sup>Wichita State University, Wichita, KS; <sup>2</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>3</sup>Idaho National Laboratory, Idaho Falls, ID
- WP 663 **Photoelectron Spectroscopy of Substituted Phenylnitrenes;** Neloni Wijeratne; Paul G. Wenthold; Purdue University, West Lafayette, IN
- WP 664 **Potassium Affinity of Gas-Phase Amino Acids Determined by IRMPD (CO<sub>2</sub><sup>-</sup> and Free Electron Laser) and Molecular Modeling;** Miriam Drayss<sup>1</sup>; Frank Dreier<sup>1</sup>; Dirk Blunk<sup>1</sup>; Jeremiah M. Purcell<sup>3</sup>; Chris Hendrickson<sup>2,6</sup>; Alan G. Marshall<sup>2,6</sup>; Jos Oomens<sup>4</sup>; Abhingya Mookherjee<sup>5</sup>; Peter B. Armentrout<sup>5</sup>; Mathias Schaefer<sup>1</sup>; <sup>1</sup>Inst. Organic Chemistry University of Cologne, Koeln, Germany; <sup>2</sup>Ion Cyclotron Resonance Prog, Tallahassee, FL; <sup>3</sup>Shell Global Solutions, Houston, TX; <sup>4</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>5</sup>University of Utah, Salt Lake City, UT; <sup>6</sup>National High Magnetic Field Laboratory, Tallahassee, FL
- WP 665 **Chain Length and Sequence Effects on Metal-Ion Peptide Binding Conformations. IRMPD Spectroscopic Exploration;** Robert C. Dunbar<sup>1</sup>; Jeffrey Steill<sup>2</sup>; Nicolas Polfer<sup>3</sup>; Jos Oomens<sup>2</sup>; <sup>1</sup>Case Western Reserve Univ, Cleveland, OH; <sup>2</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>3</sup>University of Florida, Gainesville, FL
- WP 666 **The Structure of (M+H-H<sub>2</sub>O)<sup>+</sup> Generated from Protonated Tetraglycine Revealed by Tandem MS and IRMPD Spectroscopy;** Michael J. Van Stipdonk<sup>1</sup>; Benjamin Bythell<sup>2</sup>; Ryan Dain<sup>1</sup>; Jos Oomens<sup>3</sup>; Jeffrey Steill<sup>3</sup>; Gary Groenewold<sup>4</sup>; Bela Paizs<sup>5</sup>; <sup>1</sup>Wichita State University, Wichita, KS; <sup>2</sup>GermanCancer Research Center, Heidelberg, Germany; <sup>3</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>4</sup>Idaho National Laboratory, Idaho Falls, ID; <sup>5</sup>DKFZ, Heidelberg, Germany
- WP 667 **Structure and Fragmentation Behavior of Metal-Cationized Phosphopeptides;** Sarah M. Young<sup>1</sup>; Sam Molesworth<sup>1</sup>; Jeffrey Steill<sup>2</sup>; Ryan Dain<sup>1</sup>; Jos Oomens<sup>2</sup>; Gary Groenewold<sup>3</sup>; Michael J. Van Stipdonk<sup>1</sup>; <sup>1</sup>Wichita State University, Wichita, KS; <sup>2</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>3</sup>Idaho National Laboratory, Idaho Falls, ID
- WP 668 **An IRMPD Study of Radical Cations of Aromatic Amino Acids and their Precursors;** Chi-kit Siu<sup>1</sup>; Udo Verkerk<sup>1</sup>; Junfang Zhao<sup>1</sup>; Yuzhu Guo<sup>1</sup>; Yuyong Ke<sup>1</sup>; Jeffrey Steill<sup>2</sup>; Jos Oomens<sup>2</sup>; Robert C. Dunbar<sup>3</sup>; Alan C. Hopkinson<sup>1</sup>; K W Michael Siu<sup>1</sup>; <sup>1</sup>CRMS, York University, Toronto, ON; <sup>2</sup>FOM Rijnhuizen, Nieuwegein, Netherlands; <sup>3</sup>Case Western Reserve University, Cleveland, OH
- WP 669 **Characterization of the Conformations of Gas-Phase Peptide Ions via Acid-Base Measurements: A Study of Ion Internal Solvation;** Jianhua Ren; Kiran Kumar Morishetti; Robert Harper; John Tan; Betty Huang; University of the Pacific, Stockton, CA
- WP 670 **Structure and Behavior of Mixed Serine Clusters: Molecular Dynamics, Post-Hartree Fock and Density**



## WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 671 **Functional Theory Studies;** Anthony Costa; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- WP 672 **Conformational and Thermochemical Properties of Deprotonated Amino Acid Clusters from High Pressure Mass Spectrometry;** Robert J. Nieckarz<sup>1</sup>; Chad G. Atkins<sup>2</sup>; Opal Courtney<sup>1</sup>; Terry McMahon<sup>1</sup>; <sup>1</sup>*University of Waterloo, Waterloo, Canada;* <sup>2</sup>*Memorial University, St Johns, Canada*
- WP 673 **Mechanisms of Characteristic Phospholipid Anion Fragmentations: Theoretical Study II;** Daryl Giblin; Fong-Fu Hsu; John Turk; Michael L. Gross; *Washington University, St Louis, MO*
- WP 674 **Mobile Protons and Mobile Radicals: Insights from Time- and Collision Energy-Resolved Surface-Induced Dissociation Studies;** Julia Laskin<sup>1</sup>; Zhibo Yang<sup>2</sup>; Ngor Wai Lam<sup>3</sup>; Ivan K. Chu<sup>4</sup>; <sup>1</sup>*Pacific NW National Laboratory, Richland, WA;* <sup>2</sup>*University of Colorado at Bo, Boulder, CO;* <sup>3</sup>*HKU, Hong Kong, Hong Kong;* <sup>4</sup>*University of Hong Kong, Hong Kong, Hong Kong*
- WP 675 **Determination of the Binding Energy of Benzene-Water Cluster;** Laura Haupt; Paul G. Wenthold; *Purdue University, West Lafayette, IN*
- WP 676 **Double Hydrogen Transfer on Unimolecular Dissociation for N-(2-Indancarbonyl)-1-azacycloalkan(e)-2-(thi)one Derivatives Including Deuterium Labeled Ones Using a Four Sector Tandem Mass Spectrometer;** Hiroshi Yamaoka<sup>1</sup>; Kazuo Fujii<sup>1</sup>; Rie Uemura<sup>1</sup>; Kimio Isa<sup>2</sup>; Ryuji Nakata<sup>2</sup>; Tetsuya Maekawa<sup>2</sup>; Nico M.M. Nibbering<sup>3</sup>; <sup>1</sup>*Osaka Prefecture University, Sakai, Osaka, Japan;* <sup>2</sup>*University of Fukui, Fukui, Japan;* <sup>3</sup>*Vrije Universiteit, Amsterdam, The Netherlands*
- WP 677 **Selective Bond Breaking in Prompt and Metastable Decay of Deprotonated Monosaccharides – the Role of Intramolecular Vibrational Redistribution;** Oddur Ingolfsson; Ilko Bald; *University of Iceland, Reykjavik, Iceland*
- WP 678 **Unusual Rearrangements and Fragmentations of different Steroid Ethers upon Electrospray and Electron Ionization;** Jurgen Grotemeyer; Christoph Freudenhammer; *Christian-Albrechts-Univ, Kiel, Germany*
- COMPUTER APPLICATIONS, 678 - 697**
- WP 678 **Sub-Part-Per-Million Mass Accuracy Using a Single Internal Calibrant on an Orbitrap Mass Spectrometer for Large-Scale Protein Analysis;** Craig D. Wenger; Graeme C. McAlister; Qiangwei Xia; Joshua J. Coon; *University of Wisconsin, Madison, WI*
- WP 679 **Efficient Validation and Qualification of Mass Spectrometry Systems in a GLP- and GMP-Regulated Environment;** Cynthia A. Palmer<sup>1</sup>; Douglas James<sup>2</sup>; Mario Rocci<sup>2</sup>; <sup>1</sup>*FDA, Philadelphia, PA;* <sup>2</sup>*Prevalere Life Sciences, Inc., Whitesboro, NY*
- WP 680 **Making a Spectrum Viewer with Microsoft's Windows Presentation Foundation;** Tom Patterson; *nScan, Medford, MA*
- WP 681 **Bayesian Tools for Mapping Accurate Mass Measurements to Elemental Formulae;** Philip C. Price<sup>1</sup>; Megan E. Price<sup>3</sup>; Daniel O. Price<sup>2</sup>; <sup>1</sup>*The Dow Chemical Company, South Charleston, WV;* <sup>2</sup>*Fellow, American Statistical Assoc., Jacksonville, FL;* <sup>3</sup>*The Benetech Initiative, Palo Alto, CA*
- WP 682 **Is Wikipedia the Public Face of Mass Spectrometry?** Thabiso Musapelo; Kermit K. Murray; *Louisiana State Univ., Baton Rouge, LA*
- WP 683 **An Improved Calibration Method for the MALDI-FTICR Analysis of <sup>15</sup>N-Metabolically Labeled Proteome Digests Using a Mass Difference Approach;** LiJing; Jon Amster; *University of Georgia, Athens, GA*
- WP 684 **Image Enhancement with Constraints in the Input Space for ToF/DL Imaging Mass Spectrometry;** Andriy Kharchenko; Leendert Klerk; Ron Heeren; *FOM Institute for Atomic and Molecular Physics, Amsterdam, Netherlands*
- WP 685 **Open Access Tables of Accurate Precursor Ion Mass Values for Mass-Based Classification (MBC) of Chemical Compounds;** Bernhard Spengler; Alfons Hester; *University of Giessen, Giessen, Germany*
- WP 686 **The IUPAC International Chemical Identifier and Mass Spectrometry;** Peter J. Linstrom<sup>1</sup>; Steve R. Heller<sup>1</sup>; Alan D. McNaught<sup>2</sup>; Yuri A. Mirokhin<sup>3</sup>; Stephen E. Stein<sup>1</sup>; Dmitrii V. Tchekhovskoi<sup>1</sup>; <sup>1</sup>*NIST, Gaithersburg, MD;* <sup>2</sup>*IUPAC, Research Triangle Park, NC;* <sup>3</sup>*KT Consulting, Antioch, CA*
- WP 687 **Scalable Data Management on a High Throughput MALDI TOF Mass Spectrometer;** George Mills; Matthew Gabeler-lee; *Virgin Instruments Corporation, Sudbury, MA*
- WP 688 **Simulation of Ion Transport from Atmospheric Pressure through Intermediate Pressure to Vacuum;** Peter Williams; *Agilent Laboratories, Santa Clara, CA*
- WP 689 **Mass++ is a Plug-In Type Universal Freeware for Viewing and Manipulating Large Scale LC/MS Data;** Satoshi Tanaka<sup>1</sup>; Ken Aoshima<sup>1,2</sup>; Yuji Miura<sup>1,2</sup>; Yoshiya Oda<sup>1,2</sup>; <sup>1</sup>*CREST, Saitama, Japan;* <sup>2</sup>*Eisai Co., Ltd, Tsukuba, Japan*
- WP 690 **Automated Classification of Unknown Biocompounds Using Tandem MS;** Sebastian Böcker; Thomas Zichner; Florian Rasche; *Friedrich-Schiller-University Jena, Jena, Germany*
- WP 691 **Optimized Data Compression Strategy for Efficient Storage and Analysis for High Throughput Multidimensional Separations and Mass Spectrometry;** Nathaniel Beagley; Chad Scherrer; Yan Shi; Brian H. Clowers; William F. Danielson; Anuj Shah; Anoop M. Mayampurath; Gordon Anderson; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*
- WP 692 **A Peptide Mass Fingerprinting Approach to Enhance Protein Sequence Coverage Using High Mass Accuracy MS1 Spectra;** Yunhu Wan; Stefani Thomas; Zhongping Liao; Sarah Rnyarzewski; Nandakumar Madayiputhiya; Noble Nemieboka; Austin Yang; *University of Maryland, Baltimore, MD*
- WP 693 **Developing Application Software Using Applied Biosystem Mass Spectrometer and Shimadzu HPLC to Achieve Multiplexing and Direct Instrument Control in Bioanalysis;** Leimin Fan<sup>1</sup>; Richard Koeritz<sup>3</sup>; Tawakol El-Shourbagy<sup>2</sup>; Huaiqin Wu<sup>2</sup>; <sup>1</sup>*Abbott Labs, Abbott Park, IL;* <sup>2</sup>*Abbott Laboratories, Abbott Park, IL;* <sup>3</sup>*Shimadzu Scientific Instruments Inc., Columbia, MD*
- WP 694 **Automated Identification of Fragments via Rigorous Statistical Modelling of LC-MS Metabolomic Data;** Andreas Ipsen; Elizabeth J Want; Timothy M Ebbels; *Imperial College London, London, UK*



### WEDNESDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed 7:30 to 8:00 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- WP 695 **Directed Sample Interrogation Utilizing an Accurate Mass Exclusion-Based Data-Dependent Acquisition Strategy (AMEx)**; Emily Rudomin<sup>2</sup>; Steven A. Carr<sup>2</sup>; Jacob D. Jaffe<sup>1</sup>; <sup>1</sup>*The Broad Institute of Ha, Cambridge, MA*; <sup>2</sup>*Broad Institute, Cambridge, MA*
- WP 696 **A High Throughput LC/MS/MS Data Analysis Approach for Discovery PK and *in-vitro* Bio-Analysis**; Mei Foong Hwang; Monica Wu; Mark Gao; Quincey Wu; *XenoPort, Inc., Santa Clara, CA*
- WP 697 **The Protein Information and Property Explorer: a Rich-Client Web Application for the Management and Functional Exploration of Proteomic Data**; Hector Ramos<sup>1</sup>; Paul Shannon<sup>1</sup>; Ruedi Aebersold<sup>1,2</sup>; <sup>1</sup>*Institute for Systems Biolog, Seattle, WA*; <sup>2</sup>*Swiss Federal Institute of Technology, Zurich, Switzerland*

## THURSDAY POSTERS

*Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.*

Bioinformatics (001 – 032)  
 Proteomics: Biomarker Discovery (033 – 064)  
 Metabolomics (065 – 100)  
 Proteomics: New Approaches (101 – 130)  
 Small Molecule Analysis (131 – 160)  
 Imaging MS: Small Molecules and Lipids (161 – 182)  
 Proteomics: Peptide Sequencing (183 – 204)  
 Proteomics: Protein Sequencing (205 – 213)  
 Quantitation: Small Molecules (214 – 241)  
 Proteomics: PTM Determination – Glycosylation and Phosphorylation (242 – 271)  
 Peptides: Post-Translational Modification (272 – 310)  
 Direct Ionization – DESI, DART and ASAP (311 – 332)  
 Instrumentation: New Concepts (333 – 353)  
 LC/MS Sample Preparation (354 – 369)  
 Microbial Analysis (370 - 392)  
 Nucleic Acids (393 – 420)  
 Proteomics: Phosphorylation Pathways (421 – 454)  
 Neuropeptides (455 – 471)  
 Proteins: General (472 – 507)  
 Proteins: Membrane (508 – 532)  
 Proteins: Recombinant (533 – 551)  
 Proteins: Modified (552 – 578)  
 Toxicology (579 – 602)  
 Atmospheric / Aerosol Chemistry (603 – 613)  
 Instrumentation: TOF (614 – 629)  
 Ion Molecule, Ion Electron, and Ion Ion Reactions (630 – 660)  
 High Throughput Analysis / Robotics (661 – 696)

### BIOINFORMATICS, 001 - 032

ThP 001 **Peptide Identification from Mixture Tandem Mass Spectra**; Jian Wang<sup>1</sup>; Josue Perez<sup>1</sup>; Ronald Luethy<sup>2</sup>; Parag Mallick<sup>2</sup>; Nuno Bandeira<sup>3</sup>; <sup>1</sup>*Bioinformatics Program, UCSD, San Diego, CA*; <sup>2</sup>*Dept. of Chemistry and Biochemistry, UCLA, Los Angeles, CA*; <sup>3</sup>*Center for Computational Mass Spectrometry, UCSD, San Diego, CA*

ThP 002 **RAID<sub>deNovo</sub>: Using de novo Statistics to Combine Search Results from Multiple Scoring Functions and More**; Gelio Alves; Aleksey Ogurtsov; Yi-kuo Yu; *National Center for Biotechnology Information, NLM, Bethesda, MD*

ThP 003 **Automated Multiple Round Searches to Increase Coverage of Peptide/Protein Identification**; Baozhen Shan<sup>1</sup>; Lei Xin<sup>2</sup>; Weijie Yang<sup>1</sup>; Gilles Lajoie<sup>2</sup>; Bin Ma<sup>3</sup>; <sup>1</sup>*Bioinformatics Solutions Inc., Waterloo, Canada*; <sup>2</sup>*University of Western Ontario, London, ON*; <sup>3</sup>*University of Waterloo, Waterloo, ON*

ThP 004 **HyPep: A New Strategy to Accelerate Peptide Discovery with a Combination of de novo Sequencing and Homology Database Search**; Weifeng Cao<sup>1</sup>; Mingming Ma<sup>1</sup>; Qiang Fu<sup>2</sup>; Lingjun Li<sup>1</sup>; <sup>1</sup>*University of Wisconsin, Madison, WI*; <sup>2</sup>*Schering Plough, North Plainfield, NJ*

ThP 005 **Beyond Edman Degradation: Automated de novo Protein Sequencing of Modified Monoclonal Antibodies**; Nuno Bandeira<sup>1</sup>; Victoria Pham<sup>2</sup>; David Arnott<sup>2</sup>; Jennie Lill<sup>2</sup>; Pavel Pevzner<sup>3</sup>; <sup>1</sup>*Center for Computational Mass Spectrometry, UCSD, La Jolla, CA*; <sup>2</sup>*Genentech Inc, South San Francisco, CA*; <sup>3</sup>*University of California, San Diego, La Jolla, CA*

ThP 006 **PepNovo+: Extending the Performance Envelope of de novo Sequencing**; Ari Frank; Pavel Pevzner; *UCSD, La Jolla, CA*

ThP 007 **Lipid Analytical Tool (LipidAT): Automated Analysis of Lipidomic Mass Spectrometry Data**; Jun Ma; Haixu Tang; *Indiana University, Bloomington, IN*

ThP 008 **LipiDiff: A Tool for High-Throughput Glycerophospholipid Profiling and Quantitative Difference Testing via Direct Infusion Electrospray Ionization Mass Spectrometry**; Peter S. Straub; Eric I. Purser; David L. Tabb; *Vanderbilt University, Nashville, TN*

ThP 009 **ICC-CLASS: Isotopically-Coded Cleavable Cross-Linking Analysis Software Suite**; Evgeniy Petrotchenko; Christoph Borchers; *UVic-GBC Proteomics Centre, Victoria, Canada*

ThP 010 **A Database Search Algorithm for Identification of Intact Cross links in Proteins and Peptides Using Tandem Mass Spectrometry**; Hua Xu<sup>1</sup>; Pang-hung Hsu<sup>2</sup>; Liwen Zhang<sup>3</sup>; Michael A. Freitas<sup>3</sup>; <sup>1</sup>*University of Illinois at Chicago, Chicago, IL*; <sup>2</sup>*The Genomics Research Center, Academia Sinica, Taipei, Taiwan*; <sup>3</sup>*Ohio State University, Columbus, OH*

ThP 011 **Spectral Clustering for Comprehensive PTM Discovery and Targeted Quantitative Proteomics Analysis of Human Lens Proteins**; Jayson A. Falkner<sup>1</sup>; Phillip Wilmarth<sup>2</sup>; Jarret Falkner<sup>1</sup>; Larry David<sup>2</sup>; <sup>1</sup>*Single Organism Software, Beaverton, OR*; <sup>2</sup>*BMB, OHSU, Portland, OR*

ThP 012 **Correlation of MS2 and MS3 Pairs for Phosphoprotein Identification**; Bret Cooper; *USDA-ARS, Beltsville, MD*

ThP 013 **Sequencing of Cyclic Non-Ribosomal Peptides Using High Accuracy Mass Spectrometry Data**; Julio Ng<sup>1</sup>; Nuno Bandeira<sup>1</sup>; Wei-ting Liu<sup>1</sup>; Roger Linington<sup>2</sup>; Pieter Dorrestein<sup>3</sup>; Pavel Pevzner<sup>1</sup>; <sup>1</sup>*University of California, San Diego, La Jolla, CA*; <sup>2</sup>*University of California, Santa Cruz, Santa Cruz, CA*; <sup>3</sup>*University of California, San Diego, Skaggs School, La Jolla, CA*

ThP 014 **BUPID-Top-Down: Database Search and Assignment of Top-Down MS/MS Data**; Weiwei Tong; Roger Theberge; Giuseppe Infusini; Weidong Cui; David H. Perlman; Cheng Lin; Mark E. McComb; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*

ThP 015 **Fast Unrestrictive Identification of Multiply-Modified Peptides**; Seungjin Na<sup>1</sup>; Nuno Bandeira<sup>2</sup>; Eunok Paek<sup>1</sup>; <sup>1</sup>*Univ. of Seoul, Seoul, South Korea*; <sup>2</sup>*Center for Computational Mass Spectrometry, UCSD, La Jolla, CA*

ThP 016 **Hexicon++: Automating HDX Data Analysis**; Xinghua Lou<sup>1</sup>; Bernhard Y. Renard<sup>1</sup>; Marc Kirchner<sup>2</sup>; Ullrich Koethe<sup>1</sup>; Christian Graf<sup>3</sup>; Judith A.J. Steen<sup>2</sup>; Hanno Steen<sup>2</sup>; Matthias P. Mayer<sup>3</sup>; Fred Hamprecht<sup>1</sup>; <sup>1</sup>*University of Heidelberg, Heidelberg, Germany*; <sup>2</sup>*Children's Hospital Boston / Harvard Medical, Boston, MA*; <sup>3</sup>*ZMBH, Heidelberg, Germany*

ThP 017 **HDX by nanoLC-MALDI: Software for Discovery of Protein-Wide Correlations between Peptide Deuterium Uptake Data and Structural or MD Simulation Parameters**; Vikram Bodicherla; Paul Gershon; *UC-Irvine, Irvine, CA*

ThP 018 **Marimba: A Toolset for Automated Design of High-Throughput LC-MRM/MS Assays from Prior Shotgun Proteomics Analyses**; Angel D. Pizarro<sup>1</sup>; Sumit Shah<sup>1</sup>; Kenneth Yu<sup>1</sup>; Samuel I. Parry<sup>1</sup>; Garret A. FitzGerald<sup>2</sup>; Ian A. Blair<sup>2</sup>; <sup>1</sup>*University of Pennsylvania,*

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Philadelphia, PA; <sup>2</sup>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA
- ThP 019 **Automated Creation and Refinement of Complex Scheduled SRM Methods for Targeted Proteomics;** Brendan Maclean<sup>1</sup>; Daniela Tomazela<sup>1</sup>; Amol Prakash<sup>2</sup>; Scott Peterman<sup>3</sup>; Michael J. Maccoss<sup>1</sup>; <sup>1</sup>University of Washington, Seattle, WA; <sup>2</sup>ThermoFisher Scientific, Cambridge, MA; <sup>3</sup>Thermo Electron, Somerset, NJ
- ThP 020 **Statistical Analysis of Calibration Curves on Log-Log Scale from Multiple Reaction Monitoring Assays for Measuring Proteins Spiked into Human Plasma;** Steven J Skates<sup>1</sup>; Terri Addona<sup>2</sup>; Susan E. Abbatiello<sup>2</sup>; Birgit Schilling<sup>3</sup>; D. R. Mani<sup>4</sup>; David M. Bunk<sup>5</sup>; Clifford H. Spiegelman<sup>6</sup>; Lisa Zimmerman<sup>7</sup>; Amy-joan L. Ham<sup>8</sup>; Hasmik Keshishian<sup>4</sup>; Steven C. Hall<sup>9</sup>; Steven A. Carr<sup>2</sup>; CPTAC Network<sup>10</sup>; <sup>1</sup>Massachusetts General Hospital, Boston, MA; <sup>2</sup>Broad Institute, Cambridge, MA; <sup>3</sup>Buck Institute for Age Research, Novato, CA; <sup>4</sup>Broad Institute of MIT, Cambridge, MA; <sup>5</sup>National NIST, Gaithersburg, MD; <sup>6</sup>Texas A&M University, College Station, TX; <sup>7</sup>Vanderbilt Univ., Nashville, TN; <sup>8</sup>Vanderbilt Univ. School of Medicine, Nashville, TN; <sup>9</sup>UCSF MS Core Facility, San Francisco, CA; <sup>10</sup>National Cancer Institute, Bethesda, MD
- ThP 021 **Database Searching of Combined ETD and CID Data Using Protein Prospector;** Peter R Baker; Robert Chalkley; Aenoch Lynn; Shenheng Guan; A.L. Burlingame; Univ. of California, San Francisco, CA
- ThP 022 **Decreasing Database Search Times in ETD MS/MS Sequence Searching by Assignment of Parent Precursor Charge to MS/MS Spectra;** Viswanadham Sridhara; Lewis Y. Geer; Stephen H. Bryant; NCBI/NLM/NIH, Bethesda, MD
- ThP 023 **Charge Prediction Machine: A Tool for Inferring Precursor Charge States of Electron Transfer Dissociation Tandem Mass Spectra;** Paulo C Carvalho<sup>1,2</sup>; Daniel Cociorva<sup>1</sup>; Catherine C L Wong<sup>1</sup>; Maria da Gloria da C Carvalho<sup>2</sup>; Valmir C Barbosa<sup>2</sup>; John Yates<sup>1</sup>; <sup>1</sup>The Scripps Research Institute, La Jolla, CA; <sup>2</sup>Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
- ThP 024 **Modeling ETD Fragmentation with Bayesian Network for Peptide Identification;** Xiaowen Liu<sup>1</sup>; Baozhen Shan<sup>2</sup>; Bin Ma<sup>1</sup>; <sup>1</sup>University of Waterloo, Waterloo, Canada; <sup>2</sup>Bioinformatics Solutions Inc., Waterloo, ON
- ThP 025 **Statistical Discovery and Applications of Fragmentation Patterns from Proteomics-Grade Electron Transfer Dissociation (ETD) Spectra;** Ruixiang Sun<sup>1,2</sup>; Meng-Qiu Dong<sup>3</sup>; Bing Yang<sup>3</sup>; Hao Chi<sup>1,2</sup>; Liyun Xiu<sup>1,2</sup>; You Li<sup>1,2</sup>; Wenping Wang<sup>1,2</sup>; Chao Liu<sup>1,2</sup>; Leheng Wang<sup>1,2</sup>; Yan Fu<sup>1,2</sup>; Si-Min He<sup>1,2</sup>; <sup>1</sup>Institute of Computing Technology, CAS, Beijing, China; <sup>2</sup>Key Lab of Intelligent Information Processing, CAS, Beijing, China; <sup>3</sup>National Institute of Biological Sciences, Beijing, China
- ThP 026 **Increasing Peptide Identifications Using Spectral Processing Prior to a Database Search;** David Good; Craig Wenger; Joshua J. Coon; Univeristy of Wisconsin, Madison, WI
- ThP 027 **MS-Based Proteomics of Oceanic Microbial Communities Using High-Performance Computing, Sequence Similarity, Peptide Coverage Mapping, and Confidence Metrics;** Angela D. Norbeck<sup>1</sup>; Christopher Oehmen<sup>1</sup>; Matthew E. Monroe<sup>1</sup>; Carrie D. Nicora<sup>1</sup>; Ashoka D. Polpitiya<sup>1</sup>; Heather Mottaz-Brewer<sup>1,4</sup>; Sarah Sowell<sup>3</sup>; Lea Constan<sup>2</sup>; Stephen Giovannoni<sup>3</sup>; Steven Hallam<sup>2</sup>; Lilijana Paša-Tolić<sup>1,4</sup>; Mary S. Lipton<sup>1</sup>; Richard D. Smith<sup>1</sup>; <sup>1</sup>Pacific Northwest National Laboratory, Richland, WA; <sup>2</sup>University of British Columbia, Vancouver, Canada; <sup>3</sup>Oregon State University, Corvallis, OR; <sup>4</sup>Environmental and Molecular Sciences Laboratory, Richland, WA
- ThP 028 **Quadrupole Time-of-Flight Mass Spectrometry to Characterize the Proteome of an Unsequenced Genome –*Mangifera indica*;** Pradip Kumar Acharya<sup>1</sup>; Keshava T.S. Prasad<sup>1</sup>; Harsh A Pawar<sup>1</sup>; Sameer Kumar<sup>1</sup>; Renu Goel<sup>1</sup>; Rajesh Raju<sup>1</sup>; Santosh Renuse<sup>1</sup>; H C Harsha<sup>1,2</sup>; Raghothama Chaerkady<sup>1,2</sup>; Akhilesh Pandey<sup>2</sup>; <sup>1</sup>Institute of Bioinformatics, Bangalore, India; <sup>2</sup>Johns Hopkins University, Baltimore, MD
- ThP 029 **Confident Identification of Single Amino Acid Polymorphisms by a Database-Searching Approach for Shotgun Proteomics;** Chongle Pan<sup>1</sup>; P. Douglas Hyatt<sup>1</sup>; Nathan C. Verberkmoes<sup>1</sup>; Jill F. Banfield<sup>2</sup>; Robert Hettich<sup>1</sup>; <sup>1</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>University of California, Berkeley, CA
- ThP 030 **An Automated Method for Resolving Gene Sequencing Errors through Tandem Mass Spectrometry;** Robert M. Day<sup>1,2</sup>; Tamah Fridman<sup>1,2</sup>; Nathan C. Verberkmoes<sup>1</sup>; Loren Hauser<sup>1</sup>; Doug Hyatt<sup>1</sup>; Andrey Gorin<sup>1</sup>; <sup>1</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>Joint Institute for Computational Sciences, Oak Ridge, TN
- ThP 031 **Investigating Amino Acid Polymorphisms in a Natural Viral-Microbial Community by Integrating High Mass Accuracy and de novo Search Algorithms;** Patricia Carey<sup>1</sup>; Chongle Pan<sup>1</sup>; Manesh Shah<sup>1</sup>; Robert Hettich<sup>1</sup>; Mya Breitbart<sup>2</sup>; Jillian Banfield<sup>3</sup>; Nathan C. Verberkmoes<sup>1</sup>; <sup>1</sup>Oak Ridge National Lab, Oak Ridge, TN; <sup>2</sup>University of South Florida, St. Petersburg, FL; <sup>3</sup>University of California, Berkeley, CA
- ThP 032 **Withdrawn**
- PROTEOMICS: BIOMARKER DISCOVERY, 033 - 064**
- ThP 033 **Effect of Preimplantation Factor (PIF)\* on Autoimmune Neuroinflammation (Multiple Sclerosis) Using Discovery Proteomics;** Ravi Amunugama<sup>1</sup>; Michael Ford<sup>1</sup>; Richard Jones<sup>1</sup>; Lola Weiss<sup>2</sup>; Reuven Or<sup>2</sup>; Sivakumar Ramu<sup>3,4</sup>; Zhanna Yachtin<sup>2</sup>; Eytan Barnea<sup>3,5</sup>; <sup>1</sup>NextGen Sciences, Ann Arbor, MI; <sup>2</sup>Hebrew University, Jerusalem, Israel; <sup>3</sup>BioIncept LLC, Cherry Hill, NJ; <sup>4</sup>Cari Reproductive Institute, Chicago, IL; <sup>5</sup>Society for the Investigation of Early Pregnancy, Cherry Hill, NJ
- ThP 034 **Classification of MALDI-TOF Profile Spectra of Spinal Cord Tissue from Control and ALS Patients;** Joshua L. Johnson<sup>1</sup>; Long Li<sup>1</sup>; Daryl A. Bosco<sup>2</sup>; Robert H. Brown Jr<sup>2</sup>; Pengyu Hong<sup>1</sup>; Jeffrey N. Agar<sup>1</sup>; <sup>1</sup>Brandeis University, Waltham, MA; <sup>2</sup>University of Massachusetts Medical School, Worcester, MA
- ThP 035 **Using Cell Fractionation and Metabolic Labeling to Identify Serum Biomarkers of Liver Damage;** Julie A. Weisz<sup>1</sup>; Hidekazu Tsukamoto<sup>2</sup>; Christine C Wu<sup>3</sup>; <sup>1</sup>Univ. of Colorado Sch. of Medicine, Aurora, CO; <sup>2</sup>UCLA, Los Angeles, CA; <sup>3</sup>Univ. of Colorado, Aurora, CO

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 036 **Identification of Brugia Worm Proteins by Life Cycle Stage;** Tiffany Weinkopff<sup>1,2</sup>; Xiang Zhu<sup>1</sup>; Rohan Patel<sup>1</sup>; John John<sup>1</sup>; William Jones<sup>1</sup>; Patrick Lammie<sup>2</sup>; Ron Orlando<sup>1</sup>; <sup>1</sup>University of Georgia, Athens, GA; <sup>2</sup>CDC, Atlanta, GA
- ThP 037 **Biomarker Candidate Discovery from Formalin-Fixed and Paraffin-Embedded Tissue Microarrays: Combining Electrophoresis and MALDI FT-ICR MS;** Hans-Rudolf Aerni; Dale S. Cornett; Richard M. Caprioli; *Vanderbilt University, Nashville, TN*
- ThP 038 **Differential Gel Electrophoresis of Bovine Samples Treated with Zeranol to Determine the Mechanism of Positive Muscle Growth in Cattle;** Jocelyn Hach; Young C Lin; Wei-Ping Ye; John Mark Reddish; Kari Green-Church; Macdonald Wick; *The Ohio State University, Columbus, OH*
- ThP 039 **High Throughput Sample Preparation for Stroke Biomarker Discovery Using the Digital Proteome Chip;** David Sarracino<sup>2</sup>; MingMing Ning<sup>1</sup>; Amol Prakash<sup>2</sup>; Taha Reza<sup>2</sup>; Bryan Krastins<sup>2</sup>; Michael Athanas<sup>2</sup>; Mary F Lopez<sup>2</sup>; <sup>1</sup>Massachusetts General Hospital, Boston, MA; <sup>2</sup>ThermoFisher Scientific, Cambridge, MA; <sup>3</sup>VAST Scientific, Wayland, MA
- ThP 040 **Proteomics Analysis of the Human Embryonic Stem Cell Secretome Reveals Novel Differentiation Factor Candidates;** Qiangwei Xia; Guokai Chen; James A. Thomson; Joshua J. Coon; *Univ of Wisconsin, Madison, Madison, WI*
- ThP 041 **Multiplex iTRAQ-Based Quantitative Approach for Cochlear Nucleus Proteomics in a Mouse Model of Age-Related Hearing Loss (AHL);** Harsha P. Gunawardena; Ling Xie; Yanbao Yu; Heather O'Donohue; Paul B. Manis; Xian Chen; *University of North Carolina, Chapel Hill, NC*
- ThP 042 **Glycan Biomarker Discovery of Adult Stem Cells Using Sequential Mass Spectrometry;** Jenny Jiao<sup>1</sup>; Hailong Zhang<sup>1</sup>; Krisha Panchalingam<sup>2</sup>; James L. Sherley<sup>2</sup>; Vernon N. Reinhold<sup>1</sup>; <sup>1</sup>The Glycomics Center, University of New Hampshire, Durham, NH 03824; <sup>2</sup>Boston Biomedical Research Institute, Watertown, MA
- ThP 043 **Leveraging MS/MS Spectra for Optimizing SRM Transitions for Hypothesis-Driven Biomarker Discovery in Human Plasma;** Simon Letarte<sup>1</sup>; Mi-young Brusniak<sup>3</sup>; Jungchun Chen<sup>3</sup>; Hamid Mirzaei<sup>1</sup>; Emma Nimeus<sup>2</sup>; Carey Sheu<sup>1</sup>; Julian D Watts<sup>1</sup>; Ruedi Aebersold<sup>1,3</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>University Hospital, Lund, Sweden; <sup>3</sup>Swiss Federal Institute of Technology, Zurich, Switzerland
- ThP 044 **Withdrawn**
- ThP 045 **Profiling the Prostate Cancer Plasma Membrane N-Glycoproteome via a Highly Specific Glycopeptide-Capture Chemistry;** Amelia C. Peterson<sup>1</sup>; Priti Koranne<sup>2</sup>; Bernd Wollscheid<sup>3</sup>; Daniel B. Martin<sup>2</sup>; <sup>1</sup>University of Wisconsin, Madison, WI; <sup>2</sup>Institute for Systems Biology, Seattle, WA; <sup>3</sup>IMSB, ETH Zurich, Zurich, Switzerland
- ThP 046 **Label-Free Quantitative Analysis of Glycoproteins Enriched through Lectin Affinity Chromatography of Human Serum: Application to the Study of Esophageal Adenocarcinoma;** Benjamin Mann<sup>1</sup>; Milan Madera<sup>2</sup>; Yehia Mechref<sup>2,3</sup>; Milos V. Novotny<sup>1,2</sup>; <sup>1</sup>Indiana University, Bloomington, IN; <sup>2</sup>National Center for Glycomics and Glycoproteomics, Bloomington, IN; <sup>3</sup>METACyt Biochemical Analysis Ctr., Bloomington, IN
- ThP 047 **A SILAC Study of Neurofibromatosis: Evaluating the Proteome of Tumor Specimen and Nf1-/- Primary Cells;** Douglas A Johnson<sup>1</sup>; Catherine Formolo<sup>1,2</sup>; Tobey MacDonald<sup>1</sup>; Karlyne Reilly<sup>3</sup>; Roger Packer<sup>1</sup>; Yetrib Hathout<sup>1,2</sup>; <sup>1</sup>Children's National Medical Center, Washington, DC; <sup>2</sup>George Washington University, Washington, DC; <sup>3</sup>National Cancer Institute, Frederick, MD
- ThP 048 **Application of a Rationally Designed Gas Phase Fractionation Technique to Isotope Coded Affinity Tagging;** Kristian E. Swearingen; Martin Sadilek; Brad T. Cookson; Norman J. Dovichi; *University of Washington, Seattle, WA*
- ThP 049 **Enrichment and Identification of Low Abundance Proteins Using Hexapeptide Libraries;** Martha Stapels<sup>2</sup>; Catalin Doneanu<sup>2</sup>; Kate Smith<sup>1</sup>; Weibin Chen<sup>2</sup>; <sup>1</sup>Bio-Rad Laboratories, Hercules, CA; <sup>2</sup>Waters Corporation, Milford, MA
- ThP 050 **Improved Proteomic Approach for the Discovery of Potential Vaccine Targets in Trypanosoma Cruzi;** Ernesto S. Nakayaasu<sup>1</sup>; Tiago J.P. Sobreira<sup>1</sup>; Rafael Torres Jr. <sup>1</sup>; Luciane Ganiko<sup>1</sup>; Paulo S.L. Oliveira<sup>2</sup>; Alexandre F. Marques<sup>1</sup>; Igor C. Almeida<sup>1</sup>; <sup>1</sup>University of Texas at El Paso, El Paso, TX; <sup>2</sup>Instituto do Coracao, Universidade de Sao Paulo, Sao Paulo, Brazil
- ThP 051 **Comprehensive Plasma Analysis for Finding Pathogenic Factors in Preeclampsia;** Chongdong Liu<sup>2</sup>; Haiqiang Yu<sup>1</sup>; Yong Liang<sup>1</sup>; Yang Xu<sup>2</sup>; Haiteng Deng<sup>1</sup>; Zhenyu Zhang<sup>2</sup>; <sup>1</sup>The Rockefeller University, New York, NY; <sup>2</sup>Beijing Chaoyang Hospital affiliated Capital Medic, Beijing, China
- ThP 052 **LC-MS Analysis of Proteins Secreted By Activated Pancreatic Stellate Cells;** Angela Y Wehr<sup>1</sup>; Kenneth Yu<sup>1</sup>; Ian A. Blair<sup>2</sup>; <sup>1</sup>University of Pennsylvania, Philadelphia, PA; <sup>2</sup>Univ. of Penn/SOM/Pharmacol, Philadelphia, PA
- ThP 053 **Identification and Quantitation of Plasmodium falciparum and Anopheles gambiae Proteins from Plasmodium Parasite Infected Mosquitoes Using Isotope Labeling;** Raghothama Chaerkady<sup>1,2</sup>; Mobolaji A Okulate<sup>1</sup>; Kumaran Kandasamy<sup>1,2</sup>; Sutopa B Dwivedi<sup>2</sup>; Nirbhay Kumar<sup>1</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Institute of Bioinformatics, Bangalore, India
- ThP 054 **Relative Quantification in Mass Spectrometry Based Proteomics Studies: Understanding Bias and Variability in an iTRAQ Spike-in Study;** Ann L Oberg<sup>1</sup>; Douglas Mahoney<sup>1</sup>; Carrie Holtz-heppelmann<sup>1</sup>; Linda M Benson<sup>1</sup>; Leeann Higgins<sup>2</sup>; Terry Therneau<sup>1</sup>; Gary Nelsestuen<sup>2</sup>; H. Robert Bergen, III<sup>1</sup>; <sup>1</sup>Mayo Clinic, Rochester, MN; <sup>2</sup>Univ. of Minnesota, Minneapolis, MN
- ThP 055 **SILAC Based Quantitative Proteomics Approach to Identify Secreted Biomarkers of Esophageal Squamous Cell Carcinoma;** Manoj K. Kashyap<sup>1,2</sup>; H. C. Harsha<sup>1,2</sup>; Santosh S. Renuse<sup>2</sup>; Harsh A. Pawar<sup>2</sup>; Min-Sik Kim<sup>1</sup>; Arivusudar Marimuthu<sup>1,2</sup>; Raghothama Chaerkady<sup>1,2</sup>; Anil K. Rustgi<sup>3</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Institute of Bioinformatics, Bangalore, India; <sup>3</sup>University of Pennsylvania, Philadelphia, PA
- ThP 056 **A Quantitative Label-Free Profiling Study of the Effects of Hypoxia on Mycobacterium Tuberculosis Membrane and Cytosol Proteins;** Hua Lin; Jing

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Wang; Thomas A. Shaler; Chris Becker; *PPD Biomarker Discovery Sciences, Menlo Park, CA*
- ThP 057 **Identification of Potential Biomarkers of Esophageal Squamous Cell Carcinoma Using Quantitative Proteomics;** Santosh Renuse<sup>2</sup>; Pradip Kumar Acharya<sup>2</sup>; H.C. Harsha<sup>1,2</sup>; Nandini Patankar<sup>2</sup>; Manoj K Kashyap<sup>1,2</sup>; Yashwanth Subbannayya<sup>2</sup>; Harsh Pawar<sup>2</sup>; Raghothama Chaerkady<sup>1,2</sup>; Rekha V Kumar<sup>3</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Institute of Bioinformatics, Bangalore, India; <sup>3</sup>Kidwai Memorial Institute of Oncology, Bangalore, India
- ThP 058 **Comparative Proteomic Profiling of Osteoarthritis and Rheumatoid Arthritis;** Nandini Patankar<sup>1</sup>; Mitali Bhattacharjee<sup>1</sup>; Harsh Pawar<sup>1</sup>; Charles Jacob Harrys Kishore<sup>1</sup>; H. C. Harsha<sup>1,2</sup>; Santosh Renuse<sup>1</sup>; Raghothama Chaerkady<sup>1,2</sup>; Shankar Subramanian<sup>3</sup>; Akhilesh Pandey<sup>2</sup>; <sup>1</sup>Institute of Bioinformatics, Bangalore, India; <sup>2</sup>Johns Hopkins University School of Medicine, Baltimore, MD; <sup>3</sup>Armed Forces Medical College, Pune, India
- ThP 059 **Identification of Secreted Biomarkers of Pancreatic Cancer Using SILAC;** H.C. Harsha<sup>1,2</sup>; Jun Zhong<sup>1</sup>; Arivusudar Marimuthu<sup>1,2</sup>; Manoj K Kashyap<sup>1,2</sup>; Sameer Kumar<sup>2</sup>; Raghothama Chaerkady<sup>1,2</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup>Johns Hopkins University, Baltimore, MD; <sup>2</sup>Institute of Bioinformatics, Bangalore, India
- ThP 060 **Evaluation of Formalin Fixed Paraffin Embedded Tissues for the Extraction and Comparison of Peptide Phosphorylation;** Paul L Auger Jr<sup>2</sup>; Christopher Farnsworth<sup>3</sup>; Kimberly Lee<sup>2</sup>; Leo E. Bonilla<sup>2</sup>; Mike Davis<sup>1</sup>; <sup>1</sup>Amgen, Inc., Thousand Oaks, CA; <sup>2</sup>Amgen, Thousand Oaks, CA; <sup>3</sup>Molecular Sciences-Amgen, Seattle, WA
- ThP 061 **Identification of Differentially Modified Proteins in the Astrocytoma Secretome;** Catherine Formolo<sup>1,2</sup>; Kristy J. Brown<sup>1</sup>; Tobey J. MacDonald<sup>1,2</sup>; Yetrib Hathout<sup>1,2</sup>; <sup>1</sup>Children's National Medical Center, Washington, DC; <sup>2</sup>George Washington University, Washington, DC
- ThP 062 **Quantitative Neuroblastoma Cell Line Comparison Using a Pooled SILAC Reference Sample;** Charlene Bierl; Lin-sheng Li; Logan J Everett; Stephen R Master; *University of Pennsylvania, Philadelphia, PA*
- ThP 063 **Multiplexed On-Target Protein Fractionation for MALDI Analysis of Sub-Proteome "Windows" into Complex Samples;** Rachel L Weller Roska; Stephen A Brose; Robert E Carlson; *Receptors LLC, Chaska, MN*
- ThP 064 **Identification of Serum Biomarker in Cysticercosis, the Major Parasitic Disease of the Central Nervous System;** Brian J. Ward; Momar Ndao; Christine Straccini; Bernard F. Gibbs; *McGill University, Montreal, QC*
- METABOLOMICS, 065 - 100**
- ThP 065 **Global Metabolic Profiling in Plasma Samples of Patients Before and after Ketogenic Diet Therapy by Monolithic-C18 LC and HILIC/(+)ESI-MS;** Soledad Cerutti; Peggy R. Borum; Jodie V. Johnson; Richard A. Yost; David H. Powell; *University of Florida, Gainesville, FL*
- ThP 066 **Evaluation of Exact Mass and Relative Isotopic Abundance Measurements in LTQ-Orbitrap Mass Spectrometer for Further Metabolomics Database Building;** Ying Xu<sup>1</sup>; Geoffrey Madalinski<sup>1</sup>; Aurelie Roux<sup>1</sup>; Jean-Francois Heilier<sup>1,2</sup>; Jerome Cotton<sup>1</sup>; Eric Ezan<sup>1</sup>; Jean-claude Tabet<sup>3</sup>; Christophe Junot<sup>1</sup>; <sup>1</sup>CEA, Gif-sur-Yvette, France; <sup>2</sup>Université Catholique de Louvain, Bruxelles, Belgique; <sup>3</sup>University Paris VI (UPMC), Paris, France
- ThP 067 **Determining the Molecular Substrate Specificity of Kidney Anion Transporters in vivo Using Untargeted Metabolomics;** William Wikoff<sup>1</sup>; Sanjay Nigam<sup>3</sup>; Gary Siuzdak<sup>2</sup>; <sup>1</sup>The Scripps Research Institute, San Diego, CA; <sup>2</sup>The Scripps Research Institute, La Jolla, CA; <sup>3</sup>Univ. of California San Diego, La Jolla, CA
- ThP 068 **Measurement of the Metabolome of Stagonospora Nodorum, a Major Pathogen on Wheat;** Robert Trengove<sup>1,3</sup>; Joel Gummer<sup>1,2</sup>; Kar-Chun Tan<sup>1,2</sup>; Peter S Solomon<sup>2,4</sup>; Richard P. Oliver<sup>1,2</sup>; <sup>1</sup>Murdoch Univ., Murdoch, Australia; <sup>2</sup>ACNFP, Murdoch, Australia; <sup>3</sup>Metabolomics Australia (Murdoch Node), Murdoch, Australia; <sup>4</sup>Australian National Univ., Canberra, Australia
- ThP 069 **Proof-of-Principle for Untargeted Plasma Metabolite Profiling to Discover Metabolic Aberrations Resulting from Gene Defects and Drug Treatments;** Qiuying Chen<sup>1</sup>; HC Park<sup>2</sup>; Brian Ratliff<sup>2</sup>; Michael Goligorsky<sup>2</sup>; Steven M. Fischer<sup>3</sup>; Steven S. Gross<sup>1</sup>; <sup>1</sup>Weill Medical College of Cornell University, New York, NY; <sup>2</sup>New York Medical College, New York, NY; <sup>3</sup>Agilent Technologies, Santa Clara, CA
- ThP 070 **Combining Unbiased Metabolic Profiling with Targeted Analysis of Specific Metabolites Using High Resolution Mass Spectrometry, a Step Forward in Metabolomics;** Albert Koulman<sup>1</sup>; Martin Hornshaw<sup>2</sup>; Gary Woffendin<sup>2</sup>; Helen Welchman<sup>2</sup>; Vinod Narayana<sup>1</sup>; Catharina Crone<sup>2</sup>; Dietrich Volmer<sup>1</sup>; <sup>1</sup>Medical Research Council, Cambridge, UK; <sup>2</sup>Thermo Fisher Scientific, Hemel Hempstead, UK
- ThP 071 **Mass-Based Global Metabolomics in a Neuropathic Rat Model Implicates the Central Nervous System as the Basis for Chronic Pain;** Gary J Patti<sup>1</sup>; Oscar Yanes<sup>1</sup>; James Bilslund<sup>2</sup>; Jean-Philippe Courade<sup>2</sup>; Gary Siuzdak<sup>1</sup>; <sup>1</sup>The Scripps Research Institute, La Jolla, CA; <sup>2</sup>Pfizer, Pain, Sandwich, UK
- ThP 072 **Cuticular Wax Profiling of Individual Arabidopsis Flowers: Use of LVI-PTV-GCMS as a Means of Validating Metabolite Imaging Data;** Zhihong Song<sup>1,2</sup>; Ji Hyun Jun<sup>1,2</sup>; Zhenjiu Liu<sup>1,2</sup>; Edward S. Yeung<sup>1,2</sup>; Young Jin Lee<sup>1,2</sup>; Basil J. Nikolau<sup>1,2</sup>; <sup>1</sup>Ames Lab of US DOE, Ames, IA; <sup>2</sup>Iowa State Univ., Ames, IA
- ThP 073 **Visualization of Identified and Unknown Compounds in Metabolomic Data Sets of Environmental Tobacco Smoke Exposure in Rats;** Dinesh Kumar Barupal; Oliver Fiehn; *UC, Davis, CA*
- ThP 074 **Optimization of Cell-based Protein Production Using Quantitative Targeted Metabolite Analysis of Animal Cell Cultures;** Denise U. Sonntag; Michael Urban; Matthias Keller; Klaus M. Weinberger; *Biocrates Life Sciences AG, Innsbruck, Austria*
- ThP 075 **An Automated Processing Pipeline for Accurate Mass LC-MS Data Enabling Combined Identification and Quantitation of Metabolites;** Ryan M. Danell<sup>1</sup>; Jun Han<sup>2</sup>; Christoph Borchers<sup>2</sup>; <sup>1</sup>Danell Consulting, Greenville, NC; <sup>2</sup>UVic-GBC Proteomics Centre, Victoria, BC
- ThP 076 **Ultra-Fast Quantitative Profiling of Endogenous Metabolites Based on Differential Chemical Labelling and MALDI-MS;** Dietrich A Volmer;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 077 **Mass Spectrometry Based Metabonomics Study on Autism;** Jun Yang; Jozsef Lango; Bruce D. Hammock; *University of California, Davis, Davis, CA*
- ThP 078 **Metabolomics Reveals Unique *Medicago truncatula* Responses to the Devastating *Phymatotrichopsis* Root Rot Pathogen and Strategies for Metabolic Engineering of Resistance;** Wensheng Li<sup>1,2</sup>; Guoan Shen<sup>1</sup>; Srinivasa Rao Uppalapati<sup>1</sup>; Kirankumar S. Mysore<sup>1</sup>; Richard A. Dixon<sup>1</sup>; Lloyd W. Sumner<sup>1</sup>; <sup>1</sup>*The Noble Foundation, Ardmore, OK*; <sup>2</sup>*Monsanto, Inc., St. Louis, MO*
- ThP 079 **Human Metabotypes Associate with Genotypes and Environmental Challenge;** Rui Wang-Sattler<sup>1</sup>; Christian Gieger<sup>1</sup>; Yao Yu<sup>2</sup>; Kirstin Mittelstrass<sup>1</sup>; Eva Lattka<sup>1</sup>; Elisabeth Altmeyer<sup>1</sup>; Karl H Ladwig<sup>1</sup>; Norbert Dahmen<sup>3</sup>; Pei Hao<sup>2</sup>; Yixue Li<sup>2</sup>; Lei Liu<sup>2</sup>; Ludwig Geistlinger<sup>1</sup>; Martin Hrahe de Angelis<sup>1,4</sup>; Florian Kronenberg<sup>5</sup>; Thomas Meitinger<sup>1,6</sup>; Hans-Werner Mewes<sup>1,4</sup>; H.-Erich Wichmann<sup>1,6</sup>; Klaus M. Weinberger<sup>7</sup>; Jerzy Adamski<sup>1,4</sup>; Karsten Suhre<sup>1,6</sup>; Thomas Illig<sup>1,6</sup>; <sup>1</sup>*Helmholtz Zentrum Muenchen, Neuherberg, Germany*; <sup>2</sup>*Chinese Academy of Sciences, Shanghai, China*; <sup>3</sup>*University of Mainz, Mainz, Germany*; <sup>4</sup>*Technische Universitaet Muenchen, Munich, Germany*; <sup>5</sup>*Innsbruck Medical University, Innsbruck, Austria*; <sup>6</sup>*Ludwig Maximilian Universitaet, Munich, Germany*; <sup>7</sup>*Biocrates Life Sciences, Innsbruck, Austria*
- ThP 080 **Direct Mass Spectrometric Detection of Metabolic Changes in Live Cells: Uninfected vs HTLV-1 Infected T Cells;** Prabhakar Sripathi<sup>1</sup>; Rebecca L. Easley<sup>2</sup>; Fatah Kashanchi<sup>2</sup>; Akos Vertes<sup>1</sup>; <sup>1</sup>*George Washington University, Washington, DC*; <sup>2</sup>*George Washington University School of Medicine, Washington, DC*
- ThP 081 **Genetic Basis of Metabolome Variation in Yeast;** J. Scott Breunig<sup>1</sup>; Eugene Melamud<sup>1</sup>; Erin N. Smith<sup>2</sup>; Leonid Kruglyak<sup>1</sup>; Joshua Rabinowitz<sup>1</sup>; <sup>1</sup>*Princeton University, Princeton, NJ*; <sup>2</sup>*The Scripps Research Institute, La Jolla, CA*
- ThP 082 **Multiplexed Collision Induced Dissociation-LC/TOF MS for Non-target Metabolite Discovery and Profiling;** Feng Shi; Chao Li; A. Daniel Jones; *Michigan State University, East Lansing, MI*
- ThP 083 **Influence of Gut Microbial Suppression and Recolonization on Host Metabolism: An Integrated UPLC-MS Based Metabonomic and Metagenomic Approach;** Jonathan R. Swann<sup>1</sup>; Elizabeth J. Want<sup>1</sup>; Kieran M. Tuohy<sup>2</sup>; Glenn R. Gibson<sup>2</sup>; Ian D. Wilson<sup>3</sup>; James Sidaway<sup>3</sup>; Jeremy K. Nicholson<sup>1</sup>; Elaine H. Holmes<sup>1</sup>; <sup>1</sup>*Imperial College, London, UK*; <sup>2</sup>*Univ. of Reading, Reading, UK*; <sup>3</sup>*AstraZeneca, Macclesfield, UK*
- ThP 084 **Investigating the Health of Whale Sharks at the Georgia Aquarium by Direct Analysis in Real Time Metabolic Serum Fingerprinting;** Manshui Zhou<sup>1</sup>; Alistair D.M. Dove<sup>2</sup>; David H. Webb<sup>2</sup>; Julia Kubanek<sup>1</sup>; Facundo Fernandez<sup>1</sup>; <sup>1</sup>*Georgia Institute of Technology, Atlanta, GA*; <sup>2</sup>*Georgia Aquarium Inc, Atlanta, GA*
- ThP 085 **Sterol Profiling of Phytosterolemia by Ultrahigh Pressure Liquid Chromatography-Mass Spectrometry;** Chiun-gung Juo<sup>1</sup>; Cheng-long Wang<sup>2</sup>; Dou-ming Niu<sup>3</sup>; Ming-shi Shiao<sup>4</sup>; <sup>1</sup>*MMRC, Chang Gung University, Tao-yuan, Taiwan*; <sup>2</sup>*GIBMS, Chang Gung University, Tao-yuan, Taiwan*; <sup>3</sup>*Pediatrics, Taipei Veterans General Hospital, Taipei, Taiwan*; <sup>4</sup>*LS, Chang Gung University, Tao-yuan, Taiwan*
- ThP 086 **LC-FTMS- and NMR-Based Metabolomics Reveal Age-Related Differences in Mice and Humans;** Quinlyn A. Soltow; Jennifer M. Johnson; Youngja Park; Tianwei Yu; Frederick H. Strobel; Dean P. Jones; *Emory University, Atlanta, GA*
- ThP 087 **Metabolomics Characterization of Metabolic Effect of HIF1 $\alpha$ ;** Ru Wei; Guodong Li; Yuxin Wang; Xu Xu; Kurt Eng; Albert B Seymour; *Pfizer RTC, Cambridge, MA*
- ThP 088 **Metabolomics Characterization of Adipocyte Cell Model;** Guodong Li; Yumei Lucy Sun; Debra F. Nathan; Albert B Seymour; Ru Wei; *Pfizer RTC, Cambridge, MA*
- ThP 089 **Probing the Metabolic Response of Yeast to Nutrient Limitation by LC-MS/MS;** Christopher Crutchfield; Viktor Boer; Patrick Bradley; David Botstein; Joshua Rabinowitz; *Princeton University, Princeton, NJ*
- ThP 090 **Metabolite Variations of Genetic Strain Brassica Seeds Analyzed by Infusion FTMS-Based Metabolomics;** Jun Han<sup>1</sup>; Ryan M. Danell<sup>2</sup>; Raju Datla<sup>3</sup>; Christoph Borchers<sup>1</sup>; <sup>1</sup>*UVic-GBC Proteomics Centre, Victoria, BC*; <sup>2</sup>*Danell Consulting, Greenville, NC*; <sup>3</sup>*NRC Plant Biotechnology Institute, Saskatoon, SK, Canada*
- ThP 091 **A Non-Targeted Metabolomics Approach to Metabolite Analysis in a Complex Matrix Using a Sensitive, High Speed Mass Spectrometer;** Alina Dindyal-popescu<sup>1</sup>; Nanqun Zhu<sup>2</sup>; Thomas O'shea<sup>2</sup>; Jeffrey Miller<sup>3</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada*; <sup>2</sup>*Genzyme, Waltham, MA*; <sup>3</sup>*Applied Biosystems, Framingham, MA*
- ThP 092 **A Bioinformatics Platform for Two Dimensional Gas Chromatography Mass Spectrometry-Based Metabolomics;** Bing Wang<sup>1,2</sup>; Aiqin Fang<sup>1</sup>; Charles Buck<sup>4</sup>; Mark Libardoni<sup>3</sup>; John Heim<sup>3</sup>; Xiang Zhang<sup>1</sup>; <sup>1</sup>*Univ. of Louisville, Louisville, KY*; <sup>2</sup>*Anhui Univ. of Technology, Ma An Shan, China*; <sup>3</sup>*LECO Coporation, St. Joseph, MI*; <sup>4</sup>*Purdue Univ., West Lafayette, IN*
- ThP 093 **Global Profiling Studies in Tumour Bearing Mouse Models Using High Mass Accuracy MSn Analysis;** Lindsay Lai<sup>1,2</sup>; Ian Wilson<sup>2</sup>; Robert Wilkinson<sup>2</sup>; Rajesh Odedra<sup>2</sup>; Simon Ashton<sup>3</sup>; Alan Barnes<sup>3</sup>; Neil Loftus<sup>3</sup>; <sup>1</sup>*Manchester University, Manchester, UK*; <sup>2</sup>*AstraZeneca, Alderley Park, UK*; <sup>3</sup>*Shimadzu, Manchester, UK*
- ThP 094 **Integration of NMR- and MS-Based Metabolic Profiling Techniques for Structural Determination of Marker Metabolites;** Satoko Kako<sup>1</sup>; Tadashi Nemoto<sup>2</sup>; Katsutoshi Takahashi<sup>2</sup>; Kazunori Saito<sup>3</sup>; Eri Sunaga<sup>2</sup>; Daichi Yukihira<sup>1</sup>; Yoshinori Fujimura<sup>1</sup>; Daisuke Miura<sup>1</sup>; Hiroyuki Wariishi<sup>1</sup>; <sup>1</sup>*Kyushu university, Fukuoka, Japan*; <sup>2</sup>*National Institute of Advanced Industrial Science, Tsukuba, Japan*; <sup>3</sup>*Bruker Daltonics Japan, Yokohama, Japan*
- ThP 095 **Optimisation of Metabolite Extraction from Liver Samples for Metabolic Profiling by UPLC-MS;** Perrine Masson; Jeremy K. Nicholson; Elizabeth J. Want; *Imperial College, London, UK*
- ThP 096 **Metabolomic Profiling Using Orbitrap Fourier Transform Mass Spectrometry;** Ludovic Muller<sup>1</sup>;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Nathalie Priymenko<sup>2</sup>; Céline Domange<sup>2</sup>; Alain Paris<sup>2</sup>; Christophe Junot<sup>3</sup>; Sandra Alves<sup>1</sup>; Jean-claude Tabet<sup>1</sup>; <sup>1</sup>University Paris VI (UPMC), Paris Cedex 05, France; <sup>2</sup>INRA, Toulouse, France; <sup>3</sup>CEA, Gif-sur-Yvette, France
- ThP 097 **Metabolite Profiling and Biochemical Characterization of Bovine Milk Utilizing GC-MS and LC-MS/MS;** John Lennon; Carolyn Amoretty; Kurt Boudonck; *Metabolon, Inc., Durham, NC*
- ThP 098 **Comprehensive Profiling of Acylcarnitines in Human Urine by UPLC-MS/MS;** Azeret Zuniga; Liang Li; *University of Alberta, Edmonton, Canada*
- ThP 099 **Metabonomic Profiling of Human Plasma: The Impact of Sample Handling and Storage;** Bethanne Warrack; Janet Caceres-Cortes; Serhiy Hnatyshyn; Mohammed Jemal; Petia Shipkova; Michael Reily; *Bristol-Myers Squibb, Princeton, NJ*
- ThP 100 **Targeted Metabolomics of Sterols and Cholesterol Derivatives in Mammal Samples;** Therese Koal; Peter Enoch; Matthias Keller; Hans-Peter Deigner; Klaus M. Weinberger; *Biocrates Life Sciences AG, Innsbruck, Austria*
- PROTEOMICS: NEW APPROACHES, 101 - 130**
- ThP 101 **Improved In-Gel Digestion Results and Work-Flow through the Use of a Mass Spectrometry Compatible Surfactant;** Daniel J. Simpson<sup>1</sup>; Sergei Saveliev<sup>1</sup>; Becky Godat<sup>1</sup>; Grzegorz Sabat<sup>2</sup>; <sup>1</sup>Promega Corp., Madison, WI; <sup>2</sup>University of Wisconsin, Madison, WI
- ThP 102 **Improving Protein Identification Efficiency for Comprehensive Proteome Mapping of *Escherichia coli* by LC-ESI MS/MS;** Xiaoxia Ye; Nan Wang; Liang Li; *University of Alberta, Edmonton, Canada*
- ThP 103 **Improved Protein Coverage and Throughput in Proteomics Using On-Line Multiplexed Enzyme Digestions and Targeted MS/MS with a Modified LTQ-FTICR;** Daniel Lopez Ferrer<sup>1</sup>; Konstantinos Petritis<sup>1</sup>; Andrei Liyu<sup>1</sup>; Yufeng Shen<sup>1</sup>; Benito Canas<sup>2</sup>; Kim K. Hixson<sup>1</sup>; Richard D. Smith<sup>1</sup>; Mikhail Belov<sup>1</sup>; <sup>1</sup>PNNL / Battelle Northwest, Richland, WA; <sup>2</sup>Universidad Complutense de Madrid, Madrid, Spain
- ThP 104 **Integration of Top-Down and Bottom-Up Approaches: Application of RePlay for Confident Protein/Peptide Identifications by On-Line Post-Column Digestion and High-Resolution MS;** Konstantinos Petritis<sup>1</sup>; Daniel López-Ferrer<sup>1</sup>; Tian Zhixin<sup>1</sup>; Errol Robinson<sup>1</sup>; Mikhail Belov<sup>1</sup>; Ljiljana Paša-Tolić<sup>1</sup>; John Fjeldsted<sup>2</sup>; Leslie Leonard<sup>2</sup>; Simon J. Prosser<sup>3</sup>; David Schriemer<sup>4</sup>; Darren F. Lewis<sup>5</sup>; Richard D. Smith<sup>1</sup>; <sup>1</sup>Pacific Northwest National Laboratory, Richland, WA; <sup>2</sup>Agilent Technologies, Santa Clara, CA; <sup>3</sup>Advion BioSciences, Inc., Ithaca, NY; <sup>4</sup>University of Calgary, Calgary, AB; <sup>5</sup>Ilex Health & Science Group, Oak Harbor, WA
- ThP 105 **Profiling the Thiol-Disulfide Complement of *Saccharomyces Cerevisiae* Using Organomercurial Enrichment and Multi-Dimensional-nanoLC/MS;** Mark J. Raftery; *Bioanalytical Mass Spectrometry, Sydney, Australia*
- ThP 106 **2D RP/RP LC/MS as a Fractionation Tool for the Separation of Peptides in Human Ovarian Cancer Cell Extracts;** Monika Dzieciatkowska<sup>1</sup>; Tony Tegeler<sup>2</sup>; Jinsam You<sup>2</sup>; Mu Wang<sup>1,2</sup>; <sup>1</sup>Indiana University School of Medicine, Indianapolis, IN; <sup>2</sup>Monarch Life Sciences, Indianapolis, IN
- ThP 107 **Quantitative Evaluation of Enzymatic Activity of Immobilized Trypsin Microreactors for Protein Digestion and Identification;** Ying Long; Troy Wood; *SUNY at Buffalo, Buffalo, NY*
- ThP 108 **Toward Tubulin Proteomics: Separation and Identification of Acidic Peptides Using Offline High-pH RP-HPLC Coupled with Low-pH LC-MS/MS;** Chao Gong; Carthene R. Bazemore-Walker; *Brown University, Providence, RI*
- ThP 109 **Investigation of the *Clostridium Acetobutylicum* Proteome under Different Growth Conditions Using 1D and 2D RPRP nanoUPLC and Alternative Scanning LCMS;** Thérèse Mckenna<sup>1</sup>; Joanne B. Connolly<sup>1</sup>; Chris Hughes<sup>1</sup>; Jim Langridge<sup>1</sup>; Kevin Collins<sup>1</sup>; Keith R Compson<sup>1</sup>; Philippe Soucaille<sup>2</sup>; Gwenaelle Bestel-corre<sup>2</sup>; <sup>1</sup>Waters, Manchester, UK; <sup>2</sup>Metabolic Explorer, Saint Beuzire, France
- ThP 110 **Design of 1 Meter Long Monolithic nanoLC Columns for Ultra-High-Efficiency LC-MS Peptide Analyses;** Sebastian Eelink; Evert-Jan Sneekes; Remco Swart; *Dionex Corp., Amsterdam, Netherlands*
- ThP 111 **Automated Sample Loading and Desalting within a MudPIT Experiment to Increase Global Proteomic Identifications;** Robert Lj Graham<sup>1</sup>; John Lloyd<sup>2</sup>; Sonja Hess<sup>1</sup>; <sup>1</sup>Caltech, Pasadena, CA; <sup>2</sup>NIH/NIDDK, Germantown, MD
- ThP 112 **An Efficient Microfluidic Chip-Based Proteolytic Reactor for Online ESI-MS Analysis;** Peter Liuni; Tamanna Rob; Derek J. Wilson; *York University, Toronto, Canada*
- ThP 113 **High-Resolution Peptide Analysis Using Sub-Two Micron Columns;** Reno Nguyen; Joyce Wang; Mark Jacyno; Scott Anderson; Wendy Luo; Ian Chappell; *Grace Davison, Deerfield, IL*
- ThP 114 **Novel Cleavable Probe for Cysteiny-Peptide Enrichment and LC-MS/MS Analysis in Complex Protein Mixtures;** De Lin; Daniel C. Liebler; *Department of Biochemistry, Vanderbilt University, Nashville, TN*
- ThP 115 **Mapping Reagent Space for Fragment Ion Mass Defect Labeling (FIMDL) of Peptides;** Yu Shi; Bekim Bajrami; Xudong Yao; *Chemistry Department, University of Connecticut, Storrs, CT*
- ThP 116 **Expanding Mass Forbidden Zones in Tandem Mass Spectra for Improved Selectivity of Phosphoryl Fragment Ion Detection Using Peptide Esterification;** Bekim Bajrami<sup>1</sup>; Yu Shi<sup>1</sup>; Pascal Lapiere<sup>2</sup>; Xudong Yao<sup>1</sup>; <sup>1</sup>Chemistry Department, University of Connecticut, Storrs, CT; <sup>2</sup>Biotech Center, University of Connecticut, Storrs, CT
- ThP 117 **Evaluation of Dansyl-Peptides MS and MS/MS Features to Enhance the LC-MALDI-MS/MS Analysis;** Giovanni Chiappetta<sup>1,2</sup>; Sega Ndiaye<sup>1</sup>; Emmanuelle Demy<sup>1</sup>; Iman Haddad<sup>1</sup>; Gennaro Marino<sup>2</sup>; Angela Amoresano<sup>2</sup>; Joelle Vinh<sup>1</sup>; <sup>1</sup>ESPCI-ParisTech, Paris, France; <sup>2</sup>University of Naples Federico II, Naples, Italy
- ThP 118 **Enhancing the Detectability of Cysteine-Containing Peptides in MALDI-Based Proteomics;** Jon M. Bruno<sup>1</sup>; Carol E. Parker<sup>2</sup>; Nedyalka Dicheva<sup>2</sup>; Kristina E. Ile<sup>3</sup>; Mihaela Mocanu<sup>2</sup>; Vytas A. Bankaitis<sup>3</sup>; John C. Edwards<sup>1</sup>; <sup>1</sup>Department of Medicine, UNC-CH, Chapel Hill, NC; <sup>2</sup>UNC-Duke Proteomics Center, UNC-CH,

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Chapel Hill, NC; <sup>3</sup>Cell and Developmental Biology, UNC-CH, Chapel Hill, NC
- ThP 119 **Using Deuterium Oxide to Measure Turnover Rates of Plant Proteins;** XiaoYuan Yang; Wen-Ping Chen; Adrian D. Hegeman; William M. Gray; Jerry D. Cohen; *University of Minnesota, Saint Paul, MN*
- ThP 120 **The Potential of Fluorous Labeling as a Novel Tool to Enrich Low Abundance CysteinyI-Peptides;** Wantao Ying; David H. Perlman; Lei Li; Roger Theberge; Catherine E. Costello; Mark E. McComb; *Boston University School of Medicine, Boston, MA*
- ThP 121 **Optimization of UPLC and Orbitrap Analyses for Characterization of Single Proteins and Complex Mixtures;** Donald S Kirkpatrick; Corey E Bakalarski; Lilian Phu; Daisy Bustos; Jianjun Zhang; David Arnott; *Genentech, Inc., South San Francisco, CA*
- ThP 122 **Proteomic Analysis of a Sinitang Uptake Response in the Bacterium *Deinococcus Radiodurans*;** Jingyueh Jeng; Chiashan Weng; *Chia Nan University of Pharmacy & Science, Tainan, Taiwan*
- ThP 123 **A Proteomic Approach to the Sources and Fate of Proteins in the Bering Sea;** Eli Moore<sup>1</sup>; Brook Nunn<sup>2</sup>; David R. Goodlett<sup>2</sup>; H. Rodger Harvey<sup>1</sup>; <sup>1</sup>*University of Maryland/CES, Solomons, MD*; <sup>2</sup>*University of Washington, Seattle, WA*
- ThP 124 **High Throughput Global Proteome Profiling of Mammalian Tissue Using Hybrid Triple Quadrupole / Linear Ion Trap Technology;** Xu Guo<sup>1</sup>; Brigitte Simons<sup>1</sup>; Feng Zhong<sup>1</sup>; Jason Hoffert<sup>2</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada*; <sup>2</sup>*NHLBI, Bethesda, MD*
- ThP 125 **Mass Spectrometric Proteome Analysis of the Tardigrade *Hypsibius Dujardini*, a New Model Organism for Aging Research;** Birgit Schilling<sup>1</sup>; Aaron W. Miller<sup>1</sup>; Ronald Beavis<sup>2</sup>; Robert E. Hughes<sup>1</sup>; Bradford W. Gibson<sup>1</sup>; <sup>1</sup>*Buck Institute for Age Research, Novato, CA*; <sup>2</sup>*University of British Columbia, Vancouver, BC*
- ThP 126 **Exploring the Structural Heterogeneity of the COP9 Signalingosome Complex;** Lei Fang; Xiaorong Wang; Lan Huang; *University of California, Irvine, CA*
- ThP 127 **Tandem Mass Spectrometry Analysis of Primary Amyloid Disease Patient Tissue Samples Fractionated by Hydrostatic Pressure Cycling;** Zhenning Hong; Giuseppe Infusini; Lawreen H. Connors; Martha Skinner; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*
- ThP 128 **Differential Expression of Cellular Proteins in Pancreatic Cancer Cells in Response to Transketolase Inhibitor Oxythiamine Treatment;** Hengwei Zhang<sup>1</sup>; Rui Cao<sup>1</sup>; W. Paul Lee<sup>2</sup>; Caishu Deng<sup>1</sup>; Yingchun Zhao<sup>1</sup>; Jing Xiao<sup>1</sup>; Qingmei Xie<sup>1</sup>; Shu Lim<sup>2</sup>; Vay Liang Go<sup>2</sup>; Robert Recker<sup>1</sup>; Gary Guishan Xiao<sup>1</sup>; <sup>1</sup>*Creighton University, Omaha, NE*; <sup>2</sup>*Harbor - UCLA Medical Center, Torrance, CA*
- ThP 129 **A Novel Method for Protein Profiling in Layered Tissues Combining Serial Sectioning of Frozen Tissue with Gel-Free Label-Free Quantitative Proteomics;** Nikolai Skiba<sup>1,2</sup>; Boris Reidel<sup>1,2</sup>; Will Thompson<sup>3</sup>; Arthur Moseley<sup>1,3</sup>; Vadim Arshavsky<sup>2</sup>; <sup>1</sup>*Duke University, Durham, NC*; <sup>2</sup>*Duke University Eye Center, Durham, NC*; <sup>3</sup>*Institute for Genome Science and Policy, Durham, NC*
- ThP 130 **Development and Use of Complex Experimental Proteomics Standards;** Andrew T Bauman<sup>1</sup>; Roger Higdon<sup>1</sup>; Sean Rapson<sup>1</sup>; Brent Louie<sup>1</sup>; Jared C. Roach<sup>1</sup>; Natali Kolker<sup>1</sup>; Gerald van Belle<sup>2</sup>; Eugene Kolker<sup>1</sup>; <sup>1</sup>*Seattle Children's Research Institute, Seattle, WA*; <sup>2</sup>*University of Washington, Seattle, WA*
- SMALL MOLECULE ANALYSIS, 131 - 160**
- ThP 131 **LC/MS/MS Analysis of Biogenic Amines in Foods and Beverages;** Robert Ellis<sup>1</sup>; Takeo Sakuma<sup>1</sup>; Michael Quilliam<sup>2</sup>; Pearl Blay<sup>2</sup>; William Hardstaff<sup>2</sup>; Vernon Bartlett<sup>3</sup>; Becky Wittrig<sup>3</sup>; Daniel Bazavan<sup>4</sup>; Deolinda Fernandes<sup>1</sup>; David Cox<sup>1</sup>; Fouad Khalaf<sup>1</sup>; Andre Schreiber<sup>5</sup>; <sup>1</sup>*MDS Analytical Technologies, Concord, Canada*; <sup>2</sup>*National Research Council, Halifax, Canada*; <sup>3</sup>*Restek, Bellefonte, PA*; <sup>4</sup>*Dionex, Oakville, Canada*; <sup>5</sup>*Applied Biosystems, Toronto, Canada*
- ThP 132 **Confirmation of Azaspiracid Toxins in Outbreak Implicated Mussel Products;** Ann Abraham; Steven M. Plakas; Hudson R. Granade; Kathleen R. El Said; Robert W. Dickey; *FDA, Dauphin Island, AL*
- ThP 133 **Determination of Biogenic Amines in Seafood by GC- and LC-MS;** F. Aladar Bencsath; Ann Abraham; *FDA, Gulf Coast Seafood Laboratory, Dauphin Island, AL*
- ThP 134 **High Throughput Pesticides Screening Using LC/TOF-MS;** Takashi Ando<sup>1</sup>; Makiko Iki<sup>2</sup>; Haruo Hosoda<sup>3</sup>; Jun Watanabe<sup>3</sup>; <sup>1</sup>*Miyazaki Agricultural Research Institute, Miyazaki, Japan*; <sup>2</sup>*JA Miyazaki Keizairen, Miyazaki, Japan*; <sup>3</sup>*Bruker Daltonics K. K., Yokohama, Japan*
- ThP 135 **Mass-Spectrometric Analysis of Non-Nitrogen Containing Bisphosphonates: Clodronate;** Veniamin Lapko; Richard Olsen; Lee Zhu; Curtis Sheldon; Chad Briscoe; *MDS Pharma Services, Lincoln, NE*
- ThP 136 **Analysis of Underivatized Amino Acids in Root Exudates Using Hydrophilic Interaction Liquid Chromatography Combined with Electrospray Ionization Mass Spectrometry;** Madeleine Dellmour; Leonhard Jaitz; Eva Oburger; Markus Puschenreiter; Gunda Koellensperger; Stephan Hann; *University of Natural Resources and Applied Life S, Vienna, Austria*
- ThP 137 **High Sensitive Derivatization Method for the Analysis of Alendronic Acid in Human EDTA Plasma by LC/MS/MS;** Nicolas Jean; Chantal Gravel; Sylvain Lachance; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- ThP 138 **Formation Mechanism of Germanium Containing Zeolitic Materials Studied by ESI-MS and ESI-MS/MS;** Bernd Bastian Schaack; Ferdi Schueth; Wolfgang Schrader; *Max-Planck Inst Coal Res., Mülheim / Ruhr, Germany*
- ThP 139 **Laser Desorption Ionization on Nanowell Silicon Arrays Prepared by Argon Plasma Etching Using a Nanoporous Alumina Mask;** Basri Gulbakan<sup>1,2</sup>; Kaan Kececi<sup>1,2</sup>; Dooho Park<sup>1,2</sup>; Charles R Martin<sup>1,2</sup>; Weihong Tan<sup>1,2</sup>; David H Powell<sup>1,3</sup>; <sup>1</sup>*University of Florida Department of Chemistry, Gainesville, FL*; <sup>2</sup>*Center for Research at Bio/Nano Interface, Gainesville, FL*; <sup>3</sup>*UF Metabolomics Core, Gainesville, FL*
- ThP 140 **Ultra Specific Determination of Clopidogrel in Human Plasma: Improved Method Minimizing Metabolite Back-Conversion;** Guy Havarid; Marie-Eve Coulombe; Sylvain Lachance; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 141 **Characterization of DNA Adducts and Secondary Plant Metabolites at the Microgram Level Using a Nano-electrospray LC-MS-Microcoil NMR Integrated System;** Rose Gathungu; Susan Schiavo; John Oldham; Carolyn Lee-Parsons; Paul Vouros; Roger Kautz; *Northeastern University, Boston, MA*
- ThP 142 **Analysis of Canine Kidney Stones Using Mass Spectrometry;** James A. Campbell<sup>1</sup>; Catherine E. Petersen<sup>1</sup>; David S. Wunschel<sup>1</sup>; Thomas O. Metz<sup>1</sup>; David W. Koppenaal<sup>1</sup>; Leo Romanczyk<sup>2</sup>; Peter Markhill<sup>2</sup>; John Hammerstone<sup>2</sup>; <sup>1</sup>*Battelle-PNNL, Richland, WA*; <sup>2</sup>*Waltham, a Division of Mars Incorporated, Leicester, UK*
- ThP 143 **Screening Phosphatidylcholine Injection Samples for Impurities by HPLC-UV-MS and GC/MS;** Jamie D. Dunn<sup>1</sup>; Jeffrey T. Woodruff<sup>1</sup>; John C. Reepmeyer<sup>1</sup>; Benjamin J. Westenberger<sup>1</sup>; Samia M. Nasr<sup>2</sup>; Michael E. Hadwiger<sup>1</sup>; <sup>1</sup>*FDA, CDER, Division of Pharmaceutical Analysis, St. Louis, MO*; <sup>2</sup>*FDA, CDER, Office of Compliance, Silver Spring, MD*
- ThP 144 **Quality by Design Approach for the Identification of Extractable Substances in Vial Stoppers Using GC/MS and LC/MS for Qualitative Identification;** Louis-philippe Labranche<sup>1</sup>; John Mchugh<sup>3</sup>; Yves G. Leblanc<sup>1</sup>; Alain Carrier<sup>2</sup>; <sup>1</sup>*Sandoz, Boucherville, Canada*; <sup>2</sup>*Sandoz Canada, Boucherville, QC*; <sup>3</sup>*Sandoz Canada, Inc., Boucherville, QC*
- ThP 145 **Development of an LC-MS-MS Assay for Cyclooxygenase Inhibition;** Hongmei Cao<sup>1,2</sup>; Rui Yu<sup>1,2</sup>; Yi Tao<sup>1,2</sup>; Dejan Nikolic<sup>1,2</sup>; Richard B. Van Breemen<sup>1,2</sup>; <sup>1</sup>*University of Illinois at Chicago, Chicago, IL*; <sup>2</sup>*College of Pharmacy, Chicago, IL*
- ThP 146 **Lipemic Effect Evaluation on Detection Variability Using Natural and Synthetic Lipemic Plasma in Four LC/MS/MS Methods;** Nancy Lampron; Sylvain Lachance; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- ThP 147 **Withdrawn**
- ThP 148 **Quantitation of Propylene Glycol in Human Plasma by LC/MS/MS: A Bioanalytical Challenge;** Serge Auger; Sylvain Lachance; Julie Vibert; Sofi Gagnon-Carignan; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- ThP 149 **A LC-MS/MS Method for Quantification of Anthocyanins, Application in a Clinical Pharmacologic Study with a Bioadhesive Black Raspberry Gel Formulation;** Yonghua Ling<sup>1</sup>; Chen Ren<sup>1</sup>; Susan Mallery<sup>2</sup>; Carlos M. Ugalde<sup>2</sup>; U.V.R. Vijaya Saradhi<sup>1</sup>; Ping Pei<sup>2</sup>; Gary Stoner<sup>3,4</sup>; Kenneth K. Chan<sup>3,5</sup>; Zhongfa Liu<sup>1,3</sup>; <sup>1</sup>*College of Pharmacy, The Ohio State Univ., Columbus, OH*; <sup>2</sup>*College of Dentistry, The Ohio State Univ., Columbus, OH*; <sup>3</sup>*Comprehensive Cancer Center, The Ohio State Univ, Columbus, OH*; <sup>4</sup>*College of Medicine, The Ohio State Univ., Columbus, OH*; <sup>5</sup>*Colleges of Pharmacy & Medicine and Public Health, Columbus, OH*
- ThP 150 **A Novel Method for the Determination of Oxalic Acid in Root Exudates;** Leonhard Jaitz; Bernhard Müller; Madeleine Dell'mour; Eva Oburger; Markus Puschenreiter; Gunda Koellensperger; Stephan Hann; *University of Natural Resources and Applied Life S, Vienna, Austria*
- ThP 151 **Evaluation of Two Innovative Derivatization Reagents: Application to the Determination of Calcitriol and Tibolone Metabolites in Human Plasma by LC/MS/MS;** Guy Havarid; Serge Auger; Sylvain Lachance; Johanne Lefebvre; Ann Levesque; Robert Masse; *Anapharm, Québec, Canada*
- ThP 152 **High Resolution Mass Spectrometry Analysis of 2-Substituted Benzothiazoles;** Jian Guo; Scott W. Grimm; *AstraZeneca Pharmaceuticals, Wilmington, DE*
- ThP 153 **Troubleshooting Cross-well Contamination in a 96-Well Plate of Volatile Pharmaceutical Compounds (Methylphenidate and Rivastigmine) during Evaporation Step Using LC/MS/MS;** Danielle Bouchard; Philippe Bélanger; Patrice Arcand; Robert Massé; *Anapharm, Québec, QC*
- ThP 154 **Fast Method Development Approach for Multi-Analyte SPE Screening and the Analysis of 6 Different Compounds in Human Plasma by LC/MS/MS;** Philippe Belanger; Danielle Bouchard; Patrice Arcand; Robert Massé; *Anapharm, Québec, Canada*
- ThP 155 **Light Exposure of 4-oxo-13-cis-retinoic Acid and 4-oxo-all-trans-Retinoic Acid and Qualitative Analysis of their Degradation by-products Using LC/MS/MS;** Sébastien Gagné; Nadine Boudreau; Adrien Musuku; Robert Masse; *Anapharm, Québec, QC*
- ThP 156 **Mass Spectrometry Based Assay for the Enzymatic Hydrolysis of Pseudo-Prochiral Malonate Diesters;** Dale A. Rosado, Jr.; Thomas Maestri; Douglas Masterson\*; *University of Southern Mississippi, Hattiesburg, MS*
- ThP 157 **High-Throughput Screening of Cardiovascular Drugs from Clinical Samples by MALDI MS;** Eduardo C. Dias; Joey C. Latham; Dan M. Roden; Nancy J. Brown; Richard M. Caprioli; *Vanderbilt Univ Sch of Med, Nashville, TN*
- ThP 158 **Alteration of Selective Neurotransmitters in Fetal Brains of Alcohol-Treated Prenatally C57BL/6 mice: Quantitative Analysis Using Liquid Chromatography/Tandem Mass Spectrometry Methods;** Loubna A. Hammad<sup>2</sup>; Youssef Sari<sup>1</sup>; Marwa M. Saleh<sup>2</sup>; Yehia Mechref<sup>2</sup>; <sup>1</sup>*Department of Psychology, Indiana University, Bloomington, IN*; <sup>2</sup>*Department of Chemistry, Indiana University, Bloomington, IN*
- ThP 159 **Matrix-Ionization Laser Desorption (MILD) for Structural Elucidation of Small Molecules;** Asanka S Rathnayake<sup>1</sup>; Sadish Karunaweera<sup>1</sup>; Thushani N. Herath<sup>1</sup>; Ellen D. Inutan<sup>1</sup>; Charles N. Mcewen<sup>2</sup>; J Michael Walker<sup>3</sup>; Sarah Trimpin<sup>1</sup>; <sup>1</sup>*Wayne State University, Detroit, MI*; <sup>2</sup>*Univ. of the Sciences in PA, Philadelphia, PA*; <sup>3</sup>*Indiana University, Bloomington, IN*
- ThP 160 **How Low Can We Go? An Evaluation of Strategies for Small-Molecule Analysis by MALDI;** Christopher C. Lai; Lawrence R. Phillips; Lyndsay L. Smith; James A. Kelley; *NCI/NIH, Frederick, MD*

<b>IMAGING MS: SMALL MOLECULES AND LIPIDS, 161 - 182</b>
--

- ThP 161 **High-Sensitivity Mass Spectrometric Imaging Applied to the Analysis of TB Drug Distributions in Infected Rabbit Lung;** Brendan Prideaux<sup>1</sup>; Dieter Staab<sup>1</sup>; Veronique Dartois<sup>2</sup>; Anne Goh<sup>2</sup>; Hui Qing Ang<sup>2</sup>; Peiting Zeng<sup>2</sup>; Maxime Herve<sup>2</sup>; Laura Via<sup>3</sup>; Clifton E. Barry<sup>3</sup>; Markus Stoeckli<sup>1</sup>; <sup>1</sup>*Novartis Institutes for BioMedical Research, Basel, Switzerland*; <sup>2</sup>*Novartis*

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Institute for Tropical Diseases, Singapore; <sup>3</sup>National Institutes of Health, Bethesda, MD*
- ThP 162 **Strategies for Drugs Imaging;** Alice M. Delvolvé; Jeremy Post; Shelley N. Jackson; Amina S. Woods; *NIH/NIDA/IRP, Baltimore, MD*
- ThP 163 **Imaging Mass Spectrometry Provides Chemical Makeup of Samples Prepared by Matrix-Assisted Laser Desorption/Ionization Methods;** Thushani N. Herath<sup>1</sup>; Ellen D. Inutan<sup>1</sup>; Steffen M. Wiedner<sup>2</sup>; Sarah Trimpin<sup>1</sup>; <sup>1</sup>Wayne State University, Detroit, MI; <sup>2</sup>Fed. Inst. of Mat. Research, Berlin, Germany
- ThP 164 **Imaging Melamine in Egg Samples by Surface Desorption Atmospheric Pressure Chemical Ionization Mass Spectrometry;** Haiwei Gu<sup>1,2</sup>; Shuiping Yang<sup>2</sup>; Huanwen Chen<sup>2,3</sup>; Yuling Yang<sup>2</sup>; Bin Hu<sup>2</sup>; Xie Zhang<sup>2</sup>; Yufen Zhou<sup>2</sup>; Lili Zhang<sup>3</sup>; <sup>1</sup>Validation Resources, LLC, Bend, OR; <sup>2</sup>East China Institute of Technology, Fuzhou, P.R.China; <sup>3</sup>Jilin University, Changchun, P. R. China
- ThP 165 **Quantitative Mass Spectrometric Imaging of Endogenous Acetylcarnitine from Piglet Brain Tissue Using Acetyl-d<sub>3</sub>-Carnitine as an Internal Standard;** David A. Pirman; Peggy R. Borum; Richard A. Yost; *University of Florida, Gainesville, FL*
- ThP 166 **Ambient Molecular Imaging of Matrix-Free Plant Tissues Using Electrospray-Assisted Laser Desorption Ionization Mass Spectrometry;** Siou-Sian Jhang; Min-Zong Huang; Jentaie Shia; *National Sun Yat-Sen Univ., Kaohsiung, Taiwan*
- ThP 167 **Direct Analysis of Irinotecan Metabolites by Accurate Mass and High Resolution Tissue Imaging off Tumor Samples;** Huy Bui<sup>1</sup>; Maria C. Prieto Conaway<sup>1</sup>; Shousong Cao<sup>2</sup>; Farukh Durrani<sup>2</sup>; Youcef Rustum<sup>2</sup>; Ping Wang<sup>2</sup>; Khin Marlar<sup>2</sup>; A. Latif Kazim<sup>2</sup>; <sup>1</sup>Thermo Fisher Scientific, San Jose, CA; <sup>2</sup>Roswell Park Cancer Institute, Buffalo, NY
- ThP 168 **MALDI Imaging of Pharmaceuticals in Zebrafish for Discovery and Drug Safety Screening;** Stacey R. Oppenheimer<sup>1</sup>; Jiangwei Li<sup>2</sup>; <sup>1</sup>Pfizer, Groton, CT; <sup>2</sup>Iowa State University, Ames, IA
- ThP 169 **Mass Spectrometric Imaging of AFEX treated Corn Stover;** Zhen Li<sup>1</sup>; Paul Bohn<sup>2</sup>; Jonathan Sweedler<sup>1</sup>; <sup>1</sup>University of Illinois, Urbana, IL; <sup>2</sup>Notre Dame University, Notre Dame, IN
- ThP 170 **The Use of Imaging MALDI to Probe the Distribution of the Components of Gastropod Mucus;** David Evason<sup>2</sup>; Vic Parr<sup>1</sup>; Mark D. Mills<sup>2</sup>; Alexis Polley<sup>3</sup>; <sup>1</sup>SAI, LTD., Manchester, UK; <sup>2</sup>SAI, Manchester, UK; <sup>3</sup>SAI Ltd., Manchester, UK
- ThP 171 **MALDI - MS Imaging of Tumour Lipids in DU145 and HCT116 Tumour Xenografts and the Effects of Vinblastine;** Paul J Trim<sup>1</sup>; Kelly M Hearne<sup>2</sup>; Chris Brown<sup>2</sup>; Andrew McEwen<sup>2</sup>; Emmanuelle Claude<sup>3</sup>; Peter S. Marshall<sup>4</sup>; Alessandra P Princivale<sup>1</sup>; Malcolm Clench<sup>1</sup>; <sup>1</sup>Sheffield Hallam Uni, UK, Sheffield, UK; <sup>2</sup>Quotient Bioresearch Ltd, Rushden, UK; <sup>3</sup>Waters Corporation, Manchester, UK; <sup>4</sup>GlaxoSmithKline, Stevenage, UK
- ThP 172 **Imaging of Phospholipids in Formalin Fixed Rat Brain Sections via MALDI-MS;** Claire Louise Carter<sup>1</sup>; Cameron McLeod<sup>1</sup>; Josephine Bunch<sup>2</sup>; <sup>1</sup>The University of Sheffield, Sheffield, UK; <sup>2</sup>University of Birmingham, Birmingham, UK
- ThP 173 **MALDI-FTICR Imaging of Phospholipids in Tissue: More Peaks but More Images?;** Shannon Cornett<sup>1</sup>; Hans Rudolf Aerni<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>Vanderbilt Univ Sch of Med, Nashville, TN
- ThP 174 **A Target Amplification Strategy to Detect Enzyme Activity by Imaging MS;** Junhai Yang<sup>1</sup>; Pierre Chaurand<sup>1</sup>; Ned Porter<sup>1</sup>; Richard M. Caprioli<sup>2</sup>; <sup>1</sup>Vanderbilt University, Nashville, TN; <sup>2</sup>Vanderbilt Univ Sch of Med, Nashville, TN
- ThP 175 **Determination of Brain Extracted Lipids by Thin-Layer Chromatography – Imaging Desorption Electrospray Ionization (TLC-Imaging DESI);** Demian R. Iffa<sup>1</sup>; Giuseppe Paglia<sup>2</sup>; Gaetano Corso<sup>2</sup>; R. Graham Cooks<sup>1</sup>; <sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>University of Foggia, Foggia, Italy
- ThP 176 **Mass Spectrometry Imaging of Mating Tetrahymena Thermophila Reveals that Cell Morphology Changes Precede Lipid Domain Formation;** Michael E. Kurczyk<sup>1</sup>; Paul D. Pichowski<sup>1</sup>; Michael L Heien<sup>1</sup>; Andrew G. Ewing<sup>1,2</sup>; Nick Winograd<sup>1</sup>; <sup>1</sup>Penn State University, University Park, PA; <sup>2</sup>Gothenburg University, Gothenburg, Sweden
- ThP 177 **MALDI Imaging of Phospholipids: Validation of Signal Response;** Satu Puolitaival<sup>1</sup>; Stephen Milne<sup>2</sup>; H. Alex Brown<sup>3</sup>; Richard M. Caprioli<sup>4</sup>; <sup>1</sup>Vanderbilt Univ., Nashville, TN; <sup>2</sup>Vanderbilt Univ. Medical Center, Nashville, TN; <sup>3</sup>YUMC Cancer Research, Nashville, TN; <sup>4</sup>Vanderbilt Univ. Sch of Med, Nashville, TN
- ThP 178 **High Resolution MALDI Imaging of Lipids and Drug Metabolites in Brain Tissue;** Sucharita Dutta<sup>1</sup>; Shelley N Jackson<sup>2</sup>; Alice Devolve<sup>2</sup>; Amina S. Woods<sup>2</sup>; <sup>1</sup>Thermo Fisher, San Jose, CA; <sup>2</sup>NIDA-IRP, NIH, Baltimore, MD
- ThP 179 **The Localization of Lipids Eye Flat-Mounts by Imaging Mass Spectrometry;** Timothy Garrett; William W. Dawson; Richard A. Yost; *University of Florida, Gainesville, FL*
- ThP 180 **Imaging Mass Spectrometry of Antibiotics in *S. epidermidis* Bacterial Biofilms Using Laser Desorption 7.87 eV Postionization;** Gerald Gasper<sup>1</sup>; Ross Carlson<sup>2</sup>; Artem Akhmetov<sup>1</sup>; Jerry F. Moore<sup>3</sup>; Peng Lu<sup>4</sup>; Amy V. Walker<sup>4</sup>; Luke Hanley<sup>1</sup>; <sup>1</sup>University of Illinois at Chicago, Chemistry, Chicago, Illinois; <sup>2</sup>Montana State University, Bozeman, Montana; <sup>3</sup>MassThink LLC, Naperville, IL; <sup>4</sup>Department of Chemistry, Washington University, St. Louis, MO
- ThP 181 **The Use of MSn and High Resolution MS for the Identification and Imaging of Lipids in Spinal Cord;** Rachelle R. Landgraf<sup>1</sup>; Whitney Stutts<sup>1</sup>; Timothy J. Garrett<sup>1</sup>; Peter W. Stacpoole<sup>1</sup>; Maria C. Prieto Conaway<sup>2</sup>; Richard A. Yost<sup>1</sup>; <sup>1</sup>Univ. of Florida, Gainesville, FL; <sup>2</sup>Thermo Fisher Scientific, Pleasanton, CA
- ThP 182 **Validation Studies of Phospholipids in Rat Brain Using Imaging Mass Spectrometry;** Joseph A. Hankin; Robert C. Murphy; Robert M. Barkley; *University of Colorado Denver, Aurora, CO*

### PROTEOMICS: PEPTIDE SEQUENCING, 183 - 204

- ThP 183 **Sequence Determination of  $\beta$ -amyloid Autoantibodies Using Combined Liquid Chromatography and Tandem Mass Spectrometry;** Claudia Cozma; Irina Perdivara; Adrian Moise;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- |   |  |
|---|--|
| <p>Michael Przybylski; <i>University of Konstanz, Konstanz, Germany</i></p> <p>ThP 184 <b>Liquid Chromatography Mass Spectrometry for the Determination of the Site-Specific Fusion of a Therapeutic Antibody</b>; <u>Robert Murphy</u>; Ryan Preston; <i>Covx Research, San Diego, CA</i></p> <p>ThP 185 <b>Withdrawn</b></p> <p>ThP 186 <b>Bioactive Peptides in the Skin Secretion of Ranid and Hylid Frogs: Complex Approach for the Mass Spectrometric <i>de novo</i> Sequencing</b>; Tatiana Samgina; Sergey Kovalev; Egor Vorontsov; Vladimir Gorshkov; <u>Albert T. Lebedev</u>; <i>Moscow State University, Moscow, Russian Federation</i></p> <p>ThP 187 <b>Efficacy of LC-TOFMS Signal Deconvolution for Peak Finding and Identification of Peptide Mixtures</b>; <u>Fumihiko Tsuchiya</u><sup>1</sup>; Matthew Giardina<sup>2</sup>; Mark Libardoni<sup>2</sup>; <sup>1</sup><i>LECO Japan Corporation, Tokyo, Japan</i>; <sup>2</sup><i>LECO Corporation, St. Joseph, MI</i></p> <p>ThP 188 <b>Evaluation of ETD Fragmentation-Enhancing Peptide Charge Modification Strategies Amenable to Complex Samples and Direct Use with HPLC-MS</b>; <u>A. Michelle English</u>; Namrata Udeshi; David F. Allison; Philip Compton; Jeffrey Shabanowitz; Marty W. Mayo; Donald F. Hunt; <i>University of Virginia, Charlottesville, VA</i></p> <p>ThP 189 <b>High Confidence in Protein Identification Using ppb Mass Accuracy by Fourier Transform Ion Cyclotron Resonance Mass Spectrometry</b>; <u>Matthias Witt</u>; Jens Fuchser; <i>Bruker Daltonik GmbH, Bremen, Germany</i></p> <p>ThP 190 <b>Analysing Data from Large Scale ECD Proteomics Experiments: Protein Database Searching and Localization of Sites of Phosphorylation</b>; <u>Helen Cooper</u>; Steve Sweet; Andrew W Jones; Debbie L Cunningham; Christopher M Bailey; John K Heath; <i>University of Birmingham, Birmingham, UK</i></p> <p>ThP 191 <b>Optimizing Parameters for CID Based Shotgun Proteomic Experiments on an LTQ-Orbitrap Mass Spectrometer</b>; <u>Min-Sik Kim</u><sup>1</sup>; Raghothama Chaerkady<sup>2</sup>; Kumaran Kandasamy<sup>2</sup>; Akhilesh Pandey<sup>1</sup>; <sup>1</sup><i>Johns Hopkins Univ. School of Medicine, Baltimore, MD</i>; <sup>2</sup><i>Institute of Bioinformatics, Bangalore, India</i></p> <p>ThP 192 <b>Reducing Protein Identification False Positive Rates in Shotgun Proteomics Using Automated Isoelectric Point Filtering Techniques</b>; <u>Susan K. Van Riper</u>; Matthew D. Stone; John V. Carlis; Timothy J. Griffin; <i>University of Minnesota, Minneapolis, MN</i></p> <p>ThP 193 <b>Determining the Identity of Unassignable Peptides in an Accurate Mass Measurement Shotgun Proteomics Analysis Using Electron Induced Dissociation</b>; <u>Melissa Warren</u>; Chunyan Li; Jon Amster; <i>University of Georgia, Athens, GA</i></p> <p>ThP 194 <b>Proteomic Analysis of Secreted Proteins of Human Olfactory Stem Cells in Culture</b>; <u>Cristina Di Poto</u><sup>1</sup>; Hakan Ozdener<sup>2</sup>; Nancy E. Rawson<sup>2</sup>; Lewis K. Pannell<sup>3</sup>; James N. Baraniuk<sup>1</sup>; <sup>1</sup><i>Georgetown University, Washington, DC</i>; <sup>2</sup><i>Monell Institute for Chemical Senses, Philadelphia, PA</i>; <sup>3</sup><i>Mitchell Cancer Institute, Mobile, AL</i></p> <p>ThP 195 <b>Identification of Novel Conotoxins in <i>Conus Novaehollandiae</i> Using a Combination of cDNA Sequencing and Multiple Reaction Monitoring Mass Spectrometry</b>; <u>Helena Safavi-Hemami</u>; Bruce G. Livett; Nicholas A. Williamson; Anthony W. Purcell;</p> | <p><i>Department of Biochemistry University of Melbourne, Melbourne, Australia</i></p> <p>ThP 196 <b>Exploring Proteome Responses of <i>Alkalimonas Amylolytica</i> N10 to Different External pHs with Combination Strategy of <i>de novo</i> Peptide</b>; <u>Quanhui Wang</u><sup>1</sup>; Zhong Qian<sup>1</sup>; Bo Meng<sup>1</sup>; Fuli Peng<sup>1</sup>; Wei Tong<sup>1</sup>; Zhuowei Wang<sup>1</sup>; Chuanqi Zhou<sup>1</sup>; Qian Wang<sup>1</sup>; Siqi Liu<sup>1</sup>; Yanhe Ma<sup>2</sup>; <sup>1</sup><i>Beijing Genomics Institute, CAS, Beijing, China</i>; <sup>2</sup><i>Institute of Microbiology, CAS, Beijing, China</i></p> <p>ThP 197 <b>Isolation of C-Terminal Peptides by Strong Anion-Exchanger from Proteolytic Digests of Fully Amidated Proteins for Mass Spectrometric Sequencing</b>; <u>Takashi Nakazawa</u><sup>1</sup>; Mariko Nakagawa<sup>1</sup>; Hiroki Kuyama<sup>3</sup>; Eiji Ando<sup>2</sup>; Osamu Nishimura<sup>3</sup>; Minoru Yamaguchi<sup>2</sup>; Susumu Tsunasawa<sup>3</sup>; <sup>1</sup><i>Nara Women's Univ., Nara, Japan</i>; <sup>2</sup><i>Shimadzu Corp, Kyoto, Kyoto</i>; <sup>3</sup><i>Institute for Protein Research, Suita, Osaka</i></p> <p>ThP 198 <b>Thermolytic Digestion of Peptides and Polymers Using Microfabricated Devices with Product Analysis Using DESI and MALDI Introduction</b>; <u>Curtis Mowry</u><sup>1</sup>; Matthew Moorman<sup>1</sup>; Amy Allen<sup>1</sup>; Franco Basile<sup>2</sup>; <sup>1</sup><i>Sandia National Laboratories, Albuquerque, NM</i>; <sup>2</sup><i>University of Wyoming, Laramie, WY</i></p> <p>ThP 199 <b>Use of a Data Dependent Decision Tree Strategy for Improving Proteomics Survey Results on a Linear Ion Trap</b>; <u>Julie Horner</u>; Andreas F Huhmer; Roger G. Biringer; Julian J Phillips; <i>Thermo Fisher Scientific, San Jose, CA</i></p> <p>ThP 200 <b>A General Method to Compare Mass Spectrometry Peptide Sequencing Variables Using Support Vector Machine Learning</b>; D. C. Anderson; <i>Institute of Molecular Biology, Univ. of Oregon, Eugene, OR</i></p> <p>ThP 201 <b>High Confidence Identification of Bioagent Biomarkers Using Top-Down Analyses on an Orbitrap</b>; <u>Colin Wynne</u><sup>1</sup>; Catherine Fenselau<sup>1</sup>; Nathan J. Edwards<sup>2</sup>; <sup>1</sup><i>University of Maryland, College Park, MD</i>; <sup>2</sup><i>Georgetown University Medical Center, Washington, DC</i></p> <p>ThP 202 <b>Overcoming Undersampling in Proteomic Experiments with the Help of a Novel Hybrid Linear Trap-Orbitrap Mass Spectrometer</b>; <u>Eugen Damoc</u><sup>1</sup>; Eduard Denisov<sup>1</sup>; Justin Blethrow<sup>2</sup>; Tonya Pekar Second<sup>2</sup>; Vlad Zabrouskov<sup>2</sup>; Jens Griep-Raming<sup>1</sup>; Alexander Makarov<sup>1</sup>; Thomas Moehring<sup>1</sup>; <sup>1</sup><i>Thermo Fisher Scientific (Bremen) GmbH, Bremen, Germany</i>; <sup>2</sup><i>Thermo Fisher Scientific, San Jose, CA</i></p> <p>ThP 203 <b><i>De novo</i> Sequencing of Polypeptides Isolated from the Leukocyte of the American Alligator (<i>Alligator mississippiensis</i>)</b>; <u>Lancia N.F. Darville</u><sup>1</sup>; Mark E. Merchant<sup>2</sup>; Azeem Hasan<sup>1</sup>; Kermit K. Murray<sup>1</sup>; <sup>1</sup><i>Louisiana State University, Baton Rouge, LA</i>; <sup>2</sup><i>McNeese State University, Lake Charles, LA</i></p> <p>ThP 204 <b>RAId_DbS: MS/MS Based Peptide Identification with Knowledge Integration</b>; <u>Gelio Alves</u>; Aleksey Ogurtsov; Yi-kuo Yu; <i>National Center for Biotechnology Information, NLM, Bethesda, MD</i></p> |
|---|--|
- PROTEOMICS: PROTEIN SEQUENCING, 205 - 213**
- |  |  |
|--|--|
| <p>ThP 205 <b>Intact Protein Sequencing Using ETD PTR in Linear Ion Trap</b>; <u>Zhiqi Hao</u>; Jae C Schwartz; Andreas F Huhmer; <i>Thermo Fisher Scientific, San Jose, CA</i></p> <p>ThP 206 <b>Simultaneous Transmission Mode Collision-Induced Dissociation and Ion/Ion Reactions for Top-Down</b></p> |  |
|--|--|

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- |   |  |         |  |
|---|--|---------|--|
| ThP 207   | <p><b>Protein Identification/Characterization Using a Quadrupole/Time-of-Flight Tandem Mass Spectrometer;</b> <u>Jian Liu</u>; Teng-Yi Huang; Scott A. McLuckey; <i>Purdue University, West Lafayette, IN</i></p> <p><b>The Role of Increased Resolution and Scan Speed of Ion Traps for Top-Down Proteomics with ETD/PTR;</b> <u>Michael Schubert</u>; Christian Albers; Andreas Brekenfeld; Christoph Gebhardt; Ralf Hartmer; <i>Bruker Daltonik GmbH, Bremen, Germany</i></p> | ThP 218 | <p><b>Improved Quantitative Detection of Three Major Di(2-ethylhexyl)phthalate (DEHP) Metabolites in Urine Using Isotope Dilution GC/NCI-MS;</b> Yan Zin Chang; <i>Chung Shan Medical University, Taichung City, Taiwan</i></p>  |
| ThP 208   | <p><b>High-Resolution Orbitrap-ETD for Characterization of Intact HDL Proteins;</b> <u>Matthew Mazur</u>; Helene Cardasis; Yi Du; Nathan Yates; Ronald Hendrickson; <i>Merck Research Laboratories, Rahway, NJ</i></p>   | ThP 219 | <p><b>Quantitation of ERB-257 and ERB-041 in Monkey and Rat Plasma Using Automated Solid Phase Extraction and LC/MS/MS;</b> <u>Jasper X. Chu</u>; Richard Xue; James Saunders; Zhiping Jiang; Yuliya Livson; Zhi Liu; Peter Amorusi; Allena Ji; <i>Wyeth Research, Pearl River, NY</i></p>   |
| ThP 209   | <p><b>Characterization of Gray Seal Hemoglobin Variants Using ESI-MS/MS;</b> <u>Saurav Uppal</u>; Jingshu Guo; Timothy Mueser; Wendell P. Griffith; <i>University of Toledo, Niles, OH</i></p>   | ThP 220 | <p><b>Trace Level Quantification of Poly-Dispersed Polyethyleneglycol Benzenesulfonate Esters in Drug Formulations by LC-MS Using Precursor-Ion Scanning;</b> <u>Wei Ding</u>; Yande Huang; Bao-Ning Su; Venkatapuram Palaniswamy; John Grosso; <i>Bristol-Myers Squibb, New Brunswick, NJ</i></p>   |
| ThP 210   | <p><b>De novo Sequencing Structural Determination of New Mammalian Hemoglobins by Tandem Mass Spectrometry and X-Ray Crystallography;</b> <u>Jingshu Guo</u>; Lindsey Easton; Timothy Mueser; Wendell P. Griffith; <i>University of Toledo, Toledo, OH</i></p>   | ThP 221 | <p><b>Quantification of Almond Skin Polyphenols by Liquid Chromatography-Mass Spectrometry;</b> <u>Gregory G. Dolnikowski</u>; Jeffrey B Blumberg; C-Y Oliver Chen Chen; Bradley W Bolling; <i>Tufts University, Boston, MA</i></p>  |
| ThP 211   | <p><b>Top-Down Protein Sequencing in an LTQ-FTMS Equipped with a Front End Electron Transfer Dissociation Source;</b> <u>Patrick F. James</u><sup>1</sup>; Philip D. Compton<sup>1</sup>; Jeffrey Shabanowitz<sup>1</sup>; Donald F. Hunt<sup>2</sup>; <sup>1</sup><i>Dept. of Chemistry, UVA, Charlottesville, VA;</i> <sup>2</sup><i>Dept. of Chemistry and Pathology, UVA, Charlottesville, VA</i></p>  | ThP 222 | <p><b>Development of an Accurate LC-MS/MS Method to Avoid Non-Specific Binding in Human Urine for a New Drug Candidate;</b> Wei Zhou; <u>Yilin Feng</u>; Harold T Smith; Francis Tse; <i>Novartis Institutes for Biomedical Research, East Hanover, NJ</i></p>   |
| ThP 212   | <p><b>Middle Down Analysis Using an Orbitrap for Polypeptides Produced by Site-Selective Acid Cleavage;</b> <u>Joe Cannon</u><sup>1</sup>; Karen Lohnes<sup>1</sup>; Colin Wynne<sup>1</sup>; Nathan J. Edwards<sup>2</sup>; Catherine Fenselau<sup>1</sup>; <sup>1</sup><i>University of Maryland, College Park, MD;</i> <sup>2</sup><i>Georgetown University Medical Center, Washington, DC</i></p>  | ThP 223 | <p><b>Highly Sensitive Simultaneous Determination of Melamine and Cyanuric Acid in Infant Formula by LC-MS/MS;</b> Qi Gu<sup>1</sup>; <u>Mary Pelzer</u><sup>2</sup>; Xiaoyun Wu<sup>1</sup>; Xi Chen<sup>2</sup>; Xiang-yu Jiang<sup>2</sup>; <sup>1</sup><i>Covance Laboratories, Shanghai, China;</i> <sup>2</sup><i>Covance, Madison, WI</i></p>   |
| ThP 213   | <p><b>Modulating the Declustering Potential Affords Selective Tandem Mass Spectrometry within the Ion Source and Reveals Three Distinct Protein Fragmentation Pathways;</b> <u>Jennifer S. Cobb</u><sup>1</sup>; Michael L. Easterling<sup>2</sup>; Jeffrey N. Agar<sup>1</sup>; <sup>1</sup><i>Brandeis University, Waltham, MA;</i> <sup>2</sup><i>Bruker Daltonics Inc., Billerica, MA</i></p>  | ThP 224 | <p><b>Validation of LC-MS/MS Method for Quantitation of Oxybutynin in Human Plasma;</b> <u>Sheng Wang</u>; Jingguo Hou; Charlene Wang; Fei Liu; Bibo Xu; <i>Primera Analytical Solutions Corp., Princeton, NJ</i></p>  |
| <b>QUANTITATION: SMALL MOLECULES, 214 - 241</b> |  |         |  |
| ThP 214   | <p><b>Low Level LC-MS/MS Quantitation of Psychotherapeutics in Extracellular Fluid to Support Microdialysis Studies;</b> <u>Sarah M Osgood</u>; Stacey L Becker; Lisa M Buchholz; Roxanne Gorczyca; Christopher L Shaffer; Hans Rollema; <i>Pfizer, Groton, CT</i></p>   | ThP 225 | <p><b>Quantification of CLR1401 in Rat Plasma by Automated Liquid-Liquid Extraction in Conjunction with Hydrophilic Interaction Liquid Chromatography-Tandem Mass Spectrometric Detection;</b> <u>Hongliang Jiang</u><sup>1</sup>; Michelle J. Cannon<sup>1</sup>; Anatoly N. Pinchuk<sup>2</sup>; Maria Banach<sup>2</sup>; Jamey P. Weichert<sup>2</sup>; Marc A. Longino<sup>2</sup>; Bill Clarke<sup>2</sup>; Xiangyu Jiang<sup>1</sup>; <sup>1</sup><i>Covance Laboratories Inc., Madison, WI;</i> <sup>2</sup><i>Collectar Inc., Madison, WI</i></p> |
| ThP 215   | <p><b>Matrix Effect Correlation for Multiple Analytes Using a Single Internal Standard;</b> <u>Yuichiro Hashimoto</u>; Kazuki Tanaka; Masuyuki Sugiyama; Hideki Hasegawa; <i>Hitachi, Ltd, Central Research Lab, Kokubunji, Tokyo, Japan</i></p>   | ThP 226 | <p><b>Analysis of Genotoxic Impurities in Drug Substances Using Fast Liquid Chromatography Coupled to a Triple Quadrupole Mass Spectrometer;</b> Siji Joseph; <i>Agilent Technologies, Bangalore, India</i></p>  |
| ThP 216   | <p><b>Method Development for the Absolute Quantification of NNAL from Smoker's Urine by LC-ESI-MS/MS;</b> <u>Showket H. Bhat</u>; Stacy L. Gelhaus; Ian A. Blair; <i>University of Pennsylvania, Philadelphia, PA</i></p>  | ThP 227 | <p><b>Fast and Comprehensive Screening Method Based on UPLC-TOF MS Technique for Determination of 300 Pesticide Residues in Fruits and Vegetables;</b> <u>Ondřej Lacina</u>; Jana Hajšlová; Jana Urbanová; <i>Institute of Chemical Technology, Prague, Czech Republic</i></p>   |
| ThP 217   | <p><b>Considerations for Dried Blood Spots as an Alternative Matrix for Support of Pharmacokinetic and Toxicokinetic Studies in Drug Development;</b> <u>Chester L Bowen</u>; Christopher A. Evans; <i>GlaxoSmithKline, King of Prussia, PA</i></p>  | ThP 228 | <p><b>Determination of Formaldehyde in Rat and Primate Whole Blood Using Derivatization, Liquid-Liquid Extraction and Gas Chromatography with Mass Spectrometric Detection;</b> <u>Mark Leahy</u>; Pam Sheaff; <i>Covance, Madison, WI</i></p>   |
|   |  | ThP 229 | <p><b>Method Development of a UPLC Assay for the Bioanalysis of Ketoconazole in Human Plasma;</b> <u>Guowen Liu</u>; Heidi M. Snapp; Qin Ji; Mark E. Arnold; <i>R&amp;D, Bristol-Myers Squibb Co., Princeton, NJ</i></p>   |

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- |         |   |   |
|---------|---|---|
| ThP 230 | <b>Investigation of Blood Samples Storage Stability Using Dry Blood Spot Technology for LC/MS Bioanalysis;</b> <u>Jane Liu</u> ; Guowen Liu; Qin C Ji; Mark E Arnold; <i>Bristol-Myers Squibb Co., Princeton, NJ</i>  | <b>PROTEOMICS: PTM DETERMINATION (GLYCOSYLATION AND PHOSPHORYLATION), 242 - 271</b>   |
| ThP 231 | <b>Fast LC/MS/MS Methods for BILR355 and BILR516 in Human Plasma – Comparisons of Fast Separation Technologies to Conventional HPLC;</b> <u>Yan Mao</u> <sup>1</sup> ; Bailuo Ren <sup>2</sup> ; Jeffrey Duggan <sup>3</sup> ; <sup>1</sup> <i>Boehringer-Ingelheim Pharmaceuticals, Ridgefield, CT</i> ; <sup>2</sup> <i>Boehringer Ingelheim, Ridgefield, CT</i> ; <sup>3</sup> <i>Boehringer-Ingelheim, Ridgefield, CT</i>                             | ThP 242   |
| ThP 232 | <b>Mycophenolic Acid Glucuronides Back Conversion Stability Evaluation Using High Performance Liquid Chromatography with Tandem Mass Spectrometry Detection;</b> Eric Morin; Brigitte Pellerin; Nadine Boudreau; <u>Adrien Musuku</u> ; Robert Masse; <i>Anapharm, Quebec, QC</i>   | <b>Unambiguous Identification of Multiple O-Glycosylation Sites Using Electron Capture Dissociation in a Linear Radio Frequency Quadrupole Ion Trap;</b> <u>Naomi Manri</u> <sup>1</sup> ; Hiroyuki Satake <sup>1</sup> ; Akihito Kaneko <sup>1</sup> ; Takeshi Sakamoto <sup>1</sup> ; Yasuhiro Takegawa <sup>2</sup> ; Ryo Hashimoto <sup>2</sup> ; Yayoi Yoshimura <sup>2</sup> ; Naoki Fujitani <sup>2</sup> ; Shin-Ichiro Nishimura <sup>2</sup> ; <sup>1</sup> <i>Central Res. Lab. Hitachi, Ltd., Kokubunji, Japan</i> ; <sup>2</sup> <i>Grad. School Adv. Life Sci., Hokkaido Univ., Sapporo, Japan</i>                     |
| ThP 233 | <b>Application of Biochemical Knowledge Coupled with HILIC-APCI-Tandem Mass Spectrometry for Quantitative Analysis of 2-Chloroadenine in Rat Plasma;</b> <u>Jiongwei Pan</u> ; Eric W Miele; Mark A Netsch; <i>Charles River, Shrewsbury, MA</i>  | ThP 243   |
| ThP 234 | <b>Rapid Detection of Melamine and Cyanuric Acid Using a Novel High Capacity Ion Trap Mass Spectrometer;</b> Leith J. Fremlin <sup>1</sup> ; Matthias Pelzing <sup>1</sup> ; <u>Clive H Seymour</u> <sup>2</sup> ; <sup>1</sup> <i>Bruker Daltonics Division, Preston, Australia</i> ; <sup>2</sup> <i>Bruker Daltonics, Auckland, New Zealand</i>  | <b>Precise and Large Scale Identification of Core Fucosylated Glycoproteins by Hybrid Linear Trap/FT-ICR Mass Spectrometer;</b> <u>Weij Jia</u> <sup>1</sup> ; Yan Fu <sup>2</sup> ; Zhuang Lu <sup>1</sup> ; Haipeng Wang <sup>2</sup> ; Lina Song <sup>1</sup> ; Huanhuan Han <sup>1</sup> ; Jinglan Wang <sup>1</sup> ; Yun Cai <sup>1</sup> ; Wantao Ying <sup>1</sup> ; Simin He <sup>2</sup> ; Xiaohong Qian <sup>1</sup> ; <sup>1</sup> <i>State Key Laboratory of Proteomics-BPRC-BIRM, Beijing, China</i> ; <sup>2</sup> <i>Institute of Computing Technology, Beijing, China</i>  |
| ThP 235 | <b>Method Development and Validation of Caffeine and Paraxanthine in Human Plasma;</b> <u>Rachel Sun</u> ; Orlando Bravo; Brian J. Engel; <i>BASi, West Lafayette, IN</i>   | ThP 244   |
| ThP 236 | <b>Bioanalytical Method Development and Validation Using Incurred Samples–Determination of Ramipril and Ramiprilat in Human EDTA Plasma by LC-MS/MS;</b> <u>Aimin Tan</u> <sup>1</sup> ; Wen Jin <sup>1</sup> ; Fu Deng <sup>1</sup> ; Saleh Hussain <sup>1</sup> ; Adrien Musuku <sup>2</sup> ; Robert Masse <sup>2</sup> ; <sup>1</sup> <i>Anapharm (Richmond Hill), Richmond Hill, Ontario</i> ; <sup>2</sup> <i>Anapharm (Quebec), Quebec, Canada</i> | <b>Combined Top-Down and Bottom-Up Analysis of the Complement Protein C1q: Toward the Complete Characterization of its Hydroxylations and Glycosylations;</b> <u>Delphine Pflieger</u> <sup>1,2</sup> ; Cédric Przybylski <sup>1,2</sup> ; Florence Gonnet <sup>1,2</sup> ; Thomas Lunardi <sup>3,4</sup> ; Gérard Arlaud <sup>3,4</sup> ; Régis Daniel <sup>1,2</sup> ; <sup>1</sup> <i>CNRS UMR 8587, Evry, France</i> ; <sup>2</sup> <i>Université d'Evry Val d'Essonne, EVRY, France</i> ; <sup>3</sup> <i>CNRS UMR 5075, Université Joseph Fourier, Grenoble, France</i> ; <sup>4</sup> <i>IBS, CEA-CNRS, Grenoble, France</i> |
| ThP 237 | <b>A High Throughput LC-MS/MS Assay for the Quantitation of Lorcaseerin Sulfamate and Lorcaseerin N-carbamoyl Glucuronide in Human Urine;</b> <u>Michael Ma</u> ; Weichao Chen; Yong Q. Tang; <i>Arena Pharmaceuticals, San Diego, CA</i>   | ThP 245   |
| ThP 238 | <b>Method Development and Validation for the Quantitation of Bupropion and its Metabolites in Human Plasma Using UPLC/MS/MS;</b> <u>Lin Tan</u> ; Troy Voelker; Min Meng; Patrick Bennett; <i>Tandem Labs, Salt Lake City, UT</i>   | <b>Improving ETD Analysis of N, O-glycopeptides by Using the Isobaric Labeling Approach with Tandem Mass Tags (TMT);</b> <u>Terry Zhang</u> ; Rosa Viner; Vlad Zabrouskov; <i>ThermoFisher, San Jose, CA</i>  |
| ThP 239 | <b>Quantitation of Oxycodone and Three of its Metabolites in Human Plasma Using On-Line SPE-LC-MS/MS;</b> <u>Michel Wagner</u> ; Emmanuel Varesio; Gerard Hopfgartner; <i>University of Geneva, Geneva 4, Switzerland</i>   | ThP 246   |
| ThP 240 | <b>Quantification of 5-Fluorouracil (5-FU) in Human Plasma Using API-5500 QTRAP Systems with 5-Chlorouracil (5-CU) as Internal Standard;</b> <u>Guangchun Zhou</u> ; Kathryn Piening; Tian-Sheng Lu; John-Paul Gutierrez; Haiqing Ding; Yong-Xi Li; <i>Medpace Bioanalytical Laboratories, Cincinnati, OH</i>   | <b>iTRAQ Quantitation in an Ion Trap Mass Spectrometer for Synaptic Proteomics and O-GlcNAc Site Mapping in Human Alzheimer's Disease;</b> <u>John D Deuso, Jr.</u> <sup>1</sup> ; Yuliya V Skorobogatko <sup>1</sup> ; Nan Guo <sup>1</sup> ; Yue-song Gong <sup>1</sup> ; Carol F Lipka <sup>1</sup> ; Robert J Chalkley <sup>2</sup> ; Keith Vosseller <sup>1</sup> ; <sup>1</sup> <i>Drexel University College of Medicine, Philadelphia, PA</i> ; <sup>2</sup> <i>University of California, San Francisco, CA</i>  |
| ThP 241 | <b>A Rapid LC-MS/MS Method for the Determination of Telbivudine in Human Plasma;</b> <u>Dawei Zhou</u> ; Xuntian Jiang; Xiping Fang; <i>XenoBiotic Laboratories, Inc., Plainsboro, NJ</i>   | ThP 247   |
|         |   | <b>An Integrative HCD/CID Scoring Scheme for Improved Characterization of Site-Specific Protein N-Glycosylation;</b> Anoop M. Mayampurath; Yin Wu; Zaneer Segu; Milos Novotny; Yehia Mechref; <u>Haixu Tang</u> ; <i>Indiana University, Bloomington, IN</i>  |
|         |   | ThP 248   |
|         |   | <b>Characterization of Early Maillard Reaction Products Using MALDI Mass Spectrometry;</b> <u>Helen Montgomery</u> <sup>1</sup> ; Gerald Stubiger <sup>2</sup> ; Koichi Tanaka <sup>3</sup> ; Omar Belgacem <sup>4</sup> ; <sup>1</sup> <i>Shimadzu, Koichi Tanaka MS Research laboratory, Manchester, UK</i> ; <sup>2</sup> <i>Medical University of Vienna, Vienna, Austria</i> ; <sup>3</sup> <i>Shimadzu Corporation, Kyoto, Japan</i> ; <sup>4</sup> <i>Shimadzu Biotech, Manchester, UK</i>   |
|         |   | ThP 249   |
|         |   | <b>A Quantum Increase in O-GlcNAc Modification Site Identification Using ETD Analysis on a LTQ-Orbitrap;</b> <u>Robert Chalkley</u> <sup>1</sup> ; Agnes Thalhammer <sup>2</sup> ; Ralf Schoepfer <sup>2</sup> ; A.I. Burlingame <sup>1</sup> ; <sup>1</sup> <i>UCSF, San Francisco, CA</i> ; <sup>2</sup> <i>University College London, London, UK</i>   |
|         |   | ThP 250   |
|         |   | <b>Characterization of Antibodies by High Resolution Protein Analytical Methods;</b> Martin Blueggel; <u>Susanne Mette</u> ; Andreas Wattenberg; <i>Protagen AG, Dortmund, Germany</i>  |
|         |   | ThP 251   |
|         |   | <b>The Phosphorylation of Mortalin Isoforms in Human APOE-Targeted Replacement Mice and</b>   |

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Brain Tissue Presenting Alzheimer's Disease;** Cristina Osorio<sup>1</sup>; Maria Warren Hines<sup>2</sup>; Carol E. Parker<sup>2</sup>; Oscar Alzate<sup>3</sup>; <sup>1</sup>University of Chapel Hill, Systems-Proteomics Core, Chapel Hill, NC; <sup>2</sup>UNC-Duke Proteomics Center, UNC-CH, Chapel Hill, NC; <sup>3</sup>Dept. of Cell and Developmental Biology, UNC-CH, Chapel Hill, NC
- ThP 252 **Characterization of Novel O-GlcNAcylation Sites on the Arabidopsis Transcription Factor RGA Using Electron Transfer Dissociation Mass Spectrometry;** Sushmit Maitra<sup>1</sup>; Namrata D. Udeshi<sup>1</sup>; Neil E. Olszewski<sup>2</sup>; Rodolfo Zentella<sup>3</sup>; Tai-ping Sun<sup>3</sup>; Jeffrey Shabanowitz<sup>1</sup>; Donald F. Hunt<sup>1</sup>; <sup>1</sup>Dept. of Chemistry, University of Virginia, Charlottesville, VA; <sup>2</sup>Dept. of Plant Biology, University of Minnesota, St. Paul, MN; <sup>3</sup>Dept. of Biology, Duke University, Durham, NC
- ThP 253 **Elucidation of Cell Surface Glycoproteins from Cancer Stem-Like Cells;** Jintang He; Yashu Liu; Xiaolei Xie; Xing Fan; David M. Lubman; *University of Michigan, Ann Arbor, MI*
- ThP 254 **Specific Detection of Glycopeptides Using Glycan Diagnostic Ions: A Key Step for the Characterisation of the Glideosome from *T. gondii*;** Agnes Hovasse<sup>1</sup>; Audrey Bednarczyk<sup>1</sup>; Sylvain Fauquenoy<sup>2</sup>; Willy Morelle<sup>2</sup>; Christian Slomianny<sup>3</sup>; Christine Schaeffer<sup>1</sup>; Alain Van Dorsselaer<sup>1</sup>; Stanislas Tomavo<sup>2</sup>; <sup>1</sup>IPHC-DSA, CNRS, Strasbourg, France; <sup>2</sup>CNRS UMR 8576, Lille, France; <sup>3</sup>INSERM U 800, Lille, France
- ThP 255 **Characterization of Phosphoproteomic Changes Induced by Oncogenic Protein, NPM-ALK, Using Affinity Purification and LC/MS;** Fang Wu; Peng Wang; Leah C. Young; Raymond Lai; Liang Li; *University of Alberta, Edmonton, Canada*
- ThP 256 **First-time Identification of Four Protein Kinase A Phosphorylation Sites in Both Murine and Human Isoforms of Cardiac Myosin Binding Protein-C;** Weitao Jia<sup>1</sup>; Justin F. Shaffer<sup>1,2</sup>; Samantha P. Harris<sup>1</sup>; Julie A. Leary<sup>1</sup>; <sup>1</sup>UC Davis, Davis, CA; <sup>2</sup>UW Seattle, Seattle, WA
- ThP 257 **Mesoporous Metal Oxide Nanomaterials for Mass Spectrometry-based Phosphoproteomics;** Cory Nelson; Qingge Xu; Jeannine Szczech; Song Jin; Ying Ge; *University of Wisconsin-Madison, Madison, WI*
- ThP 258 **Evaluation of Different Fragmentation Strategies for Mono- and Multi-Phosphorylated Peptides;** Melanie Schulz<sup>1</sup>; Ulrich Andrae<sup>1</sup>; Martin R. Larsen<sup>2</sup>; <sup>1</sup>Helmholtz Zentrum Muenchen, Neuherberg, Germany; <sup>2</sup>Univ. Southern Denmark, Odense, Denmark
- ThP 259 **Identification of Phosphorylated Residues on Eukaryotic Initiation Factor 2 by Using the LTQ Orbitrap XL;** Armann Andaya; Weitao Jia; Masaaki Sokabe; John W.B. Hershey; Julie A. Leary; *UC Davis, Davis, CA*
- ThP 260 **Global Phosphopeptide Identification from Complex Mixtures;** Kimberly A. Lee; Wen Yu; Christopher Farnsworth; Leo E. Bonilla; *Amgen, Seattle, WA*
- ThP 261 **Injury and Stimulation of Aortic Endothelial Cells with Nucleotides or EGF Cause Differential EGFR Phosphorylation and Affect Recruitment of GRB2;** Amanuel Kehasse; Giuseppe Infusini; David H. Perlman; Ilene Boucher; Mark E. Meccomb; Vickery Trinkaus-Randall; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*
- ThP 262 **Mapping Phosphoproteome Dynamics in the Cyanobacterium Circadian Cycle Using Direct LC-MS or LC-MS with On-Line Phosphopeptide Enrichment;** Bogdan A. Budnik<sup>1</sup>; Joseph S. Markson<sup>3</sup>; Yelena Margolin<sup>2</sup>; Alexander R. Ivanov<sup>2</sup>; John Neveu<sup>1</sup>; William S. Lane<sup>1</sup>; Erin K. O'Shea<sup>3</sup>; <sup>1</sup>Harvard University FAS MSPRL, Cambridge, MA; <sup>2</sup>Harvard University HSPH, Boston, MA; <sup>3</sup>Harvard University, Center for Systems Biology, Cambridge, MA
- ThP 263 **Automatic Tandem Immobilized Metal Ion Affinity Chromatography for Enhanced Phosphopeptide Enrichment;** Yu-Ni Sun<sup>1,2</sup>; Yi-Ting Wang<sup>2</sup>; Chia-Feng Tsai<sup>2</sup>; Yu-Ju Chen<sup>2</sup>; <sup>1</sup>Institute of Bioscience and Biotechnology, NTOU, Taipei City, Taiwan; <sup>2</sup>Institute of Chemistry, Academia Sinica, Taipei City, Taiwan
- ThP 264 **Analysis of Protein Phosphorylation by Using High Mass Accuracy LC-MS Data Generated from Linear Ion Trap-Orbitrap Hybrid Mass Spectrometer;** Pao-chi Liao<sup>1</sup>; Hsin-Yi Wu<sup>1</sup>; Vincent Shin-Mu Tseng<sup>2</sup>; <sup>1</sup>Department of Environmental and Occupational Health, Tainan, Taiwan; <sup>2</sup>National Cheng Kung University, Tainan, Taiwan
- ThP 265 **Combined Top-down and Bottom-up Strategy to Characterize Posttranslational Modifications in Cu/Zn Superoxide Dismutase that Contributes to Familial Amyotrophic Lateral Sclerosis;** Li Zhou<sup>1</sup>; Kyle Wilcox<sup>1</sup>; Yi Huang<sup>2</sup>; Michael Caplow<sup>1</sup>; Nikolay V. Dokholyan<sup>1</sup>; Xian Chen<sup>1</sup>; <sup>1</sup>University of North Carolina at Chapel Hill, Chapel Hill, NC; <sup>2</sup>Fudan University, Shanghai, China
- ThP 266 **Enrichment of Phosphopeptides with Cationic Magnetic Nanoparticles for Mass Spectrometric Analysis;** Cheng-Tung Chen; Yen-Peng Ho; *National Dong Hwa University, Hualien, Taiwan*
- ThP 267 **TiOx Nanostructured Coating on MALDI Plates for Capture of Phosphopeptides;** Paolo Soffientini<sup>1</sup>; Andrea Di Fonzo<sup>1</sup>; Roberta Carbone<sup>2</sup>; Simone Vinati<sup>2</sup>; Gabriela Grigorean<sup>3</sup>; <sup>1</sup>Cogentech, Milan, Italy; <sup>2</sup>Tethis s.r.l, Milan, Italy; <sup>3</sup>IFOM-IEO, Milan, Italy
- ThP 268 **Identification of Phosphorylation Sites in Caspase-7 by Mass Spectrometry;** Xin Cong; Bradford W. Gibson; Lisa Ellerby; *Buck Inst. for Age Research, Novato, CA*
- ThP 269 **Ethylenediamine Tetraacetic Acid (EDTA) Assists Phosphoproteomics;** Tatsuji Nakamura<sup>1,2</sup>; Khin Than Myint<sup>1,2</sup>; Yoshiya Oda<sup>1,2</sup>; <sup>1</sup>Eisai Co., Ltd., Tsukuba, Japan; <sup>2</sup>Crest, Saitama, Japan
- ThP 270 **Mass Spectrometric Identification of Changes in Protein Expression and Phosphorylation that Regulate the Renal Response to Metabolic Acidosis;** David Goldstrohm<sup>1</sup>; Dana Gammelgaard<sup>1</sup>; Corey Broeckling<sup>2</sup>; Jessica Prenni<sup>2</sup>; Norman Curthoys<sup>1</sup>; <sup>1</sup>Colorado State University, Fort Collins, CO; <sup>2</sup>Proteomics and Metabolomics Facility, Fort Collins, CO
- ThP 271 **Nanoprobe-Based Immobilized Metal Affinity Chromatography towards Comprehensive Phosphoproteomics for Human Mesenchymal Stem Cells;** Haun-Ting Wu<sup>1</sup>; Chuan-Chih Hsu<sup>2,3</sup>; Chia-Feng Tsai<sup>3</sup>; Po-Chiao Lin<sup>1,3</sup>; Yi-Che Li<sup>2,3</sup>; Yu-Ju Chen<sup>2,3</sup>; Chun-Cheng Lin<sup>1</sup>; <sup>1</sup>National Tsing Hua University, Hsinchu, Taiwan; <sup>2</sup>National Taiwan University, Taipei, Taiwan; <sup>3</sup>Institute of Chemistry Academia Sinia, Taipei, Taiwan

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

### PEPTIDES: POST-TRANSLATIONAL MODIFICATIONS, 272 - 310

- |   |   |
|---|---|
| <p>ThP 272 <b>ECD and EID of Amyloid Beta 17-28, 1-40, and Synthetic Beta-Substance P</b>; <u>Nadezda P. Sargaeva</u><sup>1</sup>; Chunxiang Yao<sup>1</sup>; Tzu-yung Lin<sup>1</sup>; Weidong Cui<sup>1</sup>; Konstantin Aizikov<sup>1</sup>; Xiaojuan Li<sup>1</sup>; Cheng Lin<sup>1</sup>; Peter B. O'Connor<sup>2</sup>; <sup>1</sup><i>Boston University School of Medicine, Boston, MA</i>; <sup>2</sup><i>University of Warwick, Coventry, UK</i></p> <p>ThP 273 <b>Characterization of Glyoxal and Methylglyoxal-Induced Modifications in Human Hemoglobin by NanoLC-Nanospray Ionization Tandem Mass Spectrometry</b>; <u>Yu-chin Chen</u>; Hauh-Jyun Candy Chen; <i>National Chung Cheng University, Ming-hsiung, Taiwan</i></p> <p>ThP 274 <b>Mass Spectrometry-Based Characterization of Protein Glutathionylspermidine Modification Using Complementary Dissociation Approaches</b>; <u>Chi-Chi Chou</u><sup>1</sup>; Kuan-Ting Pan<sup>1</sup>; Bing-Yu Chiang<sup>2</sup>; Chun-Hung Lin<sup>2</sup>; Kay-hooi Khoo<sup>1,2</sup>; <sup>1</sup><i>NRPGM MS Facilities at Academia Sinica, Taipei, Taiwan</i>; <sup>2</sup><i>IBC, Academia Sinica, Taipei, Taiwan</i></p> <p>ThP 275 <b>Glutamine Deamidation: Differentiation of Glutamic Acid and <math>\gamma</math>-Glutamic Acid in Peptides by Electron Capture Dissociation</b>; <u>Xiaojuan Li</u><sup>1</sup>; Weidong Cui<sup>1</sup>; Chunxiang Yao<sup>1</sup>; Konstantin Aizikov<sup>1</sup>; Tzu-Yung Lin<sup>1</sup>; Nadezda P. Sargaeva<sup>1</sup>; Cheng Lin<sup>1</sup>; Peter B. O'Connor<sup>2</sup>; <sup>1</sup><i>Boston University School of Medicine, Boston, MA</i>; <sup>2</sup><i>University of Warwick, Coventry, UK</i></p> <p>ThP 276 <b>Improving the Selectivity of Titanium Dioxide-Based Enrichment of Sulfated Peptides</b>; <u>Katie Hersberger</u>; Kristina Hakansson; <i>Univ. of Michigan, Ann Arbor, MI</i></p> <p>ThP 277 <b>SUMOylation of E1: Determination of SAE2 SUMOylated Site Using Multiple Protease Digestion and Liquid Chromatography - Mass Spectrometry</b>; <u>Khue Truong</u>; Yi-Jia Li; Roger Moore; Terry Lee; Yuan Chen; <i>City of Hope, Duarte, CA</i></p> <p>ThP 278 <b>Substrate Specificity of TPST-1 and -2 Using Gastrin mutants: An MS Approach</b>; <u>Peter J. Ludden</u><sup>1</sup>; Lieza Marie Danan<sup>2</sup>; Julie A. Leary<sup>1</sup>; <sup>1</sup><i>Department of Molecular and Cellular Biology, Davis, CA</i>; <sup>2</sup><i>Department of Chemistry, Davis, CA</i></p> <p>ThP 279 <b>Molecular Recognition Specificity and Bioaffinity Quantification in Biopolymer Interaction of Anti-3-Nitrotyrosine Antibody revealed by SAW-ESI-MS and PLIMSTEX</b>; <u>Mihaela Dragusanu</u><sup>1</sup>; Brindusa-Alina Petre<sup>1</sup>; Tingting Tu<sup>2</sup>; Michael Gross<sup>2</sup>; Michael Przybylski<sup>1</sup>; <sup>1</sup><i>University of Konstanz, Konstanz, Germany</i>; <sup>2</sup><i>Washington University, St. Louis, Missouri</i></p> <p>ThP 280 <b>Identifying Characteristic Neutral Mass Losses and Low Mass Ions for Oxidized Amino Acids</b>; <u>Jessica M. Saladino</u><sup>1</sup>; Joshua S. Sharp<sup>2</sup>; <sup>1</sup><i>Univeristy of Georgia, Athens, GA</i>; <sup>2</sup><i>University of Georgia, Athens, GA</i></p> <p>ThP 281 <b>Application of MALDI TOF/TOF CID Tandem Mass Spectrometry for the Rapid Identification of Unknown Disulfide-Bonded Peptides in Protein Digestions</b>; <u>Dariusz Janecki</u>; Jennifer F. Nemeth; <i>Centocor R&amp;D, Radnor, PA</i></p> <p>ThP 282 <b>A Novel Modification in Somatostatin Fragment (7-14) Under Oxidative Stress</b>; <u>Wei Wu</u>; Peiran Liu; Michael Ackerman; Li Tao; Reb Russell; Michael Grace; <i>Bristol Myers Squibb Co., Pennington, NJ</i></p> <p>ThP 283 <b>Analytical Methods for Improving Identification of SUMO-Modified Peptides</b>; <u>Omoruyi Osula</u><sup>2</sup>; Steve</p> | <p>Swatkoski<sup>1</sup>; Robert J. Cotter<sup>3</sup>; <sup>1</sup><i>Department of Pharmacology, Baltimore, MD</i>; <sup>2</sup><i>Johns Hopkins University, Baltimore, MD</i>; <sup>3</sup><i>Middle Atlantic MS Laboratory, Baltimore, MD</i></p> <p>ThP 284 <b>Orientation of Lasso Peptide Fragmentations Under CID and ECD Conditions</b>; <u>Severine Zirah</u><sup>1</sup>; Carlos Afonso<sup>2</sup>; Uwe Linne<sup>3</sup>; Kok-Phen Yan<sup>1</sup>; Thomas A Knappe<sup>3</sup>; Mohamed A Marahiel<sup>3</sup>; Sylvie Rebuffat<sup>1</sup>; Jean-claude Tabet<sup>2</sup>; <sup>1</sup><i>National Museum of Natural History / CNRS, Paris, France</i>; <sup>2</sup><i>University Paris 6, Paris, France</i>; <sup>3</sup><i>Philipps University, Marburg, Germany</i></p> <p>ThP 285 <b>Specific Modification of Citrullinated Peptides Facilitates their Identification</b>; <u>Marlies De Ceuleneer</u>; Kelly Tilleman; Katleen Van Steendam; Dieter Deforce; <i>Pharmaceutical Biotechnology, Ghent University, Ghent, Belgium</i></p> <p>ThP 286 <b>Novel 4-Oxo-2(E)-Nonenal-Derived Post-Translational Modifications to Angiotensin Peptides</b>; <u>Seon Hwa Lee</u>; Takaaki Goto; Tomoyuki Oe; <i>Tohoku University, Sendai, Japan</i></p> <p>ThP 287 <b>Sites of Alkylation by Botanical Chemoprevention Agents of Human Keap1 Bound to Cul3</b>; <u>Chenqi Hu</u>; Evan Small; Richard B. Van Breemen; <i>University of Illinois, Chicago, IL</i></p> <p>ThP 288 <b>Elucidating Histone PTM Cross-Talk by Quantitative Mass Spectrometry</b>; Feixia Chu; <u>Shannon M Eliuk</u>; David A Maltby; Robert J Chalkley; Peter R Baker; Barbara Panning; Alma L Burlingame; <i>UCSF, San Francisco, CA</i></p> <p>ThP 289 <b>Using Mass Spectrometry to Characterize a Novel PTM in the Escherichia Coli Ribosomal Protein S12</b>; <u>Michael Brad Strader</u><sup>1</sup>; Suwako Fujigaki<sup>1</sup>; Cai Yun Chen<sup>1</sup>; Nina Costantino<sup>3</sup>; Anthony J. Makusky<sup>1</sup>; W. Judson Hervy IV<sup>2</sup>; Donald L. Court<sup>3</sup>; Sanford P. Markey<sup>1</sup>; Jeffrey A. Kowalak<sup>1</sup>; <sup>1</sup><i>NIMH/NIH, Bethesda, MD</i>; <sup>2</sup><i>UT-ORNL, Oak Ridge, TN</i>; <sup>3</sup><i>NCI/FCRDC, Fredrick, Maryland</i></p> <p>ThP 290 <b>Histone Isoform Mapping Using Data-Dependent MS/MS of Deutero-Acetylated Tryptic Fragments</b>; <u>Robert J. Cotter</u>; Dwella Moton Nelson; Katherine Wilson; Rocio Montes de Oca; <i>Johns Hopkins School of Medicine, Baltimore, MD</i></p> <p>ThP 291 <b>Targeted Quantitative Analysis of Acetylated Histone H4 sites K5, K8, K12, K16</b>; <u>Marc Gentzel</u><sup>1</sup>; Asifa Akhtar<sup>2</sup>; <sup>1</sup><i>MPI-CBG, Dresden, Germany</i>; <sup>2</sup><i>EMBL, Heidelberg, Germany</i></p> <p>ThP 292 <b>"Bottom-Up" Approaches to Characterizing Novel Post-Translational Modifications on Histones Using an LTQ-OrbitrapXL-ETD</b>; <u>Dwella Moton Nelson</u>; Rocio Montes de Oca; Katherine Wilson; Robert J. Cotter; <i>Johns Hopkins University School of Medicine, Baltimore, MD</i></p> <p>ThP 293 <b>MS Analysis of Cysteine Modifications Caused by Sample Preparation</b>; <u>Zhouxi Wang</u>; Tomas Rejtar; Zhaohui Zhou; Barry L. Karger; <i>Northeastern University, Boston, MA</i></p> <p>ThP 294 <b>Minimizing Post Translation Modification Artifacts in Biotherapeutic Proteins</b>; <u>Ying-qing Yu</u>; Martin Gilar; John Gebler; Joomi Ahn; <i>Waters Corporation, Milford, MA</i></p> <p>ThP 295 <b>Comprehensive Analysis of the Arabidopsis Thaliana Leaf and Chloroplast Proteome: Proteotypic Library, Peptide Modifications, and</b></p> |
|---|---|



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Amino Acid Substitutions;** Boris Zybalov; Qi Sun; Klaas van Wijk; *Cornell University, Cornell University, Ithaca, NY*
- ThP 296 **Analysis of Post-Translationally Modified Peptides Using Synthetic Reference Standards and Tandem Mass Spectra Matching;** Hannes Hahne<sup>1</sup>; Simone M Lemeer<sup>1</sup>; Florian Richter<sup>4</sup>; Mikhail Savitski<sup>2</sup>; Martin Zeller<sup>3</sup>; Markus Boesche<sup>2</sup>; Thomas Moehring<sup>3</sup>; Marcus Bantscheff<sup>2</sup>; Henning Urlaub<sup>4</sup>; Bernhard Kuster<sup>1</sup>; <sup>1</sup>*Technical University Munich, Freising, Germany*; <sup>2</sup>*Cellzome AG, Heidelberg, Germany*; <sup>3</sup>*Thermo Fisher Scientific, Bremen, Germany*; <sup>4</sup>*MPI Biophysical Chemistry, Göttingen, Germany*
- ThP 297 **Comparison of ETD-Trap and Q-TOF for Analysis of Post-Translational Modifications;** Vaibhav Chumbalkar<sup>1</sup>; Vadiraja Bhat<sup>2</sup>; Khatri latha<sup>1</sup>; Rebecca Maywald<sup>1</sup>; Oliver Bogler<sup>1</sup>; <sup>1</sup>*UT MD Anderson Cancer Center, Houston, TX*; <sup>2</sup>*Agilent Technologies, Wilmington, DE*
- ThP 298 **Beyond Monoisotopic Mass: Detection of Peptide PTMs by Isotope Cluster Analysis;** Jonathan A Epstein<sup>1</sup>; Matthew Olson<sup>2</sup>; Kenneth Parker<sup>3</sup>; Peter S. Backlund<sup>1</sup>; Marvin Vestal<sup>3</sup>; Alfred L. Yerger<sup>1</sup>; <sup>1</sup>*NIH, Bethesda, MD*; <sup>2</sup>*JHMI, Baltimore, MD*; <sup>3</sup>*Virgin Instruments Corp., Sudbury, MA*
- ThP 299 **High Energy Collision Dissociation of Glycopeptides Aiding in Identifying Glycosylation Sites in Proteins;** Zaneer Segu<sup>1,2</sup>; Yehia Mechref<sup>1,2</sup>; <sup>1</sup>*METACyt Biochemical Analysis Center, Bloomington, IN*; <sup>2</sup>*Dept of Chemistry, Indiana University, Bloomington, IN*
- ThP 300 **Advances and Hurdles in O-linked Glycopeptide Analysis;** Zsuzsanna Darula<sup>2</sup>; Katalin F. Medzihradzsky<sup>1,2</sup>; <sup>1</sup>*UCSF, San Francisco, CA*; <sup>2</sup>*Biological Research Center, HAS, Szeged, Hungary*
- ThP 301 **Free Dinner: Doubling the Numbers of Identified Phosphopeptides by Converting MS3 Spectra into MS2 Mimics;** Wiebke A Timm<sup>1</sup>; Nurhan Ozlu<sup>2</sup>; Judith Steen<sup>1</sup>; Hanno Steen<sup>1</sup>; <sup>1</sup>*Harvard Medical School/Children's Hospital Boston, Boston, MA*; <sup>2</sup>*Harvard Medical School, Boston, MA*
- ThP 302 **Phosphoproteomic Characterization of Insulin Resistance in T2D Using iTRAQ and SIMAC Combined with Multistage Activation and Higher-Energy C-Trap Dissociation MS/MS;** Tine E. Thingholm; Henning Beck-Nielsen; Michael Gaster; Ole N. Jensen; *Univ. of Southern Denmark, Odense, Denmark*
- ThP 303 **De-Coupling the Identification and Relative Quantitation of Phosphopeptides Using a Real-Time Combination CID and HCD\* Using an LTQ-Orbitrap XL;** Andrew JK Williamson<sup>2</sup>; Yvonne Connolly<sup>1</sup>; Duncan L Smith<sup>1</sup>; <sup>1</sup>*Paterson Institute for Cancer Research, Manchester, UK*; <sup>2</sup>*SCALPL, University of Manchester, Manchester, UK*
- ThP 304 **A Chemical Derivatization, Results-Driven Mass Spectrometry Workflow for Sensitive Identification and Relative Quantification of Tyrosine Phosphorylation Sites;** John R Griffiths; Anthony D Whetton; *University of Manchester, Manchester, United Kingdom*
- ThP 305 **MS Characterization of Differentially Modified Isoforms of the Homer2 Scaffolding Protein in Brain;** Rob Helton<sup>2</sup>; Karen K Szumlanski<sup>1</sup>; Christine C Wu<sup>2</sup>; <sup>1</sup>*University of California, Santa Barbara, CA*; <sup>2</sup>*University of Colorado School of Medicine, Aurora, CO*
- ThP 306 **Assessment of Phosphopeptide Enrichment/Precipitation Methods for LC-MS/MS Based Phosphoproteomic Analysis of Plant Tissue;** Juanying Ye<sup>1</sup>; Elena Rudashevskaya<sup>2</sup>; Thomas Aarup Hansen<sup>1</sup>; Anja T. Fuglsang<sup>2</sup>; Michael G. Palmgren<sup>2</sup>; Ole N. Jensen<sup>1</sup>; <sup>1</sup>*University of Southern Denmark, Odense, Denmark*; <sup>2</sup>*University of Copenhagen, Copenhagen, Denmark*
- ThP 307 **Novel Approach to Phosphopeptide Profiling Based on Combination of Liquid Chromatography at Critical Conditions and Mass Spectrometry;** Tatiana Yu. Perlova<sup>1</sup>; Yelena Margolin<sup>4</sup>; Irina A. Tarasova<sup>1</sup>; Anton A. Goloborodko<sup>1</sup>; Alexander V. Gorshkov<sup>2</sup>; Eugene Moskovets<sup>3</sup>; Alexander R. Ivanov<sup>4</sup>; Mikhail V. Gorshkov<sup>1</sup>; <sup>1</sup>*Institute of Energy Problems of Chemical Physics, Moscow, Russia*; <sup>2</sup>*N. N. Semenov's Institute of Chemical Physics, Moscow, Russia*; <sup>3</sup>*MassTech Inc., Columbia, MD*; <sup>4</sup>*Harvard School of Public Health, Boston, MA*
- ThP 308 **Selective Enrichment and Quantitative Analysis of the Endogenous Serum Phosphorylated Peptides for Potential Disease Biomarker Discovery;** Lianghai Hu<sup>1</sup>; Houjiang Zhou<sup>1</sup>; Lihai Guo<sup>2</sup>; Shutao Sun<sup>1</sup>; Mingliang Ye<sup>1</sup>; Hanfa Zou<sup>1</sup>; <sup>1</sup>*Dalian Chemical Physics Institute, the CAS, Dalian, Liaoning*; <sup>2</sup>*ASC, Applied Biosystems, Shanghai, China*
- ThP 309 **Mass Spectrometric Determination of Disulfide Linkages and Glycosylation Sites in Recombinant Therapeutic Proteins Using On-line LC-MS with Electron Transfer Dissociation;** Shiaw-lin Wu<sup>1</sup>; Zhiqi Hao<sup>2</sup>; Andreas F Huhmer<sup>2</sup>; Haitao Jiang<sup>1</sup>; William S. Hancock<sup>1</sup>; Barry L. Karger<sup>1</sup>; <sup>1</sup>*Northeastern University, Boston, MA*; <sup>2</sup>*Thermo Fisher Scientific, San Jose, CA*
- ThP 310 **Evaluation of the Low-Specificity Protease Elastase for the Phosphoproteome Analysis;** Bin Wang; Rainer Malik; Erich Nigg; Roman Körner; *Max-Planck-Institute of Biochemistry, Munich, Germany*
- DIRECT IONIZATION (DESI, DART AND ASAP),  
311 - 332**
- ThP 311 **Molecular Imaging of Marine Algal Metabolites by Reactive DESI MS: Towards a Better Understanding of Aquatic Antifungal Defense System;** Leonard Nyadong; Edward G. Hohenstein; Amy L. Lane; Asiri Galhena; Mark Kwasnik; Mark E. Hay; Julia Kubanek; David Sherrill; Facundo Fernandez; *Georgia Institute of Technology, Atlanta, GA*
- ThP 312 **Solvent Gradient Used to Vary Ionization Selectivity in Transmission Mode Desorption Electrospray Ionization;** Kevin D. Quinn; Troy Wood; *University at Buffalo, Buffalo, NY*
- ThP 313 **Imaging Desorption Electrospray Ionization-Mass Spectrometry and Direct Analysis in Real Time Mass-Spectrometry for the Integral Investigation of Counterfeit Antimalarial Pharmaceuticals;** Asiri Galhena; Leonard Nyadong; R. Mitchell Parry; May D Wang; Facundo Fernandez; *Georgia Institute of Technology, Atlanta, GA*
- ThP 314 **Secondary Electrospray Ionization Detection of Explosive Vapors Below 0.02 ppt on a Triple Quadrupole with an Atmospheric Pressure Source;** Erica Mesonero<sup>2</sup>; Juan A. Sillero<sup>2</sup>; Marta Hernandez<sup>3</sup>;



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 315 **Juan Fernandez de la Mora**<sup>1</sup>; <sup>1</sup>*Yale University - Mechanical Engineering Department, New Haven, CT*; <sup>2</sup>*SEADM, Boecillo, Valladolid, Spain*; <sup>3</sup>*CARTIF, Boecillo, Valladolid, Spain*
- ThP 316 **Analysis of Non-ionic Surfactants on the Surface of Coated Acrylic Paints by Desorption Electrospray Ionization Mass Spectrometry**; **Chengli Zu**; Greg Meyers; Bruce Bell; Melinda Keefe; *Dow Chemical Company, Midland, MI*
- ThP 317 **DART-MS/MS Analysis of Foamed PVC Jar Lids**; **Luke K. Ackerman**<sup>1</sup>; Gregory O. Noonan<sup>1</sup>; Timothy H. Begley<sup>1</sup>; Catherine Simoneau<sup>2</sup>; Michele Suman<sup>3</sup>; <sup>1</sup>*US-FDA Center for Food Safety, College Park, MD*; <sup>2</sup>*EU Comm., Inst. for Health & Consumer Protection, Ispra, Italy*; <sup>3</sup>*Barilla G.R. F.lli SpA, Parma, Italy*
- ThP 318 **Continuously Monitoring the States of nano-TiO<sub>2</sub> Catalyzed Photo Reactions with Liquid Electrospray-assisted Laser Desorption Ionization Mass Spectrometry**; **Cheng-Hui Yuan**; Hsin-Hui Liang; Jentaie Shiea; *National Sun Yat-Sen Univ., Kaohsiung, Taiwan*
- ThP 319 **Transmission-Mode DART TOF MS for the Semi-Quantitative Analysis of Pyrethroid Pesticide-Treated Bednets**; **Jose J. Perez**<sup>1</sup>; Michael D. Green<sup>2</sup>; Christina Y. Hampton<sup>1</sup>; Facundo M. Fernandez<sup>1</sup>; <sup>1</sup>*Georgia Institute of Technology, Atlanta, GA*; <sup>2</sup>*Centers for Disease Control and Prevention, Atlanta, GA*
- ThP 320 **Preparation and Rapid Analysis of Dry Powders with an Ambient Pressure Desorption Ionization Equipped Mass Spectrometer**; **Brian D. Musselman**; Elizabeth Crawford; Jordan Krechmer; *IonSense, Inc., Saugus, MA*
- ThP 321 **Instant Quality Control of Biodiesel Made from Used Frying Oil by Easy Ambient Sonic-Spray Ionization Mass Spectrometry**; **Rosana Maria Alberici**<sup>1</sup>; Vanderlea de Souza<sup>2</sup>; Gilberto Fernandes de Sá<sup>3</sup>; Romeu Jose Daroda<sup>2</sup>; Marcos Nogueira Eberlin<sup>1</sup>; <sup>1</sup>*Thomson Mass Spectrometry Laboratory-UNICAMP, Campinas, SP, Brazil*; <sup>2</sup>*National Institute of Metrology-INMETRO, Duque de Caxias, RJ, BRAZIL*; <sup>3</sup>*Department of Fundamental Chemistry, UFPE, Recife, PE, Brazil*
- ThP 322 **Development of a SPE/DART Assay for Rapid Narcotics Screening in Urine**; **Thurman Allsup**<sup>1</sup>; Brian D. Musselman<sup>2</sup>; Kimberly Gamble<sup>3</sup>; Ken Lewis<sup>1</sup>; <sup>1</sup>*OpAns, LLC, Durham, NC*; <sup>2</sup>*IonSense, Inc., Saugus, MA*; <sup>3</sup>*MicroLiter Analytical Supplies, Inc., Suwanee, GA*
- ThP 323 **The Use of Recently Innovated Ambient Mass Spectrometry for Direct Determination of Pharmaceutical Compounds in Biological Matrices**; Hang Zeng; *University of the Sciences in Philadelphia, Philadelphia, PA*
- ThP 324 **Electrospray-Assisted Laser Desorption Ionization (ELDI) with an Infrared OPO Laser for Characterization of Peptides and Proteins**; **Mark Little**<sup>1</sup>; Ivory Peng<sup>2</sup>; Rachel O. Loo<sup>2</sup>; Eli Margalith<sup>1</sup>; Joseph A. Loo<sup>2</sup>; <sup>1</sup>*Opotek, Inc., Carlsbad, CA*; <sup>2</sup>*UCLA, Los Angeles, CA*
- ThP 325 **Elucidation of the MALDESI Ionization Mechanism Using Deuterated Solvents, Remote Analyte Sampling Transport and Ionization Relay Coupled with FT-ICR-Mass Spectrometry**; **Jason S. Sampson**; R. Brent Dixon; David C. Muddiman; *North Carolina State University, Raleigh, NC*
- ThP 326 **Investigation of DESI Desorption on Biomolecular Surfaces**; **Felicia M. Green**<sup>1</sup>; Tara L. Salter<sup>1</sup>; David G. Castner<sup>2</sup>; Lara J. Gamble<sup>2</sup>; Ian S. Gilmore<sup>1</sup>; Peter Stokes<sup>3</sup>; Gavin O'Connor<sup>3</sup>; <sup>1</sup>*National Physical Laboratory, Teddington, UK*; <sup>2</sup>*NESAC/BIO Washington University, Seattle, Washington*; <sup>3</sup>*LGC Limited, Teddington, UK*
- ThP 327 **Development of a "Greener" Ionization Source for Ambient Desorption Ionization with Nitrogen as the Carrier Gas**; **Joseph Tice**<sup>1</sup>; Douglas Simmons<sup>2</sup>; Michael Festa<sup>1</sup>; James A. Hill<sup>3</sup>; Brian D. Musselman<sup>1</sup>; <sup>1</sup>*IonSense, Inc., Saugus, MA*; <sup>2</sup>*IonSense Inc., Saugus, MA*; <sup>3</sup>*James A. Hill Instruments, Arlington, MA*
- ThP 328 **Mass Spectrometry Guided Surgery by Direct Coupling of Electrosurgical Methods with On-line Mass Spectrometric Analysis**; **Zoltan Takats**<sup>1,2</sup>; Katalin Albrecht<sup>1</sup>; Reka Skoumal<sup>1</sup>; Miklos Toth<sup>1</sup>; Tamas Szaniszló<sup>1</sup>; Karl-Christian Schaefer<sup>2</sup>; Julia Denes<sup>1</sup>; <sup>1</sup>*Semmelweis University, Budapest, Hungary*; <sup>2</sup>*Justus-Liebig University, Giessen, Germany*
- ThP 329 **On-Line Infrared Matrix-Assisted Laser Desorption Electrospray Ionization Mass Spectrometry**; **Fan Huang**; Kermit K. Murray; *Louisiana State University, Baton Rouge, LA*
- ThP 330 **Rapid Characterization of the Active Ingredients in Over-the-Counter Medicines by Electrospray-assisted Laser Desorption Ionization (ELDI) Mass Spectrometry**; Yi-Yzu Cho; Min-Zong Huang; **Jentaie Shiea**; *National Sun Yat-Sen Univ., Kaohsiung, Taiwan*
- ThP 331 **Novel Applications of DART (Direct Analysis in Real Time) in Pharmaceutical Industry**; Guilong (Charles) Cheng; *Pfizer, Inc., Groton, CT*
- ThP 332 **Off-Line Desorption Electrospray Ionization (Off-Line DESI) for Sample Collection: A Novel Surface Sampling and Preconcentration Technique**; Afrand Kamali; Semere Bairu; Shashank Jain; **Andre Venter**; *Western Michigan University, Kalamazoo, MI*
- ThP 333 **New Sampling Methods for the Direct Analysis in Real Time (DART) Ion Source**; **Robert B. Cody**; John Dane; *JEOL USA, Inc., Peabody, MA*

### INSTRUMENTATION: NEW CONCEPTS, 333 - 353

- ThP 333 **Ion Optic Design for Drift Tube Soft-landing**; **David Birdwell**; Stephen Davila; Guido F. Verbeck; *University of North Texas, Denton, TX*
- ThP 334 **Mass Selective Soft and Reactively Landed Ion Studies of Nucleobases and Nucleosides on Plasma Pre-treated Metal Surfaces**; **Karl E. Jackson**; W. Tim Elam; Frantisek Turecek; *University of Washington, Seattle, WA*
- ThP 335 **Atmospheric Pressure Ion Soft Landing and Surface Patterning**; **Abraham K Badu Tawiah**<sup>1</sup>; Chunping Wu<sup>1</sup>; Hao Chen<sup>2</sup>; R. Graham Cooks<sup>1</sup>; <sup>1</sup>*Purdue University, West Lafayette, IN*; <sup>2</sup>*Ohio University, Athens, OH*
- ThP 336 **In situ SIMS Analysis and Reactions of Surfaces Prepared by Ion Soft-Landing**; **Jobin Cyriac**; Liang Gao; Guangtao Li; R. Graham Cooks; *Purdue University, West Lafayette, IN*
- ThP 337 **In situ Characterization of Surfaces Following Soft Landing of Complex Ions**; **Qichi Hu**<sup>1</sup>; Peng Wang<sup>2</sup>; Omar Hadjar<sup>3</sup>; Julia Laskin<sup>1</sup>; <sup>1</sup>*Pacific NW National Laboratory, Richland, WA*; <sup>2</sup>*Pacific Northwest National*

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Laboratory, Billerica, MA; <sup>3</sup>O.I. Analytical, Pelham, AL
- ThP 338 **Characterization and Isolation of Specifically Selected Cu Nanoclusters Using Drift Tube Soft Landing;** Stephen Davila; Guido F. Verbeck; University of North Texas, Denton, TX
- ThP 339 **Charge Retention and Neutralization on Various Surfaces during Ion Soft Landing;** Guanqiao Li; Liang Gao; Jobin Cyriac; R. Graham Cooks; Purdue University, Westfield, IN
- ThP 340 **A Fast and Transportable Gas Chromatograph – Mass Spectrometer with Double Focusing Characteristic;** Gottfried Kibelka; Omar Hadjar; Scott Kassar; Scott Shill; Chad Cameron; O.I. Analytical, Pelham, AL
- ThP 341 **On-Line Reactors Enabling Fast Gas Chromatography (GC) and Comprehensive 2D GC (GCxGC) Coupled to Isotope Ratio Mass Spectrometry (IRMS);** Herbert Tobias; J Thomas Brenna; Cornell University, Ithaca, NY
- ThP 342 **Withdrawn**
- ThP 343 **Development of Novel Laser Post-Ionization Mass Spectrometer with Ultra-High Sensitivity and Ultra-Trace Sampling;** Morio Ishihara<sup>1</sup>; Kousuke Kumondai<sup>1</sup>; Ryo Mibuka<sup>2</sup>; Kiichiro Uchino<sup>2</sup>; Hisayoshi Yurimoto<sup>3</sup>; <sup>1</sup>Osaka Univ., Toyonaka, Japan; <sup>2</sup>Kyushu University, Japan, Kasuga, Japan; <sup>3</sup>Hokkaido University, Sapporo, Japan
- ThP 344 **Ultra fast Proton-Transfer-Reaction Mass Spectrometry - Development of a Novel Drift Tube Design;** Alfons Jordan<sup>1</sup>; Stefan Haidacher<sup>1</sup>; Gernot Hanel<sup>1</sup>; Eugen Hartungen<sup>1</sup>; Hans Seehauser<sup>1</sup>; Ralf Schottkowsky<sup>1</sup>; Philipp Sulzer<sup>1</sup>; Lukas Maerk<sup>1</sup>; Tilmann Märk<sup>1,2</sup>; <sup>1</sup>Ionicon Analytik, Innsbruck, Austria; <sup>2</sup>Universität Innsbruck, Innsbruck, Austria
- ThP 345 **High Capacity Ion Trap Coupled to a Time of Flight MS for Comprehensive No-Loss MS/MS of All Stored Ions;** Sunnie Myung<sup>1</sup>; Andrew N. Kruchinsky<sup>2</sup>; David Fenyo<sup>1</sup>; Julio Cesar Padovan<sup>1</sup>; Herbert Cohen<sup>1</sup>; Brian Chait<sup>1</sup>; <sup>1</sup>The Rockefeller University, New York, NY; <sup>2</sup>Department of Pharmaceutical Chemistry at UCSF, San Francisco, CA
- ThP 346 **The Performance of a MALDI LTQ Orbitrap and its Application to the Study of Protein Complexes;** Yang Luo; Tuo Li; Fang Yu; A. Chase Palish; Tal Kramer; Ileana M. Cristea; Princeton University, Princeton, NJ
- ThP 347 **An In-Capillary FAIMS Device for High Transmission and Instrument Versatility;** Alessandra Ferzoco<sup>1</sup>; Mark Ridgeway<sup>1</sup>; Desmond Kaplan<sup>2</sup>; Melvin A. Park<sup>2</sup>; Gary L. Glish<sup>1</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>Bruker Daltonics, Inc., Billerica, MA
- ThP 348 **Planar High Field Asymmetric Ion Mobility Spectrometry Device Utilizing Temperature Control of Carrier Gas and Electrodes;** Mark Ridgeway<sup>1</sup>; Philip M Remes<sup>2</sup>; Gary L. Glish<sup>1</sup>; <sup>1</sup>University of North Carolina, Chapel Hill, NC; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA
- ThP 349 **Origin of Higher Order Overtone Peaks in Overtone Mobility Spectrometry;** Ruwan Kurulugama; Stephen Valentine; David E. Clemmer; Indiana University, Bloomington, IN
- ThP 350 **An FTICR – Ion Trap Cluster;** Magnus Palmblad; Yuri E. M. Van Der Burgt; Hans Dalebout; André M. Deelder; Leiden Univ. Medical Ctr, Leiden, Netherlands
- ThP 351 **New Ion Source for Inductively Coupled Plasma Mass Spectrometry with Low Argon Consumption (UMAS Ion Source);** Wolfgang Buscher<sup>1</sup>; Thorben Pfeifer<sup>1</sup>; Michael Sperling<sup>1,2</sup>; <sup>1</sup>University of Muenster, Muenster, Germany; <sup>2</sup>EVISA Europ. Virtual Inst. for Speciation Analysis, Muenster, Germany
- ThP 352 **Temperature Dependent Energy Distributions of Sputtered Coronene Molecules Induced by Energetic Atomic and Cluster Projectiles;** Daniel A. Brenes; David G. Willingham; Nicholas Winograd; Penn State University, University Park, PA
- ThP 353 **Direct Analysis of Biological Tissue by Electrospray Droplet Impact / Secondary Ion Mass Spectrometry;** Daiki Asakawa; LeeChuin Chen; Kenzo Hiraoka; University of Yamanashi, Kofu, Japan
- LC/MS SAMPLE PREPARATION, 354 - 369**
- ThP 354 **Increased Bioanalytical Throughput Using Selective Phospholipid Depletion;** Craig Aurand<sup>1</sup>; An Trinh<sup>2</sup>; Hillel K. Brandes<sup>1</sup>; David S. Bell<sup>1</sup>; Michael Ye<sup>1</sup>; <sup>1</sup>Supelco/ Sigma Aldrich, Bellefonte, PA; <sup>2</sup>Supelco, Bellefonte, PA
- ThP 355 **Improved Bioanalysis of Antidepressants from Plasma Using Non-Drip Filtration Plates;** Eugene Chang; David Jones; Ritu Arora; Varian Inc., Lake Forest, CA
- ThP 356 **A Simple Way to Remove Phospholipids from Bioanalytical Samples;** Ben Yong<sup>1</sup>; William Hudson<sup>1</sup>; David Jones<sup>2</sup>; Yung-Lin Chen<sup>2</sup>; <sup>1</sup>Varian, Inc., Lake Forest, CA; <sup>2</sup>Varian Inc., Lake Forest, CA
- ThP 357 **Phospholipid Removal: A Comparison between Traditional Liquid-Liquid Extraction (LLE) and Supported Liquid Extraction (SLE) Using LC-MS/MS Analysis;** Lee Williams<sup>1</sup>; Mike Lindenmuth<sup>2</sup>; Rhys Jones<sup>1</sup>; Claire Desbrow<sup>1</sup>; Joanna Caulfield<sup>1</sup>; Gary Dowthwaite<sup>1</sup>; Richard Calverley<sup>1</sup>; Steve Jordan<sup>1</sup>; Helen Lodder<sup>1</sup>; <sup>1</sup>Biotage GB Limited, Cardiff, UK; <sup>2</sup>Biotage, Charlottesville, VA
- ThP 358 **The Use of Liquid-Liquid Extraction along with Colloidal Silica and Polyvalent Cations to Remove Phospholipids that Produce ESI Matrix Effects;** Dale Schoener; Stan Murakami; Alta Analytical Laboratory, El Dorado Hills, CA
- ThP 359 **Biological Sample Phospholipids Clean Up: A Comparison of Sample Preparation Techniques;** Zheng Ouyang<sup>1</sup>; Steven T. Wu<sup>2</sup>; Mohammed Jemal<sup>2</sup>; <sup>1</sup>Bristol-Myers Squibb Company, Princeton, NJ; <sup>2</sup>Bristol-Myers Squibb, Princeton, NJ
- ThP 360 **Determination of Topiramate in Human Plasma Using Negative Ion ESI-LC/MS/MS;** Song Zhao; Moucun Yuan; William R. Mylott; Bruce Hidy; Rand Jenkins; PPD, Richmond, VA
- ThP 361 **Isolation of Digoxin from Human Plasma Using Supported Liquid Extraction (SLE) for Analysis by ESI-LC/MS/MS;** Moucun Yuan; Laura Nakovich; William R. Mylott; Bruce Hidy; Rand Jenkins; PPD, Richmond, VA
- ThP 362 **The Retention Behavior of Phospholipids Leading to the Elimination of Matrix Effect in LC-MS/MS Using Reverse-Phase Silica SPE;** Mathieu Lahaie; Milton Furtado; Fabio Garofolo; Algorithm Pharma Inc., Laval (Montreal), Quebec, Canada

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 363 **Efficiency, Reproducibility, Accuracy and Linearity Evaluation of Filtration Plates during Protein Precipitation to Remove Phospholipids in Bioanalysis by LC-MS/MS;** Catherine Dicaire; Milton Furtado; Fabio Garofolo; *Algorithme Pharma Inc., Laval (Montreal), Quebec, Canada*
- ThP 364 **Selection of Buffer Additives for Liquid-Liquid Extraction (LLE) Procedure to Remove Matrix Effect Due to Phospholipids in LC-MS/MS;** Melanie Bergeron; Mathieu Lahaie; Milton Furtado; Fabio Garofolo; *Algorithme Pharma Inc., Laval (Montreal), Quebec, Canada*
- ThP 365 **Method Development Strategies for Improving ISR Reproducibility - Use of Surfactants for Success;** Roger Demers; Daria L Wentzel; *Tandem Labs, West Trenton, NJ*
- ThP 366 **Potential Ion Suppression from the Individual Components of Cannula Locking Solutions used in Rodent Studies;** Daniel G. Morgan<sup>1</sup>; Sarah J. Taylor<sup>1</sup>; Marc Browning<sup>1</sup>; Timothy Olah<sup>2</sup>; <sup>1</sup>*Bristol-Myers Squibb, Wallingford, CT*; <sup>2</sup>*Bristol-Myers Squibb Company, Lawrenceville, NJ*
- ThP 367 **An Accurate and Specific LC-MS/MS Method for the Quantitative Determination of a Drug Candidate in Monkey Whole Blood and Tissues;** Wei Zhou; Shaoyong Li; Harold T Smith; Francis Tse; *Novartis Institutes for Biomedical Research, East Hanover, NJ*
- ThP 368 **Maximizing Workflow Efficiency and Investigation of Drug Candidate Freeze/Thaw Recovery in Cerebrospinal Fluid After Addition of Plasma or Other Additives;** Gary E. Adamson<sup>2</sup>; Debra McLoughlin<sup>3</sup>; James Monahan<sup>1</sup>; William Bart Emary<sup>4</sup>; <sup>1</sup>*Merck Research Laboratories, West Point, PA*; <sup>2</sup>*Merck and Co., West Point, PA*; <sup>3</sup>*Merck & Co., West Point, PA*; <sup>4</sup>*Merck Research Labs, West Point, PA*
- ThP 369 **Evaluation of Bead-Based Homogenization Technique and Comparison with a Focused Acoustic Energy Wave Technique (Covaris);** Debra Liao; Susan Chen; Ji Zhang; Jing-tao Wu; Mark Qian; *Millennium: The Takeda Oncology Company, Cambridge, MA*
- MICROBIAL ANALYSIS, 370 - 392**
- ThP 370 **Interaction of Bacteria and Ion-Exchange Magnetic Nanoparticles and its Potential in Separation for MALDI-MS Identification of Bacteria in Water;** Ying Liu; Shuping Li; Zhongxian Guo; Zhaoguang Yang; *Centre for Advanced Water Technology, Singapore*
- ThP 371 **Diamond Nanoparticles for MALDI-TOF Mass Analysis of Bacterial Surface and Secretion Proteins;** Chun-Wei Chen<sup>1</sup>; Kai-Chih Chang<sup>2,3</sup>; Anren Hu<sup>2,3</sup>; Yen-peng Ho<sup>1</sup>; Wen-ping Peng<sup>1</sup>; <sup>1</sup>*National Dong Hwa University, Shoufeng, Hualien, Taiwan*; <sup>2</sup>*Tzu Chi University, Hualien, Taiwan*; <sup>3</sup>*Buddhist Tzu Chi General Hospital, Hualien, Taiwan*
- ThP 372 **Combinatorial Metaproteomics and Metagenomics to Analyze Complex Bacterial Communities *in situ*;** Nathanael Delmotte<sup>1</sup>; Claudia Knief<sup>1</sup>; Samuel Chaffron<sup>2</sup>; Bernd Roschitzki<sup>3</sup>; Gerd Innerebner<sup>1</sup>; Christian von Mering<sup>2</sup>; Julia Vorholt<sup>1</sup>; <sup>1</sup>*ETHZ, Zurich, Switzerland*; <sup>2</sup>*University of Zurich, Zurich, Switzerland*; <sup>3</sup>*Functional Genomics Center, Zurich, Switzerland*
- ThP 373 **Proteome Analysis of Iron-Corrosive Archaeon *Methanococcus maripaludis* OS7;** Hanako Ataku; Miyako Mise; Keiko Nishijima; Jun Yamazaki; Jun Fukuda; Kazumi Sasaki; Syuji Yamazaki; Nobuyuki Fujita; Naofumi Ito; Satoshi Tanikawa; Hirohito Tsurumaru; Shigeaki Harayama; *National Institute of Technology and Evaluation, Shibuya, Japan*
- ThP 374 **Investigating Potential Protein Functions of Small Unknown Reading Frames Secreted by Individual and Co-Cultured Thermophiles;** Genna L. Andrews; Derrick L. Lewis; Sara E. Blumer-Schuetz; Jaspreet Nohy; Robert M. Kelly; Timothy S Collier; David C. Muddiman; *North Carolina State Univ., Raleigh, NC*
- ThP 375 **Analysis of Botulinum Neurotoxin G Using Endopep-MS and Toxin Proteomics;** Rebecca R Terilli<sup>1</sup>; Hercules Moura<sup>5</sup>; Suzanne Kalb<sup>1</sup>; Adrian R Woolfitt<sup>2</sup>; Jon Rees<sup>2</sup>; Maribel Gallegos-Candela<sup>2</sup>; David M. Schieltz<sup>1</sup>; John R. Barr<sup>2</sup>; <sup>1</sup>*Center for Disease Control and Prevention, Atlanta, GA*; <sup>2</sup>*CDC, Atlanta, GA*
- ThP 376 **Comprehensive Mass Spectrometric Analysis of Multiple Pertussis Toxins Reveals Amino Acid Coverage Homogeneity and Differential Subunit Expression;** Yulanda M. Williamson; Hercules Moura; David M. Schieltz; Jon Rees; Adrian R. Woolfitt; Maria L. Tondella; Edwin Ades; Jacqueline S. Sampson; George Carlone; John R. Barr; *Centers for Disease Control and Prevention, Chamblee, GA*
- ThP 377 **Identification of H7 Antigen of Escherichia Coli with Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS);** Keding Cheng; Joanne McCrea; David Lee; Katherine Sierks; Stuart McCorrister; Gary Van Domselaar; Helen Tabor; Garrett Westmacott; Gehua Wang; *NML-PHAC Canada, Winnipeg, Canada*
- ThP 378 **In Planta Proteomics and Proteogenomics of the Biotrophic Barley Fungal Pathogen *Blumeria graminis* f.sp. *hordei*;** Laurence V. Bindschedler<sup>1</sup>; Tim Burgis<sup>2</sup>; Davinia J.S. Mills<sup>1</sup>; Jenny Ho<sup>3</sup>; Pietro D. Spanu<sup>2</sup>; Rainer Cramer<sup>1</sup>; <sup>1</sup>*The University of Reading, Reading, UK*; <sup>2</sup>*Imperial College London, London, UK*; <sup>3</sup>*Thermo Fisher Scientific, Hemel Hempstead, UK*
- ThP 379 **Quantitative Proteomic Analysis of Gluconacetobacter Diazotrophicus Interaction with Sugarcane;** Leticia Miranda Santos Lery<sup>1</sup>; Eduardo M. Nogueira<sup>2</sup>; Paulo M. Bisch<sup>1</sup>; Adriana S. Hemery<sup>2</sup>; Wanda M. A. von Kruger<sup>1</sup>; <sup>1</sup>*Federal University of Rio de Janeiro, Rio De Janeiro, Brazil*; <sup>2</sup>*Instituto de Pesquisas do Jardim Botânico, Rio de Janeiro, Brasil*
- ThP 380 **Proteomic Analysis of Caulobacter Crescentus Outer Membrane Subproteome;** Yuan Cao; Helen M. Johnson; Seth N. Levin; Carthene R. Bazemore-Walker; *Brown University, Providence, RI*
- ThP 381 **Top-Down Identification of Bacterial Intact Protein Expression Profile Markers;** Melinda A. McFarland; John H. Callahan; Denis Andrzejewski; Rebecca Bell; Steven M. Musser; *FDA/CFRAN, College Park, MD*
- ThP 382 **Decomposition of Soil Microbial Biomass: Investigations of Degradation Products by Mass Spectrometry;** Adrian Spence<sup>1</sup>; Andre J. Simpson<sup>2</sup>; Brian P. Kelleher<sup>1</sup>; <sup>1</sup>*Dublin City University, Dublin, Ireland*; <sup>2</sup>*University of Toronto at Scarborough, Toronto, Canada*
- ThP 383 **Quantitative Mass Spectrometric Analysis Reveals Bacterial Cell-Wall Organization;** Jiawei Chen<sup>1</sup>; Gary

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 384 J Patti<sup>2</sup>; Michael L. Gross<sup>1</sup>; <sup>1</sup>Washington University, St Louis, MO; <sup>2</sup>The Scripps Research Inst., La Jolla, CA  
**Classification of Mycotoxin-Producing Fusarium Species Based on MALDI-TOF MS Analyses of their Intact Spores**; Martina Marchetti-Deschmann<sup>1</sup>; Wolfgang Winkler<sup>1</sup>; Jasmin Kemptner<sup>1</sup>; Emmanuel Raptakis<sup>2</sup>; Irina S. Druzhinina<sup>1</sup>; Robert Mach<sup>1</sup>; Christian P. Kubicek<sup>1</sup>; Guenter Allmaier<sup>1</sup>; <sup>1</sup>Vienna Univ. of Technology, Vienna, Austria; <sup>2</sup>Shimadzu Biotech Kratos Analytical, Manchester, UK
- ThP 385 **AP-MALDI MS/MS and Proteomics Based Rapid Detection of Food-Borne Pathogens**; Appavu Sundaram; Seshu Gudlavalleti; Jane Razumovskaya; Vladimir M. Doroshenko; *Science & Engineering Services, Inc., Columbia, MD*
- ThP 386 **Comprehensive Pathogen Identification Using MALDI TOF Coupled to Statistic Patented Procedure**; Fan Xiang<sup>1</sup>; Joachim Dyck<sup>2,2</sup>; <sup>1</sup>Shimadzu Biotech, Pleasanton, CA; <sup>2</sup>AnagnosTec, Potsdam, Germany
- ThP 387 **Application of MS Signatures of Intact Microorganisms in the Search for Extant Extraterrestrial Life**; Timothy J. Cornish<sup>1</sup>; Plamen A. Demirev<sup>3</sup>; William Brinckerhoff<sup>4</sup>; Miquel Antoine<sup>5</sup>; Luann Becker<sup>2</sup>; Scott Ecelberger<sup>3</sup>; Jeffrey Lin<sup>3</sup>; Andrew Feldman<sup>3</sup>; Nathan Hagan<sup>3</sup>; <sup>1</sup>JHU/APL, MS:4-234, Laurel, MD; <sup>2</sup>Johns Hopkins Univ., Baltimore, MD; <sup>3</sup>JHU/APL, Laurel, MD; <sup>4</sup>NASA Goddard SFC, Greenbelt, MD; <sup>5</sup>JHU-APL, Laurel, MD
- ThP 388 **Applicability of MALDI TOF Mass Spectrometry for Helicobacter Pylori Characterization and Typing**; Elena Ilina<sup>1</sup>; Marina V. Serebryakova<sup>1</sup>; Alexandra D. Borovskaya<sup>1</sup>; Kuvat T. Momynaliev<sup>1</sup>; Thomas Maier<sup>2</sup>; Markus Kostrzewa<sup>2</sup>; Vadim M. Govorun<sup>1</sup>; <sup>1</sup>Research Institute for Physical-Chemical Medicine, Moscow, Russian Federation; <sup>2</sup>Bruker Daltonik GmbH, Bremen, Germany
- ThP 389 **Investigating the Functional Activities and Cellular Processes of the Human Gut Microbiome by Multidimensional LC-MS/MS**; Robert Hettich<sup>1</sup>; Nathan C. Verberkmoes<sup>2</sup>; Alison Russell<sup>2</sup>; Manesh Shah<sup>1</sup>; Mark Lefsrud<sup>6</sup>; Adam Godzik<sup>3</sup>; Claire Fraser-Liggett<sup>5</sup>; Janet Jansson<sup>4</sup>; <sup>1</sup>Oak Ridge National Lab., Oak Ridge, TN; <sup>2</sup>UT-Oak Ridge National Lab, Knoxville, TN; <sup>3</sup>Burnham Institute for Medical Research, La Jolla, CA; <sup>4</sup>Lawrence Berkeley National Lab, Berkeley, CA; <sup>5</sup>Univ. of Maryland School of Medicine, Baltimore, MD; <sup>6</sup>McGill Univ., Quebec, Canada
- ThP 390 **Analysis of the Proteome Released through the Type III Secretion System (T3SS) of Burkholderia Species**; Ünige A. Laskay<sup>1</sup>; Samantha I Wickramasekara<sup>1</sup>; Jennifer R. Bethke<sup>1</sup>; Chengsi Huang<sup>1</sup>; Mingshun Liu<sup>2</sup>; Imke Schroeder<sup>2</sup>; Todd French<sup>2</sup>; Jeff F. Miller<sup>2</sup>; Vicki H. Wysocki<sup>1</sup>; <sup>1</sup>University of Arizona, Tucson, AZ; <sup>2</sup>UCLA, Los Angeles, CA
- ThP 391 **Metaproteomic Analysis of Microbial Endosymbionts from the Gutless Oligochaete Olavius Algarvensis**; Jacque Young<sup>1,2</sup>; Manuel Kleiner<sup>3,4</sup>; Manesh Shah<sup>1</sup>; Cecilia Wentrup<sup>4</sup>; Yun-Juan Chang<sup>1</sup>; Christian Lott<sup>4</sup>; Stephanie Markert<sup>3</sup>; Nathan C. Verberkmoes<sup>1</sup>; Nicole Dubilier<sup>4</sup>; <sup>1</sup>Oak Ridge National Laboratory, Oak Ridge, TN; <sup>2</sup>Univ. of Tennessee, Knoxville, TN; <sup>3</sup>Univ. of Greifswald, Greifswald, Germany; <sup>4</sup>Max-Planck-Institute for Marine Microbiology, Bremen, Germany
- ThP 392 **Systems Fluctuations of an Extremely Halophilic Archaeon Haloarcula Marismortui at Mid- and Late-Log Phase of Growth Analyzed by MS/MS**; Li-chieh Julie Chu<sup>1</sup>; Han-ying Yang<sup>1</sup>; Yihsuan Tsai<sup>2</sup>; Xuefeng Fung<sup>3</sup>; Ying Ting<sup>2</sup>; David R. Goodlett<sup>2</sup>; Wailap Ng<sup>1</sup>; <sup>1</sup>National Yang Ming University, Taipei, Taiwan; <sup>2</sup>University of Washington, Seattle, WA; <sup>3</sup>Zhejiang University, Hangzhou, China

### NUCLEIC ACIDS, 393 - 420

- ThP 393 **Structural Features of the Anti-HIV DNA Quadruplexes Studied by Electrospray Ionization Mass Spectrometry and Circular Dichroism Techniques**; Xinhua Guo<sup>1</sup>; Shuying Liu<sup>2</sup>; <sup>1</sup>Jilin University, Changchun, China; <sup>2</sup>Changchun Inst Appl Chem, Changchun, China
- ThP 394 **Interaction of Oligonucleotide Sequence with Copper Complexes Using MALDI TOF Mass-Spectrometry**; Alexander G. Majouga<sup>1</sup>; Leonid A. Agron<sup>1</sup>; Elena K. Beloglazkina<sup>1</sup>; Nikolay I. Vorozhtsov<sup>1</sup>; Ilya A. Agron<sup>2</sup>; Nina A. Khristenko<sup>2</sup>; Evgenij N. Nikolaev<sup>2</sup>; Nikolay V. Zyk<sup>1</sup>; <sup>1</sup>Lomonosov Moscow State University, Moscow, Russian Federation; <sup>2</sup>Institute for Energy Problems of Chemical Physics, Moscow, Russia
- ThP 395 **Investigation of Structural Changes of Single Strand DNA Using Glyoxal and Potassium Permanganate Chemical Probes**; Carol E. Parr; Jennifer Brodbelt; <sup>1</sup>University of Texas, Austin, TX
- ThP 396 **Probing Secondary and Tertiary Structures of Ribonucleoprotein Assemblies with Synthetic Deoxyribozymes**; Kevin B. Turner; Micheal German; Arie Hawkins; Alberto Berton; Daniele Fabris; *Univ. of Maryland, Baltimore County, Baltimore, MD*
- ThP 397 **Using Mass Spectrometry to Identify Components of Ribosome Assembly Intermediates**; Romel Dator; Rebecca Rohlf; Patrick A. Limbach; *University of Cincinnati, Cincinnati, OH*
- ThP 398 **Accurate Mass Analysis of Oligonucleotides Using a High Resolution Orbitrap Mass Spectrometer**; Amy Hilderbrand; Mark Sanders; *Thermo Fisher Scientific, Somerset, NJ*
- ThP 399 **An Amide-HILIC Nano-LC/MS Based Platform for Oligonucleotide Profiling**; Anders Mb Giessing; Finn Kirpekar; <sup>1</sup>Univ. of Southern Denmark, Odense, Denmark
- ThP 400 **Rapid Characterization and Sequencing of RNAi Using Liquid Chromatography and Mass Spectrometry**; Vera Ivleva<sup>2</sup>; Sean Mccarthy<sup>1</sup>; Ying-qing Yu<sup>2</sup>; Martin Gilar<sup>1</sup>; <sup>1</sup>Waters, Milford, MA; <sup>2</sup>Waters Corporation, Milford, MA
- ThP 401 **Bioanalytical Method Development for the Determination of Antisense Oligonucleotides in Mouse Plasma By Reverse Phase Ion-Pair LC-MS/MS**; Philip S. Wong; Bruenner Bernd; Christopher James; *Amgen, Thousand Oaks, CA*
- ThP 402 **Characterization of Degradation Pathways of Modified Therapeutic Oligonucleotides Using Mass Sequencing via UPLC MS**; Ann O'brien; *Merck Co Inc, West Point, PA*
- ThP 403 **Sequencing of Chemically Modified RNAs by Exonuclease Digestion and MALDI-TOF Mass Spectrometry**; Hong Gao<sup>1</sup>; Yong Liu<sup>1</sup>; Megan Rumley<sup>2</sup>; Huimin Yuan<sup>1</sup>; Bing Mao<sup>1</sup>; <sup>1</sup>Merck & Co.,

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Inc., Rahway, NJ; <sup>2</sup>Department of Chemistry, North Carolina State Univ, Raleigh, NC
- ThP 404 **Investigating Nuclease Action in qPCR Using Fluorescence and Mass Spectrometric Detection;** Eef Dirksen<sup>1</sup>; Andrew Derome<sup>2</sup>; Kristiane Schmidt<sup>2</sup>; <sup>1</sup>Philips Research, MiPlaza, Eindhoven, Netherlands; <sup>2</sup>Philips Research, Molecular Diagnostics, Eindhoven, Netherlands
- ThP 405 **Characterizing Quantifiable Signature Digestion Products of tRNAs by LC-MS/MS;** Siwei Li; Colette Castleberry; Patrick A. Limbach; *University of Cincinnati, Cincinnati, OH*
- ThP 406 **Electrospray-Generated Radical Cations as Negative Electron Transfer Dissociation (nETD) Reagents for Nucleic Acid Analysis;** Teng-yi Huang; Scott A. McLuckey; *Purdue University, West Lafayette, IN*
- ThP 407 **Novel Software for Engineered/Hybrid Oligonucleotide Mass Spectrometry Data Analysis;** Suping Zheng; Steven Becht; Xiaoya Ding; *PPD, Inc., Middleton, WI*
- ThP 408 **Chemical Synthesis of Carboxymethylated DNA Lesions and LC-MS/MS for Assessing their Formation in DNA upon Exposure to Diazoacetate;** Jianshuang Wang<sup>1</sup>; Yinsheng Wang<sup>1,2</sup>; <sup>1</sup>UC Riverside, Riverside, CA; <sup>2</sup>University of California, Riverside, CA
- ThP 409 **Mass Spectrometry for Revealing the Cytotoxic and Mutagenic Effects of the Minor Groove Adduct O<sup>2</sup>-Methylthymine in Cells;** Nisana Andersen; Jianshuang Wang; Yinsheng Wang; *University of California, Riverside, CA*
- ThP 410 **Mass Spectrometry for Assessing the Chemistry and Biology of DNA Lesions Formed from Byproducts of Glycolysis;** Bifeng Yuan; Lei Xiong; Huachuan Cao; Yong Jiang; Yinsheng Wang; *University of California, Riverside, CA*
- ThP 411 **Interloop Photoproduct Formation in the Human Telomere G-Quadruplexes;** Dian Su; John-Stephen Taylor; Michael L. Gross; *Washington University, St Louis, MO*
- ThP 412 **Analyses of Chemically Modified RNAs by Tandem Mass Spectrometry;** Fanyu Meng; Huimin Yuan; Bing Mao; *Merck & Co., Inc, Rahway, NJ*
- ThP 413 **Base Modification in Subtelomeric DNA – Mass Spectrometric Analysis;** Ilan Vidavsky<sup>1</sup>; Michael L. Gross<sup>1</sup>; Phillip Smiraldo<sup>2</sup>; Woodring E. Wright<sup>2</sup>; <sup>1</sup>Washington University, St Louis, MO; <sup>2</sup>University of Texas Southwestern Medical Center, Dallas, TX
- ThP 414 **Probing RNA Structure by Selective 2' Hydroxyl Acylation Analyzed by Mass Spectrometry (SHAMS);** Alberto Berton<sup>1</sup>; Kevin B. Turner<sup>1</sup>; Robert G. Brinson<sup>2,3</sup>; John P. Marino<sup>3</sup>; Stuart F.J. Le Grice<sup>2</sup>; Daniele Fabris<sup>1</sup>; <sup>1</sup>Univ. of Maryland, Baltimore County, Baltimore, MD; <sup>2</sup>National Cancer Institute, Frederick, MD; <sup>3</sup>Center for Advanced Research in Biotechnology, Rockville, MD
- ThP 415 **Ion Trap Collision-Induced Dissociation of Locked Nucleic Acids;** Anastasia Kharlamova; Teng-yi Huang; Scott A. McLuckey; *Purdue Univ., West Lafayette, IN*
- ThP 416 **Top-Down Mass Spectrometry of Modified RNA;** Monika Schöllnberger; Ulrike Rieder; Ronald Micura; Kathrin Breuker; *University of Innsbruck, Innsbruck, Austria*
- ThP 417 **Determination of Psoralen Binding to Oligodeoxynucleotides by IRMPD and CID;** Suncerae Smith; Julia R. Aponte; Jennifer Brodbelt; *The University of Texas, Austin, TX*
- ThP 418 **Characterization of Interstrand Oligonucleotide Crosslinks by Infrared Multiphoton Dissociation;** Sarah E. Pierce<sup>1</sup>; Lynn J. Guziec<sup>2</sup>; Frank S. Guziec, Jr.<sup>2</sup>; Jennifer S. Brodbelt<sup>1</sup>; <sup>1</sup>The University of Texas, Austin, TX; <sup>2</sup>Southwestern University, Georgetown, TX
- ThP 419 **CID vs. ECD/ETD Sequencing of RNA:Protein Complexes;** Kady Krivos<sup>1</sup>; Patrick A. Limbach<sup>2</sup>; <sup>1</sup>University of Cincinnati, Cincinnati, OH; <sup>2</sup>University of Cincinnati, Cincinnati, OH
- ThP 420 **An Efficient Strategy for the Identification of UV-Induced Protein-RNA Crosslinks by ESI Mass Spectrometry;** Florian Richter<sup>1</sup>; He-Hsuan Hsiao<sup>1</sup>; Nicodeme Paul<sup>2</sup>; Xiao Luo<sup>1</sup>; Dimitry Agafonov<sup>1</sup>; Reinhard Lührmann<sup>1</sup>; Marcus Wahl<sup>1</sup>; Mihaela Zavolan<sup>1</sup>; Henning Urlaub<sup>1</sup>; <sup>1</sup>MPI for Biophysical Chemistry, Goettingen, Germany; <sup>2</sup>Biocenter of the University Basel, Basel, Switzerland
- PROTEOMICS: PHOSPHORYLATION PATHWAYS, 421 - 454**
- ThP 421 **Quantitative Phosphoproteomics Study of the Sperm Membrane Protein During Capacitation;** Han-Jia Lin<sup>2</sup>; Tin-Wei Lin<sup>1,2</sup>; Yu-Lun Chiu<sup>1</sup>; Yet-Ran Chen<sup>1,2</sup>; <sup>1</sup>Academia Sinica, Taipei, Taiwan; <sup>2</sup>National Taiwan Ocean University, Keelung, Taiwan
- ThP 422 **Quantitative Phosphoproteomic Dissection of Signaling Pathways Applied to T Cell Signaling;** Vinh Nguyen; Lulu Cao; Kebing Yu; Arthur Salomon; *Brown University, Providence, RI*
- ThP 423 **Quantitative Phosphoproteome Analysis of a Macrophage Cell Line Reveals LPS-triggered Cell Signaling Events;** Di Wu; Xi Chen; Yong Zhao; Lin Guo; *College of Life Sciences, Wuhan University, Wuhan, China*
- ThP 424 **Phosphopeptide Profile for the Early Diagnosis of Minimal Residual Disease in Response to Doxorubicin Treatment of Leukemia Cell Disease;** Songyun Xu; *Stanford University, Palo Alto, CA*
- ThP 425 **Identification and Quantitation of GSK3 Phosphorylation Sites in MEF2 Transcription Factors;** David Cox<sup>1</sup>; Nathaniel B Nowacki<sup>2</sup>; John C McDermott<sup>2</sup>; <sup>1</sup>MDS Analytical Technology, Concord, Canada; <sup>2</sup>York University, North York, Canada
- ThP 426 **Quantitative Phospho-Proteomics of Human Embryonic Stem Cell Differentiation;** Jeroen Krijgsveld<sup>1,4</sup>; Javier Munoz<sup>1</sup>; Dennis Van Hooft<sup>2</sup>; Martijn Pinkse<sup>1</sup>; Stefan Braam<sup>2,5</sup>; Rune Linding<sup>3</sup>; Christine Mummery<sup>2,5</sup>; Albert J.R. Heck<sup>1</sup>; <sup>1</sup>Utrecht University, Utrecht, The Netherlands; <sup>2</sup>Hubrecht Institute, Utrecht, The Netherlands; <sup>3</sup>Institute of Cancer Research, London, UK; <sup>4</sup>EMBL, Heidelberg, Germany; <sup>5</sup>Leiden University Medical Center, Leiden, The Netherlands
- ThP 427 **Phosphorylation Dynamics of Kinases Across Mitosis;** Kalyan Dulla; Henrik Daub; Renate Hornberger; Albert Ries; Erich Nigg; Roman Körner; *Max Planck Institut für Biochemie, Martinsried, Germany*
- ThP 428 **Temporal Changes in Relative Protein Expression in Response to IGF-1R Signaling Using iTRAQ Quantitative Proteomics in MCF-7 Breast Cancer Cells;** Patrick Murphy<sup>1</sup>; Devanand M. Pinto<sup>2</sup>;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>1</sup>Dalhousie University, Halifax, Canada; <sup>2</sup>NRC, Halifax, NS
- ThP 429 **Identification and Quantitative Profiling of Phosphoproteins Expressed Oligodendrocyte in the Human Neural Stem Cell;** Kun Cho<sup>1</sup>; Eunmin Kim<sup>1</sup>; Gun Wook Park<sup>1</sup>; Jeong Hwa Lee<sup>1</sup>; Kyung-Hoon Kwon<sup>1</sup>; Jinyoung Kim<sup>1</sup>; Kyung Hee Byn<sup>2</sup>; Bong Hee Lee<sup>2</sup>; Jong Shin Yoo<sup>1</sup>; <sup>1</sup>Korea Basic Science Institute, Ochang, South Korea; <sup>2</sup>Gachon University Medical Center, Incheon, South Korea
- ThP 430 **Quantitative Phosphoproteomic Analysis of Signaling Pathways Triggered by Insulin in Rat L6 Myotubes;** Junjie Hou; Peng Xue; Zhensheng Xie; Ziyou Cui; Xiulan Chen; Peng Wu; Linan Shi; Tanxi Cai; Jing Li; Fuquan Yang; *Institute of Biophysics, CAS, Beijing, China*
- ThP 431 **Analysis of Platelet Storage Lesion Signaling Pathways Using Quantitative Proteomics and Phosphopeptide Enrichment;** Geraldine M Walsh; Arash Khosrovi-Eghbal; Eva Rieker; Jason Rogalski; Juergen Kast; *University of British Columbia, Vancouver, BC*
- ThP 432 **Characterising Corticotropin Releasing Hormone Receptor-Induced Signalling Dynamics;** Georgios Efsthathiou<sup>1</sup>; Susan E Slade<sup>1</sup>; Maria Delidaki<sup>1</sup>; Jim Langridge<sup>2</sup>; Joanne B. Connolly<sup>3</sup>; Dimitri K Grammatopoulos<sup>1</sup>; Chris Hughes<sup>3</sup>; James Scrivens<sup>1</sup>; <sup>1</sup>Univ of Warwick, Coventry, UK; <sup>2</sup>Waters Corporation, Manchester, UK; <sup>3</sup>Waters, Manchester, UK
- ThP 433 **Phosphoproteome Analysis of Pathogenic and Non-Pathogenic Pseudomonas Species;** Yasushi Ishihama<sup>1,2</sup>; Naoyuki Sugiyama<sup>1</sup>; Sumiko Ohnuma<sup>1</sup>; Masaru Tomita<sup>1</sup>; Ayshwarya Ravichandran<sup>3</sup>; Sanjay Swarup<sup>3</sup>; <sup>1</sup>Keio University, Tsuruoka, Japan; <sup>2</sup>Presto-JST, Tokyo, Japan; <sup>3</sup>National University of Singapore, Singapore
- ThP 434 **Profiling Global Changes in the Phosphoproteome of Epithelial Cells Following the Inhibition of ERK1/2 MAP Kinase Pathway;** Mathieu Courcelles; Catherine Julien; Sébastien Lemieux; Sylvain Meloche; Pierre Thibault; *IRIC/Université de Montréal, Montréal, Canada*
- ThP 435 **Quantitative Site-Specific Tyrosine Phosphorylation Analysis of EphB Receptor Signaling;** Guoan Zhang<sup>1,3</sup>; David Fenyo<sup>2</sup>; Thomas Neubert<sup>1,3</sup>; <sup>1</sup>Skirball Institute, NYUMC, New York, NY; <sup>2</sup>The Rockefeller University, New York, NY; <sup>3</sup>Skirball Institute, NYUMC, New York, NY
- ThP 436 **Cdc5 Regulates Chromosome Condensation by Phosphorylation of the Condensin Complex;** Julie St-Pierre; Mélanie Douziche; Franck Bazile; Mirela Pascariu; Eric Bonneil; Véronique Sauvé; Hery Ratsima; Damien D'Amours; *IRIC-Université de Montréal, Montréal, QC*
- ThP 437 **Discovery of Anthrax Biomarkers Using Label-Free Quantitative Phosphoproteomics and LC-LTQ-Orbitrap-MS/MS;** Nathan P Manes; Li Dong; Weidong Zhou; Nikitha Reghu; Arjan C Kool; Charles Bailey; Emanuel F Petricoin; Lance A Liotta; Serguei G Popov; *George Mason University, Manassas, VA*
- ThP 438 **Phosphorylation of p300 in the Beta-Catenin Interacting N-Terminus;** Mingquan Guo; Zanzhan Xia; Hong Ma; Nguyen Cu; Michael Kahn; *University of Southern California, Los Angeles, CA*
- ThP 439 **Measurement of Kinase Profiles by Selected Reaction Monitoring;** Ulrike Kusebauch<sup>1</sup>; Johan Malmstroem<sup>2</sup>; Oliver Rinner<sup>2</sup>; Ruedi Aebersold<sup>1,2</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>ETH, Zurich, Switzerland
- ThP 440 **Characterization and Quantitation of Phosphotyrosine Signaling Networks: Selective Enrichment and Mass Spectrometry for Building Targeted Assays to Monitor Phosphorylation Cascades;** Michael Major<sup>2</sup>; Michael Rosenblatt<sup>2</sup>; Paul Taylor<sup>1</sup>; Scott Peterman<sup>2</sup>; Sarah Feuillerat<sup>2</sup>; Mark Schofield<sup>2</sup>; Barbara Kaboord<sup>2</sup>; John Rogers<sup>2</sup>; Michael Moran<sup>1</sup>; <sup>1</sup>Hospital for Sick Children, Toronto, ON; <sup>2</sup>Thermo Fisher Scientific, Rockford, IL
- ThP 441 **Ultrasensitive, Multiplexed Kinase Activity Profiling: Identification of Biomarkers for Cancer Signaling Networks;** Yonghao Yu<sup>1</sup>; Rana Anjum<sup>1</sup>; Kazuishi Kubota<sup>1</sup>; John Rush<sup>2</sup>; Judit Villen<sup>1</sup>; Steven Gygi<sup>1</sup>; <sup>1</sup>Harvard Medical School, Boston, MA; <sup>2</sup>Cell Signaling Technology, Danvers, MA
- ThP 442 **Development and Application of a Label-Free Quantitative Phosphoproteomic Platform to Study Signaling Pathways in Zebrafish;** Erik J. Soderblom<sup>1</sup>; J. Will Thompson<sup>1</sup>; Melanie Philipp<sup>1,2</sup>; Marc G. Caron<sup>1,2</sup>; Arthur Moseley<sup>1</sup>; <sup>1</sup>Duke University School of Medicine, Durham, NC; <sup>2</sup>Department of Cell Biology, Durham, NC
- ThP 443 **A Combined SIMAC-HILIC-TiO<sub>2</sub> Strategy for Large-Scale Phosphoproteomic Analysis of Sub-Milligram Amounts of Sample Material;** Kasper Engholm-Keller; Søren S. Jensen; Martin R. Larsen; *University of Southern Denmark, Odense M, Denmark*
- ThP 444 **Can SILAC Quantitatively Characterize Phosphoproteome in Culture Cells?;** Koshi Imami<sup>1</sup>; Naoyuki Sugiyama<sup>1</sup>; Masaru Tomita<sup>1</sup>; Yasushi Ishihama<sup>1,2</sup>; <sup>1</sup>Institute for Advanced Biosciences, Keio Univ., Tsuruoka, Japan; <sup>2</sup>Presto, Tokyo, Japan
- ThP 445 **Analysis by Blue Native PAGE and Mass Spectrometry of Protein-Protein Interactions within EphB2-NG108 Cells in Response to EphrinB1-Fc Stimulation;** Costel Darie<sup>1</sup>; Helene Cardasis<sup>4</sup>; Guoan Zhang<sup>5</sup>; Kathrin Deinhardt<sup>2</sup>; Vivekananda Shetty<sup>3</sup>; Thomas Neubert<sup>2</sup>; <sup>1</sup>The Mount Sinai Medical Center, New York, NY; <sup>2</sup>Skirball Institute, NYUMC, New York, NY; <sup>3</sup>Immunotope, Inc., Doylestown, PA; <sup>4</sup>Merck & Co., Rahway, NJ; <sup>5</sup>New York University, New York, NY
- ThP 446 **Highly Multiplexed Robust Phosphopeptide Quantitation in Complex Cell Extracts Using Timed MRM Methods;** Brigitte Simons<sup>1</sup>; Jason Hoffert<sup>2</sup>; Mark Knepper<sup>2</sup>; <sup>1</sup>MDS Analytical Technologies, Concord, Canada; <sup>2</sup>NHLBI, Bethesda, MD
- ThP 447 **A Systematic Approach to Identify Protein Kinase Substrates;** Yong Chi<sup>1,2</sup>; Jeffrey J. Posakony<sup>2</sup>; Bruce E. Clurman<sup>2</sup>; Ruedi Aebersold<sup>1</sup>; <sup>1</sup>Institute for Systems Biology, Seattle, WA; <sup>2</sup>Fred Hutchinson Cancer Research Center, Seattle, WA
- ThP 448 **High Sensitivity Nanoscale Multidimensional LC/MS Analysis of Phosphopeptides;** Scott Ficarro<sup>1</sup>; Yi Zhang<sup>1</sup>; Feng Zhou<sup>1</sup>; Job Cardoza<sup>1</sup>; Guillaume Adelmant<sup>1</sup>; Manor Askenazi<sup>2</sup>; Amanda Berg<sup>3</sup>; Gary Valaskovic<sup>3</sup>; Jarrod Marto<sup>1</sup>; <sup>1</sup>Dana-Farber Cancer Institute, Boston, MA; <sup>2</sup>Dana-Farber Cancer Institute and Hebrew University, Boston, MA; <sup>3</sup>New Objective, Inc., Woburn, MA

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 449 **Selective Elution of Singly and Multiply Phosphopeptides in Aliphatic Hydroxy Acid-Modified Metal Oxide Chromatography;** Yutaka Kyono<sup>1</sup>; Naoyuki Sugiyama<sup>1</sup>; Masaru Tomita<sup>1</sup>; Yasushi Ishihama<sup>1,2</sup>; <sup>1</sup>Keio University, Tsuruoka, Japan; <sup>2</sup>Presto JST, Tokyo, Japan
- ThP 450 **Quantitative Phosphoproteome Analysis of the TNF-Signaling Protein having Biphasic Phos-tag/C18 Tip Separation between iTRAQ-Labeling and MS Analysis;** Takuji Nabetani<sup>1</sup>; Yeon-Jeong Kim<sup>1</sup>; Masaki Watanabe<sup>2</sup>; Yoko Ohashi<sup>1</sup>; Hiroyuki Kamiguchi<sup>1</sup>; Yoshio Hirabayashi<sup>1</sup>; <sup>1</sup>Riken BSI, Wako, Japan; <sup>2</sup>Hitachi High-Technologies, Hitachinaka-shi, Japan
- ThP 451 **A New Approach for Quantitative Phosphoproteomic Dissection of Signaling Pathways Applied to T Cell Receptor Activation;** Vinh Nguyen<sup>1</sup>; Arthur Salomon<sup>2</sup>; <sup>1</sup>Brown University MCB Department, Providence, RI; <sup>2</sup>Brown University, Providence, RI
- ThP 452 **Molecular Dissection of Ras-MAPK Signaling Pathway Using Phosphoproteomics and RNA Interference;** Gaëlle Bridon; Malha Sahmi; Marc Therrien; Pierre Thibault; *University of Montreal, Montreal, QC*
- ThP 453 **Phosphopeptide Analysis of Marek's Disease Virus (MDV)-Infected Cells Using Electrostatic Repulsion Hydrophilic Interaction Chromatography (ERLIC), IMAC, and LC/MS/MS;** Ko-yi Chien; Kevin Blackburn; Hsiao-Ching S. Liu; Michael B. Goshe; *NC State University, Raleigh, NC*
- ThP 454 **Enrichment and 12-Plex Profiling of Phosphoproteins Using Affinity Chromatography, SILAC, and Tandem Mass Tags;** Michael Rosenblatt<sup>1</sup>; Michael Major<sup>1</sup>; Julian Saba<sup>2</sup>; Sarah Feuillerat<sup>1</sup>; Rosa Viner<sup>2</sup>; Krystal Rampalli<sup>1</sup>; John Rogers<sup>1</sup>; <sup>1</sup>Thermo Fisher Scientific, Rockford, IL; <sup>2</sup>ThermoFisher Scientific, San Jose, CA
- NEUROPEPTIDES, 455 - 471**
- ThP 455 **New Insights into the Degradation of Neuropeptides by Metalloendopeptidases;** Markus Hardt<sup>1</sup>; Richard Niles<sup>2</sup>; Graeme S. Cottrell<sup>2</sup>; Nigel Bunnett<sup>2</sup>; <sup>1</sup>Boston Biomedical Research Institute, Watertown, MA; <sup>2</sup>Univ. of CA San Francisco, San Francisco, CA
- ThP 456 **Characterization of Drosophila Melanogaster Neuropeptides by MALDI-FT-ICR Imaging MS, MALDI-TOF MS, and MALDI-TOF/TOF MS;** Kristin J. Boggio<sup>1</sup>; Yun-Wei A. Hsu<sup>1</sup>; Paul J. Kowalski<sup>2</sup>; Michael L. Easterling<sup>2</sup>; Michael Rosbash<sup>1</sup>; Jeffrey N. Agar<sup>1</sup>; <sup>1</sup>Brandeis University, Waltham, MA; <sup>2</sup>Bruker Daltonics Inc., Billerica, MA
- ThP 457 **Use of an Antibody Functionalized Surface Specific for Amyloid Precursor Protein in Detection of Beta Amyloid Fragments by Mass Spectrometry;** Steve Roth<sup>1,1</sup>; Vanitha Thulasiraman<sup>1,2</sup>; Amanda Bulman<sup>1,2</sup>; Fiona Plows<sup>1,3</sup>; Mariana Rusa<sup>1,2</sup>; Matthew Hammond<sup>1,4</sup>; <sup>1</sup>Fremont, CA; <sup>2</sup>Bio-Rad Laboratories, Hercules, CA; <sup>3</sup>Bio-Rad Laboratories, Inc., Hercules, CA; <sup>4</sup>Stanford University, Stanford, CA
- ThP 458 **Mapping Neuropeptide Expression in Single Identified Neurons in the Nematode *Ascaris Suum*;** Jessica Jarecki; Kari Andersen; Martha M. Vestling; Antony O. Stretton; *Univ. of Wisconsin, Madison, WI*
- ThP 459 **C-Terminal Methyl Esterification During Neuropeptide Extraction;** Elizabeth A. Stemmler<sup>1</sup>; Elizabeth E. Barton<sup>1</sup>; Laura L. Onderko<sup>1</sup>; Andrew E. Christie<sup>2</sup>; Patsy S. Dickinson<sup>1</sup>; <sup>1</sup>Bowdoin College, Brunswick, ME; <sup>2</sup>Mount Desert Island Biological Laboratory, Salisbury Cove, ME
- ThP 460 **Exploring the Functional Consequences of Neuropeptide Diversity by MALDI Mass Spectrometry;** Limei Hui; Ruibing Chen; Lingjun Li; *Univ. of Wisconsin-Madison, Madison, WI*
- ThP 461 **MS-Based Characterization of Neuropeptides Present in and Released from the Suprachiasmatic Nucleus;** Shifang Ren; Norman Atkins; Ji Eun Lee; Nathan G. Hatcher; Martha U. Gillette; Neil L. Kelleher; Jonathan Sweedler; *University of Illinois at Urbana-Champaign, Urbana, IL*
- ThP 462 **Using Deuterium Exchange Electrospray Mass Spectrometry to Evaluate Inhibitors of Amyloid- $\beta$  Oligomerization;** Zijuan Zhang; Jason J. Evans; Marrianna Torok; *Univ. of Massachusetts, Boston, MA*
- ThP 463 **High Throughput Single Cell MALDI-MS;** Stanislav Rubakhin<sup>1</sup>; Jonathan Sweedler<sup>2</sup>; <sup>1</sup>Beckman Institute, UIUC, Urbana, IL; <sup>2</sup>University of Illinois, Urbana, IL
- ThP 464 **Characterization of Signaling Peptides in Sensory Neurons by MALDI-TOF and LC-ESI-qTOF Mass Spectrometry;** Elena V. Romanova<sup>1</sup>; Stanislav S. Rubakhin<sup>1</sup>; Ferdinand S. Vilim<sup>2</sup>; Jonathan V. Sweedler<sup>1</sup>; <sup>1</sup>University of Illinois, Urbana, IL; <sup>2</sup>Mount Sinai School of Medicine, New York, NY
- ThP 465 **Development and Application of Quantitation via In Cell Combination (QUICC) Methodology for MALDI FTMS Analysis of Neuropeptides in Environmental Stress;** Yuzhuo Zhang; Ruibing Chen; Lingjun Li; *University of Wisconsin, Madison, WI*
- ThP 466 **Discovery of Novel Neuropeptides and Processing Mechanisms Using Mass Spectrometry;** Nitin Gupta; Steven Bark; Weiya Lu; Laurent Taupenot; Daniel O'Connor; Pavel Pevzner; Vivian Hook; *UCSD, La Jolla, CA*
- ThP 467 **MALDI-MS Probing of Non-Covalent Protein Complexes Related to Alzheimer's Disease;** Basri Gülbakan<sup>1</sup>; Bekir Salih<sup>2</sup>; <sup>1</sup>University of Florida, Gainesville, Florida; <sup>2</sup>Hacettepe University, Ankara, Turkey
- ThP 468 **Peptidomic Profiling of Secreted Products from Cardiomyocytes Reveals Novel Natriuretic Peptide Processing;** Nancy Andon; James Bilakovics; Svetlana Nikoulina; Kevin McCowen; Steven Taylor; *Amylin Pharmaceuticals, Inc., San Diego, CA*
- ThP 469 **Expression and Distribution of Neuropeptides in the Nervous System of the Lobster *Homarus Americanus* and their Roles in Development;** Ruibing Chen; Xiaoyue Jiang; Lingjun Li; *UW, Madison, Madison, WI*
- ThP 470 **In vivo Monitoring of Dose Dependent Dynamic Changes of Endogenous Enkephalins by Microdialysis with Capillary LC Multistage MS;** Qiang Li; Jon-Kar Zubieta; Robert Kennedy; *University of Michigan, Ann Arbor, MI*
- ThP 471 **Inhibition of Prohormone Convertase 1/3 Peptide Hormone Processing by Organophosphate Treatment;** Sean Harshman; William C. Grunwald, Jr; David Cool; *Wright State University, Dayton, OH*
- PROTEINS: GENERAL, 472 - 507**
- ThP 472 **Analysis and Characterization of Stigmoid Bodies;** Cathleen Duffy<sup>1</sup>; Bingxing Shi<sup>1</sup>; Karina Tuz<sup>1</sup>; John Walsh<sup>1</sup>; Jeff Ault<sup>2</sup>; Russell J. Ferland<sup>1</sup>; Mark D. Platt<sup>1</sup>;



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>1</sup>Rensselaer Polytechnic Institute, Troy, NY; <sup>2</sup>The Wadsworth Center, Albany, NY
- ThP 473 **Identification of Protein Differences in the *C.elegans* Insulin Signaling Pathway;** Gennifer Merrihew; Gregory L. Finney; Michael J. Maccoss; *University of Washington, Seattle, WA*
- ThP 474 **Novel Interacting Partners of the Escherichia Coli Poly(A) Polymerase I (PAPI): *in vivo* Evidence for Interaction with the Degradosome;** Valerie J. Carabetta; Thomas J. Silhavy; Ileana M. Cristea; *Princeton University, Princeton, NJ*
- ThP 475 **Label-free Proteomic Expression Profiling of Haemophilus Influenza with a High Proteomic Coverage by Dual-Enzymatic Digestion and Long Gradient Nano-LC/Orbitrap;** Jun Li; Timothy Murphy; Aimee Braue; Xiaotao Duan; Robert Straubinger; Jun Qu; *University at Buffalo, Amherst, NY*
- ThP 476 **Redox-Dependent Disulfide Formation in the Zinc-Finger Motif of the SAP30L Co-repressor Protein Studied by ESI FT-ICR Mass Spectrometry;** Janne Jänis<sup>1</sup>; Mikko Laitaoja<sup>1</sup>; Keijo Viiri<sup>2</sup>; Jarkko Valjakka<sup>2</sup>; Olli Lohi<sup>2</sup>; Perttu Permi<sup>3</sup>; Tero Pihlajamaa<sup>3</sup>; Helena Tossavainen<sup>3</sup>; Pirjo Vainiotalo<sup>1</sup>; <sup>1</sup>*University of Joensuu, Joensuu, Finland*; <sup>2</sup>*University of Tampere, Tampere, Finland*; <sup>3</sup>*University of Helsinki, Helsinki, Finland*
- ThP 477 **Analysis of Cross-Linked Cu/Zn-Superoxide Dismutase (SOD1) Associated with Familial Amyotrophic Lateral Sclerosis by MALDI-TOF MS and FT-ICR MS;** Jared R. Auclair; Kristin J. Boggio; Dagmar Ringe; Gregory A. Petsko; Jeffrey N. Agar; *Brandeis University, Waltham, MA*
- ThP 478 **Complexes of Perfluorooctanoic Acid (PFOA) and Liver Fatty Acid Binding Protein Probed by Electrospray-Tandem Mass Spectrometry (ESI-MS/MS);** Raymond E. March<sup>1</sup>; Naomi L. Stock<sup>2</sup>; Kyle Trumpour<sup>1</sup>; Mark Woodcroft<sup>3</sup>; Steven P. Rafferty<sup>1</sup>; David A. Ellis<sup>1,4</sup>; <sup>1</sup>*Department of Chemistry, Trent University, Peterborough, Canada*; <sup>2</sup>*Worsfold Water Quality Centre, Trent University, Peterborough, Canada*; <sup>3</sup>*Department of Biochemistry, Queen's University, Kingston, Canada*; <sup>4</sup>*Canadian Environmental Modelling Centre, Peterborough, Canada*
- ThP 479 **Utilization of a Flow through Membrane Electrospray Probe for Online H/D Exchange ESI-MS;** Thomas P. White<sup>1</sup>; Juan Astorga-wells<sup>2</sup>; Tomas Bergman<sup>2</sup>; Hans Jornvall<sup>2</sup>; Thorleif Lavold<sup>3</sup>; Craig M. Whitehouse<sup>1</sup>; <sup>1</sup>*Analytica of Branford, Inc., Branford, CT*; <sup>2</sup>*Karolinska Institutet, Stockholm, Sweden*; <sup>3</sup>*Biomotif AB, Danderyd, Sweden*
- ThP 480 **Mass Spectrometry-Based Footprinting of HIV-1 Integrase in Complex with a Cellular Cofactor;** Christopher Mckee; Jacques J. Kessl; Jocelyn O. Norris; Nikolozhi Shkriabi; Mamuka Kvaratskhelia; *The Ohio State University, Columbus, OH*
- ThP 481 **Qualitative and Quantitative Analysis of Programmed Ribosomal Frameshifting by Multiple Reaction Monitoring;** Yong Seok Choi<sup>1</sup>; Pei-Yu Liao<sup>2</sup>; Kelvin H. Lee<sup>1</sup>; <sup>1</sup>*University of Delaware, Newark, DE*; <sup>2</sup>*Cornell University, Ithaca, NY*
- ThP 482 **Reconstituted Nucleosomes Containing Recombinant Human Histones for Mass Spectrometry-Based Biophysical Studies;** Sandya Ajith; Stacey Wood; Tanya Panchenko; Ben E. Black; *University of Pennsylvania, Philadelphia, PA*
- ThP 483 **Thermodynamic Analysis of Protein-Ligand Binding Interactions Using SPROX;** Graham M West; Stephanie Cordato; Michael C. Fitzgerald; *Duke University, Durham, NC*
- ThP 484 **Elucidation of the Binding of Abeta 1-40 with Human Apolipoprotein E3 by FPOP Labeling;** Brian C. Gau; Michael L. Gross; *Washington University, St. Louis, MO*
- ThP 485 **Rapid, Isotope-Coded Method for Mapping Protein-Protein and Protein-Ligand Interactions;** Katina L. Johnson; Matthew J Cuneo; Robert E London; Kenneth B Tomer; Jason G Williams; *NIEHS, NIH, DHHS, Research Triangle Park, NC*
- ThP 486 **Identification of Gli2 Protein Complexes in Mammalian Cells Using Nano-LC-MSMS and MALDI-TOF/TOF;** Min Du; Ke Lu; Charles P. Emerson; *Boston Biomedical Research Institute, Watertown, MA*
- ThP 487 **Biochemical and Functional Characterization of Serine Protease HTAR1 in Human Retinal Pigment Epithelial Cell Secretome;** Eunkyung An<sup>1,2</sup>; Supti Sen<sup>2</sup>; Heather Gordish-Dressman<sup>2</sup>; Kristy J. Brown<sup>2</sup>; Yetrib Hathout<sup>2</sup>; <sup>1</sup>*The George Washington University, Washington, DC*; <sup>2</sup>*Children's National Medical Center, Washington, DC*
- ThP 488 **States of DNA Packaging Motors in Bacteriophage: Characterization of Proteins by Mass Spectrometry;** Susan T. Weintraub; Elena T. Wright; Kevin W. Hakala; Philip Serwer; *University of Texas HSC, San Antonio, TX*
- ThP 489 **Protein Interactions of the Telomerase Holoenzyme in Saccharomyces Cerevisiae and Schizosaccharomyces Pombe;** Karin R. McDonald; Virginia A. Zakian; Ileana M. Cristea; *Princeton University, Princeton, NJ*
- ThP 490 **The CrkRS/CDK12 Kinase is Activated by a Novel Isoform of Cyclin K and Phosphorylates the C-Terminal Domain of RNA Pol2;** Annie Moradian<sup>1</sup>; Michael Kuzyk<sup>2</sup>; S.-W. Grace Cheng<sup>1</sup>; Jerry Tien<sup>3</sup>; Emily Schaeffer<sup>3</sup>; Gregg Morin<sup>1,3</sup>; <sup>1</sup>*Genome Sciences Centre, BC, Vancouver, Canada*; <sup>2</sup>*University of Victoria Genom, Victoria, BC*; <sup>3</sup>*University of British Columb, Vancouver, BC*
- ThP 491 **Profiling Akt-Interacting Proteins in Neuronal Cells;** Bill Huang; Hee-yong Kim; *National Institutes of Health, Bethesda, MD*
- ThP 492 **Using Different Mass Spectrometry Approaches to Study PKA Interactome;** Yurong Guo<sup>1</sup>; Yuliang MA<sup>1</sup>; Susan S Taylor<sup>1,2</sup>; <sup>1</sup>*HHMI, San Diego, CA*; <sup>2</sup>*UCSD, San Diego, CA*
- ThP 493 **Beam-type CID of Whole Protein Ions in Excess of 35 kDa;** Chamnongsak Chanthamontri; Scott A. McLuckey; *Purdue University, West Lafayette, IN*
- ThP 494 **Optimization and Evaluation of Subcellular Fractionation Method for Global Proteomic Analysis;** Jong-won Kim; *Monarchlifesciences, Indianapolis, IN*
- ThP 495 **Mass Defect Analysis of Tryptic Peptides from Human Biofluids: A Fresh Look;** Melinda L Toumj; Heather Desaire; *University of Kansas, Lawrence, KS*
- ThP 496 **Evaluation of Dynamic Range of Protein Identification and Quantification by LC-MSMS**



## THURSDAY POSTERS

Posters must be set up 8:00 – 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 – 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 – 2:30 pm.

- |         |   |                                      |  |
|---------|---|--------------------------------------|--|
|         | <p><b>Using a Proteomics Dynamic Range Standard Mixture</b>; <u>Suya Liu</u>; Gilles Lajoie; <i>University of Western Ontario, London, ON, Canada</i></p>   |                                      | <p>of South Florida, Tampa, FL; <sup>2</sup>University of North Texas, Denton, TX</p>  |
| ThP 497 | <p><b>Cleavable Affinity Extraction and Mass Spectrometric Analysis of Small Molecule-Binding Proteins</b>; <u>Nariyasu Mano</u><sup>1,2</sup>; Koichi Sato<sup>2</sup>; Kohei Abe<sup>1,2</sup>; Masaru Mori<sup>2</sup>; Hiroaki Yamaguchi<sup>1,2</sup>; Takaaki Goto<sup>2</sup>; Miki Shimada<sup>1,2</sup>; Junichi Goto<sup>1</sup>; <sup>1</sup>Tohoku University Hospital, Sendai, Japan; <sup>2</sup>Tohoku University, Sendai, Japan</p>   | ThP 507                              | <p><b>Specific Non-covalent Complex between the Major-Sperm-Protein Homology Domain of a Vesicle-Associated-Membrane-Protein-Associated Protein (VAP) and FFAT-Motif Peptides in the Gas Phase</b>; <u>Thomas A. Shaler</u><sup>1</sup>; Stephen E. Kaiser<sup>2</sup>; Chris Becker<sup>1</sup>; <sup>1</sup>PPD Biomarker Discovery Sciences, Menlo Park, CA; <sup>2</sup>Stanford University, Stanford, CA</p>  |
| ThP 498 | <p><b>Study of Proteolytic Digestion Efficiencies Under Conventional Heating and Microwave Irradiation Using MALDI-MS</b>; <u>Chia-chen Chen</u>; Mei-chuan Sun; Jun-Fu Hu; Yen-Peng Ho; <i>National Dong Hwa University, Taipei, Taiwan</i></p>  | <b>PROTEINS: MEMBRANE, 508 - 532</b> |  |
| ThP 499 | <p><b>High-Speed, High-Resolution Antibody Analysis Using sub2 Micron Columns for Peptide Mapping and Intact Protein Characterization</b>; Reno Nguyen; <u>Scott Anderson</u>; Mark Jacyno; Wendy Luo; Ian Chappell; <i>Grace Davison, Deerfield, IL</i></p>  | ThP 508                              | <p><b>Development and Application of X-Ray Footprinting (XF) for Structural Studies of Integral Membrane Proteins</b>; <u>Sayan Gupta</u>; Mark Chance; <i>Case Western Reserve Univ, Upton, NY</i></p>  |
| ThP 500 | <p><b>Temperature Effect on Ultrasound-Assisted Tryptic Digestion of Proteins</b>; <u>Seongjae Shin</u>; Jinhee Kim; Hyo-jik Yang; Gae Ho Lee; Jeongkwon Kim; <i>Chungnam National University, Daejeon, South Korea</i></p>   | ThP 509                              | <p><b>Dissecting the Platelet Proteome by Mass Spectrometric Approaches for Subcellular Protein Inventories Including Analysis of Phosphorylations and Glycosylations</b>; <u>Urs Lewandrowski</u><sup>1</sup>; René P. Zahedi<sup>1</sup>; Stefanie Wortelkamp<sup>1</sup>; Katharina Lohrig<sup>2</sup>; Albert Sickmann<sup>1</sup>; <sup>1</sup>Institute for Analytical Sciences, Dortmund, Germany; <sup>2</sup>Ruhr-University-Bochum, Bochum, Germany</p>  |
| ThP 501 | <p><b>Finding the Needles in the Hay Stack – Identifying Interacting Regions through Cross-Linking</b>; <u>A. Jimmy Ytterberg</u><sup>1</sup>; Elena E. Grintsevich<sup>2</sup>; Dmitri S. Kudryashov<sup>2</sup>; Zeynep A. Oztug Durera<sup>2</sup>; Emil Reisler<sup>2</sup>; Ole N. Jensen<sup>1</sup>; Joseph A. Loo<sup>2</sup>; <sup>1</sup>University of Southern Denmark, Odense, Denmark; <sup>2</sup>UCLA, Los Angeles, CA</p>   | ThP 510                              | <p><b>Topological Study of Membrane Proteins by Fenton Oxidation and Mass Spectrometry</b>; <u>Hye Kyong Kweon</u>; Xuequn Chen; Philip Andrews; <i>The University of Michigan, Ann Arbor, MI</i></p>  |
| ThP 502 | <p><b>Evaluation of Cross-Linker and Protein Dynamics in Cross-Linking Coupled to Mass Spectrometry Experiments</b>; <u>Alana Dos Reis Figueiredo</u>; Paulo C. T. Souza; Munir S. Skaf; Fabio C Gozzo; <i>Institute of Chemistry - University of Campinas, Campinas, Brazil</i></p>  | ThP 511                              | <p><b>Cysteine Chemical Cleavage-Assisted Tryptic Digestion for Membrane Proteomics</b>; <u>Mio Iwasaki</u><sup>1,2</sup>; Takeshi Masuda<sup>2</sup>; Masaru Tomita<sup>1,2</sup>; Yasushi Ishihama<sup>2,3</sup>; <sup>1</sup>Keio University, Fujisawa, Japan; <sup>2</sup>Institute for Advanced Biosciences Keio University, Tsuruoka, Japan; <sup>3</sup>Presto, Japan Science and Technology Agency, Tokyo, Japan</p>   |
| ThP 503 | <p><b>Protein Footprinting by Peroxide Photolysis Using Hg Lamp and 213 nm Laser as Radiation Sources</b>; <u>Eduardo J Pilau</u>; Alexandre F. Gomes; Marcelo A. O. Silva; Marco Aurelio Z. Arruda; Fabio C Gozzo; <i>IQ - University of Campinas, Campinas, Brazil</i></p>  | ThP 512                              | <p><b>Diagnostic Cell Surface Protein Barcodes of Blood Cancers</b>; <u>Andreas J Hofmann</u><sup>1</sup>; Bertran Gerrits<sup>2</sup>; Silvia Behnke<sup>3</sup>; Alexander Schmidt<sup>1</sup>; Thomas Bock<sup>1</sup>; Damaris Bausch-Fluck<sup>1</sup>; Ruedi Aebersold<sup>1</sup>; Holger Moch<sup>3</sup>; Marianne Tinguely<sup>3</sup>; Bernd Wollscheid<sup>1</sup>; <sup>1</sup>Swiss Federal Institute of Technology, Zurich, Switzerland; <sup>2</sup>Functional Genomics Center Zurich, Zurich, Switzerland; <sup>3</sup>University Hospital Zurich, Zurich, Switzerland</p>            |
| ThP 504 | <p><b>Use of Marker Ions and High Resolution Precursor Ion Scan for the Identification of Cross-linked Peptides</b>; <u>Fabio C Gozzo</u>; Amadeu H Iglesias; Luiz Fernando Arruda Santos; <i>IQ - University of Campinas, Campinas, Brazil</i></p>   | ThP 513                              | <p><b>Isolation and Characterization of the Human Sigma-1 Receptor Using Novel Affinity Ligand Purification and Mass Spectrometry</b>; <u>Hongbo Gu</u>; Carthene R. Bazemore-Walker; <i>Brown University, Providence, RI</i></p>  |
| ThP 505 | <p><b>Enhanced Detection of Intact Proteins by Nanole-MS Using a Novel Trapping Mode on a Hybrid Linear Ion Trap Mass Spectrometer</b>; Paul Drogaris<sup>2,6</sup>; <u>Feng Zhong</u><sup>1</sup>; J.c. Yves Leblanc<sup>1</sup>; Alain Verreault<sup>2,4</sup>; Jennifer Fitzgerald<sup>5</sup>; Noel Lowndes<sup>5</sup>; Pierre Thibault<sup>3,6</sup>; <sup>1</sup>MDS Analytical Technologies, Concord, ON, Canada; <sup>2</sup>Université de Montréal, Montréal, QC; <sup>3</sup>Univ. of Montreal, Montreal, QC; <sup>4</sup>Dept. Pathology &amp; Cell Biology (U de Montreal), Montreal, Canada; <sup>5</sup>Dept. Biochemistry National University of Ireland, Galway, Ireland; <sup>6</sup>Institut for Research in Immunology and Cancer, Montreal, Canada</p> | ThP 514                              | <p><b>Quantitative MS-Based Proteomics Strategy to Decipher Both Stable and Transient Interactors of Membrane Proteins in Yeast Peroxisomes</b>; <u>Silke Oeljeklaus</u><sup>1</sup>; Benedikt S. Reinartz<sup>1</sup>; Michael Kohl<sup>1</sup>; Christian Stephan<sup>1</sup>; Ralf Erdmann<sup>2</sup>; Helmut E. Meyer<sup>1</sup>; Bettina Warscheid<sup>1</sup>; <sup>1</sup>Medizinisches Proteom-Center, Bochum, Germany; <sup>2</sup>Department for Systems Biochemistry, Bochum, Germany</p>   |
| ThP 506 | <p><b>Extraction and Identification of Proteins from a Pottery Matrix Using Microwave-Assisted Enzymatic Digestion and Tandem Mass Spectrometry</b>; <u>Andrew Barker</u><sup>2</sup>; Steve Wolverson<sup>2</sup>; Barney Venables<sup>2</sup>; Stanley M. Stevens, Jr.<sup>1</sup>; <sup>1</sup>University</p>  | ThP 515                              | <p><b>Comprehensive Proteomic Analysis of Yersinia Pestis Membrane Proteins</b>; <u>Moo-Jin Suh</u><sup>1</sup>; Rembert Pieper<sup>1</sup>; Shih-Ting Hung<sup>1</sup>; David J. Clark<sup>1</sup>; Jeffrey M. Robinson<sup>1</sup>; Hamid Alami<sup>1</sup>; Prashanth P. Parmar<sup>1</sup>; Srilatha Kuntumalla<sup>1</sup>; Christine L. Bunai<sup>1</sup>; Robert D. Perry<sup>2</sup>; Robert D. Fleischmann<sup>1</sup>; Scott N. Peterson<sup>1</sup>; <sup>1</sup>J Craig Venter Institute, Rockville, MD; <sup>2</sup>Department of Microbiology, University of Kentucky, Lexington, KY</p> |
|         |   | ThP 516                              | <p><b>Quantitative Proteomics Analysis of Cell Surface Caveolae in Mammary Epithelial Tumor Cells</b>; <u>Yu</u></p>   |

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 517 **Zi Zheng**; Ivan R. Nabi; Leonard J. Foster; *Univeristy of British Columbia, Vancouver, Canada*  
**Analysis of the Membranome of Breast Cancer Cell Lines by Comparative Shotgun Proteomics Identifies Tumor Associated Antigens**; **Lori C Stansberry**; Eberhard Durr; Mark A Miller; Joseph G. Joyce; Loren D. Schultz; *Merck and Co., West Point, PA*
- ThP 518 **The Membrane Topology and the Dynamics of Melittin within the Liposomes**; **Kazumi Saikusa**; Yo Kono; Shunsuke Izumi; *Graduate School of Science, Hiroshima University, Higashihiroshima, Japan*
- ThP 519 **Determination of Membrane Protein Topology Expressed in a Wheat Germ Cell-Free Expression System Using Proteolysis Reactions and Mass Spectrometry**; **Mark Scalf**; Michael A. Goren; Mathew R. Lockett; Brian G. Fox; Lloyd M. Smith; *University of Wisconsin, Madison, WI*
- ThP 520 **A Structural Investigation into the CB2 Receptor Using Covalent Ligands**; **Dennis Szymanski**<sup>1</sup>; Malvina Papanastasiou<sup>2</sup>; Alexander Makriyannis<sup>1</sup>; <sup>1</sup>*Center for Drug Discovery, Boston, MA*; <sup>2</sup>*Northeastern University, Boston, MA*
- ThP 521 **Proteomics Analysis of Mitotic Golgi Disassembly and Reassembly Using a Reconstitution System**; **Xuequn Chen**; Eric Simon; Maureen Kachman; Yanzhuang Wang<sup>1</sup>; Philip Andrews<sup>2</sup>; <sup>1</sup>*The University of Michigan, Ann Arbor*
- ThP 522 **Observation of Processed Proteins by ID Gel LC-MS/MS and Scaffold Data Visualization Software**; **Randy J. Arnold**; Rohini R. Kohli; Richard W. Hardy; *Indiana University, Bloomington, IN*
- ThP 523 **Investigation of Protein Interactions of Gamma-Glutamyl Carboxylase and Vitamin K-Dependent Substrates Using Covalent Crosslinking and Mass Spectrometry**; **Christine Hebling**; James Jorgenson; *University of North Carolina, Chapel Hill, NC*
- ThP 524 **Efficiency Comparison of Magnetic and Conventional Protein A/G Beads for Membrane Protein Immunoprecipitation for MS Analysis**; **Hui Jiang**; Alexis Ramos; Xudong Yao; *Department of Chemistry, University of Connecticut, Storrs, CT*
- ThP 525 **Approaching the Complexity of Membrane Proteomes Digested with Elastase Using IEF/nLC-MALDI-MS/MS**; **Benjamin Rietsche**<sup>1</sup>; Tabiwang N. Arrey<sup>1</sup>; Bjoern Meyer<sup>1</sup>; Sandra Bornemann<sup>1</sup>; Dimitrios Papatiriou<sup>1</sup>; Ansgar Poetsch<sup>2</sup>; Michael Karas<sup>1</sup>; <sup>1</sup>*University Frankfurt, Frankfurt, Germany*; <sup>2</sup>*University Bochum, Bochum, Germany*
- ThP 526 **In-Gel Digestion of Mouse Membrane Protein Extract: 85% Increase in Peptide Recovery and Identification of Very Low Abundance Hydrophobic Proteins**; **Chris Adams**<sup>1</sup>; Allis S. Chien<sup>1</sup>; Daniel J. Simpson<sup>2</sup>; Bill Dailey<sup>2</sup>; Sergei Saveliev<sup>2</sup>; <sup>1</sup>*Stanford Univ., Stanford, CA*; <sup>2</sup>*Promega Corp., Madison, WI*
- ThP 527 **Development of LC and LC-MS/MS Methods for the Analysis of p14 Fusion-Associated Small Transmembrane Protein**; Reno Nguyen<sup>1</sup>; **Wendy Luo**<sup>1</sup>; Roberto de Antueno<sup>2</sup>; Roy Duncan<sup>2</sup>; <sup>1</sup>*Grace Davison Discovery Scie, Deerfield, IL*; <sup>2</sup>*Dalhousie University, Nova Scotia, Canada*
- ThP 528 **Sequential Gel-Assisted Digestion for Concomitant Analysis of Phosphorylated and Glycosylated Membrane Proteome**; **Chih-Wei Chien**<sup>1</sup>; Chia-li Han<sup>2</sup>; Chia-feng Tsai<sup>2</sup>; Yi Ting Wang<sup>2</sup>; Yu-ju Chen<sup>2</sup>; <sup>1</sup>*Dep. of Chemistry National Tsing Hua University, Hsinchu, Taiwan*; <sup>2</sup>*Institute of Chemistry, Academia Sinica, Taipei, Taiwan*
- ThP 529 **Determination of GTPase Expression in Membrane and Cytosolic Fractions after Bisphosphonate Treatment**; **Marjo Jauhiainen**<sup>1,3</sup>; Seppo Auriola<sup>1</sup>; Hannu Mönkkönen<sup>1,2</sup>; Michel Boutin<sup>3</sup>; Jukka Mönkkönen<sup>1</sup>; Pierre Thibault<sup>3</sup>; <sup>1</sup>*University of Kuopio, Kuopio, Finland*; <sup>2</sup>*INSERM, Universite Claude Bernard Lyon, Lyon, France*; <sup>3</sup>*Université de Montréal, Montreal, Canada*
- ThP 530 **Isolation and Mass Spectrometric Analysis of Integral Membrane Proteins and their Interacting Partners**; **Kwangwon Lee**; Anne M. Distler; Micelle Jennings; Janos Kerner; Charles Hoppel; *Case Western Reserve Univers, Cleveland, OH*
- ThP 531 **Mass Spectrometric Analysis of the GPCR AIDS Virus Co-receptor, CXCR4**; **Ting Liu**; Joyce Brewer; Royce Wilkinson; John Mills; Martin Teintze; Edward Dratz; *Montana State University, Bozeman, MT*
- ThP 532 **The Composition of Integrin Beta 1 Complexes Investigated by Formaldehyde Cross-Linking and Mass Spectrometry**; **Cordula Klockenbusch**; Juergen Kast; *University of British Columbia, Vancouver, Canada*
- PROTEINS: RECOMBINANT, 533 - 551**
- ThP 533 **Methods for Rapid Characterization of O-Linked Glycosylation in a Yeast Derived Recombinant GM-CSF Protein**; **Melissa Zolodz**; Halyna E. Narepekha; Justin Sperry; James Carroll; Ned M. Mozier; *Pfizer, Chesterfield, MO*
- ThP 534 **An Alternative Approach for Characterization of Impurities and Site-specific Modifications in Protein Drugs**; **Hongwei Xie**; Martin Gilar; John C. Gebler; *Waters Corporation, Milford, MA*
- ThP 535 **Identification and Quantification of Post-Translational Modifications of Monoclonal Antibodies by Top-Down HPLC/MS**; **Pavel V. Bondarenko**; Gang Xiao; Jason L. Richardson; Thomas M. Dillon; Da Ren; Zhongqi Zhang; *Amgen Inc., Thousand Oaks, CA*
- ThP 536 **Emerging Role of Top Down LC/MS Analysis in Biopharmaceutical Characterization and Release Testing**; **Himanshu Gadgil**; David Hambly; Da Ren; Michael J Treuheit; Bruce Kerwin; *Amgen Inc., Seattle, WA*
- ThP 537 **Application of Analytical Methods to Characterize Protein Aggregation for a Biopharmaceutical Drug Program**; **Jennifer F. Nemeth**; Michael Brigham-Burke; Audrey Baker; Eilyn Lacy; Cathy Gress; Angela Interrante; Yun Seung Kyung; Justin Sprenkle; *Centocor R&D, Radnor, PA*
- ThP 538 **Characterizing Five Deamidation Products from a Single Asparagine Residue in Recombinant mAb's Through LC-MS Peptide Mapping**; **Adam W. Lucka**; Rekha Patel; Christine Nowak; Bruce Andrien; *Alexion Pharmaceuticals, Cheshire, CT*
- ThP 539 **Withdrawn**
- ThP 540 **Novel LC-MS and Gel LC-MS Platforms with Electron Transfer Dissociation for the Characterization of Therapeutic Monoclonal Antibodies**; **Yi Wang**; Cheryl Lu; Shiaw-lin Wu;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- William S. Hancock; *Northeastern University, Boston, MA*
- ThP 541 **Quantitation of Glycoforms in Recombinant IgG Antibody by LC/MS;** Carola WN Damen<sup>2</sup>; Jeff Mazzeo<sup>1</sup>; Asish Chakraborty<sup>1</sup>; Weibin Chen<sup>1</sup>; <sup>1</sup>*Waters Corporation, Milford, MA;* <sup>2</sup>*Dept. of Pharmacy, The Netherland Cancer Inst, Amsterdam, The Netherlands*
- ThP 542 **2D SEC – RP LC/MS for the Analysis of Difficult Recombinant Protein Samples;** Wendy L. White; Jon D. Williams; *GlaxoSmithKline, Rtp, NC*
- ThP 543 **Top-Down High Resolution Tandem Mass Spectrometry for Characterization of Conserved Automethylation in Coactivator Associated Arginine Methyltransferase 1;** Peter Kuhn; Qingge Xu; Erika Cline; Di Zhang; Ying Ge; Wei Xu; *University of Wisconsin-Madison, Madison, WI*
- ThP 544 **Straight Protein QC by Benchtop MALDI-TOF Top-Down Sequencing;** Darwin Asa<sup>1</sup>; Anja Resemann<sup>2</sup>; Detlev Suckau<sup>2</sup>; Arndt Asperger<sup>2</sup>; <sup>1</sup>*Bruker Daltonics Inc, Billerica, MA;* <sup>2</sup>*Bruker Daltonik GmbH, Bremen, Germany*
- ThP 545 **Enhanced Utility of the Advion Triversa Ion Source for Protein Characterization in the Biopharmaceutical Industry;** Steven C. Pomerantz; Jennifer F. Nemeth; *Centocor Research and Development, Radnor, PA*
- ThP 546 **Isolation and Characterization of GST-Fusion Proteins by GSH-Bound Gold Nanodots for MALDI MS Analysis;** Cheng-Tai Chen<sup>1</sup>; Chao-Zong Liu<sup>2</sup>; Yu-Chie Chen<sup>1</sup>; <sup>1</sup>*National Chiao Tung University, Hsinchu, Taiwan;* <sup>2</sup>*Tzu Chi University, Hualien, Taiwan*
- ThP 547 **Mass Spectrometric Analysis of Proteolytic Products from MBP-Containing Heterologous Proteins Expressed in *Pichia pastoris*;** Zhiguo Li<sup>1</sup>; Wilson Leung<sup>1</sup>; Joan Lin-Cereghino<sup>1</sup>; Geoffrey Lin-Cereghino<sup>1</sup>; Fan Xiang<sup>2</sup>; Andreas Franz<sup>1</sup>; <sup>1</sup>*University of the Pacific, Stockton, CA;* <sup>2</sup>*Shimadzu Biotech, Pleasanton, CA*
- ThP 548 **ESI-MS Characterization of a Novel Immunoconjugate: THIOMAB-Drug Conjugate (TDC);** Galahad U. Deperalta; Lee Chien; Victor Ling; *Genentech, Inc., S. San Francisco, CA*
- ThP 549 **The Comparison of a Therapeutic Complex Glycoprotein (TNK-tPA) from Both Innovator and Biosimilar Manufacturing Processes Using Mass Spectrometry;** Haitao Jiang; Shiao-lin Wu; William S. Hancock; *Northeastern University, Boston, MA*
- ThP 550 **Glycosylation Analysis of IL23r Using Mass Spectrometry: Elucidation of Glycosylation Sites and Characterization of Attached Glycan Structures;** Jia Zhao; Yan-hui Liu; Paul Reichert; Birendra Pramanik; *Schering Plough Research Institute, Kenilworth, NJ*
- ThP 551 **ER Stress-Induced Binding of Group VIA PLA2 (iPLA2 $\beta$ ) to Calnexin Identified by Mass Spectrometric Characterization of the iPLA2 $\beta$  Interactome;** Haowei Song<sup>1</sup>; Henry W. Rohrs<sup>2</sup>; Jack Ladenson<sup>1</sup>; John Turk<sup>1</sup>; <sup>1</sup>*Washington University School of Medicine, St. Louis, MO;* <sup>2</sup>*Washington University Chemistry Department, St. Louis, MO*
- PROTEINS: MODIFIED, 552 - 578**
- ThP 552 **Characterization of a Novel Amine Derivatization to Investigate the Structural Properties of Proteins by Mass Spectrometry;** Lake N. Paul; Kenneth B. Tomer; *NIEHS, Raleigh, NC*
- ThP 553 **Lysine-Methylation: Mass Spectrometric Approaches for the Identification of Modified Proteins;** Rosalind Yc Tan; Manfred R. Raida; Choon-Keow Ng; Bernard PM Tham; *Experimental Therapeutics Ce, Singapore, Singapore*
- ThP 554 **Mapping Iodination Sites of Whole Proteins by MALDI-MS and Gas Phase Photodissociation;** Qingyu Sun; Ryan R. Julian; *University of California, Riverside, CA*
- ThP 555 **14 and 28 Da Mass Shifts Detected by MALDI-MS as Evidence and Discrimination for Artificial Methylations of Aspartate and Glutamate;** Guoqiang Chen; Zhili Li; *Institute of Basic Medical Sciences, CAMS & PUMC, Beijing, China*
- ThP 556 **Enhanced Peptide Peak Intensity with the use of Cysteine Modifiers and MALDI-TOF/TOF for Improvement of Protein Identification;** Masoud Zabet Moghaddam; Satomi Niwayama; *Texas Tech University, Lubbock, TX*
- ThP 557 **Liquid Chromatography/Mass Spectrometric Analysis of Phosphorylation Site of Organophosphate Treated Chymotrypsin;** Kaisheng Jiao; Catherine F. Yang; *Department of Chem and Biochem, Rowan University, Glassboro, NJ*
- ThP 558 **Impact of Deamidation and Oxidation on Biopharmaceutical Drug Candidate Stability and Activity Using UPLC ESI-TOF Peptide Mapping;** Ying Zhang; Brian Wiggins; Shujun Bai; Lihe Su; Yen-Ming Hsu; Alex Buko; Sharon Gao; *Biogen Idec, San Diego, CA*
- ThP 559 **Optimizing the Kinetics of the Indirect Oxidation Pathway for an Electrochemistry-Based Protein Surface Mapping Pipeline;** Paul Abraham; Carlee Mcclintock; Jerry Parks; Vilmos Kertesz; Robert Hettich; *Oak Ridge Nntl. Laboratory, Oak Ridge, TN*
- ThP 560 **Accurate Evaluation of Transcription Factor Acetylation Stoichiometry and Kinetics;** Steven H. Seeholzer; Gerd Blobel; *Children's Hospital of Philadelphia, Philadelphia, PA*
- ThP 561 **Using Mass Spectrometry to Characterize the Novel Disulfide Linkage in the Endonuclease Motif of the *Arabidopsis* CPSF30 Ortholog;** Balasubrahmanyam Addepalli<sup>1</sup>; Arthur G. Hunt<sup>2</sup>; Patrick A. Limbach<sup>1</sup>; <sup>1</sup>*University of Cincinnati, Cincinnati, OH;* <sup>2</sup>*University of Kentucky, Lexington, KY*
- ThP 562 **A Mass Spectrometric Comparison of the Interactions of Cisplatin and Transplatin with Myoglobin;** Ting Zhao; Fred King; *West Virginia Univ., Morgantown, WV*
- ThP 563 ***In vitro* glycation of glyoxalase II by methylglyoxal Characterization of the glycation sites of by LC/MS/MS;** Jean Pierre Le Caer; Olivier Laprevote; Naima Nhiri; Eric Jacquet; Jean-Yves Lallemand; *CNRS Institut de Chimie des Substances Naturelles, Gif sur Yvette, France*
- ThP 564 **Role of Hemoglobin Oxidation in the Formation of the Red Blood Cell Storage Lesion;** Grady Blacken; Yi Wang; Ryan Gallagher; Xiaoyun Fu; *Puget Sound Blood Center, Seattle, WA*
- ThP 565 **Identification of Candidate Plasma Biomarkers for Diabetic Complications: *In vivo* Methylglyoxal Modified Hotspots;** Mike Kimzey<sup>2</sup>; Michael A

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- |   |  |
|---|--|
| <p>ThP 566 <b>Characterization of the Conjugation Sites in Cleavable Antibody-Maytansinoid Conjugates Using UV Absorbance and Fluorescence Detection Combined with Mass Spectrometry;</b> <u>Alexandru C. Lazar</u>; Xuan Chen; Godfrey Amphlett; Rajesh Krishnamurthy; <i>ImmunoGen, Inc., Waltham, MA</i></p> <p>ThP 567 <b>Elucidation of PEGylation Site with a Combined Approach of In-Source Fragmentation and CID MS/MS;</b> <u>Xiaojun Lu</u>; P. Clayton Gough; Michael R. DeFelippis; Lihua Huang; <i>Eli Lilly and Company, Indianapolis, IN</i></p> <p>ThP 568 <b>Probing the Structure of the Gram-Positive Ribosome with Chemical Labeling;</b> <u>Matthew A. Lauber</u>; William E. Running; James P. Reilly; <i>Indiana University, Bloomington, IN</i></p> <p>ThP 569 <b>Top-down and Bottom-up Analysis of Nitrated Proteins by ECD, CID and IRMPD Mass Spectrometry;</b> <u>Victor A. Mikhailov</u><sup>1</sup>; Andrew W. Jones<sup>1</sup>; Jesus Iniesta<sup>2</sup>; Helen Cooper<sup>1</sup>; <sup>1</sup><i>University of Birmingham, Birmingham, UK;</i> <sup>2</sup><i>University of Alicante, Alicante, SPAIN</i></p> <p>ThP 570 <b>Verification of Selenomethionine Incorporation by Top-Down and Bottom-Up Mass Spectrometry;</b> <u>Xu Wang</u><sup>1,2</sup>; Jeremiah Tipton<sup>2</sup>; Mark R. Emmett<sup>2</sup>; Alan G. Marshall<sup>1,2</sup>; <sup>1</sup><i>Florida State University, Tallahassee, FL;</i> <sup>2</sup><i>Nat'l High Magnetic Field Lab, Tallahassee, FL</i></p> <p>ThP 571 <b>Development of a Microfluidic Quench-Flow Interface Compatible with ESI-FT-ICR MS for the Characterization of Enzyme Mechanisms;</b> <u>David J Clarke</u>; Adam A. Stokes; Pat Langridge-smith; C. Logan Mackay; <i>SIRCAMS, Dept. Chemistry, University of Edinburgh, Edinburgh, U.K.</i></p> <p>ThP 572 <b>Characterization of PEGylated-Peptides and Site Localization of Attachment with High Resolution ETD Mass Spectrometry;</b> Andrew Carr<sup>1</sup>; Tonya Second<sup>2</sup>; Robert Cummins<sup>1</sup>; Rosa Viner<sup>2</sup>; <u>Lihua Huang</u><sup>1</sup>; <sup>1</sup><i>Eli Lilly and Company, Indianapolis, IN;</i> <sup>2</sup><i>Thermo Fisher Scientific, San Jose, CA</i></p> <p>ThP 573 <b>Redox-Regulation of p53: Identification of Redox Modifications Using Top Down FT-ICR Mass Spectrometry;</b> <u>Jenna Scotcher</u><sup>1</sup>; David J Clarke<sup>1</sup>; Penka Nikolova<sup>2</sup>; Ted Hupp<sup>3</sup>; Peter Sadler<sup>4</sup>; Pat Langridge-Smith<sup>1</sup>; C. Logan Mackay<sup>1</sup>; <sup>1</sup><i>SIRCAMS, Dept. Chemistry, University of Edinburgh, Edinburgh, UK;</i> <sup>2</sup><i>Dept. Biochemistry, King's College London, London, UK;</i> <sup>3</sup><i>University of Edinburgh Cancer Center, Edinburgh, UK;</i> <sup>4</sup><i>Dept. Chemistry, University of Warwick, Coventry, UK</i></p> <p>ThP 574 <b>Type IV Pilin Profiling Reveals a Crucial Role of Glycerophosphate Modification in the Colonization Properties of Neisseria Meningitidis;</b> <u>Julia Chamot-rooke</u><sup>1</sup>; Christian Malosse<sup>1</sup>; Guillaïn Mikaty<sup>2</sup>; Magali Soyer<sup>2</sup>; Patricia martin<sup>2</sup>; Philippe Chafey<sup>3</sup>; Guilhem Clary<sup>3</sup>; Luc Camoin<sup>3</sup>; Xavier Nassif<sup>2</sup>; Guillaume Dumenil<sup>2</sup>; <sup>1</sup><i>CNRS UMR7651 - Ecole Polytechnique, Palaiseau, France;</i> <sup>2</sup><i>INSERM U570 - Faculté de médecine Necker, Paris, France;</i> <sup>3</sup><i>INSERM - Institut Cochin, Paris, France</i></p> <p>ThP 575 <b>FT-ICR MS Identification of Non-Pathologic Oxidative Modifications on Creatine Kinase in Alzheimer's and in Control Brains;</b> Shannon M.</p> | <p>Eliuk; Matthew B. Renfrow; Stephen Barnes; <u>Helen Kim</u>; <i>University of Alabama at Birmingham, Birmingham, AL</i></p> <p>ThP 576 <b>Withdrawn</b></p> <p>ThP 577 <b>Characterization of S-thiolation on Secreted Proteins from E. Coli by Mass Spectrometry;</b> <u>Peiran Liu</u><sup>2</sup>; Malloreë Tarnowski<sup>1</sup>; Brian Omara<sup>2</sup>; Wei Wu<sup>2</sup>; Haiying Zhang<sup>2</sup>; James Tamura<sup>2</sup>; Michael Ackerman<sup>2</sup>; Li Tao<sup>2</sup>; Reb Russell<sup>2</sup>; <sup>1</sup><i>University of Michigan, Ann Arbor, MI;</i> <sup>2</sup><i>Bristol-Myers Squibb, Pennington, NJ</i></p> <p>ThP 578 <b>Identification and Characterization of Deamidation Sites of Human Growth Hormone;</b> <u>Weidong Cui</u><sup>1</sup>; Chunxiang Yao<sup>1</sup>; Tzu-yung Lin<sup>1</sup>; Cheng Lin<sup>1</sup>; Peter B. O'Connor<sup>2</sup>; <sup>1</sup><i>Boston University School of Medicine, Boston, MA;</i> <sup>2</sup><i>University of Warwick, Coventry, UK</i></p> |
| <b>TOXICOLOGY, 579 - 602</b>  |  |
| <p>ThP 579 <b>GC-MS/MS Support in the Evaluation of the Toxicokinetics of VX Following Intravenous and Percutaneous Exposures in Minipigs;</b> <u>Jeffrey M. Mcguire</u>; Stanley W. Hulet; E. Michael Jakubowski, Jr; Sandra A. Thomson; <i>US Army ECBC, Apg, MD</i></p> <p>ThP 580 <b>Quantification of Benzocaine in Rat Plasma Using UPLC-ES/MS/MS;</b> <u>Kellie Woodling</u><sup>1</sup>; Tong Zhou<sup>2</sup>; Linda VonTungeln<sup>1</sup>; Frederick Beland<sup>1</sup>; Kevin Greenlees<sup>2</sup>; Daniel R. Doerge<sup>1</sup>; <sup>1</sup><i>Nat. Ctr. Tox. Res., Jefferson, AR;</i> <sup>2</sup><i>FDA/Center for Veterinary Medicine, Rockville, MD</i></p> <p>ThP 581 <b>Serum Metabolome and Frontal Cortex Proteome Alterations in C57Bl/6 Mice Persist Past Withdrawal of Chronic Tobacco Smoke Exposure;</b> <u>Rachel Neal</u>; Sadiatu Musah; Robert M. Greene; M Michele Pisano; <i>University of Louisville, Louisville, KY</i></p> <p>ThP 582 <b>Quantitative LC/MS Screening for Illicit Drugs in Biological Matrices Using Ultrahigh Resolution Mass Analysis and Accurate Mass Confirmation;</b> <u>Kevin J. Mchale</u><sup>1</sup>; Mark Sanders<sup>2</sup>; <sup>1</sup><i>Thermo Fisher, Somerset, NJ;</i> <sup>2</sup><i>Thermo Fisher Scientific, Somerset, NJ</i></p> <p>ThP 583 <b>A Quick LC/MS/MS Method for the Analysis of Common Benzodiazepines and Opiates;</b> <u>Tania A. Sasaki</u><sup>1</sup>; Sumandeep Rana<sup>2</sup>; Wayne B. Ross<sup>2</sup>; <sup>1</sup><i>Applied Biosystems, Foster City, CA;</i> <sup>2</sup><i>Redwood Toxicology, Santa Rosa, CA</i></p> <p>ThP 584 <b>Metabonomic Profiling of D-Serine-Induced Toxicity Biomarkers in Rat Urine;</b> <u>Rhonda L. Pitsch</u><sup>1,3</sup>; Claude Grigsby<sup>1</sup>; Nicholas DelRaso<sup>1</sup>; Louis Tamburino<sup>2</sup>; Mateen Rizki<sup>2</sup>; John Schlager<sup>1</sup>; Pavel Shiyonov<sup>1,3</sup>; <sup>1</sup><i>711th Human Performance Wing, WPAFB, OH;</i> <sup>2</sup><i>Wright State University, Dayton, OH;</i> <sup>3</sup><i>Henry M. Jackson Fndn., Wright-Patterson AFB, OH</i></p> <p>ThP 585 <b>Determination of VX Sequestered Within Göttingen® Minipig Skin Following Percutaneous Exposure Using LC-MS-MS and GC-MS-MS;</b> Jeffrey M. Mcguire; Stanley Hulet; E. Michael Jakubowski, Jr; Sandra Thomson; <u>Christopher Byers</u>; <i>US Army ECBC, APG, MD</i></p> <p>ThP 586 <b>Performance Evaluation of Three LC-MS Methods Implemented on Ion Trap Mass Spectrometer for Drug Testing in Urine;</b> <u>Guifeng Jiang</u>; Marta Kozak; Subodh Nimkar; <i>Thermo Fisher Scientific, San Jose, CA</i></p> <p>ThP 587 <b>Chemoproteomic Investigation of the Idiosyncratically Hepatotoxic Fluoroquinolone Trovafloxacin;</b> <u>Shaun Mccloughlin</u>; Hua Tang; Paul Richardson; Scott Warder; Jie Lai-Zhang; Michael</p>   | <p><i>Li</i></p>   |

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Liguori; Eric Blomme; *Abbott Laboratories, Abbott Park, IL*
- ThP 588 **Protein profiling Using Tandem Mass Tags to Classify Chemical Allergens in Cell Culture Models;** Petra Budde<sup>1</sup>; Hans-dieter Zucht<sup>1</sup>; Karsten Kuhn<sup>1</sup>; Sasa Koncarevic<sup>1</sup>; Christian Baumann<sup>1</sup>; Stefan Selzer<sup>1</sup>; Lisa Dietz<sup>2</sup>; Stefanie Ohnesorge<sup>2</sup>; Herrmann-Josef Thierse<sup>2</sup>; Peter Schulz-knappe<sup>1</sup>; <sup>1</sup>*Proteome Sciences R&D GmbH & Co. KG, Frankfurt, Germany*; <sup>2</sup>*University Heidelberg, Mannheim, Germany*
- ThP 589 **Quantitative Proteomic Analysis of HepG2 Cells after Ethanol Exposure;** Stanley M. Stevens, Jr.; Robert Buzzeo; Patrick C. Bradshaw; *University of South Florida, Tampa, FL*
- ThP 590 **Quantification of Potential DNA Glycation Biomarkers for Diabetes in Biological Samples by LC-MS/MS;** Hongxia Wang; Huachuan Cao; Yinsheng Wang; *University of California, Riverside, CA*
- ThP 591 **LC-MS Detection of 4-ABP-DNA Adduct Formation in Bladder Cells and Tissues;** Kristen Randall<sup>1</sup>; Dayana Argoti<sup>1</sup>; Joseph D. Paonessa<sup>2</sup>; Yi Ding<sup>2</sup>; Zachary Oaks<sup>1</sup>; Yuesheng Zhang<sup>2</sup>; Paul Vouros<sup>1</sup>; <sup>1</sup>*Northeastern University, Boston, MA*; <sup>2</sup>*Roswell Park Cancer Institute, Buffalo, NY*
- ThP 592 **Sensitive Determination of Hydroxylated-PAHs in Human Urine by Ultra Performance Liquid Chromatography Coupled to Time-of-Flight Mass Spectrometry;** Eric Gaudreau; Pierre Dumas; Eric Daigle; Nathalie Morissette; *Institut National de Santé Publique du Québec, Québec, Canada*
- ThP 593 **On Line Sample Extraction Technique vs Traditional Sample Preparation Methods for LC-MS Toxicology Screening;** Marta Kozak; Guifeng Jiang; Subodh Nimkar; *Thermo Fisher Scientific, San Jose, CA*
- ThP 594 **Serum Metabolite Profiling in the Search for Biomarkers of Inflammation;** Erin G. Prestwich; Ramesh Babu Indrakanti; Koli Taghizadeh; Peter Dedon; *MIT, Cambridge, MA*
- ThP 595 **Hepatotoxicity Biomarkers Found from Coumarin-Treated Rat Liver Tissues Utilizing MALDI TOF and FTMS Imaging Techniques;** Lily Li<sup>1</sup>; Katherine Kellersberger<sup>2</sup>; Paul Kowalski<sup>2</sup>; Jane-Marie Kowalski<sup>2</sup>; Paul Speir<sup>2</sup>; David Ho<sup>1</sup>; Bob Xiong<sup>1</sup>; Patrick Bennett<sup>1</sup>; S Stellar<sup>3</sup>; H.K. Lim<sup>3</sup>; <sup>1</sup>*TandemLabs, Woburn, MA*; <sup>2</sup>*Bruker Daltonics, Billerica, MA*; <sup>3</sup>*Johnson & Johnson, Raritan, NJ*
- ThP 596 **Robust Differentiation of Isobaric Urine Opioids and n-desmethyl metabolites Using LC-Hybrid Tandem Mass Spectrometry (LC-MSMS) and Automated Library Search;** Judy Stone<sup>1</sup>; Deborah French<sup>2,3</sup>; Katherine Chen<sup>2,3</sup>; Alan Wu<sup>2,3</sup>; <sup>1</sup>*TPMG Regional Laboratories-Northern California, Richmond, CA*; <sup>2</sup>*Univ. of Calif. San Francisco, San Francisco, CA*; <sup>3</sup>*San Francisco General Hospital, San Francisco, CA*
- ThP 597 **Determination of Arsenic Species in Urine and Serum Samples from Rats Exposed to Arsenite;** Baowei Chen<sup>1</sup>; Anthony McKnight-Whitford<sup>1</sup>; Lora L. Arnold<sup>2</sup>; Shugo Suzuki<sup>2</sup>; Karen L Pennington<sup>2</sup>; Samuel M. Cohen<sup>2</sup>; X. Chris Le<sup>1</sup>; <sup>1</sup>*University of Alberta, Edmonton, Canada*; <sup>2</sup>*University of Nebraska Medical Center, Omaha, Nebraska*
- ThP 598 **Binding of Phenylarsine Oxide to Rat and Human Hemoglobin;** Jie Liu; Chris Le; *University of Alberta, Edmonton, Canada*
- ThP 599 **Multi Target Screening for 700 Drugs Using a QTRAP LC-MS-MS System and Automated Library Searching;** Sebastian Dresen<sup>1</sup>; Nerea Ferreirós Bouzas<sup>1</sup>; Heike Gnann<sup>1</sup>; Wolfgang Weinmann<sup>1</sup>; <sup>2</sup>Mark Kuracina; <sup>1</sup>*Institute of Legal Medicine, Freiburg, Germany*; <sup>2</sup>*Applied Biosystems*
- ThP 600 **Quantitative Analysis of Bisphenol-A by GC-MS-MS-(NCI) in Biological Liquid Including Urine, Blood, Serum/Plasma, Saliva, Milk and Fruit Juice;** Pierre Dumas; Éric Daigle; *INSPQ, Québec, Canada*
- ThP 601 **Cardiac Toxicity of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) in Juvenile Zebrafish Heart: Profiling Proteomic Changes by Label Free Quantitation Methods;** Lingjun Li; Jiang Zhang; Kevin Lanham; Richard Peterson; Warren Heideman; *University of Wisconsin, Madison, WI*
- ThP 602 **Development of a LC/MS/MS Method for Determining VX Hydrolysis Product EA-2192 Concentration in Biological Matrices Following Exposure;** Stanley Hulet; E. Michael Jakubowski, Jr; Sandra Thomson; Ronald Evans; *U.S. Army ECBC, APG-EA, MD*

### ATMOSPHERIC / AEROSOL CHEMISTRY, 603 613

- ThP 603 **Mass Spectrometry's Role in Global Wildfire Emissions Modelling Important to Climate Change;** Simin D. Maleknia; *The University of New South, Sydney, Australia*
- ThP 604 **Membrane Introduction Tandem Mass Spectrometry (MIMS-MS/MS) as an Mobile On-Line Monitor to Map Air Toxics in the Metropolitan Seattle-Tacoma Airshed;** Nicholas G. Davey<sup>3,4</sup>; Jacob M. Etzkorn<sup>3,4</sup>; Ji Hyun Park<sup>1</sup>; Robert S. Crampton<sup>1</sup>; Cole T. E. Fitzpatrick<sup>1</sup>; Timothy V. Larson<sup>1</sup>; Christopher D. Simpson<sup>1</sup>; Michael G. Yost<sup>1,2</sup>; Erik T. Krogh<sup>3,4</sup>; Christopher G. Gill<sup>3,4</sup>; <sup>1</sup>*University of Washington, Seattle, WA*; <sup>2</sup>*PNASH Center, Seattle, WA*; <sup>3</sup>*Applied Environmental Research Labs. (AERL), Nanaimo, B. C., Canada*; <sup>4</sup>*Vancouver Island University, Nanaimo, B. C., Canada*
- ThP 605 **Environmental Quality. Mass spectrometry, Olfactometry and Diffusion Modelling to Define Air Quality and Risk Assessment in Landfills;** Enrico Davoli<sup>1</sup>; Giancarlo Bianchi<sup>1</sup>; Marinella Palmiotto<sup>1</sup>; Giorgio Celeste<sup>1</sup>; Roberto Fanelli<sup>1</sup>; Elena Fattore<sup>1</sup>; Massimiliano Il Grande<sup>2</sup>; Andrea N. Rossi<sup>2</sup>; <sup>1</sup>*Mario Negri Institute, Milano, Italy*; <sup>2</sup>*Progress S.r.L., Milano, Italy*
- ThP 606 **A Gas-to-Liquid Membrane Interface for Analysis of Volatile Organics in the Gas Phase by Electrospray Ionization Mass Spectrometry;** Eric J Lanni; Mark E. Bier; *Carnegie Mellon University, Pittsburgh, PA*
- ThP 607 **Real-Time in-situ Multidimensional Characterization of Ultrafine Diesel Tailpipe Particles Using Single Particle Mass Spectrometry;** Alla Zelenyuk<sup>1</sup>; Dan Imre<sup>2</sup>; Yong Cai<sup>1,5</sup>; John M. E. Storey<sup>3</sup>; Jian Wang<sup>4</sup>; Gunnar Senum<sup>4</sup>; Shean Huff<sup>3</sup>; Sam Lewis<sup>3</sup>; Dean Edwards<sup>3</sup>; <sup>1</sup>*Pacific Northwest National Laboratory, Richland, WA*; <sup>2</sup>*Imre Consulting, Richland, WA*; <sup>3</sup>*Oak Ridge National Laboratory, Oak*

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- Ridge, TN; <sup>4</sup>Brookhaven National Laboratory, Upton, NY; <sup>5</sup>University of Wyoming, Laramie, WY
- ThP 608 **Single Particle Mass Analysis for Direct Determination of Particle Fluxes in Micro-Meteorological Experiments;** Klaus-Peter Hinz<sup>1</sup>; Elmar Gelhausen<sup>1</sup>; Bernhard Spengler<sup>1</sup>; Andres Schmidt<sup>2</sup>; Otto Klemm<sup>2</sup>; <sup>1</sup>University of Giessen, Giessen, Germany; <sup>2</sup>University of Münster, Germany
- ThP 609 **Effects of Particle Composition and Morphology on Laser Desorption Ionization Mass Spectra;** Joseph P Klems; Murray V. Johnston; *University of Delaware, Newark, DE*
- ThP 610 **Capillary Electrophoresis-Mass Spectrometry: a Useful Tool to Distinguish between Weak and Strong Organic Acids in Atmospheric Fine Particulate Matter;** Mahmoud M. Yassine<sup>1</sup>; Ewa Dabek-Zlotorzynska\*<sup>1</sup>; Philippe Schmitt-Kopplin<sup>2</sup>; <sup>1</sup>Analysis & Air Quality, Environment Canada, Ottawa, ON; <sup>2</sup>Institute of Ecological Chemistry, Neuherberg, Germany
- ThP 611 **Composition and Yield of Oligomers in Biogenic Secondary Organic Aerosol;** Wiley A. Hall; Murray V. Johnston; *University of Delaware, Newark, DE*
- ThP 612 **Reactions of Aliphatic Amines with Ammonium Sulfate Clusters;** Bryan R. Bzdek; Murray V. Johnston; *University of Delaware, Newark, DE*
- ThP 613 **Formation and Decomposition of Negative Atmospheric Ion Water Clusters O<sub>2</sub>-(H<sub>2</sub>O)<sub>n</sub> in Atmospheric Pressure Corona Discharge Mass Spectrometry;** Kanako Sekimoto; Mitsuo Takayama; *Yokohama City University, Yokohama, Japan*
- INSTRUMENTATION: TOF, 614 - 629**
- ThP 614 **A Robust Bayesian-based Recovery Algorithm for Resolution Enhancement in Time-of-Flight Mass Spectrometry;** Robert Jackson; Zhongyu Yang; C. Bronson Crothers; David A. Ferris; Stephen A. Lammert; *Stillwater Scientific Instruments, Inc., Orono, ME*
- ThP 615 **Micro Array Ion Guide – A New Way of Ion Introduction into TOF Mass Spectrometer;** Boris Kozlov<sup>1</sup>; Andrey Trufanov<sup>1</sup>; Dmitriy Alekseev<sup>1,2</sup>; Mikhail Yavor<sup>1,2</sup>; Anatoli Verentchikov<sup>1</sup>; <sup>1</sup>MS Consulting, Bar, Yugoslavia; <sup>2</sup>Institute For Analytical Instrumentation RAS, St. Petersburg, Russia
- ThP 616 **A Novel Ion Trap that Enables High Duty Cycle and Wide M/Z-Range on an Orthogonal Injection TOF Mass Spectrometer;** Igor Chernushevich; Alexandre Loboda; *MDS Analytical Technologies, Concord, ON*
- ThP 617 **A Gridless Ion Deceleration Cell for Improved Sensitivity and Ion Yields in Tandem Photodissociation Time-of-Flight Mass Spectrometry;** Kevin Kmiec; Jody May; David H. Russell; *Texas A&M University, College Station, TX*
- ThP 618 **MALDI-TOF-TOF with High Resolution Precursor Selection and Multiplexed MS-MS;** Kevin Hayden; Stephen C. Gabeler; Mark Dahl; Marvin Vestal; *Virgin Instruments Corp., Sudbury, MA*
- ThP 619 **Time-Resolved Vacuum UV Photodissociation of Peptides in ESI Linear Ion Trap/Orthogonal TOF Mass Spectrometer;** Tae-young Kim; James P. Reilly; *Indiana University, Bloomington, IN*
- ThP 620 **Development of an Electron Transfer Dissociation Capable Ultra High Resolution Orthogonal Quadrupole Time of Flight Mass Spectrometer;** Carsten Stoermer<sup>2</sup>; Desmond A. Kaplan<sup>1</sup>; Ralf Hartmer<sup>2</sup>; Markus Lubeck<sup>2</sup>; Oliver Raether<sup>3</sup>; Melvin A. Park<sup>1</sup>; <sup>1</sup>Bruker Daltonics, inc., Billerica, MA; <sup>2</sup>Bruker Daltonik GmbH, Bremen, Germany; <sup>3</sup>Bruker Daltonik, Bremen, Germany
- ThP 621 **Structural Analysis of Biomolecules Using High-Energy Collision Induced Dissociation in a Multi-Turn Tandem Time-of-Flight Mass Spectrometer “MULTUM-TOF/TOF”;** Shuichi Shimma; Ayumi Kubo; Hirofumi Nagao; Michisato Toyoda; *Osaka University, Toyonaka, Japan*
- ThP 622 **A Stigmatic Mass Microscope with a High Mass Resolving Power Using a Multi-Turn Time-of-Flight Mass Spectrometer;** Hisanao Hazama<sup>1,6</sup>; Jun Aoki<sup>2,6</sup>; Hirofumi Nagao<sup>1,6</sup>; Ren Suzuki<sup>1,6</sup>; Hidetoshi Yoshimura<sup>1,6</sup>; Yasuhide Naito<sup>3,6</sup>; Michisato Toyoda<sup>2,6</sup>; Katsuyoshi Masuda<sup>4,6</sup>; Kenichi Fujii<sup>3,6</sup>; Toshio Tashima<sup>6</sup>; Kunio Awazu<sup>1,6</sup>; <sup>1</sup>Graduate School of Engineering, Osaka University, Suita, Osaka, Japan; <sup>2</sup>Graduate School of Science, Osaka University, Toyonaka, Osaka, Japan; <sup>3</sup>GPI, Hamamatsu, Shizuoka, Japan; <sup>4</sup>Suntory Institute for Bioorganic Research, Mishima-gun, Osaka, Japan; <sup>5</sup>Osaka Institute of Technology, Hirakata, Osaka, Japan; <sup>6</sup>JST, Crest, Chiyoda-ku, Tokyo, Japan
- ThP 623 **Characterization of Complex Biological Mixtures Using Multi-Reflection TOFMS in Different Mass Resolution Modes;** Matthew Giardina<sup>1</sup>; Viatcheslav Artaev<sup>1</sup>; Mikhail Gavrik<sup>2</sup>; <sup>1</sup>LECO Corporation, St. Joseph, MI; <sup>2</sup>Institute of Analytical Instrumentation, Saint Petersburg, Russian Federation
- ThP 624 **Design, Optimization, and Performance Evaluation of New MALDI-TOF MS and MS-MS Instruments;** Marvin Vestal; *Virgin Instruments Corp., Sudbury, MA*
- ThP 625 **A New Multi-Turn Time-of-Flight Mass Spectrometer with High Resolving Powers Above One Million;** Osamu Furuhashi<sup>1</sup>; Kengo Takeshita<sup>1</sup>; Hideaki Izumi<sup>1</sup>; Shinichi Yamaguchi<sup>1</sup>; Masaru Nishiguchi<sup>1</sup>; Hiroki Sakae<sup>1</sup>; Yoshihiro Ueno<sup>1</sup>; Kiyoshi Ogawa<sup>1</sup>; Yoshikazu Yoshida<sup>1</sup>; Michisato Toyoda<sup>2</sup>; Mitsutoshi Setou<sup>3</sup>; <sup>1</sup>Shimadzu Corporation, Kyoto, Japan; <sup>2</sup>Osaka University, Toyonaka, Osaka, Japan; <sup>3</sup>Hamamatsu University School of Medicine, Hamamatsu, Japan
- ThP 626 **Determination of the Stability Phase Space of Multi-Turn TOF Using for Imaging Mass Spectrometry;** Jun Aoki<sup>1,6</sup>; Hisanao Hazama<sup>2,6</sup>; Michisato Toyoda<sup>1,6</sup>; Kunio Awazu<sup>2,6</sup>; Katsuyoshi Masuda<sup>3,6</sup>; Kenichi Fujii<sup>4,6</sup>; Toshio Tashima<sup>6</sup>; Yasuhide Naito<sup>5,6</sup>; <sup>1</sup>Graduate School of Science, Osaka University, Toyonaka, Osaka, Japan; <sup>2</sup>Graduate School of Engineering, Osaka University, Suita, Osaka, Japan; <sup>3</sup>Suntory Institute for Bioorganic Research, Mishima-gun, Osaka, Japan; <sup>4</sup>Osaka Institute of Technology, Hirakata, Osaka, Japan; <sup>5</sup>GPI, Hamamatsu, Shizuoka, Japan; <sup>6</sup>JST, Crest, Chiyoda-ku, Tokyo, Japan
- ThP 627 **Maximizing Performance Of Conventional Time-of-Flight Technology: Resolution, Accuracy And Speed;** Michael Ugarov; James Bertsch; Bill Barry; John Fjeldsted; *Agilent Technologies, Santa Clara, CA*
- ThP 628 **Improved Resolution and Substantially Higher Sensitivity on a Quadrupole-TOF Mass Spectrometer;** Alexandre Loboda; Igor Chernushevich;

## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- |  |  |
|--|--|
| <p>Nic Bloomfield; <i>MDS Analytical Technologies, Concord, ON</i></p> <p>ThP 629 <b>A High Performance, Folded Geometry oa-ToF Mass Analyser Incorporating Novel ADC Based Detection;</b> Jason L Wildgoose; <i>Waters Corporation, Manchester, UK</i></p>  | <p>ThP 641 <b>Withdrawn</b></p> <p>ThP 642 <b>Ion-Neutral Complex Resulting from Dissociative Protonation: Fragmentation of <math>\alpha</math>-Furanylmethyl Benzyl Ether;</b> Pengyuan Liu; Yuanjiang Pan; <i>Department of Chemistry, Zhejiang University, Hangzhou, China</i></p>  |
| <b>ION MOLECULE, ION ELECTRON, AND ION ION REACTIONS, 630 - 660</b>  |  |
| <p>ThP 630 <b>Gas-Phase Thermochemical Properties of Damaged Nucleobases and Pyrimidine Nucleobases-Intrinsic Reactivity and Biological Implications;</b> Min Liu<sup>1</sup>; Meng Xu<sup>1,2</sup>; Tingting Li<sup>1</sup>; Sednam Amegayibor<sup>1</sup>; Daisy Cardoso<sup>1</sup>; Yunlin Fu<sup>1</sup>; Jeehiun Lee<sup>1</sup>; <i><sup>1</sup>Rutgers, The State University of New Jersey, Piscataway, NJ; <sup>2</sup>Schering-Plough, Piscataway, NJ</i></p> <p>ThP 631 <b>Stability of DNA Duplex Containing Hypoxanthine in the Gas Phase Versus Solution Phase;</b> Xuejun Sun; Jeehiun K. Lee; <i>Rutgers University, Piscataway, NJ</i></p> <p>ThP 632 <b>Gas Phase S<sub>N</sub>2 Reactions of 1,3-Dimethyluracil and Analogs. Insights into the Mechanism of Uracil Removal by the UDG Enzyme;</b> Anna Zhachkina; Jeehiun K. Lee; <i>Rutgers University, Piscataway, NJ</i></p> <p>ThP 633 <b>Competition between Substitution and Elimination in the Reactions of Dianions with Substituted and Cyclic Alkyl Halides;</b> Keyanna Conner; Renan Joviliano; Andrew Alexander; Scott Gronert; <i>Virginia Commonwealth Univ, Richmond, VA</i></p> <p>ThP 634 <b>Gas Phase Reactions of Alpha Nucleophiles;</b> Veronica M. Bierbaum; Stephanie M. Villano; Nicole Eyt; W. Carl Lineberger; <i>University of Colorado, Boulder, CO</i></p> <p>ThP 635 <b>Gas Phase Anion Chemistry Relevant to the Interstellar Medium;</b> Oscar Martinez Jr.<sup>1</sup>; Brian Eichelberger<sup>1</sup>; Zhibo Yang<sup>1</sup>; Theodore P. Snow<sup>1,2</sup>; Veronica M. Bierbaum<sup>1</sup>; <i><sup>1</sup>University of Colorado, Boulder, CO; <sup>2</sup>Center for Astrophysics and Space Astronomy, Boulder, CO</i></p> <p>ThP 636 <b>Charged Carbenes;</b> Fabiane M Nachtigall<sup>1</sup>; Yuri E Corilo<sup>1</sup>; Patricia Verardi Abdelnur<sup>1</sup>; Marcos N Eberlin<sup>1</sup>; Jairton Dupont<sup>2</sup>; <i><sup>1</sup>ThoMSon Lab UNICAMP, Campinas, SP, Brazil; <sup>2</sup>Laboratory of Molecular Catalysis, Porto Alegre, RS, Brazil</i></p> <p>ThP 637 <b>Identification of Aromatic Epoxide Functionalities in Protonated Analytes by Using Ion-molecule Reactions in a Fourier-transform Ion Cyclotron Resonance Mass Spectrometer;</b> Ryan J Eismin; <i>Purdue University, West Lafayette, IN</i></p> <p>ThP 638 <b>Reactivity Studies of Hydroxy-Substituted Dehydropyridines;</b> Jennifer Reece<sup>1</sup>; Bartłomiej Jankiewicz<sup>1</sup>; John Nash<sup>2</sup>; Hilkka Kenttamaa<sup>3</sup>; <i><sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>Department of Chemistry, West Lafayette, IN; <sup>3</sup>Chemistry Department, West Lafayette, IN</i></p> <p>ThP 639 <b>Gas-Phase Ion-Molecule Reactions for the Differentiation of Primary, Secondary and Tertiary Hydroxyl Functionalities in Unknown Protonated Analytes;</b> Mingkun Fu<sup>1</sup>; Penggao Duan<sup>2</sup>; Hilkka Kenttamaa<sup>3</sup>; <i><sup>1</sup>Purdue University, West Lafayette, IN; <sup>2</sup>Bruker Daltonics, Billerica, MA; <sup>3</sup>Chemistry Department, West Lafayette, IN</i></p> <p>ThP 640 <b>Differentiation of Carbohydrate Phosphates and Sulfates by Gas-Phase Ion-Molecule Reactions;</b> Matthew Hurt; Yuriy Pyatkivskyy; Victor Ryzhov; <i>Northern Illinois University, DeKalb, IL</i></p> | <p>ThP 643 <b>Studying the Mechanism of Cysteine S-Nitrosylation by Ion-Molecule Reactions;</b> Victor Ryzhov<sup>1</sup>; Richard A. J. O'Hair<sup>2</sup>; <i><sup>1</sup>Northern Illinois University, DeKalb, IL; <sup>2</sup>University of Melbourne, Victoria, Australia</i></p> <p>ThP 644 <b>In-Situ Selective and Sensitive Detection of Monosaccharides by Reactive Desorption Electrospray Ionization (DESI) Using Modified Phenylboronic Acids;</b> Yun Zhang<sup>1</sup>; Caroline Krieger<sup>1</sup>; Dina R. Justes<sup>2</sup>; Feng Feng<sup>1</sup>; Hao Chen<sup>1</sup>; <i><sup>1</sup>Ohio University, Athens, OH; <sup>2</sup>Purdue University, West Lafayette, IN</i></p> <p>ThP 645 <b>Ion/Molecule Reactions of Electrogenerated Ions at Atmospheric Pressure;</b> Jiwen Li; Zhixin Miao; Hao Chen; <i>Ohio University, Athens, OH</i></p> <p>ThP 646 <b>Structural Fingerprinting of Recombinant Proteins Using Sequential Tandem Mass Spectrometry and Ion/Molecule Chemistry;</b> Kevin Turney; Paul Schnier; <i>Amgen, Thousand Oaks, CA</i></p> <p>ThP 647 <b>Characterization of PEGs and PEGylated Biotherapeutics by ESI Ion-Mobility Time-of-Flight Mass Spectrometer Coupled with Ion-Molecule Reactions;</b> Asish Chakraborty; Weibin Chen; John Gebler; <i>Waters Corporation, Milford, MA</i></p> <p>ThP 648 <b>A Mechanistic Study of the H/D Exchange of Phenylalanine-Containing Peptides;</b> Laura Simpson; Young Lee; Elaine M. Marzluff; <i>Grinnell College, Grinnell, IA</i></p> <p>ThP 649 <b>A Computational Investigation of the Gas Phase Hydrogen/Deuterium Exchange of Aspartic Acid and Arginine Containing Peptides;</b> Ning-shiuan Lee; Elaine M. Marzluff; <i>Grinnell College, Grinnell, IA</i></p> <p>ThP 650 <b>H/D Exchange and Computational Modeling of Serine-Containing Peptides in the Gas Phase;</b> Maya Lipert; Elaine M. Marzluff; <i>Grinnell College, Grinnell, IA</i></p> <p>ThP 651 <b>Capabilities of High Resolution Laser Ablation Mass Spectrometry to Study Aluminosilicates Compounds;</b> Junien Exposito<sup>1,2</sup>; David Ruch<sup>2</sup>; Frédéric Aubriet<sup>1</sup>; <i><sup>1</sup>LSMCL Université Paul Verlaine, Metz, France; <sup>2</sup>LTI CRP Henri Tudor, Esch/Alzette, Luxembourg</i></p> <p>ThP 652 <b>Energetics of the Formation of Metal Sulfide Clusters in Gas Phase Ion-Molecule Reactions: DFT Calculations;</b> Kaitlin Papson; Jeffrey Spraggins; Una Kim; Nicholas Zeringo; Katherine Mullaugh; George Luther; Douglas P. Ridge; <i>University of Delaware, Newark, DE</i></p> <p>ThP 653 <b>Reactivity Comparison of Pd and Pt Catalysts Liganded by Secondary Oxide Phosphines with Norbornadiene and Terminal Alkynes Using CAR Experiments;</b> Yves Gimbert<sup>2</sup>; Magda Karanik<sup>1</sup>; Reddy Thota<sup>1</sup>; Claude Charvy<sup>1</sup>; Denis Lesage<sup>1</sup>; Laurent Giordano<sup>3</sup>; Stéphane Humbel<sup>3</sup>; Anne Milet<sup>2</sup>; Gérard Buono<sup>3</sup>; Jean-claude Tabet<sup>1</sup>; <i><sup>1</sup>University Paris VI (UPMC), Paris Cedex 05, France; <sup>2</sup>LEDSS, Chimie Recherche UMR 5616, Grenoble, France; <sup>3</sup>ECM, Faculté St-Jérôme, Marseille, France</i></p> |



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- ThP 654 **Production of Titanium/Oxygen Cluster Ions by Laser Ablation, Investigation of their Reactivity with H<sub>2</sub>O and O<sub>2</sub> - A FTICRMS Study;** Nicolas Barthen; Jean Jacques Gaumet; Frédéric Aubriet; *LSMCL Université Paul Verlaine, Metz, France*
- ThP 655 **Monitoring Gas Phase Ion-Molecule Reactions of Environmentally Significant Metal Clusters with Hydrogen Sulfide Using FT-ICR MS;** Jeffrey Spraggins; Kaitlin Papson; Nicholas Zeringo; Una Kim; Katherine Mullaugh; George Luther; Douglas Ridge; *University of Delaware, Newark, DE*
- ThP 656 **On Performing Simultaneous ETD/CID on Multiply Protonated Peptides in a Linear Ion Trap;** J. Larry Campbell<sup>1</sup>; James Hager<sup>2</sup>; J.c. Yves Leblanc<sup>2</sup>; <sup>1</sup>*MDS Analytical Tech, Sciex, Concord, Canada*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON*
- ThP 657 **Schiff Base Formation in Protonated Peptides via Ion/Ion Reactions in the Gas Phase;** Hongling Han; Anastasia Kharlamova; Scott A. McLuckey; *Purdue University, West Lafayette, IN*
- ThP 658 **Charge Inversion Ion/Ion Reactions of Corticosteroids: Proton Transfer versus Anion Attachment;** Kerry Hassell<sup>1</sup>; J.c. Yves Leblanc<sup>2</sup>; Scott A. McLuckey<sup>1</sup>; <sup>1</sup>*Purdue University, West Lafayette, IN*; <sup>2</sup>*MDS Analytical Technologies, Concord, ON, ON*
- ThP 659 **Computational Evidence for Electron Delocalization in Fixed-Charge Tagged Peptide Dications upon Electron Capture and Transfer;** Thomas W. Chung; Frantisek Turecek; *Univ. of Washington, Seattle, WA*
- ThP 660 **Electron Induced Fragmentation of  $\beta$  Peptides;** Hisham Ben Hamidane<sup>1</sup>; Aleksey Vorobyev<sup>1</sup>; Adrian Schmid<sup>1</sup>; Maud Larregola<sup>2</sup>; Aneta Lukaszuk<sup>2</sup>; Dirk Tourwé<sup>2</sup>; Philippe Karoyan<sup>2</sup>; Yury O. Tsybin<sup>1</sup>; <sup>1</sup>*Ecole Polytechnique Federale, Lausanne, Switzerland*; <sup>2</sup>*Universite Pierre et Marie Curie, Paris, France*
- HIGH THROUGHPUT ANALYSIS / ROBOTICS,  
661 - 696**
- ThP 661 **Efficiency and Throughput of an HDX- and Mass Spectrometry-Based Assay for Protein-Ligand Binding;** Patrick D. Dearmond; Erin D. Hopper; Graham M. West; Victor Anbalagan; Michael C. Fitzgerald; *Duke University, Durham, NC*
- ThP 662 **Development of a Bioanalytical Platform for Supporting High Throughput *in-vitro* Protein Binding Screening;** Marianne Vath; Kasia Kieltyka; Jennifer Maloney; Jeremy Stewart; John Herbst; Charlie Conway; Harold Weller; Wilson Shou; Jun Zhang; *Bristol Myers Squibb, Wallingford, CT*
- ThP 663 **A highly Automated 5 Pump, 4 Detector Super-Critical Fluid Chromatography Mass Spectrometry (SFC/MS) System for Chiral Purification in Drug Discovery;** Qing Ping Han; Mark J. Hayward; *Lundbeck Research USA, Paramus, NJ*
- ThP 664 **A High Throughput On-line SPE-LC-MS/MS Method for Quantitative Determination of CVT-3619 in Human Urine;** Chungwen Chen; Belinda Wong; Nevena Mollova; Kwan Leung; *CV Therapeutics, Inc., Palo Alto, CA*
- ThP 665 **High-Throughput Analysis of *in vivo* Pharmacokinetic Studies Using Sample Pooling Followed by UPLC-MS/MS;** Jessie Dahlström<sup>1</sup>; Tjerk Bueters<sup>1</sup>; Ingvar Betné<sup>2</sup>; Sveinn Briem<sup>1</sup>; <sup>1</sup>*Astrazeneca R&D, Södertälje, Sweden*; <sup>2</sup>*Waters, Sollentuna, Sweden*
- ThP 666 **UPLC-MS/MS in High-Throughput Detection, Quantification and Confirmation of Anabolic Steroids in Equine Plasma;** Youwen You<sup>1</sup>; Fuyu Guan<sup>1</sup>; Xiaoqing Li<sup>1</sup>; Cornelius Uboh<sup>1,2</sup>; Lawrence Soma<sup>1</sup>; Jeffrey Rudy<sup>2</sup>; Jinwen Chen<sup>1</sup>; Ying Liu<sup>1</sup>; <sup>1</sup>*University of Pennsylvania, West Chester, PA*; <sup>2</sup>*PA Equine Toxicology, West Chester, PA*
- ThP 667 **Throughput Advantages of Two-Dimensional Chromatography with Multiple Parallel LC Systems Utilizing a Single Data File;** Matthew Berube; *Thermo Fisher Scientific, Franklin, MA*
- ThP 668 **Simple and Rapid Screening of Melamine in Milk Products with High Resolution Accurate Mass Bench Top Orbitrap LCMS;** Keifei Wang; Chunang (christine) Gu; Jie Qian; Ze Zhang; *ThermoFisher Scientific, San Jose, CA*
- ThP 669 **Label Free High-Throughput Whole Protein Kinase Screening Assay;** Michelle V. Romm<sup>1</sup>; Nikunj Parikh<sup>1</sup>; Thomas B. Stanley<sup>2</sup>; Jon D. Williams<sup>2</sup>; William A. Lamarr<sup>1</sup>; Can "jon" Ozbal<sup>1</sup>; <sup>1</sup>*BioTrove, Inc., Woburn, MA*; <sup>2</sup>*GlaxoSmithKline, Research Triangle Park, NC*
- ThP 670 **High Throughput Quantitative Sample Analysis Using an Integrated Multiplex LC-MS System Combined with On-Line SPE;** Min J. Yang; David M. Cox; Adrian Taylor; Peter Kovarik; John Gibbons; *MDS Analytical Technologies, Concord, Canada*
- ThP 671 **A High Throughput 10-in-1 LC/MS/MS Method to Support CYP Inhibition Studies Using Human Liver Microsomes;** Dandan Wang; Jianrong Lin; Diansong Zhou; Connie Azumaya; Scott Grimm; *AstraZeneca Pharmaceuticals LP, Wilmington, DE*
- ThP 672 **Withdrawn**
- ThP 673 **A High Speed High Resolution Open Access Multi Column LCMS System for Diverse Application Needs;** Oliver Keil<sup>1</sup>; Michael Frank<sup>2</sup>; Angelika Gratzfeld-Huesgen<sup>2</sup>; <sup>1</sup>*Graffinity Pharmaceuticals, Heidelberg, Germany*; <sup>2</sup>*Agilent Technologies, Waldbronn, Germany*
- ThP 674 **High Throughput Screening of Deoxynivalenol by MALDI-TOF Mass Spectrometry;** Chang-nan Chen<sup>1</sup>; Mei-wun Lin<sup>1</sup>; Jentaie Shiea<sup>2</sup>; <sup>1</sup>*Chaoyang University of Technology, Taichung, Taiwan*; <sup>2</sup>*National Sun Yeh-sen University, Kaohsiung, Taiwan*
- ThP 675 **Improvements in Mass-Directed Preparative HPLC Fractionation to Support Late Stage Lead Optimization;** Yinong Zhang; Rongda Xu; Catherine Pham; Lu Zeng; Daniel B. Kassel; *Takeda San Diego, Inc., San Diego, CA*
- ThP 676 **Maximizing Versatility of an Automated Mass Directed Preparative HPLC for Multiple Uses and Diverse Loading Scales;** Leonard Hargiss<sup>1</sup>; Philip E Keyes<sup>1</sup>; Julita Cicogna<sup>2</sup>; Timothy Stanoch<sup>4</sup>; Trevor Cornell<sup>3</sup>; <sup>1</sup>*Lexicon Pharmaceuticals, Princeton, NJ*; <sup>2</sup>*Taylor Technologies, Princeton, NJ*; <sup>3</sup>*The College of New Jersey, Ewing, NJ*; <sup>4</sup>*Stevens Institute of Technology, Hoboken, NJ*
- ThP 677 **Discovery of Novel Inhibitors of Serine Palmitoyltransferase (SPT) by Mass Spectrometry-Based High-Throughput Screening (HTS);** Pete Meyn<sup>1</sup>; Paul Maresca<sup>1</sup>; William A. Lamarr<sup>2</sup>; Peter Rye<sup>2</sup>; Maureen Brooks<sup>1</sup>; Adam Babbs<sup>3</sup>; Martin Procter<sup>3</sup>; David Pan<sup>3</sup>; Can "Jon" Ozbal<sup>2</sup>; Andrew Garton<sup>1</sup>; <sup>1</sup>*OSI Pharmaceuticals, Farmingdale, NY*



## THURSDAY POSTERS

Posters must be set up 8:00 - 8:30 am on the day scheduled and removed by 3:30 pm. Authors of odd numbered posters (001, 003, 005, etc.) are required to be present 10:30 - 12:30. Authors of even numbered posters (002, 004, 006, etc.) must be present 12:30 - 2:30 pm.

- <sup>2</sup>BioTrove, Inc., Woburn, MA; <sup>3</sup>Prosidion Limited, Oxford, UK
- ThP 678 **Novel Ultra-High-Pressure Splitless Dual Channel Nano-UPLC System for Drastic Increase in Through-Put, Resolution and Sensitivity in Drug and Proteomic Analysis;** Frank Yang<sup>1</sup>; Austin Yang<sup>2</sup>; Frank Wu<sup>1</sup>; Angel Wu<sup>1</sup>; Cathy Chang<sup>1</sup>; <sup>1</sup>CVC Technologies, Inc., Vista, USA; <sup>2</sup>University of Maryland, Greenbaum Cancer Center, Baltimore, MD
- ThP 679 **Evaluation of New Version DiscoveryQuant™ Software for Automated MRM Generation and Quantitation for *in vitro* ADME Screening;** Haiqing Hu<sup>1</sup>; Erika Manyak<sup>1</sup>; Steven Ainley<sup>2</sup>; Kevin Shirey<sup>2</sup>; Michael Rooney<sup>1</sup>; <sup>1</sup>AstraZeneca R&D Boston, Waltham, MA; <sup>2</sup>Sound Analytics, LLC, Niantic, CT
- ThP 680 **Cross Platform MS/MS Method Development, Transfer and Implementation Using DiscoveryQuant Software;** Kevin Whalen; Emily Hudson; Lisa Buchholz; Sarah Osgood; *Pfizer Global R & D, Groton, CT*
- ThP 681 **Co-Polymer Characterization Using Automated On-Line SEC-Pyrolysis GCMS;** Junko Iida<sup>1</sup>; Erwin Kaal<sup>2,3</sup>; Hans-Gerd Janssen<sup>2,4</sup>; <sup>1</sup>Shimadzu Europa GmbH, Duisburg, Germany; <sup>2</sup>van't Hoff Institute for Molecular Sciences, Amsterdam, The Netherlands; <sup>3</sup>Atas GL International, Veldhoven, The Netherlands; <sup>4</sup>Unilever Research and Development, Vlaardingen, The Netherlands
- ThP 682 **Using Discovery Quant® and Global MS/MS database to facilitate the LC/MS/MS analysis of Discovery In Vitro Protein Binding Assays;** Emily Hudson<sup>1</sup>; Kevin Whalen<sup>2</sup>; Erik A. Soderstrom<sup>3</sup>; Brian Rago<sup>1</sup>; Amanda King-ahmad<sup>1</sup>; John Janiszewski<sup>4</sup>; Lisa Buchholz<sup>5</sup>; <sup>1</sup>Pfizer, Groton, CT; <sup>2</sup>Pfizer Inc, Groton, CT; <sup>3</sup>Pfizer, Inc., Groton, CT; <sup>4</sup>Pfizer Inc., Westerly, RI; <sup>5</sup>Pfizer Global R & D, Groton, CT
- ThP 683 **Fast Analysis of Vitamins in Dietary Supplements Using LCMS;** Masatoshi Takahashi; William A Hedgepeth; Yuhui Wang<sup>1</sup>; <sup>1</sup>Shimadzu Scientific Instruments, Inc, Columbia, MD
- ThP 684 **High Throughput Nanospray Chip for Robust Molecular ID Using Direct Infusion;** Katherine Heaton; Arthur Fogiel; Lee Heineman; Arthur Fogiel, Jr; Sau Lan Tang Staats; *Phoenix S & T, Inc, Chester, PA*
- ThP 685 **Application of Ultra-Fast LC-MS/MS to High Throughput *in vivo* PK Screening –Techniques to Minimize Matrix Effects;** Bernard K. Choi; Haiping Wang; Gino M. Salituro; Karen Owens; Lucinda Cohen; *Merck Research Laboratory, Rahway, NJ*
- ThP 686 **Plasma and Brain Homogenate Sample Pooling on a Hamilton Liquid Handling Robotic System;** Joyce Shuman; Bernard Choi; Karen Owens; Gino M. Salituro; Lucinda Cohen; *Merck & Co., Inc., Rahway, NJ*
- ThP 687 **High Throughput Workflow for Midazolam and 1-Hydroxymidazolam Analysis in Human Plasma;** Michael Coyer<sup>1</sup>; Patrice Tremblay<sup>2</sup>; Pierre Picard<sup>2</sup>; Lynn Jordan<sup>3</sup>; John Siira<sup>3</sup>; <sup>1</sup>Northern Tier Research, Mayfield, PA; <sup>2</sup>Phytronix Technologies, Quebec, QC; <sup>3</sup>Caliper Life Sciences, Hopkinton, MA
- ThP 688 **A Vortex Cooled Sample Handling and Processing System for Automated H/D Exchange Mass Spectrometry;** Yong Chen; Ansgar Brock; *Novartis-GNF, San Diego, CA*
- ThP 689 **Coupling of a Capillary Scale Immobilized Enzyme Reactor with Bioextraction/Tandem Mass Spectrometry for Identification of Enzyme Inhibitors in Mixtures;** Erica M Forsberg; John D Brennan; *McMaster University, Hamilton, Canada*
- ThP 690 **Validation of Pioglitazone in Human Serum by Two Sample Introduction Methods: LDTD-APCI/MS/MS and LC-ESI/MS/MS;** Michael Pugh; Rachel Sun; John W. Torchia; Donald Gray; Brian Engel; *BASi, West Lafayette, IN*
- ThP 691 **Pushing the Envelope on LC/MS Separation Speed: "Knowing When to Push it and When to Back Off";** Mark J. Hayward; *Lundbeck Research USA, Paramus, NJ*
- ThP 692 **Evaluation of Protein Precipitation Filter Plates for High-Throughput LC-MS Biological Sample Preparation;** Lan Gao; Meng Xu; Swapan Chowdhury; *Schering-Plough, Kenilworth, NJ*
- ThP 693 **Multi-Adsorption Reverse SPE to Clean up Bioanalytical Samples for LC-MS;** Jerry Wang; Jerry Wang; *Agela Technologies Inc, Newark, DE*
- ThP 694 **Urinary Metabolite Profiling Using Solid-Phase Extraction and Direct Infusion Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry;** Bo Blanckenburg; Yuri E.M. van der Burg; André M. Deelder; Magnus Palmblad; *Leiden University Medical Ce, Leiden, Netherlands*
- ThP 695 **Integrated Workflow to Design Methods and Analyze Data in Large-to-Extremely-Large Scale SRM Experiments;** Amol Prakash<sup>1</sup>; Reiko Kiyonami<sup>1</sup>; Alan E. Schoen<sup>2</sup>; Huy Nguyen<sup>2</sup>; Scott Peterman<sup>2</sup>; Andreas F Huhmer<sup>2</sup>; Mary F Lopez<sup>1</sup>; Bruno Domon<sup>3</sup>; <sup>1</sup>ThermoFisher Scientific, Cambridge, MA; <sup>2</sup>Thermo Fisher Scientific, San Jose, CA; <sup>3</sup>ETH Zurich, Zurich, Switzerland
- ThP 696 **Approaching Real-Time Protein Identification from Mass Spectrometry Data;** Joel Coburn<sup>1</sup>; Nuno Bandeira<sup>2</sup>; Pavel Pevzner<sup>1</sup>; Vineet Bafna<sup>1</sup>; Natalie Castellana<sup>1</sup>; Rajesh K. Gupta<sup>1</sup>; Kirby Collins<sup>3</sup>; <sup>1</sup>University of California, San Diego, La Jolla, CA; <sup>2</sup>Center for Computational Mass Spectrometry, UCSD, La Jolla, CA; <sup>3</sup>Convey Computers, Richardson, TX

## INDEX OF AUTHORS

Aarnisalo, Antti A. ....	WP 557	Aebersold, Ruedi .....	ThP 043	Aizikov, Konstantin .....	WP 327
Abbatiello, Susan E. ....	MP 467	Aebersold, Ruedi .....	MOE am 09:30	Ajamete, Kaykas .....	TP 149
Abbatiello, Susan E. ....	MOB pm 4:10	Aebersold, Ruedi .....	WP 075	Ajith, Sandya .....	TP 447
Abbatiello, Susan E. ....	MP 477	Aebersold, Ruedi .....	WP 697	Ajith, Sandya .....	ThP 482
Abbatiello, Susan E. ....	ThP 020	Aebersold, Ruedi .....	ThP 439	Akashi, Satoko .....	TP 468
Abbatiello, Susan E. ....	MP 001	Aebersold, Ruedi .....	ThP 512	Akeroyd, Michiel .....	MP 591
Abbott, David H. ....	WP 127	Aebersold, Ruedi .....	TOC pm 2:50	Akervik, Kristi D. ....	WP 313
Abbott, Tom .....	WP 040	Aebersold, Ruedi .....	WP 036	Akhmedov, Bakhrom .....	TP 080
Abdelnur, Patricia Verardi .....	ThP 636	Aebersold, Ruedi .....	ThP 447	Akhmetov, Artem .....	ThP 180
Abdelnur, Patricia Verardi .....	MP 508	Aebersold, Ruedi .....	WP 559	Akhmetov, Artem .....	WP 186
Abdrakhmanova, Albina .....	TP 010	Aebersold, Ruedi .....	WP 087	Akhtar, Asifa .....	ThP 291
Abdul-Hadi, Kojo .....	TP 018	Aebersold, Ruedi .....	WP 521	Akimov, Vyacheslav .....	WP 300
Abe, Kohei .....	ThP 497	Aebersold, Ruedi .....	Special	Aklujkar, Muktak .....	WP 144
Abe, Kohei .....	TP 005	Aerni, Hans Rudolf .....	ThP 173	Akman, Steven .....	MP 534
Abedin, Joynal .....	TP 477	Aerni, Hans-Rudolf .....	ThP 037	Aksenov, Alexander .....	TP 233
Abedin, Md. ....	WP 002	Afonso, Carlos .....	TOF am 09:50	Aksenov, Alexander .....	TP 233
Abernathy, Robert A. ....	WP 149	Afonso, Carlos .....	ThP 284	Alagramam, Kumar .....	WP 084
Abraham, Ann .....	ThP 132	Afonso, Carlos .....	WP 360	Alam, Asif .....	TP 121
Abraham, Ann .....	ThP 133	Afonso, Carlos .....	MP 644	Alam, Munir .....	TOC pm 3:10
Abraham, Bindu .....	TP 545	Afonso, Carlos .....	TP 461	Alam, Waqas .....	MP 537
Abraham, Paul .....	ThP 559	Afton, Scott E. ....	MOG am 09:30	Alami, Hamid .....	ThP 515
Abramsson, Alexandra .....	TP 092	Aga, Diana .....	WP 603	Albanese, Jenny .....	TP 530
Abul-Husn, Noura S. ....	TP 546	Aga, Diana .....	TP 598	Albanese, Jenny .....	TP 059
Abzalimov, Rinat .....	TP 430	Agafonov, Dimitry .....	ThP 420	Alberici, Luciane Carla .....	TP 243
Abzalimov, Rinat .....	TOG pm 4:10	Agapov, Alexander Yu. ....	TP 275	Alberici, Rosana Maria .....	ThP 320
Abzalimov, Rinat .....	ThOA am 08:50	Agar, Jeffrey .....	MP 634	Alberici, Rosana Maria .....	TP 243
Abzalimov, Rinat .....	TP 459	Agar, Jeffrey .....	TP 061	Albers, Christian .....	WP 315
Abzalimov, Rinat .....	TP 432	Agar, Jeffrey N. ....	WOA am 09:10	Albers, Christian .....	WP 583
Academia, Katrina .....	WP 088	Agar, Jeffrey N. ....	ThP 034	Albers, Christian .....	ThP 207
Acevedo, Socrates .....	WP 651	Agar, Jeffrey N. ....	ThP 477	Albrecht, Katalin .....	ThP 377
Acharya, Pradip Kumar .....	MP 008	Agar, Jeffrey N. ....	ThP 213	Alder, Ryan .....	WP 234
Acharya, Pradip Kumar .....	ThP 028	Agar, Jeffrey N. ....	ThOA pm 2:50	Alecio, Robert .....	TOC pm 3:50
Acharya, Pradip Kumar .....	ThP 057	Agar, Jeffrey N. ....	ThP 456	Alecio, Robert .....	TP 059
Acharya, Pradip Kumar .....	WP 525	Agar, Nathalie Y. R. ....	ThOA pm 2:50	Alekseev, Dmitriy .....	ThP 615
Acheampong, Andrew .....	MOA pm 3:10	Agar, Nathalie Y.R. ....	WOA am 09:10	Alekseeva, Elena .....	TP 080
Ackerman, Luke K. ....	ThP 316	Agar, Nathalie Y.R. ....	TP 195	Aleksic, Maja .....	MP 061
Ackerman, Michael .....	ThP 577	Aggarwal, Sudeepta .....	WP 093	Al-Eryani, Rowaida .....	ThOE pm 2:30
Ackerman, Michael .....	ThP 282	Agnew, Brian .....	MP 298	Aletta, John .....	MP 302
Ackermann, Bradley L. ....	TOB pm 2:50	Ago, Tetsuro .....	TP 268	Alewood, Paul F. ....	MOC pm 3:50
Ackermann, Bradley L. ....	WP 160	Ago, Tetsuro .....	WP 011	Alexander, Andrew .....	ThP 633
Ackermann, Bradley L. ....	MP 272	Agrofoglio, Luigi .....	TP 467	Alexander, Elizabeth .....	WP 122
Ad, Niv .....	WP 074	Agron, Ilya A .....	MP 053	Alexandrova, Ludmila .....	MP 439
Adam, Lau .....	WP 224	Agron, Ilya A .....	TP 060	Al-Fdeilat, Abdullah H. ....	TP 424
Adamec, Jiri .....	TP 101	Agron, Ilya A .....	TP 065	Al-fdeilat, Abdullah H. ....	TP 357
Adamec, Jiri .....	MP 264	Agron, Ilya A .....	ThP 394	Alfred Merrill, Alfred .....	WP 187
Adams, Chris .....	ThP 526	Agron, Leonid A. ....	ThP 394	Algaier, Joseph W. ....	WP 170
Adams, Craig .....	TP 603	Aguilera, Todd A. ....	TP 343	Alhazmi, Abdulrahman .....	TP 476
Adams, Craig .....	MOG pm 4:10	Ahadi, Elias .....	TP 630	Alicie, Bethany .....	WP 394
Adams, Joe .....	WP 557	Ahlf, Dorothy .....	MP 134	Aliferis, Constantin .....	WP 522
Adams, Paul .....	WP 645	Ahlf, Dorothy .....	MOC pm 2:50	Alimpiev, Sergey .....	WP 163
Adamski, Jerzy .....	ThP 079	Ahlf, Dorothy R. ....	TOE am 09:50	Alimpiev, Sergey .....	WP 326
Adamson, Gary E. ....	ThP 368	Ahlf, Dorothy R. ....	MOC pm 4:10	Allard-Breton, Béatrice .....	WP 620
Adamson, Julie .....	MP 493	Ahlquist, David A. ....	MP 094	Alleman, Teresa L. ....	WP 631
Adarayan, Emily .....	MP 592	Ahmad, Imran .....	MP 093	Allen, Amy .....	ThP 198
Addepalli, Balasubrahmanyam .....	ThP 561	Ahmad, Rushdy .....	MP 084	Allen, Laurie .....	WP 605
Addison, Tom .....	MP 420	Ahn, Jong Rok .....	MP 209	Allen, Mark .....	TP 165
Addison, Tom .....	MP 359	Ahn, Joomi .....	TP 332	Allen, Simon .....	WP 150
Addison, Tom .....	MP 424	Ahn, Joomi .....	ThP 294	Allen, Simon .....	TOC pm 2:30
Addona, Terri .....	ThP 020	Ahn, Natalie G. ....	WP 149	Allen, Thomas J. ....	TP 522
Addona, Terri .....	MOB pm 4:10	Ahn, Seungkirl .....	TP 024	Allen-Michaud, Teresa .....	TP 354
Addona, Terri .....	TP 015	Ahn, Soyoun .....	MP 541	Alley, William R. ....	MP 481
Adelmant, Guillaume .....	ThP 448	Ahn, Soyoun .....	WP 220	Alley, William R. ....	MP 488
Ades, Edwin .....	ThP 376	Ahn, Sun Young .....	TP 133	Allis, C. David .....	TP 271
Adkins, Joshua .....	WP 051	Ahn, Younghee .....	MP 127	Allison, David F. ....	ThP 188
Adkins, Joshua N. ....	WP 458	Aiello, Mauro .....	WP 221	Allison, John .....	TP 665
Adkins, Joshua N. ....	TP 552	Aiken, Judd .....	WP 078	Allmaier, Guenter .....	MP 105
Adkins, Joshua N. ....	MP 290	Aiken, M. Jeannette .....	TOF am 09:30	Allmaier, Guenter .....	ThP 384
Admon, Arie .....	MP 383	Ainley, Steven .....	ThP 679	Allsup, Thurman .....	ThP 321
Adou, Kouame .....	MP 329	Aizikov, Konstantin .....	ThP 275	Al-majdoub, Zubida .....	WP 021
Adragni, Kofi P. ....	MP 060	Aizikov, Konstantin .....	MP 285	Almaraz, Ruben T. ....	MP 284
Aebersold, Ruedi .....	TP 138	Aizikov, Konstantin .....	MP 205	Almeida, Eladia .....	MP 267
Aebersold, Ruedi .....	MP 088	Aizikov, Konstantin .....	ThP 272	Almeida, Igor C. ....	ThP 050

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Almeida, Igor C.....	WP 307	Anderson, Caroline F.....	MP 603	Anthanas, Michael.....	MP 040
Almeida, Reinaldo.....	TP 165	Anderson, Crisand.....	WP 378	Anthony, Joseph.....	TP 553
Almeida, Reinaldo.....	MP 151	Anderson, D. C.....	ThP 200	Antoine, Miquel.....	ThP 387
Al-saad, Khalid A.....	MP 645	Anderson, Damon.....	TP 239	Antti, Henrik.....	TP 559
Altelaar, A.F. Maarten.....	WP 401	Anderson, David J.....	WP 146	Antwi, Kwasi.....	TP 083
Altelaar, A.F. Maarten.....	TP 130	Anderson, Gordon.....	WP 051	Ao, Xiaoping.....	MP 416
Altelaar, A.F. Maarten.....	TP 122	Anderson, Gordon.....	MP 033	Aoki, Jun.....	ThP 626
Altelaar, A.F. Maarten.....	TP 200	Anderson, Gordon.....	WP 691	Aoki, Jun.....	ThP 622
Alterman, Michail.....	TP 132	Anderson, Gordon.....	TP 218	Aoki, Jun.....	MP 207
Altman, Eleonora.....	MP 112	Anderson, Gordon.....	MOD am 08:30	Aoki, Yuko.....	WP 411
Altmeier, Elisabeth.....	ThP 079	Anderson, Gordon.....	WP 144	Aoshima, Ken.....	WP 689
Alton, Kevin.....	TOA pm 3:50	Anderson, Gordon A.....	TP 213	Aoshima, Ken.....	MP 044
Alton, Kevin.....	TP 583	Anderson, Kenneth.....	MOE am 10:10	Aoshima, Ken.....	TP 104
Alton, Kevin B.....	WP 098	Anderson, Kenneth D.....	MP 436	Aphasizhev, Ruslan.....	TP 142
Alvarado, Rudy.....	MP 003	Anderson, Leigh.....	MOE pm 3:30	Apicella, Michael.....	WP 014
Alvarez, Irene.....	TP 624	Anderson, Leigh.....	MP 009	Apon, Junefredo.....	ThOG pm 2:30
Alvarez, Melissa.....	TP 316	Anderson, Lorraine.....	WP 002	Aponte, Julia R.....	ThP 417
Alves, Gelio.....	ThP 204	Anderson, Lorraine.....	WP 005	Arabshahi, Alireza.....	MP 445
Alves, Gelio.....	WOE am 09:30	Anderson, Michelle A.....	WP 507	Arai, Hiroko.....	WP 340
Alves, Gelio.....	ThP 002	Anderson, N. Leigh.....	WP 514	Arakawa, Ryuichi.....	WP 612
Alves, Sandra.....	WP 360	Anderson, Penny.....	ThOC am 09:30	Arcand, Patrice.....	ThP 153
Alves, Sandra.....	ThP 096	Anderson, Scott.....	ThP 113	Arcand, Patrice.....	ThP 154
ALVES, Sandra.....	WP 617	Anderson, Scott.....	ThP 499	Archakov, Alexander.....	TP 508
Alving, Kim.....	MOC pm 3:10	Anderson, Vernon E.....	MP 621	Arcinas, Arthur.....	TP 073
Alving, Kim.....	MP 215	Andersson, Jan T.....	WOG am 08:30	Arckens, Lutgarde.....	WP 029
Alvord, Gregory.....	MP 129	Andersson, Jan T.....	WP 648	Argani, Pedram.....	TP 628
Alzate, Oscar.....	ThP 251	Andersson, Malin E.....	TP 092	Argoti, Dayana.....	ThP 591
Amado, Francisco.....	MP 512	Ando, Eiji.....	ThP 197	Arita, Masanori.....	TP 069
Amann, Joseph M.....	WP 181	Ando, Takashi.....	ThP 134	Arlaud, Gérard.....	ThP 244
Amano, Junko.....	WP 510	Andon, Nancy.....	ThP 468	Armean, Irina.....	TP 535
Amano, Junko.....	MPZ 582	Andra, Syam Sundar.....	TP 663	Armenta, Jenny.....	MP 476
Amantonico, Andrea.....	MP 171	Andrae, Ulrich.....	ThP 258	Armenta, Jenny M.....	MP 534
Amarnath, Venkataraman.....	TP 183	Andre, Magali.....	WP 469	Armenta, Jenny M.....	MP 255
Amato, Jussara.....	ThOC pm 3:30	Andrecht, Sven.....	WP 501	Armentrout, Peter B.....	WP 664
Ambatipudi, Kiran S.....	TP 097	Andrecht, Sven.....	WP 335	Armentrout, Peter B.....	TOF am 09:10
Ambus, Per.....	TOA am 09:30	Andrecht, Sven.....	WP 393	Armstrong, Daniel W.....	MP 380
Amegayibor, Sedinam.....	ThP 630	Andreev, Victor.....	WP 524	Armstrong, Glen D.....	MOC am 10:10
Amir, Liba.....	MOG am 09:50	Andresson, Thorkell.....	MP 052	Arnhold, Thomas.....	MOB am 10:10
Amirav, Aviv.....	TP 302	Andrews, Genna L.....	ThP 374	Arnold, Lora L.....	ThP 597
Amirav, Aviv.....	WP 646	Andrews, Genna L.....	TP 504	Arnold, Mark.....	WP 354
Ammerer, Gustav.....	MP 007	Andrews, Philip.....	ThOC pm 4:10	Arnold, Mark E.....	ThP 230
Amon, Angelika.....	TP 141	Andrews, Philip.....	ThP 521	Arnold, Mark E.....	ThP 229
Amoresano, Angela.....	ThP 117	Andrews, Philip.....	WP 038	Arnold, Nikita.....	TP 044
Amoretty, Carolyn.....	ThP 097	Andrews, Philip.....	WP 035	Arnold, Randy J.....	TP 045
Amorusi, Peter.....	ThP 219	Andrews, Philip.....	ThP 510	Arnold, Randy J.....	ThP 522
Amoscato, Andrew A.....	MP 128	Andrews, Philip.....	WP 431	Arnold, Steven E.....	MP 600
Amphlett, Godfrey.....	ThP 566	Andrien, Bruce.....	ThP 538	Arnotskaya, Natalia.....	TP 080
Amr, Mohamed.....	MP 645	Andrien, Bruce.....	TP 217	Arnott, David.....	TP 127
Amstalden, Erika R.....	TP 177	Andrzejewski, Denis.....	TP 063	Arnott, David.....	MP 062
Amstalden Van Hove, Erika R.....	TP 199	Andrzejewski, Denis.....	ThP 381	Arnott, David.....	Special
Amster, Jon.....	TP 525	Ane, Jean-Michel M.....	ThOE am 08:50	Arnott, David.....	WP 016
Amster, Jon.....	WP 153	Ang, Hui Qing.....	ThP 161	Arnott, David.....	ThP 121
Amster, Jon.....	ThP 193	Angata, Takashi.....	TP 526	Arnott, David.....	TP 028
Amster, Jon.....	TP 277	Angel, Peggi.....	WOD pm 3:50	Arnott, David.....	ThP 005
Amster, Jon.....	TP 123	Angel, Peggi.....	MOA am 10:10	Arnould, Mark.....	WOF pm 2:30
Amster, Jon.....	WP 683	Angel, Peggi.....	WP 185	Aronov, Pavel A.....	WP 248
Amster, Jon.....	ThOD pm 2:50	Angeletti, Ruth Hogue.....	WP 004	Aronova, Sofya.....	TOA am 10:10
Amundson, Lucas.....	WP 164	Angeletti, Ruth Hogue.....	MP 516	Arora, Jasbir S.....	MP 531
Amunugama, Ravi.....	ThP 033	Angeletti, Ruth Hogue.....	WP 550	Arora, Ritu.....	ThP 355
An, Eunkyung.....	ThP 487	Angeletti, Ruth Hogue.....	TP 543	Arrey, Tabiwang N.....	ThP 525
An, Hyun Joo.....	MP 478	Angeletti, Ruth Hogue.....	WP 298	Arrey, Tabiwang N.....	WP 396
An, Hyun Joo.....	MP 234	Anjum, Rana.....	ThP 441	Arriaga, Edgar A.....	ThOB am 09:50
An, Hyun Joo.....	WOC pm 4:10	Anjum, Rana.....	TOE pm 3:50	Arriaga, Edgar A.....	WP 020
An, Hyun Joo.....	MP 485	Ann, David K.....	WP 025	Arruda, Marco Aurelio Z.....	ThP 503
An, Yanming.....	TP 099	Annan, Roland S.....	TP 548	Arshavsky, Vadim.....	ThP 129
Anand, Ganesh S.....	WP 418	Annan, Roland S.....	MP 387	Arshavsky, Vadim Y.....	MP 238
Anbalagan, Victor.....	ThP 661	Annan, Roland S.....	WP 287	Arslanoglu, Julie.....	MP 585
Andaya, Armann.....	ThP 259	Annan, Roland S.....	MP 144	Arslanoglu, Julie.....	MP 590
Andersen, Julie K.....	TP 496	Annangudi, Suresh P.....	TP 497	Artaev, Viatcheslav.....	ThP 623
Andersen, Kari.....	ThP 458	Anni, Helen.....	WP 527	Artemenko, Konstantin.....	TOB am 09:50
Andersen, Michael Barrett.....	TP 154	Ansenberger, Kristine.....	MP 341	Artemenko, Konstantin.....	TOE pm 4:10
Andersen, Nisana.....	ThP 409	Ansong, Charles.....	TP 552	Arthen-Engeland, Thomas.....	WP 118

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Artigues, Antonio.....	TP 429	Awazu, Kunio.....	ThP 626	Balazy, Michael.....	MP 104
Asa, Darwin.....	ThP 544	Awazu, Kunio.....	TP 643	Balcer, Jesse L.....	MP 545
Asakawa, Daiki.....	ThP 353	Awazu, Kunio.....	ThP 622	Bald, Ilko.....	WP 676
Asbury, Reid.....	MP 287	Ayaz Guner, Serife.....	WP 536	Bald, Ilko.....	TP 640
Asgriz, Nasser.....	WP 323	Azagarsamy, Malar.....	MP 506	Baldwin, Andrew J.....	TP 463
Ashcroft, Alison E.....	WP 461	Azam, Farooq.....	MP 305	Baldwin, H. Scott.....	WP 185
Ashcroft, Alison E.....	TP 235	Azumaya, Connie.....	ThP 671	Baldwin, Ian T.....	WP 120
Ashcroft, Alison E.....	MOD am 09:10	B. Fayad, Paul.....	TP 596	Baldwin, Stephen A.....	WP 461
Ashcroft, Alison E.....	TP 229	Baba, Takashi.....	MP 638	Baliban, Richard C.....	MP 289
Ashihara, Motooki.....	WP 411	Baba, Takashi.....	MP 639	Baliban, Richard C.....	ThOD pm 3:10
Ashline, David.....	MP 495	Baba, Takashi.....	ThOD pm 3:50	Balkhi, Iffat.....	TP 396
Ashton, Simon.....	MP 252	Baba, Takashi.....	WP 547	Ball, Haydn L.....	ThOE pm 2:30
Ashton, Simon.....	ThP 093	Baba, Takashi.....	MOD pm 4:10	Ball, Terry B.....	WP 083
Askenazi, Manor.....	TP 540	Babbs, Adam.....	ThP 677	Balogh, Michael P.....	MP 310
Askenazi, Manor.....	ThP 448	Babushok, Valeri I.....	MP 662	Balogh, Michael P.....	MP 253
Askenazi, Manor.....	ThOE am 09:30	Back, JaapWillem.....	WP 138	Balsbaugh, Jeremy L.....	MP 300
Askenazi, Manor.....	WP 039	Backlund, Peter S.....	ThP 298	Baluya, Dodge.....	MP 210
Askenazi, Manor.....	WP 065	Backlund, Peter S.....	WP 264	Bamba, Takeshi.....	WP 576
Askovich, Peter.....	MP 037	Backus, Sean M.....	MP 309	Bamba, Takeshi.....	TP 111
Aslanian, Aaron.....	TP 627	Baden, Meike.....	MP 373	Bamberger, Andreas.....	WOD pm 3:10
Asmussen, Gary.....	MOC pm 3:10	Badman, Ethan R.....	WP 199	Bamberger, Casimir.....	WOD pm 3:10
Asperger, Arndt.....	TP 178	Badman, Ethan R.....	MP 622	Banach, John.....	MP 420
Asperger, Arndt.....	ThP 544	Badman, Ethan R.....	WP 343	Banach, Maria.....	ThP 225
Asperger, Arndt.....	TP 610	Badu Tawiah, Abraham K.....	ThP 335	Bandeira, Nuno.....	ThOE pm 4:10
Assadi-Porter, Fariba.....	WP 127	Baek, Je-hyun.....	TP 046	Bandeira, Nuno.....	MP 035
Assam, Lyes.....	WP 655	Baek, Je-Hyun.....	TP 133	Bandeira, Nuno.....	ThP 013
Astorga-wells, Juan.....	ThP 479	Baek, Moon-chang.....	TP 249	Bandeira, Nuno.....	WOE am 09:10
Astorga-Wells, Juan.....	MP 505	Baemisberger, Dominic.....	WP 396	Bandeira, Nuno.....	ThP 015
Ataku, Hanako.....	ThP 373	Baer, Tomas.....	ThOG am 08:50	Bandeira, Nuno.....	WP 041
Athanas, Michael.....	ThP 039	Baessler, Olivia.....	TP 145	Bandeira, Nuno.....	ThP 696
Athanas, Michael.....	MP 607	Baessmann, Carsten.....	WP 118	Bandeira, Nuno.....	ThP 001
Athanas, Michael.....	TP 628	Baessmann, Carsten.....	MP 017	Bandeira, Nuno.....	ThP 005
Athanas, Michael.....	MP 048	Baessmann, Carsten.....	TP 251	Bandhakavi, Sricharan.....	MP 060
Athanasios, Lykidis.....	WP 144	Baessmann, Carsten.....	TP 620	Bandhakavi, Sricharan.....	WP 142
Atherton, Jim.....	TP 347	Baessmann, Carsten.....	MP 151	Bandila, Peter.....	TP 165
Atkins, Chad G.....	WP 671	Bafna, Vineet.....	TP 175	Bando, Yasuhiko.....	WP 534
Atkins, Norman.....	ThP 461	Bafna, Vineet.....	MP 062	Bandyopadhyay, Sunayan.....	WP 002
Atkinson, John P.....	TP 522	Bafna, Vineet.....	ThP 696	Banerjee, Anamika.....	WP 540
Atlasevich, Natalya.....	TP 215	Bafna, Vineet.....	MP 035	Banerjee, Poulabi.....	WP 130
Atlasevich, Natalya.....	WP 205	Bafna, Vineet.....	WP 041	Banfield, Jill.....	MP 286
Atmanene, Cédric.....	WP 455	Bagal, Dhanashri.....	WP 208	Banfield, Jill F.....	ThP 029
Attie, Alan D.....	MP 356	Baginski, Theodore.....	TP 501	Banfield, Jill F.....	WP 131
Attygalle, Athula B.....	TP 631	Baginski, Tomasz K.....	WP 466	Banfield, Jillian.....	ThP 031
Attygalle, Athula B.....	TP 644	Bagramyan, Karine.....	TP 075	Bang, Eunjin.....	MOB pm 3:30
Attygalle, Athula B.....	WP 371	Bagramyan, Karine.....	MP 117	Bang, Jeong K.....	WP 413
Atwood, James.....	TP 038	Bagrodia, Shubha.....	MP 248	Bankaitis, Vytautas A.....	ThP 118
Atwood III, James A.....	TP 555	Bahl, Justyna M Czarna.....	MP 259	Banks, Rosamonde.....	TP 155
Auberry, Deanna.....	WP 144	Bahrainwala, Tasneem.....	WP 197	Banks, Rosamonde E.....	MP 614
Aubriet, Frédéric.....	MP 633	Bai, Shujun.....	ThP 558	Bannerman, Douglas D.....	MP 396
Aubriet, Frédéric.....	ThP 654	Bailey, Charles.....	ThP 437	Bansal, Surendra.....	WP 343
Aubriet, Frédéric.....	ThP 651	Bailey, Christopher M.....	ThP 190	Bantscheff, Marcus.....	ThOC am 09:50
Aubry, Anne-Francoise.....	WP 244	Bailey, Jonathan.....	TP 600	Bantscheff, Marcus.....	ThP 296
Auclair, Jared R.....	ThP 477	Bairu, Semere.....	ThP 331	Bao, Donghui.....	MP 354
Auger, Serge.....	ThP 148	Bajic, Steve.....	MP 318	Bao, Jiangyin.....	MP 533
Auger, Serge.....	ThP 151	Bajpai, Lakshmi.....	MP 432	Barak, Ruth.....	WOB am 09:30
Auger Jr, Paul L.....	ThP 060	Bajrami, Bekim.....	ThP 116	Baraniuk, James N.....	ThP 194
Augusti, Rodinei.....	TP 591	Bajrami, Bekim.....	ThP 115	Barbacci, Damon.....	MP 256
Ault, Jeff.....	ThP 472	Bakalarski, Corey E.....	ThP 121	Barbara, Joanna.....	MP 543
Aurand, Craig.....	ThP 354	Baker, Andrew.....	TP 570	Barbeau, Jean.....	WP 227
Aurand, Craig.....	WP 608	Baker, Andrew.....	TP 236	Barber, David.....	TP 453
Auriola, Seppo.....	ThP 529	Baker, Audrey.....	ThP 537	Barber, Jill.....	WP 021
Austin, Calvin.....	ThOA pm 3:10	Baker, David.....	WP 430	Barbosa, Leandro S. C.....	MP 165
Austin, Calvin A.....	WOF pm 4:10	Baker, Erin.....	TP 218	Barbosa, Valmir C.....	ThP 023
Austin, Calvin A.....	MPZ 577	Baker, Erin.....	MOD am 08:30	Barboza, Mariana.....	WP 497
Austin, Daniel.....	ThOF pm 2:50	Baker, Erin.....	MP 332	Barbula, Griffin.....	MP 515
Austin, Daniel.....	TP 387	Baker, Erin.....	TP 232	Barbula, Griffin K.....	TP 298
Austin, John.....	TP 516	Baker, Peter R.....	ThP 288	Barendregt, Arjan.....	MOC am 08:30
Avery, Sian L.....	MP 398	Baker, Peter R.....	ThP 021	Barendregt, Arjan.....	TP 460
Avtonomov, Dmitriy M.....	TP 060	Baker, Scott.....	WP 144	Bark, Steven.....	ThP 466
Avtonomov, Dmitriy M.....	TP 065	Bakes, David M.....	MP 359	Barker, Andrew.....	ThP 506
Avtonomov, Dmitry.....	MP 053	Balan, Venkatesh.....	WP 481	Barker, Philip.....	TP 303
Awad, Amber.....	MP 371	Balalabramani, Manimalha.....	MP 287	Barket, Jr., Dennis.....	TP 372

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Barkley, Robert M.....	ThP 182	Bauer, Selena.....	WP 414	Belgacem, Omar.....	MP 092
Barkow-Oesterreicher, Simon.....	MP 045	Bauman, Andrew T.....	WP 047	Belisle, John T.....	TP 299
Barlogie, Bart.....	TP 618	Bauman, Andrew T.....	WP 057	Belke, Jay E.....	MP 344
Barlow, Christopher K.....	MP 221	Bauman, Andrew T.....	ThP 130	Bell, Bruce.....	ThP 315
Barlow, Paul.....	WP 157	Baumann, Anne.....	MP 522	Bell, Bruce.....	WP 614
Barnea, Eilon.....	MP 383	Baumann, Anne.....	TP 240	Bell, Christina.....	ThOE pm 3:50
Barnea, Eytan.....	ThP 033	Baumann, Christian.....	MP 474	Bell, David S.....	ThP 354
Barnes, Alan.....	ThP 093	Baumann, Christian.....	ThP 588	Bell, Rebecca.....	ThP 381
Barnes, Stephen.....	MP 257	Bausch-Fluck, Damaris.....	ThP 512	Bell, Ryan J.....	ThOF pm 3:30
Barnes, Stephen.....	WP 543	Bayliss, Mark A.....	WP 166	Bellows, Chris.....	ThOB am 09:30
Barnes, Stephen.....	MP 445	Bazavan, Daniel.....	ThP 131	Beloglazkina, Elena K.....	ThP 394
Barnes, Stephen.....	TP 312	Bazemore-Walker, Carthene R.....	ThP 513	Belov, Mikhail.....	TP 232
Barnes, Stephen.....	WP 528	Bazemore-Walker, Carthene R.....	ThP 108	Belov, Mikhail.....	TP 212
Barnes, Stephen.....	ThP 575	Bazemore-Walker, Carthene R.....	ThP 380	Belov, Mikhail.....	MOD am 08:30
Barnett, Joey V.....	WP 185	Bazile, Franck.....	ThP 436	Belov, Mikhail.....	TP 218
Barnhart, Kurt T.....	TP 081	Bazzi, Bilal.....	MP 326	Belov, Mikhail.....	ThP 103
Barofsky, Douglas F.....	MP 636	Bazzone, Lindsey.....	MP 072	Belov, Mikhail.....	WP 051
Barofsky, Douglas F.....	ThOD am 09:50	Beagley, Nathaniel.....	TP 213	Belov, Mikhail.....	ThP 104
Barquera, Blanca.....	WP 404	Beagley, Nathaniel.....	WP 691	Belov, Mikhail E.....	TP 234
Barr, John R.....	TP 511	Beardsley, Richard L.....	WP 343	Belyaeva, Natalia.....	WP 145
Barr, John R.....	TOG am 09:10	Beasley, Ashley.....	WP 280	Ben Hamidane, Hisham.....	ThOD am 09:30
Barr, John R.....	MP 460	Beaudet, Sylvie.....	WP 249	Ben Hamidane, Hisham.....	MP 643
Barr, John R.....	ThP 375	Beavis, Ronald.....	WP 147	Ben Hamidane, Hisham.....	ThP 660
Barr, John R.....	ThP 376	Beavis, Ronald.....	ThP 125	Benabdelkamel, Hicham.....	WP 389
Barr, John R.....	MP 004	Bech, Niels.....	TOA am 09:30	Benabdellah, Farida.....	WOA am 09:30
Barr, John R.....	TP 014	Becher, Dörte.....	TP 134	Bencsath, F. Aladar.....	ThP 133
Barr, John R.....	TP 380	Becher, Francois.....	TP 382	Bender, Matthew.....	TP 125
Barr, John R.....	MP 422	Becht, Steve.....	TP 346	Bendix Jensen, Kenneth.....	WP 281
Barran, Perdita.....	TP 446	Becht, Steven.....	ThP 407	Benesch, Justin LP.....	TP 463
Barran, Perdita E.....	TP 032	Beck, Alain.....	WP 455	Bennaceur, Chafia.....	WP 360
Barrera, Nelson P.....	WOE pm 4:10	Beck, Jonathan.....	WP 600	Benner, Jack.....	TP 554
Barrera, Neslon.....	MOC am 08:50	Becker, Arno.....	TOD pm 4:10	Benner Jr., Bruce A.....	WP 121
Barrett, Tanya.....	WP 037	Becker, Chris.....	MP 239	Benner, Jr., Bruce A.....	MP 671
Barrett-Wilt, Gregory.....	WP 026	Becker, Chris.....	ThP 056	Bennett, Bryson.....	WP 102
Barrientos-Astigarraga, Rafael.....	MP 165	Becker, Chris.....	ThP 507	Bennett, Melissa J.....	TP 448
Barry, Adrienne K.....	TP 495	Becker, Chris.....	MP 113	Bennett, Patrick.....	ThP 595
Barry, Adrienne K.....	TP 494	Becker, Christopher.....	MP 076	Bennett, Patrick.....	ThP 238
Barry, Bill.....	ThP 627	Becker, Johanna Sabine.....	MOG am 08:30	Bennett, Patrick.....	TP 018
Barry, Clifton E.....	ThP 161	Becker, Juergen.....	TP 650	Bennett, Patrick.....	WP 222
Barry, Colin G.....	WP 537	Becker, Luann.....	ThP 387	Bennett, Patrick.....	TP 404
Barry, Richard.....	MP 563	Becker, Luann.....	MP 190	Bennett, Patrick.....	WP 234
Barsch, Aiko.....	WP 120	Becker, Luann.....	WP 325	Bennett, Patrick.....	WP 562
Barsch, Aiko.....	TP 565	Becker, Michael.....	TP 178	Bennett, Sean.....	WP 618
Barsky, Daniel.....	WP 211	Becker, Michael.....	WOD pm 4:10	Benson, Kasey.....	TP 420
Barthen, Nicolas.....	ThP 654	Becker, Stacey L.....	ThP 214	Benson, Linda M.....	ThP 054
Bartlett, Michael G.....	MOG pm 2:30	Beckhaus, Tobias.....	WP 154	Benson, Linda M.....	WP 028
Bartlett, Michael G.....	MP 405	Beckman, Babara S.....	MP 072	Benson, Linda M.....	TP 257
Bartlett, Vernon.....	ThP 131	Beckman, Joseph S.....	MP 636	Bente, Matthias.....	ThOG am 09:30
Bartmess, John E.....	TP 305	Beck-Nielsen, Henning.....	ThP 302	Benter, Thorsten.....	MP 304
Bartolini, Wilmin P.....	MP 399	Bedair, Mohamed.....	WP 570	Benter, Thorsten.....	MP 319
Barton, Elizabeth E.....	ThP 459	Bednarczyk, Audrey.....	ThP 254	Benter, Thorsten.....	TP 642
Barton, Geran.....	WP 328	Beer, Ilan.....	MP 383	Benton, Paul H.....	TP 106
Barton, Hollie.....	MP 158	Beer, Lynn A.....	TP 081	Bentzley, Catherine.....	MP 660
Barupal, Dinesh Kumar.....	WOB am 08:30	Beer, Lynn A.....	MP 118	Benz, Chris.....	TP 023
Barupal, Dinesh Kumar.....	ThP 073	Beer, Thomas.....	TP 333	Beranek, Josef.....	MP 664
Basha, Eman.....	TP 463	Beerse, Peter.....	WP 225	Berardinelli, Anthony.....	WP 295
Basile, Franco.....	TP 299	Beger, Richard D.....	TP 409	Berberich, Matthew J.....	TP 342
Basile, Franco.....	ThP 198	Begley, Timothy H.....	ThP 316	Bereman, Michael S.....	WOC pm 3:50
Basir, Yousef.....	MP 258	Behnke, Silvia.....	ThP 512	Berg, Amanda.....	ThP 448
Bassilian, Sara.....	WOE pm 3:50	Behrendt, Anna K.....	MP 231	Berg, Amanda.....	TP 156
Basu, Partha.....	MP 539	Behrens, Marina.....	MP 017	Berg, Amanda.....	TP 161
Basu, Sankha S.....	MP 173	Beil, Eric.....	TP 462	Berg, Amanda.....	MP 001
Batard, Thierry.....	ThOA am 09:10	Bek, Stephan.....	TP 506	Bergen, III, H. Robert.....	WP 028
Batard, Thierry.....	TP 529	Bek, Stephan.....	TOB am 10:10	Bergen, III, H. Robert.....	WP 070
Batchelor, Suzanne P.....	MP 309	Beland, Frederick.....	ThP 580	Bergen, Iii, H. Robert.....	MP 094
Bateman, Kevin P.....	MP 356	Beland, Frederick A.....	TP 409	Bergen, III, H. Robert.....	ThP 054
Bateman, Nicholas W.....	TP 532	Belanger, Philippe.....	ThP 154	Bergen, III, H. Robert.....	TP 257
Bateman, Randall J.....	MP 601	Belanger, Philippe.....	WP 232	Bergenheim, A. Tommy.....	TP 559
Bates, Anna H.....	TOG am 09:30	Bélangier, Philippe.....	ThP 153	Berger, Beatrice.....	WP 120
Batoy, S Mariccor Andresa.....	MP 214	Belcheva, Antoaneta.....	TP 439	Berger, Scott.....	ThOA am 10:10
Batth, Tanveer S.....	TP 500	Belenky, Alexei.....	MP 215	Bergeron, Melanie.....	ThP 364
Baudys, Jakub.....	MP 391	Belgacem, Omar.....	ThP 248	Bergh, Ann.....	WP 519

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Berghoff, Adar T.....	WP 086	Bierl, Charlene.....	ThP 062	Blanckenburg, Bo.....	ThP 694
Bergman, Jacques J.....	WP 554	Bierl, Charlene.....	TP 043	Blank, David W.....	TP 625
Bergman, Tomas.....	ThP 479	Biesenthal, Tom.....	MP 191	Blank, David W.....	WP 566
Bergqvist, Simon.....	MP 464	Biggin, Mark D.....	WP 150	Blankenship, Robert E.....	WP 451
Berkout, Vadym.....	TP 360	Bigwarfe Jr., Paul M.....	MP 663	Blanksby, Stephen J.....	MP 213
Berkout, Vadym D.....	ThOG am 10:10	Bihoreau, Nicolas.....	WP 469	Blanksby, Stephen J.....	MOF am 08:50
Berkowitz, Steven.....	TP 441	Bilakovics, James.....	ThP 468	Blanksby, Stephen J.....	MOF am 09:10
Berkowitz, Steven A.....	TP 432	Billheimer, Dean D.....	TP 074	Blanksby, Stephen J.....	WOC am 09:10
Berkowitz, Steven A.....	TP 430	Billheimer, Dean D.....	TP 079	Blanksby, Stephen J.....	TP 379
Bern, Marshall W.....	WP 456	Billings, Eric M.....	TP 037	Blanksby, Stephen J.....	MOA am 08:30
Bern, Marshall W.....	WOF am 08:30	Bilski, Piotr J.....	WP 447	Blanksby, Stephen J.....	TP 303
Bern, Marshall W.....	WP 450	Bilsland, James.....	ThP 071	Blaschke, Sabine.....	TP 610
Bern, Morten.....	WP 056	Bindila, Laura.....	MP 482	Blase, Ryan.....	WP 213
Bernd, Bruenner.....	ThP 401	Bindschedler, Laurence V.....	ThP 378	Blatnik, Matt.....	TOB pm 3:50
Bernhardt, Rita.....	TP 482	Binz, Pierre-Alain.....	Special	Blatt, Celso.....	MP 658
Bernier, Ulrich R.....	WP 198	Binz, Pierre-Alain.....	TP 251	Blay, Pearl.....	ThP 131
Bernstein, Robert.....	WOF am 09:10	Binz, Pierre-Alain.....	WP 042	Blazer-Yost, Bonnie L.....	MP 067
Berntenis, Nikolaos.....	TP 313	Binz, Pierre-alain.....	Special	Bleholder, Christian.....	TOF pm 3:50
Berryman, Joshua T.....	TP 235	Binz, Pierre-Alain.....	WP 165	Blennow, Kaj.....	TP 093
Berryman, Joshua T.....	MOD am 09:10	Birdwell, David.....	ThP 333	Blennow, Kaj.....	TP 092
Bertenshaw, Greg P.....	WP 112	Birgit, Korte.....	MP 618	Blethrow, Justin.....	ThP 202
Berton, Alberto.....	ThP 414	Biringer, Roger G.....	ThP 199	Blethrow, Justin.....	MP 588
Berton, Alberto.....	ThP 396	Birse, Charles E.....	WP 093	Blethrow, Justin.....	TOD pm 3:30
Bertozzi, Carolyn R.....	MP 389	Bishnoi, Tanushree.....	WP 418	Blex, Christian.....	TP 145
Bertrand, Virginie.....	WP 032	Bisle, Birgit.....	MP 069	Blindauer, Claudia A.....	WOD am 09:10
Bertsch, Andreas.....	TP 050	Bissati, Kamal El.....	WP 298	Blobel, Gerd.....	ThP 560
Bertsch, James.....	ThP 627	Bissessar, Preeta.....	MP 423	Bloch, Michael.....	MP 072
Berube, Matthew.....	ThP 667	Bissessar, Preeta.....	MP 410	Blomme, Eric.....	ThP 587
Berube, Matthew.....	WP 256	Bissessar, Preeta.....	TP 407	Blonder, Josip.....	TOB pm 3:10
Bérubé, Eugénie-Raphaëlle.....	WP 223	Bisson, Nicolas.....	TP 509	Blonder, Josip.....	MP 052
Berven, Frode.....	MP 084	Bitzer, Markus.....	TP 543	Blonder, Josip.....	MP 617
Bessler, Monica.....	MP 042	Blachon, Grégory.....	MP 557	Blonder, Josip.....	Special
Bestel-Corre, Gwenaëlle.....	ThP 109	Black, Ben E.....	TP 447	Bloom, Joshua.....	MP 039
Bethke, Jennifer R.....	ThP 390	Black, Ben E.....	ThP 482	Bloomfield, Nic.....	MP 146
Betné, Ingvær.....	ThP 665	Black, Timothy J.....	ThOC am 09:10	Bloomfield, Nic.....	TP 062
Bettsworth, Florence.....	MP 126	Blackburn, Kevin.....	MP 025	Bloomfield, Nic.....	TP 561
Betty, Eipper A.....	TP 497	Blackburn, Kevin.....	MP 022	Bloomfield, Nic.....	MP 441
Beu, Steve.....	TP 281	Blackburn, Kevin.....	ThP 453	Bloomfield, Nic.....	ThP 628
Beu, Steve.....	TP 279	Blackburn, Mary.....	MP 489	Blueggel, Martin.....	TP 620
Beu, Steven C.....	MOD pm 2:50	Blacken, Grady.....	ThP 564	Blueggel, Martin.....	ThP 250
Beuck, Simon.....	TP 255	Blacken, Grady.....	MP 501	Blueggel, Martin.....	MP 618
Beuning, Penny J.....	TP 436	Blackwell, Anne E.....	MOC pm 3:30	Blumberg, Jeffrey B.....	ThP 221
Bezdetnaya, Lina.....	MP 611	Bladergroen, Marco R.....	MP 596	Blumer-Schuette, Sara E.....	ThP 374
Bezstarosti, Karel.....	WP 024	Blades, Michael.....	WP 320	Blunk, Dirk.....	WP 664
Bhandari, Deepak.....	TP 305	Blades, Michael.....	MP 308	Bobeldijk, Ivana.....	TP 110
Bhardwaj, Chhavi.....	WP 186	Blades, Michael.....	MP 153	Bobeldijk-Pastorova, Ivana.....	MP 243
Bhat, Showket H.....	ThP 216	Blagoev, Blagoy.....	WP 300	Bobst, Cedric.....	ThOA am 08:50
Bhat, Vadiraja.....	ThP 297	Blair, Ian A.....	MP 116	Bobst, Cedric.....	TP 452
Bhat, Vadiraja.....	MP 539	Blair, Ian A.....	MP 172	Bobst, Cedric.....	TP 432
Bhat, Vadiraja B.....	WP 531	Blair, Ian A.....	WP 082	Bobst, Cedric.....	TP 430
Bhat, Vadiraja B.....	MP 604	Blair, Ian A.....	MP 114	Bock, Thomas.....	ThP 512
Bhatia, Vivek N.....	WP 049	Blair, Ian A.....	MP 531	Böcker, Sebastian.....	WP 690
Bhatia, Vivek N.....	MP 288	Blair, Ian A.....	ThP 018	Bode, Lars.....	MP 484
Bhatia, Vivek N.....	MP 292	Blair, Ian A.....	MP 173	Bodenmiller, Bernd.....	MP 283
Bhatia, Vivek N.....	WP 414	Blair, Ian A.....	ThP 216	Bodicherla, Vikram.....	ThP 017
Bhattacharjee, Mitali.....	ThP 058	Blair, Ian A.....	WP 540	Bodnar, Ed.....	WP 465
Bhattacharyya, Sudeepa.....	WP 119	Blair, Ian A.....	ThP 052	Bodnar, Ed.....	TP 531
Bhattacharyya, Sudeepa.....	WP 115	Blair, Ian A.....	MP 175	Boehmer, Jamie L.....	MP 395
Bheda, Poanam.....	TP 260	Blair, Ian A.....	TOB pm 2:30	Boehmer, Jamie L.....	MP 396
Bialk, Heidi M.....	WOG am 08:50	Blair, Ian A.....	MP 530	Boël, Grégory.....	WP 033
Bian, Min.....	TP 346	Blair, Ian A.....	WP 537	Boer, Viktor.....	ThP 089
Bian, Shengjie.....	TP 544	Blair, Ian A.....	MP 278	Boeri Erba, Elisabetta.....	WOC am 09:50
Bianchi, Giancarlo.....	ThP 605	Blake, James C.....	MP 403	Boerma, LeeAnn J.....	TP 454
Bick, David P.....	TP 621	Blakeslee, Kenneth.....	MP 255	Boernsen, Olaf.....	TOB am 10:10
Biederer, Thomas.....	WP 506	Blakney, Greg.....	TP 278	Boersma, Paul J.....	MP 011
Bienvenut, Willy Vincent.....	TP 334	Blakney, Greg T.....	TP 281	Boesche, Markus.....	ThP 296
Bier, Mark E.....	ThP 606	Blakney, Greg T.....	TP 365	Bogdanov, Bogdan.....	WP 124
Bier, Mark E.....	WP 478	Blakney, Greg T.....	TP 286	Bogdanov, Mikhail B.....	WP 100
Bier, Mark E.....	TP 590	Blakney, Greg T.....	MOD pm 2:50	Boggio, Kristin J.....	ThOA pm 2:50
Bierbaum, Veronica M.....	MOF am 08:30	Blakney, Gregory T.....	TP 284	Boggio, Kristin J.....	ThP 456
Bierbaum, Veronica M.....	ThP 634	Blanchard, John S.....	TP 450	Boggio, Kristin J.....	ThP 477
Bierbaum, Veronica M.....	ThP 635	Blanchard, Sophie.....	TP 238	Bogler, Oliver.....	ThP 297

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Bogler, Oliver.....	WP 560	Bouchard, Danielle.....	ThP 154	Breuker, Kathrin.....	WP 426
Bohn, Paul.....	ThP 169	Boucher, Ilene.....	ThP 261	Breuker, Kathrin.....	ThP 416
Bohrer, Brian.....	WP 205	Boudonck, Kurt.....	ThP 097	Breuker, Kathrin.....	WP 425
Bohrer, Brian.....	WOF pm 4:10	Boudreau, Nadine.....	ThP 155	Breunig, J. Scott.....	ThP 081
Bohrer, Brian C.....	TP 215	Boudreau, Nadine.....	ThP 232	Brewer, Edward.....	TP 404
Boie, Yves.....	MP 356	Boulanger, Luce.....	WP 249	Brewer, Edward.....	WP 230
Boisseau, Charlotte.....	TP 427	Boulay, Katherine.....	MP 409	Brewer, Joyce.....	ThP 531
Bokatizian-Johnson, Samantha.....	TP 355	Boumsellek, Said.....	TP 214	Brewer, William.....	WP 358
Bolcato, Christopher.....	MP 287	Bousquet-Moore, Danielle.....	TP 497	Bridge, Bob.....	MP 349
Boldin, Ivan.....	TP 274	Boutaud, Olivier.....	TP 183	Bridon, Gaëlle.....	TP 203
Boldin, Ivan.....	TP 278	Boutin, Herve.....	TP 174	Bridon, Gaëlle.....	ThP 452
Bolgar, Mark S.....	TP 631	Boutin, Michel.....	ThP 529	Briem, Sveinn.....	ThP 665
Bolling, Bradley W.....	ThP 221	Boutin, Michel.....	MP 093	Brier, Sebastien.....	WP 443
Bondarenko, Pavel V.....	ThP 535	Bouyssiere, Brice.....	WP 651	Briggs, Steven P.....	TP 558
Bonello, Pierluigi.....	TOE am 10:10	Bouyssiere, Brice.....	WP 647	Brigham-Burke, Michael.....	ThP 537
Bones, Angela.....	TOB pm 2:50	Bowden, Donald K.....	TP 121	Brill, Laurence M.....	TP 534
Bones, Angela M.....	WP 160	Bowen, Benjamin.....	TP 626	Brinckerhoff, William.....	ThP 387
Bongarzone, Italia.....	MP 323	Bowen, Chester.....	WOB pm 3:30	Brinker, Anita.....	MP 245
Bonilla, Leo E.....	ThP 260	Bowen, Chester L.....	ThP 217	Brinkmalm, Gunnar.....	TP 092
Bonilla, Leo E.....	ThP 060	Bowen, Richard.....	TP 299	Brinkmalm, Gunnar.....	TP 093
Bonneil, Eric.....	TP 203	Bowerbank, Christopher R.....	TP 373	Brinson, Robert G.....	ThP 414
Bonneil, Eric.....	MP 043	Bowers, Michael T.....	TOF pm 3:50	Brinza, Dumitru.....	ThOE pm 4:10
Bonneil, Eric.....	ThP 436	Bowersock, Gregory J.....	TP 312	Briscoe, Andrew.....	MP 070
Bonneil, Eric.....	TP 262	Boyarkin, Oleg V.....	MOF pm 3:10	Briscoe, Chad.....	ThP 135
Bonner, Ron.....	TP 109	Boyd, Jessica.....	WOG pm 3:50	Briscoe, Chad.....	ThOB am 09:10
Bonner, Ron.....	TP 062	Boyd, Jessica M.....	WP 599	Briscoe, Chad J.....	MP 355
Bonner, Ron.....	WP 224	Boyle, Billy.....	WOD am 09:50	Brkic, Boris.....	ThOF pm 3:10
Boonthung, Pinmanee.....	WP 463	Boyle, Siobhan.....	TOG am 09:30	Brock, Ansgar.....	TP 126
Boonthung, Pinmanee.....	TP 517	Boys, Brian.....	TP 629	Brock, Ansgar.....	ThP 688
Boonthung, Pinmanee.....	WP 453	Boys, Brian.....	TOC am 08:30	Brockmann, Klaus J.....	MP 304
Booy, Aaron.....	MP 142	Boysen, Reinhard I.....	TP 121	Brockmann, Klaus J.....	MP 319
Bora, Adriana.....	TP 491	Bozigian, Haig.....	TP 502	Brockmann, Klaus J.....	TP 642
Boram, Sharon.....	ThOA am 09:30	Braam, Stefan.....	ThP 426	Brodbelt, Jennifer.....	TP 362
Borchers, Christoph.....	ThP 090	Bradley, Donald.....	WOF am 09:10	Brodbelt, Jennifer.....	TP 368
Borchers, Christoph.....	ThP 075	Bradley, Melissa.....	MP 225	Brodbelt, Jennifer.....	ThP 417
Borchers, Christoph.....	TP 030	Bradley, Patrick.....	ThP 089	Brodbelt, Jennifer.....	WOC am 09:30
Borchers, Christoph.....	WP 153	Bradshaw, James A.....	TP 185	Brodbelt, Jennifer.....	MP 627
Borchers, Christoph.....	WP 438	Bradshaw, James A.....	WOD pm 3:30	Brodbelt, Jennifer.....	ThOD pm 3:30
Borchers, Christoph.....	WP 432	Bradshaw, Patrick C.....	ThP 589	Brodbelt, Jennifer.....	ThP 395
Borchers, Christoph.....	WP 440	Bragason, Gisli.....	MOB am 09:30	Brodbelt, Jennifer.....	MP 628
Borchers, Christoph.....	ThP 009	Brahmbhatt, Viral.....	WP 069	Brodbelt, Jennifer.....	WOB pm 4:10
Borchers, Christoph H.....	WP 128	Brahmbhatt, Viral.....	WP 066	Brodbelt, Jennifer.....	MP 626
Borchers, Christoph H.....	WP 514	Bramwell-German, Claire.....	MP 432	Brodbelt, Jennifer.....	MP 642
Borchers, Christoph H.....	MOB pm 3:10	Bramwell-german, Claire.....	MP 517	Brodbelt, Jennifer S.....	ThP 418
Borchers, Christoph H.....	WP 567	Branca, Rui Miguel Mamede.....	MP 026	Broeckling, Corey.....	TP 536
Borchers, Christoph H.....	MP 120	Branch, Robert A.....	TP 401	Broeckling, Corey.....	ThP 270
Borgeat, Pierre.....	MP 409	Branch, Todd.....	WP 225	Brooks, Bryan W.....	WOG pm 3:10
Borgmann, Sabine.....	MP 214	Brand, Tony.....	TP 259	Brooks, Maureen.....	ThP 677
Borhan, Babak.....	WP 116	Brand, Tony.....	WP 261	Brooks Loftin, Kathleen.....	WP 628
Bori, Ibrahim D.....	MP 469	Brandes, Hillel K.....	ThP 354	Brooks Loftin, Kathleen.....	WOG pm 4:10
Borisov, Oleg.....	TP 316	Brant, Ashley.....	TP 345	Broomall, Bill.....	WP 057
Borisov, Roman.....	MP 657	Brass, Lawrence.....	WP 537	Broomall, Bill.....	WP 047
Borisov, Roman.....	WP 623	Brauckmann, Christine.....	TP 241	Brosch, Markus.....	MP 063
Bornemann, Sandra.....	ThP 525	Brauckmann, Christine.....	MOG am 09:10	Brose, Stephen A.....	ThP 063
Bornstein, Stefan R.....	MP 249	Braue, Aimee.....	ThP 475	Brouns, Stan.....	TP 460
Borodkov, Alexey.....	WP 163	Braumann, Ulrich.....	TP 565	Brouwer, Eric.....	TP 146
Boronina, Tatiana N.....	TP 036	Braun, Thomas.....	WP 558	Brown, Chris.....	ThP 171
Borovskaya, Alexandra D.....	ThP 388	Brautigan, David L.....	MP 300	Brown, H. Alex.....	ThP 177
Borowsky, Alexander D.....	MP 478	Bravo, Orlando.....	ThP 235	Brown, Jeff.....	MP 635
Bortvedt, Sarah.....	WP 551	Breault-Turcot, Julien.....	ThOB am 08:30	Brown, Jeffery M.....	TP 361
Borum, Peggy R.....	ThP 165	Brechenmacher, Laurent.....	TP 105	Brown, Johnie.....	WP 159
Borum, Peggy R.....	ThP 065	Breen, Nancy.....	MP 253	Brown, Johnie.....	MP 540
Bosanac, Ivan.....	TP 028	Breilh, Dominique.....	MP 598	Brown, Kristy J.....	TP 615
Boschetti, Egisto.....	TP 096	Breitbart, Mya.....	ThP 031	Brown, Kristy J.....	ThP 061
Bosco, Daryl A.....	ThP 034	Brekenfeld, Andreas.....	ThP 207	Brown, Kristy J.....	ThP 487
Bossée, Anne.....	WP 360	Brekenfeld, Andreas.....	MP 203	Brown, Lewis M.....	WP 033
Both, Jean-Pierre.....	TP 176	Brenes, Daniel A.....	ThP 352	Brown, Nancy J.....	ThP 157
Botitsi, Helen V.....	TP 593	Brenna, J Thomas.....	ThP 341	Brown, Robert.....	TP 370
Botre, Francesco.....	TP 657	Brenna, J Thomas.....	MP 163	Brown, Wes.....	MP 424
Botstein, David.....	ThP 089	Brennan, John D.....	ThP 689	Brown Jr, Robert H.....	ThP 034
Bou-assaf, George M.....	TP 444	Brenner, Dean E.....	WP 507	Browne, Shaynah.....	MP 641
Bouchard, Danielle.....	ThP 153	Breteler, Monique M. B.....	MP 087	Browning, Marc.....	ThP 366

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Bruand, Jocelyne.....	TP 175	Bunk, David M.....	TP 074	Calcutt, Nigel A.....	TP 322
Bruce, Can.....	WP 402	Bunnett, Nigel.....	ThP 455	Califf, Robert.....	MOE pm 3:50
Bruce, James.....	WP 156	Bunse, Christian.....	WP 532	Calkin, Anna C.....	MP 221
Bruce, James.....	WP 155	Bunting, Harry.....	MP 656	Callahan, John H.....	MP 392
Bruckner, James.....	MOG pm 2:30	Bunting, Harry.....	WP 604	Callahan, John H.....	MP 395
Bruening, Merlin L.....	WP 397	Buonanno, Andres.....	TP 342	Callahan, John H.....	TP 063
Bruisnak, Mi-Youn.....	WP 087	Buono, Gérard.....	ThP 653	Callahan, John H.....	MP 396
Brulet, Marc.....	TP 176	Burd, Berta.....	WP 298	Callahan, John H.....	WP 282
Brull, Lars.....	MOA pm 4:10	Burgers, Peter C.....	TP 094	Callahan, John H.....	ThP 381
Brumbaugh, Justin.....	MOE am 09:10	Burgess, Michael.....	MP 477	Callahan, Michael.....	MP 183
Brumbaugh, Justin.....	TP 538	Burgess, Michael.....	TP 015	Callan, Jared.....	TP 390
Brun, Virginie.....	WP 064	Burgis, Tim.....	ThP 378	Callan, Jared.....	MP 423
Brunelle, Alain.....	TP 176	Burke, Sarah.....	MP 344	Callan, Jared.....	MP 414
Brunelle, Alain.....	WOA am 09:30	Burlingame, A.I.....	TP 270	Callister, Stephen J.....	TOA am 09:10
Brunengraber, Henri.....	MP 621	Burlingame, A.I.....	MP 228	Calverley, Richard.....	MP 370
Bruno, Jon M.....	ThP 118	Burlingame, A.L.....	ThP 021	Calverley, Richard.....	MP 372
Brusniak, Mi-youn.....	ThP 043	Burlingame, A.I.....	ThP 249	Calverley, Richard.....	ThP 357
Brusniak, Mi-youn.....	WP 559	Burlingame, Al.....	TP 269	Camacho, Luisa.....	TP 411
Brusniak, Mi-Youn.....	Special	Burlingame, Alma L.....	ThP 288	Camara, Johanna E.....	WP 250
Brustkern, Adam.....	TP 282	Burnett, Jr., John C.....	TP 504	Cameron, Chad.....	WP 309
Bruun, Esben Wilson.....	TOA am 09:30	Burns, Autumn W.....	WP 254	Cameron, Chad.....	ThP 340
Bryant, Stephen H.....	ThP 022	Burns, Bradley E.....	TP 253	Cameron, Douglas.....	MP 653
Bryant-Friedrich, Amanda.....	WP 295	Burns, Colin S.....	TP 475	Camoïn, Luc.....	ThP 574
Bu, Wei.....	MP 343	Burnum, Kristin E.....	TOA am 09:10	Camp, David.....	WP 552
Buchholz, Lisa.....	ThP 682	Burow, Matthew.....	MP 072	Campbell, Dale A.....	MP 272
Buchholz, Lisa.....	WP 238	Burton, Lyle.....	MP 435	Campbell, David S.....	WP 559
Buchholz, Lisa.....	ThP 680	Burton, Lyle.....	WP 224	Campbell, David S.....	WP 521
Buchholz, Lisa M.....	ThP 214	Burzykowski, Tomasz.....	WP 399	Campbell, Ian S.....	WP 585
Buchmeiser, Michael R.....	WP 347	Busby, Devin.....	MP 313	Campbell, J. Larry.....	MP 473
Buck, Charles.....	ThP 092	Busby, Jennifer.....	TP 312	Campbell, J. Larry.....	ThP 656
Buck, Charles.....	WP 060	Busby, Robert.....	MP 399	Campbell, James.....	WP 009
Buckenmaier, Stephan.....	MP 406	Busby, Scott.....	WP 423	Campbell, James.....	MP 125
Buckenmaier, Stephan.....	ThOG pm 3:10	Busby, Scott A.....	ThOC am 08:30	Campbell, James A.....	ThP 142
Buckley, David.....	MP 543	Buscher, Wolfgang.....	ThP 351	Campisi, Judy.....	TP 023
Bucknall, Martin P.....	MP 259	Bushey, Jared.....	MP 639	Campuzano, Iain D G.....	MOD am 09:10
Budac, David P.....	TP 164	Busik, Julia V.....	TOB pm 4:10	Campuzano, Iain D G.....	WP 209
Budac, David P.....	MP 402	Bustos, Daisy.....	ThP 121	Campuzano, Iain D G.....	TP 361
Budde, Petra.....	MP 474	Butchart, Ken.....	WP 329	Campuzano, Iain D G.....	TP 229
Budde, Petra.....	ThP 588	Butler, Andy.....	WP 130	Campuzano, Iain D G.....	MP 635
Buddington, Randal K.....	TP 244	Butler, V J.....	TP 032	Canas, Benito.....	ThP 103
Budman, Eva.....	MP 215	Butterfield, D. Allan.....	WP 277	Cannon, Joe.....	ThP 212
Budnik, Bogdan A.....	WP 141	Butz, Diane.....	MP 254	Cannon, Michelle J.....	ThP 225
Budnik, Bogdan A.....	ThP 262	Buzzeo, Robert.....	ThP 589	Canterbury, Jesse D.....	MP 149
Budowle, Bruce.....	TP 661	Byers, Christopher.....	ThP 585	Canterbury, Jesse D.....	MP 147
Bueters, Tjerk.....	ThP 665	Byers, Helen.....	MP 125	Canty, John.....	TP 131
Bugarcic, Tijana.....	TP 229	Byers, Helen.....	WP 009	Cao, Hongmei.....	ThP 145
Buhl, Allen.....	TP 417	Byn, Kyung Hee.....	ThP 429	Cao, Hongmei.....	MP 341
Buhler, Leah.....	TP 306	Bynum, Maggie.....	WP 466	Cao, Huachuan.....	ThP 590
Bui, Huy.....	ThP 167	Bynum, Maggie A.....	WP 470	Cao, Huachuan.....	ThP 410
Bui, Huy.....	MP 588	Bythell, Benjamin.....	ThOD am 08:50	Cao, Jerry.....	MP 418
Bujara, Ingrid.....	MP 564	Bythell, Benjamin.....	MOF pm 3:30	Cao, Jerry.....	TP 403
Buko, Alex.....	ThP 558	Bythell, Benjamin.....	WP 666	cao, Jin.....	MP 302
Bukowski, Nick.....	MP 655	Bzdek, Bryan R.....	ThP 612	Cao, Lulu.....	MP 390
Bukowski, Nick.....	TP 385	C F de Oliveira, Helena.....	TP 243	Cao, Lulu.....	ThP 422
Bukowski-Wills, Jimi-Carlo.....	WP 152	C. M. Amorim, Olivia.....	MP 165	Cao, Rui.....	ThP 128
Bulbule, Archana.....	MP 650	Cabanban, Stella.....	WP 645	Cao, Rui.....	WP 090
Bulman, Amanda.....	WP 089	Cabecinha, Ashley.....	WP 440	Cao, Rui.....	WP 094
Bulman, Amanda.....	WP 513	Caceres-Cortes, Janet.....	ThP 099	Cao, Shousong.....	MP 442
Bulman, Amanda.....	ThP 457	Cadene, Martine.....	TP 467	Cao, Shousong.....	ThP 167
Bultman, Scott.....	WP 551	Cagmat, Emilio.....	WP 482	Cao, Weifeng.....	ThP 004
Bunai, Christine.....	MP 612	Cai, Cing-Hong.....	MPZ 568	Cao, Xiaoji.....	MP 623
Bunai, Christine L.....	ThP 515	Cai, Hong.....	MP 401	Cao, Yuan.....	ThP 380
Bunch, Josephine.....	ThP 172	Cai, Hong.....	TOB am 09:10	Capka, Vladimir.....	WP 174
Bunch, Josephine.....	MP 646	Cai, Sheng-Suan (Victor).....	MP 310	Caplow, Michael.....	ThP 265
Bundy, Jonathan L.....	TP 151	Cai, Tanxi.....	MP 232	Cappiello, Achille.....	WP 606
Bundy, Jonathan L.....	MP 079	Cai, Tanxi.....	WP 017	Cappiello, Achille.....	MP 241
Bundy, Jonathan L.....	WP 052	Cai, Tanxi.....	ThP 430	Caprini, Geisa.....	WP 390
Bunger, Maureen K.....	WP 052	Cai, Xianmei.....	MP 437	Caprioli, Richard M.....	ThP 037
Bunger, Maureen K.....	TOE am 08:50	Cai, Yang.....	MP 509	Caprioli, Richard M.....	WP 185
Bunger, Maureen K.....	WP 551	Cai, Yong.....	TP 608	Caprioli, Richard M.....	WOE pm 3:30
Bunk, David M.....	MOB pm 4:10	Cai, Yong.....	ThP 607	Caprioli, Richard M.....	TP 193
Bunk, David M.....	ThP 020	Cai, Yun.....	ThP 243	Caprioli, Richard M.....	ThP 174

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Caprioli, Richard M. ....	TP 191	Carter, Spencer .....	TP 404	Chait, Brian .....	MOC pm 3:50
Caprioli, Richard M. ....	WP 190	Cartwright, Hugh .....	WP 659	Chait, Brian .....	TP 331
Caprioli, Richard M. ....	ThP 173	Caruso, Joseph .....	TP 547	Chakrabarti, Atis .....	WP 341
Caprioli, Richard M. ....	MP 450	Caruso, Joseph .....	MP 466	Chakraborty, Asish .....	ThP 541
Caprioli, Richard M. ....	WP 181	Caruso, Joseph A. ....	MOG am 08:50	Chakraborty, Asish .....	ThOA am 10:10
Caprioli, Richard M. ....	TP 183	Caruso, Joseph A. ....	MOG am 09:30	Chakraborty, Asish .....	ThP 647
Caprioli, Richard M. ....	TP 614	Caruso, Joseph A. ....	MOG am 10:10	Chakravartula, Srinivas .....	MP 104
Caprioli, Richard M. ....	ThP 177	Caruso, Joseph A. ....	TP 318	Chalkley, Robert .....	ThP 249
Caprioli, Richard M. ....	TP 182	Carvalho, Maria .....	MP 222	Chalkley, Robert .....	ThP 021
Caprioli, Richard M. ....	WOD pm 3:50	Carvalho, Maria da Gloria da C .....	ThP 023	Chalkley, Robert J. ....	ThP 288
Caprioli, Richard M. ....	MP 170	Carvalho, Paulo C. ....	ThP 023	Chalkley, Robert J. ....	ThP 246
Caprioli, Richard M. ....	ThP 157	Carvalho, Valdemir Melechco .....	WP 253	Chalmers, Michael .....	WP 423
Caprioli, Richard M. ....	TP 181	Casadonte, Rita .....	WP 181	Chalmers, Michael .....	TOC am 09:50
Caprioli, Richard M. ....	MOA am 10:10	Case, Marjorie A. ....	TP 157	Chalmers, Michael J. ....	ThOC am 08:30
Caprioli, Richard M. ....	WP 180	Casey, Elizabeth .....	MP 264	Chambers, Andrew G. ....	MP 335
Carabetta, Valerie J. ....	ThP 474	Cassady, Carolyn J. ....	TP 355	Chambers, Erin E. ....	MP 472
Carado, Anthony .....	WOD pm 2:30	Cassady, Carolyn J. ....	WP 370	Chambers, Erin E. ....	MP 472
Carbone, David P. ....	WP 181	Cassidy, Scott A. ....	MP 444	Chambers, Erin E. ....	MP 472
Carbone, Mary .....	MP 261	Castanieto, Angela .....	TP 073	Chambers, Matthew .....	Special
Carbone, Roberta .....	ThP 267	Castellana, Natalie .....	ThP 696	Chambers, Matthew .....	Special
Cardamone, John .....	MP 287	Castellana, Natalie E. ....	MP 062	Chambliss, C. Kevin .....	WOG pm 3:10
Cardasis, Helene .....	ThP 208	Castellino, Steve .....	MOA pm 3:50	Chamot-Rooke, Julia .....	TP 427
Cardasis, Helene .....	ThP 445	Castiglioni, Sara .....	WOG pm 2:50	Chamot-Rooke, Julia .....	ThP 574
Cardinali, Barbara .....	WP 439	Castleberry, Colette .....	ThP 405	Chamot-Rooke, Julia .....	WOA pm 3:50
Cardoso, Daisy .....	ThP 630	Castner, David G. ....	ThP 325	Chamoun, Jean E. ....	TP 444
Cardoza, Job .....	ThP 448	Castro, Sergio .....	WP 426	Champagne, Josee .....	MP 106
Carey, Bebhine .....	WP 392	Castro-Perez, Jose .....	TP 577	Champion, Matthew .....	MP 471
Carey, Patricia .....	MP 065	Castro-Perez, Jose .....	MP 253	Champlin, V. Blake .....	WP 215
Carey, Patricia .....	ThP 031	Castro-Perez, Jose .....	TP 574	Chamrad, Daniel C. ....	MP 618
Cargile, Benjamin J. ....	TOE am 08:50	Castro-Perez, Jose .....	WP 385	Chamrad, Daniel C. ....	TP 620
Cargile, Benjamin J. ....	WP 052	Castro-Perez, Jose .....	WP 126	Chan, Changching .....	TP 631
Carl, Damon R. ....	TOF am 09:10	Castro-Perez, Jose .....	ThOB pm 4:10	Chan, Daniel .....	TP 628
Carlis, John V. ....	MP 119	Catalano, Carlos E. ....	WP 460	Chan, Daniel W. ....	MP 490
Carlis, John V. ....	ThP 192	Catapano, Lisa A. ....	TP 387	Chan, Err-cheng .....	MP 023
Carlis, John V. ....	MP 060	Catharino, Rodrigo .....	TP 243	Chan, John .....	TP 550
Carlone, George .....	ThP 376	Catherman, Adam .....	MP 135	Chan, John .....	WP 004
Carlson, Greta .....	TP 129	Cauich, Enrique .....	WP 420	Chan, Kenneth H.N. ....	MP 112
Carlson, James .....	WP 252	Caulfield, Joanna .....	ThP 357	Chan, Kenneth K. ....	ThP 149
Carlson, Robert E. ....	ThP 063	Caulfield, Joanna .....	MP 370	Chan, King .....	WP 271
Carlson, Ross .....	ThP 180	Caulfield, Joanna .....	MP 372	Chan, Pik .....	MOG am 09:50
Carlson, Ross .....	WP 186	Caumette, Guilhem .....	WP 647	Chan, Qilin .....	TP 318
Carlson, Tim .....	TP 563	Causon, Jason .....	WP 357	Chan, Qilin .....	MOG am 09:30
Carol, Wasser .....	TP 414	Cavey, Gregory S. ....	WP 408	Chan, Tak-wah Dominic .....	WOA pm 2:50
Carolan, Vikki .....	TP 198	Cavin, Christophe .....	WP 219	Chan, Tak-wah Dominic .....	TP 371
Caron, Marc G. ....	ThP 442	Cazares, Lisa H. ....	MP 612	Chan, Tze-Ming .....	MP 350
Carr, Andrew .....	ThP 572	Celeste, Giorgio .....	ThP 605	Chan, W. Y. Kelly .....	WOA pm 2:50
Carr, Steven A. ....	MOB pm 4:10	Çelikbiçak, Ömür .....	TP 485	Chan, Wai Yi .....	TP 371
Carr, Steven A. ....	MP 001	Cereda, Roberta .....	TP 423	Chan, Ya-Ting .....	WP 136
Carr, Steven A. ....	MP 084	Cernat, Alexandru .....	MPZ 577	Chance, Mark .....	TP 017
Carr, Steven A. ....	TP 027	Čeřovský, Václav .....	WP 371	Chance, Mark .....	WP 430
Carr, Steven A. ....	MP 467	Cerutti, Soledad .....	ThP 065	Chance, Mark .....	TOE am 08:30
Carr, Steven A. ....	TP 015	Cessna, Allan .....	TP 600	Chance, Mark .....	ThP 508
Carr, Steven A. ....	ThP 020	Cezar, Gabriela G. ....	WP 115	Chance, Mark .....	WP 541
Carr, Steven A. ....	MP 477	Cezar, Gabriela G. ....	WP 119	Chance, Mark .....	WP 203
Carr, Steven A. ....	MOE pm 3:30	Cha, Sangwon .....	TP 072	Chance, Mark .....	WP 084
Carr, Steven A. ....	TP 055	Chabot, Josée .....	TP 616	Chance, Mark .....	WP 058
Carr, Steven A. ....	WP 695	Chabre, Henri .....	TP 529	Chance, Mark .....	WP 296
Carrasco-Pancorbo, Alegria .....	WP 118	Chacon, Almary .....	TP 183	Chance, Mark .....	WP 445
Carre, Vincent .....	MP 611	Chaerkady, Raghothama .....	ThP 028	Chance, Mark .....	TP 100
Carré, Vincent .....	WP 565	Chaerkady, Raghothama .....	TP 613	Chance, Mark R. ....	WP 444
Carrier, Alain .....	WP 610	Chaerkady, Raghothama .....	ThP 055	Chance, Mark R. ....	MOE pm 2:50
Carrier, Alain .....	ThP 144	Chaerkady, Raghothama .....	MP 008	Chance, Mark R. ....	WP 527
Carrier, Alain .....	WP 615	Chaerkady, Raghothama .....	WP 525	Chanda, Pranab K. ....	MP 282
Carrier, Hervé .....	WP 651	Chaerkady, Raghothama .....	ThP 058	Chandan, Vandana .....	MP 112
Carroll, James .....	ThP 533	Chaerkady, Raghothama .....	ThP 053	Chandramouli, Nagarajan .....	MP 620
Carroll, James A. ....	WP 493	Chaerkady, Raghothama .....	ThP 191	Chang, Byeong S. ....	WP 415
Carroll, Kate .....	WP 486	Chaerkady, Raghothama .....	ThP 059	Chang, Caren .....	MP 554
Carter, Andrew .....	TP 516	Chaerkady, Raghothama .....	ThP 057	Chang, Cathy .....	ThP 678
Carter, Claire Louise .....	ThP 172	Chafey, Philippe .....	ThP 574	Chang, Chao-Hung .....	TP 354
Carter, Graham D. ....	WP 265	Chaffron, Samuel .....	ThP 372	Chang, Emmanuel .....	TP 354
Carter, Guy .....	MOB am 08:30	Chaignepain, Stephane .....	MP 598	Chang, Eugene .....	ThP 355
Carter, John P. ....	TP 412	Chait, Brian .....	ThP 345	Chang, Hsiang-Kai .....	TP 144

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Chang, Hsueh-Chia .....	ThOC pm 3:50	Chen, Chung-Yu .....	TP 324	Chen, Wei .....	TP 268
Chang, Jae .....	TP 416	Chen, Chun-Wei .....	ThP 371	Chen, Weibin .....	ThP 049
Chang, James .....	MP 653	Chen, Chwen-Lih .....	WP 291	Chen, Weibin .....	ThP 647
Chang, Kai-Chih .....	ThP 371	Chen, Clark .....	MP 056	Chen, Weibin .....	WOC pm 3:10
Chang, Lai Chuan .....	MP 181	Chen, C-Y Oliver Chen .....	ThP 221	Chen, Weibin .....	ThP 541
Chang, Lai-chuan .....	MP 181	Chen, Daniel .....	WP 084	Chen, Weibin .....	ThOA am 10:10
Chang, Qing .....	TOC pm 3:10	Chen, Dawn .....	MP 603	Chen, WeiChao .....	MP 377
Chang, Sai Y. ....	MP 529	Chen, Emily .....	TP 173	Chen, Weichao .....	ThP 237
Chang, Sandra .....	TP 113	Chen, Eric S.-W. ....	WP 406	Chen, Wei-Jen .....	TP 248
Chang, Shao-Kuang .....	MP 556	Chen, Guang .....	TP 387	Chen, Weiwu .....	MP 043
Chang, Wei-Chao .....	MP 074	Chen, Guei-tian .....	MP 023	Chen, Wen-Ping .....	MP 055
Chang, Wei-chao .....	MOB pm 2:30	Chen, Guodong .....	MP 161	Chen, Wen-Ping .....	ThP 119
Chang, Yan Zin .....	ThP 218	Chen, Guokai .....	ThP 040	Chen, Xi .....	MP 226
Chang, Yu-Ling .....	MP 491	Chen, Guoqiang .....	ThP 555	Chen, Xi .....	ThP 423
Chang, Yun-Juan .....	ThP 391	Chen, Guoqiang .....	WP 464	Chen, Xi .....	MP 376
Chang-Wong, Tony .....	MP 118	Chen, Hao .....	TP 366	Chen, Xi .....	MP 102
Chang-wong, Tony .....	WP 135	Chen, Hao .....	ThP 644	Chen, Xi .....	ThP 223
Chanthamontri, Chamnongsak .....	ThP 493	Chen, Hao .....	ThP 335	Chen, Xian .....	WP 560
Chapman, Jessica R .....	TP 266	Chen, Hao .....	WP 422	Chen, Xian .....	ThP 265
Chapman, Kent D .....	MP 231	Chen, Hao .....	ThP 645	Chen, Xian .....	TP 148
Chapman, Richard C .....	TP 361	Chen, Hauh-Jyun Candy .....	ThP 273	Chen, Xian .....	MP 388
Chappell, Ian .....	ThP 499	Chen, Hauh-Jyun Candy .....	MP 266	Chen, Xian .....	TP 539
Chappell, Ian .....	ThP 113	Chen, Hongzhuan .....	TP 390	Chen, Xian .....	TP 128
Chappell, William .....	MOD pm 3:30	Chen, Hongzhuan .....	TP 403	Chen, Xian .....	WP 517
Chargin, David A .....	WP 327	Chen, Hsiao-Wei .....	TP 086	Chen, Xian .....	TP 556
Charipar, Nicholas .....	TP 304	Chen, Huanwen .....	TP 294	Chen, Xian .....	ThP 041
Charipar, Nicholas .....	ThOF pm 2:30	Chen, Huanwen .....	MP 615	Chen, Xian .....	WOA pm 3:30
Charipar, Nicholas .....	MP 550	Chen, Huanwen .....	ThP 164	Chen, Xiaodi .....	WP 026
Charipar, Nicholas A .....	WP 319	Chen, Huanwen .....	TP 293	Chen, Xiaoyan .....	TP 574
Charles, Laurence .....	WP 620	Chen, Huanwen .....	TP 297	Chen, Xiulan .....	MP 232
Charles, Laurence .....	MP 178	Chen, Jen-kun .....	WP 192	Chen, Xiulan .....	WP 017
Charles, Laurence .....	WOF am 08:30	Chen, Jen-Yi .....	MP 321	Chen, Xiulan .....	ThP 430
Charles, Laurence .....	WP 611	Chen, Jianping .....	MP 670	Chen, Xiuying .....	TP 493
Charles, Phil D .....	MOE am 08:50	Chen, Jianzhong .....	TP 088	Chen, Xuan .....	ThP 566
Charlesworth, Cristine .....	WP 070	Chen, Jiawei .....	ThP 383	Chen, Xuequn .....	ThP 510
Charmont, Stephan .....	TOB am 10:10	Chen, Jinn-shiun .....	MP 023	Chen, Xuequn .....	ThP 521
Charrier, Jean-philippe .....	MP 126	Chen, Jinwen .....	TP 659	Chen, Yan .....	TP 563
Charvatova, Olga .....	WP 456	Chen, Jinwen .....	ThP 666	Chen, Yan .....	TP 419
Charvy, Claude .....	ThP 653	Chen, Jungchun .....	ThP 043	Chen, Yanfeng .....	WP 187
Chau, Hoa K .....	MP 552	Chen, Kan .....	WP 529	Chen, Yangbin .....	MPZ 583
Chaudhary, Ashish .....	WP 324	Chen, Katherine .....	ThP 596	Chen, Yegao .....	TP 320
Chaudhary, Ashish .....	ThOF pm 3:30	Chen, Lee Chuin .....	TP 187	Chen, Yen-Wen .....	MP 077
Chaurand, Pierre .....	WP 185	Chen, Lee Chuin .....	MP 322	Chen, Yet-ran .....	TP 499
Chaurand, Pierre .....	ThP 174	Chen, LeeChuinn .....	ThP 353	Chen, Yet-Ran .....	ThP 421
Chaurand, Pierre .....	MOA am 10:10	Chen, Linda .....	WP 228	Chen, Yet-Ran .....	TP 326
Chaurand, Pierre .....	WOE pm 3:30	Chen, Liuxi .....	TP 225	Chen, Yi .....	TP 611
Chavan, Shweta S .....	MP 041	Chen, Liuxi .....	TP 223	Chen, Yibai .....	WP 111
Chavez-Eng, Cynthia M .....	TP 394	Chen, Louise .....	WP 476	Chen, Yi-Ju .....	WP 289
Che, Fa-yun .....	MP 516	Chen, Lu .....	MP 457	Chen, Yi-Ju .....	WP 292
Che, Fa-yun .....	WP 004	Chen, Lu .....	TP 011	Chen, Ying Lan .....	TP 499
Cheah, Hun Teong .....	WP 383	Chen, Meng-Chieh .....	TP 086	Chen, Yi-Ting .....	TP 086
Cheek, Kristin .....	WP 518	Chen, Pei .....	WP 386	Chen, Yoeng-Renn .....	WP 291
Chen, Ann .....	TP 611	Chen, Pr .....	TP 179	Chen, Yong .....	ThP 688
Chen, Baowei .....	ThP 597	Chen, Qiuying .....	ThP 069	Chen, Yu .....	TP 465
Chen, Cai Yun .....	ThP 289	Chen, Ruibing .....	ThP 465	Chen, Yuan .....	ThP 277
Chen, Chang-nan .....	ThP 674	Chen, Ruibing .....	ThP 460	Chen, Yuan .....	WP 370
Chen, Chang-Tzon .....	MP 180	Chen, Ruibing .....	WP 183	Chen, Yuan-Shek .....	MP 414
Chen, Chao-Jung .....	TP 326	Chen, Ruibing .....	ThP 469	Chen, Yuan-shek .....	TP 403
Chen, Cheng-Tai .....	ThP 546	Chen, Ruiqiang .....	MP 554	Chen, Yuan-Shek .....	TP 400
Chen, Cheng-Tung .....	ThP 266	Chen, Shaonong .....	TP 415	Chen, Yuan-shek .....	TP 397
Chen, Chia-chen .....	ThP 498	Chen, Shuhua .....	MP 149	Chen, Yuan-Shek .....	TP 390
Chen, Chia-Hua .....	WP 192	Chen, Shu-Hua .....	MP 139	Chen, Yuan-Shek .....	TP 407
Chen, Chien-Hsun .....	WP 310	Chen, Shu-Hui .....	MP 077	Chen, Yuan-shek .....	MP 413
Chen, Chien-Lun .....	TP 086	Chen, Shu-Hui .....	TP 144	Chen, Yuan-Shek .....	MP 410
Chen, Chung-Hsuan .....	WP 310	Chen, Sophia .....	MP 239	Chen, Yuan-shek .....	MP 416
Chen, Chung-Hsuan .....	MOB pm 2:30	Chen, Sue-Ting .....	MP 487	Chen, Yuan-shek .....	WP 218
Chen, Chung-Hsuan .....	MP 491	Chen, Susan .....	WP 334	Chen, Yuan-shek .....	TP 389
Chen, Chung-Hsuan .....	TP 609	Chen, Susan .....	ThP 369	Chen, Yuan-shek .....	MP 418
Chen, Chung-Hsuan .....	MP 074	Chen, Tianbao .....	WP 390	Chen, Yuan-shek .....	MP 411
Chen, Chung-Hsuan .....	WP 582	Chen, Tzong-Hao .....	WP 112	Chen, Yuan-shek .....	MP 423
Chen, Chungwen .....	ThP 664	Chen, Wei .....	MP 145	Chen, Yuanxing .....	MOD pm 3:10
Chen, Chung-Yi .....	MP 321	Chen, Wei .....	WP 284	Chen, Yu-Chie .....	TP 248

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Chen, Yu-Chie.....	ThP 546	Chik, John.....	TP 448	Chu, Jasper X.....	MP 423
Chen, Yu-Chie.....	MP 321	Chik, John K.....	TP 455	Chu, Jasper X.....	ThP 219
Chen, Yu-chin.....	ThP 273	Chin, Alice.....	MP 013	Chu, Li-chieh Julie.....	ThP 392
Chen, Yue.....	TP 265	Chin, Tzong-Shan.....	MP 180	Chu, Ming-Lee.....	WP 310
Chen, Yue.....	WP 297	Chingin, Konstantin.....	TP 297	Chu, Ye.....	MP 030
Chen, Yue.....	MP 293	Chingin, Konstantin.....	TP 293	Chuah, Cheng Hock.....	WP 383
Chen, Yue.....	TOE pm 3:10	Chinnaiyan, Arul.....	WP 531	Chumbalkar, Vaibhav.....	ThP 297
Chen, Yuhong.....	WP 028	Chinnaiyan, Arul M.....	MP 124	Chundawat, Shishir P.....	WP 481
Chen, Yu-Ju.....	MPZ 574	Chipuk, Joe.....	WOB pm 4:10	Chung, Bong Chul.....	WP 574
Chen, Yu-Ju.....	WP 292	Chisholm, Kenneth.....	TP 549	Chung, Bong Chul.....	WP 573
Chen, Yu-Ju.....	WP 229	Chiu, Norman H.L.....	MP 020	Chung, Eliot.....	TP 388
Chen, Yu-Ju.....	MPZ 573	Chiu, Yu-Lun.....	ThP 421	Chung, Kathy.....	TP 623
Chen, Yu-Ju.....	TP 035	Cho, Byung-hoon.....	TP 317	Chung, Li-wen.....	TP 648
Chen, Yu-Ju.....	WP 289	Cho, Hanjoung.....	TP 006	Chung, Soo Hyun.....	WP 641
Chen, Yu-Ju.....	ThP 271	Cho, Kathleen.....	MP 066	Chung, Thomas W.....	ThP 659
Chen, Yu-ju.....	MP 023	Cho, Kun.....	ThP 429	Chung, Ting.....	TP 086
Chen, Yu-Ju.....	ThP 263	Cho, Robert.....	TP 563	Churlaud, Florence.....	WP 617
Chen, Yu-ju.....	ThP 528	Cho, Robert.....	TP 421	Churley, Melissa.....	MP 658
Chen, Yung-Lin.....	WP 350	Cho, Sool Yeon.....	MP 513	Ciborowski, Pawel.....	MP 095
Chen, Yung-Lin.....	ThP 356	Cho, Wonryeon.....	TP 101	Ciccimaro, Eugene.....	TP 492
Chen, Zhuo.....	WP 157	Cho, Yi-Tzu.....	MP 338	Ciccimaro, Eugene F.....	MP 116
Cheng, Chu-Nian.....	TP 636	Cho, Yi-Yzu.....	ThP 329	Ciccimaro, Eugene F.....	WP 540
Cheng, D. Jessica.....	WP 299	Choi, Bernard.....	ThP 686	Ciccimaro, Gene.....	MP 016
Cheng, Fang-yi.....	MP 022	Choi, Bernard K.....	ThP 685	Ciccimaro, Gene.....	MP 463
Cheng, Guilong (charles).....	ThP 330	Choi, Hyungwon.....	TP 051	Ciccone, William.....	TP 112
Cheng, Hong-Lin.....	MP 077	Choi, Jaewoo.....	MP 226	Cicogna, Julita.....	ThP 676
Cheng, Hua.....	MOA am 08:50	Choi, Jaewoo.....	MP 102	Cipollo, John F.....	MP 479
Cheng, Keding.....	ThP 377	Choi, Keun-joo.....	TP 594	Cipollo, John F.....	WP 467
Cheng, Keding.....	WP 083	Choi, Madonna-Lily.....	TP 455	Cipollo, John F.....	MP 492
Cheng, Kuang H.....	WP 068	Choi, Man-ho.....	WP 574	Citerone, David.....	ThOA am 09:30
Cheng, Lei.....	TOG pm 3:50	Choi, Man-ho.....	WP 573	Clague, Jason.....	WP 357
Cheng, Lei.....	WP 393	Choi, Megan.....	WP 150	Clare, Adam.....	ThOF pm 3:10
Cheng, Pai-Chiao.....	TP 144	Choi, Sung W.....	WP 007	Clark, C.A.C.....	WP 157
Cheng, S.-W. Grace.....	ThP 490	Choi, Yong Seok.....	ThP 481	Clark, Daniel.....	WP 362
Cheng, Sy-Chyi.....	MP 320	Choi, Yong Seok.....	MP 115	Clark, David J.....	ThP 515
Cheng, Xiaoliang.....	TP 603	Choi, Yongsoo.....	TP 320	Clark, Julie.....	TP 106
Cheng, Zhongyi.....	TP 265	Choi, Yongsoo.....	WP 167	Clarke, Bill.....	ThP 225
Cheng, Zhongyi.....	TOE pm 3:10	Choiniere, John.....	WP 254	Clarke, David J.....	ThP 571
Chenier, Claude L.....	TP 375	Chong, Kevin.....	MP 624	Clarke, David J.....	ThP 573
Chennasamudram, Sudha.....	MP 610	Choquet-Kastylevsky, Geneviève.....	MP 126	Clarke, David J.....	TP 166
Chernushevich, Igor.....	MP 146	Chordia, Mahendra.....	MP 519	Clarke, David J.....	WP 317
Chernushevich, Igor.....	ThP 628	Chornoguz, Olesya.....	MP 385	Clarke, Steven.....	TOE am 09:30
Chernushevich, Igor.....	ThP 616	Chou, Chi-Chi.....	ThP 274	Clary, Guilhem.....	ThP 574
Chervet, Jean-pierre.....	MP 544	Chou, Chi-Chung.....	MP 556	Clasquin, Michelle F.....	WOB am 10:10
Chesnik, Marla A.....	TP 621	Chou, Chih-Chiang.....	MP 320	Classon, Robert.....	WP 271
Chetty, Palaniappan S.....	TOG pm 2:30	Chou, Fang-Ju.....	WP 380	Claude, Emmanuelle.....	ThP 171
Chetwani, Nishant.....	ThOC pm 3:50	Chou, Hsiao-chiao.....	WP 292	Claude, Emmanuelle.....	TP 179
Chemg, Tommy K.....	TP 127	Chou, Hsiao-Chiao.....	WP 289	Claude, Emmanuelle.....	WP 197
Chevreaux, Guillaume.....	WP 469	Chou, Hsun-Wen.....	MP 416	Claude, Emmanuelle.....	ThOA 3:10
Chew, Helen.....	TOC pm 3:50	Chou, Hsun-Wen.....	WP 218	Claude, Emmanuelle.....	TP 198
Chew, Helen K.....	WOC pm 4:10	Chou, Wayne.....	TP 425	Clausen, Tim.....	WP 412
Chew, Helen K.....	MP 478	Choudhary, Chunaram.....	MP 303	Clausen III, Christian A.....	WP 628
Chi, Hao.....	ThP 025	Choudhary, Jyoti.....	MP 063	Clausen III, Christian A.....	WOG pm 4:10
Chi, Hao.....	WP 043	Chovanec, Peter.....	MP 539	Clauser, Karl R.....	TP 055
Chi, Hao.....	TP 058	Chow, Eric D.....	MP 228	Clauser, Karl R.....	MP 467
Chi, Yong.....	ThP 447	Chow, Nan-Haw.....	MP 077	Clauser, Karl R.....	TP 027
Chia, Jing Y.....	TP 098	Chowdhury, Saiful M.....	WP 458	Clauss, Therese R.W.....	WP 146
Chiang, Bing-Yu.....	ThP 274	Chowdhury, Swapan.....	ThP 692	Clauss, Therese W.....	TP 125
Chiang, Vincent.....	WP 535	Chowdhury, Swapan K.....	TP 583	Clayton, Richard.....	TOA pm 3:30
Chiappetta, Giovanni.....	ThP 117	Chowdhury, Swapan K.....	TOA pm 3:50	Clement, Ray E.....	WP 587
Chiarelli, M. Paul.....	WOG pm 2:50	Chowdhury, Swapan K.....	WP 098	Clements, Melisa.....	WP 640
Chiba, Kazuhiro.....	WP 333	Chowdhury, Swapan K.....	TOA pm 3:10	Clemmer, David E.....	MP 483
Chibante, L. P. Felipe.....	WP 652	Christen, Philipp.....	TP 116	Clemmer, David E.....	WP 205
Chiellini, Grazia.....	WP 247	Christian, Parul.....	WP 516	Clemmer, David E.....	WP 202
Chiem, Nghia.....	MP 468	Christians, Uwe.....	WP 379	Clemmer, David E.....	TP 224
Chien, Allis S.....	MP 217	Christie, Andrew E.....	ThP 459	Clemmer, David E.....	WP 538
Chien, Allis S.....	ThP 526	Chu, Caroline S.....	TOC pm 3:50	Clemmer, David E.....	WP 200
Chien, Allis S.....	Special	Chu, Caroline S.....	MP 234	Clemmer, David E.....	WP 201
Chien, Chih-wei.....	MP 023	Chu, Feixia.....	ThP 288	Clemmer, David E.....	TP 215
Chien, Chih-Wei.....	ThP 528	Chu, Feixia.....	TP 269	Clemmer, David E.....	WOF pm 4:10
Chien, Ko-yi.....	ThP 453	Chu, Ivan K.....	TOF am 10:10	Clemmer, David E.....	WP 215
Chien, Lee.....	ThP 548	Chu, Ivan K.....	WP 673	Clemmer, David E.....	ThP 349

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Clemmer, David E.....	MOD am 09:30	Collings, Bruce.....	MOD pm 3:50	Cooks, R. Graham.....	TP 366
Clemmer, David E.....	WP 212	Collingwood, Therese.....	MP 387	Cooks, R. Graham.....	ThP 335
Clench, Malcolm.....	TP 198	Collingwood, Therese.....	TP 548	Cooks, R. Graham.....	WP 363
Clench, Malcolm.....	ThP 171	Collins, Bradley J.....	MP 403	Cooks, R. Graham.....	ThP 339
Clerens, S.....	MP 553	Collins, Kathleen.....	TP 554	Cooks, R. Graham.....	MP 550
Clerens, Stefan.....	WP 539	Collins, Kevin.....	ThP 109	Cooks, R. Graham.....	MOD pm 3:30
Clerens, Stefan.....	WP 029	Collins, Kirby.....	ThP 696	Cooks, R. Graham.....	ThOF pm 2:30
Cliby, William A.....	WOC pm 3:50	Collins, Scott D.....	TP 424	cooks, R. Graham.....	ThOF pm 4:10
Cliffel, David E.....	WP 206	Collins, Terrence J.....	TP 590	Cooks, R. Graham.....	TP 184
Clifford, Kevin J.....	ThOG pm 2:50	Collodoro, Mike.....	WP 012	Cooks, R. Graham.....	ThP 175
Clifford-Nunn, Billy.....	WP 431	Collodoro, Mike.....	WP 032	Cookson, Brad T.....	ThP 048
Cline, Erika.....	ThP 543	Colman, Howard.....	MOA am 09:30	Cool, David.....	ThP 471
Clodfelder-Miller, Buffie.....	WP 545	Cologna, Stephanie M.....	WP 133	Cooley, Phillip.....	TOE am 08:50
Clough, Geraldine.....	MP 061	Colsch, Benoit.....	MP 236	Coon, Joshua J.....	TP 048
Clouse, Steven D.....	MP 025	Colwell, Lawrence.....	TP 395	Coon, Joshua J.....	TP 369
Clowers, Brian H.....	TP 234	Colwill, Karen.....	TP 008	Coon, Joshua J.....	ThOE am 08:50
Clowers, Brian H.....	TOG am 08:50	Comezoglu, S.Nilgun.....	TP 575	Coon, Joshua J.....	ThP 040
Clowers, Brian H.....	WP 691	Comins, Daniel L.....	MP 469	Coon, Joshua J.....	TP 368
Clowers, Brian H.....	TP 213	Compson, Keith R.....	ThP 109	Coon, Joshua J.....	TP 512
Clowers, Brian H.....	TP 218	Compton, Philip.....	ThP 188	Coon, Joshua J.....	WOA pm 2:30
Clurman, Bruce E.....	ThP 447	Compton, Philip.....	TOC pm 4:10	Coon, Joshua J.....	MOE am 09:10
Cobb, Jennifer S.....	ThP 213	Compton, Philip.....	TP 518	Coon, Joshua J.....	TOD am 09:30
Coburn, Joel.....	ThP 696	Compton, Philip.....	TP 510	Coon, Joshua J.....	MP 192
Cociorva, Daniel.....	MP 189	Compton, Philip.....	TP 271	Coon, Joshua J.....	ThP 026
Cociorva, Daniel.....	ThP 023	Compton, Philip D.....	MP 300	Coon, Joshua J.....	WP 678
Cody, Robert B.....	WOG pm 4:10	Compton, Philip D.....	ThP 211	Coon, Joshua J.....	TP 538
Cody, Robert B.....	MP 558	Comte-Walters, Susana.....	WP 006	Coon, Joshua J.....	ThOD pm 4:10
Cody, Robert B.....	ThP 332	Concannon, Patrick.....	TP 510	Cooney, Greg.....	TP 528
Cohen, Aharon.....	MP 215	Cong, Mian-er.....	MP 422	Cooper, Bret.....	MP 554
Cohen, Aharon.....	MOC pm 3:10	Cong, Xin.....	ThP 268	Cooper, Bret.....	ThP 012
Cohen, Herbert.....	ThP 345	Conner, Keyanna.....	ThP 633	Cooper, Helen.....	ThP 190
Cohen, Isaac.....	WP 379	Connolly, Joanne B.....	TP 032	Cooper, Helen.....	ThP 569
Cohen, Jerry D.....	ThP 119	Connolly, Joanne B.....	TP 542	Cooper, Helen J.....	TP 290
Cohen, Jerry D.....	MP 055	Connolly, Joanne B.....	TP 095	Cooper, Mark E.....	MP 221
Cohen, Lucinda.....	ThP 686	Connolly, Joanne B.....	ThP 109	Cooper, Michael K.....	TP 614
Cohen, Lucinda.....	ThP 685	Connolly, Joanne B.....	ThP 432	Cooper, Theresa.....	TOF am 09:10
Cohen, Lucinda.....	TP 395	Connolly, Yvonne.....	ThP 303	Cooper, Travis.....	WOA pm 4:10
Cohen, Lucinda.....	MP 307	Connors, Lawreen H.....	ThP 127	Cope, Mark B.....	WP 528
Cohen, Samuel M.....	ThP 597	Conrad, Charles A.....	WP 410	Coraggio, Melis.....	TP 419
Cohen, Steven J.....	TP 085	Conrad, Charles A.....	WOC pm 2:30	Cordato, Stephanie.....	ThP 483
Cohen, Steven L.....	MP 499	Conrad, Charles A.....	MOA am 09:30	Cordero T., Joesmelith M.....	WP 651
Cohen, Steven L.....	TP 339	Conrads, Thomas P.....	WP 086	Cordes, Matthew H. J.....	MOC pm 3:30
Cohen-Freue, Gabriela.....	MOB pm 3:10	Conrads, Thomas P.....	MOG pm 3:50	Corilo, Yuri E.....	ThP 636
Colangelo, Christopher.....	TOE pm 2:30	Conrads, Thomas P.....	TP 401	Corkey, Barbara E.....	TP 613
Colangelo, Christopher.....	WP 040	Conrads, Thomas P.....	MOE pm 3:10	Corminboeuf, Clemence.....	ThOD am 09:30
Colburn, Heather A.....	TP 662	Conrads, Thomas P.....	TP 532	Cornélio, Vivian E.....	MP 590
Colburn, Heather A.....	TOG am 08:50	Constan, Lea.....	ThP 027	Cornell, Trevor.....	TP 665
Cold, Søren.....	WP 504	Constanzer, Marvin.....	TP 394	Cornell, Trevor.....	ThP 676
Cole, F. Sessions.....	MP 049	Contino, Nathan C.....	WP 312	Cornellison, C. D.....	MP 553
Cole, Jacquelyn R.....	TOB am 09:30	Conway, Charlie.....	ThP 662	Cornellison, Charisa D.....	WP 539
Cole, Regina.....	TP 621	Conway, Charlie.....	MP 437	Cornett, Dale S.....	ThP 037
Cole, Richard B.....	MP 509	Conway, James P.....	WP 548	Cornett, Shannon.....	ThP 173
Cole, Richard B.....	WP 322	Cook, Kelsey D.....	MP 297	Cornett, Shannon.....	TP 191
Cole, Richard B.....	WP 529	Cook, Kelsey D.....	TP 632	Cornish, Timothy J.....	ThP 387
Cole, Richard B.....	MP 212	Cook, Kelsey D.....	TP 305	Cornish, Timothy J.....	MP 190
Cole, Richard B.....	MP 223	Cook, Kevin.....	MP 159	Corpuz, Rodney.....	WP 637
Cole, Richard B.....	WP 584	Cook, Mark E.....	WP 127	Corr, Jay.....	MP 593
Cole, Robert N.....	MP 005	Cook, Shannon.....	MP 632	Corso, Gaetano.....	TP 250
Cole, Robert N.....	WP 516	Cook, Shannon.....	MP 631	Corso, Gaetano.....	ThP 175
Cole, Robert N.....	TP 036	Cooke, Kelly.....	WP 559	Cort, John R.....	WP 458
Coleman, Julie A.....	WP 522	Cooke, Kenneth R.....	MOE pm 2:50	Cortens, John P.....	TP 002
Coleman, Mike.....	Special	Cooke, William E.....	WP 091	Cortes, Diego F.....	MP 534
Colgan, Terence J.....	MP 081	Cooke, William E.....	MP 612	Cortes, Diego F.....	MP 255
Colgan, Terence J.....	TP 136	Cooks, R. Graham.....	WP 670	Cortes, Hernan.....	WP 614
Colgrave, Michelle.....	TP 528	Cooks, R. Graham.....	TP 655	Corvaia, Nathalie.....	WP 455
Colinge, Jacques.....	WP 042	Cooks, R. Graham.....	ThP 336	Costa, Anthony.....	WP 670
Colizza, Kevin.....	MP 547	Cooks, R. Graham.....	WP 588	Costa, Jose Luiz.....	MP 267
Colizza, Kevin.....	MP 548	Cooks, R. Graham.....	TP 359	Costa, Jose Luiz.....	WP 255
Colizza, Kevin.....	MP 546	Cooks, R. Graham.....	TP 304	Costa Vera, Cesar.....	WP 148
Coller, Hilary A.....	WP 102	Cooks, R. Graham.....	WOB pm 2:50	Costantino, Nina.....	ThP 289
Collier, Abby.....	TP 113	Cooks, R. Graham.....	TP 372	Costello, Catherine E.....	MP 479
Collier, Timothy S.....	ThP 374	Cooks, R. Graham.....	TOD pm 3:50	Costello, Catherine E.....	WOC pm 2:50

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Costello, Catherine E.	MP 594	Creegan, James	MP 348	Daehee, Daehee	TP 249
Costello, Catherine E.	ThP 014	Creese, Andrew	TP 290	D'Agostino, Paul A.	TP 375
Costello, Catherine E.	MP 292	Crews, Bridgit	TP 652	Dahl, Jeff	MP 542
Costello, Catherine E.	WP 491	Crisp, Jessica L.	TP 343	Dahl, Mark	ThP 618
Costello, Catherine E.	ThP 120	Cristadoro, Anna	WOF am 08:50	Dahlström, Jessie	ThP 665
Costello, Catherine E.	ThP 261	Cristea, Ileana M.	ThP 346	Dahmen, Norbert	ThP 079
Costello, Catherine E.	WP 100	Cristea, Ileana M.	ThP 474	Dai, Hong Jian	WP 225
Costello, Catherine E.	WP 434	Cristea, Ileana M.	TOE pm 2:50	Dai, Jun	MP 401
Costello, Catherine E.	WP 414	Cristea, Ileana M.	ThP 489	Dai, Lan	MP 071
Costello, Catherine E.	MP 288	Cristoni, Simone	MP 323	Dai, Susie	WP 226
Costello, Catherine E.	ThP 127	Cristoni, Simone	TP 068	Daigle, Eric	ThP 592
Costello, Catherine E.	MP 103	Croley, Timothy R.	TP 063	Daigle, Eric	ThP 600
Costello, Catherine E.	WP 049	Croley, Timothy R.	MP 138	Dailey, Bill	ThP 526
Cote, Linda	WP 601	Crombie, Andrew	TP 542	Dain, Ryan	WP 666
Cottarel, Guillaume	TOA am 10:10	Cromwell, Kyle N.	MP 584	Dain, Ryan	WP 660
Cotten, Steven W.	MP 597	Cromwell, Mandy	MP 215	Dain, Ryan	WP 667
Cotter, David R.	MP 602	Crone, Catharina	MP 235	Dain, Ryan P.	WP 662
Cotter, Robert J.	ThP 283	Crone, Catharina	WP 097	Dale, Bruce E.	WP 481
Cotter, Robert J.	MP 603	Crone, Catharina	ThP 070	Dalebout, Hans	ThP 350
Cotter, Robert J.	MP 091	Cross, Tyra	TP 030	Dalebout, Hans	MP 596
Cotter, Robert J.	WP 325	Crosswhite, Mark R.	MP 551	Dalebout, Hans	TP 201
Cotter, Robert J.	TP 273	Crothers, C. Bronson	TOD pm 2:30	Dalglisch, Gerard	WP 230
Cotter, Robert J.	MP 190	Crothers, C. Bronson	ThP 614	Dalglisch, Gerard	TP 404
Cotter, Robert J.	ThP 292	Crowley, Jan	TP 522	Dalhoff, Christian	TP 145
Cotter, Robert J.	WP 280	Crowther, Sandra	TP 091	Dallas, Shannon	MP 537
Cotter, Robert J.	ThP 290	Crumbliss, Alvin L.	WP 177	Dall'O, Elisa	TP 423
Cotter, Robert J.	TP 260	Crutchfield, Christopher	ThP 089	Dallongeville, Sophie	WP 276
Cotter, Robert J.	TP 263	Cu, Nguyen	ThP 438	Dalmasso, Enrique	WP 513
Cotton, Jerome	ThP 066	Cubero Herrera, Lisandra	MP 108	Dalmasso, Enrique	WP 089
Cottrell, Graeme S.	ThP 455	Cui, Jian	WP 063	Dalmasso, Enrique	ThOA pm 3:50
Coulier, Leon	MP 243	Cui, Weidong	ThP 272	Daly, Michael	WP 452
Coulier, Leon	MOA pm 4:10	Cui, Weidong	ThP 578	Daly, Thomas M.	TOB pm 2:50
Coulombe, Marie-Eve	ThP 140	Cui, Weidong	ThP 014	Damen, Carola WN	ThP 541
Countryman, Sky	MP 559	Cui, Weidong	MP 285	Dammer, Eric	ThOE pm 3:10
Courade, Jean-Philippe	ThP 071	Cui, Weidong	ThP 275	Damoc, Eugen	ThP 202
Courcelles, Mathieu	ThP 434	Cui, William	TP 581	Damoc, Eugen	WP 097
Court, Donald L.	ThP 289	Cui, Xiangqin	WP 528	Damoc, Eugen	MOD pm 2:30
Courtet-Compondu, Marie-Claude	TP 470	Cui, Ziyou	MP 232	Damoc, Nicolaie Eugen	TP 033
Courtney, Opal	WP 671	cui, ziyou	ThP 430	D'Amours, Damien	ThP 436
Cousins, Lisa	WP 323	Cui, Ziyou	WP 017	Danan, Lieza Marie	ThP 278
Couté, Yohann	ThOE pm 3:30	Culbert, Elizabeth	MP 563	Dane, A. John	WOG pm 4:10
Couture, Jean	WP 232	Culp, Amanda	MOA pm 3:50	Dane, A. John	MP 558
Cover, Timothy L.	WP 030	Cummins, Robert	ThP 572	Dane, John	ThP 332
Cox, Alan G.	MP 646	Cummins, Stanley	WP 225	Danell, Allison S.	TP 475
Cox, David	ThOB am 09:10	Cuneo, Matthew J.	ThP 485	Danell, Ryan M.	WP 128
Cox, David	WP 270	Cunliffe, Jennifer N.	ThOB am 08:50	Danell, Ryan M.	ThP 075
Cox, David	ThP 131	Cunningham, Debbie L.	ThP 190	Danell, Ryan M.	TP 291
Cox, David	ThP 425	Cunningham, Robert	WP 071	Danell, Ryan M.	ThP 090
Cox, David M.	ThP 670	Curthoys, Norman	TP 536	Dang, Oanh	WP 228
Cox, Jeffery	MP 228	Curthoys, Norman	ThP 270	Daniel, Butz	WP 127
Cox, Juergen	MP 462	Curtice, Stephanie	TP 349	Daniel, Régis	WP 443
Cox, Juergen	MP 299	Curtice, Stephanie S.	TP 352	Daniel, Régis	ThP 244
Cox, Juergen	MP 303	Curtis, Matthew	MP 661	Daniels, Scott B.	MP 260
Coy, Stephen L.	WP 207	Cushman, Mark S.	WP 220	Daniels, Scott B.	WP 272
Coyer, Michael	ThP 687	Custer, Jenny E.	MP 224	Daniels, Scott B.	WP 577
Cozma, Claudia	ThP 183	Cutalo, Jenny M.	WP 446	Danielson, Steven R.	TP 496
Crabb, David W.	MP 609	Cuyckens, Filip	TP 577	Danielson, Steven R.	TP 023
Craciun, Gheorghe	TP 048	Cyriac, Jobin	ThP 336	Danielson, William	MOD am 08:30
Craft, David	TP 237	Cyriac, Jobin	ThP 339	Danielson, William F.	WP 691
Cramer, Rainer	MPZ 567	Czerwieciec, Gregg A.	WP 007	Danielson, William F.	TP 232
Cramer, Rainer	TP 622	Czok, Ulrich	TOD pm 4:10	Danielson, William F.	TP 213
Cramer, Rainer	ThP 378	Czornak, Kamila	TP 199	Danielson III, William	TP 212
Cramer, Rainer	MPZ 566	Czornak, Kamila	TP 200	D'antonio, Sue	WP 375
Crampton, Robert S.	ThP 604	Czyborra, Stefanie	WP 609	Dantus, Marcos	MP 251
Crane, Brian	WP 452	Czyzyk-krzeska, Maria F.	TP 021	Dantus, Marcos	MOD pm 3:10
Crathern, Susan	MP 435	Da Silva, David	MP 611	Dantus, Marcos	WOC am 08:50
Crawford, Christina	WP 196	Daaro, Ibrahim	MP 161	Dantus, Marcos	TP 117
Crawford, Christina L.	WOD am 08:30	Dabek-Zlotorzynska*, Ewa	ThP 610	Dantzig, Anne H.	TOB pm 2:50
Crawford, Christina L.	WP 204	Dabney, David E.	WP 624	D'Apolito, Oceania	TP 250
Crawford, Elizabeth	WP 314	Dadgar, Dari	MP 419	Darden, Thomas A.	WP 446
Crawford, Elizabeth	WOB pm 3:10	Dadgar, Dari	MP 339	Darfler, Marlene M.	TP 136
Crawford, Elizabeth	ThP 319	Dadimov, Denis	WP 475	Darie, Costel	ThP 445

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Dariento, Celia.....	TP 562	Decker, Petra.....	WP 605	Denissen, Jon.....	MP 428
Darland, Ed.....	WP 061	Dedon, Peter.....	ThP 594	Denner, Larry.....	MP 054
Darmanto, Agus.....	TP 267	Deelder, Andre.....	WP 118	Denny, Patricia A.....	TP 517
Daroda, Romeu Jose.....	ThP 320	Deelder, André M.....	MP 496	Denny, Paul C.....	TP 517
Dartois, Veronique.....	ThP 161	Deelder, André M.....	WP 191	Depauw, Edwin.....	TP 364
Darula, Zsuzsanna.....	ThP 300	Deelder, André M.....	TP 201	Deperalta, Galahad U.....	ThP 548
Darville, Lancia N.F.....	ThP 203	Deelder, André M.....	TP 288	Dephoure, Noah E.....	TP 141
Dash, Aditya P.....	MP 047	Deelder, André M.....	MP 596	Derckx, Pieter.....	TP 078
Date, Sachiko.....	MP 431	Deelder, André M.....	ThP 694	Derome, Andrew.....	ThP 404
Datla, Raju.....	ThP 090	Deelder, André M.....	ThP 350	Derou, Stephanie.....	TOG pm 3:10
Dator, Romel.....	ThP 397	Deelder, André M.....	WP 148	Derua, Rita.....	WP 399
Daub, Henrik.....	ThP 427	Deeley, Jane M.....	MP 213	Desaire, Heather.....	WP 362
Dauly, Claire.....	MP 141	Deeley, Jane M.....	MOA am 08:30	Desaire, Heather.....	TOC pm 3:10
Dausch, Christian.....	TP 588	DeFelippis, Michael R.....	ThP 567	Desaire, Heather.....	ThP 495
Davey, Nicholas G.....	ThP 604	Deforce, Dieter.....	ThP 285	desbrow, Claire.....	MP 372
David, Larry.....	ThP 011	Defoy, Daniel.....	MP 521	Desbrow, Claire.....	ThP 357
Davies, Michael J.....	MP 259	Degertekin, F. Levent.....	MP 317	Desbrow, Claire.....	MP 370
Davila, Stephen.....	ThP 338	DeGiorgis, Joseph A.....	WP 143	Desfrancois, Charles.....	ThOF am 08:50
Davila, Stephen.....	ThP 333	DeGrasse, Jeffrey A.....	MP 395	Deshaias, Raymond J.....	TP 314
Davis, Eric J.....	WP 196	DeGroot, Jeroen.....	TP 089	Deshmane, Vijayalakshmi.....	WP 525
Davis, Eric J.....	WOD am 08:30	Dehonor, Christophe.....	MOF pm 3:50	Deshpande, Samir.....	TP 384
Davis, Mike.....	ThP 060	Deigner, Hans-Peter.....	ThP 100	Desilets, Jean-Francois.....	MP 511
Davis, Roderick.....	WP 216	Deinhardt, Kathrin.....	ThP 445	Desmarchelier, Aurélien.....	WP 219
Davoli, Enrico.....	ThP 605	Deininger, Soeren-Oliver.....	WOD pm 4:10	Desouza, Leroi.....	MP 081
Davoli, Enrico.....	WOG pm 2:50	Deininger, Sören-Oliver.....	TP 178	Desouza, Leroi V.....	TP 136
Daw, Richard.....	MP 403	Deinzer, Max L.....	MP 636	Despots, Caroline.....	TP 106
Dawe, Margot R.....	WP 104	Deinzer, Max L.....	ThOD am 09:50	Deterding, Leesa.....	WP 447
Dawson, William W.....	ThP 179	Dejournal, Robert.....	WP 560	Deterding, Leesa.....	TP 351
Day, Jennifer A.....	WP 564	Dekker, Lennard.....	TP 146	Deuso, Jr., John D.....	ThP 246
Day, Robert M.....	TP 044	Delanghe, Bernard.....	MP 150	Deutsch, Eric.....	Special
Day, Robert M.....	ThP 030	Delatour, Thierry.....	WP 219	Deutsch, Eric.....	Special
Dayon, Loïc.....	WP 008	Delclos, K. Barry.....	TP 411	Deutsch, Eric.....	WP 521
de Antueno, Roberto.....	ThP 527	Delidaki, Maria.....	ThP 432	Deutsch, Eric W.....	WP 036
de Boer, Gina.....	MP 342	Delinsky, Amy.....	TP 586	Devakumar, Arugadoss.....	MP 248
de Boer, Gina.....	TP 391	Delinsky, Amy D.....	WP 602	Devakumar, Arugadoss.....	WP 410
De Ceuleneer, Marlies.....	ThP 285	Dell'mour, Madeleine.....	ThP 150	Devakumar, Arugadoss.....	WOC pm 2:30
de Dios, Kristine.....	ThOB am 09:30	Della Valle, Maria Cecilia.....	WP 003	Devarapalli, Nagarjuna.....	TP 433
De Jong, Ebbing.....	MP 119	Dellmour, Madeleine.....	ThP 136	DeVera, Michael E.....	MP 128
De Jong, Ebbing.....	MP 060	Dello Russo, Antonio.....	TP 250	Devi, Lakshmi A.....	TP 546
de Jong, Luitzen.....	WP 138	Delmotte, Nathanael.....	ThP 372	Devolve, Alice.....	ThP 178
de Koning, Leo J.....	WP 138	Delnomdedieu, Marielle.....	WP 130	Dey, Subhakar.....	WP 272
de Koster, Chris G.....	WP 138	DelRaso, Nicholas.....	ThP 584	Dey, Subhakar.....	MP 260
de la Torre, Xavier.....	TP 657	DelRaso, Nicholas J.....	TP 088	Deyanova, Ekaterina G.....	WP 553
De Leoz, Maria Lorna.....	MP 485	Delvolve, Alice.....	WP 194	Deyarmin, Brenda.....	WP 552
de Leoz, Maria Lorna.....	WOC pm 4:10	Delvolve, Alice.....	MP 236	Deyholos, Michael.....	WP 128
de Leoz, Maria Lorna A.....	MP 478	Delvolvé, Alice M.....	ThP 162	Dhariwal, Gulshan.....	WP 093
De Luca, Giuseppina.....	WP 374	Demers, Roger.....	MP 358	Dhir, Rajiv.....	MOE pm 3:10
De Moor, Bart.....	WOA am 10:10	Demers, Roger.....	ThP 365	Di, Li.....	MOB am 08:30
de O. Carrazedo, Maria Fernanda.....	MP 165	Demeure, Kevin.....	TP 364	Di Bussolo, Joseph.....	WP 352
De Pauw, Edwin.....	WP 366	Demeure, Michael J.....	TP 083	Di Donna, Leonardo.....	WP 374
De Pauw, Edwin.....	WP 184	Demey, Emmanuelle.....	ThP 117	Di Donna, Leonardo.....	WP 389
De Pauw, Edwin.....	MP 605	Demina, Olga.....	WP 369	Di Fonzo, Andrea.....	ThP 267
De Pauw, Edwin.....	WP 032	Demirev, Plamen A.....	ThP 387	Di Poto, Cristina.....	ThP 194
De Pauw, Edwin.....	ThOC pm 3:30	Demireva, Maria.....	TOF am 09:30	Dias, Eduardo C.....	ThP 157
De Pauw, Edwin.....	TP 012	Demmers, Jeroen.....	WP 024	Diaz, Arnaldo.....	MP 172
De Pauw, Edwin.....	ThOF am 08:50	den Os, Desiree.....	ThOE am 08:50	Diaz Arevalo, Diana.....	TP 075
De Pauw, Edwin.....	WP 012	Denef, Vincent.....	WP 131	Dicaire, Catherine.....	ThP 363
de Sá, Gilberto Fernandes.....	ThP 320	Denef, Vincent.....	MP 065	Dicheva, Nedyalka.....	TP 556
De Santis, Andrea M.....	TP 510	Denes, Julia.....	ThP 327	Dicheva, Nedyalka.....	WP 556
De Souza, Andrea G.....	WP 549	Deng, Caishu.....	WP 090	Dicheva, Nedyalka.....	ThP 118
de Souza, Vanderlea.....	ThP 320	Deng, Caishu.....	ThP 128	Dickel, Timo.....	TOD pm 4:10
De Vriendt, Valérie.....	WP 630	Deng, Changhui.....	MP 140	Dicker, Lee.....	MP 070
Dealwis, Chris.....	TP 434	Deng, Fu.....	ThP 236	Dickey, Robert W.....	ThP 132
Dearden, David V.....	WOC am 08:30	Deng, Gejing.....	MP 262	Dickinson, Patsy S.....	ThP 459
Dearmond, Patrick D.....	ThP 661	Deng, Haiteng.....	TP 003	Dickman, Mark.....	TP 264
Deb-choudhury, Dr. Santanu.....	MP 553	Deng, Haiteng.....	MP 620	Dickman, Mark J.....	WP 294
Deb-Choudhury, Santanu.....	WP 539	Deng, Haiteng.....	ThP 051	Diego, Pamela Ann.....	TP 358
Deboer, Gerrit J.....	MP 545	Deng, Lin.....	TP 347	Dieguez, Francisco.....	WP 553
Debois, Delphine.....	WP 184	Deng, Lin.....	TP 576	Dieguez-Acuna, Francisco J.....	WP 548
Decker, G. Anton.....	TP 083	Denis, Marie-Claude.....	WP 227	Dietz, Lisa.....	ThP 588
Decker, Hillary.....	TP 414	Denisov, Eduard.....	ThP 202	Diez, Roberto.....	WP 516
		Denisov, Eduard.....	MOD pm 2:30	DiFalco, Marcos.....	MP 526

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

DiFalco, Marcos.....	WP 566	Domingues, Pedro.....	MP 512	Drogaris, Paul.....	ThP 505
Dihazi, Hassan.....	TP 610	Domin-Turza, Alina.....	MP 663	Drugan, Madalina M.....	TP 130
Dikler, Sergei.....	MPZ 572	Domon, Bruno.....	WP 075	Drugan, Madalina M.....	TP 122
Dill, Brian.....	MP 065	Domon, Bruno.....	MP 088	Drury, William.....	TP 263
Dill, Brian D.....	WP 131	Domon, Bruno.....	TP 138	Druzhinina, Irina S.....	ThP 384
Dillon, Roslyn.....	MP 248	Domon, Bruno.....	ThP 695	Du, Min.....	ThP 486
Dillon, Roslyn.....	WOC pm 2:30	Domon, Bruno.....	MP 122	Du, Xiuxia.....	WP 458
Dillon, Roslyn.....	WP 410	Domon, Bruno.....	WP 313	Du, Yi.....	ThP 208
Dillon, Thomas M.....	ThP 535	Donald, William A.....	ThOD am 08:30	Du, Yi.....	TP 082
DiMaggio, Peter A.....	MP 289	Donald, William A.....	TOF am 09:30	Du, Yi.....	MP 121
DiMaggio, Peter A.....	ThOD pm 3:10	Doneanu, Angela.....	WP 318	Du, Yi.....	WP 553
D'Incalci, Maurizio.....	TP 423	Doneanu, Catalin.....	ThP 049	Du, Ying.....	TP 539
Dindyal-Popescu, Alina.....	ThP 091	Doneanu, Catalin.....	WOC pm 3:10	Duan, Fenghai.....	MP 095
Ding, Caroline.....	ThOB pm 3:10	Dong, Jing.....	MP 155	Duan, Penggao.....	ThP 639
Ding, Chuan-fan.....	MP 197	Dong, Jing.....	MP 166	duan, xiaotao.....	MP 302
Ding, Chuan-fan.....	MP 198	Dong, Jing.....	WP 381	Duan, Xiaotao.....	ThP 475
Ding, Haiqing.....	TP 493	Dong, Keling.....	MP 606	Duan, Xiaotao.....	TP 131
Ding, Haiqing.....	ThP 240	Dong, Li.....	ThP 437	Duan, Xiaotao.....	MOB pm 3:30
Ding, JianHua.....	TP 293	Dong, Linlin.....	WP 216	Duarte, Carlos B.....	MP 024
Ding, Jianhua.....	TP 294	Dong, Meng-Qiu.....	ThP 025	Dubay, George R.....	WP 177
Ding, Li.....	TP 301	Dong, Ming.....	WP 150	Dubilier, Nicole.....	ThP 391
Ding, Li.....	MP 198	Dong, Vy M.....	MOF pm 4:10	Dubois, Laura G.....	MOE pm 3:50
Ding, Li.....	MP 197	Dong, Weijie.....	MP 480	Duboise, Laura G.....	TP 619
Ding, Li.....	MP 201	Donis, Reuben O.....	TP 511	Duchateau, Magalie.....	TP 427
Ding, Sheng.....	TP 106	Donohoe, Dallas.....	WP 551	Duchoslav, Eva.....	TP 561
Ding, Shi-jian.....	TP 550	Dooley, Alek N.....	MP 429	Duchoslav, Eva.....	MP 441
Ding, Wei.....	TOA pm 3:50	Dormeyer, Wilma.....	ThOA am 08:30	Duchoslav, Eva.....	MP 237
Ding, Wei.....	ThP 220	Doroshenko, Vladimir M.....	ThP 385	Duckett, Dr Catherine.....	TP 572
Ding, Wen.....	WP 505	Doroshenko, Vladimir M.....	MP 190	Ducret, Axel.....	TP 313
Ding, Wen.....	WP 496	Doroshenko, Vladimir M.....	TP 383	Ducruix, Celine.....	TP 120
Ding, Xiaoya.....	ThP 407	Doroshenko, Vladimir M.....	TP 285	Duczak, Jr, Nicholas.....	MP 159
Ding, Xiaoya.....	TP 346	Doroshenko, Vladimir M.....	MP 610	Duebelbeis, Dennis O.....	WP 372
Ding, Yi.....	ThP 591	Doroshenko, Vladimir M.....	WP 325	Dueker, Stephen.....	MOA pm 3:30
Dingle, Tanis.....	MOC am 10:10	Doroshenko, Vladimir M.....	ThOG am 10:10	Dueker, Stephen.....	MOA pm 2:50
Dinh, Van.....	MOA pm 3:10	Doroshenko, Vladimir M.....	TP 194	Duffy, Cathleen.....	ThP 472
Dinulescu, Daniela M.....	WP 068	Dorrestein, Pieter.....	ThOA pm 2:30	Duffy, Kelly.....	TP 621
DiNuoscio, Gregg.....	WP 541	Dorrestein, Pieter.....	ThP 013	Duflot, Denis.....	MOF pm 3:50
Dirksen, Eef.....	ThP 404	Dosemeci, Ayse.....	TP 387	Duggan, Jeffrey.....	ThP 231
Distler, Anne M.....	ThP 530	Dosemeci, Ayse.....	WP 407	Dulla, Kalyan.....	ThP 427
Dixon, Carisa.....	WP 158	Dost, Banu.....	MP 035	Dumas, Pierre.....	ThP 600
Dixon, Joseph.....	MP 245	Dotson-Roberts, Crystal A.....	TOB pm 2:50	Dumas, Pierre.....	ThP 592
Dixon, R. Brent.....	MP 317	Dou, Yimeng.....	TP 142	Dumelin, Christoph.....	TP 480
Dixon, R. Brent.....	MP 470	Douce, Dr David.....	TP 572	Dumenil, Guillaume.....	ThP 574
Dixon, R. Brent.....	ThP 324	Doucette, Alan A.....	WP 132	Dunbar, Robert C.....	WP 668
Dixon, Richard A.....	ThP 078	Doucette, Alan A.....	WP 134	Dunbar, Robert C.....	WP 665
Djijda, Marie Claude.....	TP 198	Douglas, D. J.....	MP 204	Duncan, Roy.....	ThP 527
Doble, Brad.....	MP 056	Douglas, D. J.....	TP 451	Dunk, Paul W.....	TP 283
Dobson, Rowan L.....	MP 605	Douglas, Trevor.....	TP 478	Dunn, Jamie D.....	ThP 143
Dobson, Rowan L.....	WP 032	Douglas, Trevor.....	TP 477	Dunn, Michael J.....	MP 602
Dobson, Rowan L.....	WP 012	Douziech, Mélanie.....	ThP 436	Dunn-meynell, Kimberly.....	TP 402
Dodder, Nathan.....	WP 417	Dove, Alistair D.M.....	ThP 084	Dunyach, Jean-Jacques.....	MP 194
Dodder, Nathan G.....	WP 121	Dove, William F.....	WP 026	Duong, Duc.....	WP 304
Dodder, Nathan G.....	WP 096	Dovichi, Norman J.....	ThP 048	Duong, Duc.....	TP 338
Dodder, Nathan G.....	WOB am 09:30	Dow, Thomas A.....	MP 470	Duong, Duc.....	WP 299
Dodder, Nathan G.....	WP 101	Dowthwaite, Gary.....	MP 372	Dupont, Jairton.....	ThP 636
Dodds, Eric D.....	MOC pm 3:30	Dowthwaite, Gary.....	MP 370	Dupuis, Alain.....	WP 064
Dodds, Eric D.....	ThOC am 09:10	Dowthwaite, Gary.....	ThP 357	Dupuis, Nicholas.....	TOF pm 3:50
Dodeller, Marc.....	WP 457	Drabner, Georg.....	ThOA am 08:30	Durbin, Ken.....	MP 135
Doede, Chris.....	WP 536	Dragusanu, Mihaela.....	ThP 279	Duriez, Elodie.....	TP 382
Doerge, Daniel R.....	TP 411	Dragusanu, Mihaela.....	WP 321	Duronio, Vincent.....	TP 553
Doerge, Daniel R.....	ThP 580	Drahos, Laszlo.....	WP 627	Durr, Eberhard.....	ThP 517
Doetsch, Volker.....	WP 154	Drake, Penelope M.....	TOC pm 2:30	Durr, Eberhard.....	MP 037
Dogan, Ahmet.....	MP 613	Drake, Steven K.....	TP 242	Durrani, Farukh.....	ThP 167
Doherty, Thomas P.....	MP 656	Dratz, Edward.....	ThP 531	Durrani, Farukh.....	MP 442
Dokholyan, Nikolay V.....	ThP 265	Drayss, Miriam.....	WP 664	Durst, Florian.....	WP 154
Dolios, Georgia.....	TP 546	Dreger, Mathias.....	TP 145	Dutta, Sucharita.....	ThP 178
Dolnikowski, Gregory G.....	ThP 221	Dreiöcker, Frank.....	WP 664	Dutta, Sucharita.....	ThOB pm 3:10
Domange, Céline.....	ThP 096	Dresen, Sebastian.....	ThP 599	Dutta, Sucharita.....	TP 457
Domann, Paula.....	MP 498	Drexler, Dieter M.....	MP 503	Dutta, Sucharita.....	WP 618
Domanski, Dominik.....	MOB pm 3:10	Drexler, Hannes.....	WP 558	Duursma, Marc C.....	WP 193
Domanski, Dominik.....	TP 030	Dreyer, Mark.....	WP 228	Duursma, Marc C.....	WP 195
Domingues, M Rosário.....	MP 227	Drogaris, Paul.....	TP 262	Dwivedi, Ravi.....	WP 524

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Dwivedi, Sutopa B.....	ThP 053	Egan, Thomas.....	TOG am 10:10	Engen, John R.....	TP 332
Dworzanski, Jacek P.....	TP 384	Egan, Thomas.....	WOD am 09:30	Engen, John R.....	TOG pm 2:50
Dyck, Joachim.....	ThP 386	Eghbalnia, Hamid.....	WP 127	Engholm-Keller, Kasper.....	ThP 443
Dyer, Daniel.....	MP 504	Egsgaard, Helge.....	TOA am 09:30	Englander, Walter.....	TOG pm 2:30
Dyer, J. M.....	MP 553	Ehlerding, Annelie.....	ThOD am 08:50	Engle, Nancy L.....	TP 108
Dyer, Jolon M.....	WP 539	Ehya, Hormoz.....	TP 085	English, A. Michelle.....	ThP 188
Dykstra, Andrew.....	TOA am 09:50	Eichelberger, Brian.....	MOF am 08:30	English, A. Michelle.....	MP 386
Dykstra, Andrew B.....	MP 297	Eichelberger, Brian.....	ThP 635	English, Jane A.....	MP 602
Dytfeld, Dominik.....	MP 604	Eichhorn, Thomas.....	WP 501	Enoh, Peter.....	ThP 100
Dzerk, Alan M.....	MP 355	Eikel, Daniel.....	MP 291	Ens, Werner.....	TP 002
Dziechciarková, Marta.....	MP 088	Eikel, Daniel.....	WP 315	Enyenihi, Atim A.....	MOD pm 4:10
Dzieciatkowska, Monika.....	ThP 106	Eisenacher, Martin.....	WP 532	Eppe, Gauthier.....	WOB am 09:30
Dzubak, Pert.....	MP 050	Eismin, Ryan J.....	ThP 637	Eppe, Gauthier.....	WP 101
Dzubak, Petr.....	WP 018	Eitner, Casimir.....	TP 136	Eppe, Gauthier.....	WP 096
Easley, Rebecca L.....	ThP 080	Ejsing, Christer.....	MOA am 09:50	Eppe, Gauthier.....	WP 121
Easter, Renee N.....	MOG am 10:10	Ekroos, Kim.....	MP 237	Epstein, Jonathan A.....	ThP 298
Easter, Renee N.....	MOG am 08:50	El Said, Kathleen R.....	ThP 132	Erdmann, Ralf.....	ThP 514
Easterling, Michael.....	MP 634	Elam, W. Tim.....	ThP 334	Erickson, Bethany.....	MP 328
Easterling, Michael.....	WP 520	Elias, gonzalez.....	WP 063	Erickson, Brian.....	WP 131
Easterling, Michael.....	MP 154	Eliuk, Shannon M.....	TP 270	Erickson, Brian K.....	MP 286
Easterling, Michael.....	TOG pm 4:10	Eliuk, Shannon M.....	ThP 288	Eriksson, Jan.....	TP 053
Easterling, Michael.....	ThOD pm 2:50	Eliuk, Shannon M.....	ThP 575	Eriksson, Johan.....	TP 319
Easterling, Michael.....	MP 136	Elkabes, Stella.....	TP 544	Erlekam, Undine.....	MOF pm 3:30
Easterling, Michael.....	MP 156	El-Kadissi, Georges.....	MP 261	Ermini, Florian.....	MP 217
Easterling, Michael.....	ThOD am 10:10	El-Kattan, Ayman.....	WP 238	Ernst, Robert K.....	MP 110
Easterling, Michael L.....	WP 506	Elkins, James G.....	TOA am 09:50	Ernst, Robert K.....	MP 107
Easterling, Michael L.....	ThP 213	Ellerby, Lisa.....	ThP 268	Esau, Christine.....	TP 543
Easterling, Michael L.....	ThP 456	Elliott, Marc.....	WP 329	Eschrich, Steven.....	TP 611
Easterling, Michael L.....	TP 195	Elliott, Monica H.....	WP 128	Esposito, Christopher L.....	WP 256
Easterling, Michael L.....	WOA am 09:10	Elliott, Steven.....	MP 072	Esposito, Simone.....	TP 657
Easterwood, LaHoma.....	MP 529	Ellis, David A.....	ThP 478	Espourteille, Francois A.....	WP 595
Easthon, Lindsey.....	WP 454	Ellis, Robert.....	ThP 131	Espourteille, Francois A.....	WP 256
Easthon, Lindsey.....	ThP 210	Ellis, Robert.....	MP 267	Espourteille, Francois A.....	WP 269
Eaton, Kimberly.....	TP 259	Ellis, Walther.....	TOG am 09:50	Espourteille, Francois A.....	MP 361
Eaton, Kimberly.....	WP 261	Ellison, Sparkle.....	WP 358	Essén, Sofia.....	WP 172
Eaton, Suzanne.....	MP 222	ElNaggar, Mariam S.....	MP 315	Esswein, Stefan.....	TP 446
Ebbel, Erika N.....	WP 100	El-Shourbagy, Tawakol.....	MP 368	Ethier, Diane.....	MP 356
Ebbels, Timothy M.....	WP 694	El-Shourbagy, Tawakol.....	WP 693	Etzkorn, Jacob M.....	ThP 604
Eberlin, Livia S.....	MP 508	El-Shourbagy, Tawakol.....	MP 367	Euler, Marco.....	TP 524
Eberlin, Livia S.....	TP 366	Emami, Iman.....	WP 278	Evalet, Olivier.....	WP 042
Eberlin, Marcos N.....	ThP 636	Emary, William Bart.....	TP 418	Evans, Christopher A.....	ThP 217
Eberlin, Marcos N.....	MP 508	Emary, William Bart.....	ThP 368	Evans, Christopher A.....	WOB pm 3:30
Eberlin, Marcos N.....	WP 210	Emary, William Bart.....	MP 280	Evans, Dan.....	WP 147
Eberlin, Marcos N.....	TP 243	Emerson, Charles P.....	ThP 486	Evans, James E.....	WP 557
Eberlin, Marcos Nogueira.....	ThP 320	Emert-Sedlak, Lori.....	TOG pm 2:50	Evans, Jason J.....	ThP 462
Ebert, Matthias.....	TP 178	Emmel, Katrina.....	WP 375	Evans, Jason J.....	MP 098
Ebrahimi, Diako.....	MP 100	Emmert-Buck, Michael.....	MP 617	Evans, Ronald.....	ThP 602
Ebrahimi Mohammadi, Diako.....	MP 099	Emmert-Buck, Michael R.....	TOB pm 3:10	Evans-Nguyen, Theresa.....	MP 190
Ecelberger, Scott.....	ThP 387	Emmett, Mark R.....	MOA am 09:30	Evans-Nguyen, Theresa.....	WP 325
Echeverri, Christophe J.....	TP 010	Emmett, Mark R.....	TP 426	Evason, David.....	ThP 170
Eckel-Passow, Jeanette.....	WP 070	Emmett, Mark R.....	ThP 570	Everett, Allen.....	WP 544
Eckenrode, Brian.....	TP 661	Emmett, Mark R.....	TP 444	Everett, Logan J.....	ThP 062
Economou, Anastasios.....	TP 593	Emmett, Mark R.....	WOC pm 2:30	Everett, Logan J.....	TP 043
Edbey, Khaled.....	WP 480	Emmett, Mark R.....	TOG pm 3:30	Everley, Robert A.....	MP 131
Edgar, Ron.....	WP 037	Emmett, Mark R.....	TP 450	Ewing, Andrew G.....	ThP 176
Edmondson, Rick.....	TP 618	Emmett, Mark R.....	TP 527	Ewing, George E.....	WP 312
Edmondson, Rick.....	MP 041	Emory, Joshua F.....	TP 296	Ewing, Rob M.....	MOE pm 2:50
Edmondson, Ricky D.....	WP 459	Enders, Jeffrey.....	TP 207	Exposito, Junien.....	ThP 651
Edwards, Dean.....	ThP 607	Eng, Jimmy.....	MOE am 09:30	Eyers, Claire.....	MP 597
Edwards, Ian.....	MP 498	Eng, Jimmy K.....	WP 036	Eyet, Nicole.....	ThP 634
Edwards, Jack R.....	MP 470	Eng, Kurt.....	ThP 087	Eyler, John R.....	WP 482
Edwards, Jennifer.....	MP 129	Engel, Brian.....	ThP 690	Eyler, John R.....	TP 309
Edwards, John C.....	ThP 118	Engel, Brian J.....	ThP 235	Eyler, John R.....	TP 453
Edwards, Nathan J.....	ThP 212	Engel, Marc E.....	TP 607	Eyler, John R.....	WP 661
Edwards, Nathan J.....	WP 046	Engelhard, Victor H.....	MP 386	Eyler, John R.....	WP 479
Edwards, Nathan J.....	ThP 201	Engen, John R.....	TP 449	Eyler, John R.....	MP 352
Ee, Kim Huey.....	TP 336	Engen, John R.....	TP 440	Eysberg, Martin.....	MP 544
Eelink, Sebastiaan.....	TP 159	Engen, John R.....	TP 436	Ezan, Eric.....	TP 529
Eelink, Sebastiaan.....	ThP 110	Engen, John R.....	TP 438	Ezan, Eric.....	ThP 066
Efstathiou, Georgios.....	ThP 432	Engen, John R.....	WP 421	Ezan, Eric.....	TP 382
Egan, Thomas.....	TP 205	Engen, John R.....	TP 441	Ezawa, Naoya.....	TP 374
Egan, Thomas.....	TP 204	Engen, John R.....	TP 430	Ezawa, Naoya.....	TP 376

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Fabris, Daniele	ThP 396	Fenaille, Francois	TP 529	Fiehn, Oliver	ThP 073
Fabris, Daniele	WP 436	Feng, Feng	ThP 644	Fiehn, Oliver	WOB am 08:30
Fabris, Daniele	ThOC am 10:10	Feng, Feng	MP 166	Fiehn, Oliver	WP 125
Fabris, Daniele	ThP 414	Feng, Li-Chia	MOE pm 4:10	Field, Brian J.	MP 490
Fabris, Daniele	ThOF am 09:30	Feng, Shun	WP 511	Field, Christine	ThOE am 09:10
Faca, Vitor M.	WP 068	Feng, Shun	MP 082	Field, Jennifer A.	TP 663
Fadgen, Keith	WP 318	Feng, Shun	TP 034	Fields-Zinna, Christina A.	TP 635
Fadgen, Keith	WP 421	Feng, Xiao-Jiang	WP 102	Figueiredo, Alana Dos Reis	ThP 502
Fadgen, Keith	TP 332	Feng, Xidong	TP 472	Figus, Margaret	TP 295
Fadgen, Keith	MP 619	Feng, Yilin	ThP 222	Filiou, Michaela D.	MP 069
Fagerquist, Clifton K.	TOG am 09:30	Fenical, William	WP 167	Finan, Michael	WP 072
Faid, Valegh	WP 469	Fenn, Larissa S.	MOD am 10:10	Findlay, Geoff	MP 029
Fajer, Piotr G.	TP 444	Fennell, Timothy R.	MP 403	Findley, Seth	TP 105
Fales, B. Scott	ThOF am 08:30	Fenselau, Catherine	WP 282	Finiguerra, Alessandro	MP 323
Falkenhagen, Jana	WOF am 10:10	Fenselau, Catherine	ThP 212	Finley, Daniel	WP 299
Falkner, Jarret	ThP 011	Fenselau, Catherine	TOG am 08:30	Finney, Greg L.	MP 049
Falkner, Jayson	WP 038	Fenselau, Catherine	ThP 201	Finney, Gregory	MOE am 09:50
Falkner, Jayson A.	TP 016	Fenselau, Catherine	MP 392	Finney, Gregory L.	ThP 473
Falkner, Jayson A.	ThP 011	Fenton, Aron W.	TP 429	Firestein, Stuart	WP 033
Falkner, Jayson A.	WP 065	Fenyo, David	ThP 345	Fischer, Frank	ThOC am 09:50
Fallon, John	WP 547	Fenyo, David	TP 053	Fischer, Jenny J.	TP 145
Famiglini, Giorgio	WP 606	Fenyo, David	ThP 435	Fischer, Steven M.	WP 061
Famiglini, Giorgio	MP 241	Fenyo, David	MOC pm 3:50	Fischer, Steven M.	TP 112
Fan, Chunling	WP 544	Fenzel, Stefan	TP 588	Fischer, Steven M.	WP 109
Fan, Leimin	WP 693	Ferguson, James A.	MP 529	Fischer, Steven M.	TP 113
Fan, Leimin	MP 368	Ferguson, James A.	MP 540	Fischer, Steven M.	WP 122
Fan, Teresa W.	WP 124	Ferland, Russell J.	ThP 472	Fischer, Steven M.	ThP 069
Fan, Xiaoqing	MP 343	Fermin, Damian	TP 051	Fisher, Rachel D.	WP 079
Fan, Xing	ThP 253	Fernandes, Deolinda	ThP 131	Fisher, Susan	TOC pm 2:30
Fan, Xing	TP 647	Fernandez, Bernadette O.	WP 414	Fisher, Susan	WP 150
Fancher, Charles A.	MP 316	Fernandez, Beth	WP 221	Fisher, Susan J.	MP 086
Fandino, Anabel	MP 406	Fernandez, Facundo	TOD am 08:50	Fishman, Marshall L.	MP 552
Fanelli, Roberto	ThP 605	Fernandez, Facundo	TP 222	Fitch, Bill	MP 439
Fang, Aiqin	WP 060	Fernandez, Facundo	ThP 313	FitzGerald, Garret A.	ThP 018
Fang, Aiqin	ThP 092	Fernandez, Facundo	ThP 311	Fitzgerald, Jennifer	ThP 505
Fang, Jing	TP 436	Fernandez, Facundo	TP 308	Fitzgerald, Michael C.	TOC am 10:10
Fang, Lei	TP 142	Fernandez, Facundo	ThP 084	Fitzgerald, Michael C.	ThP 483
Fang, Lei	ThP 126	Fernandez, Facundo M.	ThP 318	Fitzgerald, Michael C.	ThP 661
Fang, Qing	MP 620	Fernandez, Joseph	TP 003	FitzHugh, William	WP 093
Fang, Xinping	ThP 241	Fernandez De La Mora, Juan	TP 386	Fitzpatrick, Cole T. E.	ThP 604
Fang, Xinping	WP 171	Fernandez de la Mora, Juan	TP 230	Fitzpatrick, Joe	MPZ 571
Fang, Yong	TP 318	Fernandez de la Mora, Juan	WOD am 10:10	Fjeldsted, John	ThP 104
Farcas, Claudiu	WP 041	Fernandez de la Mora, Juan	ThP 314	Fjeldsted, John	ThP 627
Fareh, Jeannette	TP 096	Fernandez Lima, Francisco Alberto	WOG am 09:50	Flad, Thomas	TP 610
Farkas, Tivadar	MP 379	Fernandez Maestre, Roberto	WOD am 08:30	Flamand, Nicolas	MP 409
Farmar, James	Special	Fernandez Maestre, Roberto	WP 204	Flamigni, Luca	MP 171
Farmar, James	MP 516	Fernández-Metzler, Carmen	TP 530	Flanagan, Michael	WP 604
Farnsworth, Christopher	ThP 260	Fernando, Reshan E.	MP 403	Flanagan, Michael	WP 594
Farnsworth, Christopher	ThP 060	Ferran, Robert	TP 214	Flangea, Corina	WP 487
Farnsworth, Paul B.	MP 313	Ferrari Marques, Anna Sylvia	MP 267	Fleischmann, Robert D.	ThP 515
Farrar, Terry	WP 521	Ferrario, Joseph B.	WP 584	Fleming, Mark	TP 239
Farwanah, Hany	MP 246	Ferreirós Bouzas, Nerea	ThP 599	Flick, Karen	MP 214
Fathi, Marc	TP 251	Ferrer, Imma	WOG pm 3:30	Flick, Tawnya G.	WP 233
Fathi, Marc	WP 165	Ferrer, Imma	WP 598	Flint, Melanie	MOG pm 3:50
Fattore, Elena	ThP 605	Ferrige, Tony	TOC pm 3:50	Flint, Melanie	MOE pm 3:10
Faubert, Amelie	TP 551	Ferrige, Tony	TP 059	Florance, Hannah	TP 446
Faubert, Denis	MP 106	Ferris, David A.	TOD pm 2:30	Florens, Laurence	MP 038
Faul, Kym	WOE pm 3:50	Ferris, David A.	ThP 614	Florens, Laurence	WP 055
Fauquenoy, Sylvain	ThP 254	Ferzoco, Alessandra	ThP 347	Floudas, Christodoulos A.	ThOD pm 3:10
Faust, Andreas	TP 240	Festa, Michael	WP 314	Floudas, Christodoulos A.	MP 289
Fayad, Paul	TP 597	Festa, Michael	ThP 326	Floyd, Kyle A.	WP 543
Fechheimer, Marcus	WP 153	Feuillerat, Sarah	ThP 440	Flynn, Helen	WP 301
Fede, Jean-Marie	WP 110	Feuillerat, Sarah	ThP 454	Foekens, John A.	MP 616
Fedorov, Andrei G.	MP 317	Fialkov, Alexander B.	WP 646	Fogiel, Arthur	TP 164
Feelisch, Martin	WP 414	Ficarro, Scott	ThOE am 09:30	Fogiel, Arthur	TP 153
Fei, Yiyan	WP 497	Ficarro, Scott	TP 540	Fogiel, Arthur	ThP 684
Feigerle, Charles S.	TP 632	Ficarro, Scott	ThP 448	Fogiel, Arthur J.	TP 152
Feild, Brian	WP 621	Fico, Miriam	TP 372	Fogiel, Arthur J.	TP 152
Feldman, Adam	TOE pm 3:50	Fiehn, Oliver	WP 123	Fogiel, Jr., Arthur J.	TP 153
Feldman, Andrew	ThP 387			Fogiel, Jr., Arthur	ThP 684
Feldman, Kenneth	TP 252			Follstaedt, Susan C.	MP 606
Felts, Katie	WP 470			Fong, Harry H.S.	TP 320

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Fong, Karen Pei Yi.....	WP 537	Fries, David.....	MP 312	Gabant, Guillaume.....	TP 467
Fontaine, Catherine.....	WP 356	Fries, David.....	WP 328	Gabeler, Stephen C.....	ThP 618
Fonteh, Alfred N.....	WP 079	Fries, David.....	TP 592	Gabeler-lee, Matthew.....	WP 687
Foote, Jim.....	MP 656	Friso, Giulia.....	TP 557	Gabelica, Valerie.....	TP 364
Forbes, Matthew W.....	MOF pm 4:10	Fritz, Marc.....	WP 556	Gabelica, Valerie.....	ThOC pm 3:30
Forbes, Thomas P.....	MP 317	Frka, Sanja.....	WP 583	Gabelica, Valerie.....	ThOF am 08:50
Forbush, Biff.....	TOE pm 2:30	Frodin, Morten.....	WP 393	Gabelica, Valerie.....	WP 184
Ford, Michael.....	ThP 033	Froehlich, Jan.....	WP 179	Gabriele, Bartolo.....	WP 389
Ford, Michael J.....	MP 123	Froehlich, John.....	TOC pm 3:50	Gadgil, Himanshu.....	ThP 536
Ford, Neil.....	MP 224	Froehlich, John W.....	ThOE am 09:50	Gadgil, Himanshu.....	WP 208
Formolo, Catherine.....	ThP 061	Fröhlich, Florian.....	TP 533	Gadgil, Himanshu.....	WP 424
Formolo, Catherine.....	ThP 047	Fromme, Petra.....	WOE pm 3:50	Gaeb, Siegmur.....	WP 622
Forni, Sabrina.....	WP 257	Fu, Cexiong.....	WP 284	Gafken, Philip.....	MOE pm 4:10
Forsberg, Erica M.....	ThP 689	Fu, Cexiong.....	WP 011	Gage, Eric.....	ThP 367
Fortenly, Simon.....	WP 057	Fu, Mingkun.....	ThP 639	Gagne, Sebastien.....	WP 232
Fortenly, Simon.....	WP 047	Fu, Mingkun.....	WP 164	Gagne, Sebastien.....	ThOB am 08:30
Fortier, Chanel A.....	MP 223	Fu, Qiang.....	ThP 004	Gagné, Sébastien.....	ThP 155
Fortis, Laurie.....	MP 552	Fu, Sam.....	WP 169	Gagnon-Carignan, Sofi.....	ThP 148
Foster, Fred.....	WP 358	Fu, Xiaowei.....	WP 257	Gairloch, Elena.....	MP 372
Foster, Fredrick D.....	MP 373	Fu, Xiaoyun.....	ThP 564	Galan, Jacob A.....	TP 139
Foster, Leonard J.....	ThP 516	Fu, Xiaoyun.....	MP 501	Gale, David.....	MP 433
Fountoulakis, Michael.....	MP 024	Fu, Yan.....	WP 043	Gale, David C.....	MOB am 09:10
Fournier, Francoise.....	TOF am 09:50	Fu, Yan.....	TP 058	Galezowska, Angelika.....	MP 167
Fournier, Francoise.....	TP 461	Fu, Yan.....	ThP 243	Galhena, Asiri.....	WOC am 10:10
Fournier, Isabelle.....	TP 175	Fu, Yan.....	ThP 025	Galhena, Asiri.....	ThP 313
Fox, Alvin.....	TP 084	Fu, You-Jun.....	WP 010	Galhena, Asiri.....	TOD am 08:50
Fox, Brian G.....	ThP 519	Fu, Yunlin.....	ThP 630	Galhena, Asiri.....	ThP 311
Fox, Joseph P.....	WP 169	Fu, Yunlin.....	WP 244	Galjaard, Robert-Jan J.H.....	TP 078
Fox, Karen.....	TP 084	Fu, Zongming.....	WP 544	Gallagher, Patrick G.....	TOE pm 2:30
France, Neil.....	ThOF pm 3:10	Fuchareon, Suthat.....	TP 098	Gallagher, Richard T.....	TP 560
Franco, Ericka.....	MP 261	Fuchser, Jens.....	MP 596	Gallagher, Richard T.....	TP 564
Francoleon, Deborah R.....	TP 517	Fuchser, Jens.....	ThP 189	Gallagher, Ryan.....	ThP 564
Frank, Ari.....	ThP 006	Fuglsang, Anja T.....	ThP 306	Gallardo, Vanessa.....	WOG am 10:10
Frank, Benedikt T.C.....	WP 302	Fuh, Ming-Ren.....	WP 229	Gallardo, Vanessa.....	WP 164
Frank, Elisabeth.....	MP 069	Fuhrmann, Jakob.....	WP 412	Gallegos-Candela, Maribel.....	ThP 375
Frank, Michael.....	ThP 673	Fujamade, Nathaniel O.....	ThOF am 08:30	Galligan, Michael A.....	TP 624
Frantom, Patrick A.....	TP 450	Fujigaki, Suwako.....	ThP 289	Galligan, Michael A.....	ThP 565
Franz, Andreas.....	ThP 547	Fujii, Kazuo.....	WP 675	Galvinas, Paulo A. R.....	MP 165
Franz, Andreas H.....	MP 284	Fujii, Kenichi.....	ThP 626	Gamez, Chaminda M.....	ThOG am 10:10
Franzblau, scott.....	TP 413	Fujii, Kenichi.....	ThP 622	Gamagedara, Sanjeeva.....	MOG pm 4:10
Fränzel, Benjamin.....	WP 034	Fujii, Kiyonaga.....	WP 534	Gamble, Kimberly.....	TP 259
Frappier, Sara L.....	TP 614	Fujii, Kiyonaga.....	WP 013	Gamble, Kimberly.....	WP 261
Frascarelli, Sabina.....	WP 247	Fujimura, Yoshinori.....	TP 579	Gamble, Kimberly.....	ThP 321
Fraser, Karl.....	MP 489	Fujimura, Yoshinori.....	ThP 094	Gamble, Lara J.....	ThP 325
Fraser-Liggett, Claire.....	ThP 389	Fujita, Nobuyuki.....	ThP 373	Gamble, Tanya.....	TP 567
Freeby, Steve.....	WP 088	Fujita, Tamami.....	TP 643	Gamble, Tanya.....	TP 581
Freeman, Angela B.....	WP 160	Fujitani, Naoki.....	ThP 242	Gamble, Tanya.....	WP 258
Freeman, Angela S.....	TOB pm 2:50	Fukuda, Jun.....	ThP 373	Gamez, Gerardo.....	TP 297
Freeman, Emily.....	TP 129	Fukuda, Tetsuya.....	WP 534	Gamez, Gerardo.....	TP 186
Freeman, Emily.....	WP 141	Fukumoto, Satoshi.....	TP 643	Gamez, Gerardo.....	TP 293
Freitas, Michael A.....	MP 027	Fukusaki, Eiichiro.....	WP 576	Gamez, Jeff D.....	MP 613
Freitas, Michael A.....	ThP 010	Fukusaki, Eiichiro.....	TP 111	Gammelgaard, Dana.....	ThP 270
Freitas, Michael A.....	TP 311	Fukuyama, Yuko.....	MPZ 569	Gan, Jinping.....	TOB am 08:30
Fremlin, Leith J.....	ThP 234	Funcke, Valerie.....	MP 304	Gang, Chen.....	TP 092
French, Deborah.....	ThP 596	Fung, Eva.....	ThOA pm 3:30	Gangadhar, Nidhi.....	WP 033
French, Todd.....	ThP 390	Fung, Xuefeng.....	ThP 392	Ganiko, Luciane.....	ThP 050
Freudenhammer, Christorph.....	WP 677	Fung, Y.M. Eva.....	TOE pm 4:10	Gant, Randi.....	MOD am 10:10
Frey, Brian L.....	WOA pm 2:30	Furey, Ambrose.....	WP 392	Gant -Branum, Randi L.....	WP 409
Frick, Lauren E.....	MP 438	Furman, Phillip A.....	MP 354	Gao, Haiyan.....	MP 166
Fridgen, Travis.....	TOF pm 3:10	Furtado, Milton.....	ThP 363	Gao, Hong.....	TP 295
Fridman, Tamah.....	TP 044	Furtado, Milton.....	ThP 364	Gao, Hong.....	ThP 403
Fridman, Tamah.....	ThP 030	Furtado, Milton.....	WP 223	Gao, Hongying.....	MP 408
Friedman, Alan.....	MP 154	Furtado, Milton.....	WP 356	Gao, Lan.....	ThP 692
Friedman, Alan.....	TP 102	Furtado, Milton.....	WP 243	Gao, Liang.....	ThOF pm 2:30
Friedman, David B.....	TOE am 09:10	Furtado, Milton.....	MP 261	Gao, Liang.....	ThP 339
Friedman, David B.....	Special	Furtado, Milton.....	ThP 362	Gao, Liang.....	ThOF pm 4:10
Friedman, David B.....	WP 030	Furtos, Alexandra.....	WP 227	Gao, Liang.....	ThP 336
Friedrich, Jochen.....	WP 644	Furuhashi, Osamu.....	ThP 625	Gao, Mark.....	WP 696
Friel, Patrick.....	TP 652	Furuta, Naoki.....	WP 336	Gao, Qiang.....	TP 101
Friel, Patrick N.....	TP 663	Fusaro, Vincent A.....	MP 467	Gao, Sharon.....	ThP 558
Friend, James.....	TP 337	Fussi, Manfred.....	TP 103	Gao, Xiaoli.....	MP 533
Fries, David.....	MP 311	Fütterer, Arne.....	TP 178	Gao, Ying.....	MP 282

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Gao, Yuan.....	ThOG pm 3:50	Gearing, Marla.....	ThOE pm 3:10	Gibbs, Bernard F.....	MP 526
Gao, Yue.....	WP 385	Gebhardt, Christoph.....	ThP 207	Gibbs, Bernard F.....	MP 097
Gao, Yuqian.....	MPZ 580	Gebhardt, Christoph.....	MP 203	Gibbs, Bernard F.....	ThP 064
Gapeev, Alexei.....	MP 385	Gebler, John.....	WOC pm 3:10	Gibbs, Bernard F.....	TP 625
Gaquerel, Emmanuel.....	WP 120	Gebler, John.....	ThP 294	Gibbs, Bernard F.....	TP 616
Garbis, Spiros D.....	TP 033	Gebler, John.....	ThP 647	Gibbs, Bernard F.....	WP 095
Garbis, Spiros D.....	TP 593	Gebler, John C.....	ThP 534	Gibbs, Bernard F.....	TP 103
Garbis, Spiros D.....	MP 024	Gedamke, Richard.....	WP 161	Giblin, Daryl.....	WP 672
Garbus, Brandon R.....	TOG am 09:30	Geddes, Kristin.....	MP 435	Gibson, Bradford W.....	ThP 125
Garcia, Benjamin.....	MP 039	Geddes, Kristin.....	MP 592	Gibson, Bradford W.....	TP 023
Garcia, Benjamin A.....	TP 272	Gee, Nora.....	MP 656	Gibson, Bradford W.....	TOC pm 2:30
Garcia, Benjamin A.....	ThOD pm 3:10	Geer, Lewis Y.....	ThP 022	Gibson, Bradford W.....	WP 286
Garcia, Benjamin A.....	TOE pm 3:30	Gehrig, Peter M.....	TP 488	Gibson, Bradford W.....	WP 007
Garcia, Benjamin A.....	MP 289	Geier, Florian.....	WOB am 08:50	Gibson, Bradford W.....	ThP 268
Garcia-Lerma, Gerardo.....	MP 422	Geissel, Hans.....	TOD pm 4:10	Gibson, Bradford W.....	WP 014
Garcia-Ordonez, Ruben.....	ThOC am 08:30	Geißler, Robert.....	WOG am 09:10	Gibson, Bradford W.....	TP 496
Garcia-reyes, Juan F.....	TP 304	Geistlinger, Ludwig.....	ThP 079	Gibson, Glenn R.....	ThP 083
Garcia-Reyes, Juan F.....	MP 550	Gelasco, Andrew K.....	WP 178	Gibson, Stephen C.....	TP 632
Garcia-Ribas, Ignacio.....	TOB pm 2:50	Gelb, Michael.....	TP 238	Gibson, Stephen C.....	TP 305
Gard, Jaime.....	WP 179	Gelb, Michael H.....	WP 254	Gidde, Jennifer.....	TP 433
Gardella, Joseph A.....	WP 629	Gelhaus, Stacy.....	MP 173	Gieger, Christian.....	ThP 079
Gardner, Michael.....	MP 079	Gelhaus, Stacy.....	MP 172	Gies, Anthony P.....	WOF pm 3:50
Gardner, Michael.....	TP 151	Gelhaus, Stacy L.....	ThP 216	Giese, Nathalia A.....	WP 193
Gardner, Myles.....	WOC am 09:30	Gelhaus, Stacy L.....	TOB pm 2:30	Giessing, Anders Mb.....	ThP 399
Gardner, Myles.....	MP 626	Gelhausen, Elmar.....	ThP 608	Gika, Eleni.....	WP 126
Gardner, Myles.....	ThOD pm 3:30	Genin, Eric.....	MP 235	Gil, Geun-cheol.....	TP 515
Gardner, Myles.....	TP 368	Gentzel, Marc.....	MP 021	Gilar, Martin.....	ThP 294
Gardner, Myles.....	MP 628	Gentzel, Marc.....	ThP 291	Gilar, Martin.....	ThP 534
Garge, Nikhil.....	WP 551	Genuit, Wim.....	WP 648	Gilar, Martin.....	ThP 400
Garge, Nikhil.....	TOE am 08:50	George, M.P.....	TP 259	Gilbert, Gary E.....	TP 437
Garge, Nikhil.....	WP 052	George, M.P.....	WP 261	Gilbert, Jeffrey R.....	MP 545
Garin, Jérôme.....	WP 064	Georgi, Gilda.....	TP 524	Gilbert, Jeffrey R.....	WP 372
Garney, Bryan.....	MP 185	Gerfault, Laurent.....	WP 064	Gilbert, Tony.....	TP 220
Garofolo, Fabio.....	ThP 362	Gerhardt, Geoff.....	WP 318	Gilbert, Tony.....	TP 227
Garofolo, Fabio.....	ThP 363	German, Bruce J.....	WP 497	Giles, Kevin.....	TP 229
Garofolo, Fabio.....	ThP 364	German, J. B.....	WP 473	Giles, Kevin.....	TP 210
Garofolo, Fabio.....	WP 223	German, J. Bruce.....	MP 234	Giles, Kevin.....	MOD am 08:50
Garofolo, Fabio.....	WP 356	German, Micheal.....	ThP 396	Giles, Kevin.....	TP 227
Garofolo, Fabio.....	WP 243	Geromanos, Scott.....	MP 036	Giles, Roger.....	MP 200
Garofolo, Fabio.....	MP 261	Geromanos, Scott.....	TP 039	Giles, Roger.....	MP 199
Garrett, Timothy.....	ThP 179	Geromanos, Scott.....	MP 148	Giles, Zachary S.....	WP 330
Garrett, Timothy J.....	ThP 181	Gerrits, Bertan.....	MP 045	Gilfix, Brian J.....	WP 566
Garrett, Timothy J.....	MP 503	Gerrits, Bertran.....	ThP 512	Gill, Andrew C.....	WOD am 09:10
Garrett, Timothy J.....	TP 322	Gerrits, Bertran.....	MP 283	Gill, Christopher G.....	ThP 604
Garrett Jr., Timothy.....	WP 436	Gerritsen, Henk.....	MOA pm 4:10	Gill, Matthew C.....	MP 199
Garrow, Andrew.....	MP 061	Gershon, Paul.....	WP 420	Gill, Matthew C.....	MP 200
Garton, Andrew.....	ThP 677	Gershon, Paul.....	ThP 017	Gill, Véronik.....	MP 261
Garza, Selynda.....	TP 464	Gershon, Paul.....	WP 035	Gillen, Greg.....	TP 378
Gasch, Audrey P.....	TP 512	Gershon, Paul.....	TP 425	Gilles, Nicolas.....	WP 012
Gasiewicz, Thomas.....	MP 154	Gessner, Chris.....	TP 437	Gilles, Nicolas.....	WP 366
Gaskell, Simon J.....	WP 021	Gessner, Christopher R.....	TP 311	Gillet, Marie-claire.....	WP 032
Gaskell, Simon J.....	MP 597	Getie-Kebtie, Melkamu.....	TP 132	Gillette, Martha U.....	ThP 461
Gasparovic, Blazenka.....	WP 583	Ghamari, Alireza.....	WP 024	Gillies, Laura A.....	MP 234
Gaspar, Gerald.....	ThP 180	Ghannoum, Mahmoud A.....	TP 100	Gillig, Kent.....	TP 225
Gaspar, Gerald.....	WP 186	Ghassempour, Alireza.....	WP 368	Gillig, Kent.....	WP 213
Gaster, Michael.....	ThP 302	Ghelardoni, Sandra.....	WP 247	Gillig, Kent.....	TP 226
Gathungu, Rose.....	ThP 141	Ghobarah, Hesham.....	TP 581	Gillig, Kent J.....	TP 223
Gatschelhofer, Christina.....	WP 347	Ghobarah, Hesham.....	MP 517	Gillis, Elizabeth.....	TOF pm 3:10
Gattone II, Vincent H.....	MP 067	Ghobarah, Hesham.....	TP 567	Gilmer, Tona.....	TP 548
Gau, Brian C.....	ThP 484	Ghosal, Anima.....	TOA pm 3:50	Gilmore, Ian S.....	ThP 325
Gauci, Sharon.....	WP 401	Ghosh, Dipankar.....	TP 617	Gimbert, Yves.....	ThP 653
Gaudreau, Eric.....	ThP 592	Ghosh, Dipankar.....	WP 313	Ginn, Elaine.....	TP 585
Gaumet, Jean Jacques.....	ThP 654	Ghoshal, Uday.....	TP 617	Ginsburg, Geoff.....	MOE pm 3:50
Gauthier, Ted.....	ThOG pm 2:50	Giannone, Richard J.....	MP 297	Ginter, Joy M.....	TP 651
Gavrik, Mikhail.....	ThP 623	Giannone, Richard J.....	TOA am 09:50	Giordanengo, Rémi.....	WP 620
Gay, Melvin CL.....	TP 256	Giardina, Matthew.....	ThP 187	Giordano, Laurent.....	ThP 653
Ge, Ying.....	MP 595	Giardina, Matthew.....	ThP 623	Giorgi, Gianluca.....	TP 473
Ge, Ying.....	ThP 543	Gibb, Iain.....	TP 599	Giovannelli, Jean-François.....	WP 064
Ge, Ying.....	ThP 257	Gibbons, John.....	ThP 670	Giovannoni, Stephen.....	ThP 027
Ge, Ying.....	WP 536	Gibbons, John.....	ThOB am 09:10	Girgenrath, Stefan.....	MP 215
Geahlen, Robert.....	WP 394	Gibbs, Bernard F.....	WP 270	Girod, Marion.....	WP 611
Geahlen, Robert L.....	TP 139			Girod, Marion.....	WOF am 08:30

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Giuliani, Alexandre	MOF pm 3:50	Gong, Chao	ThP 108	Gozal, Yair M.	WP 304
Gjukich, Mark	WP 038	Gong, Xiaoyi	TP 306	Gozal, Yair M.	ThOE pm 3:10
Glad, Gunnar	WP 519	Gong, Xiaoyi	TP 295	Gozzo, Fabio C.	ThP 502
Gladysheva, Tatiana	MOC pm 3:10	Gong, Yue-song	ThP 246	Gozzo, Fabio C.	ThP 503
Glaskin, Rebecca S.	WP 201	Gonnet, Florence	WP 443	Gozzo, Fabio C.	ThP 504
Glaskin, Rebecca S.	WP 212	Gonnet, Florence	ThP 244	Gozzo, Fabio C.	WP 365
Glasmachers, Albrecht	MP 186	Gonye, Gregory E.	WP 527	Gozzo, Fabio C.	WP 364
Glass, Jeffrey	WP 325	Gonzalez, Elias	WP 062	Grace, Michael	ThP 282
Glatz, Bernd	MP 406	Good, David	ThP 026	Gracia, Jose	MP 380
Glaus, Reto	MP 171	Good, David	MP 192	Graf, Christian	ThP 016
Gleissner, Beate	TP 620	Goodenough, Angela K.	MP 401	Graham, Brendan F.	WP 650
Glenn, Karen M.	MP 108	Gooderham, Nigel J.	WP 110	Graham, David R.	MP 606
Glick, James	MOG pm 3:30	Goodison, Steve	MP 085	Graham, Robert Lj.	ThP 111
Gliniski, Mirko	TP 145	Goodison, Steve	WP 511	Graichen, Adam M.	TP 344
Glish, Gary L.	ThP 347	Goodison, Steve	MP 082	Graichen, Adam M.	TP 435
Glish, Gary L.	MP 638	Goodison, Steve	TP 034	Grammatopoulos, Dimitri K.	ThP 432
Glish, Gary L.	ThOG am 08:50	Goodlett, David R.	MP 110	Granade, Hudson R.	ThP 132
Glish, Gary L.	MOD pm 4:10	Goodlett, David R.	MP 147	Granados, Christian	TP 456
Glish, Gary L.	ThOD pm 3:50	Goodlett, David R.	ThP 392	Grandis, Jennifer R.	WP 181
Glish, Gary L.	ThP 348	Goodlett, David R.	MP 139	Grange, Andrew H.	TP 307
Glish, Gary L.	WP 547	Goodlett, David R.	MP 149	Grangeat, Pierre P.	WP 064
Glish, Gary L.	MP 639	Goodlett, David R.	WP 460	Grant, David	MP 162
Glueckmann, Matthias	WP 400	Goodlett, David R.	TP 140	Grant, Russell	WP 337
Glueckmann, Matthias	TP 010	Goodlett, David R.	ThP 123	Grant, Russell	MOB pm 3:50
Glueckmann, Matthias	MP 598	Goodlett, David R.	TP 291	Gratzfeld-Huesgen, Angelika	ThP 673
Glukhova, Veronika	MP 029	Goodlett, David R.	MP 107	Graumann, Johannes	MP 462
Glunde, Kristine	TP 177	Goodman, William	MP 659	Gravel, Chantal	MP 378
Glunde, Kristine	TP 199	Goodman, William D.	MP 654	Gravel, Chantal	ThP 137
Gluedenis, Tom	WP 358	Goodman, William D.	MP 666	Gray, Donald	ThP 690
Gnann, Heike	ThP 599	Goodman, William D.	MP 672	Gray, John	WP 592
Go, David	ThOC pm 3:50	Goodpaster, John V.	TP 292	Gray, Nathanael S.	TP 449
Go, Eden P.	WP 362	Goodwin, Lee	MP 359	Gray, William M.	ThP 119
Go, Eden P.	TOC pm 3:10	Goossens, Pierre L.	TP 382	Gray, William M.	MP 055
Go, Vay Liang	ThP 128	Gopee, Neera V.	ThOG pm 3:50	Grayson, Michael A.	Special
Go, Vay Liang	WP 094	Gorzcyca, Roxanne	ThP 214	Grayson, Scott M.	MPZ 581
Gobezie, Reuben	MP 123	Gordin, Alexander	TP 302	Grazyna, Sobal	MP 092
Goda, Ryoya	MP 458	Gordish-Dressman, Heather	ThP 487	Grechnikov, Alexander	WP 163
Godat, Becky	ThP 101	Gordiyenko, Yuliya	TOG pm 3:10	Greco, Todd M.	TP 339
Godat, Emmanuel	ThOA am 09:10	Gordon, Jeffrey	TP 541	Greco, Todd M.	WP 019
Goddard, Bryan D.	MP 224	Gordon, Justin	WP 334	Green, Felicia M.	ThP 325
Godde, Frederic	MP 598	Goren, Michael A.	ThP 519	Green, Karin	WP 557
Gödecke, Tanja	TP 415	Gorenstein, Marc V.	TP 210	Green, Martin	TP 227
Godugu, Bhaskar	WP 044	Gorenstein, Marc V.	MP 148	Green, Martin	TP 210
Godzik, Adam	ThP 389	Gorenstein, Marc V.	TP 039	Green, Martin	ThOB pm 4:10
Goel, Renu	ThP 028	Gorin, Andrey	ThP 030	Green, Martin	WP 643
Goeringer, Douglas E.	WOD pm 3:30	Gorin, Andrey	TP 044	Green, Michael D.	ThP 318
Goeringer, Douglas E.	TP 185	Gorshkov, Alexander V.	TP 041	Greenberg, Howard	WP 645
Goetz, John A.	MP 486	Gorshkov, Alexander V.	ThP 307	Green-Church, Kari	TOE am 10:10
Goetz, Sebastian	TP 251	Gorshkov, Mikhail V.	TP 041	Green-Church, Kari	TP 088
Goetz, Sebastian	TP 565	Gorshkov, Mikhail V.	ThP 307	Green-Church, Kari	ThP 038
Goh, Anne	ThP 161	Gorshkov, Mikhail V.	TP 275	Green-Church, kari. B.	WP 291
Gokulrangan, Giridharan	WP 084	Gorshkov, Vladimir	ThP 186	Greendale, Gail	MP 445
Golas, Monika M.	WP 140	Gorton, Ian	WP 051	Greene, Robert M.	ThP 581
Goldman, Eleanor Russell	WP 004	Gosh, Santosh	WP 058	Greene, Travis	ThOD pm 3:50
Goldman, Radoslav	TP 099	Goshe, Michael B.	MP 025	Greenlees, Kevin	ThP 580
Goldman, Radoslav	MP 488	Goshe, Michael B.	ThP 453	Greenwood, Tiffany R.	TP 199
Goldsmith, Paul	MP 129	Goshe, Michael B.	TP 019	Greer, Tyler J.	WP 367
Goldstrohm, David	ThP 270	Goshe, Michael B.	WP 433	Greger, James	TP 548
Golemi-Kotra, Dasantila	TP 439	Goshe, Michael B.	MP 022	Gregersen, Joshua A.	MP 630
Golick, Dan	TP 039	Gosnell, William L.	TP 113	Gregoire, Gilles	ThOF am 08:50
Goligorsky, Michael	ThP 069	Goss, Greg G.	WP 549	Gregson, Brian	WP 328
Goloborodko, Anton A.	TP 041	Gosteli, Christoph	TP 287	Gregson, Brian P.	TP 592
Goloborodko, Anton A.	ThP 307	Goto, Junichi	TP 005	Greig, Michael	MP 248
Gomathinayagam, Thamby	WP 077	Goto, Junichi	ThP 497	Greig, Michael	MP 464
Gomathinayagam, Thamby	MP 384	Goto, Takaaki	TP 341	Greiner, Erin R.	WP 463
Gomes, Alexandre F.	WP 364	Goto, Takaaki	ThP 497	Greis, Kenneth D.	MP 593
Gomes, Alexandre F.	ThP 503	Goto, Takaaki	ThP 286	Greis, Kenneth D.	TP 021
Gomes, João	MP 024	Goto, Takaaki	MP 152	Grenier, Geneviève	TP 602
Gomes, Mr. Noel	MP 351	Gotoh, Mitsukazu	MP 480	Greshock, Joel	TP 548
Gomes, Noel	WP 237	Goudarzi, Maryam	WP 074	Gress, Cathy	ThP 537
Gomez, Melissa	WP 344	Gough, P. Clayton	ThP 567	Gretchnikov, Alexander	WP 326
Gomez-Escudero, Andrea	MP 506	Govorun, Vadim M.	ThP 388	Grey, Angus	WP 188

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Grey, Angus C.....	WP 308	Grosveld, Frank.....	WP 024	Guo, Ping.....	TP 399
Grey, Angus C.....	WOE pm 3:30	Grote, Michael.....	WP 015	Guo, Tan.....	MP 176
Grey, Angus C.....	WP 178	Grottemeyer, Jurgen.....	WP 677	Guo, Xiaofeng.....	MP 040
Griener, Thomas P.....	MOC am 10:10	Grottemeyer, Jurgen.....	MP 629	Guo, Xinhua.....	ThP 393
Griep-Raming, Jens.....	ThP 202	Grotewiel, Mike.....	TP 020	Guo, Xu.....	ThP 124
Griep-Raming, Jens.....	MOD pm 2:30	Grubb, Mary.....	TOB am 09:10	Guo, Yurong.....	ThP 492
Griffin, Patrick.....	TOC am 09:50	Gruidl, Mike.....	TP 611	Guo, Yuzhu.....	WP 668
Griffin, Patrick R.....	WP 423	Grunwald, Jr., William C.....	ThP 471	Guo, Zhongxian.....	ThP 370
Griffin, Patrick R.....	ThOC am 08:30	Grutters, Mark.....	WP 648	Gupta, Nitin.....	ThP 466
Griffin, Paul.....	WP 153	Gu, Chunang (Christine).....	ThP 668	Gupta, Rajesh K.....	ThP 696
Griffin, Tim.....	WP 092	Gu, Chunang (Christine).....	WOB am 09:50	Gupta, Sandeep.....	WP 002
Griffin, Tim.....	MP 119	Gu, Haiwei.....	TP 294	Gupta, Sayan.....	ThP 508
Griffin, Timothy J.....	WP 142	Gu, Haiwei.....	ThP 164	Gupta, Swati.....	ThOB am 09:30
Griffin, Timothy J.....	ThP 192	Gu, Hongbo.....	ThP 513	Guryca, Vilem.....	TP 313
Griffin, Timothy J.....	MP 060	Gu, Ming.....	MP 538	Gustavsson, Mikael K.....	TP 092
Griffin, Timothy P.....	WP 628	Gu, Ming.....	MP 670	Gutierrez, Danielle B.....	WP 308
Griffin, Timothy P.....	WOG pm 4:10	Gu, Ming.....	TP 576	Gutierrez, John-Paul.....	ThP 240
Griffith, Wendell P.....	ThP 209	Gu, Ming.....	WP 105	Gutierrez, John-Paul.....	TP 493
Griffith, Wendell P.....	ThP 210	Gu, Ming.....	WP 174	Guttman, Andras.....	WP 472
Griffith, Wendell P.....	WP 454	Gu, Qi.....	ThP 223	Guy, Moltu.....	MP 595
Griffith, Wendell P.....	WP 295	Gu, Rong-Fang.....	MP 262	Guzel, Coskun.....	WP 554
Griffiths, John R.....	ThP 304	Gu, Wei.....	TP 265	Güzel, Coskun.....	TP 078
Griffiths, II, Thomas.....	MP 229	Gu, Xiaodong.....	MP 102	Guziec, Lynn J.....	ThP 418
Grigorean, Gabriela.....	ThP 267	Gu, Xiaodong.....	MP 226	Guziec, Jr., Frank S.....	ThP 418
Grigsby, Claude.....	ThP 584	Gu, Zezong.....	WP 283	Gygi, Steven.....	MOC am 09:50
Grimm, Rudi.....	WP 473	Gu, Zheming.....	MP 345	Gygi, Steven.....	TP 025
Grimm, Rudolf.....	TOC pm 3:50	Guan, Bing.....	WP 584	Gygi, Steven.....	TP 024
Grimm, Rudolf.....	MP 234	Guan, Fuyu.....	ThOA am 09:50	Gygi, Steven.....	TP 141
Grimm, Rudolf.....	ThOE am 09:50	Guan, Fuyu.....	ThP 666	Gygi, Steven.....	ThP 441
Grimm, Scott.....	ThP 671	Guan, Fuyu.....	TP 659	Gygi, Steven.....	TOE pm 3:50
Grimm, Scott W.....	ThP 152	Guan, Shenheng.....	ThP 021	H.C, Harsha.....	WP 525
Grimm, Scott W.....	TOA pm 2:30	Guan, Shenheng.....	MP 228	Ha, Mi Young.....	TP 197
Grimrud, Paul A.....	ThOE am 08:50	Guan, Shenheng.....	TP 269	Ha, Miyoung.....	MP 137
Grintsevich, Elena E.....	ThP 501	Gucek, Marjan.....	MP 005	Haas, Wilhelm.....	TP 024
Gritsenko, Marina A.....	TP 552	Gucek, Marjan.....	WP 516	Habicht, Steven.....	WP 164
Grivet, Chantal.....	MPZ 570	Gucek, Marjan.....	WP 544	Habicht, Steven.....	MOF am 10:10
Grivet, Chantal.....	TOB am 08:50	Gucinski, Ashley C.....	WOC am 10:10	Habicht, Steven.....	WOG am 10:10
Groeber, Elizabeth A.....	MP 365	Gudlavalleti, Seshu.....	TP 383	Habtemariam, Abraha.....	TP 229
Groenewold, Gary.....	WP 666	Gudlavalleti, Seshu.....	ThP 385	Habulihaz, Bahanu.....	TP 395
Groenewold, Gary.....	WP 662	Gudlavalleti, Seshu.....	MP 610	Hach, Jocelyn.....	ThP 038
Groenewold, Gary.....	WP 667	Gudlavalleti, Seshu K.....	ThOG am 10:10	Haddad, Iman.....	ThP 117
Groenewold, Gary.....	WP 660	Guedes, Sofia.....	MP 512	Hadjar, Omar.....	ThP 337
Grogg, Karen L.....	MP 613	Guentert, Andreas.....	MP 125	Hadjar, Omar.....	ThP 340
Gronemeyer, Thomas.....	WP 532	Guerreiro, Nelson.....	TOB am 10:10	Hadjar, Omar.....	WP 309
Gronert, Scott.....	TP 020	Guerrier, Luc.....	TP 096	Hadwiger, Michael E.....	ThP 143
Gronert, Scott.....	ThP 633	Guichard, Boris.....	MP 182	Haegler, Katrin.....	MP 069
Gronert, Scott.....	WP 279	Guidi, Monia.....	MOF pm 3:10	Haffey, Wendy D.....	TP 021
Gronert, Scott.....	TOF am 08:30	Guilhaus, Michael.....	MP 100	Hagan, Nathan.....	ThP 387
Groopman, John D.....	WP 516	Guilhaus, Michael.....	MP 099	Hagan, Nathan A.....	MP 316
Groopman, John D.....	MP 005	Guillou, Vincent.....	WOF pm 3:30	Hagen, Joerg von.....	WP 393
Groseclose, Reid.....	TP 182	Gulbakan, Basri.....	ThP 139	Hager, James.....	ThP 656
Gross, Larry.....	TP 343	Gülbakan, Basri.....	ThP 467	Hahn, Chang-gyu.....	TP 492
Gross, Michael.....	ThP 279	Gulcicek, Erol E.....	TOE pm 2:30	Hahn, Chang-gyu.....	WP 540
Gross, Michael L.....	WP 321	Gulcicek, Erol E.....	WP 402	Hahn, Don R.....	WP 372
Gross, Michael L.....	ThP 411	Gummer, Joel.....	ThP 068	Hahn, Si Houn.....	WP 267
Gross, Michael L.....	TP 282	Guna, Michael.....	MP 191	Hahn, Sihoun.....	TP 246
Gross, Michael L.....	TP 445	Gunawardena, Harsha P.....	WP 517	Hahne, Hannes.....	ThP 296
Gross, Michael L.....	ThP 413	Gunawardena, Harsha P.....	ThP 041	Haidacher, Stefan.....	ThP 344
Gross, Michael L.....	MOC am 09:30	Gundry, Rebekah.....	MP 091	Haidecher, Sigmund.....	MP 054
Gross, Michael L.....	WP 451	Gunsalus, Robert P.....	TP 517	Hajduch, Marian.....	MP 050
Gross, Michael L.....	WP 672	Günther, Detlef.....	MP 171	Hajduch, Marian.....	WP 018
Gross, Michael L.....	MP 394	Guo, Cindy.....	TP 031	Hajdúch, Marián.....	MP 088
Gross, Michael L.....	ThP 484	Guo, Jian.....	ThP 152	Hajjar, Adeline M.....	MP 110
Gross, Michael L.....	ThP 383	Guo, Jingshu.....	ThP 209	Hajkova, Dagmar.....	WP 023
Gross, Richard.....	MOA am 08:50	Guo, Jingshu.....	WP 454	Hajslova, Jana.....	TP 310
Gross, Steven S.....	ThP 069	Guo, Jingshu.....	ThP 210	Hajšlová, Jana.....	ThP 227
Gross, Vera S.....	TP 129	Guo, Kevin.....	TP 107	Hakala, Kevin W.....	ThP 488
Gross, Vera S.....	TP 132	Guo, Kevin.....	WP 104	Hakansson, Kristina.....	MP 493
Grosse, Joachim.....	WP 081	Guo, Lihai.....	ThP 308	Hakansson, Kristina.....	WP 462
Grosser, Tilo.....	WP 537	Guo, Lin.....	ThP 423	Hakansson, Kristina.....	MP 640
Grossmann, Jonas.....	MP 045	Guo, Mingquan.....	ThP 438	Hakansson, Kristina.....	ThP 276
Grosso, John.....	ThP 220	Guo, Nan.....	ThP 246	Hakansson, Kristina.....	MP 497

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Hakansson, Kristina	TP 363	Han, Yonghua	WOE am 09:50	Hardy, Robert	MP 268
Hakansson, Kristina	WP 373	Hanash, Samir	MP 013	Harfmann, Bob	WP 614
Hakansson, Kristina	ThOC pm 4:10	Hanash, Samir	MOE pm 4:10	Hargiss, Leonard	ThP 676
Hakansson, Kristina	WP 367	Hanash, Samir M.	WP 068	Harkey, Gail A.	MP 653
Hakansson, Kristina	WP 108	Hanavan, Paul	TP 083	Harkins, Jay	MP 468
Hakansson, Kristina	TP 345	Hancock, A. J.	MP 553	Harkness, Kellen M.	WP 206
Halberg, Richard	WP 026	Hancock, Anita J.	WP 539	Harman, David G.	MOF am 08:50
Hales, Dale B.	MP 341	Hancock, William S.	ThP 540	Harman, Robb	TP 389
Halket, John M.	WP 265	Hancock, William S.	ThP 309	Harman, Robb	MP 413
Hall, Emily H.	MP 300	Hancock, William S.	ThP 549	Harman, Robert	MP 417
Hall, Laura M.	WP 248	Hancock, William S.	WP 494	Harmon, Julie	ThOG pm 2:50
Hall, Lowell	MP 162	Handberg, Eric	TOD pm 3:10	Harms, Amy C.	WP 026
Hall, Stacy	TP 514	Hanel, Gernot	ThP 344	Harnden, Patricia	MP 614
Hall, Steven	WP 150	Haney, Lisa L.	WP 170	Harnly, James	WP 386
Hall, Steven C.	MOB pm 4:10	Haney, Tim	WP 269	Harper, Sandra L.	WP 435
Hall, Steven C.	ThP 020	Hangauer, David, G.	WP 171	Harper, Jason	ThOF pm 4:10
Hall, Steven C.	MP 086	Hankemeier, Thomas	TP 089	Harper, Jason	MP 550
Hall, Steven C.	TOC pm 2:30	Hankemeier, Thomas	TP 119	Harper, Jason	ThOF pm 2:30
Hall, Wiley A.	ThP 611	Hankin, Joseph A.	ThP 182	Harper, Jason D.	TP 304
Hallam, Steven	ThP 027	Hanley, Luke	WP 186	Harper, Jason D.	WP 319
Hallowita, Nuwan	ThOF am 08:30	Hanley, Luke	ThP 180	Harper, Robert	WP 669
Haluszka, Oleh	TP 085	Hann, Stephan	ThP 150	Harrington, Jason S.	TP 340
Ham, Amy-joan L.	ThP 020	Hann, Stephan	ThP 136	Harrington, Jonathan J.	MP 094
Ham, Amy-Joan L.	MOB pm 4:10	Hanneman, Andrew	WP 471	Harrington, Michael G.	WP 079
Ham, Amy-Joan L.	TP 074	Hannemann, Frank	TP 482	Harris, Glenn A.	TP 308
Ham, Bryan M.	ThOE am 10:10	Hanold, Karl A.	MP 310	Harris, Glenn A.	TP 222
Hamada, Naoki	WP 349	Hansel, Steven	MP 408	Harris, Roger K.	WP 170
Hamasaka, Tomoko	WP 240	Hanselmann, Michael	TP 177	Harris, Samantha P.	ThP 256
Hamasaki, Hiroko	WP 534	Hanselmann, Michael	WP 193	Harris, Sarah A.	MOD am 09:10
Hambly, David	WP 424	Hanselmann, Michael	WP 059	Harrison, Alex G.	TP 350
Hambly, David	ThP 536	Hansen, Brett	ThOF pm 2:50	Harrison, Mark	MP 159
Hamsch, Boris	MP 069	Hansen, Jeffrey C.	TP 447	Harrison, Mark W.	MP 167
Hamm, Gregory	WP 565	Hansen, Johanna	MP 382	Harrison, Scott	MP 489
Hammad, Loubna A.	MP 349	Hansen, Nils	WP 653	Harron, Andrew	MP 314
Hammad, Loubna A.	WP 173	Hansen, Thomas Aarup	ThP 306	Harsha, H. C.	ThP 028
Hammad, Loubna A.	WP 477	Hansen, Todd	TP 143	Harsha, H. C.	ThP 058
Hammad, Loubna A.	ThP 158	Hansen, Vagn A.	TP 605	Harsha, H. C.	ThP 055
Hammerstone, John	ThP 142	Hanson, Glenn	MP 359	Harsha, H.C.	ThP 059
Hammock, Bruce D.	WP 248	Hanson, Jeffrey	MP 617	Harsha, H.C.	ThP 057
Hammock, Bruce D.	ThP 077	Hanson, Jeffrey C.	TOB pm 3:10	Harshman, Sean	ThP 471
Hammock, Christina	WP 325	Hanson, Phyllis I.	WP 025	Hart, Bradley J.	MP 455
Hammond, Matthew	WP 513	Hanton, Scott D.	WP 625	Hart, Courtenay	MP 298
Hammond, Matthew	WP 137	Hao, Changtong	MP 625	Hart, Gerald W.	TOC pm 4:10
Hammond, Matthew	ThOA pm 3:50	Hao, Changtong	MP 536	Hart, Gerald W.	TP 518
Hammond, Matthew	ThP 457	Hao, Changtong	MP 473	Hart, Jerry	WP 590
Hammond, Matthew R.	WP 649	Hao, Pei	ThP 079	Hartenstine, Mike	TP 077
Hamprecht, Fred	ThP 016	Hao, Zhiqi	ThP 309	Hartmer, Ralf	ThP 620
Hamprecht, Fred A.	MP 034	Hao, Zhiqi	ThP 205	Hartmer, Ralf	MP 203
Hamprecht, Fred A.	MP 057	Hara, Makoto	TP 024	Hartmer, Ralf	ThP 207
Hamprecht, Fred A.	WP 059	Harabagiu, Valeria	WP 616	Hartshorn, Michael	TP 577
Hamprecht, Fred A.	WP 193	Harada, Takahiro	TP 189	Hartungen, Eugen	ThP 344
Hamprecht, Fred A.	WP 053	Harada, Takanori	WP 568	Harvey, David J.	MP 498
Hamprecht, Fred A.	TP 177	Harada, Takanori	WP 561	Harvey, H. Rodger	ThP 123
Hampton, Christina Y.	ThP 318	Harada, Takanori	WP 129	Harvey, Stephen B.	WP 579
Hamvas, Aaron	MP 049	Harada, Takanori	WP 578	Hasan, Azeem	ThP 203
Han, Chia-li	ThP 528	Harada, Takanori	MP 431	Hasegawa, Hideki	TP 377
Han, Chia-li	MP 023	Harada, Takanori	WP 106	Hasegawa, Hideki	ThP 215
Han, Futian	TP 410	Harada, Takanori	WP 391	Haselmann, Kim F.	WP 209
Han, Futian	TP 399	Harada, Takanori	WP 411	Haseyama, Kazuko	WP 340
Han, Hongling	WP 361	Haramura, Masayuki	WP 411	Hashi, Yuki	MP 155
Han, Hongling	ThP 657	Harayama, Shigeaki	ThP 373	Hashi, Yuki	MP 166
Han, Huanhuan	ThP 243	Harbourt, David	WP 547	Hashimoto, Hiroaki	TP 374
Han, Jun	WP 567	Harden, Charles S.	WP 204	Hashimoto, Hiroaki	TP 376
Han, Jun	WP 128	Harden, Leslie A.	TOG am 09:30	Hashimoto, Michizane	WP 376
Han, Jun	ThP 090	Harder, Michael	TP 315	Hashimoto, Ryo	ThP 242
Han, Jun	ThP 075	Harder, Michael	TP 002	Hashimoto, Yoshio	WP 388
Han, Jungsun	WP 577	Hardesty, William	WP 190	Hashimoto, Yuichiro	ThP 215
Han, Qing Ping	MP 402	Hardie, Darryl	WP 514	Hashimoto, Yuichiro	TP 377
Han, Qing Ping	ThP 663	Hardie, Darryl B.	MOB pm 3:10	Hashimoto, Yutaka	TP 187
Han, Sang Beom	MP 274	Hardin, Douglas P.	WP 522	Hashimoto, Yutaka	MP 322
Han, Xianlin	MOA am 08:50	Hardstaff, William	ThP 131	Hasibu, Ibrahim	MP 521
Han, Yieng-hau	MP 665	Hardt, Markus	ThP 455	Haskins, William	WP 063
		Hardy, Richard W.	ThP 522		

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Hasman, David.....	WP 259	He, Tao.....	WP 093	Held, Jason.....	TP 496
Hassell, Kerry.....	ThP 658	He, Xiang.....	MP 239	Held, Jason M.....	WP 007
Haste, Nicole.....	TP 073	He, Yi.....	MP 500	Held, Jason M.....	WP 286
Hatcher, Nathan G.....	ThP 461	Headley, John.....	TP 600	Helfrich, Forrest S.E.....	ThOC am 09:10
Hatcher, Patrick G.....	WOG am 08:50	Hearn, Milton T. W.....	TP 121	Helin, Kristian.....	ThOE pm 2:50
Hatfield, Wes.....	TP 142	Hearne, Kelly M.....	ThP 171	Hellberg, Ulf.....	WP 519
Hather, Gregory.....	WP 057	Heath, John K.....	ThP 190	Helle, Norbert.....	MP 373
Hather, Gregory.....	WP 047	Heaton, Katherine.....	ThP 684	Heller, Elizabeth.....	TP 331
Hathout, Yetrib.....	TP 615	Heaton, Katherine.....	TP 153	Heller, Steve R.....	WP 686
Hathout, Yetrib.....	ThP 047	Heaton, Katherine.....	TP 152	Helmy, Roy.....	TP 306
Hathout, Yetrib.....	WP 526	Heaton, Katherine J.....	ThOG am 09:10	Helton, Rob.....	ThP 305
Hathout, Yetrib.....	TP 328	Heaven, Michael R.....	WP 543	Hembach, Peter.....	TP 333
Hathout, Yetrib.....	ThP 487	Heavner, George A.....	TP 462	Hemby, Scott E.....	MP 600
Hathout, Yetrib.....	ThP 061	Hebert, Nicole.....	TP 509	Hemerly, Adriana S.....	ThP 379
Hatsis, Panos.....	MP 399	Hebert, Nicole.....	TP 171	Hemmer, Michael.....	MP 075
Hattan, Christopher.....	WP 179	Hebling, Christine.....	ThP 523	Hempel, Kristina.....	TP 134
Hattan, Stephen J.....	MPZ 565	Heck, Albert J.R.....	TP 460	Henday, Stacy.....	TP 606
Hattan, Stephen J.....	MPZ 571	Heck, Albert J.R.....	TP 130	Henday, Stacy.....	WP 175
Haufler, Robert E.....	WP 652	Heck, Albert J.r.....	WP 401	Henderson, Alex.....	TP 174
Hauge, Robert H.....	TP 205	Heck, Albert J.R.....	TP 122	Henderson, Peter J. F.....	WP 461
Hauggaard-Nielsen, Henrik.....	TOA am 09:30	Heck, Albert J.R.....	MOC am 08:30	Hendrickson, Chris.....	TP 279
Hauhart, Richard.....	TP 522	Heck, Albert J.R.....	TP 481	Hendrickson, Chris.....	WP 664
Hauptert, Laura.....	WP 674	Heck, Albert J.R.....	ThP 426	Hendrickson, Chris.....	TP 365
Hauschild, Jennifer.....	WP 659	Heck, Albert J.r.....	MP 635	Hendrickson, Chris.....	TP 278
Hausler, Loren.....	ThP 030	Heck, Albert J.R.....	TP 200	Hendrickson, Chris.....	TP 281
Hautbergue, Guillaume.....	TP 264	Heck, Albert J.R.....	MP 011	Hendrickson, Chris.....	TP 286
Havard, Guy.....	ThP 140	Hecker, Michael.....	TP 134	Hendrickson, Chris L.....	MOC pm 4:10
Havard, Guy.....	ThP 151	Heddle, Jonathan G.....	TP 468	Hendrickson, Christopher L.....	TP 283
Havlicek, Vladimir.....	TP 190	Hedgepeth, William A.....	WP 271	Hendrickson, Christopher L.....	MOD pm 2:50
Havlicek, Vladimir.....	MP 050	Hedgepeth, William A.....	ThP 683	Hendrickson, Christopher L.....	TP 284
Havlicek, Vladimir.....	WP 018	Hedrick, Jerry L.....	MP 284	Hendrickson, Ronald.....	ThP 208
Hawke, David.....	Special	Heegaard, Niels H.H.....	TOG pm 3:50	Hendrickson, Ronald.....	TP 082
Hawkins, Aaron.....	ThOF pm 2:50	Heeney, Matthew.....	TP 239	Hendrickson, Ronald.....	WP 553
Hawkins, Arie.....	ThP 396	Heeren, Ron.....	TP 276	Hendrickson, Ronald.....	MP 121
Hawkins, Arie.....	ThOC am 10:10	Heeren, Ron.....	WP 684	Hendrickson, Ronald.....	MP 076
Hawkins, Oriana E.....	MP 386	Heeren, Ron M.A.....	WP 193	Hendrickson, Ronald C.....	WP 548
Hawkridge, Adam.....	MOE am 10:10	Heeren, Ron M.A.....	TP 177	Hendriks, Robertus.....	WP 501
Hawkridge, Adam M.....	TP 504	Heeren, Ron M.A.....	WP 327	Hendriks, Robertus.....	WP 335
Hay, Mark E.....	ThP 311	Heeren, Ron M.A.....	WOF pm 3:10	Heneine, Walid.....	MP 422
Hayakawa, Shigeo.....	TOD pm 2:50	Heeren, Ron M.A.....	WP 195	Hengel, Matt.....	MP 563
Hayakawa, Yoshihiro.....	WP 349	Heeren, Ron M.A.....	TP 176	Henkel, Corinna.....	WP 081
Hayasaka, Takahiro.....	TP 189	Heeren, Ron M.A.....	WOD pm 2:50	Henning, Diane M.....	WP 625
Hayashi, Masahiro.....	TP 188	Heeren, Ron M.A.....	TP 277	Henson, Zachary B.....	WP 212
Hayden, Kevin.....	MPZ 571	Heeren, Ron M.A.....	WP 627	Hentz, Michelle.....	TP 173
Hayden, Kevin.....	ThP 618	Heeren, Ron M.A.....	TP 200	Her, Guor-Rong.....	TP 167
Hayden, Kevin.....	TP 191	Heeren, Ron M.A.....	TP 199	Her, Guor-Rong.....	TP 169
Hayden, Michael R.....	WP 306	Heeren, Ron M.A.....	TP 278	Her, Guor-Rong.....	WP 331
Hayes, Angela.....	MP 398	Heffron, Fred.....	TP 552	Her, Guor-Rong.....	MP 487
Hayes, Juaneka M.....	TOG am 10:10	Hegeman, Adrian D.....	WP 026	Herath, Thushani N.....	MPZ 578
Hayes, Roger N.....	ThOB am 08:50	Hegeman, Adrian D.....	MP 055	Herath, Thushani N.....	ThP 159
Haynes, Barton F.....	TOC pm 3:10	Hegeman, Adrian D.....	ThP 119	Herath, Thushani N.....	ThOA 3:10
Hayward, Mark J.....	ThP 691	Heidbrink, Jenny L.....	WP 093	Herath, Thushani N.....	ThP 163
Hayward, Mark J.....	TP 164	Heideman, Warren.....	ThP 601	Herauld, Olivier.....	TP 551
Hayward, Mark J.....	WP 347	Heidenreich, Axel.....	WP 081	Herbert, Vince.....	MP 563
Hayward, Mark J.....	ThP 663	Heidger, Volker.....	MP 562	Herbst, Allen.....	WP 078
Hayward, Mark J.....	MP 402	Heien, Michael L.....	ThP 176	Herbst, John.....	MP 437
Hazama, Hisanao.....	ThP 622	Heilier, jean-francois.....	ThP 066	Herbst, John.....	ThP 662
Hazama, Hisanao.....	ThP 626	Heilig, Joseph S.....	ThOB am 09:30	Hercules, David M.....	WOF pm 3:50
Hazama, Makoto.....	MP 202	Heim, John.....	ThP 092	Herman, Lelie.....	MOG am 09:50
Hazlehurst, Lori.....	MP 608	Heim, John R.....	TP 649	Hermjakob, Henning.....	Special
He, Huan.....	MOA am 09:30	Heim, John R.....	WP 103	Herms, Daniel A.....	TOE am 10:10
He, Huan.....	WOC pm 2:30	Heimark, Larry.....	MP 350	Hernandez, Marta.....	ThP 314
He, Huan.....	TOG pm 3:30	Heine, George F.....	MP 027	Herniman, Julie.....	WP 634
He, Jintang.....	MP 085	Heineman, Lee.....	ThP 684	Herniman, Julie.....	TOA am 08:50
He, Jintang.....	ThP 253	Heineman, Lee.....	TP 152	Herring, Richie.....	WP 528
He, Limin.....	TP 416	Heintz, Nathaniel.....	TP 331	Herrman, Timothy.....	WP 226
He, Qianchuan.....	TP 539	Hejazi, Leila.....	MP 099	Hersberger, Katie.....	ThP 276
He, Qiaohong.....	MP 247	Hejazi, Leila.....	MP 100	Hersch, Steven.....	WP 100
He, Simin.....	ThP 243	Helal, Abdul-Fattah.....	MP 645	Hershey, John W.B.....	ThP 259
He, Simin.....	WP 043	Helbig, Andreas.....	WP 401	Hershey, Neil D.....	TP 363
He, Simin.....	TP 058	Helbig, Andreas O.....	TP 122	Herve, Maxime.....	ThP 161
He, Si-Min.....	ThP 025	Held, Jason.....	TP 023	Hervy IV, W. Judson.....	ThP 289

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Herzog, Denis.....	TOB am 10:10	Hintzen, Rogier Q.....	TP 094	Holmes, Michael W.....	WP 070
Herzog, Denis.....	TP 506	Hinz, Klaus-Peter.....	ThP 608	Holmes, William E.....	TP 244
Herzog, Raimund I.....	WP 402	Hirabayashi, Atsumu.....	MP 637	Holsclaw, Cynthia M.....	WP 486
Herzog, Ronny.....	MP 240	Hirabayashi, Jun.....	TP 526	Holtz-heppelmann, Carrie.....	ThP 054
Herzog, Ronny.....	MP 222	Hirabayashi, Yoshio.....	ThP 450	Holtz-heppelmann, Carrie.....	WP 070
Herzog, Ronny.....	MP 249	Hirano, Ichiro.....	WP 376	Holzman, Ted.....	MOE pm 4:10
Hesketh, Geoffrey.....	WP 544	Hiraoka, Kenzo.....	MP 322	Holzmann, Johann.....	MP 007
Hess, Sonja.....	MP 143	Hiraoka, Kenzo.....	ThP 353	Holzmann, Johann.....	TP 013
Hess, Sonja.....	TP 314	Hiraoka, Kenzo.....	TP 187	Hong, Li.....	MP 226
Hess, Sonja.....	TP 545	Hirose, Kenji.....	TP 219	Hong, Pengyu.....	ThP 034
Hess, Sonja.....	ThOE pm 3:50	Hixson, Kim K.....	TP 125	Hong, Pengyu.....	TP 061
Hess, Sonja.....	TP 634	Hixson, Kim K.....	ThOE pm 4:10	Hong, Teresa.....	TP 075
Hess, Sonja.....	TP 047	Hixson, Kim K.....	ThP 103	Hong, Teresa.....	MP 117
Hess, Sonja.....	ThP 111	Hixson, Kim K.....	WP 144	Hong, Tse-Ming.....	TP 035
Hester, Alfons.....	TP 176	Hnatyshyn, Serhiy.....	ThP 099	Hong, Tzu-Chan.....	TP 035
Hester, Alfons.....	WP 685	Hnatyshyn, Serhiy.....	WP 161	Hong, Zhenning.....	ThP 127
Hettich, Robert.....	ThP 389	Hnatyshyn, Serhiy.....	WOB am 09:10	Hongmei, Li.....	WP 381
Hettich, Robert.....	MP 286	Ho, Ching-Wen.....	MPZ 574	Honrine, Jordan.....	WP 339
Hettich, Robert.....	MP 065	Ho, Chi-Yi.....	WP 229	Hood, Brian L.....	TP 532
Hettich, Robert.....	TOA am 09:50	Ho, David.....	ThP 595	Hood, Brian L.....	MOG pm 3:50
Hettich, Robert.....	ThP 559	Ho, Jenny.....	ThP 378	Hood, Brian L.....	MOE pm 3:10
Hettich, Robert.....	TP 541	Ho, K. Steven.....	TP 205	Hood, Brian L.....	WP 086
Hettich, Robert.....	ThP 031	Ho, Ming-chih D.....	WP 562	Hood, Kenyon.....	TP 420
Hettich, Robert.....	WP 131	Ho, Ming-yi.....	WP 512	Hook, Vivian.....	ThP 466
Hettich, Robert.....	ThP 029	Ho, Nancy.....	MP 264	Hoopmann, Michael R.....	TP 040
Hettich, Robert L.....	MP 297	Ho, Yen-Peng.....	MPZ 568	Hoopmann, Michael R.....	TP 521
Hettick, Justin M.....	MP 507	Ho, Yen-Peng.....	WP 416	Hoover, Shelley.....	MP 129
Heumann, Hermann.....	TP 092	Ho, Yen-Peng.....	ThP 266	Hop, Cornelis.....	TP 419
Hewel, Johannes.....	MOB pm 2:50	Ho, Yen-peng.....	ThP 371	Hop, Cornelis.....	ThOB pm 3:10
Hewitt, Mark.....	MP 309	Ho, Yen-Peng.....	ThP 498	Hopfgartner, Gerard.....	MPZ 570
Heyman, Irwin.....	MP 343	Hobbs, Steve.....	MP 448	Hopfgartner, Gerard.....	MP 518
Hibbert, David B.....	MP 100	Hobby, Kirsten.....	TP 560	Hopfgartner, Gerard.....	TOB am 08:50
Hibbert, David B.....	MP 099	Hobby, Kirsten.....	TP 564	Hopfgartner, Gerard.....	TP 109
Hicks, Leslie M.....	WP 575	Hochrein, James.....	WOF am 09:10	Hopfgartner, Gerard.....	ThP 239
Hidy, Bruce.....	ThP 360	Hochstrasser, Denis F.....	WP 165	Hopkinson, A.C.....	TOF am 10:10
Hidy, Bruce.....	ThP 361	Hochstrasser, Denis F.....	TP 251	Hopkinson, Alan C.....	WP 668
Hidy, Bruce.....	MP 158	Hochstrasser, Mark.....	WP 299	Hoppel, Charles.....	MP 109
Hidy, Bruce.....	WP 339	Hodges, Brittany D.M.....	MP 244	Hoppel, Charles.....	WP 580
Hidy, Bruce.....	MP 160	Hodgkin, Jonathan.....	MP 492	Hoppel, Charles.....	ThP 530
Hidy, Bruce J.....	MP 348	Hodgkin, Jonathan.....	MP 479	Hopper, Erin D.....	ThP 661
Hieftje, Gary M.....	TOD am 10:10	Hoelzer, Jasper.....	TP 638	Hopper, Jonathan.....	TP 228
Hiemstra, Henk.....	WP 138	Hoeschele, Ina.....	MP 476	Horai, Hisayuki.....	TP 069
Higashi, Richard M.....	WP 124	Hoffert, Jason.....	ThP 446	Horiike, Hiroshi.....	TP 643
Higbee, Daniel.....	TP 170	Hoffert, Jason.....	ThP 124	Horn, David.....	MP 015
Higdon, Roger.....	WP 047	Hoffman, Eric.....	WP 526	Horn, Patrick J.....	MP 231
Higdon, Roger.....	WP 057	Hoffman, John P.....	TP 085	Hornberger, Renate.....	ThP 427
Higdon, Roger.....	ThP 130	Hoffman, Lisabeth.....	WP 153	Horner, Gerhard.....	MP 655
Higgins, Leeann.....	ThP 054	Hoffman, Oliver.....	MP 070	Horner, Gerhard.....	TP 385
Higgins, Leeann.....	WP 005	Hoffman, Ronald.....	MP 513	Horner, Julie.....	TP 290
Hike, Hiroshi.....	WP 534	Hoffmann, Ralf.....	MP 632	Horner, Julie.....	MP 159
Hiken, Jeffery.....	MP 042	Hofmann, Andreas J.....	ThP 512	Horner, Julie.....	ThP 199
Hildebrand, William.....	MP 386	Hogan, Christopher J.....	TP 230	Horner, Julie.....	MP 442
Hilderbrand, Amy.....	ThP 398	Hogan, Christopher J.....	WOD am 10:10	Horner, Julie.....	TP 393
Hill, Alastair.....	TP 577	Hogan, Jason M.....	MOE pm 4:10	Horning, Ole.....	TP 154
Hill, Dennis.....	MP 162	Hogan, Thomas J.....	MP 185	Hornshaw, Martin.....	ThP 070
Hill, Herbert H.....	WP 196	Hogan, Thomas J.....	ThOF pm 3:10	Hornshaw, Martin.....	TP 033
Hill, Herbert H.....	WOD am 08:30	Hoggatt, Jonathan.....	MP 513	Hornshaw, Martin.....	MP 141
Hill, Herbert H.....	WP 204	Hohenstein, Edward G.....	ThP 311	Hornshaw, Martin.....	WP 097
Hill, James.....	WP 038	Hojrup, Peter.....	WP 499	Horowitz, Jonathan.....	MOE am 10:10
Hill, James.....	MP 540	Hojrup, Peter.....	WP 437	Horrigan, Mark.....	MP 543
Hill, James A.....	ThP 326	Holcomb, April.....	MPZ 579	Horton, Marc B.....	WP 068
Hill, John S.....	MOB pm 3:10	Holden, Martin.....	WOD am 09:50	Horton, Rob.....	WP 230
Hilton, Gillian R.....	WOD am 09:10	Holder, Angela.....	MP 422	Horton, Robert.....	TP 404
Hilton, Gillian R.....	WOF am 09:50	Holland, Patricia.....	WP 337	Horvath, Steve.....	WP 463
Hilton, Gillian R.....	TP 221	Holland, Patricia.....	MOB pm 3:50	Horwatt, Peter.....	TP 347
Hincapie, Marina.....	WP 502	Holland, Ricky D.....	ThOG pm 3:50	Horwitz, Susan Band.....	WP 550
Hines, Jesse.....	MP 138	Holliman, Christopher.....	MP 408	Hosia, Walteri.....	MP 089
Hines, Maria Warren.....	ThP 251	Holliman, Christopher.....	MP 337	Hosoda, Haruo.....	MP 447
Hines, Maria Warren.....	WP 439	Hollingshead, Melinda G.....	TP 412	Hosoda, Haruo.....	ThP 134
Hines, Maria Warren.....	WP 556	Holman, Stephen.....	MP 430	Hosokawa, Akinori.....	WP 561
Hines, Wade.....	TP 409	Holmes, Elaine.....	WOB am 08:50	Hosokawa, Yoshinori.....	WP 388
Hinrichs, Steven.....	TP 550	Holmes, Elaine H.....	ThP 083	Hostetler, Dana.....	TP 308

Program Code: M, T, W, Th = Day    O = Oral    Time  
 M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Hostetter, Galen.....	TP 083	Huang, Han-Tsung.....	MPZ 574	Huhmer, Andreas F.....	ThP 205
Hoteling, Andrew J.....	WP 618	Huang, Huang.....	WP 063	Huhmer, Andreas F.....	ThP 695
Hou, Jingguo.....	MP 164	Huang, Hung-Jen.....	MP 077	Hühmer, Andreas F.R.....	WP 494
Hou, Jingguo.....	ThP 224	Huang, Jane.....	TP 416	Hui, Limei.....	ThP 460
Hou, Junjie.....	WP 017	Huang, Ju-Li.....	TP 167	Hulet, Stanley.....	ThP 585
Hou, Junjie.....	ThP 430	Huang, Lan.....	ThP 126	Hulet, Stanley.....	ThP 602
Hou, Junjie.....	MP 232	Huang, Lan.....	TP 147	Hulet, Stanley W.....	ThP 579
Hou, Liming.....	MOE pm 4:10	Huang, Lan.....	ThOF am 10:10	Hulthe, Gustaf.....	WP 172
Houde, Damian.....	TP 441	Huang, Lan.....	TOC am 09:30	Humbel, Stéphane.....	WOF am 08:30
Houde, Damian.....	TP 430	Huang, Lan.....	TP 142	Humbel, Stéphane.....	ThP 653
Houde, Damian.....	TP 432	Huang, Lan.....	TP 026	Humphrey, Steven.....	TP 417
Houel, Stephane.....	WP 149	Huang, Lihua.....	ThP 567	Humphreys, W. Griffith.....	TOB am 08:30
Houel, Stephane.....	TP 370	Huang, Lihua.....	ThP 572	Humphreys, William.....	TOA pm 2:50
Houen, Gunnar.....	WP 437	Huang, Mike-Qingtao.....	TP 399	Humphreys, William.....	ThOB pm 3:30
Houk, R. Sam.....	WP 199	Huang, Min.....	MP 263	Humphreys, William.....	TP 562
Houk, R. Sam.....	MP 622	Huang, Ming-Shyan.....	MOB pm 2:30	Humphreys, William G.....	TP 575
Hovasse, Agnes.....	ThP 254	Huang, Min-Zong.....	WP 136	Humphreys, William G.....	TOB am 09:10
Howard, William N.....	TP 291	Huang, Min-Zong.....	TP 636	Hung, Ming-Lung.....	WP 294
Howard, Paul C.....	ThOG pm 3:50	Huang, Min-Zong.....	ThP 329	Hung, Shih-Ting.....	ThP 515
Howe, Gregg A.....	MP 533	Huang, Min-Zong.....	ThP 166	Hunt, Arthur G.....	ThP 561
Hoyes, John B.....	ThOB pm 4:10	Huang, Nelson.....	WP 342	Hunt, Donald F.....	TP 271
Hoyes, John B.....	MOD am 08:50	Huang, Po-sheng.....	TP 612	Hunt, Donald F.....	ThP 252
Hoyes, John B.....	TP 220	Huang, Renee.....	MP 440	Hunt, Donald F.....	TP 510
Hoyes, John B.....	TP 361	Huang, Richard Yu-cheng.....	TP 445	Hunt, Donald F.....	ThP 188
Hrabe de Angelis, Martin.....	ThP 079	Huang, Shih-Ting.....	WOF am 10:10	Hunt, Donald F.....	TP 266
Hsia, Chih-Hao.....	MP 648	Huang, Teng-yi.....	ThP 415	Hunt, Donald F.....	ThP 211
Hsiao, He-Hsuan.....	WP 302	Huang, Teng-yi.....	ThP 406	Hunt, Donald F.....	TOC pm 4:10
Hsiao, He-Hsuan.....	ThP 420	Huang, Teng-Yi.....	ThP 206	Hunt, Donald F.....	TP 518
Hsiao, Michael.....	MOB pm 2:30	Huang, To-Ju.....	WP 041	Hunt, Donald F.....	MP 300
Hsiao, Michael.....	TP 609	Huang, Xiaodong.....	WP 060	Hunt, Donald F.....	MP 386
Hsiao, Michael.....	TP 612	Huang, Yande.....	ThP 220	Hunt, John F.....	WP 033
Hsieh, Edward J.....	TP 521	Huang, Yi.....	ThP 265	Hunter, Christie L.....	TP 549
Hsieh, Edward J.....	TP 040	Huang, Yi.....	TP 128	Hunter, Christie L.....	MP 142
Hsieh, Tsung-yen.....	MP 389	Huang, Yingying.....	TP 563	Hunter, Christie L.....	MP 471
Hsieh, Yunsheng.....	MP 397	Huang, Yingying.....	ThOB pm 3:10	Hunter, Christie L.....	MP 606
Hsieh, Yunsheng.....	TP 202	Huang, Yingying.....	TP 568	Hunter, Christie L.....	MP 009
Hsu, Chuan-Chih.....	ThP 271	Huang, Yingying.....	MP 442	Hunter, Christie L.....	TP 530
Hsu, Fong-Fu.....	WP 672	Huang, Yingying.....	TP 419	Hunter, Christie L.....	MOE pm 3:30
Hsu, Pang-hung.....	ThP 010	Hubbard, Heidi F.....	WP 591	Hunter, Christie L.....	TP 010
Hsu, Wei.....	MPZ 574	Hubbard, Robert.....	TP 143	Hunter, Kevin.....	MP 193
Hsu, Wei-Yi.....	TP 247	Hubbard, Tim.....	MP 063	Hunter, Tony.....	TP 627
Hsu, Wen-Lian.....	MP 051	Huber, Lukas A.....	TP 013	Hupp, Ted.....	MP 018
Hsu, Wen-Lian.....	MP 074	Hubler, Shane L.....	TP 048	Hupp, Ted.....	ThP 573
Hsu, Wen-Lian.....	TP 035	Huddleston, Michael.....	TP 548	Huq, Shahana.....	WP 353
Hsu, Yen-Ming.....	ThP 558	Huddleston, Michael J.....	MP 144	Hur, Manhoi.....	WP 636
Hsu, Yun-Wei A.....	ThP 456	Hudecz, Otto.....	TP 013	Hur, Manhoi.....	WP 641
Hsueh, Yun-Hung.....	TP 167	Hudson, Emily.....	ThP 680	Hur, Manhoi.....	WP 654
Hu, Anren.....	ThP 371	Hudson, Emily.....	ThP 682	Hur, Manhoi.....	WP 658
Hu, Bin.....	MP 615	Hudson, William.....	ThP 356	Hurt, Matthew.....	ThP 640
Hu, Bin.....	ThP 164	Hudson, William.....	WP 350	Husi, Holger.....	TP 032
Hu, Bin.....	TP 294	Hueben, Michael.....	TP 145	Hussain, Saleh.....	ThP 236
Hu, Chenqi.....	ThP 287	Huff, Shean.....	ThP 607	Hussein, Ahmed.....	WP 503
Hu, Dan.....	MP 155	Hugenholtz, Philip.....	TOA am 09:10	Husser, Christophe.....	MP 452
Hu, Haiqing.....	ThP 679	Huggins, Tom.....	WP 225	Hutchins, Patrick.....	MP 216
Hu, Jiehui.....	MP 443	Hughes, Chris.....	TP 155	Huttlin, Edward L.....	WP 026
Hu, Jiehui.....	WP 274	Hughes, Chris.....	ThP 109	Huzarska, Malwina.....	ThOD am 10:10
Hu, Jun.....	TP 544	Hughes, Chris.....	ThP 432	Huzarska, Malwina.....	TP 527
Hu, Jun-Fu.....	ThP 498	Hughes, Chris.....	MP 056	Huzarska, Malwina A.....	MP 136
Hu, Lianghai.....	ThP 308	Hughes, Chris.....	TP 095	Hvelplund, Preben.....	ThOD am 08:50
Hu, Qichi.....	ThP 337	Hughes, Chris.....	TP 542	Hwang, Esther.....	MP 663
Hu, Qihui.....	TP 318	Hughes, Christopher.....	MP 614	Hwang, Hyejin.....	TP 623
Hu, Qizhi.....	TOD pm 3:50	Hughes, Nicki.....	MP 366	Hwang, Mei Foong.....	WP 696
Hu, Wan Ping.....	WP 592	Hughes, Nicola.....	TP 396	Hyatt, Doug.....	ThP 030
Huang, Betty.....	WP 669	Hughes, Robert E.....	ThP 125	Hyatt, P. Douglas.....	ThP 029
Huang, Bill.....	ThP 491	Hughey, Christine A.....	WP 378	Hyde, Winston.....	MP 070
Huang, Chengsi.....	ThP 390	Hugues Ouellet, Hugues.....	MP 228	Hymowitz, Sarah.....	TP 028
Huang, Chiun-Sheng.....	TP 628	Huhman, David.....	WP 570	Iacob, Roxana E.....	TP 449
Huang, Congshi.....	MP 656	Huhman, David V.....	WP 113	Iannucci, Robert M.....	MP 537
Huang, Fan.....	ThP 328	Huhmer, Andreas F.....	ThP 199	Ibrahim, Norazana.....	TOA am 09:30
Huang, Guangming.....	ThOF pm 2:30	Huhmer, Andreas F.....	WP 313	Ibrahim, Yehia.....	MOD am 08:30
Huang, Guangming.....	ThOF pm 4:10	Huhmer, Andreas F.....	TP 138	Ibrahim, Yehia.....	TP 212
Huang, Guangming.....	WP 588	Huhmer, Andreas F.....	ThP 309	Ibrahim, Yehia.....	TP 232

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Ifa, Demian R.....	TP 184	Ishihama, Yasushi.....	ThP 511	Jaffe, Howard.....	WP 407
Ifa, Demian R.....	WOB pm 2:50	Ishihama, Yasushi.....	ThP 449	Jaffe, Jacob D.....	MP 467
Ifa, Demian R.....	ThP 175	Ishihama, Yasushi.....	ThP 444	Jaffe, Jacob D.....	WP 695
Igarashi, Yasuyuki.....	WP 395	Ishihara, Morio.....	ThP 343	Jaffe, Jacob D.....	TP 027
Iglesias, Amadeu H.....	WP 365	Ishii, Nobuya.....	WP 411	Jagtap, Pratik.....	WP 002
Iglesias, Amadeu H.....	ThP 504	ishii, Yoshiyuki.....	TP 584	Jahn, Olaf.....	WP 530
Igor, Grigoriev.....	WP 144	Ishii, Yoshiyuki.....	MP 400	Jahn, Sandra.....	MP 522
Iida, Junko.....	ThP 681	Ishitani, Hajime.....	WP 388	Jain, Mohit.....	WP 284
Iida, Junko.....	WP 349	Issa, Samah.....	TOC pm 3:30	Jain, Mohit R.....	TP 544
IJsselstijn, Linda.....	MP 087	Istrate, Monica.....	ThOC am 08:30	Jain, Shashank.....	ThP 331
Ikeda, Norihiko.....	WP 534	Ito, Hajime.....	TP 187	Jaitly, Navdeep.....	WP 051
Ikehara, Yuzuru.....	TP 526	Ito, Hajime.....	MP 322	Jaitz, Leonhard.....	ThP 150
Iki, Makiko.....	ThP 134	Ito, Hiromi.....	TP 526	Jaitz, Leonhard.....	ThP 136
Il Grande, Massimiliano.....	ThP 605	Ito, Naofumi.....	ThP 373	Jakob, Ursula.....	TOC am 10:10
Ilag, Leopold L.....	TP 319	Ito, Shinya.....	WP 547	Jakse, Gerhard.....	WP 081
Ilchenko, Sergei.....	WP 203	Ivancic, Melanie M.....	WP 026	Jakubowiak, Andrzej J.....	MP 604
Ilchenko, Sergei.....	WP 527	Ivanov, Alexander R.....	Special	Jakubowski, Jennifer.....	MP 665
Ilchenko, Sergei.....	MOE pm 2:50	Ivanov, Alexander R.....	TP 129	Jakubowski, Jr., E. Michael.....	ThP 602
Ile, Kristina E.....	ThP 118	Ivanov, Alexander R.....	ThP 262	Jakubowski, Jr., E. Michael.....	ThP 585
Ilina, Elena.....	ThP 388	Ivanov, Alexander R.....	ThP 307	Jakubowski, Jr., E. Michael.....	ThP 579
Iliuk, Anton.....	WP 394	Ivanov, Alexander R.....	WP 141	Jalali, Kayvon.....	MP 525
Illig, Thomas.....	ThP 079	Ivanov, Alexander R.....	WP 053	Jalali, Kayvon.....	TP 502
Imami, Koshi.....	ThP 444	Ivanov, Sergei.....	WP 327	James, Andrew.....	TP 008
Impey, Gary.....	ThOB pm 2:50	Ivanov, Stan.....	WP 328	James, Andrew.....	TP 029
Impey, Gary.....	MP 237	Ivleva, Vera.....	ThP 400	James, Andrew.....	TP 509
Impey, Gary.....	TP 580	Ivosev, Gordana.....	TP 062	James, Christopher.....	ThP 401
Impey, Gary.....	MP 169	Ivosev, Gordana.....	WP 224	James, Christopher A.....	MP 455
Imre, Dan.....	ThP 607	Iwaguchi, Shin-ich.....	WP 388	James, Cindy.....	TOE am 10:10
Inagaki, Fuyuhiko.....	WP 013	Iwamatsu, Masako.....	WP 388	James, Douglas.....	WP 679
Indeykina, Maria.....	WP 369	Iwamoto, Shinichi.....	MP 202	James, Ginny B.....	MP 355
Indeykina, Maria.....	TP 508	Iwamoto, Shinichi.....	MPZ 569	James, Ian T.....	MP 464
Indrakanti, Ramesh Babu.....	ThP 594	Iwamoto, Shinichi.....	MP 586	James, Kevin.....	WP 392
Infusini, Giuseppe.....	MP 594	Iwasaki, Mio.....	ThP 511	James, Patrick F.....	ThP 211
Infusini, Giuseppe.....	ThP 014	Iwasaki, Mio.....	WP 395	Jan, Yi-Hua.....	TP 609
Infusini, Giuseppe.....	ThP 127	Iwasaki, Noriyuki.....	MP 447	Jan, Yi-hua.....	TP 612
Infusini, Giuseppe.....	MP 292	Iwata, Kazunori.....	WP 336	Janecki, Dariusz.....	ThP 281
Infusini, Giuseppe.....	WP 414	Iwata, Rikiya.....	TP 187	Jang, In-Jin.....	MP 032
Infusini, Giuseppe.....	WP 100	Iwata, Rikiya.....	MP 322	Jang, In-Jin.....	MP 412
Infusini, Giuseppe.....	WP 434	Izhakova, Julia.....	TP 567	Jang, In-Jin.....	TP 405
Infusini, Giuseppe.....	ThP 261	Izrael-Tomasevic, Anita.....	TP 028	Jang, In-Jin.....	TP 406
Ingalls, Stephen.....	WP 580	Izrael-Tomasevic, Anita.....	WP 016	Jang, In-Jin.....	TP 408
Ingendoh, Arndt.....	WP 605	Izumi, Hideaki.....	ThP 625	Jang, Youngmi.....	WP 274
Ingolfsson, Oddur.....	TP 640	Izumi, Shunsuke.....	ThP 518	Jänis, Janne.....	ThP 476
Ingolfsson, Oddur.....	WP 676	Jabbour, Rabih.....	TP 384	Janiszewski, John.....	MP 434
Ingrell, Christian Ravnsborg.....	WP 056	Jabs, Wolfgang.....	TP 620	Janiszewski, John.....	MP 433
Iniesta, Jesus.....	ThP 569	Jabs, Wolfgang.....	MP 017	Janiszewski, John.....	ThP 682
Innerebner, Gerd.....	ThP 372	Jackson, Angela M.....	WP 514	Janiszewski, John.....	MP 451
Innis, Sheila M.....	WP 259	Jackson, Angela M.....	MOB pm 3:10	Jankiewicz, Bartlomiej.....	ThP 638
Inohana, Yusuke.....	WP 376	Jackson, Ayanna.....	TP 655	Jankowska, Ewa.....	WP 467
Inomata, Noriyuki.....	WP 411	Jackson, Ayanna.....	TP 304	Jannasch, Amber.....	MP 264
Inoue, Shoko.....	WP 129	Jackson, Glen.....	MP 631	Janoski, Jon.....	WP 624
Insel, Paul A.....	TP 037	Jackson, Glen.....	MP 632	Janssen, Hans-Gerd.....	ThP 681
Intelicato-Young, Jennifer.....	TP 084	Jackson, Karl E.....	ThP 334	Janssen, Anna.....	TOG pm 3:50
Interrante, Angela.....	ThP 537	Jackson, Lewis C.....	MP 046	Jansson, Janet.....	ThP 389
Inutan, Ellen D.....	ThP 159	Jackson, Phil J.....	TP 505	Jany, Paige.....	WP 071
Inutan, Ellen D.....	MPZ 578	Jackson, Robert.....	ThP 614	Jaquillard, Lucie.....	TP 467
Inutan, Ellen D.....	WOF pm 4:10	Jackson, Robert H.....	TOD pm 2:30	Jarecki, Jessica.....	ThP 458
Inutan, Ellen D.....	ThOA 3:10	Jackson, Shaun P.....	MP 221	Jariwala, Freneil.....	TP 644
Inutan, Ellen D.....	ThP 163	Jackson, Shelley N.....	ThP 178	Jarrold, Martin.....	WP 312
Ippolito, Danielle.....	TP 077	Jackson, Shelley N.....	WOD am 09:30	Jarrold, Martin.....	WP 205
Ipsen, Andreas.....	WP 694	Jackson, Shelley N.....	MP 236	Jaskiewicz, Ewa.....	MP 495
Ireton, Renee C.....	WP 068	Jackson, Shelley N.....	TP 483	Jaskolla, Thorsten Wolfgang.....	WP 396
Isa, Kimio.....	WP 675	Jackson, Shelley N.....	TP 457	Jason, Giacomo.....	MOA pm 3:30
Isaacson, Shoshanna.....	MOC am 08:50	Jackson, Shelley N.....	ThP 162	Jauhainen, Marjo.....	ThP 529
Isaacson, Shoshanna C.....	WOE pm 4:10	Jackson, Tony.....	WOF am 09:50	Javorszky, Eszter.....	TP 245
Isaaq, Haleem.....	WP 271	Jacob, Jaby.....	WP 424	Jaya, Nomalie.....	TP 463
Isaeva, Elena.....	TP 080	Jacobs, Ian.....	TP 622	Jayapalan, Swapna.....	MP 379
Ischiropoulos, Harry.....	MP 116	Jacquet, Eric.....	ThP 563	Jayaram, Beby.....	WP 170
Ischiropoulos, Harry.....	WP 019	Jacquot, Yves.....	TP 461	Jean, Nicolas.....	MP 378
Ishigai, Masaki.....	TP 489	Jacyno, Mark.....	ThP 113	Jean, Nicolas.....	ThP 137
Ishihama, Yasushi.....	WP 395	Jacyno, Mark.....	ThP 499	Jean-Claude, Bertrand J.....	MP 526
Ishihama, Yasushi.....	ThP 433	Jadot, Michel.....	WP 003	JeBailey, Lellean.....	WP 068

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Jecklin, Matthias	MOF am 09:30	Jiang, Xiangyu	ThP 225	Jones, A. Daniel	MP 533
Jecklin, Matthias	TP 480	Jiang, Xiangyu	MP 424	Jones, A. Daniel	WP 481
Jecklin, Matthias C.	TP 479	Jiang, Xiang-yu	ThP 223	Jones, A. Daniel	ThP 082
Jelinek, Christine	MP 091	Jiang, Xiang-yu	MP 376	Jones, Alun	TP 528
Jelinek, Christine	TP 263	Jiang, Xiang-yu	MP 428	Jones, Andrew W.	ThP 190
Jellema, Renger	TP 110	Jiang, Xiang-yu	MP 420	Jones, Andrew W.	ThP 569
Jemal, Mohammed	ThP 099	Jiang, Xiaoyue	ThP 469	Jones, Barry R.	MP 272
Jemal, Mohammed	ThOB pm 3:30	Jiang, Xinzhao Grace	WP 476	Jones, Barry R.	WP 160
Jemal, Mohammed	MP 425	Jiang, Xuntian	ThP 241	Jones, Christopher M.	MOC pm 3:30
Jemal, Mohammed	WP 332	Jiang, Yong	ThOF am 09:50	Jones, David	ThP 355
Jemal, Mohammed	MP 426	Jiang, Yong	ThP 410	Jones, David	ThP 356
Jemal, Mohammed	ThP 359	Jiang, Zhiping	ThP 219	Jones, Dean P.	ThP 086
Jen, Connie	WOD am 08:50	Jiao, Jenny	MP 494	Jones, Elliott	ThOB pm 3:50
Jen, Connie	TP 471	Jiao, Jenny	ThP 042	Jones, Elliott	TP 422
Jeng, Jingyueh	ThP 122	Jiao, Kaisheng	ThP 557	Jones, Elliott	MP 517
Jeng, Jingyueh	MP 338	Jin, Jang Mi	WP 377	Jones, Elliott	TP 421
Jenkins, Alicia J.	MP 259	Jin, Jang Mi	TP 064	Jones, Elliott	MP 429
Jenkins, Rand	MP 160	Jin, Jian	WP 150	Jones, Emrys A.	WP 189
Jenkins, Rand	MP 158	Jin, Liping	TP 502	Jones, Emrys A.	TP 174
Jenkins, Rand	ThP 360	Jin, Liping	MP 525	Jones, Gil	WP 645
Jenkins, Rand	ThP 361	Jin, Song	ThP 257	Jones, Jace W.	MP 110
Jenkins, Rand G.	MP 348	Jin, Wen	ThP 236	Jones, Jace W.	MP 107
Jenkins, Rand G.	WP 339	Jin, YouXun	TP 335	Jones, Jacob	MP 334
Jenkins, Stefan	WP 114	Jin, Zhicheng	WP 316	Jones, Jeffrey J.	MP 214
Jennings, Lee	TP 472	Jing, Li	WP 683	Jones, Julia C.	WP 265
Jennings, Michelle	ThP 530	Jing, Linhong	TP 148	Jones, Kevin	MP 420
Jensen, Clause Juel	WP 393	Jing, Xiaohong	TP 543	Jones, Kevin	MP 359
Jensen, Lauren	TP 102	Jo, Sung-Chan	WP 217	Jones, Kevin	MP 424
Jensen, Ole N.	ThP 501	Jockusch, Rebecca A.	MOF pm 4:10	Jones, Lisa	MOC am 09:30
Jensen, Ole N.	WP 393	Joerg, Wolfgang	MOB am 10:10	Jones, Lisa A.	MOE pm 4:10
Jensen, Ole N.	ThP 302	Johann, Donald	MP 617	Jones, Lynsey N.	WP 461
Jensen, Ole N.	ThP 306	Johann, Donald	MP 052	Jones, Patrick R.	MP 661
Jensen, Ole N.	ThOE pm 2:50	Johann, Donald	TOB pm 3:10	Jones, Rhys	MP 372
Jensen, Peter Arendt	TOA am 09:30	Johansen, Eric	TOC pm 2:30	Jones, Rhys	ThP 357
Jensen, Søren S.	ThP 443	Johansson, Magnus	WP 172	Jones, Rhys	MP 370
Jeon, Jongyeob	MP 137	John, John	ThP 036	Jones, Richard	ThP 033
Jeon, Junho	TP 226	John, Stolz	MP 539	Jones, Richard C.	MP 123
Jeong, Gap-Su	TP 317	Johnson, Diana R.	MP 245	Jones, Ted	MP 113
Jeong, Sun Yong	TP 128	Johnson, Douglas A.	ThP 047	Jones, Ted	MP 239
Jeong, Sun Yong	MP 388	Johnson, Ed	WP 613	Jones, William	ThP 036
Jesch, Christian	TOD pm 4:10	Johnson, Erin	TOG am 09:50	Jones-Laugner, Jaqueline M.	MOE pm 3:10
Jessica, Scotchie	WP 556	Johnson, Gary L.	TP 148	Jong, Shiang-Bin	MP 276
Jewell, William T.	TP 601	Johnson, Helen M.	ThP 380	Jong, Shiang-Bin	MP 068
Jhang, Siou-Sian	ThP 166	Johnson, Jay	WP 318	Jong, Shiang-Bin	WP 076
Ji, Allena	ThP 219	Johnson, Jennifer M.	ThP 086	Jong, Ting-Ting	WP 380
Ji, Chengjie	MP 365	Johnson, Jodie V.	ThP 065	Jonsson, Lena	WP 519
Ji, Qin	ThP 229	Johnson, John E.	MP 174	Joo, Jong Wha Joanne	TP 046
Ji, Qin C.	ThP 230	Johnson, Joshua L.	ThP 034	Joo, Won-A	MP 118
Jia, Jim M.	TP 258	Johnson, Katina L.	ThP 485	Jorabchi, Kaveh	ThOC pm 2:30
Jia, Wei	ThP 243	Johnson, Kenneth L.	WP 070	Jordan, Alfons	ThP 344
Jia, Weiping	TP 585	Johnson, Mark	TOF pm 2:30	Jordan, Lynn	ThP 687
Jia, Weitao	ThP 256	Johnson, Michael	WP 334	Jordan, Rick	TP 049
Jia, Weitao	ThP 259	Johnson, Michael	MP 360	Jordan, Steve	MP 370
Jian, Wenyang	TOA pm 4:10	Johnson, Richard S.	TP 149	Jordan, Steve	ThP 357
Jiang, Bin	WP 058	Johnston, Jason	WP 014	Jordan, Steve	MP 372
Jiang, Gong-yu	MP 197	Johnston, Jonathan B.	MP 228	Jore, Matthijs	TP 460
Jiang, Gong-yu	MP 198	Johnston, Murray V.	MP 329	Jorgensen, Claus	TP 008
Jiang, Guifeng	ThP 586	Johnston, Murray V.	ThP 611	Jorgensen, Thomas J.d.	TOG pm 3:50
Jiang, Guifeng	ThP 593	Johnston, Murray V.	ThOG am 08:30	Jorgenson, James	ThP 523
jiang, Haitao	ThP 549	Johnston, Murray V.	ThOG am 09:10	Jorgenson, James	TP 487
Jiang, Haitao	ThP 309	Johnston, Murray V.	ThP 612	Jornvall, Hans	ThP 479
Jiang, Hao	WP 354	Johnston, Murray V.	ThOG am 09:50	Jörnvall, Hans	MP 505
Jiang, Hongliang	ThP 225	Johnston, Murray V.	ThP 609	Joseloff, Elizabeth	WP 093
Jiang, Hongliang	MP 376	Johnston, Murray V.	MP 208	Joseph, Siji	ThP 226
Jiang, Hui	TP 358	Johnston, Murray V.	MPZ 580	Josephs, Jonathan L.	TOB am 09:10
Jiang, Hui	ThP 524	Joiner, Clinton H.	TOE pm 2:30	Josephs, Jonathan L.	TOA pm 2:50
Jiang, Licong	MP 275	Jolley, Craig C.	TP 478	Josephs, Jonathan L.	TP 582
Jiang, Lihua	MP 459	Jolliffe, Charles	MP 327	Josephs, Jonathan L.	MP 401
Jiang, Lihua	TP 261	Jones, A. Daniel	TP 117	Joviliano, Renan	ThP 633
Jiang, Liqun	WP 544	Jones, A. Daniel	WP 569	Joyce, Joseph G.	MP 037
Jiang, Sherwin	TP 389	Jones, A. Daniel	MOD pm 3:10	Joyce, Joseph G.	ThP 517
Jiang, Tao	TP 343	Jones, A. Daniel	WP 116	Joyce, William F.	ThOC pm 2:50

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Jue, April.....	WOA pm 2:30	Kameyama, Akihiko.....	MP 480	Kassel, Daniel B.....	ThP 675
Julian, Bruce A.....	TP 514	Kamiguchi, Hiroyuki.....	ThP 450	Kassouf, Wassim.....	TP 625
Julian, Ryan R.....	ThP 554	Kaminsky, Ilya.....	TP 214	Kast, Juergen.....	WP 320
Julian, Ryan R.....	MOF am 09:10	Kamphorst, Jurre.....	TP 089	Kast, Juergen.....	WP 147
Julien, Catherine.....	ThP 434	Kanamori-Kataoka, Mieko.....	TP 374	Kast, Juergen.....	ThP 431
Julka, Samir.....	WP 614	Kanda, Taketoshi.....	WP 340	Kast, Juergen.....	TP 553
Jun, Ji Hyun.....	ThP 072	Kandasamy, Kumaran.....	MP 008	Kast, Juergen.....	MP 153
Jun, Ji Hyun.....	WOA am 09:50	Kandasamy, Kumaran.....	ThP 053	Kast, Juergen.....	ThP 532
Jung, Hye Ryung.....	ThOE pm 2:50	Kandasamy, Kumaran.....	ThP 191	Kasthuri, Raj.....	WP 002
Jung, Hyun-Jin.....	WP 573	Kandasamy, Kumaran.....	TP 367	Kastner, Berthold.....	WP 140
Jung, Hyun-Jin.....	WP 574	Kane, Jennifer.....	WP 552	Katayama, Hiroyuki.....	MP 133
Jung, Kwanyoung.....	TOC pm 2:30	Kane, Lesley.....	WP 544	Kate, Antolick.....	TP 662
Jung, Stephan.....	WP 080	Kaneko, Akihito.....	WP 498	Katenhusen, Richard.....	WP 552
Jung, Yu-Kyung.....	TP 321	Kaneko, Akihito.....	MP 637	Kato, Harubumi.....	WP 534
Junnotula, Venkatraman.....	TP 400	Kaneko, Akihito.....	ThP 242	Katselis, George.....	WP 523
Junnotula, Venkatraman.....	WP 218	Kaneko, Sachiyo.....	WP 388	Katsikis, Sotirios N.....	TP 593
Junot, Christophe.....	ThP 096	Kaneko, Yuka.....	TP 006	Kattner, Gerhard.....	WP 583
Junot, Christophe.....	ThP 066	Kaneshiro, Edna S.....	MP 224	Katz, Benjamin.....	TP 330
Juo, Chiun-gung.....	ThP 085	Kaneshiro, Kaoru.....	MPZ 569	Katzenmeyer, Joseph B.....	ThOB am 09:50
Justes, Dina R.....	ThP 644	Kang, Liping.....	WP 385	Katzmann, Jerry A.....	WP 028
Juyal, Priyanka.....	WP 638	Kang, Minhyuck.....	TP 348	Kaufman, Thomas C.....	WP 538
K. Finzi, Jane.....	MP 165	Kang, Myunghee.....	WP 274	Kaupppila, Walter E.....	ThOC pm 4:10
K.V., Veerendra Kumar.....	WP 525	Kang, Pilsoo.....	MP 488	Kaur, Monika.....	MP 661
Kaake, Robyn.....	TP 026	Kang, Sebyung.....	TP 478	Kaur, Parminder.....	WP 445
Kaal, Erwin.....	ThP 681	Kang, Un-Beom.....	MP 127	Kaur, Surinder.....	MP 391
Kaboord, Barbara.....	ThP 440	Kannan, Krishna.....	WP 027	Kautz, Roger.....	ThP 141
Kaboord, Barbara.....	WP 410	Kannan, Lakshmi.....	TP 490	Kavan, Daniel.....	MP 050
Kachman, Maureen.....	ThP 521	Kansal, Monika M.....	WP 338	Kawahara, Rui.....	WP 576
Kaddurah-Daouk, Rima.....	WOB am 08:30	Kao, Cai-Yu.....	WP 582	Kawasaki, Hideya.....	WP 612
Kadkhodayan, Miryam.....	TOA am 10:10	Kaplan, Desmond.....	TOG pm 4:10	Kay, Lewis E.....	TP 463
Kadowaki, Tadashi.....	TP 104	Kaplan, Desmond.....	MP 641	Kazim, A. Latif.....	MP 442
Kafonek, Chris J.....	MP 355	Kaplan, Desmond.....	MP 136	Kazim, A. Latif.....	ThP 167
Kagan, Natasha.....	MP 282	Kaplan, Desmond.....	ThOD pm 2:50	Ke, Eileen.....	TP 085
Kagawa, Shuji.....	MPZ 575	Kaplan, Desmond.....	ThP 347	Ke, Jing.....	TP 398
Kahn, Michael.....	ThP 438	Kaplan, Desmond.....	ThOD am 10:10	Ke, Yuyong.....	WP 668
Kaiser, Nathan.....	MOD pm 2:50	Kaplan, Desmond.....	WP 442	Ke, Zhenlian/vivian.....	WP 553
Kaiser, Nathan K.....	TP 283	Kaplan, Desmond A.....	ThP 620	Keane, Niamh.....	MP 528
Kaiser, Nathan K.....	TP 284	Kaplan, Kimberly A.....	WOD am 08:30	Keasling, Jay D.....	MP 389
Kaiser, Peter.....	TP 026	Kapron, James.....	MP 159	Kebebew, Electron.....	TP 073
Kaiser, Peter.....	MP 214	Karabacak, N Murat.....	MP 634	Kececi, Kaan.....	ThP 139
Kaiser, Stephen E.....	ThP 507	Karanik, Magda.....	ThP 653	Keck, Brad.....	MOA pm 3:30
Kakoi, Satoko.....	ThP 094	Karas, Michael.....	ThP 525	Keck, Brad.....	MOA pm 2:50
Kalb, Suzanne.....	ThP 375	Karas, Michael.....	WP 396	Keck, Rodney.....	WP 466
Kalb, Suzanne R.....	TOG am 09:10	Karas, Michael.....	WP 154	Keefe, Melinda.....	ThP 315
Kalcic, Christine L.....	WOC am 08:50	Karas, Michael.....	WP 050	Kehasse, Amanuel.....	ThP 261
Kalcic, Christine L.....	MP 251	Karger, Barry L.....	ThP 293	Kehler, Jonathan.....	ThOA am 09:30
Kalcic, Christine L.....	MOD pm 3:10	Karger, Barry L.....	WP 545	Keil, Adam.....	TP 372
Kalcic, Christine L.....	TP 117	Karger, Barry L.....	WP 494	Keil, Oliver.....	ThP 673
Kaledin, Leonid.....	ThOG pm 3:30	Karger, Barry L.....	ThP 309	Kelleher, Brian P.....	ThP 382
Kalgutkar, Amit.....	TP 571	Karger, Barry L.....	TP 072	Kelleher, Joanne K.....	MP 621
Kalkum, Markus.....	MP 117	Karger, Barry L.....	WP 472	Kelleher, Neil L.....	TOE am 09:50
Kalkum, Markus.....	TP 075	Karger, Barry L.....	WP 502	Kelleher, Neil L.....	MOC pm 2:50
Kall, Lukas.....	MP 048	Karlsson, Niclas G.....	TOC pm 3:30	Kelleher, Neil L.....	MOC pm 4:10
Käll, Lukas.....	WOE pm 3:10	Karoyan, Philippe.....	ThP 660	Kelleher, Neil L.....	MP 135
Kalli, Anastasia.....	TP 363	Karst, Uwe.....	MP 544	Kelleher, Neil L.....	MP 134
Kalli, Anastasia.....	MP 143	Karst, Uwe.....	TP 240	Kelleher, Neil L.....	TP 150
Kaltashov, Igor A.....	TP 432	Karst, Uwe.....	TP 241	Kelleher, Neil L.....	TP 261
Kaltashov, Igor A.....	TOG pm 4:10	Karst, Uwe.....	MP 522	Kelleher, Neil L.....	ThP 461
Kaltashov, Igor A.....	TP 452	Karst, Uwe.....	TP 254	Keller, Andrew.....	WP 541
Kaltashov, Igor A.....	TP 459	Karst, Uwe.....	MOG am 09:10	Keller, Bernd O.....	WP 306
Kaltashov, Igor A.....	TP 430	Karunaweera, Sadish.....	WOF pm 4:10	Keller, Jennifer M.....	TP 589
Kaltashov, Igor A.....	MOC am 09:10	Karunaweera, Sadish.....	ThP 159	Keller, Mark P.....	MP 356
Kaltashov, Igor A.....	WP 429	Kashanchi, Fatah.....	ThP 080	Keller, Martin.....	TOA am 09:50
Kaltashov, Igor A.....	ThOA am 08:50	Kashyap, Manoj K.....	ThP 059	Keller, Matthias.....	ThP 074
Kalvodova, Lucie.....	MOA am 09:50	Kashyap, Manoj K.....	ThP 057	Keller, Matthias.....	ThP 100
Kamali, Afrand.....	ThP 331	Kashyap, Manoj K.....	WP 525	Kellersberger, Katherine.....	ThOF am 09:30
Kamei, Katsuhiko.....	WP 563	Kashyap, Manoj K.....	ThP 055	Kellersberger, Katherine.....	ThP 595
Kamel, Amin M.....	MP 548	Kasper, Tina.....	WP 653	Kellersberger, Katherine A.....	TP 195
Kamel, Amin M.....	MP 547	Kassan, Scott.....	WP 309	Kellersberger, Katherine A.....	WOA am 09:10
Kamel, Amin M.....	MP 546	Kassan, Scott.....	ThP 340	Kelley, James A.....	Special
Kamens, Richard M.....	ThOG am 08:50	Kassel, Daniel B.....	MP 374	Kelley, James A.....	ThP 160
Kameyama, Akihiko.....	WP 508	Kassel, Daniel B.....	ThOB pm 3:50	Kellie, John.....	TP 150

Program Code: M, T, W, Th = Day    O = Oral    Time  
 M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Kellie, John.....	MP 135	Khairallah, George N.....	TOF am 08:50	Kim, Jong-won.....	ThP 494
Kellie, John F.....	MOC pm 2:50	Khalaf, Fouad.....	ThP 131	Kim, Joon.....	MP 127
Kellie, John F.....	MOC pm 4:10	Khan, Amjad.....	WP 531	Kim, Junho.....	MP 137
Kellie, John F.....	TOE am 09:50	Khan, Zia.....	MP 039	Kim, Kami.....	WP 298
Kellogg, Todd.....	WP 579	Khandekar, Narayan.....	WP 162	Kim, Kyoung-Wook.....	WP 217
Kelly, John.....	WP 496	Kharchenko, Andriy.....	TP 276	Kim, Kyunggon.....	MP 032
Kelly, John F.....	TP 516	Kharchenko, Andriy.....	TP 277	Kim, Kyunggon.....	MP 127
Kelly, John F.....	WP 505	Kharchenko, Andriy.....	WOD pm 2:50	Kim, Min-Sik.....	ThP 055
Kelly, Robert M.....	ThP 374	Kharchenko, Andriy.....	WP 684	Kim, Min-Sik.....	ThP 191
Kelly, Ryan.....	MP 333	Kharlamova, Anastasia.....	ThP 657	Kim, Moo-young.....	MP 339
Kelly, Ryan.....	TOD am 09:50	Kharlamova, Anastasia.....	ThP 415	Kim, Moo-young.....	MP 419
Kelly, Ryan.....	MP 332	Khartulyari, Stefanie.....	MP 175	Kim, Nam.....	WP 084
Kelly, Ryan.....	MOD am 08:30	Kharybin, Oleg.....	TP 508	Kim, Sanghwa.....	WP 577
Kelly-Spratt, Karen S.....	WP 085	Khatib-Shahidi, Sheerin.....	ThOB pm 3:10	Kim, Sanghwa.....	WP 274
Kelstrup, Christian Dahl.....	TP 533	Khodonov, Andrey.....	WP 369	Kim, Sanghwa.....	MP 127
Kemp, Christopher J.....	WP 085	Khoo, Kay-hooi.....	WP 292	Kim, Sangtae.....	WOE am 09:10
Kemp, Christopher J.....	MOE pm 4:10	Khoo, Kay-hooi.....	ThP 274	Kim, Seon Jeong.....	TP 405
Kemptner, Jasmin.....	ThP 384	Khoo, Kay-hooi.....	TP 520	Kim, Seon Jeong.....	TP 406
Kendrick, John.....	TOA pm 3:30	Khosla, Chaitan.....	TP 487	Kim, Seon Jeong.....	TP 408
Kennedy, David.....	MP 187	Khosrovi-Eghbal, Arash.....	ThP 431	Kim, Seon-Jeong.....	MP 412
Kennedy, Jacob.....	MP 013	Khristenko, Nina A.....	ThP 394	Kim, Seung-Hyun.....	TP 594
Kennedy, Joseph H.....	TP 292	Khrushcheva, Maria.....	TP 604	Kim, Sung Chan.....	TP 265
Kennedy, Joseph H.....	WOB pm 3:30	Kibelka, Gottfried.....	ThP 340	Kim, Sunghwan.....	WP 658
Kennedy, Robert.....	ThP 470	Kibelka, Gottfried.....	WP 309	Kim, Sunghwan.....	WP 641
Kent, Peter.....	MP 003	Kidara, Masanori.....	TP 374	Kim, Sunghwan.....	WP 654
Kentamaa, Hilikka.....	MOF am 10:10	Kiefer, Patrick.....	TP 116	Kim, Tae-young.....	ThP 619
Kentamaa, Hilikka.....	WP 316	Kieltyka, Jason W.....	TP 345	Kim, Una.....	ThP 655
Kentamaa, Hilikka.....	ThP 639	Kieltyka, Kasia.....	ThP 662	Kim, Una.....	ThP 652
Kentamaa, Hilikka.....	WOG am 10:10	Kienesberger, Petra.....	WP 572	Kim, Unmi.....	TP 517
Kentamaa, Hilikka.....	ThP 638	Kienle, Stefan.....	WP 008	Kim, Yangsun.....	MP 587
Kentamaa, Hilikka.....	WP 164	Killeen, Kevin.....	WP 470	Kim, Yangsun.....	TP 197
Kentamaa, Hilikka.....	WP 164	Killeen, Kevin.....	TP 262	Kim, Yangsun.....	WP 509
Kepfler, Scott.....	MP 358	Killeen, Kevin.....	TOC pm 3:50	Kim, Yangsun.....	MP 137
Kerfoot, Sandra.....	TP 246	Killeen, Kevin.....	WP 491	Kim, Yeon-Jeong.....	ThP 450
Kern, Rolf.....	WP 221	Kilpatrick, Lisa E.....	TP 042	Kim, Yeonjung.....	MP 090
Kern, Rolf.....	TP 422	Kilpatrick, Lisa E.....	TP 074	Kim, Yeoun Jin.....	WP 093
Kernan, Jeffrey.....	MP 656	Kim, Chan-Duck.....	TP 249	Kim, Yong-Hak.....	MP 127
Kerner, Janos.....	ThP 530	Kim, Eunkyong.....	WP 658	Kim, Yong-Lim.....	TP 249
Kerns, Edward.....	MOB am 08:30	Kim, Eunkyong.....	WP 654	Kim, Young Hwan.....	WP 641
Kerns, Edward.....	MP 282	Kim, Eunmin.....	ThP 429	Kim, Young Hwan.....	WP 658
Kerr, Thomas J.....	MOD am 10:10	Kim, Evelyn H.....	MP 587	Kim, Youngsoo.....	MP 090
Kersten, Hendrik.....	MP 319	Kim, Evelyn H.....	WP 054	Kim, Youngsoo.....	MP 032
Kersten, Hendrik.....	TP 642	Kim, Hee-yong.....	ThP 491	Kim, Youngsoo.....	MP 127
Kersten, Hendrik.....	MP 304	Kim, Hee-yong.....	TP 566	Kim Pak, Youngmi.....	TP 133
Kerstetter, Dale R.....	TP 344	Kim, Hee-yong.....	MP 219	Kimura, Atsuko Kakio.....	MP 218
Kertesz, Tzipporah.....	MP 162	Kim, Hee-yong.....	MP 218	Kimura, Taichi.....	WP 013
Kertesz, Vilmos.....	ThP 559	Kim, Hee-Yong.....	WP 264	Kimzey, Mike.....	ThP 565
Kertesz, Vilmos.....	WOB pm 3:50	Kim, Helen.....	WP 528	Kimzey, Mike.....	TP 624
Kertesz, Vilmos.....	MP 324	Kim, Helen.....	ThP 575	Kind, Tobias.....	WOB am 08:30
Kertesz, Vilmos.....	TP 296	Kim, Hokeun.....	TP 133	King, Fred.....	ThP 562
Kerwin, Bruce.....	ThP 536	Kim, Hwa Suk.....	TP 406	King, Kristopher.....	MP 369
Kerwin, Bruce.....	WP 424	Kim, Hwa Suk.....	MP 412	King, Richard.....	MP 592
Kerwin, James.....	MP 080	Kim, Hwa Suk.....	TP 408	King, Richard.....	MP 435
Kesari, Santosh.....	WOA am 09:10	Kim, Hwa Suk.....	TP 405	King-Ahmad, Amanda.....	ThP 682
Kesari, Santosh.....	TP 195	Kim, Hyeyeong.....	MP 066	Kinsel, Gary R.....	MP 504
Keshishian, Hasmik.....	MOB pm 4:10	Kim, Hyun Sik.....	WP 377	Kinsel, Gary R.....	WOF am 09:30
Keshishian, Hasmik.....	TP 015	Kim, Hyun Sik.....	TP 064	Kinsel, Wadim.....	TOD pm 4:10
Keshishian, Hasmik.....	ThP 020	Kim, In-San.....	TP 249	Kirby, Daniel P.....	WP 162
Keshishian, Hasmik.....	MP 477	Kim, Jaehan.....	MP 485	Kirchner, David.....	WP 552
Kessl, Jacques J.....	ThP 480	Kim, Jae-Kon.....	WP 636	Kirchner, Marc.....	MP 057
Kessler, Brenda.....	TP 203	Kim, Jeff.....	MP 219	Kirchner, Marc.....	TP 177
Kessler, Melanie S.....	MP 069	Kim, Jeongkwon.....	WP 403	Kirchner, Marc.....	MP 034
Kessner, Darren.....	Special	Kim, Jeongkwon.....	WP 509	Kirchner, Marc.....	WP 053
Kessner, Darren.....	Special	Kim, Jeongkwon.....	ThP 500	Kirchner, Marc.....	ThP 016
Kettani, Ali.....	WP 118	Kim, Jin San.....	TP 321	Kirchner, Marc.....	WP 059
Ketterer, Margaret.....	WP 014	Kim, Jin Tae.....	MP 209	Kirk, Benjamin B.....	MOF am 08:50
Kevala, Karl.....	TP 566	Kim, Jin young.....	TP 090	Kirkpatrick, Donald S.....	TP 028
Kevala, Karl R.....	MP 219	Kim, Jinhee.....	ThP 500	Kirkpatrick, Donald S.....	ThP 121
Kevala, Karl R.....	MP 218	Kim, Jinhee.....	WP 403	Kirleis, Matthew A.....	WP 319
Keyes, Philip E.....	ThP 676	Kim, Jinhee.....	WP 509	Kirpekar, Finn.....	ThP 399
Khabashesku, Valery N.....	TP 205	Kim, Jinyoung.....	ThP 429	Kirsch, Dieter.....	WOF pm 3:30
Khainovski, Nikita.....	WP 150	Kim, Jong Sung.....	WP 231	Kirsch, Stephan.....	MP 482

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Kirsch, Stéphanie	WP 012	Köcher, Thomas	MP 007	Korfmacher, Walter	TP 202
Kirsch, Stéphanie	TP 012	Kodera, Kei	MP 202	Korfmacher, Walter	MP 397
Kiselar, Janna	WP 445	Koehl, Andrew	WOD am 09:50	Kornacki, James R.	MP 493
Kiselar, Janna	WP 444	Koehler, Fritz	WOF pm 3:30	Körner, Roman	ThP 427
Kishi, Shintaro	TP 376	Koehn, H.	MP 553	Körner, Roman	ThP 310
Kishi, Shintaro	TP 374	Koehn, Henning	WP 539	Korte, Birgit	TP 620
Kishore, Charles Jacob Harrys	ThP 058	Koehn, Scott K.	TOF am 08:30	Koshino, Hiroyuki	WP 384
Kislinger, Thomas	TP 154	Koellensperger, Gunda	ThP 136	Koster, Emile	WP 351
Kitagawa, Norton	WP 061	Koellensperger, Gunda	ThP 150	Kostrzewa, Markus	ThP 388
Kitova, Elena	MOC am 10:10	Koep, Larry	TP 083	Kostrzewa, Markus	TP 610
Kitova, Elena	TOF pm 4:10	Koepke, Sara	MP 624	Kota, Uma	MP 025
Kittrell, Carter	TP 205	Koeritz, Richard	WP 693	Kothari, Sameer	ThOF pm 4:10
Kiuchi, Masato	WP 388	Koers, Jim	MP 168	Köthe, Ullrich	TP 177
Kiyonami, Reiko	WP 313	Koester, Hubert	TP 145	Kotsuka, Takashi	WP 336
Kiyonami, Reiko	MP 122	Koethe, Ullrich	ThP 016	Koudstaal, Peter J.	MP 087
Kiyonami, Reiko	ThP 695	Koethe, Ullrich	WP 059	Koulman, Albert	MP 252
Kiyonami, Reiko	TP 138	Koethe, Ullrich	MP 034	Koulman, Albert	ThP 070
Kiyonami, Reiko	WP 494	Kogure, Yoshifumi	MP 400	Koulman, Albert	ThP 076
Klarskov, Klaus	MP 521	Kogure, Yoshifumi	TP 584	Koulman, Albert	MP 242
Klarskov, Klaus	MP 511	Koh, Jaesuk	WP 654	Koutsantonis, George	TOF am 08:50
Klassen, John	MOC am 10:10	Kohl, Michael	ThP 514	Kovalev, Sergey	ThP 186
Klassen, John	TOF pm 4:10	Kohlbacher, Oliver	TP 050	Kovar, Victor	WP 645
Klausen, Morten M.	TP 605	Kohler, Maxie	TP 255	Kovarik, Peter	ThP 670
Klee, Matthew S.	MP 658	Kohli, Rohini R.	ThP 522	Kovarova, Hana	WP 018
Klee, Sonja	TP 642	Kohn, Andrea	MP 249	Kovtoun, Viatcheslav V.	MP 588
Klee, Sonja	MP 319	Kohn, Harold	MP 597	Kowalak, Jeffrey A.	WP 143
Kleimann, Jörg	WP 609	Koin, Peter	WP 186	Kowalak, Jeffrey A.	WP 065
Klein, Larry L.	TP 413	Koisten, Kaisa	MP 237	Kowalak, Jeffrey A.	Special
Kleiner, Manuel	ThP 391	Koizumi, Eiko	MP 188	Kowalak, Jeffrey A.	ThP 289
Kleinholz, Nan M.	TOE am 10:10	Koizumi, Hideya	MP 188	Kowalak, Jeffrey A.	TP 340
Klemm, Otto	ThP 608	Kojima, Shota	TP 341	Kowalczyk, Marek	WP 616
Klems, Joseph P.	ThP 609	kolb, Janet	MP 437	Kowalski, Jane-Marie	ThP 595
Klerk, Leendert	WP 684	Koleva, Rositsa	TP 540	Kowalski, Paul	ThP 595
Klerk, Leendert A.	WP 195	Kolker, Eugene	ThP 130	Kowalski, Paul	MPZ 572
Klerk, Leendert A.	WOD pm 2:50	Kolker, Eugene	WP 047	Kowalski, Paul J.	ThP 456
Kliman, Michal	MOD am 10:10	Kolker, Eugene	WP 057	Kowalski, Paul J.	ThOA pm 2:50
Kliman, Michal	TP 193	Kolker, Natali	ThP 130	Kowlessur, Dev	TP 443
Klinder, Klaus	MOB am 10:10	Kolker, Natali	WP 057	Kozak, Marta	ThP 593
Kline, Kelli G.	WOE pm 2:50	Kolker, Natali	WP 047	Kozak, Marta	ThP 586
Kling, Hans-Willi	WP 622	Koll, Hans	ThOA am 08:30	Kozin, Sergey	TP 508
Klingler, Diana	MP 014	Kolli, V.S. Kumar	WP 552	Kozlov, Boris	ThP 615
Klinkert, Ivo	TP 199	Kolter, Thomas	MP 246	Kozłowski, Rachel	WP 567
Klinkert, Ivo	TP 176	Komarov, Alexander	MP 555	Kraemer-Berkman, Susan	WP 375
Klockenbusch, Cordula	ThP 532	Kombu, Rajan S.	MP 621	Kraiczek, Karsten	WP 491
Kloczewiak, Marek	TP 430	Komives, Elizabeth	WP 418	Kraiczek, Karsten	ThOE am 09:50
Kmiec, Kevin	ThP 617	Koncarevic, Sasa	MP 474	Krakovska, Olga	MP 081
Knapman, Tom	TP 229	Koncarevic, Sasa	ThP 588	Kralovec, Jaroslav A.	MP 108
Knapman, Tom W.	MOD am 09:10	Kondoh, Osamu	WP 411	Kramer, Gertjan	WP 138
Knapman, Tom W.	TP 235	Kondrat, Frances D L	WOD am 09:10	Kramer, Tal	ThP 346
Knapp, Daniel R.	TP 170	Konermann, Lars	TP 630	Krapivkin, Boris	MP 555
Knapp, Daniel R.	WP 006	Konermann, Lars	TOC am 08:30	Krasinska, Karolina M.	MP 217
Knapp, Daniel R.	MP 059	Konermann, Lars	TP 431	Krasnoselsky, Alexei	MOE pm 4:10
Knappe, Thomas A.	ThP 284	Konermann, Lars	TP 439	Krastins, Bryan	MP 016
Knapp-Mohammady, Michaela	TP 350	Konermann, Lars	TP 629	Krastins, Bryan	MP 048
Knepper, Mark	ThP 446	Konermann, Lars	TP 474	Krastins, Bryan	MP 123
Knepper, Ronald W.	MP 205	Konermann, Lars	WP 448	Krastins, Bryan	MP 607
Knief, Claudia	ThP 372	Kong, Xianglei	WP 425	Krastins, Bryan	WP 410
Knolhoff, Ann	TP 196	Kono, Yo	ThP 518	Krastins, Bryan	ThP 039
Knott, Christopher	MP 185	Kononikhin, Alexey	WP 369	Krawczyk, Sarah	TP 613
Knuechel, Ruth	WP 081	Kononikhin, Alexey	MP 053	Kraynov, Eugenia	MP 464
Knutzen, Laura	TOC pm 2:50	Kononikhin, Alexey	TP 508	Krechmer, Jordan	ThP 319
Knych, Heather	TP 393	Konzer, Anne	WP 558	Kreshuk, Anna	MP 057
Ko, Byoung Joon	MP 627	Koo, Abraham J. K.	MP 533	Kreshuk, Anna	WP 059
Koal, Therese	ThP 100	Kool, Arjan C.	ThP 437	Kresie, Knute	MP 656
Koal, Therese	MP 254	Koomen, John	MP 608	Kreuzer, Helen	TP 662
Kobayashi, Nobuhiro	MP 458	Koomen, John	MP 454	Kreuzer-Martin, Helen W.	TOG am 08:50
Kobielush, Brent	MP 154	Koomen, John	TP 611	Krieger, Caroline	ThP 644
Kobliha, Vaclav	TP 190	Kopka, Klaus	TP 240	Krijgsveld, Jeroen	Special
Kobs, Amanda J.	WP 005	Koppenaar, David W.	ThP 142	Krijgsveld, Jeroen	ThP 426
Koch, Boris P.	WP 583	Koranne, Priti	ThP 045	Krilich, Joan C.	WP 408
Koch, Joachim	MP 171	Korfmacher, Walter	TP 402	Krishnamurthy, Rajesh	ThP 566
Kochansky, Chris	MP 436	Korfmacher, Walter	ThOB pm 2:30	Kristal, Bruce	MP 040

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Kristensen, Gert H.....	TP 605	Kumondai, Kousuke.....	ThP 343	Lah, James J.....	WP 304
Krivos, Kady.....	ThP 419	Kunenkov, Erast.....	WP 369	Lahaie, Mathieu.....	ThP 362
Krizman, David B.....	TP 136	Kunkel, Thomas A.....	WP 446	Lahaie, Mathieu.....	ThP 364
Kroening, Karolin K.....	MOG am 10:10	Künemeyer, Jens.....	MOG am 09:10	Lahesmaa, Riitta.....	MP 089
Kroening, Karolin K.....	MOG am 08:50	Kuno, Atsushi.....	TP 526	Lahm, Hans-Werner.....	TP 313
Kroes, Roger A.....	WOC pm 2:30	Kuntumalla, Srilatha.....	ThP 515	Lai, Angeline.....	TP 098
Krogh, Erik T.....	ThP 604	Kunze, Juergen.....	MP 564	Lai, Chien-chen.....	TP 247
Krokhin, Oleg V.....	TP 315	Kuo, Jr Shin.....	WP 533	Lai, Christopher C.....	ThP 160
Krokhin, Oleg V.....	WP 524	Kuo, Jr Shin.....	MP 220	Lai, Lindsay.....	ThP 093
Krokhin, Oleg V.....	TP 002	Kuo, Kuan-Ting.....	TP 628	Lai, Raymond.....	WP 405
Krol, Jim.....	WP 577	Kuo, Ping-Chung.....	MP 590	Lai, Raymond.....	ThP 255
Krolik, Stefan.....	WP 587	Kuo, Ping-Chung.....	MP 585	Lai, Tsung-ching.....	TP 612
Kronenberg, Deborah.....	MP 087	Kuracina, Mark.....	ThP 599	Lai, Tsung-ching.....	TP 609
Kronenberg, Florian.....	ThP 079	Kurczy, Michael E.....	ThP 176	Lai, Tsung-Ching.....	MOB pm 2:30
Kronewitter, Scott.....	MP 485	Kuriyama, Naohiro.....	MP 447	Lai, Xianyin.....	MP 067
Kronewitter, Scott R.....	MP 478	Kurnosenko, Sergey.....	TP 383	Lai, Xianyin.....	MP 609
Kronewitter, Scott R.....	WOC pm 4:10	Kuromitsu, Junro.....	MP 044	Laird, James.....	MP 102
Kroto, Harold W.....	TP 283	Kurono, Sadamu.....	TP 006	Laird, James M.....	MP 226
Kruchinsky, Andrew N.....	ThP 345	Kurulugama, Ruwan.....	ThP 349	Laitaoja, Mikko.....	ThP 476
Krueger, Ingolf.....	WP 041	Kurulugama, Ruwan.....	TP 224	Lai-Zhang, Jie.....	ThP 587
Krueger, Marcus.....	WP 558	Kurzbaauer, Robert.....	TP 013	Lajoie, Gilles.....	MP 295
Kruft, Volker.....	TP 010	Kuschner, Karl W.....	WP 091	Lajoie, Gilles.....	MP 043
Krug, Edward L.....	WP 178	Kusebauch, Ulrike.....	ThP 439	Lajoie, Gilles.....	ThP 003
Krug, Karsten.....	WP 080	Kushnir, Mark M.....	WP 273	Lajoie, Gilles.....	ThP 496
Kruger, Warren.....	WP 111	Kussmann, Martin.....	TP 470	Lajoie, Gilles.....	MP 056
Kruglyak, Leonid.....	ThP 081	Kuster, Bernhard.....	ThP 296	Lakatta, Edward.....	WP 544
Kruglyak, Leonid.....	MP 039	Kuster, Bernhard.....	WP 555	Lake, Douglas.....	TP 083
Kruppa, Gary.....	TP 190	Kux van Geijtenbeek, Sabine.....	TP 313	Lallemand, Jean-Yves.....	ThP 563
Kruppa, Gary.....	TP 291	Kuyama, Hiroki.....	ThP 197	Lam, Henry H.....	WP 036
Kruppa, Gary.....	WP 179	Kuzyk, Michael.....	TP 030	Lam, Henry H.....	WP 521
Krutchinsky, Andrew.....	MP 140	Kuzyk, Michael.....	ThP 490	Lam, Henry H.....	TP 071
Krylov, Evgeny V.....	WP 203	Kuzyk, Michael A.....	WP 514	Lam, Justine.....	TP 396
Krylov, Evgeny V.....	WP 207	Kuzyk, Michael A.....	MOB pm 3:10	Lam, Ngor Wai.....	WP 673
Ku, Wei-Chi.....	WP 292	Kvaratskhelia, Mamuka.....	ThP 480	Lam, TuKiet T.....	WP 520
Ku, Wei-Chi.....	WP 289	Kwak, Jun Young.....	TP 335	Lam, Tukiet T.....	WP 506
Ku, Yunhyi.....	MP 090	Kwasnik, Mark.....	ThP 311	Lam, Wing W.....	MP 523
Kubaneck, Julia.....	ThP 311	Kwasnik, Mark.....	TP 222	LaMarche, Brian L.....	MP 333
Kubaneck, Julia.....	ThP 084	Kweon, Hye Kyong.....	ThP 510	Lamarche, Martine.....	MP 356
Kubatova, Alena.....	MP 664	Kwon, Hansoon.....	WP 274	Lamarr, William A.....	ThP 669
Kubicek, Christian P.....	ThP 384	Kwon, Hansoon.....	WP 577	Lamarr, William A.....	MP 438
Kubo, Ayumi.....	ThP 621	Kwon, Hyun-Jeong.....	TP 317	Lamarr, William A.....	ThP 677
Kubota, Kazuishi.....	ThP 441	Kwon, Kyung-Hoon.....	TP 090	Lammert, Stephen A.....	ThP 614
Kubota, Kazuishi.....	TOE pm 3:50	Kwon, Kyung-Hoon.....	ThP 429	Lammert, Stephen A.....	TOD pm 2:30
Kubota, Kazuishi.....	TP 024	Kwon, Tae-Hwan.....	TP 249	Lammie, Patrick.....	ThP 036
Kubwabo, Cariton.....	TP 602	Kwon, Yun Kyung (Sophia).....	ThOC am 08:50	Lamond, Angus.....	ThOF am 09:30
Kucherer, Shelly A.....	MP 128	Kyono, Yutaka.....	ThP 449	Lampron, Nancy.....	ThP 146
Kucklick, John R.....	TP 589	Kyung, Yun Seung.....	ThP 537	Lanaro, Rafael.....	WP 255
Kudryashov, Dmitri S.....	ThP 501	Labranche, Louis-philippe.....	WP 610	Land, Adrian P.....	WP 382
Kuennemeyer, Jens.....	TP 254	Labranche, Louis-philippe.....	WP 615	Lander, Adam.....	MP 170
Kuhn, Eric.....	MP 477	Labranche, Louis-philippe.....	ThP 144	Landgraf, Rachelle R.....	ThP 181
Kuhn, Jeffrey F.....	WP 447	Labrecque, David.....	TP 280	Landgraf, Rainer.....	MP 069
Kuhn, Karsten.....	MP 125	Labrijn, Aran F.....	TP 481	Lane, Amy L.....	ThP 311
Kuhn, Karsten.....	MP 474	Lachance, Sylvain.....	ThP 140	Lane, Andrew N.....	WP 124
Kuhn, Karsten.....	WP 009	Lachance, Sylvain.....	ThP 146	Lane, Catherine S.....	TP 505
Kuhn, Karsten.....	ThP 588	Lachance, Sylvain.....	ThP 137	Lane, Geoff A.....	MP 489
Kuhn, Peter.....	ThP 543	Lachance, Sylvain.....	ThP 151	Lane, William S.....	WP 065
Kuiper, Heather.....	MP 271	Lachance, Sylvain.....	ThP 148	Lane, William S.....	ThP 262
Kuiper, Heather.....	MP 535	Lachance, Sylvain.....	MP 378	Lane, William S.....	WP 141
Kuiper, Heather.....	MP 265	Lachance, Sylvain.....	WP 232	Lane, William S.....	Special
Kuipers, Hartmut.....	MOD pm 2:30	Lachance, Sylvain.....	MP 093	Lange, Oliver.....	MOD pm 2:30
Kuklennyik, Zsuzsanna.....	MP 422	Lachapelle, Nathalie.....	MP 093	Langen, Hanno.....	TP 313
Kulkarni, Ketav P.....	TP 337	Lacina, Ondřej.....	ThP 227	Langford, Vaughan.....	WP 592
Kullman, Michael.....	WP 660	Lacy, Eilyn.....	ThP 537	Langish, Robert.....	TOB am 09:10
Kumar, Chanchal.....	MP 599	Laczko, Endre.....	MP 014	Langlais, Paul.....	TP 626
Kumar, Naresh.....	ThOC am 08:30	Ladenson, Jack.....	ThP 551	Langley, G. John.....	WP 635
Kumar, Nirbhay.....	ThP 053	Ladwig, Karl H.....	ThP 079	Langley, G. John.....	WP 634
Kumar, Praveen.....	MP 239	Lafontaine, Catherine.....	MP 361	Langley, G. John.....	MP 167
Kumar, Rekha V.....	WP 525	Lafontaine, Catherine.....	WP 595	Langley, G. John.....	MP 430
Kumar, Rekha V.....	ThP 057	Lafontaine, Catherine.....	WP 269	Langley, G. John.....	TOA am 08:50
Kumar, Sameer.....	ThP 028	Lagman, Jo Ann J.....	MP 341	Lango, Jozsef.....	ThP 077
Kumar, Sameer.....	ThP 059	Lagna, William M.....	TP 660	Langridge, David.....	TP 220
Kumar, Sunil.....	TP 617	Lah, James J.....	ThOE pm 3:10	Langridge, James.....	MP 614



## INDEX OF AUTHORS

Langridge, Jim.....	ThP 432	Laue, Alexander.....	MP 186	Lebrilla, Carlito B. ....	ThOE am 09:50
Langridge, Jim.....	MP 619	Lauman, Richard.....	TP 422	Lecchi, Paolo.....	WP 112
Langridge, Jim.....	MP 148	Laura, Sutherland.....	TOC pm 3:10	Leclercq, Guy.....	TP 461
Langridge, Jim.....	TP 179	Lauricella, Robert.....	MP 178	Leclercq, Laurent.....	TP 577
Langridge, Jim.....	MP 635	Lauritsen, Frants R.....	TP 605	Leddy, Cecilia.....	MP 391
Langridge, Jim.....	ThP 109	Lavelle, Candice.....	MP 075	Leduc, Annie.....	WP 227
Langridge, Jim.....	TP 155	Lavigne, Damien.....	TP 096	LeDuc, Richard.....	MP 042
Langridge, Jim.....	MP 036	Lavigne, Régis.....	MP 141	Ledvina, Aaron.....	TP 368
Langridge, Jim.....	TP 542	Lavold, Thorleif.....	MP 505	Ledvina, Aaron.....	WOA pm 2:30
Langridge, Jim.....	TP 095	Lavold, Thorleif.....	ThP 479	Ledvina, Aaron.....	MP 628
Langridge, Jim.....	TP 039	Law, Hai Y.....	TP 098	Ledvina, Aaron.....	MP 626
Langridge, Jim.....	TP 513	Law, Wai Siang.....	TP 293	Ledvina, Aaron.....	WOC am 09:30
Langridge-Smith, Pat.....	TP 166	Lawrence, Nate.....	TP 125	Lee, Bong Hee.....	ThP 429
Langridge-Smith, Pat.....	ThP 573	Lawrence, Ross F.....	TP 291	Lee, Byung Kyu.....	MP 274
Langridge-Smith, Pat.....	WP 317	Lay, Jackson O.....	TP 490	Lee, Cheolju.....	MP 127
Langridge-smith, Pat.....	ThOF am 09:30	Lay, Jackson O.....	TP 433	Lee, Cheolju.....	TP 046
Langridge-smith, Pat.....	ThP 571	Lazar, Alexandru C.....	ThP 566	Lee, Chi-Yang.....	MP 180
Langsdorf, Brandi.....	MP 265	Lazar, Maria Iuliana.....	MP 476	Lee, David.....	MP 123
Langsdorf, Brandi L.....	MP 271	Lazarev, Alexander.....	TP 132	Lee, David.....	ThP 377
Langsdorf, Brandi L.....	MP 535	Lazarev, Alexander V.....	TP 129	Lee, Edgar.....	TOD pm 3:10
Langsdorf, Markus.....	WP 368	Lazarus, Rebecca M.....	ThOA pm 2:50	Lee, Edgar D.....	TP 373
Lanham, Kevin.....	ThP 601	Le, Chris.....	ThP 598	Lee, Gae Ho.....	ThP 500
Lanni, Eric J.....	ThP 606	Le, John C.....	WP 415	Lee, Gloria P.....	WP 260
Lapainis, Theodore.....	WP 117	Le, X. Chris.....	MOG pm 2:50	Lee, Hwami.....	WP 274
Lapek, John.....	TP 102	Le, X. Chris.....	ThP 597	Lee, Hyeyoung.....	MP 234
Lapierre, Pascal.....	ThP 116	Le Blanc, J.C. Yves.....	MP 625	Lee, Hyun.....	WP 406
Lapko, Veniamin.....	ThP 135	Le Caer, Jean Pierre.....	TP 096	Lee, Jacob.....	MP 368
Lappe, Joan.....	WP 090	Le Caer, Jean Pierre.....	ThP 563	Lee, Jeehiun.....	ThP 630
Laprevote, Olivier.....	TP 176	Le Faouder, Pauline.....	WP 278	Lee, Jeehiun K.....	ThP 631
Laprevote, Olivier.....	ThP 563	Le Grice, Stuart F.J.....	ThP 414	Lee, Jeehiun K.....	ThP 632
Laprévôte, Olivier.....	TP 096	Le Mignon, Maxime.....	WP 443	Lee, Jeong Hwa.....	ThP 429
Laprévôte, Olivier.....	WOA am 09:30	Leach III, Franklin E.....	ThOD pm 2:50	Lee, Jeong Hwa.....	TP 090
Laremore, Tatiana.....	TP 525	Leach III, Franklin E.....	TP 277	Lee, Jeong-Eun.....	TP 249
Laremore, Tatiana.....	ThOD pm 2:50	Leach III, Franklin E.....	TP 525	Lee, Jeonghoon.....	TP 381
Larina, Irina.....	MP 053	Leahy, Daniel J.....	TP 036	Lee, Jeongrim.....	MP 219
Larregola, Maud.....	ThP 660	Leahy, Mark.....	ThP 228	Lee, Jeongrim.....	TP 566
Larroque, Anne-Laure.....	MP 526	Leary, Julie A.....	TP 471	Lee, Jessica Y.....	TP 339
Larsen, Barbara S.....	TP 300	Leary, Julie A.....	ThP 278	Lee, Ji Eun.....	TP 150
Larsen, Barbara S.....	MOF am 09:50	Leary, Julie A.....	TP 216	Lee, Ji Eun.....	TOE am 09:50
Larsen, Barbara S.....	WOF pm 4:10	Leary, Julie A.....	ThP 256	Lee, Ji Eun.....	MP 135
Larsen, Brett.....	TP 008	Leary, Julie A.....	ThP 259	Lee, Ji Eun.....	ThP 461
Larsen, Brett.....	TP 509	Leary, Julie A.....	WOD am 08:50	Lee, Ji Eun.....	MOC pm 2:50
Larsen, Martin R.....	ThP 443	Leary, Julie A.....	WP 486	Lee, Ji Yoon.....	MP 090
Larsen, Martin R.....	WP 504	Leavitt, Christopher M.....	WP 662	Lee, Jong Won.....	MP 127
Larsen, Martin R.....	ThP 258	Lebedev, Albert.....	TP 604	Lee, Ju Yeon.....	TP 090
Larsen, Martin R.....	WP 398	Lebedev, Albert T.....	ThP 186	Lee, Jung-Min.....	WP 413
Larsen, Martin Rossel.....	TP 519	Lebedev, Albert T.....	TOB am 09:50	Lee, Kelvin H.....	MP 115
Larson, Doug F.....	ThOC am 09:10	LeBlanc, André.....	MP 520	Lee, Kelvin H.....	ThP 481
Larson, Timothy S.....	TP 253	LeBlanc, André.....	MP 182	Lee, Keu Chan.....	MP 209
Larson, Timothy V.....	ThP 604	Leblanc, J.C. Yves.....	MP 536	Lee, Kimberly.....	ThP 060
Larter, Steve.....	WP 640	Leblanc, J.C. Yves.....	ThP 505	Lee, Kimberly A.....	ThP 260
Lashin, Vitaly.....	WP 166	Leblanc, J.C. Yves.....	MP 473	Lee, Kwangwon.....	ThP 530
Laskay, Ünige A.....	ThP 390	Leblanc, J.C. Yves.....	MP 441	Lee, Kyung H.....	WP 413
Laskin, Julia.....	ThP 337	Leblanc, J.C. Yves.....	TP 062	Lee, Kyung S.....	WP 413
Laskin, Julia.....	WP 673	Leblanc, J.C. Yves.....	ThP 658	Lee, Lynn.....	WP 162
Later, Douglas W.....	TP 373	Leblanc, J.C. Yves.....	TP 561	Lee, M. Violet.....	TP 369
Laterza, Omar.....	WP 260	Leblanc, J.C. Yves.....	ThP 656	Lee, M. Violet.....	TP 512
latha, Khatri.....	ThP 297	Leblanc, J.C. Yves.....	TOB am 08:50	Lee, Manjui V.....	TP 261
Latham, Joey C.....	ThP 157	Leblanc, Yves G.....	WP 610	Lee, Maw-Rong.....	MP 556
Latham, Joey C.....	WP 180	Leblanc, Yves G.....	WP 615	Lee, Maw-rong.....	TP 324
Lathrop, Rick.....	TP 142	Leblanc, Yves G.....	ThP 144	Lee, Maw-rong.....	MP 362
Lattif, Ali A.....	TP 100	Lebre, Daniel.....	TP 580	Lee, Maw-Rong.....	TP 648
Latka, Eva.....	ThP 079	Lebre, Daniel.....	ThOB pm 2:50	Lee, Maw-Rong.....	MP 363
Latyshev, Sergey.....	TP 652	Lebre, Daniel.....	MP 267	Lee, Maw-Rong.....	WP 380
Lau, Jim.....	MP 397	Lebrilla, Carlito.....	WP 497	Lee, Michelle.....	MP 667
Lau, Serrine S.....	TP 624	Lebrilla, Carlito.....	TOC pm 3:50	Lee, Mi-Jin.....	WP 636
Lau, Serrine S.....	WP 179	Lebrilla, Carlito B.....	MOA am 09:10	Lee, Mike S.....	MP 475
Lau, Serrine S.....	ThP 565	Lebrilla, Carlito B.....	WP 473	Lee, Mike S.....	TP 633
Lauan, Maria Claret B.....	TP 087	Lebrilla, Carlito B.....	MP 485	Lee, Mike S.....	TP 161
Lauber, Matthew A.....	ThP 568	Lebrilla, Carlito B.....	MP 234	Lee, Mike S.....	TP 160
Laudicina, Don.....	MP 525	Lebrilla, Carlito B.....	WOC pm 4:10	Lee, Mike S.....	TP 151
Laudicina, Don.....	TP 502	Lebrilla, Carlito B.....	MP 478	Lee, Milton.....	ThOF pm 2:50

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Lee, Milton L. ....	ThOF pm 3:50	Lenz, Christof E. ....	WP 400	Li, Frank .....	TP 269
Lee, Minhee .....	TP 348	Lenz, Thomas .....	TP 145	Li, Fumin .....	MP 424
Lee, Ning-shiuan .....	ThP 649	Leonard, John .....	MP 215	Li, Guangtao .....	ThP 336
Lee, Ren-Jye .....	MP 363	Leonard, Leslie .....	ThP 104	Li, Guangtao .....	ThP 339
Lee, Richard S. ....	MP 070	Leonard, Susan .....	WP 252	Li, Guodong .....	ThP 088
Lee, Seon Hwa .....	ThP 286	Leonard, Susan .....	WP 577	Li, Guodong .....	ThP 087
Lee, Seon Hwa .....	TP 341	Leopold, Peter .....	WP 314	Li, Hong .....	TP 268
Lee, Seon Hwa .....	MP 152	Lepist, Eve-Irene .....	MP 432	Li, Hong .....	TP 544
Lee, Sunyoung .....	WP 200	Lerch, Christopher .....	MP 365	Li, Hong .....	WP 284
Lee, Terry .....	ThP 277	Letarte, Michael .....	TOC pm 2:30	Li, Hong .....	WP 290
Lee, Terry .....	WP 523	Lerno, Larry .....	MP 234	Li, Hong .....	WP 011
Lee, Theresa .....	TP 422	Lerno, Larry .....	MOA am 09:10	Li, Hongyan .....	MP 455
Lee, W. Paul .....	WP 090	LeRoy, Gary .....	TOE pm 3:30	Li, Jiangwei .....	ThP 168
Lee, W. Paul .....	ThP 128	Lesage, Denis .....	ThP 653	Li, Jianjian .....	WP 305
Lee, W. Paul .....	WP 094	Lesage, Denis .....	TOF am 09:50	Li, Jianjun .....	WP 484
Lee, Wan-Li .....	WP 331	Letarte, Simon .....	ThP 043	Li, Jianjun .....	MP 112
Lee, Wei-Han .....	TP 169	Letarte, Simon .....	WP 087	Li, Jianqiang .....	MP 615
Lee, Won-Yong .....	WP 573	Letarte, Simon .....	WP 559	Li, Jing .....	MP 232
Lee, Yen-Bor .....	MP 266	Letarte, Sylvain .....	MP 106	Li, Jing .....	WP 017
Lee, Yong-Moon .....	TP 335	Leth-Larsen, Rikke .....	TP 519	Li, Jing .....	ThP 430
Lee, Young .....	ThP 648	Leung, David K.K. ....	WP 581	Li, Jinghu .....	MP 541
Lee, Young Jin .....	WP 441	Leung, Kwan .....	MP 432	Li, Jinghu .....	TP 415
Lee, Young Jin .....	WOA am 09:50	Leung, Kwan .....	ThP 664	Li, Jinxi .....	WP 282
Lee, Young Jin .....	ThP 072	Leung, Wilson .....	ThP 547	Li, Jinxi .....	MP 392
Lee, Young Jin .....	WP 632	Levander, Fredrik .....	Special	Li, Jiwen .....	ThP 645
Lee, Yuan T. ....	TP 641	Levander, Fredrik .....	Special	Li, Jui-Ping .....	WP 192
Lee, Yuan-Chuan .....	MP 491	Leverence, Rachael .....	WP 387	Li, Jun .....	ThP 475
Lee, YuanYu .....	TP 556	Levesque, Ann .....	WP 232	Li, Ke .....	TP 574
Lee, Yvonne .....	WP 470	Levesque, Ann .....	ThP 146	Li, Lan .....	MP 415
Lee-Parsons, Carolyn .....	ThP 141	Levesque, Ann .....	ThP 148	Li, Lei .....	MP 288
Leeuwenburgh, Christiaan .....	TP 322	Levesque, Ann .....	ThP 151	Li, Lei .....	WP 088
Lefebvre, Johanne .....	ThP 151	Levesque, Ann .....	ThP 137	Li, Lei .....	ThP 120
Leff, Richard .....	MP 268	Levesque, Ann .....	ThP 140	Li, Li .....	TP 009
Lefkowitz, Robert .....	TP 024	Levesque, Ann .....	MP 378	Li, Liang .....	MP 247
Lefort, Natalie .....	TP 626	Levesque, Ann .....	WP 232	Li, Liang .....	MP 457
Lefsrud, Mark .....	ThP 389	Levesque, Jean-Francois .....	ThOB am 08:30	Li, Liang .....	MP 294
Legay, Francois .....	TP 506	Levey, Allan I. ....	ThOE pm 3:10	Li, Liang .....	WP 549
Legay, Francois .....	TOB am 10:10	Levey, Allan I. ....	WP 304	Li, Liang .....	WP 104
Léger, Thibaut .....	TP 096	Levin, Seth N. ....	ThP 380	Li, Liang .....	ThP 102
Legesse-Miller, Aster .....	WP 102	Levinson, Rebecca .....	WP 084	Li, Liang .....	ThP 098
Lehman-Mckeeman, Lois .....	WOB am 09:10	Lewandrowski, Urs .....	ThP 509	Li, Liang .....	WP 107
Lehmann, Wolf D. ....	MP 057	Lewer, Paul .....	WP 372	Li, Liang .....	TP 066
Lehner, Caryn L. ....	WP 408	Lewis, Avalyn .....	WP 107	Li, Liang .....	ThP 255
Lei, Ming .....	WOC pm 3:30	Lewis, Darren F. ....	ThP 104	Li, Liang .....	WP 405
Lei, Zhentian .....	TP 105	Lewis, Derrick L. ....	ThP 374	Li, Liang .....	TP 107
Leib, Ryan D. ....	ThOD am 08:30	Lewis, Ernest K. ....	WOD am 09:30	Li, Liang .....	TP 011
Leib, Ryan D. ....	TOF am 09:30	Lewis, Ernest K. ....	TP 205	Li, Liang .....	MP 012
Leib, Ryan D. ....	WP 233	Lewis, Ernest K. ....	TOG am 10:10	Li, Lily .....	WP 562
Leidner, Samantha .....	MP 663	Lewis, Ernest K. ....	TP 204	Li, Lily .....	ThP 595
Leinweber, Barbara .....	WP 179	Lewis, Kathleen .....	MP 142	Li, Lily .....	TP 018
Leiserowitz, Gary S. ....	WOC pm 4:10	Lewis, Ken .....	WP 261	Li, Lin .....	WP 536
Leissring, Malcolm A. ....	MP 136	Lewis, Ken .....	TP 259	Li, Lingjun .....	ThP 465
Leitzinger, Thomas .....	MP 157	Lewis, Ken .....	ThP 321	Li, Lingjun .....	ThP 004
Leize-Wagner, Emmanuelle .....	TP 482	Lewis, Sam .....	ThP 607	Li, Lingjun .....	MP 010
Lemaire, Joel .....	ThOF am 08:50	Leymarie, Nancy .....	WOC pm 2:50	Li, Lingjun .....	ThP 601
Lemaire, Joel .....	MOF pm 3:50	Leymarie, Nancy .....	MP 479	Li, Lingjun .....	TP 172
Lemaire, Pascale .....	WP 032	Leymarie, Nancy .....	WP 490	Li, Lingjun .....	WP 183
Lemaire, Pascale .....	WP 184	Li, Aiqun .....	WP 093	Li, Lingjun .....	WP 071
Lembcke, Jan .....	TP 323	Li, Austin .....	MP 428	Li, Lingjun .....	ThP 460
Lemeer, Simone M. ....	ThP 296	Li, Bensheng .....	TOC pm 2:30	Li, Lingjun .....	WP 078
Lemeer, Simone M. ....	WP 555	Li, Bensheng .....	WP 286	Li, Lingjun .....	ThP 469
Lemieux, Sébastien .....	ThP 434	Li, Bin .....	TP 098	Li, Lingyun .....	MP 215
Lemoine, Jérôme .....	MP 126	Li, Chao .....	WP 569	Li, Lin-sheng .....	ThP 062
Lemoine, Pascal .....	TP 595	Li, Chao .....	ThP 082	Li, Long .....	ThP 034
Lemoine, Pierrick .....	ThOA am 09:10	Li, Chen .....	WP 054	Li, Long .....	TP 061
Lemr, Karel .....	TP 190	Li, Chen .....	WP 507	Li, Mei .....	MP 366
Lendal, Sara Eun .....	WP 504	Li, Chunyan .....	TP 123	Li, Mingxi .....	TP 261
Lennon, John .....	ThP 097	Li, Chunyan .....	ThP 193	Li, Qiang .....	ThP 470
Lenz, Christof .....	TP 010	Li, Donghai .....	WP 435	Li, Qing-run .....	TP 001
Lenz, Christof .....	MP 598	Li, Fangbiao .....	MP 397	Li, Rong .....	TP 336
Lenz, Christof .....	WP 015	Li, Fangbiao .....	TP 202	Li, Rong-xia .....	TP 001
Lenz, Christof E. ....	MP 126	Li, Fengping .....	MP 519	Li, Shaojuan .....	ThOE am 09:30

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Li, shaojuan	TP 540	Liao, Pei-Yu	ThP 481	Lin, Erika	TP 171
Li, Shaojuan	WP 039	Liao, Sylvain	MP 491	Lin, Han-Jia	ThP 421
Li, Shaoyong	ThP 367	Liao, Wei-Li	WP 417	Lin, Hsin-Hung	WP 582
Li, Shuping	ThP 370	Liao, Zhongping	WP 001	Lin, Hua	MP 113
Li, Shuwei	TP 004	Liao, Zhongping	WP 692	Lin, Hua	ThP 056
Li, Siwei	ThP 405	Liao, Zhongping	WP 025	Lin, Hua	MP 239
Li, Susan	MOB am 08:30	Libardoni, Mark	ThP 092	Lin, Hua	MP 076
Li, Tingting	ThP 630	Libardoni, Mark	WP 103	Lin, Huan-Chang	WP 582
Li, Tuo	ThP 346	Libardoni, Mark	TP 649	Lin, Jeffrey	ThP 387
Li, Wei	MP 102	Libardoni, Mark	ThP 187	Lin, Jianrong	ThP 671
Li, Wensheng	ThP 078	Libault, Marc	TP 105	Lin, Jia-Yi	MP 321
Li, Wenying	TOA pm 2:50	LiChan, Xiao-xian	TP 347	Lin, Jung-Lee	WP 310
Li, Xiangdong	WP 061	Lichter, Peter	WP 031	Lin, Keh-Liang	TP 648
Li, Xiao Chuan	WP 379	Lichti, Cheryl F.	TP 157	Lin, Longze	WP 386
Li, xiaodong	MP 347	Licinio, Julio	WP 524	Lin, Mei-wun	ThP 674
Li, Xiaojuan	ThP 275	Liebler, Daniel C.	ThP 114	Lin, Pei-yi	MP 023
Li, Xiaojuan	ThOD am 09:10	Liebler, Daniel C.	WP 522	Lin, Pei-yi	TP 035
Li, Xiaojuan	MP 285	Liebler, Daniel C.	TP 074	Lin, Po-Chiao	WP 229
Li, Xiaojuan	ThP 272	Liebler, Daniel C.	TP 079	Lin, Po-Chiao	MPZ 573
Li, Xiaoqing	ThP 666	Liebler, Daniel C.	WP 518	Lin, Po-Chiao	ThP 271
Li, Xiaoqing	TP 659	Lienemann, Charles-Philippe	WP 647	Lin, Po-Chiao	MPZ 574
Li, Xiao-xu	MP 198	Liepold, Lars	TP 477	Lin, Qishan	MP 077
Li, Xing-fang	WP 599	Liepold, Lars O.	TP 478	Lin, Shanhua	MP 113
Li, Xing-Fang	MP 346	Lieske, John C.	TP 253	Lin, Shanhua	MP 076
Li, Xing-fang	WOG pm 3:50	Liffbrig, Lizz	WP 069	Lin, Shujun	TP 553
Li, Xin-Ming	TP 085	Lifton, Richard P.	TOE pm 2:30	Lin, Song	TP 585
Li, Xue	TP 024	Lightfield, Alan R.	WP 359	Lin, Tao	TP 301
Li, Yan	ThOE pm 2:30	Ligtenberg, Antoon J.M.	TOC pm 3:30	Lin, Tao	MP 201
Li, Yan	TP 628	Liguori, Michael	ThP 587	Lin, Tin-Wei	ThP 421
Li, Yan	MP 490	Lih, Fred Bjorn	MP 306	Lin, Tzu-yung	WP 327
Li, Yi-Che	ThP 271	Likens, Jane	TP 372	Lin, Tzu-Yung	ThP 275
Li, Yifan	TP 166	Lill, Jennie	MP 062	Lin, Tzu-Yung	MP 205
Li, Yifan	WP 317	Lill, Jennie	WP 016	Lin, Tzu-yung	ThP 272
Li, Yi-Jia	ThP 277	Lill, Jennie	ThP 005	Lin, Tzu-yung	MP 285
Li, Ying	MP 419	Lilley, Kathryn S.	TP 535	Lin, Tzu-yung	ThP 578
Li, Ying	MP 339	Lilley, Kathryn S.	Special	Lin, Wen-peng	MP 266
Li, Ying	MP 437	Lilley, Kathryn S.	MOE am 08:50	Lin, Ya-Shiuan	TP 248
Li, Yixue	ThP 079	Lillie, James	MOC pm 3:10	Lin, Yihui	TP 267
Li, Yong	TP 045	Lillie, Jim	MP 215	Lin, Young C.	ThP 038
Li, Yong-Xi	TP 493	Lim, Chae-mi	TP 317	Lin, Zhen	MOB am 08:30
Li, Yong-Xi	ThP 240	Lim, Dong Wan	TP 064	Lin, Zhongping (John)	TP 399
Li, You	WP 043	Lim, Dong Wan	WP 377	Lin, Zhongping (John)	TP 410
Li, You	ThP 025	Lim, H. K.	WP 562	Lin, Zhongping John	TP 398
Li, You	TP 058	Lim, H.K.	ThP 595	Lin-Cereghino, Geoffrey	ThP 547
Li, Zhen	ThP 169	Lim, Heng-Keang	TP 569	Lin-Cereghino, Joan	ThP 547
Li, Zhen	TP 196	Lim, Heng-keang	MP 537	Lindenmuth, Mike	ThP 357
Li, Zhiguo	ThP 547	Lim, Jihyeon	TP 543	Linding, Rune	ThP 426
Li, Zhili	WP 464	Lim, Jinkyu	TP 087	Lindman, Susanna	WP 519
Li, Zhili	ThP 555	Lim, Kheng B.	MP 374	Lindqvist, Staffan	WP 519
Li, Zhiyu	MP 483	Lim, Shu	ThP 128	Lindstrom, Andrew B.	WP 602
Li, Zhong	MP 665	Limbach, Patrick A.	MOG am 10:10	Lindstrom, Andrew B.	TP 586
Liang, Feng	MP 405	Limbach, Patrick A.	ThP 419	Lineberger, W. Carl	ThP 634
Liang, Hongkun	TP 397	Limbach, Patrick A.	ThP 397	Ling, Sui Kong	WP 383
Liang, Hongkun	TP 407	Limbach, Patrick A.	ThP 561	Ling, Victor	TP 316
Liang, Hongkun	MP 413	Limbach, Patrick A.	ThP 405	Ling, Victor	ThP 548
Liang, Hongkun	TP 390	Lin, Cheng	MP 205	Ling, Yonghua	ThP 149
Liang, Hongkun	MP 417	Lin, Cheng	ThP 275	Ling, Zhiqiang	MP 620
Liang, Hongkun	MP 410	Lin, Cheng	ThP 014	Linhardt, Robert J.	TP 525
Liang, Hsin-Hui	ThP 317	Lin, Cheng	ThP 578	Linhardt, Robert J.	ThOD pm 2:50
Liang, Songping	WP 090	Lin, Cheng	ThOD am 09:10	Linington, Roger	ThP 013
Liang, Xiaorong	MP 359	Lin, Cheng	MP 285	Link, Sebastian	TP 620
Liang, Yong	TP 003	Lin, Cheng	ThP 272	Link, Sebastian	MP 618
Liang, Yong	ThP 051	Lin, Cheng-Ying	WP 416	Linne, Uwe	ThP 284
Liang, Yuxue	MP 668	Lin, Chenwei	MOE pm 4:10	Linstrom, Peter	MP 662
Liang, Zhenmin	WP 343	Lin, Chia-wei	TP 520	Linstrom, Peter J.	WP 686
Liangpunsakul, Suthat	MP 609	Lin, Chun-Cheng	MPZ 574	Liotta, Lance	MP 129
Liao, Chung-lin	WP 512	Lin, Chun-Cheng	ThP 271	Liotta, Lance	WP 074
Liao, Debra	ThP 369	Lin, Chun-Cheng	WP 229	Liotta, Lance A.	ThP 437
Liao, Debra	WP 334	Lin, Chun-Cheng	MPZ 573	Lipert, Maya	ThP 650
Liao, Hua-Xin	TOC pm 3:10	Lin, Chun-Hung	MPZ 574	Lippa, Carol F.	ThP 246
Liao, Jie	WP 355	Lin, Chun-Hung	ThP 274	Lipson, Rebecca	TOE am 09:30
Liao, Pao-chi	ThP 264	Lin, De	ThP 114	Lipton, Mary	TOA am 08:30

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Lipton, Mary.....	WP 144	Liu, Xiaoyan.....	WP 303	Lohmann, Wiebke.....	MP 522
Lipton, Mary S.....	TOA am 09:10	Liu, Xin.....	MP 112	Lohnes, Karen.....	ThP 212
Lipton, Mary S.....	ThOE am 10:10	Liu, Xuewu.....	TP 592	Lohrig, Katharina.....	ThP 509
Lipton, Mary S.....	ThOE pm 4:10	Liu, Yan-hui.....	ThP 550	Lohstroh, Pete.....	MOA pm 2:50
Lipton, Mary S.....	ThP 027	Liu, Yansheng.....	MP 339	Lomeli, Shirley.....	ThOC pm 3:10
Lipton, Mary S.....	TP 125	Liu, Yansheng.....	MP 419	Lomeli, Shirley H.....	WP 453
Lisacek, Frederique.....	TP 251	Liu, Yashu.....	ThP 253	London, Robert E.....	ThP 485
Lisacek, Frederique.....	WP 165	Liu, Yashu.....	TP 034	Long, Yaoling.....	TP 453
Lishko, Polina V.....	MP 238	Liu, Yashu.....	MP 085	Long, Ying.....	ThP 107
Little, Mark.....	ThP 323	Liu, Ying.....	ThP 370	Longino, Marc A.....	ThP 225
Litwin, Samuel.....	TP 085	Liu, Ying.....	ThP 666	Loo, Joseph A.....	TP 517
Liu, Alvin.....	TOC pm 2:50	Liu, Ying.....	WP 187	Loo, Joseph A.....	MOC pm 2:30
Liu, Ang.....	MP 465	Liu, Ying.....	TP 659	Loo, Joseph A.....	ThP 501
Liu, Bo-Hong.....	TP 641	Liu, Yinghua.....	WP 355	Loo, Joseph A.....	TP 458
Liu, Chao.....	ThP 025	Liu, Yong.....	ThP 403	Loo, Joseph A.....	WP 463
Liu, Chao.....	TP 058	Liu, Yongzhen.....	MOG pm 2:30	Loo, Joseph A.....	WP 453
Liu, Chao-Zong.....	ThP 546	Liu, Yuan.....	TP 548	Loo, Joseph A.....	MP 296
Liu, Cheng Bin.....	WP 533	Liu, Yu-Hong.....	TP 439	Loo, Joseph A.....	ThOC pm 3:10
Liu, Cheng Bin.....	MP 220	Liu, Zhenjiu.....	ThP 072	Loo, Joseph A.....	ThP 323
Liu, Chongdong.....	ThP 051	Liu, Zhenjiu.....	WOA am 09:50	Loo, Joseph A.....	WP 495
Liu, Fan.....	WP 433	Liu, Zhenke.....	WP 472	Loo, Rachel O.....	ThP 323
Liu, Fang.....	WP 132	Liu, Zhi.....	ThP 219	Loo, Rachel O.....	MP 296
Liu, Fei.....	ThP 224	Liu, Zhongfa.....	ThP 149	Loo, Rachel O.....	ThOC pm 3:10
Liu, Fei.....	MP 164	Liuni, Peter.....	ThP 112	Lopez, Linda.....	WP 637
Liu, Guowen.....	ThP 229	Livett, Bruce G.....	ThP 195	Lopez, Mary.....	MP 129
Liu, Guowen.....	ThP 230	Livi, Valeria.....	TP 423	Lopez, Mary.....	WP 410
Liu, Haichuan.....	WP 150	Livson, Yuliya.....	ThP 219	Lopez, Mary.....	TP 628
Liu, Haichuan.....	TOC pm 2:30	Liyanage, Rohana.....	TP 490	Lopez, Mary F.....	ThP 039
Liu, Hsiao-Ching S.....	ThP 453	Liyanage, Rohana.....	TP 433	Lopez, Mary F.....	ThP 695
Liu, Hsiao-Ching S.....	TP 019	Liyu, Andrei.....	WP 051	Lopez, Mary F.....	MP 048
Liu, Hua-fen.....	MP 517	Liyu, Andrei.....	ThP 103	Lopez, Mary F.....	MP 123
Liu, Hua-fen.....	MP 429	Lloyd, Adrian J.....	WP 428	Lopez, Mary F.....	MP 607
Liu, Hua-fen.....	TP 421	Lloyd, John.....	MP 143	Lopez, Mary F.....	MP 016
Liu, Hua-fen.....	MP 443	Lloyd, John.....	ThP 111	Lopez Ferrer, Daniel.....	TP 125
Liu, Huiling.....	WP 355	Lloyd, John R.....	TP 634	Lopez Ferrer, Daniel.....	ThP 103
Liu, Jane.....	ThP 230	Lloyd, Julie.....	MP 314	López Ferrer, Daniel.....	MP 290
Liu, Jenna-Jiangjiang.....	TP 431	Lloyd, Julie A.....	ThOG am 09:10	Lopez-Avila, Viorica.....	WP 382
Liu, Jian.....	ThP 206	Lo, Andy.....	TP 011	Lopez-Ferrer, Daniel.....	TP 232
Liu, Jian.....	TP 170	Lo, Andy.....	MP 012	López-Ferrer, Daniel.....	ThP 104
Liu, Jie.....	ThP 598	Lo, Andy.....	MP 457	LoPresti, Mary.....	WP 506
Liu, Jie.....	MOG pm 2:50	Lo, Andy.....	WP 549	Lord, Susan T.....	WP 439
Liu, Lei.....	ThP 079	Loadman, Paul M.....	TP 198	Lorenz, Matthias.....	MP 304
Liu, Li.....	TP 548	Lobanova, Ekaterina S.....	MP 238	Lorenz, Matthias.....	MP 319
Liu, Luke.....	MP 164	Lobel, Peter.....	WP 003	Lorenz, Matthias.....	TP 642
Liu, Luna.....	MP 391	Lobinski, Ryszard.....	WP 651	Lorenzen, Kristina.....	MOC am 08:30
Liu, Miao.....	TP 550	Lobinski, Ryszard.....	WP 647	Lorenzen, Kristina.....	TP 460
Liu, Min.....	ThP 630	Loboda, Alexandre.....	WP 652	Lorenzo Tejedor, Mónica.....	WP 391
Liu, Mingshun.....	ThP 390	Loboda, Alexandre.....	ThP 628	Loriau, Matthieu.....	WP 617
Liu, Ning.....	WP 088	Loboda, Alexandre.....	ThP 616	Lorimer, George H.....	TP 459
Liu, Peiran.....	ThP 282	Loboda, Alexandre.....	MP 625	Lorsong, Aaron.....	WP 526
Liu, Peiran.....	ThP 577	Loboda, Alexandre.....	MP 146	Lößner, Christopher.....	WP 031
Liu, Pengyuan.....	ThP 642	Loboda, Alexandre.....	MP 536	Lotspeich, Erica.....	TP 292
Liu, Qinfeng.....	TP 079	Loboda, Alexandre.....	WOD pm 2:30	Lott, Christian.....	ThP 391
Liu, Qingyuan.....	WP 279	LoBrutto, Rosario.....	MP 502	Lotze, Michael T.....	MP 128
Liu, Richard Z.....	TP 611	Lochner, Adriane.....	MP 297	Lou, Xinghua.....	ThP 016
Liu, Rihe.....	MP 597	Lochner, Adriane.....	TOA am 09:50	Louie, Brent.....	WP 047
Liu, Roy.....	WP 041	Lock, Chris.....	MP 536	Louie, Brent.....	WP 057
Liu, Shuying.....	ThP 393	Lock, Stephen J.....	MP 549	Louie, Brent.....	ThP 130
Liu, Siqi.....	WP 283	Lock, Stephen J.....	TP 599	Louis, Justin Vijay.....	WOA am 10:10
Liu, Siqi.....	ThP 196	Lock, Stephen J.....	TP 505	Love, Craig.....	MP 449
Liu, Suyu.....	ThP 496	Lockett, Mathew R.....	ThP 519	Lovell, Mark.....	MP 046
Liu, Tao.....	WP 552	Lockyer, Nicholas P.....	WOD pm 2:50	Lovell, Mark A.....	WP 010
Liu, Tiffany.....	TP 085	Lodder, Helen.....	MP 372	Lovell, Mark A.....	MP 225
Liu, Ting.....	ThP 531	Lodder, Helen.....	ThP 357	Lovely, Derek.....	WP 144
Liu, Tong.....	TP 268	Lodder, Helen.....	MP 370	Lovestone, Simon.....	MP 125
Liu, Tong.....	TP 544	Loffredo, Christopher.....	TP 099	Lowe, Nick.....	TP 535
Liu, Tong.....	WP 011	Loftus, Neil.....	ThP 093	Lowenthal, Mark S.....	WP 101
Liu, Tong.....	WP 290	Loftus, Neil.....	WP 376	Lowenthal, Mark S.....	WP 096
Liu, Tong.....	WP 284	Loftus, Neil J.....	MP 252	Lowndes, Noel.....	ThP 505
Liu, Wei-ting.....	ThP 013	Logan, Susan.....	TP 516	Lu, Amy.....	MP 130
Liu, Xiaowen.....	WOE am 09:50	Loh, John T.....	WP 030	Lu, Bingwen.....	TP 097
Liu, Xiaowen.....	ThP 024	Lohi, Olli.....	ThP 476	Lu, Cheryl.....	ThP 540

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Lu, Ke.....	ThP 486	Luo, Yang.....	ThP 346	Maccoss, Michael J.....	ThP 473
Lu, Meiling.....	MOG pm 2:50	Lupton, Sara J.....	TP 598	Macdonald, Matthew L.....	WP 540
Lu, Peng.....	ThP 180	Lusic, Jelena.....	MP 334	Macdonald, Matthew L.....	TP 492
Lu, Tao.....	WP 296	Luther, George.....	ThP 655	Macdonald, Timothy L.....	MP 519
Lu, Tian-sheng.....	TP 493	Luther, George.....	ThP 652	MacDonald, Tobey.....	ThP 047
Lu, Tian-Sheng.....	ThP 240	Lutz, Ryan.....	TP 394	MacDonald, Tobey.....	TP 328
Lu, Weiya.....	ThP 466	Lutzke, Barry.....	WP 160	MacDonald, Tobey J.....	ThP 061
Lu, Wenyun.....	WOB am 10:10	Lutzke, Barry S.....	TOB pm 2:50	Macek, Boris.....	WP 080
Lu, Xiaojun.....	ThP 567	Lutzke, Barry S.....	MP 272	Mach, Robert.....	ThP 384
Lu, Xiufen.....	MOG pm 2:50	Lv, Xiaoxing.....	WP 355	Macha, Stephen F.....	TP 135
Lu, Ying-Wei.....	MPZ 573	Ly, Tony.....	MOF am 09:10	Macha, Stephen F.....	MP 224
Lu, Ying-Wei.....	WP 229	Lydic, Todd A.....	TOB pm 4:10	Macher, Bruce.....	TP 073
Lu, Yu.....	ThOE am 09:30	Lygrisse, Justin.....	WP 275	Macherone, Anthony.....	WP 593
Lu, Zhuang.....	ThP 243	Lynch, Tom.....	TOA am 08:50	Macht, Marcus.....	MP 047
Lubeck, Markus.....	MP 151	Lynch, Tom.....	WP 634	Macht, Marcus.....	WP 605
Lubeck, Markus.....	ThP 620	Lynch, Tom.....	WP 635	Machtejevas, Egidijus.....	WP 335
Lubeck, Markus.....	WP 555	Lynn, Aenoch.....	ThP 021	Mackay, C. Logan.....	ThP 573
Lubeck, Markus.....	MP 203	Lynn, Bert C.....	WP 010	Mackay, C. Logan.....	TP 166
Lubeck, Markus.....	MP 017	Lynn, Bert C.....	MP 225	Mackay, C. Logan.....	ThOF am 09:30
Lubman, David M.....	WP 511	Lynn, Bert C.....	MP 046	Mackay, C. Logan.....	WP 317
Lubman, David M.....	WP 054	Lyon, Carla.....	WP 590	Mackay, C. Logan.....	ThP 571
Lubman, David M.....	ThP 253	Lyons-Weiler, James.....	TP 049	Mackie, Ken.....	ThOA 3:10
Lubman, David M.....	MP 587	M, Vijayakumar.....	WP 525	MacKintosh, Carol.....	TP 091
Lubman, David M.....	MP 085	M. A. von Kruger, Wanda.....	ThP 379	Mackintosh, Samuel G.....	WP 459
Lubman, David M.....	MP 082	M. Bisch, Paulo.....	ThP 379	Maclean, Brendan.....	MOE am 09:50
Lubman, David M.....	TP 034	M. Nogueira, Eduardo.....	ThP 379	Maclean, Brendan.....	ThP 019
Lubman, David M.....	WP 507	M. Silva, Washington.....	MP 165	Maclean, Brendan.....	Special
Lubman, David M.....	MP 071	Ma, Baijing.....	WP 385	Maclean, Brendan.....	TP 040
Lubman, David M.....	MP 066	Ma, Bin.....	WOB am 09:50	Maclean, Brendan.....	MP 048
Luc, Gérard.....	WP 515	Ma, Bin.....	MP 056	Macleod, Veronica.....	TP 618
Lucas, Joseph.....	MOE pm 3:50	Ma, Bin.....	ThP 003	MacLeod, Veronica.....	MP 041
Lucas, Stéphane.....	WP 630	Ma, Bin.....	MP 043	Macneill, Robert.....	ThOB pm 2:50
Luchko, Tyler.....	TP 448	Ma, Bin.....	ThP 024	Madalinski, Geoffrey.....	ThP 066
Lucka, Adam W.....	TP 217	Ma, Bin.....	MP 295	Madalinski, Mathias.....	TP 013
Lucka, Adam W.....	ThP 538	Ma, Hong.....	ThP 438	Madan, Ajay.....	TP 502
Luckey, C. John.....	ThOE am 09:30	Ma, Ji.....	TP 563	Madan, Ajay.....	MP 525
Ludden, Peter J.....	ThP 278	Ma, Ji.....	TP 421	Madayiputhiya, Nandakumar.....	WP 692
Luethy, Ronald.....	ThP 001	Ma, Jun.....	ThP 007	Madden, Michael C.....	WP 591
Lührmann, Reinhard.....	ThP 420	Ma, Kang.....	WP 381	Madeira, Marlene de Freitas.....	WP 253
Lührmann, Reinhard.....	WP 140	Ma, Li.....	ThOB pm 3:30	Madeira, Marlene de Freitas.....	WP 251
Lührmann, Reinhard.....	WP 015	Ma, Li.....	TOB am 08:30	Madera, Milan.....	ThP 046
Lui, Houfu.....	MP 443	Ma, Michael.....	ThP 237	Madera, Milan.....	MP 488
Lui, Winnie.....	TP 388	Ma, Michael.....	MP 377	Madlinger, Casey.....	TP 554
Lui, Winnie.....	TP 391	Ma, Mingming.....	ThP 004	Madsen, James.....	MP 628
Lui, Winnie.....	MP 342	Ma, Yanhe.....	ThP 196	Madsen, James.....	TP 368
Luider, Theo.....	TP 146	Ma, Yinfa.....	TP 603	Madsen, James.....	TP 362
Luider, Theo M.....	TP 094	Ma, Yinfa.....	MOG pm 4:10	Madsen, James.....	WOC am 09:30
Luider, Theo M.....	MP 616	MA, Yuliang.....	ThP 492	Madsen, James.....	MP 626
Luider, Theo M.....	MP 087	Ma'ayan, Avi.....	TP 546	Maeda, Masahiro.....	MP 400
Luider, Theo M.....	WP 554	Maarouf, John Sami.....	MPZ 577	Maeda, Masahiro.....	TP 584
Luider, Theo M.....	TP 078	Maas, Jeff.....	MOD pm 3:30	Maekawa, Tetsuya.....	WP 675
Luippold, Andreas H.....	MOB am 10:10	Maat, Peter.....	TP 146	Maerk, Lukas.....	ThP 344
Luk, C. Emily.....	TP 582	Macagno, Eduardo R.....	TP 175	Maestri, Thomas.....	ThP 156
Luk, Chiuwa Emily.....	MP 401	MacAleese, Luke.....	WP 195	Magera, Mark J.....	TP 257
Luk, Chiuwa Emily.....	TOB am 09:10	Macaleese, Luke.....	WOD pm 2:50	Magnes, Christoph.....	WP 572
Lukaszkuk, Aneta.....	ThP 660	MaCaese, Luke.....	TP 200	Magnusson, Olafur P.....	MOB am 09:30
Luke, Brian.....	MP 052	Maccarrone, Giuseppina.....	MP 069	Magparangan, Daniel P.....	MP 503
Lunardi, Thomas.....	ThP 244	MacCormack, Tyson J.....	WP 549	Maguigad, Jacob.....	MP 424
Lund, Troy C.....	WP 005	Maccoss, Michael J.....	MOE am 09:50	Mahan, Elizabeth A.....	TP 418
Lund-Katz, S.....	TOG pm 2:30	Maccoss, Michael J.....	MP 149	Mahoney, Douglas.....	MP 094
Lundberg, Kathleen C.....	TP 017	Maccoss, Michael J.....	MP 029	Mahoney, Douglas.....	ThP 054
Lundin, Ulrika.....	TP 118	Maccoss, Michael J.....	TP 040	Mahsut, Ablatt.....	MOD am 10:10
Lunsford, Kyle A.....	WP 485	Maccoss, Michael J.....	MP 147	Maier, Claudia.....	TP 442
Luo, Chan.....	MP 198	Maccoss, Michael J.....	ThP 019	Maier, Claudia.....	MP 277
Luo, Jie.....	MOE am 09:30	MacCoss, Michael J.....	MP 049	Maier, Claudia.....	TP 022
Luo, Lusong.....	WP 287	Maccoss, Michael J.....	WOB am 08:50	Maier, Claudia.....	TP 498
Luo, Moulun.....	TP 626	Maccoss, Michael J.....	Special	Maier, Thomas.....	ThP 388
Luo, Wendy.....	ThP 527	Maccoss, Michael J.....	WOB pm 3:10	Mains, Richard E.....	TP 497
Luo, Wendy.....	ThP 499	Maccoss, Michael J.....	TP 521	Maitra, Sushmit.....	ThP 252
Luo, Wendy.....	ThP 113	Maccoss, Michael J.....	TP 052	Maitre, Philippe.....	MOF pm 3:50
Luo, Xiao.....	ThP 420	Maccoss, Michael J.....	MP 048	Maitre, Philippe.....	MOF pm 3:30
Luo, Yan.....	TP 145	Maccoss, Michael J.....	WP 151	Majeran, Wojciech.....	TP 557

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Majerova, Eva	TP 412	Manri, Naomi	MP 637	Marshall, Alan G.	WP 664
Majmudar, Chinmay	WP 462	Manri, Naomi	WP 498	Marshall, Alan G.	TP 426
Major, Hilary J.	WP 643	Mansfield, Brian C.	WP 112	Marshall, Alan G.	TP 281
Major, Michael	ThP 440	Mansoori, Bashir A.	MP 417	Marshall, Alan G.	WP 657
Major, Michael	ThP 454	Manyak, Erika	ThP 679	Marshall, Alan G.	TP 527
Majouga, Alexander G.	ThP 394	Mao, Bing	ThP 412	Marshall, Alan G.	ThP 570
Mak, Adrian	WP 019	Mao, Bing	ThP 403	Marshall, Alan G.	TP 450
Makarov, Alexander	TP 508	Mao, Dunmin	MP 342	Marshall, Alan G.	TP 278
Makarov, Alexander	MOD pm 2:30	Mao, Frances	MP 029	Marshall, Alan G.	TP 444
Makarov, Alexander	ThP 202	Mao, Wan-Yu	MP 074	Marshall, Alan G.	MOA am 09:30
Makriyannis, Alexander	ThP 520	Mao, Weimin	MP 620	Marshall, Alan G.	WP 639
Maksimova, Yelena D.	TOE pm 2:30	Mao, Yan	ThP 231	Marshall, Alan G.	WP 638
Makusky, Anthony J.	TP 387	Mao, Yuan	TP 365	Marshall, Alan G.	WOG am 09:30
Makusky, Anthony J.	TP 340	Mapes, Rebekka	TP 626	Marshall, Alan G.	TOG pm 3:30
Makusky, Anthony J.	WP 143	Mapolelo, Mmilili Myles	WP 642	Marshall, Katherine	TP 102
Makusky, Anthony J.	ThP 289	Mapp, Anna	WP 462	Marshall, Peter S.	ThP 171
Makusky, Anthony J.	TP 342	Marahiel, Mohamed A.	ThP 284	Marshall-Waggett, Carla	TP 156
Malamud, Daniel	MP 620	Marangon, Elena	TP 423	Martens, Lennart	Special
Malayappan, Bhaskar	MP 421	Marathi, Archana	MP 104	Martens, Lennart	WP 065
Maleknia, Simin D.	ThP 603	March, Raymond E.	ThP 478	Martens, Lennart	MP 036
Malik, Rainer	ThP 310	Marchetti-Deschmann, Martina	ThP 384	Martens, Lennart	Special
Mallal, Simon	MP 528	Marchewka, Matthew	TP 414	Marti-Arbona, Ricardo	ThOC am 09:30
Mallard, W. Gary	MP 177	Marchini, Maja	WP 247	Martin, Anne-Marie	TP 548
Mallery, Susan	ThP 149	Marcisin, Sean R.	TP 440	Martin, Brian	TP 342
Mallet, Claude	ThOB am 10:10	Maresca, Paul	ThP 677	Martin, Charles R.	ThP 139
Mallet, Claude	ThOB am 10:10	Margalith, Eli	ThP 323	Martin, Dan	MOE pm 4:10
Mallick, Parag	ThP 001	Marginean, Ioan	TOD am 09:50	Martin, Daniel B.	ThP 045
Mallis, Larry M.	TP 306	Marginean, Ioan	MP 333	Martin, Ian	TP 020
Malmstroem, Johan	ThP 439	Marginean, Ioan	MP 332	Martin, Jonathan W.	TP 587
Maloney, Jennifer	ThP 662	Margolin, Yelena	ThP 307	Martin, Lisa	WP 074
Maloney, Katherine	WP 167	Margolin, Yelena	ThP 262	martin, Patricia	ThP 574
Malosse, Christian	ThP 574	Margolin, Yelena	WP 141	Martin, Rachel L.	MP 498
Maltby, David A.	ThP 288	Marimuthu, Arivusudar	MP 008	Martin, Roy	MP 111
Maltby, David A.	TP 270	Marimuthu, Arivusudar	ThP 055	Martin, Vicky	WP 394
Malyarenko, Dariya	WP 091	Marimuthu, Arivusudar	WP 525	Martineau, Eric	TP 476
Malyarenko, Dariya	MP 612	Marimuthu, Arivusudar	ThP 059	Martinez, Refugio	MP 393
Man, Jun	MP 121	Marincic, Dragana	WP 483	Martinez, Refugio	TP 149
Man, Petr	MP 050	Marino, Gennaro	ThP 117	Martinez Jr., Oscar	MOF am 08:30
Man, Petr	WP 018	Marino, John P.	ThP 414	Martinez Jr., Oscar	ThP 635
Manadas, Bruno	MP 602	Mark, Kao	MP 537	Martinez-Garriga, Blanca	WP 027
Manadas, Bruno	MP 024	Märk, Tilmann	ThP 344	Martinez-Lozano Sinues, Pablo	MP 323
Mancel, Valérie	TOF am 09:50	Markert, Stephanie	ThP 391	Martinez-Lozano Sinues, Pablo	MP 273
Mandala, Suzanne	MP 076	Markey, Sanford P.	TP 342	Martinkova, Jirina	WP 018
Mandarino, Lawrence J.	TP 626	Markey, Sanford P.	TP 340	Martins, Helio	WP 255
Mandrell, Robert E.	TOG am 09:30	Markey, Sanford P.	ThP 289	Martins-Junior, Helio	MP 267
Manes, Nathan P.	ThP 437	Markey, Sanford P.	TP 387	Marto, Jarrod	TP 540
Mangal, Dipti	MP 530	Markey, Sanford P.	WP 143	Marto, Jarrod	WP 039
Mani, D. R.	MP 477	Markhill, Peter	ThP 142	Marto, Jarrod	ThOE am 09:30
Mani, D. R.	ThP 020	Markley, John L.	WP 127	Marto, Jarrod	ThP 448
Mani, D. R.	MOB pm 4:10	Marks, James D.	TOG am 09:10	Maruoka, Masayuki	TP 006
Manicke, Nicholas	TP 184	Markson, Joseph S.	ThP 262	Marur, Vasant	MP 040
Manicke, Nicholas E.	WOB pm 2:50	Marlar, Khin	ThP 167	Maruyama, Shuzo	WP 349
Manier, Lisa	MP 450	Marlar, Khin	MP 442	Marzluff, Elaine M.	ThP 650
Manis, Paul B.	ThP 041	Marquart, Klaus	TP 620	Marzluff, Elaine M.	ThP 648
Manji, Hussein K.	TP 387	Marque, Sylvain	WOF am 08:30	Marzluff, Elaine M.	ThP 649
Mank, Marko	TP 524	Marques, Alexandre F.	ThP 050	Maslen, Sarah	WP 301
Mankin, Alexander	WP 027	Marques, Anna Sylvia Ferrari	WP 255	Mason, Amanda G.	TP 558
Mann, Benjamin	ThP 046	Marr, Julie	MP 397	Mason, Anne B.	TP 452
Mann, Matthias	MP 462	Marrero, Josette	TP 665	Mason, Paul	MP 215
Mann, Matthias	MP 599	Marsden-edwards, Emma	WP 126	Masse, Robert	ThP 232
Mann, Matthias	WOE pm 2:30	Marsden-edwards, Emma	ThOB pm 4:10	Masse, Robert	ThP 140
Mann, Matthias	MP 303	Marshall, Alan G.	WOC pm 2:30	Masse, Robert	ThP 146
Mann, Matthias	TP 165	Marshall, Alan G.	TP 279	Masse, Robert	ThP 155
Mann, Matthias	MP 299	Marshall, Alan G.	TOE am 09:50	Masse, Robert	ThP 137
Manna, Tapas	TP 076	Marshall, Alan G.	TP 284	Masse, Robert	WP 232
Manna, Tapas	TP 523	Marshall, Alan G.	MOC pm 2:50	Masse, Robert	ThP 151
Manning, H. Charles	MP 170	Marshall, Alan G.	TP 286	Masse, Robert	ThP 148
Mano, Nariyasu	TP 005	Marshall, Alan G.	TP 365	Masse, Robert	MP 378
Mano, Nariyasu	ThP 497	Marshall, Alan G.	TP 283	Massey, Robert	ThP 153
Manos, Dennis	WP 091	Marshall, Alan G.	MOD pm 2:50	Massé, Robert	ThP 154
Manos, Dennis	MP 612	Marshall, Alan G.	MOC pm 4:10	Massé, Robert	ThP 236
Manri, Naomi	ThP 242	Marshall, Alan G.	WP 642	Massefski, Walter	TP 472

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Masselot, Alexandre.....	WP 042	Mazor, Suzan .....	TP 252	McGrath, A. Lynn .....	MP 358
Masselot, Alexandre.....	WP 165	Mazur, Matthew .....	TP 082	Mcgrath, Sara C. ....	MP 004
Masselot, Alexandre.....	TP 251	Mazur, Matthew.....	ThP 208	Mcgrath, Sara C. ....	TP 380
Massey, John B. ....	TP 135	Mazzeo, Jeff.....	ThP 541	Mcguire, Jeffrey M. ....	ThP 585
Masson, Perrine .....	ThP 095	Mazzotti, Fabio.....	WP 389	Mcguire, Jeffrey M. ....	ThP 579
Mast, Natalia .....	WP 417	Mazzotti, Fabio.....	WP 374	Mchale, Kevin J. ....	WOB am 09:50
Master, Stephen R. ....	TP 043	Mazzucchelli, Gabriel.....	WP 032	Mchale, Kevin J. ....	WP 586
Master, Stephen R. ....	ThP 062	Mazzucchelli, Gabriel.....	MP 605	Mchale, Kevin J. ....	ThP 582
Masterson, Douglas .....	ThP 156	Mcalister, Graeme.....	TP 048	Mchugh, John .....	ThP 144
Mastovska, Katerina.....	WP 359	Mcalister, Graeme.....	TP 368	Mchugh, Sean .....	WP 329
Masuda, Katsuyoshi .....	ThP 622	Mcalister, Graeme.....	TP 369	McHugh, Vincent M. ....	WP 204
Masuda, Katsuyoshi .....	ThP 626	Mcalister, Graeme C. ....	MOE am 09:10	McHutchison, John .....	MOE pm 3:50
Masuda, Takeshi .....	WP 395	McAlister, Graeme C. ....	TOD am 09:30	Mcilwain, Sean .....	WP 151
Masuda, Takeshi .....	ThP 511	McAlister, Graeme C. ....	WP 678	McIntosh, Daniel G. ....	TP 284
Masujima, Tsutomu.....	WP 561	McAllister, Fiona.....	TP 032	McIntosh, Daniel G. ....	MOD pm 2:50
Masujima, Tsutomu.....	WP 391	Mcalpin, Casey R.....	WP 631	McIntosh, Martin.....	MOE pm 4:10
Masujima, Tsutomu.....	WP 578	McAnoy, Andrew M.....	TP 379	Mckay, Richard G.....	TP 300
Masujima, Tsutomu.....	WP 129	McArthur, Justin.....	MP 603	Mckee, Christopher.....	ThP 480
Masujima, Tsutomu.....	WP 568	McAvey, Kevin M.....	MP 223	McKemie, Dan .....	TP 393
Masujima, Tsutomu.....	MP 431	McCann, Brad.....	WP 652	Mckenna, Amy .....	WP 657
Masujima, Tsutomu.....	WP 106	McCarthy, Diane.....	WP 137	Mckenna, Amy .....	WOG am 09:30
Masujima, Tsutomu.....	WP 168	McCarthy, Diane.....	WP 089	Mckenna, Amy .....	WP 638
Masumoto, Hiroshi.....	MP 458	Mccarthy, Diane .....	WP 513	Mckenna, Amy .....	WP 639
Matak Vinkovic, Dijana .....	MOC am 08:50	Mccarthy, Jeanette.....	MOE pm 3:50	McKenna, Therese .....	MP 614
Matak-Vinkovic, Dijana.....	WOG pm 4:10	Mccarthy, Sean .....	ThP 400	Mckenna, Thérèse .....	TP 179
Mather, Joanne .....	WP 236	Mccaskill, David G.....	MP 545	Mckenna, Thérèse .....	ThP 109
Mather, Joanne .....	WP 239	Mcclintock, Carlee.....	ThP 559	Mckenna, Thérèse .....	TP 155
Mathews, Terrell J.....	MP 446	McClure, Thomas D.....	TP 568	McKinley, Eliot.....	MP 170
Mathies, Richard A.....	MP 315	McComb, Mark E.....	MP 288	McKnight-Whitford, Anthony.....	ThP 597
Mathur, Raman.....	MP 205	Mccomb, Mark E.....	ThP 014	McKnight-Whitford, Anthony.....	MOG pm 2:50
Matondo, Mariette.....	WP 075	McComb, Mark E.....	MP 594	McLachlan, John A.....	MP 072
Matson, Samantha.....	WP 100	McComb, Mark E.....	ThP 120	Mclafferty, Fred W.....	WP 426
Matson, Wayne R.....	WP 100	McComb, Mark E.....	MP 292	Mclafferty, Fred W.....	WP 425
Matsubara, Atsuki.....	TP 111	Mccomb, Mark E.....	ThP 261	Mclaughlin, Theresa M.....	MP 217
Matsuno, Yu-ki .....	MP 480	Mccomb, Mark E.....	WP 414	McLean, John A.....	TP 193
Matsuo, Gen .....	MP 348	McComb, Mark E.....	WP 049	McLean, John A.....	MOD am 10:10
Matsutani, Takaomi.....	WP 388	McConnell, Oliver.....	WP 342	McLean, John A.....	WP 206
Mattapalli, Haritha.....	TP 475	McCormick, Paulette.....	MP 078	McLean, John A.....	WP 409
Matyska, Maria .....	TP 112	McCormick, Robert L.....	WP 631	McLean, John A.....	TP 207
Maunit, Benoit.....	WP 565	McCormick, Thomas.....	WP 058	McLeod, Cameron.....	ThP 172
Maunit, Benoit.....	MP 611	McCorrister, Stuart.....	ThP 377	McLeod, Cameron W.....	MP 646
Maupillier, William.....	MP 182	McCowan, Kevin.....	ThP 468	Mcloughlin, Debra .....	ThP 368
Maurer, Hans H.....	MP 518	McCrea, Joanne.....	ThP 377	Mcloughlin, Debra .....	MP 592
Mauron, Yann .....	WP 165	McCue, Lee Ann.....	WP 144	Mcloughlin, Shaun.....	ThP 587
Mauron, Yann .....	TP 251	McCulloch, Ross.....	MP 308	Mcloughlin, Shaun.....	TP 143
Mautner, Agnes.....	WP 347	Medaniel, Andrew S.....	TP 244	Mcloughlin, Shaun.....	TOG pm 3:30
Maw, Hlaing (Holly).....	WP 571	McDermott, John C.....	ThP 425	Mcluckey, Scott A.....	WP 361
May, Eric F.....	WP 650	McDonald, John.....	WP 187	Mcluckey, Scott A.....	ThP 658
May, Jody.....	TP 226	McDonald, Karin R.....	ThP 489	McLuckey, Scott A.....	ThP 206
May, Jody.....	MOD am 09:50	McDonald, Stephen.....	TP 570	McLuckey, Scott A.....	ThP 657
May, Jody.....	ThP 617	McDonald, Thomas.....	MP 337	Mcluckey, Scott A.....	ThP 415
Mayampurath, Anoop M.....	TP 213	McDonald, W. Hayes.....	TOE am 09:10	Mcluckey, Scott A.....	ThP 406
Mayampurath, Anoop M.....	WP 691	Mcdonell, Mike.....	WP 120	Mcluckey, Scott A.....	ThP 493
Mayampurath, Anoop M.....	TP 218	Mcdonnell, Liam.....	WP 191	McMahon, Adam.....	WP 189
Mayampurath, Anoop M.....	ThP 247	Mcdonnell, Liam.....	TP 201	McMahon, Adam.....	TP 174
Mayampurath, Anoop M.....	TP 224	Mcewan, Murray J.....	WP 592	Mcmahon, Terry.....	WP 671
Mayboroda, Oleg.....	WP 118	McEwen, Andrew.....	ThP 171	Mcnally, Jonathan C.....	TP 419
Mayer, Matthias P.....	ThP 016	Mcewen, Charles N.....	MOF am 09:50	McNaught, Alan D.....	WP 686
Mayer, Paul Michael.....	TP 476	Mcewen, Charles N.....	TP 300	McNulty, Dean.....	TP 548
Mayer, Philip.....	TP 016	Mcewen, Charles N.....	ThP 159	McNulty, Dean E.....	WP 287
Mayer, Uljana M.....	WP 458	Mcewen, Charles N.....	ThOA pm 3:10	McNulty, Nathan.....	TP 541
Mayerhofer, Corina.....	TP 041	McEwen, Charles N.....	MP 314	Mewilliams, Lisa G.....	MP 004
Maynard, Shawn.....	WP 614	Mcfarland, Melinda A.....	MP 396	Mewilliams, Lisa G.....	TP 380
Mayne, Leland.....	TOG pm 2:30	Mcfarland, Melinda A.....	ThP 381	Meani, Francesco.....	MP 129
Mayo, Marty W.....	ThP 188	McGaw, Elizabeth A.....	WP 121	Mechref, Yehia.....	MP 481
Mayotte, Nadine.....	TP 551	McGaw, Elizabeth A.....	WOB am 09:30	Mechref, Yehia.....	ThP 247
Mayrhofer, Corina.....	ThOA pm 3:30	McGaw, Elizabeth A.....	WP 101	Mechref, Yehia.....	WP 503
Mayrhofer, Corina.....	TOE pm 4:10	McGaw, Elizabeth A.....	WP 096	Mechref, Yehia.....	WP 173
Maywald, Rebecca.....	ThP 297	McGibbon, Graham A.....	ThP 166	Mechref, Yehia.....	ThP 046
Mazarin, Michael.....	WOF am 08:30	McGowan, Thomas F.....	MP 055	Mechref, Yehia.....	MP 488
Maze, Joshua.....	WP 312	McGown, Linda.....	TP 486	Mechref, Yehia.....	MP 486
Maze, Joshua.....	WP 205	McGown, Linda.....	MP 083	Mechref, Yehia.....	MP 349

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Mechref, Yehia.....	ThP 299	Mesonero, Erica.....	ThP 314	Mills, John.....	ThP 531
Mechref, Yehia.....	WOC pm 3:30	Mess, Jean-Nicholas.....	WP 356	Mills, Mark D.....	ThP 170
Mechref, Yehia.....	ThP 158	Mess, Jean-Nicholas.....	WP 223	Milne, Stephen.....	ThP 177
Mechref, Yehia.....	WP 477	Messing, Albee.....	WP 071	Milner, Elena.....	MP 383
Mechtler, Karl.....	TP 159	Mestecky, Jiri.....	TP 514	Min, Hopil.....	MP 090
Mechtler, Karl.....	Special	Metalnikov, Pavel.....	MP 555	Minardi, Carina.....	WP 378
Mechtler, Karl.....	TP 013	Mette, Susanne.....	ThP 250	Minarik, Susanne.....	TP 296
Mechtler, Karl.....	MP 007	Metz, Thomas O.....	ThP 142	Minkler, Paul.....	WP 580
Mechtler, Karl.....	WP 412	Metzger, Pierre.....	WP 646	Minkler, Paul.....	MP 109
MeDevitt, Joe.....	TP 347	Meulmeester, Erik.....	WP 302	Minkoff, Marjorie.....	WP 272
Medzihradzsky, Katalin F.....	ThP 300	Mewes, Hans-Werner.....	ThP 079	Minkoff, Marjorie.....	MP 260
Meek, Claudia.....	MP 268	Meyer, Bjoern.....	ThP 525	Minkoff, Marjorie.....	MOE pm 3:30
Meermann, Björn.....	MOG am 09:10	Meyer, Björn.....	WP 396	Minkoff, Marjorie S.....	MP 606
Meermann, Björn.....	MP 522	Meyer, Helmut E.....	TP 620	Minning, Todd A.....	TP 555
Meermann, Björn.....	TP 241	Meyer, Helmut E.....	MP 618	Mino Jr., Warren K.....	WP 661
Meier, Jan.....	WP 031	Meyer, Helmut E.....	ThP 514	Mintseris, Julian.....	MOC am 09:50
Meier, Joe.....	TP 287	Meyer, Helmut E.....	WP 532	Miranda, Cristobal.....	MP 535
Meikle, A Wayne.....	WP 273	Meyer, Kent A.....	WOC pm 3:30	Miranda, Cristobal L.....	MP 271
Meikle, Peter J.....	MP 221	Meyer, Kent A.....	TP 185	Miranda, Oscar R.....	ThOG pm 4:10
Meilhac, Olivier.....	TP 096	Meyer-arendt, Karen.....	WP 065	Miranda Santos Lery, Leticia.....	ThP 379
Meitinger, Thomas.....	ThP 079	Meyer-Arendt, Karen.....	WP 149	Miriyala, Bruhaspathy.....	TP 124
Melaiye, Abdulkareem.....	WP 613	Meyers, Greg.....	ThP 315	Mirokhin, Yuri.....	TP 042
Melamud, Eugene.....	ThP 081	Meyn, Pete.....	ThP 677	Mirokhin, Yuri A.....	WP 686
Melamud, Eugene.....	WOB am 10:10	Meza, Jose E.....	MP 086	Mirza, Shama P.....	TP 621
Melanson, Jeremy E.....	MP 108	Mhatre, Rohin.....	TP 432	Mirzaei, Hamid.....	WP 087
Melchior, Frauke.....	WP 302	Miao, Shichang.....	TP 568	Mirzaei, Hamid.....	ThP 043
Mellors, J. Scott.....	MP 335	Miao, Yunan.....	WP 523	Mischerikow, Nikolai.....	TP 130
Mellors, J. Scott.....	TP 168	Miao, Zhixin.....	WP 422	Mise, Miyako.....	ThP 373
Meloche, Sylvain.....	ThP 434	Miao, Zhixin.....	ThP 645	Misek, David.....	MP 066
Melov, Simon.....	WP 007	Mibuka, Ryo.....	ThP 343	Misharin, Alexander S.....	MP 190
Melville, Angie.....	TP 662	Michaelides, Michael.....	TP 143	Misharin, Alexander S.....	TP 285
Melvin, James E.....	TP 097	Michel, Jean Baptiste.....	TP 096	Mistrik, Robert.....	MP 105
Memboeuf, Antony.....	WP 627	Michienzi, Joseph.....	WP 318	Mistry, Pramod K.....	WP 520
Même, Aurélie.....	TP 482	Mickel, Markus.....	WP 597	Mitchell, Todd W.....	MOA am 08:30
Menard, Chantal.....	MP 261	Micura, Ronald.....	ThP 416	Mitchell, Todd W.....	WOC am 09:10
Menard, Kevin.....	MP 659	Miele, Eric W.....	ThP 233	Mitchell, Todd W.....	MP 213
Mendler, Luca.....	WP 558	Mierzwa, Jerzy.....	MP 647	Mitchison, Timothy.....	ThOE am 09:10
Mendoza, Jhoana A.....	MP 352	Mierzwa, Jerzy.....	MP 647	Mittelstrass, Kirstin.....	ThP 079
Mendoza, Luis.....	WP 036	Mieyal, John J.....	MP 621	Mitulovic, Goran.....	WP 412
Mendoza, Vanessa Leah.....	WP 442	Miglionico, Brian V.....	TP 438	Mitulovic, Goran.....	MP 007
Menetski, Joseph.....	MP 076	Miho, Yuka.....	WP 568	Mitulovic, Goran.....	TP 159
Meng, Bo.....	ThP 196	Mikami, Hirohisa.....	WP 576	Miura, Daisuke.....	ThP 094
Meng, Chin-kai.....	MP 560	Mikami, Toshi.....	TP 119	Miura, Daisuke.....	TP 578
Meng, Fanjun.....	WP 283	Mikaty, Guillion.....	ThP 574	Miura, Daisuke.....	TP 579
Meng, Fanyu.....	MP 121	Mikel, Charles.....	TP 652	Miura, Yuji.....	WP 689
Meng, Fanyu.....	ThP 412	Mikhailov, Victor A.....	ThP 569	Miyagi, Masaru.....	TP 434
Meng, Fanyu.....	TP 295	Mikhaylova, Olga.....	TP 021	Miyagi, Masaru.....	WP 023
Meng, Min.....	TP 404	Miladinovic, Sasa.....	WP 630	Miyagi, Masaru.....	WP 296
Meng, Min.....	ThP 238	Milet, Anne.....	ThP 653	Miyamoto, Suzanne.....	MP 478
Meng, Min.....	WP 234	Miller, Aaron W.....	ThP 125	Miyamoto, Suzanne.....	TOC pm 3:50
Meng, Min.....	WP 222	Miller, Christine.....	MP 456	Miyamoto, Suzanne.....	MP 485
Menon, Usha.....	TP 622	Miller, Christine.....	MP 015	Miyamoto, Suzanne.....	WOC pm 4:10
Mentinova, Marija.....	WP 361	Miller, Danny E.....	TP 429	Miyazaki, Shota.....	WP 345
Menzel, Christoph.....	TP 239	Miller, Jeff.....	WP 252	Miyazaki, Shota.....	WP 345
Merchant, Mark E.....	ThP 203	Miller, Jeff F.....	ThP 390	Mizokami, Masashi.....	TP 526
Merchant M.D., Saumil N.....	WP 557	Miller, Jeffrey.....	ThP 091	Mizuno, Hajime.....	MP 431
Merdinoglu, Didier.....	WP 565	Miller, Jeffrey.....	MP 540	Mizuno, Hajime.....	WP 129
Merdrignac, Isabelle.....	WP 647	Miller, Kristin.....	TP 493	Mizuno, Hajime.....	WP 561
Merenbloom, Samuel.....	WP 201	Miller, Leah M.....	WP 550	Mizuno, Hajime.....	WP 568
Merenbloom, Samuel I.....	WP 212	Miller, Luke.....	WP 344	Mizuno, Hajime.....	WP 168
Merkel, Dietrich.....	WP 400	Miller, Mark A.....	ThP 517	Mizuno, Hajime.....	WP 106
Meropol, Neal J.....	TP 085	Miller, Mark A.....	MP 037	Mizuno, Hajime.....	WP 391
Merrihew, Gennifer.....	MOE am 09:50	Miller, Phillip.....	WP 179	Mizuno, Hajime.....	WP 578
Merrihew, Gennifer.....	ThP 473	Miller, Ronald A.....	WP 548	Mo, Shunyan.....	WP 167
Merrihew, Gennifer.....	MP 029	Miller, Samuel I.....	WP 460	Mobley, James.....	TP 312
Merrihew, Gennifer E.....	MP 147	Miller, Silke.....	MP 402	Mocanu, Mihaela.....	WP 556
Mesaros, Clementina.....	MP 530	Miller, William G.....	TOG am 09:30	Mocanu, Mihaela.....	ThP 118
Mesaros, Clementina.....	MP 175	Milligan, Daniel.....	WP 592	Moch, Holger.....	ThP 512
Mesaros, Clementina.....	MP 172	Mills, David A.....	WP 497	Mochel, Fanny.....	TP 615
Mesaros, Clementina.....	MP 173	Mills, Davinia J.S.....	ThP 378	Mocholi, Francisco.....	MP 549
Mesecar, Andrew D.....	WP 167	Mills, George.....	WP 687	Moehring, Thomas.....	MP 007
Mesker, Wilma E.....	MP 596	Mills, George.....	TP 191	Moehring, Thomas.....	TP 290

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Moehring, Thomas.....	TP 033	Moore, Sarah M.....	WOE pm 2:50	Muddiman, David C.....	TOD am 08:30
Moehring, Thomas.....	MOD pm 2:30	Moore II, Ray.....	TP 312	Muddiman, David C.....	MP 469
Moehring, Thomas.....	MP 150	Moorman, Matthew.....	ThP 198	Muddiman, David C.....	ThP 374
Moehring, Thomas.....	WP 097	Moorman, Nathaniel J.....	TOE pm 2:50	Muddiman, David C.....	TP 504
Moehring, Thomas.....	MP 591	Moradian, Annie.....	ThP 490	Muddiman, David C.....	WP 535
Moehring, Thomas.....	ThP 202	Morais Cardozo, Karina Helena.....	WP 251	Muddiman, David C.....	ThP 324
Moehring, Thomas.....	ThP 296	Moran, Grainne.....	WP 480	Muddiman, David C.....	WOC pm 3:50
Moeller, Benjamin C.....	MP 269	Moran, Michael.....	TP 154	Muddiman, David C.....	MP 470
Mohamed, Rayane.....	TP 109	Moran, Michael.....	ThP 440	Mueller, Gerhard-Anton.....	TP 610
Mohammed, Shabaz.....	WP 401	Morast, Derrick L.....	WP 199	Mueller, Lukas N.....	WP 087
Mohammed, Shabaz.....	TP 130	Morast, Derrick L.....	MP 622	Muenster, Helmut.....	MP 235
Mohammed, Shabaz.....	TP 200	Mordehai, Alex.....	MP 331	Muenster, Helmut.....	WP 097
Mohammed, Shabaz.....	MP 635	Mordehai, Alex.....	MP 449	Mueser, Timothy.....	WP 454
Mohammed, Shabaz.....	MP 011	Morelle, Willy.....	ThP 254	Mueser, Timothy.....	ThP 210
Mohammed, Shabaz.....	TP 122	Mören, Lina.....	TP 559	Mueser, Timothy.....	ThP 209
Mohler, James L.....	MP 306	Moreno-Rodriguez, Ricardo A.....	WP 178	Mukai, Norio.....	WP 376
Mohtashemi, Iman.....	MP 454	Morgan, Chris.....	TP 438	Mukherjee, Pranab K.....	TP 100
Moingeon, Philippe.....	ThOA am 09:10	Morgan, Daniel G.....	ThP 366	Mukherjee, Sumana.....	MP 617
Moingeon, Philippe.....	TP 529	Morgan, Ling.....	MP 369	Mukhopadhyay, Aindrila.....	TP 500
Moini, Mehdi.....	MP 357	Morgan, Mike.....	TP 417	Mulayath Variyath, Asokan.....	TP 074
Moini, Mehdi.....	TP 173	Morgan, Stephen.....	WP 358	Mulder, Klaas W.....	TP 266
Moini, Mehdi.....	TP 464	Morgner, Nina.....	MOC am 08:50	Mulekar, Madhuri.....	WP 072
Moise, Adrian.....	ThP 183	Mori, Masaru.....	TP 005	Mullaney, Ian.....	TP 256
Moldowan, J. Michael.....	MP 658	Mori, Masaru.....	ThP 497	Mullaney, Ian.....	MP 528
Moldowan, J. Michael.....	WP 646	Morieux, Pierre.....	MP 597	Mullaugh, Katherine.....	ThP 655
Molesworth, Sam.....	WP 667	Morimoto, Sayuki.....	WP 411	Mullaugh, Katherine.....	ThP 652
Molesworth, Sam.....	TP 349	Morin, Eric.....	ThP 232	Mullen, Christopher.....	MP 194
Molesworth, Sam.....	TP 352	Morin, Gregg.....	ThP 490	Müllen, Klaus.....	WOF am 08:50
Molina, Erick.....	WP 198	Morin, Louis-Philippe.....	WP 243	Muller, Jean Francois.....	MP 611
Molina, Henrik.....	TP 367	Morishetti, Kiran Kumar.....	WP 669	Muller, Jean Francois.....	WP 565
Mollah, Sahana.....	MP 471	Morissette, Nathalie.....	ThP 592	Muller, Ludovic.....	ThP 096
Mollova, Nevena.....	MP 432	Morris, Jamie.....	TP 135	Müller, Bernhard.....	ThP 150
Mollova, Nevena.....	ThP 664	Morrison, Brian.....	TOA pm 3:30	Mulligan, Christopher C.....	WP 585
Momynaliev, Kuvat T.....	ThP 388	Morrow, Amy L.....	WP 649	Mullins, Oliver C.....	WP 649
Monahan, James.....	ThP 368	Mortishire-Smith, Russel.....	TP 577	Mulvey, George L.....	MOC am 10:10
Monell, Craig.....	WP 470	Morton, Victoria L.....	MOD am 09:10	Mummery, Christine.....	ThP 426
Monigatti, Flavio.....	WP 053	Moseley, Arthur.....	MP 619	Munkongdee, Thongperm.....	TP 098
Monigatti, Flavio.....	ThOE am 09:10	Moseley, Arthur.....	ThP 129	Munoz, Javier.....	ThP 426
Monique, Martina.....	WP 235	Moseley, Arthur.....	ThP 442	Munske, Gerhard.....	WP 156
Mönkkönen, Hannu.....	ThP 529	Moseley, Arthur.....	MOE pm 3:50	Muntean, Felician.....	MP 211
Mönkkönen, Jukka.....	ThP 529	Moseley, Arthur.....	TP 619	Murakami, Stan.....	ThP 358
Monnat Jr, Ray.....	MP 029	Moser, Frank W.....	MP 174	Mural, Richard J.....	WP 552
Monroe, Matthew.....	WP 144	Moses, Michael.....	TP 102	Muralidhara, Srinivasa.....	MOG pm 2:30
Monroe, Matthew E.....	ThP 027	Moshin, Jenny.....	WP 252	Murao, Naoaki.....	TP 489
Montecchi-Palazzi, Luisa.....	Special	Moshin, Jenny.....	MP 529	Muratore-Schroeder, Tara L.....	TP 203
Montes de Oca, Rocio.....	ThP 292	Mosier, Nathan S.....	MP 264	Murphy, James.....	WP 318
Montes de Oca, Rocio.....	ThP 290	Moskal, Joseph R.....	WOC pm 2:30	Murphy, Keeley.....	MP 159
Montgomery, Helen.....	ThP 248	Moskovets, Eugene.....	ThP 307	Murphy, Patrick.....	ThP 428
Montgomery, Helen.....	MP 092	Moskovets, Eugene.....	ThOG am 10:10	Murphy, Robert.....	ThP 184
Moody, Leslie L.....	WP 170	Mossman, Allen.....	WP 164	Murphy, Robert C.....	ThP 182
Moody, Robert.....	TP 160	Motamedchaboki, Khatereh.....	MP 484	Murphy, Robert C.....	MP 216
Mookherjee, Abhingya.....	WP 664	Motamedchaboki, Khatereh.....	TP 534	Murphy, Timonthy.....	ThP 475
Moon, Bongjin.....	TP 348	Mott, Jessica E.....	MP 091	Murphy III, James P.....	WP 421
Moon, Chuljin.....	WP 577	Mottaz, Heather M.....	MP 616	Murray, Karen F.....	TP 252
Moon, Hye Kyoung.....	WP 629	Mottaz-Brewer, Heather.....	ThP 027	Murray, Kermit K.....	TOD am 08:30
Moon, Ju-Yeon.....	WP 574	Mottaz-Brewer, Heather M.....	TP 552	Murray, Kermit K.....	WP 682
Moon, Myeong Hee.....	WP 574	motto, micheal.....	MP 502	Murray, Kermit K.....	TP 381
Moon, Pyong-gon.....	TP 249	Moulder, Robert.....	MP 089	Murray, Kermit K.....	ThP 328
Moon, Sehwan.....	TP 197	Moura, Hercules.....	TOG am 09:10	Murray, Kermit K.....	TOG am 10:10
Moon, Steven J.....	TP 411	Moura, Hercules.....	ThP 376	Murray, Kermit K.....	ThP 203
Moore, Benjamin.....	MOF am 09:10	Moura, Hercules.....	ThP 375	Murray, Kermit K.....	TP 647
Moore, D. Ray.....	MP 257	Moustafa, Tarek.....	WP 572	Murray, Patrick R.....	TP 242
Moore, Eli.....	ThP 123	Mowry, Curtis.....	ThP 198	Murray, Royce W.....	TP 635
Moore, Jerry F.....	WP 186	Moy, Franklin.....	TP 472	Murrell, J. Colin.....	TP 542
Moore, Jerry F.....	TP 205	Mozdziak, Paul.....	MOE am 10:10	Musah, Sadiatu.....	ThP 581
Moore, Jerry F.....	TP 204	Mozier, Ned M.....	ThP 533	Musapelo, Thabiso.....	WP 682
Moore, Jerry F.....	ThP 180	Mu, Hui.....	MP 201	Muse, Wilson B.....	WP 486
Moore, Ray.....	MP 445	Mu, Lillian.....	TP 571	Musselman, Brian.....	WOB pm 3:10
Moore, Roger.....	ThP 277	Muccio, Donald D.....	TP 454	Musselman, Brian D.....	ThP 321
Moore, Ronald.....	MP 333	Muchatuta, Monalisa N.....	MP 067	Musselman, Brian D.....	ThP 326
Moore, Ronald J.....	WP 146	Muddiman, David C.....	MP 317	Musselman, Brian D.....	ThP 319
Moore, Ronald J.....	WP 458	Muddiman, David C.....	MOE am 10:10	Musser, Steve.....	MP 392

Program Code: M, T, W, Th = Day    O = Oral    Time  
 M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Musser, Steve	TP 063	Nam, Sang Jip	WP 167	Neslund, Charles	WP 600
Musser, Steven M.	ThP 381	Nam, Won Seok	TP 406	Nessen, Merel A.	WP 138
Musuku, Adrien	ThP 155	Nam, Won Seok	TP 408	Nesvizhskii, Alexey	WP 036
Musuku, Adrien	ThP 232	Nam, Won Seok	TP 405	Nesvizhskii, Alexey	WP 531
Musuku, Adrien	ThP 236	Nam, Won-Seok	MP 412	Nesvizhskii, Alexey	TP 051
Müthing, Johannes	MP 482	Nanavati, Dhaval	TP 387	Nesvizhskii, Alexey	TP 054
Mutlib, Abdul	TP 347	Nanavati, Dhaval	TP 342	Nesvizhskii, Alexey I.	MP 604
Mutoh, Hironori	WP 411	Nanney, Lillian B.	TOE am 09:10	Neta, Pedatsur	TP 070
Myers, Chad	WP 002	Napoli, Anna	WP 389	Netsch, Mark A.	ThP 233
Myint, Khin Than	MP 044	Napoli, Anna	WP 374	Netto, Jeremy	MP 528
Myint, Khin Than	ThP 269	Napolitano, Michael P.	MP 585	Netzel, Brian C.	WP 263
Myint, Khin Than	WP 099	Napolitano, Michael P.	MP 590	Neubert, Hendrik	MP 464
Mylonas, Roman	TP 251	Napolitano, Peter	TP 077	Neubert, Reinhard H. H.	MP 246
Mylonas, Roman	WP 165	Narayana, Vinod	ThP 076	Neubert, Thomas	ThP 435
Mylott, William R.	ThP 360	Narayana, Vinod	ThP 070	Neubert, Thomas	ThP 445
Mylott, William R.	MP 158	Nardi, Regina	WP 596	Neubert, Thomas A.	MP 019
Mylott, William R.	MP 160	Narepekha, Halyna E.	ThP 533	Neugebauer, Witold	MP 521
Mylott, William R.	ThP 361	Narepekha, Halyna E.	WP 493	Nevedomskaya, Ekaterina	WP 118
Mysling, Simon	WP 499	Narimatsu, Hisashi	WP 508	Neveu, John	ThP 262
Mysore, Kirankumar S.	ThP 078	Narimatsu, Hisashi	TP 526	Newburg, David S.	MP 103
Myung, Sunnie	ThP 345	Narimatsu, Hisashi	MP 480	Newsome, G. Asher	ThOG am 08:50
Na, Jeol Geol	WP 641	Narute, Purushottam S.	TP 438	Newton, Dianne L.	TP 412
Na, Sang	MP 280	Nascentes, Clésia C.	TP 591	Newton, Ken	MP 328
Na, Seungjin	ThP 015	Nash, John	ThP 638	Newton, Michael A.	WP 026
Na, Seungjin	TP 046	Nasioudis, Andreas	ThOC pm 2:50	Neyer, David	MP 448
Nabei, Seika	TP 646	Nasioudis, Andreas	WP 627	Neyer, David	TP 162
Nabetani, Takuji	ThP 450	Nasr, Samia M.	ThP 143	Ng, Choon Keow	TP 336
Nabi, Ivan R.	ThP 516	Nassif, Xavier	ThP 574	Ng, Choon-Keow	ThP 553
Nabuchi, Yoshiaki	TP 219	Nasyrova, Olga	MP 555	Ng, Dominic C. M.	TOF am 10:10
Nachtigall, Fabiane M.	WP 200	Nath, Avindra	WP 280	Ng, Ivy	TP 098
Nachtigall, Fabiane M.	ThP 636	Nath, Avindra	MP 603	Ng, Julio	ThP 013
Naegele, Edgar	MP 406	Nathan, Debra F.	ThP 088	Ng, Wailap	ThP 392
Naegele, Edgar	TP 120	Nathasingh, Chris	WP 516	Ng, Wailap	MP 107
Nagano, Hisashi	TP 377	Natoli, Thomas	MP 215	Ngo, Ben	TP 157
Nagano, Kohji	WP 411	Naver, Helle	WP 209	Ngo, Ben	MP 330
Nagao, Hirofumi	ThP 621	Navratil, Marian	WP 020	Nguyen, Crystal	TP 397
Nagao, Hirofumi	ThP 622	Nayak, Ranu	TP 170	Nguyen, Crystal	TP 390
Nagaraj, Nagarjuna	WOE pm 2:30	Nazabal, Alexis	WP 457	Nguyen, Crystal	TP 407
Nagashima, Atsushi	TP 115	Nazarian, Javad	TP 328	Nguyen, Crystal	MP 417
Nagle, Raymond	WP 179	Nazarov, Erkinjon	WP 207	Nguyen, Elizabeth	MP 139
Nagornova, Natalia S.	MOF pm 3:10	Nazarov, Erkinjon	WP 198	Nguyen, Huy	WP 313
Nagtalon, Dennis G.	WP 262	Nazarov, Erkinjon	WP 203	Nguyen, Huy	ThP 695
Nagy, Kornel	TP 470	Ndao, Momar	TP 616	Nguyen, Minhhuynh T.	TP 085
Nahnsen, Sven	TP 050	Ndao, Momar	TP 103	Nguyen, Nhu Quynh, Thi	TP 573
Nahon, Laurent	MOF pm 3:50	Ndao, Momar	WP 095	Nguyen, Nhu Quynh, Thi	TP 573
Naimy, Hicham	WP 488	Ndao, Momar	ThP 064	Nguyen, Reno	ThP 113
Naimy, Hicham	WOC pm 2:50	Ndiaye, Sega	ThP 117	Nguyen, Reno	ThP 527
Naimy, Hicham	WP 490	Neal, Rachel	ThP 581	Nguyen, Reno	ThP 499
Naimy, Hicham	WP 491	Nealon, Jessica R.	MP 213	Nguyen, Steve	MP 599
Nair, K Sreekumaran	WP 070	Nealon, Jessica R.	MOA am 08:30	Nguyen, Viet hung	MP 644
Naito, Yasuhide	ThP 626	Neely, Matthew	MP 349	Nguyen, Vinh	ThP 451
Naito, Yasuhide	TP 188	Neeson, Kieran	TP 210	Nguyen, Vinh	MP 390
Naito, Yasuhide	ThP 622	Negabhan, Andre	MP 305	Nguyen, Vinh	ThP 422
Najarro, Marcela C.	TP 378	Nei, Yuan-wei	ThOF am 08:30	Nguyen, Vivian	TP 008
Nakagawa, Mariko	ThP 197	Nelsestuen, Gary	WP 579	Nhiri, Naima	ThP 563
Nakamura, Kazuhiro	TP 148	Nelsestuen, Gary	ThP 054	Ni, Jinsong	MOA pm 3:10
Nakamura, Odete Hirata	WP 253	Nelson, Cory	ThP 257	Ni, Zhaohui	TP 258
Nakamura, Takemichi	WP 384	Nelson, Dwella Moton	ThP 290	Nibbe, Rod	TOE am 08:30
Nakamura, Tatsuji	ThP 269	Nelson, Dwella Moton	ThP 292	Nibbering, Nico M.M.	WP 675
Nakamura, Tatsuji	MP 044	Nelson, Peter	MOE pm 4:10	Nichols, William	WP 618
Nakata, Ryuji	WP 675	Nemes, Peter	WP 564	Nicholson, Jeremy	WOB am 08:50
Nakatani, Eri	WP 460	Nemes, Peter	MP 334	Nicholson, Jeremy K.	ThP 083
Nakatani, Shigeru	WP 341	Nemes, Peter	WOA am 08:50	Nicholson, Jeremy K.	ThP 095
Nakayaasu, Ernesto S.	ThP 050	Nemeth, Jennifer F.	ThP 537	Nicholson, Judith	MP 018
Nakayama, Shoji F.	WP 602	Nemeth, Jennifer F.	ThP 545	Nickens, Zacharie	WP 077
Nakayama, Shoji F.	TP 586	Nemeth, Jennifer F.	TP 462	Nickens, Zacharie	MP 384
Nakayasu, Ernesto S.	WP 307	Nemeth, Jennifer F.	ThP 281	Nicklay, Josh	TP 271
Nakazawa, Takashi	ThP 197	Nemieboka, Noble	WP 692	Nicolaides, Kypros	TP 095
Nakorchevsky, Aleksey	MOB pm 2:50	Nemoto, Tadashi	ThP 094	Nicolardi, Simone	MP 596
Nakovich, Laura	ThP 361	Nennig, Kevin	WP 553	Nicora, Carrie D.	TOA am 09:10
Nakovich, Laura	MP 160	Nephew, Kenneth P.	MP 072	Nicora, Carrie D.	ThP 027
Nam, Myung Hee	WP 636	Nesbitt, Daniel	WP 456	Nieckarz, Robert	WP 587

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Nieckarz, Robert J.....	WP 671	No, Myoung-han.....	WP 658	O'brien, Ann.....	ThP 402
Nielsen, Claus G.....	WP 209	No, Myoung-han.....	WP 654	O'Brien, Bart A.....	WP 170
Nielsen, Michael L.....	MP 299	Noble, William.....	WOE am 08:50	O'Brien, Darragh.....	MP 125
Nielsen, Michael Lund.....	MP 599	Noble, William.....	WOE pm 3:10	O'Brien, Jeremy T.....	TOF pm 2:50
Nielsen, Peter.....	TP 154	Noble, William.....	WP 151	O'Brien, Jeremy T.....	TOF am 09:30
Nielsen, Peter, K.....	WP 209	Nobles, Kelly.....	TP 024	O'Brien, John F.....	TP 257
Nielsen, Steen Brondsted.....	ThOD am 08:50	Noel, Jamie.....	TP 629	O'brien, Rob.....	MP 304
Nielsen, Tina.....	WP 437	Noh, Dong-Young.....	MP 127	Oburger, Eva.....	ThP 136
Niemann, Scott.....	MP 561	Nohara, Lilian L.....	WP 307	Oburger, Eva.....	ThP 150
Nierengarten, Hélène.....	TP 482	Nohra, Mireille.....	MP 261	Ochiai, Eri.....	WP 563
Nieves, Edward.....	WP 004	Noirel, Josselin.....	MP 006	O'Connell, Steven G.....	TP 589
Nigam, Sanjay.....	ThP 067	Nolan, David.....	MP 528	O'Connor, C. David.....	MP 061
Nigg, Erich.....	ThP 427	Noll, Robert J.....	TP 372	O'Connor, Daniel.....	ThP 466
Nigg, Erich.....	ThP 310	Noll, Robert J.....	TOD pm 3:50	O'Connor, Gavin.....	ThP 325
Niggebrugge, Adlai E.....	MP 183	Noll, Robert J.....	ThOF pm 2:30	O'connor, Peter B.....	ThP 578
Nihei, Yoshito.....	TP 069	Nomura, Masaharu.....	WP 534	O'connor, Peter B.....	MP 285
Nika, Heinz.....	MP 516	Nony, Emmanuel.....	ThOA am 09:10	O'Connor, Peter B.....	ThP 272
Nikiforov, Serfey.....	WP 163	Nony, Emmanuel.....	TP 529	O'connor, Peter B.....	WP 327
Nikiforov, Sergey.....	WP 326	Noonan, Gregory O.....	ThP 316	O'connor, Peter B.....	ThP 275
Niknejad, Anne.....	WP 042	Norbeck, Angela D.....	ThP 027	O'connor, Peter B.....	ThOD am 09:10
Nikolaev, Andrei V.....	WP 307	Norcross, Ryan.....	MP 436	Oda, Yoshiya.....	WP 099
Nikolaev, Eugene.....	TP 060	Nordheim, Alfred.....	TP 050	Oda, Yoshiya.....	TP 104
Nikolaev, Eugene.....	TP 065	Normandin, Denis.....	MP 356	Oda, Yoshiya.....	ThP 269
Nikolaev, Eugene.....	TP 508	Norrgran, Jessica.....	TP 014	Oda, Yoshiya.....	WP 689
Nikolaev, Eugene.....	TP 274	Norrgran, Jessica.....	TP 511	Oda, Yoshiya.....	MP 133
Nikolaev, Eugene.....	MP 053	Norris, Andrew.....	MP 386	Oda, Yoshiya.....	MP 132
Nikolaev, Eugene.....	WP 369	Norris, Jeremy L.....	MP 468	Oda, Yoshiya.....	MP 044
Nikolaev, Eugene.....	TP 276	Norris, Jeremy L.....	MP 475	Odedra, Rajesh.....	ThP 093
Nikolaev, Eugene.....	TP 278	Norris, Jeremy L.....	TP 330	Odland, Rick M.....	WP 092
Nikolaev, Eugene.....	TP 277	Norris, Jocelyn O.....	ThP 480	O'Donnell, J. Kevin.....	WP 341
Nikolaev, Evgenij N.....	ThP 394	Notey, Jaspreet.....	ThP 374	O'Donohue, Heather.....	ThP 041
Nikolau, Basil J.....	ThP 072	Nothaft, Harald.....	WP 505	Oe, Tomoyuki.....	TP 341
Nikolau, Basil J.....	WOA am 09:50	Novak, Jan.....	TP 514	Oe, Tomoyuki.....	MP 152
Nikolic, Dejan.....	ThP 145	Novak, Petr.....	MP 050	Oe, Tomoyuki.....	ThP 286
Nikolic, Dejan.....	TP 415	Novak, Petr.....	TP 190	Oehmen, Christopher.....	ThP 027
Nikolic, Dejan.....	MP 541	Novak, Petr.....	WP 018	Oeljeklaus, Silke.....	ThP 514
Nikolova, Penka.....	ThP 573	Novick, Scott.....	ThOC am 08:30	Ofman, Rob.....	WP 532
Nikos, Kyripides.....	WP 144	Novikoff, Phyllis M.....	WP 550	Ogawa, Kiyoshi.....	ThP 625
Nikoulina, Svetlana.....	ThP 468	Novotny, Milos.....	ThP 247	Ogawa, Kiyoshi.....	TP 189
Niles, Richard.....	ThP 455	Novotny, Milos V.....	MP 488	Ogbonna, Elizabeth W.....	WP 264
Niles, Richard.....	TOC pm 2:30	Novotny, Milos V.....	MP 481	Oglesbee, Devin D.....	TP 257
Nilsson, Carol.....	MOA am 09:30	Novotny, Milos V.....	ThP 046	Ogorzalek Loo, Rachel R.....	WP 495
Nilsson, Carol.....	WOC pm 2:30	Novotny, Milos V.....	WOC pm 3:30	Ogorzalek Loo, Rachel R.....	TP 517
Nilsson, Carol.....	TOG pm 3:30	Novotny, Milos V.....	WP 477	Ogura, Tairo.....	WP 576
Nilsson, Carol L.....	WP 410	Novotny, Milos V.....	MP 486	Oguri, Hiroki.....	WP 384
Nimeus, Emma.....	ThP 043	Novotny, Milos, V.....	WP 503	Ogurtsov, Aleksey.....	ThP 204
Nimkar, Subodh.....	ThP 593	Nowacki, Nathaniel B.....	ThP 425	Ogurtsov, Aleksey.....	ThP 002
Nimkar, Subodh.....	ThP 586	Nowak, Christine.....	ThP 538	Ogurtsov, Aleksey Y.....	WOE am 09:30
Ning, Kang.....	TP 054	Nowak, Christine.....	TP 217	Oh, Han Bin.....	TP 348
Ning, Mingming.....	MP 607	Nowroozi, Farnaz F.....	TP 500	Oh, Seul.....	TP 406
Ning, MingMing.....	ThP 039	Nuccio, Art.....	TP 038	Oh, Seul.....	TP 405
Ning, Zhi-bin.....	TP 001	Nugent, Kerry.....	MP 003	Oh, Seul.....	MP 412
Niñonuevo, Milady R.....	MP 484	Nugent, Kerry.....	MP 187	Oh, Seul.....	TP 408
Nirmalan, Niroshini.....	TP 155	Numazawa, Mitsuteru.....	MP 364	Oh, Weonsik.....	WP 217
Nirmalan, Niroshini.....	MP 614	Nunes, Jason.....	MP 058	O'Hair, Richard A. J.....	ThP 643
Nirudodhi, Sasidhar N.....	TP 442	Nuñez, Alberto.....	MP 552	O'hair, Richard A. J.....	TOF am 08:50
Nishiguchi, Masaru.....	ThP 625	Nunn, Brook.....	ThP 123	Ohashi, Yoko.....	ThP 450
Nishijima, Keiko.....	ThP 373	Nyadong, Leonard.....	ThP 311	Ohashi, Yoshiaki.....	TP 115
Nishikaze, Takashi.....	MPZ 582	Nyadong, Leonard.....	ThP 313	Ohkubo, Masataka.....	TOD pm 2:50
Nishikaze, Takashi.....	WP 510	Nyadong, Leonard.....	TOD am 08:50	Ohlund, Leanne B.....	TP 030
Nishimoto, Yukari.....	WP 612	Nyalwidhe, Julius.....	TP 031	Ohmori, Takeshi.....	TP 374
Nishimura, Osamu.....	ThP 197	Nyalwidhe, Julius.....	MP 612	Ohnesorge, Stefanie.....	ThP 588
Nishimura, Shin-ichiro.....	ThP 242	Nyberg, Tamara.....	MP 298	Ohnuma, Sumiko.....	ThP 433
Nishimura, Toshihide.....	WP 534	O'Connor, Peter B.....	MP 205	Öhrfelt, Annika.....	TP 093
Nishioka, Takaaki.....	TP 069	O'Malley, Jennifer.....	WP 557	Oikawa, Hideaki.....	WP 384
Nissan, Caroline.....	MP 484	Oakley, Stephen.....	MP 076	Okabayashi, Masanori.....	WP 612
Nitchke, Ashley.....	MP 072	Oaks, Zachary.....	ThP 591	Okach, Linda.....	TP 126
Niu, Dou-ming.....	ThP 085	Oates, John A.....	TP 183	Okazaki, Osamu.....	MP 458
Niwayama, Satomi.....	TP 006	Obena, Rofe-Amor.....	MPZ 573	Oktem, Berk.....	TP 194
Niwayama, Satomi.....	ThP 556	Oberg, Ann L.....	ThP 054	Oktem, Berk.....	ThOG am 10:10
Nixon, Christopher.....	MP 138	Oberg, Ann L.....	MP 094	Okubo, Mamoru.....	WP 388
Nkansah, Paul.....	WP 238	Obolensky, Oleg.....	TP 353	Okulate, Mobolaji A.....	ThP 053

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Okumura, Akihiko.....	TP 377	Orlando, Ron.....	ThP 036	Paiva, Anthony.....	MP 437
Okumura, Akihiko.....	TP 376	Orlando, Ron.....	TP 038	Paizs, Bela.....	ThOD am 08:50
Okumura, Akihiko.....	TP 374	Orlando, Ron.....	TP 555	Paizs, Bela.....	MOF pm 3:30
Olah, Timothy.....	MP 279	Orlando, Ron.....	WP 456	Paizs, Bela.....	TP 350
Olah, Timothy.....	ThP 366	Ortiz, Alexia.....	WP 515	Paizs, Bela.....	WP 666
Olah, Timothy.....	TP 562	Ortiz de Montellano, Paul R.....	MP 228	Pal, Manoj.....	TP 124
Old, William.....	TP 370	Osburn, Sandra M.....	TP 352	Pal, Manoj.....	WP 054
Old, William M.....	WP 149	Osburn, Sandra M.....	TP 349	Palaima, Elizabeth.....	MP 479
Oldenburg, Steven.....	WP 194	Osgood, Sarah.....	ThP 680	Palamalai, Vikram.....	MP 094
Oldenburg, Steven.....	TP 195	Osgood, Sarah M.....	ThP 214	Palandra, Joe.....	TP 501
Oldenburg, Thomas.....	WP 640	O'Shea, Erin K.....	ThP 262	Palaniswamy, Venkatapuram.....	ThP 220
Oldham, John.....	ThP 141	O'Shea, Stephen.....	MP 253	Palazoglu, Mine.....	WP 123
Olinares, Paul Dominic B.....	WP 022	O'Shea, Thomas.....	ThP 091	Palii, Sergiu P.....	TP 322
Oliphant, Joseph.....	TOD pm 3:10	Osorio, Cristina.....	ThP 251	Palish, A. Chase.....	ThP 346
Oliphant, Joseph L.....	TP 373	Ospina, Maria.....	TP 495	Palit, Meehir.....	MP 177
Oliphant, Patricia E.....	TP 373	Ospina, Maria.....	TP 494	Palma, Pierangela.....	WP 606
Oliveira, Paulo S.L.....	ThP 050	Osterman, Rebecca.....	MP 350	Palma, Pierangela.....	MP 241
Oliver, Richard P.....	ThP 068	Ostonal, Sarah.....	TP 388	Palmblad, Magnus.....	ThP 350
Olivier, Michael.....	TP 621	Ostrand-Rosenberg, Suzanne.....	MP 385	Palmblad, Magnus.....	ThP 694
Oliviero, Giorgia.....	ThOC pm 3:30	Osucha, Peter.....	MP 468	Palmblad, Magnus.....	MP 596
Olsen, Jesper V.....	TP 533	Osula, Omoruyi.....	ThP 283	Palmblad, Magnus.....	TP 288
Olsen, Jesper V.....	MP 303	Otto, Andreas W.....	TP 134	Palmblad, Magnus.....	WP 148
Olsen, Jesper V.....	MP 299	Ou, Bing-Yuan.....	MP 077	Palmer, Cynthia A.....	WP 679
Olsen, Richard.....	ThP 135	Ouyang, Fred.....	MOA pm 3:10	Palmgren, Michael G.....	ThP 306
Olson, Emilia S.....	TP 343	Ouyang, Zheng.....	ThOF pm 2:30	Palmiotto, Marinella.....	ThP 605
Olson, Loren.....	MP 429	Ouyang, Zheng.....	MOD pm 3:30	Palmisano, Giuseppe.....	TP 519
Olson, Loren.....	ThOB pm 3:50	Ouyang, Zheng.....	ThOF pm 4:10	Pan, Bruce.....	MP 163
Olson, Loren.....	TP 422	Ouyang, Zheng.....	ThP 359	Pan, Charles.....	MP 502
Olson, Loren.....	MP 440	Ouyang, Zheng.....	TP 359	Pan, Chongle.....	ThP 029
Olson, Loren.....	WP 221	Ouyang, Zheng.....	WP 588	Pan, Chongle.....	ThP 031
Olson, Loren Y.....	MP 444	Ouyang, Zheng.....	MP 550	Pan, David.....	ThP 677
Olson, Matthew.....	ThP 298	Ouyang, Zheng.....	WP 319	Pan, Hauqin.....	TOE am 08:50
Olsson, Linda.....	ThOE pm 2:50	Ouyang, Zheng.....	MP 425	Pan, Jingxi.....	TP 474
Olzewski, Neil E.....	ThP 252	Ovchinnikova, Olga S.....	WOD pm 3:30	Pan, Jingxi.....	TOC am 08:30
Oltrogge, Luke.....	TP 477	Ovchinnikova, Olga S.....	TP 185	Pan, Jiongwei.....	ThP 233
Olynyk, John K.....	TP 256	Ow, Saw Yen.....	MP 006	Pan, Kuan-Ting.....	ThP 274
O'Maille, Grace.....	MP 348	Owens, Karen.....	ThP 686	Pan, Ning.....	WP 342
Omara, Brian.....	ThP 577	Owens, Karen.....	ThP 685	Pan, Quintin.....	WP 408
Ómarsson, Benedikt.....	TP 640	Owens, Kevin G.....	WP 625	Pan, Ru Qiu (Sophie).....	TP 567
O'meally, Robert.....	MP 091	Owens, Kevin G.....	MPZ 579	Pan, Sophie.....	TP 581
Omenn, Gilbert.....	WP 531	Owens, Rick T.....	TP 525	Pan, Weijun.....	TOE pm 2:30
Omenn, Gilbert.....	WP 521	Ozaki, Hidenori.....	TP 526	Pan, Yan.....	WP 449
Onda, Masanori.....	MP 382	Ozawa, Tomoyuki.....	WP 612	Pan, Yuanjiang.....	ThP 642
Ondachi, Pauline.....	MP 469	Ozbal, Can "Jon".....	ThP 669	Panagiotis, Andreas.....	MP 088
Onderko, Laura L.....	ThP 459	Ozbal, Can "Jon".....	MP 438	Panawennage, Deepika.....	WOG pm 2:50
Ondrey, Frank G.....	MP 119	Ozbal, Can "Jon".....	ThP 677	Panchalingam, Krishna.....	ThP 042
O'Neill, Emily.....	TP 665	Ozden, Hakan.....	ThP 194	Panchaud, Alexandre.....	MP 149
Onipede, Adedamola.....	TP 456	Ozer, Josef.....	TP 501	Panchaud, Alexandre.....	MP 139
Ono, Akiko.....	MP 221	Ozias-Akins, Peggy.....	MP 030	Panchaud, Alexandre.....	TP 140
Onorato, Joelle.....	MP 233	Ozlu, Nurhan.....	ThP 301	Panchaud, Alexandre.....	WP 460
Onsongo, Getiria I.....	MP 119	Ozlu, Nurhan.....	ThOE am 09:10	Panchenko, Tanya.....	ThP 482
Onsongo, Getiria I.....	MP 060	Oztug Durerer, Zeynep A.....	ThP 501	Panchenko, Tanya.....	TP 447
Oo, May.....	TP 496	Pablo, Sinues.....	TP 068	Panda, Saroj.....	WOG am 08:30
Ooga, Takushi.....	TP 115	Pacchiarotta, Tiziana.....	WP 118	Panda, Saroj.....	WP 648
Oomens, Jos.....	WP 666	Packer, Roger.....	ThP 047	Pandey, Akhilesh.....	ThP 191
Oomens, Jos.....	WOA pm 3:30	Padmanabhan, Vikram.....	TP 543	Pandey, Akhilesh.....	ThP 053
Oomens, Jos.....	MOF pm 2:50	Padovan, Julio Cesar.....	ThP 345	Pandey, Akhilesh.....	ThP 055
Oomens, Jos.....	WP 660	Paek, Eunok.....	ThP 015	Pandey, Akhilesh.....	ThP 057
Oomens, Jos.....	WP 668	Paek, Eunok.....	TP 046	Pandey, Akhilesh.....	MP 008
Oomens, Jos.....	WP 662	Paeng, Ki-Jung.....	TP 321	Pandey, Akhilesh.....	TP 367
Oomens, Jos.....	WP 664	Page, A P.....	TP 032	Pandey, Akhilesh.....	TP 613
Oomens, Jos.....	WP 665	Page, Jason.....	TOD am 09:50	Pandey, Akhilesh.....	ThP 028
Oomens, Jos.....	WP 667	Page, Jason.....	MOD am 08:30	Pandey, Akhilesh.....	WP 525
Oomens, Jos.....	ThOF am 08:30	Page, Jason.....	MP 332	Pandey, Akhilesh.....	ThP 059
Oppenshaw, Matthew.....	MP 092	Paglia, Giuseppe.....	ThP 175	Pandey, Akhilesh.....	ThP 058
Oppenheimer, Stacey R.....	ThP 168	Paglia, Giuseppe.....	TP 250	Pandher, Rupinder.....	TP 120
Oppenheimer, Stacey R.....	WP 197	Pai, Pei-Jing.....	TP 223	Pang, Eric.....	TP 458
Oppermann, Madalina.....	WP 097	Pai, Sudhakar.....	MP 348	Pang, Henrianna Y.....	TP 581
Or, Reuven.....	ThP 033	Paik, Young Ki.....	TP 090	Pang, Henrianna Y.....	TP 567
Orchard, Paul J.....	WP 005	Paine, Martin R L.....	TP 303	Pang, Shaokun.....	ThOB pm 3:50
Orjala, Jimmy.....	WP 167	Paine, Martin R. L.....	TP 379	Panin, Alexander.....	MP 555
Orlandi, Rosaria.....	MP 323	Painter, Alex J.....	TP 463	Panisko, Ellen.....	WP 144

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Panee, Josef.....	TP 092	Parmar, Prashanth P.....	ThP 515	Pearce, Virginia.....	MP 026
Pannell, Lewis.....	TP 076	Paroski, Justin T.....	WP 415	Pearson, Kara.....	MP 229
Pannell, Lewis K.....	TP 523	Parr, Carol E.....	ThP 395	Peck, Michael.....	TP 516
Pannell, Lewis K.....	ThP 194	Parr, Vic.....	ThP 170	Pedder, Randy.....	MP 210
Pannell, Lewis K.....	WP 072	Parren, Paul W.H.I.....	TP 481	Pedersen, Lars C.....	WP 446
Panning, Barbara.....	ThP 288	Parry, R. Mitchell.....	ThP 313	Pei, Ping.....	ThP 149
Panse, Christian.....	MP 283	Parry, Samuel I.....	WP 082	Peintler-Krivan, Emese.....	MP 324
Panse, Christian.....	MP 045	Parry, Samuel I.....	ThP 018	Pekar Second, Tonya.....	ThP 202
Pantazatos, Dennis.....	TP 437	Parry, Samuel I.....	MP 114	Pekol, Teresa.....	MP 371
Paonessa, Joseph D.....	ThP 591	Parvin, Jeffrey D.....	MP 027	Pelckmans, Kristiaan.....	WOA am 10:10
Papanastasiou, Malvina.....	ThP 520	Pasa-tolic, Ljiljana.....	TP 125	Pellerin, Brigitte.....	ThP 232
Papasotiriou, Dimitrios.....	ThP 525	Pasa-tolic, Ljiljana.....	MP 616	Peltier, John M.....	WP 112
Papoulias, Panagiotis G.....	WP 038	Paša-Tolić, Ljiljana.....	ThP 104	Pelus, Louis M.....	MP 513
Papoulias, Panagiotis G.....	ThOC pm 4:10	Paša-Tolić, Ljiljana.....	ThP 027	Pelzer, Mary.....	ThP 223
Papoulias, Panagiotis T.....	WP 035	Paša-Tolić, Ljiljana.....	MP 290	Pelzing, Matthias.....	ThP 234
Pappalardi, Melissa B.....	WP 287	Pascal, Bruce.....	TOC am 09:50	Peng, Fuli.....	ThP 196
Papson, Kaitlin.....	ThP 655	Pascal, Bruce.....	WP 423	Peng, Ivory.....	ThP 323
Papson, Kaitlin.....	ThP 652	Pascal, Bruce D.....	ThOC am 08:30	Peng, Jianhe.....	MP 614
Paquin, E. Real.....	MP 409	Pascariu, Mirela.....	ThP 436	Peng, Junmin.....	TP 338
Paquin, E. Real.....	MP 557	Pasini, Diego.....	ThOE pm 2:50	Peng, Junmin.....	WP 304
Paquin, E. Real.....	TP 637	Passarelli, Melissa.....	WOD pm 2:30	Peng, Junmin.....	WP 299
Parakash, Amol.....	MP 123	Pastan, Ira.....	MP 382	Peng, Junmin.....	ThOE pm 3:10
Parastatidis, Ioannis.....	MP 116	Patankar, Nandini.....	ThP 057	Peng, Lijuan.....	WOF am 09:30
Parikh, Jignesh.....	WP 039	Patankar, Nandini.....	ThP 058	Peng, Liming.....	MP 379
Parikh, Jignesh.....	ThOE am 09:30	Patel, Bhavinkumar B.....	TP 085	Peng, Nick.....	TP 396
Parikh, Jignesh.....	TP 540	Patel, Keyur.....	MOE pm 3:50	Peng, Wen-ping.....	ThP 371
Parikh, Nikunj.....	ThP 669	Patel, Mehul.....	TP 472	Peng, Wen-ping.....	WP 582
Parikh, Nikunj.....	MP 438	Patel, Nayana.....	TP 242	Peng, Xuejun.....	TP 388
Paris, Alain.....	ThP 096	Patel, Nisha.....	TP 095	Peng, Xuejun.....	TP 391
Paris, Leela L.....	TP 139	Patel, Nisha.....	TP 542	Peng, Ying.....	ThOF pm 2:50
Park, Ahyoung.....	WP 211	Patel, Rekha.....	TP 217	Pengelly, Stuart.....	WP 080
Park, Chang Joon.....	MP 209	Patel, Rekha.....	ThP 538	Penn, Anna.....	MP 217
Park, Dooho.....	ThP 139	Patel, Rohan.....	ThP 036	Penn, John S.....	WP 180
Park, Eun Hye.....	WP 509	Patel, Vibhuti.....	TP 542	Pennathur, Subramaniam.....	WP 511
Park, Eun Suk.....	WP 658	Paterson, Patricia E.....	WP 339	Pennell, Michael.....	MP 344
Park, Eun Suk.....	WP 641	Paterson, Sabine.....	WP 424	Penner, Natalia.....	TOA pm 3:10
Park, Eun-il.....	TP 197	Patil, Shrikant A.....	MP 652	Penning, Trevor M.....	MP 530
Park, Gun Wook.....	TP 090	Patkin, Adam J.....	MP 666	Pennington, Karen L.....	ThP 597
Park, Gun Wook.....	ThP 429	Patkin, Adam J.....	MP 672	Pennington, Mark R.....	MP 208
Park, HC.....	ThP 069	Patkin, Adam J.....	MP 654	Peptu, Cristian.....	WP 616
Park, Ji Hyun.....	ThP 604	Patrick, Colin.....	TP 403	Percy, Andrew.....	TP 428
Park, Jung-Eun.....	WP 413	Patterson, Dale H.....	TP 422	Perdian, David.....	WP 632
Park, Ki Duk.....	MP 597	Patterson, Garth.....	TP 372	Perdivara, Irina.....	ThP 183
Park, Kyong Soo.....	MP 090	Patterson, Tom.....	WP 680	Perdivara, Irina.....	TP 351
Park, Kyong Soo.....	MP 032	Patterson, Tom.....	WP 680	Pereira, Claudia P.....	TP 488
Park, Kyu Hwan.....	TP 064	Patti, Gary J.....	ThP 383	Pereira Da Rocha, Angela.....	WP 281
Park, Kyu Hwan.....	WP 377	Patti, Gary J.....	ThOG pm 2:30	Perera, Lalith.....	WP 446
Park, Melvin A.....	ThP 347	Patti, Gary J.....	ThP 071	Perez, Jose J.....	ThP 318
Park, Melvin A.....	ThP 620	Patwa, Tasneem.....	WP 054	Perez, Josue.....	ThP 001
Park, Sam-Yong.....	TP 468	Paul, Catherine.....	TP 516	Perkins, Brittany R.....	WOC am 10:10
Park, Su-Jeong.....	TP 317	Paul, Lake N.....	ThP 552	Perkins, Brittany R.....	WOA pm 3:50
Park, Su-Min.....	TP 321	Paul, Nicodeme.....	ThP 420	Perkins, Patrick D.....	TOC pm 3:50
Park, Sun Min.....	TP 087	Pauli, Guido F.....	TP 415	Perlman, David H.....	WP 434
Park, Sun-Hee.....	TP 249	Paulovich, Amanda.....	MOE pm 4:10	Perlman, David H.....	MP 288
Park, Youngja.....	ThP 086	Paulovich, Amanda.....	TP 074	Perlman, David H.....	ThP 261
Parker, Carol E.....	WP 439	Pauls, Rick.....	WP 633	Perlman, David H.....	WP 414
Parker, Carol E.....	ThP 251	Paulus, Aran.....	WP 088	Perlman, David H.....	WP 327
Parker, Carol E.....	WP 556	Paulus, Caroline.....	WP 064	Perlman, David H.....	ThP 120
Parker, Carol E.....	ThP 118	Pawar, Harsh.....	MP 008	Perlman, David H.....	WP 049
Parker, Charles.....	WP 325	Pawar, Harsh.....	ThP 057	Perlman, David H.....	ThP 014
Parker, Kenneth.....	MP 064	Pawar, Harsh.....	ThP 058	Perlman, David H.....	MP 292
Parker, Kenneth.....	TP 191	Pawar, Harsh A.....	ThP 028	Perlmutter, Patrick.....	TP 337
Parker, Kenneth.....	MP 064	Pawar, Harsh A.....	ThP 055	Perlova, Tatiana Yu.....	ThP 307
Parker, Kenneth.....	ThP 298	Pawson, Tony.....	TP 008	Permi, Perttu.....	ThP 476
Parkes, William.....	WP 317	Pawson, Tony.....	TP 008	Perreault, Helene.....	WP 465
Parkes, William.....	TP 166	Pawson, Tony.....	TP 029	Perreault, Helene.....	TP 531
Parkinson, Andrew.....	MP 543	Pawson, Tony.....	TP 509	Perry, Richard H.....	TOD pm 3:50
Parkinson, Erika P.....	MP 061	Payne, Sam.....	WOE am 10:10	Perry, Robert D.....	ThP 515
Parks, Jerry.....	ThP 559	Paz-Filho, Gilberto.....	WP 524	Peru, Kerry M.....	TP 600
Parks, Joel H.....	MOF pm 2:30	Pazzi, Marco.....	TP 359	Pesce, Amadeo.....	TP 652
Parks, Joel H.....	MOF pm 2:30	Peacock, Kyle S.....	WOC pm 4:10	Pesek, Joseph J.....	TP 112
Parks, Joel H.....	TOF pm 3:30	Peacock, Kyle S.....	MP 485	Peskind, Elaine.....	TP 623

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Pestano, Gary	WP 179	Phan, Trang N.T.	WP 611	Pinkse, Martijn	ThOA pm 4:10
Peter, Gary F.	WP 485	Phanstiel, Doug	TP 369	Pinkse, Martijn	WP 390
Peter-Katalinic, Jasna	MP 482	Phanstiel, Doug	TP 538	Pinkston, David	WOG am 10:10
Peter-Katalinic, Jasna	WP 475	Phanstiel, Douglas H	MOE am 09:10	Pinnawala, Amara	TP 388
Peterman, Scott	TP 138	Pharm, Anh	WP 171	Pinnawala, Amara	MP 342
Peterman, Scott	ThP 695	Philip, Ramila	WP 077	Pinnick, Veronica	ThOG pm 3:30
Peterman, Scott	ThP 019	Philip, Ramilla	MP 384	Pintal, Richard	MP 600
Peterman, Scott	MP 122	Philipp, Melanie	ThP 442	Pinto, Devanand M	ThP 428
Peterman, Scott	MP 048	Philippe, Olivier	TP 251	Pinto, Devanand M	TP 549
Peterman, Scott	MP 016	Phillips, Thomas	WOA am 10:10	Piper, Chelsea	TP 513
Peterman, Scott	ThP 440	Phillips, Julian	MP 442	Piras, Antonio	MP 257
Peterman, Scott	WP 313	Phillips, Julian J	TP 393	Pirkle, James L	TP 511
Peters, Eric C.	TP 124	Phillips, Julian J	ThP 199	Pirkle, James L	MP 460
Petersen, Catherine E.	ThP 142	Phillips, Lawrence R	ThP 160	Pirkle, James L	TP 014
Peterson, Amelia C.	TOD am 09:30	Phillips, Lawrence R	TP 412	Pirkle, James L	MP 422
Peterson, Amelia C.	ThP 045	Phillips, Lawrence R	Special	Pirman, David A.	ThP 165
Peterson, David	WP 061	Phillips, Michael C	TOG pm 2:30	Pisano, M Michele	ThP 581
Peterson, Richard	ThP 601	Phillips, Nelson B.	WP 444	Pisano, Michael R.	MP 123
Peterson, Scott N.	ThP 515	Philp, Robin	TP 098	Pitcher, Austin	MP 389
Petitte, James	MOE am 10:10	Phinney, Brett	Special	Pitsch, Rhonda L.	ThP 584
Petras, Daniel	ThP 076	Phinney, Brett	MP 003	Pitsch, Rhonda L.	TP 088
Petre, Alina	WP 321	Phinney, Karen W.	WP 121	Pittenauer, Ernst	MP 105
Petre, Alina	MP 394	Phinney, Karen W.	WP 096	Pitteri, Sharon	MOE pm 4:10
Petre, Brindusa-Alina	ThP 279	Phinney, Karen W.	WOB am 09:30	Pitteri, Sharon J.	WP 068
Petric, Martin	TOD pm 4:10	Phinney, Karen W.	WP 101	Pizarro, Angel D.	Special
Petricoin, Emanuel	MP 129	Phinney, Karen W.	WP 250	Pizarro, Angel D.	ThP 018
Petricoin, Emanuel	WP 074	Phu, Lillian	WP 016	Placzek, Andrew	MP 301
Petricoin, Emanuel F.	ThP 437	Phu, Lillian	ThP 121	Plakas, Steven M.	ThP 132
Petritis, Brianne	WP 552	Phu, Lillian	TP 028	Plant, Steve	MP 372
Petritis, Brianne O.	TP 232	Phung, Qui	WP 016	Plasencia, Manolo D.	WP 215
Petritis, Brianne O.	WP 146	Phung, Qui	TP 127	Plasencia, Manolo D.	TP 224
Petritis, Konstantinos	ThP 103	Pica-Mendez, Arnaldo	WP 260	Plass, Wolfgang R.	TOD pm 4:10
Petritis, Konstantinos	ThP 104	Picard, Pierre	TP 416	Plath, Kim B.	WP 379
Petritis, Konstantinos	MP 290	Picard, Pierre	ThP 687	Platt, Mark D.	ThP 472
Petrotchenko, Evgeniy	ThP 009	Picard, Pierre	MP 106	Plazas-Mayorca, Mariana D.	TOE pm 3:30
Petrotchenko, Evgeniy	WP 438	Picard, Pierre	TP 637	Plazas-Mayorca, Mariana D.	TP 272
Petrotchenko, Evgeniy	WP 432	Picard, Pierre	MP 409	Plazas-Mayorca, Mariana D.	ThOD pm 3:10
Petrotchenko, Evgeniy	WP 440	Picard, Pierre	MP 557	Pleil, Joachim D.	WP 591
Petrotchenko, Evgeniy	WP 439	Picard, Serge	MP 409	Plet, Benoit	WP 457
Petrotchenko, Evgeniy	WP 153	Pichersky, Eran	WP 569	Plowman, J. E.	MP 553
Petsko, Gregory A.	ThP 477	Pichler, Peter	TP 013	Plowman, Jeff E.	WP 539
Petersson, Ingrid, V.	WP 209	Pichler, Peter	MP 007	Plows, Fiona	WP 089
Pettit, Lauren	WP 596	Pickel, Deanna	TP 639	Plows, Fiona	ThP 457
Petukhova, Valentina	TP 413	Pickel, Deanna L.	TOD am 09:10	Plows, Fiona	ThOA pm 3:50
Petusky, Susan	MOB am 08:30	Pickett, Jenifer	MP 502	Plows, Fiona	WP 513
Petyuk, Vladislav A.	MP 033	Pickford, Russell	MP 270	Plows, Fiona	WP 137
Petzold, Chris	MP 389	Picotti, Paola	TP 138	Plumb, Rob	WP 236
Petzold, Christopher J.	TP 500	Pieber, Thomas	WP 572	Plumb, Robert	WP 239
Pevzner, Pavel	ThP 466	Pieber, Thomas R.	WP 347	Plummer, Francis A.	WP 083
Pevzner, Pavel	WOE am 09:10	Piehowski, Paul D.	ThP 176	Podtelejnikov, Alexandre	WP 056
Pevzner, Pavel	ThP 696	Piening, Kathryn	ThP 240	Podwojski, Katharina	MP 618
Pevzner, Pavel	WP 041	Pieper, Rembert	WOE am 10:10	Poe, Julie	WP 238
Pevzner, Pavel	ThP 006	Pieper, Rembert	ThP 515	Poetsch, Ansgar	ThP 525
Pevzner, Pavel	ThP 005	Pierce, Carrie L.	TP 511	Poisson, Laila	WP 531
Pevzner, Pavel	ThOE pm 4:10	Pierce, Sarah E.	ThP 418	Pol, Jaroslav	TP 190
Pevzner, Pavel	ThP 013	Pierini, Elisabetta	WP 606	Polak-Knook, Joke A.	TP 078
Peyraud, Rémi	TP 116	Pierini, Elisabetta	MP 241	Polfer, Nicolas	MP 210
Pezzuto, John M.	WP 167	Pierson, Nicholas A.	WP 202	Polfer, Nicolas	TP 527
Pezzuto, John M.	WP 220	Pierzynowski, Stefan	TP 244	Polfer, Nicolas	MP 136
Pfeifer, Thorben	ThP 351	Pihlajamaa, Tero	ThP 476	Polfer, Nicolas	WP 665
Pfeuffer, Kevin P.	TOD am 10:10	Pikuleva, Irina A.	WP 417	Polfer, Nicolas	ThOD am 10:10
Pflieger, Delphine	ThP 244	Pilau, Eduardo J.	ThP 503	Polfer, Nicolas	WP 661
Pflieger, Delphine	WP 443	Pillai, Sasi	MP 260	Polfer, Nicolas	WOA pm 3:30
Pfuetzner, Richard A.	WP 460	Pimenova, Tatiana	TP 488	Polfer, Nicolas	WP 482
Pham, Catherine	ThP 675	Pin, Serge	WP 443	Poliak, Marina	TP 302
Pham, Hung	WP 645	Pinchuk, Anatoly N.	ThP 225	Politis, Argyris	WP 211
Pham, Huong	WOC am 09:10	Pineau, Charles G.	MP 141	Poljak, Anne	MP 259
Pham, Victoria	MP 062	Pingitore, Francesco	TOA am 10:10	Pollard, Abiola	WP 452
Pham, Victoria	ThP 005	Pinheiro, Teresa	WOD am 09:10	Polley, Alexis	ThP 170
Pham Tuan, Hai	MP 254	Pinheiro, Teresa J. T.	TP 221	Polotskii, Boris	TP 080
Phan, N.H.	TP 433	Pinkse, Martijn	ThP 426	Polovkov, Nikolai Yu.	WP 623
Phan, Trang	WOF am 08:30	Pinkse, Martijn	WP 029		

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Polpitiya, Ashoka D. ....	WP 458	Prenni, Jessica.....	ThP 270	Purkayastha, Babu.....	MP 169
Polpitiya, Ashoka D. ....	ThP 027	Prenni, Jessica.....	TP 536	Purkayastha, Babu.....	MP 260
Polpitiya, Ashoka D. ....	MP 033	Prest, Harry.....	MP 658	Purkayastha, Babu.....	WP 272
Polpitiya, Ashoka D. ....	TP 218	Prestegard, James.....	TOC am 08:50	Purohit, Sharad.....	TP 329
Polpitiya, Ashoka D. ....	WP 051	Preston, Elaine.....	TP 528	Pursch, Matthias.....	WP 614
Pols, Joanna R. ....	WP 098	Preston, Elaine.....	MP 270	Purser, Eric I.....	ThP 008
Polyakova, Olga.....	TP 604	Preston, Ryan.....	ThP 184	Purves, Randall.....	MP 356
Pomerantz, Andrew E.....	WP 649	Prestwich, Erin G.....	ThP 594	Purvine, Samuel O.....	WP 144
Pomerantz, Steven C.....	ThP 545	Prevelige, Peter.....	MOC am 09:30	Purvine, Samuel O.....	MP 616
Pomies, Christelle.....	TP 262	Prévost, Michèle.....	TP 597	Purvine, Samuel O.....	ThOE am 10:10
Pompach, Petr.....	WP 018	Prévost, Michèle.....	TP 595	Puschenreiter, Markus.....	ThP 136
Pompach, Petr.....	MP 050	Prévost, Michèle.....	TP 596	Puschenreiter, Markus.....	ThP 150
Ponko, Stefan.....	TP 149	Price, Daniel O.....	WP 681	Pyatkovskyy, Yuriy.....	ThP 640
Ponthus, Jeremie.....	WP 655	Price, Megan E.....	WP 681	Pynner, Alison.....	TP 388
Poot, Peter.....	TP 145	Price, Nathan D.....	TP 150	Qi, Lining.....	MP 096
Popov, Igor.....	WP 369	Price, Patricia.....	TP 174	Qi, Xiaojie.....	TP 142
Popov, Igor.....	MP 053	Price, Philip C.....	WP 681	Qian, Jiang.....	MP 509
Popov, Igor.....	TP 508	Prideaux, Brendan.....	ThP 161	Qian, Jie.....	ThP 668
Popov, Irene.....	MP 342	Prideaux, Brendan.....	WOA am 08:30	Qian, Jie.....	MP 463
Popov, Serguei G.....	ThP 437	Priego-Capote, Feliciano.....	ThOE pm 3:30	Qian, Jie.....	MP 386
Popoval-Butler, Alexandra.....	TOE am 10:10	Prieto, Darue A.....	MP 617	Qian, Mark.....	ThP 369
Popping, Bert.....	TP 505	Prieto, Marilyn.....	TP 208	Qian, Mark.....	WP 334
Popping, Bert.....	TP 310	Prieto, Marilyn.....	TP 214	Qian, Mark.....	MP 360
Popst Armando, Yara.....	MP 165	Prieto Conaway, Maria C.....	ThOA pm 4:10	Qian, Weijun.....	MP 033
Porta, Tiffany.....	MP 570	Prieto Conaway, Maria C.....	ThOB pm 3:10	Qian, Xiao-Dong.....	MP 298
Portais, Jean-Charles.....	TP 116	Prieto Conaway, Maria C.....	ThP 167	Qian, Xiaohong.....	ThP 243
Portelius, Erik.....	TP 093	Prieto Conaway, Maria C.....	ThP 181	Qian, Zhong.....	ThP 196
Porter, Ned.....	ThP 174	Prieto Conaway, Maria C.....	MP 442	Qin, Feng.....	WP 599
Porter, Warren P.....	WP 127	Princivalle, Alessandra P.....	ThP 171	Qin, Feng.....	WOG pm 3:50
Posakony, Jeffrey J.....	ThP 447	Pringle, Steven D.....	TP 220	Qin, Feng.....	MP 346
Post, Deborah.....	WP 014	Pringle, Steven D.....	TP 361	Qiu, Chen.....	TP 036
Post, Jeremy.....	ThP 162	Prinz, Thorsten.....	MP 474	Qiu, Minghua.....	TP 320
Post, Jeremy D.....	WP 194	Prinz, Thorsten.....	WP 009	Qiu, Qiyu.....	MP 526
Potier, Noelle.....	TP 482	Prior, David.....	TP 232	Qiu, Xi.....	TP 320
Potts, Donna.....	MP 549	Prior, David.....	MOD am 08:30	Qu, Jun.....	ThP 475
Potts, Donna.....	TP 505	Prior, David.....	TP 212	Qu, Jun.....	MOB pm 3:30
Potvin, Michael A.....	MP 108	Prior, David.....	MP 333	Qu, Jun.....	MP 302
Poulos, Tom.....	TP 425	Priymenko, Nathalie.....	ThP 096	Qu, Jun.....	TP 131
Poutaraud, Anne.....	WP 565	Proc, Jennifer.....	WP 514	Quang, Changyu.....	MP 420
Powell, David H.....	ThP 139	Procter, Martin.....	ThP 677	Qui, Cheng.....	TP 454
Powell, David H.....	ThP 065	Proctor, J.....	WP 562	Quigley, Andrew M.....	WP 428
Powell, David H.....	WP 482	Profit, Adam.....	TP 354	Quilliam, Michael.....	ThP 131
Powell, David H.....	WP 661	Prokai, Laszlo.....	MP 026	Quinn, John P.....	MOD pm 2:50
Powell, David H.....	TP 309	Prokai, Laszlo.....	WP 293	Quinn, John Paul.....	TP 284
Powell, David H.....	WOA pm 3:30	Prokai, Laszlo.....	WP 285	Quinn, Joseph.....	TP 623
Powell, Matthew.....	MP 287	Prokai-Tatrai, Katalin.....	WP 285	Quinn, Kevin D.....	ThP 312
Powers, Linda.....	TOG am 09:50	Prokai-Tatrai, Katalin.....	WP 293	Quinones, Octavio.....	MP 129
Pownall, Henry.....	TP 135	Prosser, Simon J.....	WP 315	Quinton, Loic.....	WP 366
Pozniak, Boguslaw.....	WP 322	Prosser, Simon J.....	ThP 104	Quinton, Loic.....	WP 012
Prakash, Amol.....	ThP 039	Prosser, Simon J.....	MP 291	Quinton, Loic.....	TP 364
Prakash, Amol.....	ThP 695	Provenzano, Antonio.....	MP 185	Quinton, Loic.....	WP 184
Prakash, Amol.....	ThP 019	Pruitt, Liese.....	WP 068	Quirico, David J.....	TP 397
Prakash, Amol.....	MP 016	Przyborowska, Anna M.....	WP 265	Quirk, Roderic P.....	WP 624
Prakash, Amol.....	TP 138	Przybylski, Cédric.....	ThP 244	Rabaglia, Mary E.....	MP 356
Prakash, Amol.....	WP 313	Przybylski, Michael.....	ThP 279	Rabinowitz, Joshua.....	ThOC am 08:50
Prakash, Amol.....	MP 048	Przybylski, Michael.....	WP 321	Rabinowitz, Joshua.....	ThP 081
Prakash, Amol.....	MP 607	Przybylski, Michael.....	TP 351	Rabinowitz, Joshua.....	ThP 089
Prakash, Anuradha.....	WP 378	Przybylski, Michael.....	MP 394	Rabinowitz, Joshua D.....	WP 102
Pramanik, Birendra.....	MP 184	Przybylski, Michael.....	ThP 183	Rabinowitz, Joshua D.....	WOB am 10:10
Pramanik, Birendra.....	MP 161	Pscherer, Armin.....	WP 031	Räder, Hans Joachim.....	WOF am 08:50
Pramanik, Birendra.....	MP 350	Puckett, Latisha M.....	TP 433	Radfar, Arash.....	MOE pm 3:10
Pramanik, Birendra.....	ThP 550	Pudage, Ashutosh.....	WP 237	Radfar, Arash.....	WP 086
Prasad, Keshava T.S.....	MP 008	Pudage, Mr Ashutosh.....	MP 351	Radford, Sheena E.....	TP 235
Prasad, Keshava T.S.....	ThP 028	Puga, Alvaro.....	MOG am 08:50	Radivojac, Predrag.....	TP 045
Prasad, Madhu.....	MP 604	Pugh, Michael.....	ThP 690	Raether, Oliver.....	ThP 620
Prasain, Jeevan.....	MP 445	Pugh, Scott.....	TP 649	Raetzman, Lori.....	TP 491
Pratt, Brian S.....	WP 036	Pugh, Scott.....	WP 103	Raffaelli, Andrea.....	WP 247
Pratt, Susan E.....	TOB pm 2:50	Puolitaival, Satu.....	ThP 177	Rafferty, Steven P.....	ThP 478
Pratt, Susan E.....	WP 160	Purcell, Anthony W.....	TP 337	Raffy, Quentin.....	WP 443
Prazen, Bryan.....	TP 016	Purcell, Anthony W.....	ThP 195	Raftery, Mark J.....	ThP 105
Prell, James.....	TOF pm 2:50	Purcell, Jeremiah M.....	WP 664	Raghavan, Nirmala.....	TP 575
Prell, James S.....	ThOD am 08:30	Purcell, Jeremiah M.....	WP 639	Rago, Brian.....	WP 238

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Rago, Brian.....	MP 408	Rasley, Amy .....	TP 125	Reilly, Karlyne .....	ThP 047
Rago, Brian.....	ThP 682	Rasmussen, Morten.....	WP 437	Reilly, Muredach P.....	MP 116
Rahavendran, Sadayappan .....	MP 433	Rasmussen, Morten .....	WP 152	Reilly, Peter T. A. ....	MP 188
Rahavendran, Sadayappan V .....	MOB am 09:10	Rasmussen, Morten .....	WP 157	Reily, Michael .....	WOB am 09:10
Rahman, Md Mizanur .....	MP 492	Rasmussen, Pat .....	TP 602	Reily, Michael .....	ThP 099
Raida, Manfred R.....	ThP 553	Rasmussen, Susanne .....	MP 489	Reily, Michael .....	MP 233
Raida, Manfred R.....	TP 336	Rath, Christopher M.....	WP 373	Reinartz, Benedikt S.....	ThP 514
Raida, Manfred R.....	Special	Rath, Narayan C.....	TP 490	Reinberg, Danny .....	TP 263
Rajmakers, Reinout .....	MP 011	Rathe, Jonathan O.....	MP 355	Reiner, Jessica L.....	WP 602
Rainville, Paul.....	WP 239	Rathnayake, Asanka S.....	ThP 159	Reiner, Jessica L.....	TP 589
Rainville, Paul.....	WP 236	Rathore, Rakesh.....	MP 593	Reinheimer, Katrin.....	TOD pm 4:10
Raith, Klaus.....	MP 246	Ratliff, Brian.....	ThP 069	Reinherz, Ellis .....	MP 381
Rajabi, Khadijeh.....	TOF pm 3:10	Ratsima, Hery.....	ThP 436	Reinhold, Bruce B.....	MP 381
Rajagopalachary, Sidhartharaja .....	MP 648	Rattanasinganchan, Panthip.....	TP 037	Reinhold, Vernon N.....	ThP 042
Raju, Rajesh.....	ThP 028	Rauniyar, Navin.....	WP 293	Reinhold, Vernon N.....	MP 494
Ramachandran, Prasanna .....	WP 495	Rauniyar, Navin.....	WP 285	Reinhold, Vernon N.....	MP 495
Ramaker, Raymond.....	MP 243	Ravichandran, Ayshwarya.....	ThP 433	Reisler, Emil.....	ThP 501
Ramanathan, Dil.....	TP 456	Rawson, Nancy E.....	ThP 194	Reiss, Duane R.....	WP 548
Ramanathan, Dil.....	WP 596	Ray, Gene.....	MP 339	Rejtar, Tomas.....	ThP 293
Ramanathan, Murali.....	MOB pm 3:30	Ray, Gene.....	MP 419	Rejtar, Tomas.....	WP 545
Ramanathan, Ragu.....	TP 575	Ray, Steven J.....	TOD am 10:10	Rejtar, Tomas.....	TP 072
Ramanathan, Ragu.....	TP 562	Ray, Stuart.....	TP 059	Rejtar, Tomas.....	WP 472
Ramarathinam, Sri H.....	TP 337	Raynaud, Florence.....	TP 120	Remes, Philip M.....	MP 196
Ramaroson, Mialy F.....	TP 019	Raynaud, Florence I.....	MP 398	Remes, Philip M.....	ThP 348
Ramaswamy, Girija.....	WP 525	Raznikov, Valeriy.....	TP 204	Remes, Philip M.....	MOD pm 2:30
Ramirez, Alejandro J.....	WOG pm 3:10	Razumovskaya, Jane.....	TP 383	Remes, Philip M.....	MP 195
Ramos, Alexis.....	ThP 524	Razumovskaya, Jane.....	ThP 385	Remily, Elizabeth R.....	MP 454
Ramos, Hector.....	TOC pm 2:50	Razumovskaya, Jane.....	MP 610	Rempel, Don L.....	TP 282
Ramos, Hector.....	WP 697	Razumovski, Jane.....	ThOG am 10:10	Rempel, Don L.....	TP 445
Rampalli, Krystal.....	ThP 454	Razunguzwa, Trust.....	MP 287	Rempel, Don L.....	MP 394
Ramsey, J. Michael.....	MP 335	Read, Laurie.....	MP 302	Ren, Bailuo.....	ThP 231
Ramsey, J. Michael.....	TP 168	Reamtong, Onrapak.....	MP 597	Ren, Chen.....	ThP 149
Ramu, Kumar.....	TP 400	Rebec, George V.....	WP 173	Ren, Da.....	ThP 535
Ramu, Kumar.....	MP 414	Rebuffat, Sylvie.....	ThP 284	Ren, Da.....	ThP 536
Ramu, Kumar.....	TP 390	Recker, Robert.....	ThP 128	Ren, Jianhua.....	MP 661
Ramu, Kumar.....	TP 407	Recker, Robert.....	WP 094	Ren, Jianhua.....	WP 669
Ramu, Kumar.....	MP 413	Recker, Robert.....	WP 090	Ren, Shifang.....	ThP 461
Ramu, Kumar.....	MP 418	Reckow, Stefan.....	MP 069	Ren, Yulin.....	TP 294
Ramu, Kumar.....	MP 411	Redding, Alyssa.....	MP 389	Ren, Yulin Ren.....	TP 293
Ramu, Kumar.....	MP 423	Redding, Alyssa M.....	TP 500	Renard, Bernhard.....	ThOE am 09:10
Ramu, Kumar.....	TP 389	Reddish, John Mark.....	ThP 038	Renard, Bernhard Y.....	MP 034
Ramu, Kumar.....	WP 218	Reddy, Srinivasa T.....	WP 523	Renard, Bernhard Y.....	TP 177
Ramu, Kumar.....	MP 416	Reece, Jennifer.....	ThP 638	Renard, Bernhard Y.....	ThP 016
Ramu, Kumar.....	MP 410	Reed, Jess D.....	WP 387	Renard, Bernhard Y.....	WP 059
Ramu, Kumar.....	TP 397	Reed, Ralph.....	MP 535	Renard, Bernhard Y.....	WP 053
Ramu, Kumar.....	MP 417	Reed, Ralph.....	MP 271	Renard, Bernhard Y.....	MP 057
Ramu, Kumar.....	TP 403	Reepmeyer, John C.....	ThP 143	Renaud, Justin.....	TP 476
Ramu, Sivakumar.....	ThP 033	Rees, Bernard B.....	WP 529	Renault, Jean-Philippe .....	WP 443
Rana, Gaurav S.J.B.....	WP 058	Rees, Johanna.....	TP 535	Rendahl, Aaron K.....	MP 055
Rana, Gaurav S.J.B.....	WP 541	Rees, Jon.....	ThP 375	Renfrow, Matthew B.....	TP 514
Rana, Gaurav S.J.B.....	MOE pm 2:50	Rees, Jon.....	ThP 376	Renfrow, Matthew B.....	ThP 575
Rana, Sumandeep.....	ThP 583	Reghu, Nikitha.....	ThP 437	Renfrow, Matthew B.....	TP 454
Ranasinghe, Asoka.....	TP 562	Regnier, Fred.....	TOC pm 2:30	Renfrow, Matthew B.....	TP 312
Rand, Kasper D.....	WP 421	Regnier, Fred E.....	TP 101	Renganathan, Kutralanathan .....	WP 149
Randall, Kristen.....	ThP 591	Regula, Joerg.....	ThOA am 08:30	Renger, John J.....	WP 548
Rangiah, Kannan.....	MP 116	Regulus, Peggy.....	MP 511	Rennie, Alissa.....	WP 516
Ranish, Jeff.....	MOE am 09:30	Rehder, Douglas.....	WP 424	Renuse, Santhosh.....	WP 525
Rannulu, Nalaka.....	MP 212	Reich, Richard F.....	MP 584	Renuse, Santosh.....	MP 008
Rao, Srinivasa.....	WP 637	Reichert, Paul.....	ThP 550	Renuse, Santosh.....	ThP 058
Rao, Uma.....	WP 086	Reid, Christopher.....	WP 484	Renuse, Santosh.....	ThP 057
Rappold, Brian.....	MOB pm 3:50	Reid, Gavin E.....	TOB pm 4:10	Renuse, Santosh.....	ThP 028
Rappold, Brian.....	WP 337	Reid, Gavin E.....	MOD pm 3:10	Renuse, Santosh S.....	ThP 055
Rappsilber, Juri.....	WP 152	Reid, Gavin E.....	MP 251	Resch, Martin.....	WP 621
Rappsilber, Juri.....	WP 437	Reid, Gavin E.....	WOC am 08:50	Resch, Martin.....	WP 622
Rappsilber, Juri.....	WP 053	Reidel, Boris.....	ThP 129	Resch, Mike.....	TP 447
Rappsilber, Juri.....	WP 157	Reijmers, Theo.....	TP 119	Resemann, Anja.....	ThP 544
Rapson, Sean.....	ThP 130	Reijmers, Theo.....	TP 089	Resing, Katheryn.....	TP 370
Raptakis, Emmanuel.....	ThP 384	Reilly, James P.....	MP 500	Resing, Katheryn A.....	WP 149
Raptakis, Emmanuel.....	TP 174	Reilly, James P.....	TOC am 09:10	Ressom, Habtom.....	TP 099
Raptakis, Emmanuel.....	WP 189	Reilly, James P.....	ThP 568	Reterrer, Scott.....	TP 639
Rardin, Brent.....	TP 372	Reilly, James P.....	ThP 619	Retterer, Scott.....	TOD am 09:10
Rasche, Florian.....	WP 690	Reilly, James P.....	WOA pm 3:10	Reulen, Nadine.....	WP 081

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Reyzer, Michelle L.....	MP 170	Robinson, Carol.....	WP 211	Rooney, Michael.....	ThP 679
Rezai, Taha.....	MP 129	Robinson, Carol.....	WOC am 09:50	Roper, David I.....	WP 428
Rezai, Taha.....	ThP 039	Robinson, Carol.....	MOD am 08:50	Rorrer, Leonard.....	TP 211
Rezai, Taha.....	MP 016	Robinson, Carol.....	TOG pm 3:10	Rosado, Jr, Dale A.....	ThP 156
Rezai, Taha.....	MP 123	Robinson, Carol V.....	TP 463	Rosajjakul, Teerapat.....	TP 127
Rezai, Taha.....	MP 607	Robinson, Carol V.....	WOE pm 4:10	Rosas, Damaso.....	MP 357
Rezai, Taha.....	MP 048	Robinson, Errol.....	ThP 104	Rosbash, Michael.....	ThP 456
Rhee, Kunsoo.....	WP 413	Robinson, Errol W.....	MP 290	Roschitzki, Bernd.....	MP 045
Rhee, Kyu.....	WP 122	Robinson, Gloria.....	WP 528	Roschitzki, Bernd.....	ThP 372
Rhodes, Timothy.....	TP 306	Robinson, Jeffrey M.....	ThP 515	Roscioli, Kristyn.....	WP 196
Rhodus, Nelson L.....	MP 119	Robinson, Jon.....	TP 456	Rose, Kristie L.....	TP 266
Ribadeneira, Maria.....	MP 527	Robotham, Scott A.....	WP 630	Rose, Mark J.....	MP 455
Ricci da Silva, Maria Esther.....	TP 313	Roboz, John.....	MP 513	Rose, Rebecca.....	MOC am 08:30
Riccio Fonseca, Maria Francesca.....	TP 243	Rodén, Dan M.....	ThP 157	Rose, Rebecca J.....	TP 481
Richard, Gibbs.....	MP 301	Rodger, Mark.....	TP 229	Rose, Sharon D.....	TP 523
Richards, Ayanthi.....	TP 528	Rodgers, Mary T.....	TP 465	Rosen, Elias P.....	ThOG am 08:50
Richards, Cassandra J.....	MP 341	Rodgers, Mary T.....	ThOF am 08:30	Rosenberg, Stanley.....	MP 529
Richardson, Elizabeth Ann.....	TP 072	Rodgers, Ryan P.....	WP 642	Rosenblatt, Michael.....	ThP 440
Richardson, Jason L.....	ThP 535	Rodgers, Ryan P.....	WOG am 09:30	Rosenblatt, Michael.....	WP 410
Richardson, Jordan.....	TP 572	Rodgers, Ryan P.....	WP 657	Rosenblatt, Michael.....	ThP 454
Richardson, Keith.....	TP 210	Rodgers, Ryan P.....	WP 639	Ross, Mark M.....	MP 129
Richardson, Keith.....	TP 179	Rodgers, Ryan P.....	WP 638	Ross, Mark M.....	WP 074
Richardson, Keith.....	TP 229	Rodriguez, Ramona.....	MP 367	Ross, Wayne B.....	ThP 583
Richardson, Paul.....	ThP 587	Rodland, Karin.....	WP 552	Rosser, Charles J.....	MP 082
Richardson, Paul.....	TP 143	Rodriguez-Canales, Jaime.....	TOB pm 3:10	Rossi, Andrea N.....	ThP 605
Richardson, Susan.....	WOG pm 2:30	Rodriguez, Veronica P.....	TP 420	Rossi Bernardi, Luigi.....	TP 068
Richo, Janique.....	WP 219	Rodriguez-Canales, Jaime.....	MP 617	Rostad, Colleen.....	WP 656
Richter, Florian.....	ThP 420	Rodthongkum, Nadnudda.....	MPZ 583	Rosu, Frederic.....	ThOC pm 3:30
Richter, Florian.....	ThP 296	Roeder, Daniel.....	TP 313	Rosu, Frederic.....	TP 364
Richter, Florian M.....	WP 140	Roehrich, Joerg.....	TP 650	Rosu, Frederic.....	ThOF am 08:50
Ricke, William.....	TP 102	Roempp, Andreas.....	WP 368	Rotello, Vincent M.....	ThOG pm 4:10
Ridenour, Whitney B.....	TP 193	Roempp, Andreas.....	TP 176	Roth, Jeri.....	TP 042
Ridge, Douglas.....	ThP 655	Roepstorff, Peter.....	WP 281	Roth, Steve.....	WP 137
Ridge, Douglas P.....	ThP 652	Rogalski, Jason.....	MP 153	Roth, Steve.....	WP 513
Ridgeway, Mark.....	ThP 348	Rogalski, Jason.....	WP 320	Roth, Steve.....	ThP 457
Ridgeway, Mark.....	ThP 347	Rogalski, Jason.....	ThP 431	Roth, Steve.....	ThOA pm 3:50
Rieder, Ulrike.....	ThP 416	Rogatsky, Eduard.....	WP 266	Roth, Udo.....	TP 239
Rieker, Eva.....	ThP 431	Rogers, John.....	ThP 440	Rothe, Eva.....	WP 120
Ries, Albert.....	ThP 427	Rogers, John.....	ThP 454	Rotter, Charles.....	WP 238
Riesen, Nathalie.....	WP 457	Rogers, John C.....	WP 410	Roumeliotis, Theodoros.....	TP 033
Rietschel, Benjamin.....	ThP 525	Rogowska-Wrzesinska, Adelina.....	WP 281	Rouse, Jason.....	WP 471
Rigbolt, Kristoffer T. G.....	WP 300	Roh, Jae-soon.....	TP 594	Roushall, Randy.....	MP 656
Riley, Catherine P.....	TP 101	Rohde, Lisa.....	WP 222	Rouw, Sharon.....	TP 501
Rinehart, Jesse.....	TOE pm 2:30	Rohls, Rebecca.....	ThP 397	Roux, Aurelie.....	ThP 066
Ringe, Dagmar.....	ThP 477	Rohm, Rory.....	WP 352	Rowland, Megan.....	TP 151
Ringham, Heather N.....	MP 609	Rohrs, Henry W.....	MP 042	Rowland, Megan.....	TOE am 08:50
Ringwelski, Andrzej.....	WP 645	Rohrs, Henry W.....	ThP 551	Rowland, Megan.....	MP 079
Rinner, Oliver.....	ThP 439	Rojas, Luis A.....	TP 263	Roy, Jean.....	MP 093
Ripley, Steven R.....	TP 205	Rojas, Miguel.....	TP 119	Roy, Line.....	MP 526
Risinger, Mary.....	TOE pm 2:30	Rolando, Christian.....	WP 276	Roy, Line.....	WP 566
Ritter, Joseph K.....	WP 547	Rolando, Christian.....	WP 278	Roy, René.....	MP 520
Rizki, Mateen.....	ThP 584	Rolando, Christian.....	WP 515	Rozeek, Wojciech.....	MP 095
Rizzo, Thomas R.....	MOF pm 3:10	Rolland, Antoine D.....	MP 141	Ruan, Qian.....	MOB am 09:50
Rnyarzewski, Sarah.....	WP 692	Rollema, Hans.....	ThP 214	Ruan, Qian.....	TOB am 08:30
Roach, Jared C.....	ThP 130	Rollin, Kieran.....	MPZ 566	Ruan, Qian.....	ThOB pm 3:30
Rob, Tamanna.....	ThP 112	Romanczyk, Leo.....	ThP 142	Rubakhin, Stanislav.....	WP 117
Robb, Damon.....	TP 206	Romanelli, Anthony J.....	MP 444	Rubakhin, Stanislav.....	TP 196
Robb, Damon.....	WP 320	Romani, Andrea.....	WP 541	Rubakhin, Stanislav.....	ThP 463
Robb, Damon.....	MP 308	Romano, Hebeler.....	MP 047	Rubakhin, Stanislav.....	WP 182
Robb, Damon.....	MP 153	Romanova, Elena.....	WP 182	Rubakhin, Stanislav S.....	ThP 464
Robbat, Albert.....	MP 667	Romanova, Elena V.....	ThP 464	Ruben, Steven M.....	WP 093
Robbat, Albert.....	WP 589	Romaschin, Alexander D.....	MP 081	Rubin, Emanuel.....	WP 527
Robbins, Matthew.....	MP 515	Romaschin, Alexander D.....	TP 136	Ruch, David.....	ThP 651
Robbins, Matthew D.....	TP 298	Romaschin, Matthew A.....	MOD pm 3:50	Ruczinski, Ingo.....	WP 516
Robbins, Ronny.....	TP 660	Romm, Michelle V.....	MP 438	Ruczinski, Ingo.....	MP 005
Robert, Simon.....	WP 243	Romm, Michelle V.....	ThP 669	Rudashevskaya, Elena.....	ThP 306
Roberts, Charles E.....	MP 058	Rondeau, Claude.....	MP 093	Ruderich, Alexander.....	TP 588
Roberts, Gareth.....	TP 385	Ronk, Michael.....	WP 169	Rudewicz, Patrick J.....	TP 419
Roberts, Gareth.....	MP 655			Rudewicz, Patrick J.....	ThOB pm 3:10
Robertson, Don.....	WOB am 09:10			Rudnick, Paul.....	TP 042
Robertson, James M.....	TP 661			Rudnick, Paul.....	TP 074
Robinson, Carol.....	MOC am 08:50			Rudnick, Paul.....	WP 065

Program Code: M, T, W, Th = Day    O = Oral    Time  
 M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Rudomin, Emily	TP 027	Saad, Ola M.	MP 391	Samant, Rajeev	TP 076
Rudomin, Emily	WP 695	Saba, Alessandro	WP 247	Sameer Kumar, Ghantasala S.	WP 525
Rudy, Jeffrey	TP 659	Saba, Joe	MP 328	Samgina, Tatiana	TOB am 09:50
Rudy, Jeffrey	WP 158	Saba, Julian	ThP 454	Samgina, Tatiana	ThP 186
Rudy, Jeffrey	ThOA am 09:50	Saba, Julian	TP 203	Samos, Juni T.	MP 296
Rudy, Jeffrey	ThP 666	Sabat, Grzegorz	ThP 101	Sampaio, Julio L.	MP 238
Rüetschi, Ulla	TP 092	Sachdev, Perminder	MP 259	Sampaio, Julio L.	MOA am 09:50
Ruffin, Mack	WP 054	Sackett, Dan L.	TP 448	Sampson, Jacqueline S.	ThP 376
Ruhs, Aaron	WP 558	Sacks, Gavin	MP 163	Sampson, Jason S.	ThP 324
Ruijken, Marco	ThOE pm 2:50	Sacktor, Ned	MP 603	Sampson, Jason S.	WP 535
Ruijken, Marco	MP 532	Sadilek, Martin	ThP 048	Sampson, Jason S.	TOD am 08:30
Ruiz, Yvette	TP 083	Sadilek, Martin	TP 252	Sam-Soon, Nicholas	TP 425
Ruiz-Alonso, David	WOD am 09:50	Sadilkova, Katerina	WP 267	Sana, Theodore	WP 109
Rule, Geoffrey S.	MP 291	Sadler, Peter	TP 229	Sana, Theodore	WP 061
Rule, Geoffrey S.	WP 315	Sadler, Peter	ThP 573	Sana, Theodore R.	TP 112
Rumbelow, Stephen	WP 159	Sadoshima, Junichi	TP 268	Sana, Theodore R.	WP 114
Rumley, Megan	ThP 403	Sadoshima, Junichi	WP 011	Sana, Theodore R.	TP 113
Rummel, Julia	TP 309	Sadygov, Rovshan	MP 054	Sanabria, Juan R.	MP 621
Running, William	TOC am 09:10	Saenz-vash, Veronica	TP 015	Sanaki, Takao	MP 152
Running, William E.	ThP 568	Saenz-vash, Veronica	MOE pm 3:30	Sanchez, A. Carl.	WP 338
Ruotolo, Brandon	WOC am 09:50	Safavi-Hemami, Helena	ThP 195	Sanchez, Jean-charles	ThOE pm 3:30
Ruotolo, Brandon	MOD am 08:50	Sagulenko, Pavel N.	TP 275	Sanchez, Jean-Charles	WP 008
Ruotolo, Brandon	WP 211	Sahmi, Malha	ThP 452	Sanchez, Jean-charles	MP 018
Rus, Juan	TP 386	Saikusa, Kazumi	ThP 518	Sanchez, Ray	TP 610
Rusa, Mariana	WP 137	Saito, Kaori	WP 240	Sánchez-Carbayo, Marta	WP 075
Rusa, Mariana	ThOA pm 3:50	Saito, Kazunori	ThP 094	Sander, Björn	WP 140
Rusa, Mariana	ThP 457	Saito, Takuro	MP 480	Sander, Lane C.	MP 671
Rusa, Mariana	WP 513	Saka, Alex	TP 619	Sanders, Mark	WP 586
Rush, John	ThP 441	Sakae, Hiroki	ThP 625	Sanders, Mark	ThP 582
Rush, John	WP 299	Sakamoto, Shigeru	MP 168	Sanders, Mark	WOB am 09:10
Rush, John	TOE pm 3:50	Sakamoto, Shigeru	WP 240	Sanders, Mark	MP 459
Rush, John	WP 079	Sakamoto, Takeshi	MP 637	Sanders, Mark	ThP 398
Rush, Martyn	WOD am 09:50	Sakamoto, Takeshi	ThP 242	Sanders, Mark	TOB am 09:10
Russ, Bill	MP 656	Sakamoto, Takeshi	WP 498	Sanders, Mark	WOB am 09:50
Russell, Alison	ThP 389	Sakuma, Takeo	MOA pm 3:10	Sanders, Mark	MP 427
Russell, Alison L.	TP 541	Sakuma, Takeo	ThP 131	Sanders, Mark	TP 492
Russell, David H.	WP 133	Sakuma, Takeo	MP 267	Sanders, Nathan	ThOF pm 4:10
Russell, David H.	WP 213	Sala, Federica	TP 423	Sanders, Nathaniel	TP 655
Russell, David H.	MP 510	Saladino, Jessica M.	ThP 280	Sanderson, Cynthia	MP 157
Russell, David H.	TP 226	Salamat, M Shahriar	MP 595	Sandhoff, Konrad	MP 246
Russell, David H.	ThP 617	Salazar, Gary Abdiel	TOD pm 3:50	Sandmeyer, Suzanne	TP 142
Russell, David H.	TP 223	Salberg, Alesia	WP 613	Sandy, Nargund	WP 235
Russell, David H.	TP 225	Salbo, Rune	WP 209	Sangar, Vineet	MP 114
Russell, David H.	MP 589	Saleh, Marwa	WP 477	Sangar, Vineet	WP 082
Russell, David H.	WOG am 09:50	Saleh, Marwa M.	ThP 158	Sanghera, Narinder	TP 221
Russell, David H.	MOD am 09:50	Saleh, Marwa M.	WP 173	Sanghera, Narinder	WOD am 09:10
Russell, Jason D.	MP 192	Salih, Bekir	ThP 467	Sanglier-Cianferani, Sarah	WP 455
Russell, Matthew	MOE am 08:50	Salih, Bekir	TP 485	Sangster, Timothy	ThOB pm 2:50
Russell, Neil	MP 040	Salim, Malinda	MP 006	Sangvanich, Polkit	WP 492
Russell, Reb	ThP 282	Salinas, Felix	MP 151	Sanmun, Duangmanee	TP 098
Russell, Reb	ThP 577	Salinas, Kimberly	MP 075	Santania, Carmen T.	WP 608
Russell, William K.	WP 133	Salinas, Paul	WP 488	Santos, Ana	MP 024
Russell, William K.	MP 510	Salinas, Paul	ThOA am 08:50	Santos, Ilyn Lyzette D.	TP 087
Russo, Paul	MP 129	Salituro, Gino M.	TP 395	Santos, Luiz Fernando Arruda	WP 365
Rustgi, Anil K.	ThP 055	Salituro, Gino M.	ThP 686	Santos, Luiz Fernando Arruda	ThP 504
Rustum, Youcef	MP 442	Salituro, Gino M.	ThP 685	Sapp, Lisa	WP 258
Rustum, Youcef	ThP 167	Salituro, Gino M.	MP 307	Saradhi, U.V.R. Vijaya	ThP 149
Rutherford, Seth	MP 268	Sallans, Larry	TP 135	Saraji, Mohammed	WOG am 09:10
Ruwona, Tinashe B.	MP 507	Sallans, Larry	MP 224	Sarangi, Anuraag	TP 614
Ruzicka, Josef	MP 427	Salmon, Elodie	WOG am 08:50	Sardiu, Mihaela	WP 055
Ruzicka, Josef	WP 586	Salomon, Arthur	WP 048	Sargaeva, Nadezda P.	MP 285
Ryan, Christopher	WOG pm 3:50	Salomon, Arthur	MP 390	Sargaeva, Nadezda P.	ThP 272
Rychnovsky, Scott	TOC am 09:30	Salomon, Arthur	ThP 422	Sargaeva, Nadezda P.	WP 327
Ryder, Edward	TP 535	Salomon, Arthur	ThP 451	Sargaeva, Nadezda P.	ThOD am 09:10
Rye, Peter	ThP 677	Salomon, Daniel	MOB pm 2:50	Sargaeva, Nadezda P.	ThP 275
Rynarzewski, Sarah	WP 001	Salomon, Robert G.	MP 102	Sari, Youssef	ThP 158
Rynes, Eric	MP 049	Salomon, Robert G.	MP 226	Sari, Youssef	WP 173
Ryoda, Akemi	MPZ 575	Salomonsson, Inger	WP 519	Sarracino, David	MP 123
Ryzhov, Victor	MP 624	Salter, Tara L.	ThP 325	Sarracino, David	ThP 039
Ryzhov, Victor	ThP 643	Salvador, Arnaud	MP 126	Sarracino, David	MP 048
Ryzhov, Victor	ThP 640	Salzet, Michel	TP 175	Sarracino, David	MP 016
Sa, Rongxiao	WP 020	Samad, Tarek	MP 282	Sarracino, David	MP 607

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Sasai, Ken.....	WP 013	Schiavo, Susan.....	ThP 141	Schoepfer, Ralf.....	ThP 249
Sasai, Kohei.....	MP 207	Schieffer, Gregg.....	WP 199	Schoettner, Matthias.....	WP 120
Sasaki, Kazumi.....	ThP 373	Schieffer, Gregg.....	MP 622	Schofield, Mark.....	ThP 440
Sasaki, Tania A.....	ThP 583	Schieltz, David M.....	TP 380	Scholl, Peter.....	MP 005
Sasaki, Tania A.....	WP 258	Schieltz, David M.....	ThP 375	Scholl, Peter.....	WP 516
Sasaki, Tania A.....	WP 263	Schieltz, David M.....	ThP 376	Schöllnberger, Monika.....	ThP 416
Sasso, Patrick.....	TP 325	Schieltz, David M.....	MP 004	Schorzman, Allison N.....	WP 446
Satake, Hiroyuki.....	WP 498	Schiff, Rachel.....	MP 072	Schottkowsky, Ralf.....	ThP 344
Satake, Hiroyuki.....	MP 637	Schiffmann, Raphael.....	WP 257	Schrader, Wolfgang.....	WP 648
Satake, Hiroyuki.....	ThP 242	Schiffmann, Raphael.....	TP 615	Schrader, Wolfgang.....	ThP 138
Sathe, Ganesh.....	TP 548	Schild, Hansjörg.....	WP 530	Schrader, Wolfgang.....	WOG am 08:30
Sato, Hajime.....	TP 115	Schilling, Birgit.....	MOB pm 4:10	Schramm, Elisabeth.....	TP 638
Sato, Koichi.....	ThP 497	Schilling, Birgit.....	ThP 020	Schramm, Thorsten.....	TP 176
Sato, Takashi.....	TP 526	Schilling, Birgit.....	WP 007	Schreiber, Andre.....	ThP 131
Saul, Thomas D.....	ThOG am 10:10	Schilling, Birgit.....	ThP 125	Schreiber, Andre.....	MP 564
Saul, Thomas D.....	TP 194	Schilling, Birgit.....	TOC pm 2:30	Schriemer, David.....	TP 448
Saunders, James.....	ThP 219	Schilling, Birgit.....	WP 286	Schriemer, David.....	TP 428
Sauter, Drew.....	MPZ 576	Schilling, Birgit.....	TP 496	Schriemer, David.....	ThP 104
Sauvageau, Guy.....	TP 551	Schilling, Michael.....	TP 170	Schriner, Richard.....	WP 357
Sauvageau, Martin.....	TP 551	Schiopu, Catalin C.....	WP 474	Schroeder, Imke.....	ThP 390
Sauvageot, Claire M.....	TP 195	Schiopu, Catalin C.....	WP 483	Schubert, Michael.....	ThP 207
Sauvageot, Claire M.....	WOA am 09:10	Schlager, John.....	ThP 584	Schuerenberg, M.....	WOD pm 4:10
Sauvé, Sébastien.....	TP 597	Schlager, John J.....	TP 088	Schueth, Ferdi.....	ThP 138
Sauvé, Sébastien.....	TP 595	Schlager, John J.....	MP 096	Schug, Kevin.....	TP 656
Sauvé, Sébastien.....	TP 596	Schlabach, Ralph.....	MP 045	Schug, Kevin A.....	MP 380
Sauvé, Véronique.....	ThP 436	Schlabach, Ralph.....	MP 283	Schuhmann, Kai.....	MP 249
Saux, Marie-Claude.....	MP 598	Schlatzer, Daniela M.....	MOE pm 2:50	Schultz, Gary A.....	WP 160
Saveliev, Sergei.....	ThP 526	Schlatzer, Daniela M.....	WP 203	Schultz, Gary A.....	MP 272
Saveliev, Sergei.....	ThP 101	Schlerman, Franklin.....	WP 342	Schultz, J. Albert.....	WP 194
Savickas, Philip J.....	WP 488	Schleuder, Detlev.....	TP 323	Schultz, J. Albert.....	TP 205
Savickas, Philip J.....	ThOA am 08:50	Schlicht, Kari E.....	WP 069	Schultz, J. Albert.....	WOD am 09:30
Savitski, Mikhail.....	ThP 296	Schlichting, Rita.....	TP 010	Schultz, J. Albert.....	TOG am 10:10
Savitski, Mikhail.....	TOB am 09:50	Schlutt, Birgit.....	MP 564	Schultz, J. Albert.....	TP 204
Savitski, Mikhail.....	ThOC am 09:50	Schmalstieg, Hermann.....	MP 564	Schultz, Loren D.....	MP 037
Savoie, Natasha.....	MP 261	Schmalz, Christopher A.....	WP 160	Schultz, Loren D.....	ThP 517
Savtchenko, Serguei.....	MP 336	Schmid, Adrian.....	ThP 660	Schulz, Melanie.....	ThP 258
Savtchenko, Serguei.....	WP 323	Schmidt, Adam.....	WP 569	Schulz, Michael.....	TP 296
Sawaki, Hiromichi.....	TP 526	Schmidt, Alexander.....	ThP 512	Schulze, Kerry.....	WP 516
Sawdey, Lee.....	TP 161	Schmidt, Andreas.....	WP 412	Schulze, Rolf-Dieter.....	WOF am 10:10
Saylor, Sarah J.....	MP 660	Schmidt, Andres.....	ThP 608	Schulz-Knappe, Peter.....	MP 474
Scalf, Mark.....	ThP 519	Schmidt, Carla.....	WP 015	Schulz-Knappe, Peter.....	ThP 588
Scarff, Charlotte.....	WOD am 09:10	Schmidt, Fredrick W.....	WP 045	Schulz-Knappe, Peter.....	MP 125
Scarff, Charlotte A.....	WP 428	Schmidt, Kristiane.....	ThP 404	Schulz-Knappe, Peter.....	WP 009
Scarino, Johanna M.....	WP 102	Schmidt, Michael W.....	TP 534	Schulz-König, Tim.....	MOA pm 3:30
Scatina, Joann.....	TP 347	Schmitt, Sebastian.....	TOC am 10:10	Schumacher, Kurt.....	MOB am 10:10
Schaack, Bernd Bastian.....	ThP 138	Schmitter, Jean-Marie.....	MP 598	Schürken, Malte.....	WP 050
Schaefer, Karl-Christian.....	ThP 327	Schmitt-Kopplin, Philippe.....	ThP 610	Schutzbier, Michael.....	TP 013
Schaefer, Mathias.....	WP 664	Schmitz, Oliver J.....	WP 622	Schutzbier, Michael.....	MP 007
Schaefer, William H.....	MP 229	Schmitz, Thomas A.....	TP 186	Schuurman, Janine.....	TP 481
Schaeffer, Christine.....	ThP 254	Schmoyer, Denise.....	MP 065	Schwacke, John H.....	MP 059
Schaeffer, Emily.....	ThP 490	Schnackenberg, Laura K.....	TP 409	Schwamborn, Kristina.....	TP 182
Schauer, Dominik J.....	TP 488	Schneider, Andrea.....	MP 151	Schwamborn, Kristina.....	WP 081
Schäfer, Mathias.....	TP 255	Schneider, Andrea.....	WP 555	Schwartz, Jae C.....	ThP 205
Schantz, Michele M.....	TP 589	Schneider, Andrea.....	MP 203	Schwartz, Jae C.....	TOD pm 3:30
Schantz, Michele M.....	WP 121	Schneider, Birgit.....	TP 251	Schwartz, Jae C.....	MP 194
Schänzer, Wilhelm.....	TP 255	Schneider, Birgit.....	WP 120	Schwartz, Jae C.....	TP 563
Schauer, Stefan.....	TP 480	Schneider, Richard.....	MP 434	Schwartz, Jae C.....	MP 192
Schebler, Peter J.....	WP 170	Schneider, Richard.....	MP 451	Schwartz, Jae C.....	MOD pm 2:30
Scheffrahn, Rudolf H.....	TOA am 09:10	Schneider, Richard.....	WP 130	Schwartz, Jae C.....	MP 196
Scheidenberger, Christoph.....	TOD pm 4:10	Schneider, Richard.....	TP 571	Schwartz, Jae C.....	MP 195
Schenauser, Matthew R.....	TP 216	Schnier, Paul.....	WP 208	Schwartzburg, Irina.....	MP 161
Schenkel, Michael.....	TP 287	Schnier, Paul.....	ThP 646	Schweikert, Emile A.....	ThOG pm 3:30
Scherer, Iris.....	WP 344	Schnölzer, Martina.....	WP 031	Schweikert, Emile A.....	MP 648
Scherl, Alexander.....	ThOE pm 3:30	Schnute, William C.....	TP 606	Schweizer-Theobaldt, Andreas.....	WP 614
Scherl, Alexander.....	WP 008	Schnute, William C.....	WP 175	Schwudke, Dominik.....	MP 240
Scherl, Alexander.....	MP 018	Schoen, Alan E.....	ThP 695	Schwudke, Dominik.....	MP 249
Schermann, Jean-Pierre.....	ThOF am 08:50	Schoen, Alan E.....	TP 138	Schwudke, Dominik.....	MP 222
Scherrer, Chad.....	WP 691	Schoen, Alan E.....	WP 313	Scigelova, Michaela.....	TP 033
Schey, Kevin L.....	WP 308	Schoener, Dale.....	ThP 358	Scionti, Vincenzo.....	WP 619
Schey, Kevin L.....	WOE pm 3:30	Schoener, Dale.....	WP 228	Scravi, Bianca.....	WP 443
Schey, Kevin L.....	WP 178	Schoenherr, Regine M.....	MOE pm 4:10	Scotcher, Jenna.....	ThP 573
Schey, Kevin L.....	WP 188	Schoentgen, Françoise.....	TP 467	Scott, C. Ronald.....	TP 238

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Scott, C. Ronald	WP 254	Seta, Joji	MP 447	Shan, Bin	MP 072
Scott, Daniel J	MP 061	Seto, Carmai	MOA pm 3:10	Shaner, Rebecca	WP 187
Scott, Garry	TP 227	Seto, Yasuo	TP 374	Shang, Huimin	TP 543
Scott, George	MP 327	Seto, Yasuo	TP 376	Shannon, Paul	TOC pm 2:50
Scott, George	TP 404	Setou, Mitsutoshi	ThP 625	Shannon, Paul	WP 697
Scrivens, James	ThP 432	Setou, Mitsutoshi	TP 189	Shao, Wenguang	TP 071
Scrivens, James	TP 221	Setou, Mitsutoshi	MP 230	Sharma, Arun	MP 047
Scrivens, James	WOF am 09:50	Settlage, Robert E.	Special	Sharma, Seema	MP 455
Scrivens, James	TP 095	Sexton, Holly	MP 343	Sharma, Swati	WP 100
Scrivens, James	TP 542	Seyfried, Nicholas	WP 304	Sharon, Laura	TP 295
Scrivens, James	WOD am 09:10	Seyfried, Nicholas	ThOE pm 3:10	Sharp, Joshua S.	MP 111
Scrivens, James H.	WP 428	Seyfried, Nicholas	WP 299	Sharp, Joshua S.	ThP 280
Scuba, William	TP 126	Seymour, Albert B.	ThP 088	Sharp, Joshua S.	TOC am 08:50
Scuderi, Debora	MOF pm 3:50	Seymour, Albert B.	ThP 087	Sharp, Joshua S.	WP 450
Seale, Kevin	TP 207	Seymour, Albert B.	MP 130	Sharp, Joshua S.	WP 456
Searle, Brian C.	MP 058	Seymour, Clive H.	ThP 234	Shaughnessy, Jr., John D.	TP 618
Searle, Brian C.	WP 065	Seymour, Sean L.	MOE pm 3:30	Shaw, Chris	WP 390
Sebastian, Alan	ThOC pm 4:10	Seymour, Sean L.	MP 009	Shaw, Jared	TP 362
Second, Tonya	WP 145	Seymour, Sean L.	MP 142	She, Jin-Xiong	TP 329
Second, Tonya	ThP 572	Seymour, Sean L.	WP 065	Shea, Ryan	WP 633
Second, Tonya P.	TOD pm 3:30	Sgroi, Dennis	WP 545	Shea, Ryan	WP 164
Sedlak, Miroslav	MP 264	Sgroi, Dennis C.	TP 072	Sheaff, Pam	ThP 278
See, Bret	MP 357	Shabanowitz, Jeffrey	ThP 188	Shechter, David	TP 271
Seebacher, Jan	TP 025	Shabanowitz, Jeffrey	MP 386	Sheehan, Edward	MP 312
Seegmiller, Jesse C.	TP 253	Shabanowitz, Jeffrey	ThP 211	Sheehan, Edward	MP 311
Seehauser, Hans	ThP 344	Shabanowitz, Jeffrey	TOC pm 4:10	Sheeley, Douglas M.	MOE pm 2:30
Seeholzer, Steven H.	TP 339	Shabanowitz, Jeffrey	MP 300	Shefcheck, Kevin J.	MP 395
Seeholzer, Steven H.	MP 499	Shabanowitz, Jeffrey	TP 266	Shefcheck, Kevin J.	WP 282
Seeholzer, Steven H.	ThP 560	Shabanowitz, Jeffrey	TP 510	Shefcheck, Kevin J.	MP 392
Seeholzer, Steven H.	WP 019	Shabanowitz, Jeffrey	ThP 252	Shefcheck, Kevin J.	MP 396
Seeley, Erin H.	TP 181	Shabanowitz, Jeffrey	TP 518	Sheils, Wayne	MP 193
Sefkow, Michael	TP 145	Shaffer, Christopher L.	ThP 214	Sheldon, Curtis	ThP 135
Sefler, Andrea	MOA pm 3:50	Shaffer, Justin F.	ThP 256	Sheldon, Curtis E.	MP 355
Segu, Zaneer	ThP 299	Shaffer, Scott A.	TP 140	Shelley, Jacob T.	TOD am 10:10
Segu, Zaneer	ThP 247	Shaffer, Scott A.	MP 107	Shen, Chia-Ning	MP 074
Segu, Zaneer, M.	WP 503	Shaffer, Scott A.	WP 460	Shen, Guoan	ThP 078
Seidler, Daniela	WP 487	Shaffer, Scott A.	MP 147	Shen, Jim	ThOB am 08:50
Seiler, Peter	WOF pm 3:30	Shaffer, Scott A.	MP 149	Shen, Longzhu	TP 590
seitz, Wolfram	TP 323	Shaffer, Scott A.	MP 139	Shen, Rong-Fong	TP 037
Sekimoto, Kanako	ThP 613	Shah, Anuj	WP 051	Shen, Shida	MP 325
Sekiya, Sadanori	MPZ 569	Shah, Anuj	WP 691	Shen, Yufeng	ThP 103
Sekiya, Sadanori	MP 586	Shah, Anuj	TP 218	Shen, Yulei	TP 550
Sekiya, Sadanori	MP 202	Shah, Anuj	MOD am 08:30	Shen, Zhongzhou (Andrea)	MP 307
Selby, Martin	WP 643	Shah, Anuj R.	TP 213	Shen, Zhouxin	TP 558
Selby, Peter	MP 614	Shah, Bhavana	TP 056	Shenk, Thomas E.	TOE pm 2:50
Selenka, Jeffrey M.	MP 157	Shah, Bhavana	WP 476	Shenoy, Sudha	TP 024
Selevsek, Nathalie	TP 138	Shah, Brinda	MP 120	Shepherd, Andrew G.	WP 648
Selevsek, Nathalie	WP 313	Shah, Manesh	MP 286	Sheppard, Donald C.	TP 616
Selevsek, Nathalie	WP 075	Shah, Manesh	MP 065	Sherley, James L.	ThP 042
Sellier, Nicole	TOF am 09:50	Shah, Manesh	ThP 391	Sherman, David H.	WP 373
Selzer, Stefan	ThP 588	Shah, Manesh	TP 541	Sherman, Nicholas E.	Special
Semin, David J.	WP 169	Shah, Manesh	WP 131	Sherrill, David	ThP 311
Semmes, Oliver John	TP 031	Shah, Manesh	ThP 031	Sherris, David	MP 183
Sen, Supti	ThP 487	Shah, Manesh	ThP 389	Sherwin, Robert S.	WP 402
Senko, Michael W.	MP 193	Shah, Punit	MP 384	Shettigar, Harish K.	MP 649
Senko, Michael W.	MP 194	Shah, Punit	WP 077	Shetty, Vivekananda	ThP 445
Sensenhauser, Carlo	MP 537	Shah, Sumit	ThP 018	Shetty, Vivekananda	WP 077
Senum, Gunnar	ThP 607	Shah, Sumit	WP 082	Shetty, Vivekananda	MP 384
Seo, Hojoon	WP 641	Shah, Sumit	MP 278	Sheu, Carey	WP 559
Seo, Hojoon	WP 658	Shah, Sumit J.	MP 114	Sheu, Carey	TOC pm 2:50
Seo, Jongcheol	TP 007	Shah, Sumit J.	MP 116	Sheu, Carey	ThP 043
Seo, Jungju	WP 636	Shahbaz, Sevini	WP 123	Sheu, Leslie	MP 389
Seo, You Jin	TP 216	Shahbazian, David	MP 097	Shevchenko, Andrej	MOA am 09:50
Serang, Oliver	WOE am 08:50	Shahidi, Sheerin	TP 419	Shevchenko, Andrej	MP 249
Serb, Alina F.	WP 474	Shaler, Thomas A.	MP 239	Shevchenko, Andrej	MP 021
Serb, Alina F.	WP 483	Shaler, Thomas A.	ThP 507	Shevchenko, Andrej	MP 222
Serebryakova, Marina V.	ThP 388	Shaler, Thomas A.	ThP 056	Shevchenko, Andrej	MP 240
Serino, Robert M.	ThOG am 10:10	Shan, Baozhen	ThP 003	Shevchenko, Andrej	MP 238
Serna, Antonio	TP 505	Shan, Baozhen	MP 043	Shevchenko, Valeriy	TP 080
Serpa, Jason	WP 438	Shan, Baozhen	ThP 024	Shevde, Lalita A.	TP 523
Serwer, Philip	ThP 488	Shan, Baozhen	MP 056	Shi, Bingxing	ThP 472
Sessa, Cristiana	TP 423	Shan, Baozhen	MP 295	Shi, Feng	WP 569

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Shi, Feng.....	ThP 082	Shiyanov, Pavel.....	TP 088	Simeone, Diane M.....	WP 507
Shi, Gongyi.....	WP 179	Shkriabi, Nikolozzi.....	ThP 480	Simionescu, Bogdan C.....	WP 616
Shi, Gongyi.....	WP 169	Shockcor, John P.....	ThOB pm 4:10	Simmons, Douglas.....	ThP 326
Shi, Hong.....	TP 548	Shockcor, John P.....	TP 574	Simões, Cláudia.....	MP 227
Shi, Honglan.....	TP 603	Shockcor, John P.....	MP 253	Simon, Eric.....	ThP 521
Shi, Honglan.....	MOG pm 4:10	Shockcor, John P.....	WP 385	Simon, Eric.....	WP 431
Shi, Huilin.....	WP 202	Shockcor, John P.....	WP 126	Simon, Yamil.....	TP 070
Shi, Linan.....	WP 017	Shoda, Jun-ichi.....	TP 526	Simoneau, Catherine.....	ThP 316
Shi, Linan.....	ThP 430	Shoemaker, Glen.....	MOC am 08:30	Simons, Brigitte.....	MP 291
Shi, Linan.....	MP 232	Shofran, Brian.....	TP 653	Simons, Brigitte.....	MP 237
Shi, Stone D.....	MP 464	Shofstahl, Jim.....	Special	Simons, Brigitte.....	ThP 446
Shi, Xiangguo.....	TOF pm 3:30	Shofstahl, Jim.....	Special	Simons, Brigitte.....	ThP 124
Shi, Xiaofeng.....	WP 489	Shoji, Noriko.....	MP 447	Simons, Kai.....	MOA am 09:50
Shi, Yan.....	WP 051	Shonukan, Oluwatoyin O.....	TOB pm 2:50	Simpson, Andre J.....	ThP 382
Shi, Yan.....	TP 213	Short, Tim.....	ThOF pm 3:30	Simpson, Christopher D.....	ThP 604
Shi, Yan.....	WP 691	Short, Tim.....	WP 324	Simpson, Daniel J.....	ThP 101
Shi, Yang.....	WP 269	Shortreed, Michael R.....	WP 127	Simpson, Daniel J.....	ThP 526
Shi, Yang.....	MP 361	Shou, Wilson.....	ThP 662	Simpson, David C.....	TP 020
Shi, Yu.....	ThP 115	Shou, Wilson.....	MP 437	Simpson, Laura.....	ThP 648
Shi, Yu.....	ThP 116	Shrestha, Bindesh.....	WP 478	Simpson, Mark.....	MP 129
Shi, YunHwa.....	TP 335	Shrestha, Bindesh.....	TP 114	Sindona, Giovanni.....	WP 374
Shiao, Ming-shi.....	ThP 085	Shriver, Craig.....	WP 552	Sindona, Giovanni.....	WP 389
Shiao, Tze Chieh.....	MP 520	Shteynberg, David.....	WP 521	Singer, Steve.....	MP 065
Shiea, Jentaie.....	ThP 329	Shteynberg, David.....	WP 036	Singer, Steven.....	MP 286
Shiea, Jentaie.....	ThP 317	Shuford, Christopher M.....	TP 504	Singh, Mona.....	MP 039
Shiea, Jentaie.....	WP 136	Shui, Wenqing.....	MP 389	Singh, Pragya.....	WP 460
Shiea, Jentaie.....	ThP 166	Shukla, Anil K.....	WP 146	Singh, Pratibha.....	MP 513
Shiea, Jentaie.....	TP 636	Shulaev, Vladimir.....	MP 255	Singh, Ravinder J.....	WP 263
Shiea, Jentaie.....	MP 338	Shulaev, Vladimir.....	MP 534	Singleton, Kris.....	WP 218
Shiea, Jentaie.....	MP 320	Shuman, Joyce.....	ThP 686	Singleton, Kristen.....	TP 407
Shiea, Jentaie.....	ThP 674	Shvartsburg, Alexandre A.....	WOD am 09:50	Singleton, Kristen.....	TP 390
Shiea, Jen-Taie.....	MP 068	Shyam, Sunitha.....	WP 084	Singleton, Kristen.....	MP 418
Shifman, Mark.....	WP 040	Sibray, Tamara.....	TP 299	Singleton, Kristen.....	MP 410
Shiki, Shigetomo.....	TOD pm 2:50	Sibum, Martin.....	MP 249	Singleton, Kristen.....	MP 423
Shill, Scott.....	WP 309	Sibum, Martin.....	WP 351	Sinha, Tuhin K.....	TP 181
Shill, Scott.....	ThP 340	Sibum, Martin.....	WP 249	Sinner, Frank M.....	WP 347
Shim, Jun-Hwa.....	TP 406	Sickmann, Albert.....	ThP 509	Sinner, Frank Michael.....	WP 572
Shim, Jun-hwa.....	TP 408	Sidaway, James.....	WOB am 08:50	Sisu, Eugen.....	WP 487
Shim, Jun-hwa.....	TP 405	Sidaway, James.....	ThP 083	Sisu, Eugen.....	WP 474
Shim, Jun-hwa.....	MP 412	siddiqui, Javed.....	WP 531	Sitek, Barbara.....	TP 620
Shimada, Miki.....	ThP 497	Siegel, Hal.....	TP 420	Sitek, Barbara.....	MP 618
Shimada, Miki.....	TP 005	Siegel, Marshall M.....	TP 472	Siu, Chi-kit.....	WP 668
Shimizu, Tetsuo.....	MP 207	Siegel, Paul D.....	MP 507	Siu, K W Michael.....	MP 473
Shimizu, Yoshihiro.....	WP 419	Sielaff, Tim.....	TP 083	Siu, K W Michael.....	TP 136
Shimma, Shuichi.....	ThP 621	Siemieniako, Lidia.....	MP 646	Siu, K W Michael.....	MP 536
Shimonaka, Yasushi.....	TP 489	Siems, Bill.....	WP 196	Siu, K W Michael.....	TP 206
Shin, Byunghee.....	MP 127	Siems, William F.....	WOD am 08:30	Siu, K W Michael.....	WP 668
Shin, Byunghee.....	TP 133	Siems, William F.....	WP 204	Siu, K W Michael.....	TOF am 10:10
Shin, Seongjae.....	WP 403	Sierks, Katherine.....	ThP 377	Siu, K W Michael.....	MP 081
Shin, Seongjae.....	ThP 500	Sierra, David.....	WP 596	Siu, K W Michael.....	MP 625
Shin, Seongjae.....	WP 509	Sierra, David.....	TP 456	Siuzdak, Gary.....	ThP 071
Shin, Seung Koo.....	TP 007	Sigurdson, Wendy C.....	MP 601	Siuzdak, Gary.....	ThP 067
Shin, Somi.....	WP 658	Sigurdsson, Baldur Bragi.....	MOB am 09:30	Siuzdak, Gary.....	TP 106
Shin, Young.....	TP 419	Siira, John.....	ThP 687	Siuzdak, Gary.....	WP 183
Shinkawa, Takashi.....	WP 411	Silhavy, Thomas J.....	ThP 474	Siuzdak, Gary.....	ThOG pm 2:30
Shion, Henry Y.....	TP 570	Silinski, Melanie A. Rehder.....	MP 403	Sjoelund, Virginie.....	MOC am 09:10
Shion, Henry Y.....	WP 126	Sillero, Juan A.....	TP 386	Skaf, Munir S.....	ThP 502
Shion, Henry Y.....	ThOB pm 4:10	Sillero, Juan A.....	ThP 314	Skates, Steven J.....	ThP 020
Shipkova, Petia.....	ThP 099	Sillevis Smitt, Peter.....	TP 146	Skates, Steven J.....	MOB pm 4:10
Shipkova, Petia.....	WOB am 09:10	Sillevis Smitt, Peter A E.....	TP 094	Skehel, Mark.....	WP 301
Shipkova, Petia.....	MP 233	Sillevis Smitt, Peter A. E.....	MP 087	Skiba, Nikolai.....	ThP 129
Shipkova, Petia.....	WOB am 09:50	Silva, J.....	WP 562	Skinner, Martha.....	ThP 127
Shipkova, Petia.....	TOB am 09:10	Silva, Jose.....	MP 537	Skipp, Paul J.....	MP 061
Shipkova, Petia.....	TP 582	Silva, Jose.....	TP 569	Sklortz, Martin.....	ThOG am 09:30
Shirasaki, Dyna I.....	WP 463	Silva, Marcelo A. O.....	ThP 503	Skogerson, Kirsten.....	WP 125
Shirey, Kevin.....	ThP 679	Silva, Melissa A.....	WP 068	Skor, Heather.....	MP 433
Shirey, Robert.....	WP 608	Silva, R.A. Gangani D.....	TP 135	Skor, Heather E.....	MOB am 09:10
Shiro, Yoshitsugu.....	WP 419	Silva, Wison.....	MP 267	Skorobogatko, Yuliya V.....	ThP 246
Shirota, Osamu.....	WP 348	Simanovsky, Yaroslav.....	WP 163	Skoumal, Reka.....	ThP 127
Shirota, Osamu.....	WP 340	Simanovsky, Yaroslav.....	WP 326	Skrabakova, Zuzana.....	WP 392
Shiyanov, Pavel.....	MP 096	Simell, Olli.....	MP 089	Skrovina, Matej.....	MP 088
Shiyanov, Pavel.....	ThP 584	Simeone, Diane M.....	WP 054	Slade, Peter G.....	WP 066

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Slade, Peter G.....	WP 069	Smith, Richard D.....	ThP 104	Somogyi, Arpad.....	WOA pm 3:50
Slade, Susan E.....	ThP 432	Smith, Richard D.....	MP 033	Somogyi, Arpad.....	WOC am 10:10
Slade, Susan E.....	WOF am 09:50	Smith, Richard D.....	WOD am 09:50	Son, Dong Hee.....	MP 648
Slade, Susan E.....	TP 542	Smith, Richard D.....	TP 218	Sonderegger, Peter.....	MP 014
Slade, Susan E.....	TP 221	Smith, Richard D.....	TP 125	Song, Fenhong.....	WP 386
Slade, Susan E.....	TP 095	Smith, Richard D.....	MP 332	Song, Hangtian.....	MP 640
Slamnoi, Stefan.....	WP 321	Smith, Richard D.....	WP 691	Song, Haowei.....	ThP 551
Slawson, Chad.....	TOC pm 4:10	Smith, Richard D.....	ThP 027	Song, Haowei.....	TP 522
Slawson, Chad.....	TP 518	Smith, Richard D.....	MP 333	Song, Jiao.....	MP 301
Sleat, David E.....	WP 003	Smith, Richard D.....	TOD am 09:50	Song, Junkan.....	WOF pm 3:10
Slebos, Robbert.....	WP 518	Smith, Richard D.....	MOD am 08:30	Song, Liguu.....	TP 305
Slebos, Robbert J.C.....	TP 079	Smith, Richard D.....	TP 213	Song, Lina.....	ThP 243
Slecza, Bogdan.....	MP 401	Smith, Richard D.....	TP 232	Song, Xuehui.....	TP 267
Slecza, Bogdan.....	TP 562	Smith, Rosemary.....	TP 424	Song, Yang.....	TP 413
Sleighter, Rachel L.....	WOG am 08:50	Smith, Scott.....	MOD pm 3:30	Song, Yan-Qiu.....	TP 237
Sleno, Lekha.....	MP 182	Smith, Scott A.....	WOC am 08:50	Song, Zhihong.....	WOA am 09:50
Sleno, Lekha.....	MP 520	Smith, Scott A.....	MP 251	Song, Zhihong.....	ThP 072
Slingsby, Rosanne.....	WP 637	Smith, Scott A.....	MOD pm 3:10	Sonnenberg, Nahum.....	MP 097
Sliwakowski, Maciej.....	MP 177	Smith, Suncerae.....	WOC am 09:30	Sönnichsen, Birte.....	TP 010
Slomianny, Christian.....	ThP 254	Smith, Suncerae.....	ThP 417	Sonntag, Denise U.....	ThP 074
Slotta, Douglas J.....	WP 037	Smith, Suncerae.....	MP 626	Sontag, Denise.....	WP 130
Slysz, Gordon.....	TP 448	Smith, Suncerae.....	TP 368	Soper, Steven A.....	TP 381
Small, Evan.....	ThP 287	Smith, Suncerae.....	MP 628	Soto, Xiomara.....	TP 456
Smart, Sherri K.....	WP 459	Smith, Theresa J.....	TOG am 09:10	Souady, Jamal.....	MP 482
Smedley III, James G.....	WP 447	Smith, Tim.....	TP 560	Souaille, Philippe.....	ThP 109
Smedley, III, James G.....	MP 382	Smith IV, Archer.....	TP 514	Souda, Puneet.....	WOE pm 3:50
Smeenk, Linde E.J.....	WP 138	Smith IV, Archer.....	TP 312	Souda, Puneet.....	Special
Smiljanic, Danijela.....	TP 466	Smithgall, Thomas E.....	TOG pm 2:50	Soufi, Boumediene.....	TP 533
Smiraldo, Phillip.....	ThP 413	Smithgall, Thomas E.....	TP 438	Soung, Nak-Kyun.....	WP 413
Smith, Alan.....	WP 115	Smythe, George A.....	MP 259	Southwick, Katie.....	MP 121
Smith, Alan.....	WP 119	Snapp, Heidi M.....	ThP 229	Souza, Gustavo H M F.....	WP 210
Smith, Ann.....	TP 652	Sneekes, Evert-Jan.....	ThP 110	Souza, Paulo C. T.....	ThP 502
Smith, Bryan.....	WP 035	Sniatynski, Matthew J.....	MP 040	Sowell, Renã A.....	WP 277
Smith, Bryan.....	WP 038	Snijders, Ambrosius.....	TP 264	Sowell, Sarah.....	ThP 027
Smith, Celia.....	TP 622	Snijders, Ambrosius PL.....	WP 294	Soyer, Magali.....	ThP 574
Smith, Cynthia S.....	WP 170	Snovida, Sergei.....	WP 465	Spacil, Zdenek.....	TP 319
Smith, David.....	TP 235	Snovida, Sergei.....	TP 531	Spanu, Pietro D.....	ThP 378
Smith, Derek.....	WP 514	Snow, Theodore P.....	ThP 635	Sparbier, Katrin.....	TP 610
Smith, Donald.....	WP 327	Snow, Theodore P.....	MOF am 08:30	Sparkman, O. David.....	MP 670
Smith, Donald F.....	WP 193	Snyder, Bruce.....	WP 295	Sparkman, O. David.....	MP 661
Smith, Donald F.....	WP 195	Snyder, Melissa R.....	WP 028	Sparkman, O. David.....	MP 662
Smith, Duncan L.....	ThP 303	So, Hun-Young.....	TP 335	Sparvero, L.J.....	MP 128
Smith, Erica.....	WP 632	Sobreira, Tiago J.P.....	ThP 050	Specht, August.....	MP 328
Smith, Erin N.....	ThP 081	Sobus, Jon R.....	WP 591	Spector, Tim.....	MP 076
Smith, Geoffrey.....	MP 143	Soderblom, Erik J.....	ThP 442	Spehalski, Elizabeth.....	MP 129
Smith, Geoffrey.....	TP 314	Soderstrom, Erik A.....	ThP 682	Speicher, David W.....	TP 333
Smith, H Tom.....	WP 245	Soffientini, Paolo.....	ThP 267	Speicher, David W.....	MP 118
Smith, Harold T.....	ThP 367	Sofia, Michael J.....	MP 354	Speicher, David W.....	TP 081
Smith, Harold T.....	ThP 222	Soga, Tomoyoshi.....	TP 115	Speicher, David W.....	WP 537
Smith, John.....	WP 312	Sogabe, Maki.....	TP 526	Speicher, David W.....	WP 435
Smith, Jonell.....	TP 372	Sohn, Alex.....	MP 470	Speicher, David W.....	WP 135
Smith, Kate.....	ThP 049	Sokabe, Masaaki.....	ThP 259	Speicher, Kaye D.....	TP 333
Smith, Leonard A.....	TOG am 09:10	Sokol, Ewa.....	TP 655	Speir, Paul.....	ThP 595
Smith, Lloyd.....	WOA pm 2:30	Sokoll, Lori J.....	MP 490	Speir, Paul.....	TP 195
Smith, Lloyd.....	ThOC pm 2:30	Solak, Nilufer.....	TP 236	Spellman, Daniel S.....	WP 548
Smith, Lloyd M.....	WP 127	Solak, Nilufer.....	WOF pm 2:50	Spence, Adrian.....	ThP 382
Smith, Lloyd M.....	ThP 519	Solano, Maria I.....	MP 460	Spencer, Daniel.....	MP 498
Smith, Lyndsay L.....	ThP 160	Solano, Maria I.....	TP 511	Spencer, Matt.....	TP 195
Smith, Philip C.....	WP 547	Solano, Maria L.....	TP 014	Spencer, Sandra.....	TP 656
Smith, Richard D.....	TOA am 09:10	Solivio, Morwena J.V.....	MOG am 08:50	Spengler, Bernhard.....	WP 685
Smith, Richard D.....	ThOE pm 4:10	Solnick, Jay V.....	MP 485	Spengler, Bernhard.....	WOF pm 3:30
Smith, Richard D.....	MP 290	Solomon, Bruce.....	TP 372	Spengler, Bernhard.....	WP 368
Smith, Richard D.....	WP 051	Solomon, Keith.....	MP 309	Spengler, Bernhard.....	ThP 608
Smith, Richard D.....	WP 458	Solomon, Peter S.....	ThP 068	Spengler, Bernhard.....	TP 176
Smith, Richard D.....	TP 552	Solouki, Touradj.....	TP 357	Sperling, Michael.....	ThP 351
Smith, Richard D.....	ThP 103	Solouki, Touradj.....	TP 280	Sperry, Justin.....	ThP 533
Smith, Richard D.....	WP 146	Solouki, Touradj.....	TP 424	Sperry, Justin B.....	WP 493
Smith, Richard D.....	WP 552	Soltow, Quinlyn A.....	ThP 086	Spicer, Vic.....	TP 002
Smith, Richard D.....	ThOE am 10:10	Soma, Lawrence.....	WP 158	Spicer, Vic.....	TP 315
Smith, Richard D.....	WP 144	Soma, Lawrence.....	ThP 666	Spiegelman, Cliff.....	TP 074
Smith, Richard D.....	TP 234	Soma, Lawrence R.....	TP 659	Spiegelman, Clifford H.....	ThP 020
Smith, Richard D.....	TP 212	Soma, Lawrence R.....	ThOA am 09:50	Spiegelman, Clifford H.....	MOB pm 4:10

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Spink, David C.....	TOB am 09:30	Steen, Judith A. J.....	MP 057	Stoddart, Pamela.....	TP 599
Spivak, Marina.....	TP 052	Steen, Judith A.J.....	ThP 016	Stoekli, Markus.....	TP 176
Splendore, Maurizio.....	MP 194	Steen, Judith AJ.....	MP 034	Stoekli, Markus.....	WOA am 08:30
Spraggins, Jeffrey.....	ThP 655	Steen, Judith J. A.....	MP 131	Stoekli, Markus.....	ThP 161
Spraggins, Jeffrey.....	ThP 652	Steenwyk, Rick.....	TOB pm 3:50	Stoermer, Carsten.....	ThP 620
Spratt, Karen S.....	MOE pm 4:10	Steenwyk, Rick.....	MP 337	Stokes, Adam A.....	TP 166
Spraul, Manfred.....	TP 565	Stefan, Sarah E.....	WP 479	Stokes, Adam A.....	WP 317
Sprenger, Richard R.....	MP 036	Stefanescu, Raluca.....	WOD am 08:50	Stokes, Adam A.....	ThP 571
Sprengle, Justin.....	ThP 537	Steill, Jeffrey.....	WP 668	Stokes, Peter.....	ThP 325
Spruce, Lynn.....	TP 339	Steill, Jeffrey.....	WOA pm 3:30	Stolee, Jessica A.....	TP 639
Spruce, Lynn A.....	WP 019	Steill, Jeffrey.....	ThOF am 08:30	Stolee, Jessica A.....	TOD am 09:10
Sreekumar, Arun.....	MP 604	Steill, Jeffrey.....	WP 662	Stone, Joshua K.....	TP 661
Sreekumar, Arun.....	WP 531	Steill, Jeffrey.....	WP 665	Stone, Judy.....	ThP 596
Sreekumar, Jeyan.....	MP 185	Steill, Jeffrey.....	WP 660	Stone, Kathryn L.....	WP 402
Sridhara, Viswanadham.....	ThP 022	Steill, Jeffrey.....	WP 667	Stone, Kathy.....	TOE pm 2:30
Sripada, Kishore.....	WOG am 08:30	Steill, Jeffrey.....	WP 666	Stone, Matthew.....	WP 092
Sripadi, Prabhakar.....	ThP 080	Steill, Jeffrey D.....	MOF pm 2:50	Stone, Matthew D.....	WP 142
Srnka, Anthony.....	WP 098	Stein, Daniel.....	WP 266	Stone, Matthew D.....	MP 060
Staab, Dieter.....	ThP 161	Stein, Derek R.....	WP 083	Stone, Matthew D.....	ThP 192
Staab, Dieter.....	WOA am 08:30	Stein, Stephen.....	MP 657	Stone, Peter.....	WP 601
Staats, Sau Lan Tang.....	ThP 684	Stein, Stephen.....	TP 070	Stone, Peter.....	WP 594
Staats, Sau Lan Tang.....	TP 152	Stein, Stephen E.....	MP 668	Stoner, Gary.....	ThP 149
Staats, Sau Lan Tang.....	TP 153	Stein, Stephen E.....	WP 044	Stoop, Marcel P.....	TP 094
Stacey, Gary.....	TP 105	Stein, Stephen E.....	TP 042	Storey, John M. E.....	ThP 607
Stacpoole, Peter W.....	TP 322	Stein, Stephen E.....	MP 662	St-Pierre, Julie.....	ThP 436
Stacpoole, Peter W.....	ThP 181	Stein, Stephen E.....	WOB am 09:30	Straccini, Christine.....	TP 103
Stafford, George.....	MP 192	Stein, Stephen E.....	WP 686	Straccini, Christine.....	TP 616
Stafford, George.....	MP 588	Steinberg, Jordan R.....	TP 625	Straccini, Christine.....	WP 095
Stafford Noble, William.....	TP 052	Steiner, Urs.....	MP 211	Straccini, Christine.....	ThP 064
Stahl, Bernd.....	TP 524	Steiner, Wes E.....	TP 330	Strader, Michael Brad.....	ThP 289
Stahl-zeng, Jianru.....	TP 505	Stella, David R.....	WP 543	Stranz, David.....	TOG pm 2:30
Stahl-Zeng, Jianru.....	TP 323	Stellar, S.....	ThP 595	Stratton, Steve.....	TP 624
Stahl-Zeng, Jianru.....	TP 524	Stellar, S.....	WP 562	Stratton, Tim J.....	TP 568
Stall, Brian.....	MP 203	Stemmer, Paul.....	MP 466	Straub, Peter S.....	ThP 008
Stamper, Katherine.....	TP 273	Stemmer, Paul.....	TP 547	Straubinger, Robert.....	ThP 475
Standing, Kenneth G.....	TP 002	Stemmler, Elizabeth A.....	ThP 459	Straubinger, Robert.....	MP 302
Stanford, Michael F.....	TP 384	Stenerson, Katherine.....	WP 608	Straubinger, Robert.....	TP 131
Stanley, Scott.....	TP 393	Stengel, Florian.....	TP 463	Streeter, Anthony.....	MP 537
Stanley, Scott.....	MP 269	Stenhagen, Gunnar.....	WP 241	Strege, Mark A.....	TP 231
Stanley, Thomas B.....	ThP 669	Stepanovic, Momir.....	MOF am 08:30	Streibel, Thorsten.....	WOG am 09:10
Stanoch, Timothy.....	ThP 676	Stephan, Christian.....	TP 620	Streibel, Thorsten.....	ThOG am 09:30
Stansberry, Lori C.....	ThP 517	Stephan, Christian.....	MP 618	Stresau, Dick.....	MP 193
Stansberry, Lori C.....	MP 037	Stephan, Christian.....	ThP 514	Stretton, Antony O.....	ThP 458
Stapels, Martha.....	ThP 049	Stephan, Christian.....	WP 532	Strobel, Frederick H.....	ThP 086
Stapels, Martha.....	TP 332	Stephens, Catherine H.....	WP 478	Strohalm, Martin.....	WP 018
Stapels, Martha.....	MP 619	Stephensen, Charles B.....	WP 248	Strohalm, Martin.....	MP 050
Stapels, Martha.....	TP 513	Stephenson, James.....	TP 151	Strohalm, Martin.....	TP 190
Staples, Gregory O.....	WP 488	Stephenson, James.....	MP 079	Strubel, Grégory.....	WP 064
Staples, Gregory O.....	WOC pm 2:50	Stephenson, James L.....	ThOD pm 2:30	Strupat, Kerstin.....	MP 591
Staples, Gregory O.....	WP 491	Stephenson Jr., James L.....	WP 052	Strupat, Kerstin.....	MP 588
Starch, Joel A.....	TP 433	Stevens, Douglas.....	WP 126	Strynar, Mark J.....	WP 602
Stark, George R.....	WP 296	Stevens, Fred.....	MP 535	Strynar, Mark J.....	TP 586
Stark, Holger.....	WP 140	Stevens, Fred.....	MP 271	Stubiger, Gerald.....	MP 092
Starkey, Jonathan.....	MP 054	Stevens, Fred.....	MP 265	Stubiger, Gerald.....	ThP 248
Statnikov, Alexander.....	WP 522	Stevens, James.....	TP 511	Stühler, Kai.....	TP 620
Staub, Richard E.....	WP 379	Stevens, Jr., Stanley M.....	ThP 506	Stühler, Kai.....	MP 618
Stayton, Isaac.....	MOG pm 4:10	Stevens, Jr., Stanley M.....	ThP 589	Stump, Craig.....	TP 624
Steevers, Eric A.P.....	TP 078	Stevenson, Lindsay G.....	TP 242	Stump, Craig.....	ThP 565
Steen, Hanno.....	ThP 016	Stevenson, Severin E.....	MP 030	Stumpf, Chris L.....	WP 045
Steen, Hanno.....	MP 057	Stewart, Brian.....	TP 602	Stupak, Jacek.....	WP 484
Steen, Hanno.....	MP 070	Stewart, Jeremy.....	ThP 662	Sturdy, Megan.....	WP 167
Steen, Hanno.....	WP 059	Stewart, Nicolas A.....	MOG pm 3:50	Sturm, Marc.....	Special
Steen, Hanno.....	MP 034	Stewart, Nicolas A.....	TP 401	Sturm, Robert.....	WP 183
Steen, Hanno.....	MP 131	Stewart, Ron.....	MOE am 09:10	Stutts, Whitney.....	ThP 181
Steen, Hanno.....	WP 053	Stingl, Christoph.....	WP 554	Su, Bao-Ning.....	ThP 220
Steen, Hanno.....	TP 239	Stingl, Christoph.....	TP 094	Su, Dian.....	ThP 411
Steen, Hanno.....	ThP 301	Stites, Wesley E.....	TP 433	Su, Lihe.....	ThP 558
Steen, Hanno.....	ThOE am 09:10	StJohnston, Daniel.....	TP 535	Su, Yuh-Shan.....	MP 276
Steen, Judith.....	ThP 301	Stock, Naomi L.....	ThP 478	Subbannayya, Yashwanth.....	WP 525
Steen, Judith.....	ThOE am 09:10	Stockley, Peter G.....	MOD am 09:10	Subbannayya, Yashwanth.....	ThP 057
Steen, Judith A. J.....	WP 059	Stocks, Bradley B.....	WP 448	Subel, Bethany.....	WP 626
Steen, Judith A. J.....	WP 053	Stockwell, Brent R.....	WP 033	Subramanian, Shankar.....	ThP 058

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number

## INDEX OF AUTHORS

Suci, Peter.....	TP 477	Suzuki, Mao.....	MP 152	Tabb, David L.....	TP 074
Suckau, Detlev.....	ThP 544	Suzuki, Ren.....	ThP 622	Tabb, David L.....	ThP 008
Suckau, Detlev.....	WOD pm 4:10	Suzuki, Sachiko.....	TP 643	Tabet, Jean-Claude.....	ThP 096
Sudo, Kenichi.....	MP 458	Suzuki, Shugo.....	ThP 597	Tabet, Jean-Claude.....	MP 644
Sugita-Konishi, Yoshiko.....	WP 563	Suzuki, Takahiro.....	WP 240	Tabet, Jean-Claude.....	WP 360
Sugiura, Yuki.....	TP 189	Suzuki, Takahito.....	WP 388	Tabet, Jean-Claude.....	WP 617
Sugiura, Yuki.....	MP 230	Suzuki, Yasutaka.....	TP 377	Tabet, Jean-Claude.....	TOF am 09:50
Sugiyama, Masuyuki.....	ThP 215	Svasti, Saovaras.....	TP 098	Tabet, Jean-Claude.....	TP 461
Sugiyama, Masuyuki.....	TP 377	Svatos, Ales.....	WOA am 08:50	Tabet, Jean-Claude.....	ThP 284
Sugiyama, Naoyuki.....	ThP 449	Swales, John G.....	MP 407	Tabet, Jean-Claude.....	ThP 653
Sugiyama, Naoyuki.....	ThP 444	Swalm, Brooke.....	TP 472	Tabet, Jean-Claude.....	ThP 066
Sugiyama, Naoyuki.....	ThP 433	Swan, Therese.....	WP 579	Tabiwang, N.arrey.....	WP 154
Suh, Joon Hyuk.....	MP 274	Swaney, Danielle L.....	ThOD pm 4:10	Tabor, Helen.....	ThP 377
Suh, Min-Soo.....	TP 007	Swaney, Danielle L.....	MP 192	Tachdjian, Sabrina.....	WP 336
Suh, Moo-Jin.....	ThP 515	Swaney, Danielle L.....	ThOE am 08:50	Tachibana, Hirofumi.....	TP 579
Suhre, Karsten.....	ThP 079	Swann, Jonathan.....	WOB am 08:50	Tackett, Alan J.....	WP 459
Sullards, Mark Cameron.....	WP 187	Swann, Jonathan R.....	ThP 083	Taghizadeh, Koli.....	ThP 594
Sultana, Tamanna.....	TP 049	Swanson, Willie.....	MP 029	Tagliabue, Claudia.....	MP 268
Sulzer, Philipp.....	ThP 344	Swarbrick, Michael M.....	MP 270	Taguchi, Vincent Y.....	WP 587
Suman, Michele.....	ThP 316	Swart, Remco.....	MP 596	Tahir, Salman.....	WP 157
Sumner, Lloyd W.....	WP 113	Swart, Remco.....	ThP 110	Tahir, Salman.....	WP 152
Sumner, Lloyd W.....	WP 570	Swart, Remco.....	MP 087	Tai, Susan.....	WP 268
Sumner, Lloyd W.....	ThP 078	Swart, Remco.....	TP 159	Taillon, Marie-Pierre.....	WP 243
Sumner, Lloyd W.....	TP 105	Swarup, Sanjay.....	ThP 433	Tajiri, Michiko.....	TP 645
Sumpter, Terry L.....	Special	Swatkoski, Stephen.....	TP 260	Tajiri, Michiko.....	TP 646
Sumpton, David.....	TP 334	Swatkoski, Steve.....	ThP 283	Takada, Yasuaki.....	TP 377
Sun, Chengjun.....	WP 088	Swearingen, Kristian E.....	ThP 048	Takada, Yasuaki.....	TP 374
Sun, Jinchun.....	TP 409	Sweedler, Jonathan.....	ThP 463	Takada, Yasuaki.....	TP 376
Sun, Jinpeng.....	TP 024	Sweedler, Jonathan.....	ThP 461	Takahashi, Katsutoshi.....	TP 192
Sun, Mai.....	MOG pm 3:50	Sweedler, Jonathan.....	ThP 169	Takahashi, Katsutoshi.....	ThP 094
Sun, Mai.....	WP 086	Sweedler, Jonathan.....	WP 182	Takahashi, Kazuo.....	TP 514
Sun, Mei-chuan.....	ThP 498	Sweedler, Jonathan.....	TP 491	Takahashi, Kazuteru.....	TP 189
Sun, Qi.....	WP 022	Sweedler, Jonathan.....	TP 507	Takahashi, Kazuya.....	TP 374
Sun, Qi.....	ThP 295	Sweedler, Jonathan.....	TP 196	Takahashi, Madoka.....	MP 364
Sun, Qingyu.....	ThP 554	Sweedler, Jonathan V.....	WP 117	Takahashi, Masatoshi.....	ThP 683
Sun, Rachel.....	ThP 690	Sweedler, Jonathan V.....	ThP 464	Takahashi, Yutaka.....	WP 333
Sun, Rachel.....	ThP 235	Sweedler, Jonathan V.....	TP 497	Takarewski, Joseph J.....	WP 269
Sun, Ruixiang.....	ThP 025	Sweet, Steve.....	ThP 190	Takats, Zoltan.....	TP 245
Sun, Ruixiang.....	TP 058	Sweetman, Gavain.....	ThOC am 09:50	Takats, Zoltan.....	ThP 327
Sun, Ruixiang.....	WP 043	Sweetman, Lawrence.....	WP 257	Takayama, Mitsuo.....	ThP 613
Sun, Shixin.....	MP 600	Swenson, Sarah.....	MP 419	Takayama, Mitsuo.....	TP 219
Sun, Shutao.....	ThP 308	Sweredoski, Michael.....	TP 545	Takeda, Sen.....	TP 187
Sun, Tai-ping.....	ThP 252	Sweredoski, Michael J.....	TP 047	Takegawa, Yasuhiro.....	ThP 242
Sun, Wenjian.....	TP 301	Sweredoski, Mike.....	ThOE pm 3:50	Takeshita, Kengo.....	ThP 625
Sun, Xuejun.....	ThP 631	Syage, Jack A.....	MP 310	Takeuchi, Takae.....	TP 646
Sun, Ying-Hsuan.....	WP 535	Syka, John E. P.....	MP 192	Takeuchi, Takae.....	WP 388
Sun, Yumei Lucy.....	ThP 088	Syka, John E. P.....	ThOD pm 2:30	Takeuchi, Takae.....	TP 645
Sun, Yu-Ni.....	ThP 263	Synal, Hans-Arno.....	MOA pm 3:30	Takino, Masahiko.....	WP 563
Sun, Zhi.....	WP 521	Synowsky, Silvia.....	TP 091	Talaat, Rasmy.....	TP 347
Suna, Andris.....	TP 153	Szabadi, Krisztina.....	MP 024	Talamantes, Tatjana.....	WP 293
Sunaga, Eri.....	ThP 094	Szagal, Evelin D.....	WP 150	Tallapragada, Rama Mohan R.....	MP 650
Sundaram, Appavu.....	MP 610	Szanaszlo, Tamas.....	ThP 327	Tallapragada, Rama Mohan R.....	MP 652
Sundaram, Appavu.....	TP 383	Szapacs, Matthew.....	ThOA am 09:30	Tallapragada, Rama Mohan R.....	MP 651
Sundaram, Appavu.....	ThP 385	Szczapanski, Jan.....	WP 661	Tallapragada, Rama Mohan R.....	MP 649
Sundaram, Appavu K.....	ThOG am 10:10	Szczech, Jeannine.....	ThP 257	Talroze, Raisa.....	TP 269
Sundarapandian, Sevugarajan.....	TP 207	Szczepanski, Jan.....	WP 482	Tamburino, Louis.....	ThP 584
Sung, Jaeyun.....	TP 150	Szczesniowski, Andre.....	WP 375	Tame, Jeremy R. H.....	TP 468
Sung, Ting-yi.....	TP 035	Szczesniowski, Andre.....	MP 563	Tamura, James.....	ThP 577
Sung, Ting-Yi.....	MP 051	Szekely-klepser, Gabriella.....	MOA pm 3:10	Tan, Aimin.....	ThP 236
Sunner, Jan.....	WP 326	Szewc, Mark.....	MP 463	Tan, Beijing.....	MP 337
Sunner, Jan.....	WP 163	Szewc, Mark.....	TP 492	Tan, Gina YB.....	TP 336
Suppan, Maria.....	WP 572	Szewc, Mark.....	MP 427	Tan, Hooi Poay.....	WP 383
Surdutovich, Eugene.....	ThOC pm 4:10	Szanyi, Laszlo.....	TP 245	Tan, John.....	WP 669
Surinova, Silvia.....	MP 088	Sztalryd, Carole.....	TP 545	Tan, Kar-Chun.....	ThP 068
Surowiec, Izabella.....	TP 559	Szulejko, Jan E.....	TP 280	Tan, Lin.....	WP 234
Sussman, Michael R.....	WP 026	Szumliński, Karen K.....	ThP 305	Tan, Lin.....	ThP 238
Sussman, Michael R.....	ThOE am 08:50	Szymanski, Christine.....	WP 505	Tan, Minjia.....	TOE pm 3:10
Sutton, Chris.....	WP 088	Szymanski, Christine M.....	WP 484	Tan, Rosalind YC.....	TP 336
Sutton, Chris W.....	TP 198	Szymanski, Dennis.....	ThP 520	Tan, Rosalind YC.....	ThP 553
Sutton, Daniel.....	TP 372	Szyszk, Renata.....	WP 625	Tan, Weihong.....	ThP 139
Suyama, Motohiro.....	WP 311	Tabb, David.....	WP 518	Tan, Yu-Jing.....	WP 397
Suzuki, Hitoshi.....	TP 514	Tabb, David.....	WP 065	Tanaka, Haruna.....	WP 388

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Tanaka, Kazuki	ThP 215	Tarleton, Rick L.	TP 555	Thaysen-andersen, Morten	WP 499
Tanaka, Koichi	MP 202	Tarnowski, Mallorie	ThP 577	Thayumanavan, Sankaran	MP 506
Tanaka, Koichi	MPZ 569	Taron, Christopher	TP 554	Thayumanavan, Sankaran	MPZ 583
Tanaka, Koichi	MP 586	Tarr, Matthew A.	MP 223	Theberge, Roger	MP 594
Tanaka, Koichi	ThP 248	Tashima, Toshio	ThP 622	Theberge, Roger	ThP 120
Tanaka, Masayuki	TP 104	Tashima, Toshio	ThP 626	Theberge, Roger	ThP 014
Tanaka, Satoshi	WP 689	Tasman, Natalie	WP 036	Theberge, Roger	WP 434
Tanaka, Satoshi	TP 104	Tasman, Natalie	Special	Theis, Jason D.	MP 613
Tanaka, Satoshi	MP 044	Tate, Paul	ThOG pm 2:50	Thelen, Jay J.	MP 030
Tanaka, Shinya	WP 013	Tate, Peter	WP 342	Thelen, Michael	MP 286
Tanaka, Wesley K.	WP 260	Tate, Stephen A.	TP 549	Thelen, Michael	MP 065
Tanaka, Yasuhito	TP 526	Tate, Stephen A.	TP 029	Thelen, Michael P.	WP 131
Tang, Baiqing	WP 111	Tate, Stephen A.	MP 146	Theodoridis, Georgios	WP 126
Tang, Francis P.W.	WP 581	Tate, Stephen A.	TP 062	Therneau, Terry	ThP 054
Tang, Haixu	TP 045	Tate, Stephen A.	TP 509	Therneau, Terry	WP 070
Tang, Haixu	TP 224	Taupenot, Laurent	ThP 466	Therrien, Marc	ThP 452
Tang, Haixu	ThP 247	Taverna, Domenico	WP 374	Thévand, André	WP 620
Tang, Haixu	ThP 007	Taverna, Sean D.	WP 459	Thevis, Mario	TP 255
Tang, Hsin-yao	WP 135	Taylor, Adrian	ThP 670	Thibault, Pierre	MP 043
Tang, Hsin-yao	WP 435	Taylor, Adrian	ThOB am 09:10	Thibault, Pierre	ThP 505
Tang, Hsin-Yao	MP 118	Taylor, Adrian	WP 270	Thibault, Pierre	TP 551
Tang, Hsin-yao	WP 537	Taylor, Alan W.	MP 375	Thibault, Pierre	ThP 452
Tang, Hsin-yao	TP 333	Taylor, Anne	TP 393	Thibault, Pierre	ThP 434
Tang, Hua	ThP 587	Taylor, Dennis	MOD pm 2:30	Thibault, Pierre	MP 093
Tang, Hua	TP 143	Taylor, Dennis M.	MP 195	Thibault, Pierre	TP 203
Tang, Kai	TP 098	Taylor, John-Stephen	ThP 411	Thibault, Pierre	TP 262
Tang, Keqi	MP 332	Taylor, K Wayne	WP 176	Thibault, Pierre	ThP 529
Tang, Keqi	WOD am 09:50	Taylor, Lorne E B.	TP 029	Thiele, Herbert	TP 565
Tang, Keqi	MP 333	Taylor, Lorne E. B.	TP 509	Thierse, Herrmann-Josef	ThP 588
Tang, Keqi	TOD am 09:50	Taylor, Paul	ThP 440	Thingholm, Tine E.	ThP 302
Tang, Keqi	MOD am 08:30	Taylor, Paul	TP 154	Thissen, Roland	MOF pm 3:50
Tang, Liangjie	TOC am 10:10	Taylor, Rhonda R.	WP 548	Thomas, A.	MP 553
Tang, Lina	WP 218	Taylor, Sarah J.	ThP 366	Thomas, Ancy	WP 539
Tang, Lina	MP 416	Taylor, Stephen	MP 185	Thomas, Andreas	TP 255
Tang, Lina	MP 418	Taylor, Stephen	ThOF pm 3:10	Thomas, Brian	MP 065
Tang, Lina	MP 411	Taylor, Steven	ThP 468	Thomas, Brian F.	MP 403
Tang, Lina	TP 400	Taylor, Steven	ThOB am 09:30	Thomas, Daniel A.	MP 638
Tang, Ning	MP 015	Taylor, Susan	WP 418	Thomas, Franz K.	MP 403
Tang, Ning	ThOE am 09:50	Taylor, Susan S.	ThP 492	Thomas, Haylee	MP 134
Tang, Ning	TOC pm 3:50	Tchekhovskoi, Dmitrii	WP 044	Thomas, Haylee M.	TOE am 09:50
Tang, Ning	MP 456	Tchekhovskoi, Dmitrii V.	WP 686	Thomas, James	TP 599
Tang, Wilfred	Special	Tegeler, Tony	ThP 106	Thomas, Jamie	WP 432
Tang, Xiaoting	WP 156	Teintze, Martin	ThP 531	Thomas, John J.	WP 488
Tang, Xiaoting	WP 155	Telgmann, Lena	TP 254	Thomas, John J.	ThOA am 08:50
Tang, Yan	MP 072	Tella, Max	MP 408	Thomas, Michael	WOC am 09:10
Tang, Yanan	TP 011	Tennenbaum, Steven R.	WP 069	Thomas, Paul M.	MOC pm 4:10
Tang, Yanan	MP 457	Tenzer, Stefan	WP 530	Thomas, Stefani	WP 692
Tang, Yi	TP 265	Teplow, David B.	TP 458	Thomas, Stefani	WP 001
Tang, Yong Q.	MP 377	Teramoto, Kanae	WP 333	Thomas, Stefani N.	WP 025
Tang, Yong Q.	ThP 237	Terborg, Lydia	MOG am 09:10	Thompson, Andrew	WOD am 09:50
Tanguy, Fortin	MP 126	Terilli, Rebecca R.	ThP 375	Thompson, Andrew	WP 189
Taniguchi, kenichi	MPZ 569	Termopoli, Veronica	MP 241	Thompson, Christopher	TP 287
Tanikawa, Satoshi	ThP 373	Termopoli, Veronica	WP 606	Thompson, J. Will	MP 619
Tanis, Jessica E.	TOE pm 2:30	Terrier, Peran	TP 451	Thompson, J. Will	MOE pm 3:50
Tannenbaum, Steve	WP 066	Terrier, Peran	TP 482	Thompson, J. Will	TP 619
Tannu, Nilesh	MP 600	Terry, Alvin V.	MP 405	Thompson, J. Will	ThP 442
Tao, Lei	TP 225	Teshima, Hiro	ThOC am 09:30	Thompson, Natalie	MP 639
Tao, Lei	TP 223	Tessier, Claire	WP 619	Thompson, Will	ThP 129
Tao, Li	ThP 282	Tessier, Luc	TP 516	Thomson, Bruce	MP 536
Tao, Li	ThP 577	Thakoursingh, Astrie	MP 616	Thomson, Bruce	TP 206
Tao, Nannan	WP 473	Thakur, Dipak	WP 545	Thomson, Bruce	MP 625
Tao, W. Andy	TP 139	Thakur, Dipak	WP 472	Thomson, James A.	MOE am 09:10
Tao, Weiguo Andy	WP 394	Thakur, Dipak A.	TP 072	Thomson, James A.	TP 538
Tao, Xiaolu	MP 348	Thalassinos, Konstantinos	WOD am 09:10	Thomson, James A.	ThP 040
Tao, Yi	ThP 145	Thalassinos, Konstantinos	TP 221	Thomson, Sandra	ThP 585
Taormina, Christopher	MP 210	Thalassinos, Konstantinos	TP 542	Thomson, Sandra	ThP 602
Taouatas, Nadia	MP 635	Thalassinos, Konstantinos	TP 095	Thomson, Sandra A.	ThP 579
Taouatas, Nadia	TP 122	Thalhammer, Agnes	ThP 249	Thornberg, Steven	WOF am 09:10
Taouatas, Nadia	WP 401	Tham, Bernad PM.	TP 336	Thornton, Kim T.	WP 170
Taouatas, Nadia	TP 130	Tham, Bernard PM	ThP 553	Thornton, Steve	TP 095
Tarasova, Irina A.	ThP 307	Thangaraj, Balakumar	WOF pm 3:50	Thorpe, Jason D.	WP 068
Tarasova, Irina A.	TP 041	Thannhauser, Theodore W.	TP 009	Thorsteinsdottir, Margret	MOB am 09:30

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Thota, Reddy	ThP 653	Tolocka, Michael P.	TOG am 10:10	Tracy, Eugene R.	WP 091
Thuenemann, Andreas	WOF am 10:10	Tolstikov, Vladimir	TOB pm 3:30	Tracy, Maureen B.	WP 091
Thulasiraman, Vanitha	WP 089	Tolstikov, Vladimir	WP 105	Tran, Anh	WP 537
Thulasiraman, Vanitha	WP 513	Tomavo, Stanislas	ThP 254	Tran, Chris	MP 369
Thulasiraman, Vanitha	WP 137	Tomazela, Daniela	MP 048	Tran, Dao M.	MP 275
Thulasiraman, Vanitha	ThOA pm 3:50	Tomazela, Daniela	ThP 019	Tran, John C.	MP 135
Thulasiraman, Vanitha	ThP 457	Tomazela, Daniela	MP 029	Tran, John C.	TOE am 09:50
Thurman, Michael	WOG pm 3:30	Tomazela, Daniela	MP 049	Tran, John C.	TP 150
Thurman, Michael	WP 598	Tomer, Kenneth B.	ThP 485	Tran, John C.	MOC pm 2:50
Thyparambil, Sheeno	MP 041	Tomer, Kenneth B.	WP 446	Trapman-Jansen, Anita M.	MP 616
Thyparambil, Sheeno	TP 618	Tomer, Kenneth B.	MP 382	Trauger, Sunia	TP 106
Tian, Shulan	MOE am 09:10	Tomer, Kenneth B.	TP 351	Trelle, Morten B.	TP 154
Tian, Yuan	TP 628	Tomer, Kenneth B.	MP 306	Tremblay, Patrice	TP 416
Tian, Yuan	WP 085	Tomer, Kenneth B.	WP 447	Tremblay, Patrice	MP 168
Tian, Zhixin	MP 290	Tomer, Kenneth B.	ThP 552	Tremblay, Patrice	ThP 687
Tice, Joseph	WP 314	Tomita, Masaru	ThP 449	Tremblay, Patrice	TP 637
Tice, Joseph	ThP 326	Tomita, Masaru	ThP 511	Tremintin, Guillaume	TP 316
Tiedebohl, Jessica	TP 031	Tomita, Masaru	ThP 444	Trengove, Robert	WP 650
Tien, Jerry	ThP 490	Tomita, Masaru	ThP 433	Trengove, Robert	MP 528
Tieri, Alessandra	TP 657	Tomita, Masaru	WP 395	Trengove, Robert	ThP 068
Tilleman, Kelly	ThP 285	Tomita, Masaru	TP 115	Trengove, Robert	TP 256
Tiller, Philip	TP 418	Tomita, Shigeo	TOD pm 2:50	Tretyakov, Kirill	MP 657
Tillman, Hans	MOE pm 3:50	Tomkins, Bruce A.	TP 108	Tretyakova, Natalia	MP 421
Tilton, Ronald	MP 054	Tommassen, Jan	WP 009	Treuheit, Michael J.	ThP 536
Timm, Wiebke A.	ThP 301	Ton, Alain	WP 585	Treuheit, Michael J.	WP 424
Timmers, H.Th. Marc	TP 266	Tondella, Maria L.	ThP 376	Trifonova, Oxana	MP 053
Timmons, Michael D.	MP 225	Tondeur, Yves	WP 590	Trim, Paul J.	ThP 171
Timmons, Terry	TP 603	Tong, Wei	ThP 196	Trimpin, Sarah	ThOA pm 3:10
Timmons, Terry	MOG pm 4:10	Tong, Wei	TOA pm 3:50	Trimpin, Sarah	ThP 159
Timms, John	TP 622	Tong, Wei	TP 583	Trimpin, Sarah	WOF pm 4:10
Ting, Edmund	TP 129	Tong, Weiwei	MP 288	Trimpin, Sarah	MPZ 577
Ting, Ying	ThP 392	Tong, Weiwei	MP 292	Trimpin, Sarah	MPZ 578
Ting, Ying Sonia	MP 107	Tong, Weiwei	WP 434	Trimpin, Sarah	ThP 163
Tinguely, Marianne	ThP 512	Tong, Weiwei	MP 594	Trinder, Debbie	TP 256
Tipler, Andrew	MP 672	Tong, Weiwei	ThP 014	Trinh, An	WP 608
Tipler, Andrew N.	MP 666	Tong, Wence	MP 258	Trinh, An	ThP 354
Tipler, Andy N.	MP 654	Tonoli, David	MP 518	Trinkaus-Randall, Vickery	ThP 261
Tipton, Jeremiah	ThP 570	Topolsky, Ivan	WP 042	Triquigneaux, Mathilde	MP 178
Tipton, Jeremiah	TP 527	Topper, Scott E.	TP 512	Tristani, Esther M.	MPZ 177
Tipton, Jeremiah	TP 365	Torchia, John W.	ThP 690	Trivedi, Mahendra K.	MP 651
Tipton, Jeremiah D.	MOC pm 2:50	Toren, Paul	MP 543	Trojer, Lukas	ThOG pm 3:10
Tipton, Jeremiah D.	MOC pm 4:10	Torok, Marrianna	ThP 462	Trojer, Lukas	TP 158
Tipton, Jeremiah D.	TOE am 09:50	Torrecilhas, Ana C.T.	WP 307	Trost, Matthias	TP 551
Tisminetzky, Sergio G	WP 450	Torres, Eduardo M.	TP 141	Trufanov, Andrey	ThP 615
Tiss, Ali	MPZ 566	Torres Jr., Rafael	ThP 050	Trufelli, Helga	MP 241
Tiss, Ali	TP 622	Torty, Suzy	MP 534	Trufelli, Helga	WP 606
Titman, Chris	MP 252	Torvi, Shripad	MP 015	Trumpour, Kyle	ThP 478
Titulaer, Mark K.	TP 094	Tossavainen, Helena	ThP 476	Truong, Khue	ThP 277
Titus, Mark A.	MP 306	Toth, Miklos	ThP 327	Truscott, Roger JW	MOA am 08:30
Tjaden, Ubbo	TP 089	Touboul, David	MOF am 09:30	Truscott, Roger JW	MP 213
Tobacman, Larry	TP 443	Touboul, David	WOA am 09:30	Trute, Mary	MOE pm 4:10
Tobias, Herbert	MP 163	Touboul, David	TP 479	Tsai, Becky	ThOF am 10:10
Tobias, Herbert	ThP 341	Tougasaki, Fumio	WP 510	Tsai, Chia-Feng	ThP 271
Todua, Nino	MP 657	Toumi, Melinda L.	WP 362	Tsai, Chia-feng	MP 023
Toivonen, Marja-Leena	TP 409	Toumi, Melinda L.	ThP 495	Tsai, Chia-feng	ThP 528
Tokar, Jeffrey L.	TP 085	Tourwé, Dirk	ThP 660	Tsai, Chia-Feng	ThP 263
Tokarski, Caroline	WP 278	Tous, Guillermo	TP 410	Tsai, Chia-feng	TP 035
Tokarski, Caroline	WP 515	Tousignant, Audrey	WP 615	Tsai, Chia-wei	TP 214
Tokarski, Caroline	WP 276	Tousignant, Audrey	WP 610	Tsai, Fuu-Jen	TP 247
Tokarz, John A.	TP 651	Toutoungi, Danielle	WOD am 09:50	Tsai, Ming-Daw	WP 406
Tokmak, Faruk	TP 254	Towers, Mark W.	MPZ 567	Tsai, Sheng-Ta	MP 074
Tokunboh, Idia	TP 344	Towers, Mark W.	MPZ 566	Tsai, Te-Lung	TP 248
Tolar, Jakob	WP 005	Townsend, R. Reid	MP 042	Tsai, Yihsuan	ThP 392
Toler, Strawn K.	ThOF pm 3:30	Townsend, R. Reid	TP 157	Tsai, Yihsuan	MP 139
Tolic, Nikola	WP 458	Townsend, Timothy	TP 608	Tsapraillis, George	WP 179
Tolić, Nikola	MP 290	Toyoda, Masaaki	WP 508	Tsapraillis, George	TP 624
Tolić, Nikola	TP 218	Toyoda, Michisato	ThP 625	Tsapraillis, George	ThP 565
Tollefson, Julie	MP 359	Toyoda, Michisato	ThP 621	Tschaplinski, Timothy J.	TP 108
Tollenaar, Rob A.	MP 596	Toyoda, Michisato	ThP 622	Tse, Francis	WP 245
Tolmachev, Aleksey	WP 146	Toyoda, Michisato	ThP 626	Tse, Francis	ThP 222
Tolmachev, Aleksey V.	TP 234	Toyoda, Michisato	MP 207	Tse, Francis	ThP 367
Tolmachev, Dmitry A.	TP 275	Traber, Maret G.	MP 375	Tseng, Angel	TP 400

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Tseng, Li-Hui	TP 628	Tyan, Yu-Chang	MP 068	Valaskovic, Gary	MP 475
Tseng, Mei-chun	TP 499	Tyan, Yu-Chang	WP 076	Valaskovic, Gary	TP 161
Tseng, Mei-Chun	MPZ 574	Tyan, Yu-Chang	MP 276	Valaskovic, Gary	TP 160
Tseng, Mei-Chun	TP 326	Tzeng, Shin-cheng	MP 277	Valaskovic, Gary	ThP 448
Tseng, Mei-chun	MPZ 573	Uboh, Cornelius	TP 659	Valaskovic, Gary	TP 151
Tseng, Mei-Chun	WP 229	Uboh, Cornelius	WP 158	Valaskovic, Gary A.	TP 157
Tseng, Vincent Shin-Mu	ThP 264	Uboh, Cornelius	ThP 666	Valdivia, Raphael	TP 619
Tsien, Roger Y.	TP 343	Uboh, Cornelius	ThOA am 09:50	Valeja, Santosh G.	TP 426
Tsipi, Despina	TP 593	Uchino, Kiichiro	ThP 343	Valente, Joseph	MP 502
Tso, Jerry	WP 603	Udeshi, Namrata	ThP 188	Valentine, Joan	MOG am 09:50
Tsou, Chih-chiang	TP 035	Udeshi, Namrata	TOC pm 4:10	Valentine, Stephen	WP 202
Tsou, Chih-Chiang	MP 051	Udeshi, Namrata	TP 518	Valentine, Stephen	ThP 349
Tsou, Chih-Chiang	MP 074	Udeshi, Namrata D.	ThP 252	Valentine, Stephen	TP 224
Tsuchiya, Fumihiko	ThP 187	Udey, Ruth N.	WP 116	Valentine, Stephen	MOD am 09:30
Tsuge, Kouichiro	TP 374	Ueberheide, Beatrix	MOC pm 3:50	Valjakka, Jarkko	ThP 476
Tsukamoto, Hidekazu	ThP 035	Ueckert, Torsten	MP 150	Valkenburg, Dirk	WP 399
Tsunasawa, Susumu	ThP 197	Ueda, Takeshi	TP 006	Van Amerom, Friso H. W.	ThOF pm 3:30
Tsurumaru, Hirohito	ThP 373	Ueda, Takuya	WP 419	van Amerom, Friso H. W.	WP 324
Tsuyama, Naohiro	WP 168	Uehara, Taisuke	TP 104	van Belle, Gerald	ThP 130
Tsuyama, Naohiro	WP 129	Uemura, Rie	WP 675	van Belle, Gerald	WP 057
Tsuyama, Naohiro	MP 431	Ueno, Yoshihiro	ThP 625	van Belle, Gerald	WP 047
Tsuyama, Naohiro	WP 578	Uetrecht, Charlotte	MOC am 08:30	Van Berkel, Gary J.	WOB pm 3:50
Tsuyama, Naohiro	WP 106	Ugalde, Carlos M.	ThP 149	Van Berkel, Gary J.	WOB pm 2:30
Tsuyama, Naohiro	WP 391	Ugarov, Michael	ThP 627	Van Berkel, Gary J.	TP 296
Tsuyama, Naohiro	WP 568	Ukibe, Masahiro	TOD pm 2:50	Van Berkel, Gary J.	TP 108
Tsuyama, Naohiro	WP 561	Ulrich, John	MOA pm 3:50	Van Berkel, Gary J.	MP 324
Tsybin, Yury O.	MP 643	Ulrich, Steve	WOD am 09:30	Van Berkel, Patrick H.C.	TP 481
Tsybin, Yury O.	ThOD am 09:30	Ulvik, Rune J.	MP 084	Van Breemen, Richard B.	WP 167
Tsybin, Yury O.	ThP 660	Umar, Arzu	MP 616	Van Breemen, Richard B.	MP 542
Tsygankov, Alexander	MP 387	Unger, Klaus K.	WP 335	Van Breemen, Richard B.	MOB am 08:50
Tu, Chengjian	WP 518	Unger, Steve E.	MP 305	Van Breemen, Richard B.	TP 413
Tu, Haitao	WP 312	Unkefer, Clifford	ThOC am 09:30	Van Breemen, Richard B.	WP 216
Tu, Tingting	WP 321	Unkefer, Pat J.	ThOC am 09:30	Van Breemen, Richard B.	WP 220
Tu, Tingting	MP 394	Unterfenger, Matthew	WP 645	Van Breemen, Richard B.	TP 320
Tu, Tingting	ThP 279	Unzai, Satoru	TP 468	Van Breemen, Richard B.	ThP 145
Tubb, Mattew R.	TP 135	Uppal, Saurav	ThP 209	Van Breemen, Richard B.	MP 281
Tuccio, Beatrice	MP 178	Uppalapati, Srinivasa Rao	ThP 078	Van Breemen, Richard B.	MP 341
Tucker, Kevin	TP 196	Urban, Frederique	MP 398	Van Breemen, Richard B.	ThP 287
Tucker, Mark L.	MP 554	Urban, Michael	ThP 074	Van Breemen, Richard B.	MP 541
Tummala, Vivek V.	TP 389	Urban, Nicole	WP 068	Van Breemen, Richard B.	TP 415
Tuohy, Kieran M.	ThP 083	Urban, Reinhard	TP 650	van Breukelen, Bas	TP 130
Turck, Chris	Special	Urbaneczyk-Wochniak, Ewa	WP 570	Van Cott, Kevin	TP 515
Turck, Christoph W.	MP 069	Urbanová, Jana	ThP 227	Van De Goor, Tom	TP 158
Turck, Natacha	WP 008	Uritboonthai, Wilasinee	ThOG pm 2:30	Van De Goor, Tom	ThOE am 09:50
Turco Liveri, Vincenzo	TP 473	Urlaub, Henning	WP 015	Van de Plas, Babs	WP 029
Turecek, Frantisek	MP 630	Urlaub, Henning	ThP 420	Van de Plas, Raf	WOA am 10:10
Turecek, Frantisek	ThP 334	Urlaub, Henning	WP 140	Van De Plas, Raf	WP 399
Turecek, Frantisek	MP 110	Urlaub, Henning	WP 302	Van den Bergh, Gert	WP 029
Turecek, Frantisek	ThP 659	Urlaub, Henning	ThP 296	van den Bremer, Ewald T.J.	TP 481
Turecek, Frantisek	ThOD am 08:50	Uzarski, Diane	MOE pm 3:50	van den Brink, Oscar F.	ThOC pm 2:50
Turecek, Frantisek	WP 254	Vachereau, André	MP 106	van den Brink, Oscar F.	WOF pm 3:10
Turecek, Frantisek	TP 238	Vachet, Richard	TP 435	van den Brink, Oscar F.	WP 627
Turesky, Robert J.	WP 110	Vachet, Richard	MP 641	Van Der Burgt, Yuri E. M.	ThP 350
Turgeon, Coleman T.	TP 257	Vachet, Richard	MPZ 583	van der Burgt, Yuri E.M.	ThP 694
Turk, Douglas J.	TP 567	Vachet, Richard	WP 442	Van Der Burgt, Yuri E.M.	MP 596
Turk, Douglas J.	TP 581	Vachet, Richard	TP 344	Van Der Burgt, Yuri E.M.	TP 288
Turk, John	TP 522	Vachet, Richard	ThOG pm 4:10	Van Der Greef, Jan	TP 089
Turk, John	WP 672	Vachet, Richard W.	MP 506	van der Heijden, Rob	TP 089
Turk, John	ThP 551	Vaclavik, Lukas	TP 310	van der Hoeven, Rob	MP 591
Turko, Illarion V.	WP 417	Vaezzadeh, Ali R.	MP 070	van der Kloet, Frans	TP 110
Turner, Kevin B.	WP 436	Vagts, Jens	TP 251	van der Oost, John	TP 460
Turner, Kevin B.	ThP 396	Vahid, Mojdeh	TP 390	Van Der Rest, Guillaume	TP 427
Turner, Kevin B.	ThP 414	Vahid, Mojdeh	TP 407	Van Domselaar, Gary	ThP 377
Turner, Phillip	MP 185	Vahid, Mojdeh	MP 410	Van Dorsselaer, Alain	WP 455
Turney, Kevin	ThP 646	Vainiotalo, Pirjo	ThP 476	Van Dorsselaer, Alain	ThP 254
Turpin, Phillip	MP 359	Vaisar, Tomas	TP 016	Van Duijn, Esther	TP 460
Turrell, Sylvia	WP 276	Vakhrushev, Sergey Y.	WP 475	Van Duijn, Esther	MOC am 08:30
Turtoi, Andrei	MP 605	Valaskovic, Gary	TP 156	Van Eyk, Jennifer	MP 091
Tuz, Karina	ThP 472	Valaskovic, Gary	MP 001	Van Eyk, Jennifer	WP 544
Twaddle, Nathan C.	TP 411	Valaskovic, Gary	TP 150	van Gils, Mark	TP 159
Tweed, Joseph A.	MP 465	Valaskovic, Gary	TP 633	Van Hoof, Dennis	ThP 426
Twine, Susan	TP 516	Valaskovic, Gary	MP 330	van Maarseveen, Jan H.	WP 138

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Van Nostrand, John.....	TP 206	Venugopal, S. K.....	TP 617	Villen, Judit.....	TP 141
Van Orden, Steve.....	TP 287	Verbeck, Guido F.....	ThP 333	Villen, Judit.....	TOE pm 3:50
van Remoortere, Alexandra.....	WP 191	Verbeck, Guido F.....	ThP 338	Villen, Judit.....	ThP 441
van Remoortere, Alexandra.....	TP 201	Verbeck, Guido F.....	MP 231	Vinati, Simone.....	ThP 267
Van Riper, Susan K.....	MP 060	Verberkmoes, Nathan C.....	TP 541	Vincent, John B.....	WP 370
Van Riper, Susan K.....	ThP 192	VerBerkmoes, Nathan C.....	WP 131	Vincent, Stella.....	MP 307
van Schaik, F.M.A. Richard.....	TP 266	VerBerkmoes, Nathan C.....	ThP 391	Viner, Rosa.....	ThP 454
van Schie, Chris C.N.....	TP 558	Verberkmoes, Nathan C.....	ThP 030	Viner, Rosa.....	ThP 572
Van Soest, Remco.....	TP 171	Verberkmoes, Nathan C.....	ThP 389	Viner, Rosa.....	ThP 249
Van Soest, Remco.....	MP 448	Verberkmoes, Nathan C.....	MP 286	Viner, Rosa.....	MP 454
Van Soest, Remco.....	TP 162	Verberkmoes, Nathan C.....	MP 065	Viner, Rosa.....	MP 588
Van Steendam, Katleen.....	ThP 285	Verberkmoes, Nathan C.....	ThP 029	Viner, Rosa.....	MP 459
Van Stipdonk, Michael J.....	WP 662	Verberkmoes, Nathan C.....	ThP 031	Vinh, Joelle.....	ThP 117
Van Stipdonk, Michael J.....	TP 349	Verecsi, Anibal Eugênio.....	TP 243	Vinueza, Nelson.....	MOF am 10:10
Van Stipdonk, Michael J.....	WP 666	Verdier-Pinard, Pascal.....	WP 298	Vismeh, Ramin.....	WP 481
Van Stipdonk, Michael J.....	WOA pm 4:10	Verentchikov, Anatoli.....	ThP 615	Vissers, Johannes PC.....	MP 036
Van Stipdonk, Michael J.....	TP 352	Verhaert, Peter.....	WP 390	Viswanathan, Nirmala.....	WP 596
Van Stipdonk, Michael J.....	WP 660	Verhaert, Peter D.....	WP 029	Vitorino, Rui.....	MP 512
Van Stipdonk, Michael J.....	WP 667	Verhaert, Peter D.....	ThOA pm 4:10	Vladimirov, Gleb.....	TP 276
Van Stipdonk, Michael J.....	MOF pm 3:30	Verheij, Elwin.....	MP 243	Vladimirov, Gleb.....	TP 278
Van Stipdonk, Michael J.....	TP 344	Verheij, Elwin.....	TP 110	Voelkel, Jacob.....	WOC am 08:30
Van Stipdonk, Michael J.....	WP 275	Verhoturov, Stanislav.....	MP 648	Voelker, Troy.....	ThP 238
van Ulsen, Peter.....	WP 009	Verkerk, Udo.....	WP 668	Vogel, John.....	MOA pm 3:30
van Velde, Jan W.....	WOF pm 3:10	Verkhoturov, Stanislav.....	ThOG pm 3:30	Vogel, John.....	MOA pm 2:50
van Velde, Jan W.....	ThOC pm 2:50	Vernon, Robert M.....	WP 430	Voillard, Sandrine.....	TP 461
van Vilsteren, Frederike G.I.....	WP 554	Verreault, Alain.....	ThP 505	Voinov, Valery.....	MP 636
Van Wijk, Klaas.....	ThP 295	Vertes, Akos.....	WP 564	Voisin, Sebastien.....	MP 081
Van Wijk, Klaas J.....	TP 557	Vertes, Akos.....	WP 478	Völger, Hans Rainer.....	ThOA am 08:30
Van Wijk, Klaas J.....	WP 022	Vertes, Akos.....	WOA am 08:50	Volker, Troy.....	WP 234
van Zeijl, René J.M.....	WP 191	Vertes, Akos.....	ThP 080	Voller, Andrea.....	MP 564
van Zeijl, René J.M.....	TP 201	Vertes, Akos.....	TP 114	Vollmer, Martin.....	ThOE am 09:50
Vanbogelen, Ruth A.....	MP 123	Vertes, Akos.....	MP 334	Vollmerhaus, Pauline J.....	MP 169
Vanderver, Adeline.....	TP 615	Vertes, Akos.....	TP 639	Vollmerhaus, Pauline J.....	ThOB pm 2:50
VanMeter, Amy.....	WP 074	Vertes, Akos.....	TOD am 09:10	Volmer, Dietrich.....	MP 242
VanNorman, Molly A.....	WP 263	Vertommen, Luc L.T.....	WOF pm 3:10	Volmer, Dietrich.....	ThP 070
Varesio, Emmanuel.....	TP 109	Vesper, Hubert.....	TP 495	Volmer, Dietrich A.....	ThP 076
Varesio, Emmanuel.....	TOB am 08:50	Vesper, Hubert.....	TP 494	Volny, Michael.....	TP 190
Varesio, Emmanuel.....	ThP 239	Vestal, Christina.....	TP 191	Von Czapiewski, Kristin.....	MP 564
Varesio, Emmanuel.....	MP 518	Vestal, Marvín.....	ThP 624	von Mering, Christian.....	ThP 372
Varesio, Emmanuel.....	MPZ 570	Vestal, Marvín.....	TP 191	Von Tungeln, Linda S.....	TP 409
Varfolomeev, Sergey.....	WP 369	Vestal, Marvín.....	ThP 298	VonTungeln, Linda.....	ThP 580
Varma, Manthana.....	WP 238	Vestal, Marvín.....	ThP 618	Voorhees, Kent J.....	WP 631
Varns, Jerry L.....	TP 586	Vestal, Marvín.....	MPZ 565	Vorholt, Julia.....	ThP 372
Vasicek, Lisa A.....	MP 642	Vestal, Marvín.....	MPZ 571	Vorholt, Julia A.....	TP 116
Vasileiou, Chrysoula.....	WP 116	Vestling, Martha M.....	ThP 458	Vorm, Ole.....	WP 056
Vasil'ev, Yury V.....	ThOD am 09:50	Vestling, Martha M.....	WP 387	Vorm, Ole.....	TP 154
Vasilj, Andrej.....	MP 021	Via, Laura.....	ThP 161	Vorobyev, Aleksey.....	ThOD am 09:30
Vassallo, Jeff.....	WOB am 09:10	Vibert, Julie.....	ThP 148	Vorobyev, Aleksey.....	ThP 660
Vath, Marianne.....	ThP 662	Vickerman, John.....	WOD pm 2:50	Vorobyev, Aleksey.....	MP 643
Vaughn, Valerie.....	WOD am 09:30	Vickery, Sherry.....	MP 075	Vorontsov, Egor.....	ThP 186
Vaughn, Valerie.....	TP 204	Vidavsky, Ilan.....	ThP 413	Vorozhtsov, Nikolay I.....	ThP 394
Veenstra, Timothy D.....	WP 271	Vidova, Veronika.....	TP 190	Voss, Bjoern.....	WP 059
Veenstra, Timothy D.....	MP 052	Vieira, José Gilberto.....	WP 253	Voss, Edward.....	WP 520
Veenstra, Timothy D.....	WP 413	Vieira, Karla M.....	TP 591	Voss, Edward.....	WP 506
Veenstra, Timothy D.....	Special	Viel, François.....	WP 232	Vosseller, Keith.....	ThP 246
Veenstra, Timothy D.....	MP 617	Viel, Stephane.....	WOF am 08:30	Vouros, Paul.....	MOG pm 3:30
Veenstra, Timothy D.....	TOB pm 3:10	Viel, Stéphane.....	WP 620	Vouros, Paul.....	ThP 591
Vega, Karina.....	TP 075	Vierling, Elizabeth.....	TP 463	Vouros, Paul.....	ThP 141
Vega-Montoto, Lorenzo.....	TP 074	Viette, Veronique.....	WP 165	Voyer, Janine.....	MP 043
Vekey, Karoly.....	WP 627	Viette, Veronique.....	TP 251	Voyksner, Jennifer A.....	TP 487
Velander, William H.....	TP 515	Vigh, Gyula.....	WP 133	Voyksner, Robert D.....	TP 487
Velasquez, Jade.....	WP 657	Viglino, Liza.....	TP 595	Vrana, Julie A.....	MP 613
Velic, Ana.....	WP 080	Viglino, Liza.....	TP 597	Vrbanac, James.....	TP 417
Vellaichamy, Adaikkalam.....	TOE am 09:50	Viiri, Keijo.....	ThP 476	Vrbanac, James.....	TP 414
Vellaichamy, Adaikkalam.....	MP 135	Vilim, Ferdinand S.....	ThP 464	Vreeken, Rob.....	TP 119
Vellaichamy, Adaikkalam.....	MOC pm 2:50	Vilkov, Andrey N.....	ThOG am 10:10	Vu, Anthony.....	TP 344
Vellaichamy, Adaikkalam.....	TP 150	Vilkov, Andrey N.....	TP 285	Vu, Doan-Trang.....	MP 316
Vellucci, Danielle.....	TOC am 09:30	Vilkov, Andrey N.....	MP 190	Vucic, Domagoj.....	TP 028
Venable, John.....	TP 126	Villano, Stephanie M.....	ThP 634	Vukelic, Zeljka.....	WP 474
Venables, Barney.....	ThP 506	Villar, Maria T.....	TP 429	Vukelic, Zeljka.....	WP 483
Venne, Karine.....	WP 227	Villas-Boas, Silas.....	MP 489	Vullhorst, Detlef.....	TP 342
Venter, Andre.....	ThP 331	Villen, Judit.....	TP 024	Vuong, Huy.....	TP 034

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Vuong, Huy	WP 054	Wang, Bo	WP 367	Wang, Nan	MP 294
Vuong, Huy	MP 082	Wang, Bo	WP 462	Wang, Nan	ThP 102
Vuong, Le	MOA pm 2:50	Wang, Bruce	WP 604	Wang, Nan-Hsuan	WP 331
Waanders, Leonie F.	TP 165	Wang, Charlene	ThP 224	Wang, Pei-Cheng	MP 362
Wada, Yoshinao	TP 645	Wang, Cheng-long	ThP 085	Wang, Peng	ThP 255
Wada, Yoshinao	TP 646	Wang, Chuan	MOG pm 4:10	Wang, Peng	TP 295
Waddell, Keith	TOC pm 3:50	Wang, Chun-Hung	MP 363	Wang, Peng	ThP 337
Waddell, Keith	ThOE am 09:50	Wang, Dandan	ThP 671	Wang, Peng	WP 405
Waddell, Keith	MP 456	Wang, Dongdong	WP 502	Wang, Ping	MP 442
Waddell, Keith	MP 015	Wang, Farrah Q	TOF am 08:50	Wang, Ping	ThP 167
Waelkens, Etienne	WOA am 10:10	Wang, Gehua	ThP 377	Wang, Qi	MP 634
Waelkens, Etienne	WP 399	Wang, Guangdi	MP 072	Wang, Qian	ThP 196
Wagner, Andrew	MP 437	Wang, Guanghui	TP 037	Wang, Qingxi	MP 665
Wagner, David S.	MOA pm 3:50	Wang, Hailin	MP 166	Wang, Quanhui	ThP 196
Wagner, J. Richard	MP 511	Wang, Hailin	MOG pm 2:50	Wang, Qunjie	WP 355
Wagner, Michel	ThP 239	Wang, Haipeng	TP 058	Wang, Rong	TP 546
Wagner-Rousset, Elsa	WP 455	Wang, Haipeng	ThP 243	Wang, Rui	TP 479
Wahl, Jon H.	TP 662	Wang, Haipeng	WP 043	Wang, Sheng	MP 164
Wahl, Jon H.	TOG am 08:50	Wang, Haiping	MP 307	Wang, Sheng	ThP 224
Wahl, Karen L.	TOG am 08:50	Wang, Haiping	ThP 685	Wang, Shihong	TP 585
Wahl, Karen L.	TP 662	Wang, Haiyan	WP 645	Wang, Wei-Han	WP 397
Wahl, Marcus	ThP 420	Wang, Hao	MP 302	Wang, Wei-Hsun	MP 556
Waidelich, Dietmar	TP 010	Wang, Hao	MOB pm 3:30	Wang, Weiming	TP 003
Waidelich, Dietmar	WP 400	Wang, Hay-Yan J.	MP 220	Wang, Weixun	MP 121
Wainer, Irving	WP 252	Wang, Hay-Yan J.	WP 533	Wang, Wendy	MP 546
Wainhaus, Sam	TP 402	Wang, He	TP 359	Wang, Wendy	MP 547
Waldron, Michael P.	WP 339	Wang, Hong	MP 013	Wang, Wendy	MP 548
Wales, Thomas E.	TOG pm 2:50	Wang, Hong	WP 068	Wang, Wenping	ThP 025
Walker, Amy V.	ThP 180	Wang, Hongli	MP 414	Wang, Wenping	TP 058
Walker, Bennett N.	TP 639	Wang, Hongli	TP 400	Wang, Wen-Yu	MOB pm 2:30
Walker, Bennett N.	TOD am 09:10	Wang, Hongxia	ThP 590	Wang, Xiaorong	ThP 126
Walker, Bob	MP 397	Wang, Houle	MP 187	Wang, Xiaorong	TP 147
Walker, DeEtte	WP 187	Wang, Hsiao-Han	MP 220	Wang, Xiaorong	ThOF am 10:10
Walker, J Michael	ThP 159	Wang, Hsiao-Han	WP 533	Wang, Xinli	WP 464
Walker, Jeffery W.	WP 536	Wang, Huan	WP 135	Wang, Xu	ThP 570
Walker, Jeffery W.	MP 595	Wang, Huan	MP 118	Wang, Yan	WP 252
Walker, John	WP 088	Wang, Jerry	ThP 693	Wang, Yan	WP 290
Walker, Michael	ThOA pm 3:10	Wang, Jerry	ThP 693	Wang, Yan	ThOB am 09:30
Walkinshaw, M W	TP 032	Wang, Jia	WP 600	Wang, Yanzhuang	ThP 521
Wall, Mark J.	WP 134	Wang, Jian	WP 332	Wang, Yaohua	ThOB am 09:50
Wall, Stephanie B.	TP 514	Wang, Jian	ThP 001	Wang, Yi	ThP 540
Wallace, Alistair	WP 643	Wang, Jian	ThP 607	Wang, Yi	MP 501
Wallace, Alistair	ThOB pm 4:10	Wang, Jianquan	MP 225	Wang, Yi	ThP 564
Waller, Lashanda	MP 059	Wang, Jianshuang	ThP 408	Wang, Yi Ting	TP 035
Waller, Lashanda N.	WP 006	Wang, Jianshuang	ThP 409	Wang, Yi Ting	ThP 528
Walmsley, Scott	TP 536	Wang, Jianyao	TP 576	Wang, Ying Ms.	MP 179
Walse, Spencer S.	MP 561	Wang, Jianyao	TP 347	Wang, Yinsheng	ThP 410
Walsh, Geraldine M	ThP 431	Wang, Jin	WP 355	Wang, Yinsheng	MOG pm 3:10
Walsh, John	ThP 472	Wang, Jing	ThP 056	Wang, Yinsheng	ThP 409
Walsh, Michael P.	TP 455	Wang, Jing	TP 022	Wang, Yinsheng	ThP 408
Walther, Tobias C.	TP 533	Wang, Jing	MP 113	Wang, Yinsheng	ThOF am 09:50
Walton, Anthony J.	TP 166	Wang, Jinglan	WP 447	Wang, Yinsheng	ThP 590
Walton, Anthony J.	WP 317	Wang, Jinglan	ThP 243	Wang, Yi-Sheng	TP 641
Walton, Justin	MP 365	Wang, Jinyuan	WP 175	Wang, Yi-Sheng	WP 310
Waltrip, James	MP 158	Wang, Jinyuan	TP 606	Wang, Yi-Ting	ThP 263
Walworth, Matthew J.	TP 296	Wang, Joyce	ThP 113	Wang, Yongdong	MP 538
Wan, Leren	MP 166	Wang, Junhua	TP 172	Wang, Yongdong	WP 105
Wan, Leren	WP 381	Wang, Junhua	MP 010	Wang, Yuan	TP 587
Wan, Leren	MP 155	Wang, Kefei	ThP 668	Wang, Yuesong	ThOF am 09:50
Wan, Siew Mun	ThOB pm 2:50	Wang, Leheng	TP 058	Wang, Yuexi	MP 083
Wan, Terence S.M.	WP 581	Wang, Leheng	ThP 025	Wang, Yuhui	ThP 683
Wan, Yunhu	WP 692	Wang, Leheng	WP 043	Wang, Yuxin	ThP 087
Wan, Yunhu	WP 025	Wang, Lei	WP 100	Wang, Zhen	WP 308
Wan, Yunhu	WP 001	Wang, Ling	TP 258	Wang, Zhongwen	MOG pm 2:50
Wanders, Ronald J.A.	WP 532	Wang, Li-quan	MP 345	Wang, Zhouxi	ThP 293
Wang, Alexandre	MP 429	Wang, May D.	ThP 313	Wang, Zhuowei	ThP 196
Wang, Benlian	WP 296	Wang, Meiyao	TP 329	Wang, Zihao	TOC pm 4:10
Wang, Bin	ThP 310	Wang, Miao	ThOF pm 2:50	Wang, Zihao	TP 518
Wang, Bing	MOC pm 3:10	Wang, Mingda	MP 328	Wang-iverson, David	MP 233
Wang, Bing	ThP 092	Wang, Mingyi	WP 544	Wang-Sattler, Rui	ThP 079
Wang, Bing	WP 060	Wang, Mu	ThP 106	Want, Elizabeth J.	WOB am 08:50
Wang, Bing	MP 215	Wang, Nan	MP 457	Want, Elizabeth J.	ThP 095

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Want, Elizabeth J.....	ThP 083	Wei, Ru.....	ThP 087	Wenzel, Ryan.....	WP 457
Want, Elizabeth J.....	WP 694	Wei, Ru.....	MP 130	Werner, Hauke B.....	WP 530
Ward, Brian J.....	TP 103	Wei, Shimin.....	WP 245	Wernig, Karin.....	WP 347
Ward, Brian J.....	WP 095	Wei, Xin.....	WP 078	Wesdemiotis, Chrys.....	WOF pm 2:50
Ward, Brian J.....	TP 616	Wei, Xin.....	WP 071	Wesdemiotis, Chrys.....	WP 624
Ward, Brian J.....	ThP 064	Weichert, Jamey P.....	ThP 225	Wesdemiotis, Chrys.....	TP 485
Ward, Jeffrey L.....	MP 395	Weidner, Steffen M.....	WOF am 10:10	Wesdemiotis, Chrys.....	WP 626
Ward, Jeffrey L.....	MP 396	Weidt, Stefan.....	ThOF am 09:30	Wesdemiotis, Chrys.....	WP 621
Ward, Malcolm.....	WP 009	Weil, David A.....	MP 101	Wesdemiotis, Chrys.....	TP 466
Ward, Malcolm.....	MP 125	Weinberg, Aaron.....	WP 058	Wesdemiotis, Chrys.....	WP 613
Ward, Michael D.....	TP 031	Weinberg, David.....	TP 085	Wesdemiotis, Chrys.....	TP 236
Ward, Nicole.....	TP 017	Weinberger, Klaus.....	WP 130	Wesdemiotis, Chrys.....	WP 619
Warder, Scott.....	ThP 587	Weinberger, Klaus M.....	ThP 074	West, David.....	WP 614
Warder, Scott.....	TP 143	Weinberger, Klaus M.....	TP 118	West, Graham M.....	ThP 483
Wariishi, Hiroyuki.....	ThP 094	Weinberger, Klaus M.....	ThP 079	West, Graham M.....	ThP 661
Wariishi, Hiroyuki.....	TP 578	Weinberger, Klaus M.....	ThP 100	West, Keith.....	WP 516
Wariishi, Hiroyuki.....	TP 579	Weiner, Joel H.....	MP 012	West, Keith P.....	MP 005
Warnecke, Falk.....	TOA am 09:10	Weinhold, Elmar.....	TP 145	West, Paul R.....	WP 119
Warnken, Uwe.....	WP 031	Weinkopff, Tiffany.....	ThP 036	West, Paul R.....	WP 115
Warrack, Bethanne.....	ThP 099	Weinmann, Wolfgang.....	ThP 599	West, Robert.....	TP 652
Warrander, John.....	WP 376	Weinstock, Michal.....	MP 169	Westenberger, Benjamin J.....	ThP 143
Warren, Melissa.....	ThP 193	Weinstock-Guttman, Bianca.....	MOB pm 3:30	Westmacott, Garrett.....	ThP 377
Warscheid, Bettina.....	WP 532	Weintraub, Susan T.....	ThP 488	Westmacott, Garrett.....	WP 083
Warscheid, Bettina.....	ThP 514	Weintraub, Susan T.....	Special	Westman-Brinkmalm, Ann.....	TP 092
Washburn, Michael.....	MOE am 08:30	Weir, April M.....	WP 119	Westman-Brinkmalm, Ann.....	TP 093
Washburn, Michael.....	WP 055	Weir, April M.....	WP 115	Weston, Jason.....	TP 052
Washburn, Michael.....	MP 038	Weir, Jacquelyn M.....	MP 221	Weston, Jason.....	WOF am 08:50
Wasselin, Thierry.....	MP 611	Weis, David D.....	MP 514	Whalen, Erin.....	TP 024
Waszkuc, Ted.....	WP 375	Weisberg, Sanford.....	MP 055	Whalen, Kevin.....	ThP 680
Watanabe, Hideki.....	MP 044	Weisbrod, Chad.....	WP 155	Whalen, Kevin.....	ThP 682
Watanabe, Jun.....	MP 447	Weiss, Lola.....	ThP 033	Wheeler, Korin.....	MP 286
Watanabe, Jun.....	ThP 134	Weiss, Louis.....	MP 516	Wheeler, Korin.....	MP 065
Watanabe, Junji.....	WP 523	Weiss, Louis M.....	WP 298	Whetstone, Kelly.....	TP 403
Watanabe, Kenji.....	WP 384	Weiss, Michael A.....	WP 444	Whetton, Anthony D.....	ThP 304
Watanabe, Masahiro.....	TP 468	Weissgerber, Hans-Georg.....	TP 158	Whigham, Leah D.....	WP 127
Watanabe, Masaki.....	ThP 450	Weiss-Haljiti, Cornelia.....	TP 010	White, Andrew.....	MP 061
Watanabe, Susumu.....	TP 376	Weisz, Julie A.....	ThP 035	White, Catherine.....	MOG pm 2:30
Watanabe, Susumu.....	TP 374	Weisz, Julie A.....	MP 244	White, Earl L.....	TP 420
Watanabe, Takehiro.....	WP 612	Weitz, Karl K.....	WP 146	White, Forest M.....	ThOE am 08:30
Waterham, Hans R.....	WP 532	Weitz, Karl K.....	TP 125	White, Michael.....	WOF am 09:10
Waterman, Marian.....	ThOF am 10:10	Welchman, Helen.....	ThP 070	White, Thomas.....	MP 325
Waters, Kelley.....	TP 205	Weldon, Christopher B.....	MP 072	White, Thomas.....	MP 505
Waters, Kelley.....	TP 204	Welkie, David G.....	MP 206	White, Wendy L.....	ThP 542
Waters, Kelley.....	WOD am 09:30	Welle, Kevin.....	TP 102	White V, Edward.....	MP 668
Watson, Bonnie S.....	WP 570	Weller, Harold.....	ThP 662	White, Thomas P.....	ThP 479
Watson, Caroline.....	WP 450	Weller, Harold.....	MP 437	Whiteaker, Jeffrey R.....	MOE pm 4:10
Watson, Caroline.....	TOC am 08:50	Weller Roska, Rachel L.....	ThP 063	Whitehead, Alexander S.....	MP 175
Watson, Dawn.....	TP 101	Wells, David D.....	WP 629	Whitehead, Jon P.....	TP 528
Watson, Heather.....	WP 370	Wells, J. Mitchell.....	TP 372	Whitehill, Justin GA.....	TOE am 10:10
Watson, James C.....	TP 085	Wells, Lance.....	TP 123	Whitehouse, Craig M.....	MP 325
Wattenberg, Andreas.....	ThP 250	Welsch, Dean J.....	TP 501	Whitehouse, Craig M.....	ThP 479
Watts, Julian D.....	WP 559	Welty, Devin.....	MOA pm 3:10	Whitehouse, Craig M.....	MP 505
Watts, Julian D.....	ThP 043	Wen, Bo.....	MP 439	Whitelegge, Julian.....	WOF pm 3:50
Watts, Julian D.....	WP 087	Wen, Jianzhong.....	WP 451	Whitelegge, Julian.....	TOE am 09:30
Watts, Julian D.....	TOC pm 2:50	Wen, Zhihui.....	MP 038	Whitelegge, Julian.....	MOG am 09:50
Weatherly, Brent.....	TP 555	Wendelberg, Brian M.....	MP 545	Whitmore, Paul M.....	WP 478
Weatherly, Brent.....	TP 038	Wendt, Juergen.....	TP 650	Whitmore, Ted.....	MOE pm 4:10
Weaver, Luke.....	WP 552	Wendt, Juergen.....	MP 562	Whitney, Mike.....	TP 343
Webb, David H.....	ThP 084	Wendt, Juergen.....	TP 588	Whitten, Jerry L.....	MP 469
Webb, Kristofor.....	TOE am 09:30	Wendt, Juergen.....	MP 373	Whitten, William B.....	MP 188
Webb, Sally.....	WP 114	Weng, Chiashan.....	ThP 122	Whittington, Dale.....	TP 291
Weber, Walter.....	TP 323	Weng, Naidong.....	TP 399	Wibom, Carl.....	TP 559
Webster, Paul.....	MP 080	Wenger, Craig.....	TP 369	Wichmann, H.-Erich.....	ThP 079
Wehr, Angela Y.....	ThP 052	Wenger, Craig.....	ThP 026	Wick, Charles H.....	TP 384
Wehr, Tim.....	WP 088	Wenger, Craig D.....	MOE am 09:10	Wick, Macdonald.....	ThP 038
Wehri, Sarah C.....	TP 459	Wenger, Craig D.....	WP 678	Wicking, Christianne.....	WP 635
Wei, Bin.....	MP 129	Wenger, Craig D.....	ThOE am 08:50	Wicking, Christianne.....	TOA am 08:50
Wei, Cong.....	MP 278	Wenthold, Paul G.....	WP 674	Wickramasekara, Samantha I.....	ThP 390
Wei, Fan.....	WP 283	Wenthold, Paul G.....	WP 663	Wickremsinhe, Enaksha R.....	TOB pm 2:50
Wei, Hui.....	MP 111	Wentrup, Cecilia.....	ThP 391	Wickremsinhe, Enaksha R.....	WP 160
Wei, Hui.....	WP 496	Wentzel, Daria L.....	MP 358	Widart, Joelle.....	WP 032
Wei, Ru.....	ThP 088	Wentzel, Daria L.....	ThP 365	Widart, Joelle.....	TP 012

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

## INDEX OF AUTHORS

Wiederin, Jayme.....	MP 095	Willoughby, Ross C.....	MP 312	Wolff, Jeremy.....	ThOD pm 2:50
Wiedner, Steffen M.....	ThP 163	Willoughby, Ross C.....	MP 311	Wolfgang, Schulz.....	TP 323
Wiese, Sebastian.....	WP 532	Wilmarth, Phillip.....	ThP 011	Wolfram, Julie.....	TP 017
Wiese, Thomas.....	MP 072	Wilmes, Paul.....	WP 131	Wollscheid, Bernd.....	ThP 045
Wiggins, Brian.....	ThP 558	Wilmes, Paul.....	MP 065	Wollscheid, Bernd.....	ThP 512
Wiggins, Wesley S.....	WP 112	Wilson, Derek.....	TP 206	Wolters, Dirk.....	WP 034
Wijeratne, Aruna B.....	MP 380	Wilson, Derek J.....	ThP 112	Wolverton, Steve.....	ThP 506
Wijeratne, Neloni.....	WP 663	Wilson, Ian.....	WP 126	Womack, Virginia.....	TP 205
Wikoff, William.....	ThP 067	Wilson, Ian.....	WP 236	Wong, Belinda.....	ThP 664
Wiksw, John P.....	TP 207	Wilson, Ian.....	WOB am 08:50	Wong, Catherine C L.....	MP 189
Wilcox, Kyle.....	ThP 265	Wilson, Ian.....	ThP 093	Wong, Catherine C L.....	ThP 023
Wild, Peter.....	TP 182	Wilson, Ian D.....	ThP 083	Wong, Chee-Hong.....	MP 013
Wildgoose, Jason L.....	ThOB pm 4:10	Wilson, Jonathan.....	WP 442	Wong, Diana.....	TP 106
Wildgoose, Jason L.....	ThP 629	Wilson, Jonathan.....	MP 641	Wong, G. William.....	TP 613
Wildsmith, Kristin R.....	MP 601	Wilson, Katherine.....	ThP 292	Wong, Jenny K.Y.....	WP 581
Wiley, Joshua S.....	MP 550	Wilson, Katherine.....	ThP 290	Wong, John H.....	ThOA pm 2:50
Wiley, Steve.....	TP 149	Wilson, Landon.....	WP 528	Wong, Ma-Li.....	WP 524
Wilhelm, Randy.....	MP 174	Wilson, Landon.....	TP 312	Wong, Philip S.....	ThP 401
Wilhide, Joshua.....	ThOF am 09:30	Wilson, Landon.....	WP 543	Wong, Richard L.....	MP 279
Wilkins, Charles L.....	MP 214	Wilson, Stuart.....	TP 264	Wong, Simon.....	MP 356
Wilkins, Charles L.....	WP 630	Wilson, Stuart A.....	WP 294	Wong, Ven Ney.....	MP 504
Wilkins, John.....	WP 524	Wilson, Walter B.....	MP 020	Woo, Hin-koon.....	WP 183
Wilkins, John A.....	TP 002	Wilson-Grady, Joshua T.....	TP 025	Woo, Hin-koon.....	ThOG pm 2:30
Wilkinson, Gary.....	MP 407	Windsor, Eric.....	TP 378	Wood, Michael.....	MP 313
Wilkinson, Robert.....	ThP 093	Wingate, Julie.....	WOD pm 2:30	Wood, Stacey.....	ThP 482
Wilkinson, Royce.....	ThP 531	Wingate, Julie.....	TP 580	Wood, Troy.....	ThP 510
Wilks, Donna.....	TP 528	Winichagoon, Pranee.....	TP 098	Wood, Troy.....	ThP 107
Wilks, Donna.....	MP 270	Winkler, Nelson.....	MOD pm 3:10	Wood, Troy.....	TP 598
Wille, Andrea.....	WP 609	Winkler, Nelson S.....	TP 117	Woodcroft, Mark.....	ThP 478
Willems, Stefan M.....	WP 191	Winkler, Wolfgang.....	ThP 384	Woodling, Kellie.....	ThP 580
Willett, Gary.....	WP 480	Winograd, Nicholas.....	ThP 352	Woodman, Michael.....	MP 101
Williams, Brad J.....	MP 510	Winograd, Nick.....	WOD pm 2:30	Woodruff, Jeffrey T.....	ThP 143
Williams, Craig M.....	TOF am 08:50	Winograd, Nick.....	ThP 176	Woodruff, Mark.....	WP 329
Williams, Evan R.....	TOF pm 2:50	Winrow, Christopher J.....	WP 548	Woods, Amina S.....	WOD am 09:30
Williams, Evan R.....	TOF am 09:30	Winter, Dominic.....	MP 057	Woods, Amina S.....	ThP 178
Williams, Evan R.....	MP 315	Winters, Doug.....	MP 263	Woods, Amina S.....	TP 204
Williams, Evan R.....	WP 233	Wirth, Tiffany C.....	TP 373	Woods, Amina S.....	MP 236
Williams, Evan R.....	ThOD am 08:30	Wirtz, Jennifer.....	MP 246	Woods, Amina S.....	TP 483
Williams, J.....	TP 379	Wirtz, Michaela.....	WP 622	Woods, Amina S.....	TP 457
Williams, Jamison J.....	MP 344	Wirtz, Stefanie.....	MP 562	Woods, Amina S.....	WP 194
Williams, Jason G.....	ThP 485	Wiseman, Justin.....	WOB pm 3:30	Woods, Amina S.....	TP 205
Williams, Jon D.....	ThP 669	Wiseman, Justin.....	TP 292	Woods, Amina S.....	ThP 162
Williams, Jon D.....	ThP 542	Wishnok, John S.....	WP 069	Woods, Robert J.....	WP 456
Williams, Jonathan P.....	TP 229	Wishnok, John S.....	WP 066	Woods, Jr., Virgil.....	TP 437
Williams, Karin.....	TP 102	Wisniewski, Jacek R.....	WOE pm 2:30	Wolf, Eric.....	TP 394
Williams, Katherine E.....	TOG am 09:30	Wissdorf, Walter.....	MP 319	Woolfitt, Adrian R.....	ThP 375
Williams, Kenneth R.....	WP 520	Wissdorf, Walter.....	TP 642	Woolfitt, Adrian R.....	TP 014
Williams, Kenneth R.....	WP 506	Wisztorski, Maxence.....	TP 175	Woolfitt, Adrian R.....	MP 460
Williams, Lee.....	ThP 357	Witherspoon, Kelsey.....	WP 275	Woolfitt, Adrian R.....	TP 511
Williams, Lee.....	MP 372	Witkowska, H. Ewa.....	TOC pm 2:30	Woolfitt, Adrian R.....	ThP 376
Williams, Lee.....	MP 370	Witkowska, H. Ewa.....	WP 150	Worsham, Patricia L.....	TP 125
Williams, Michelle.....	WP 066	Witkowska, H. Ewa.....	MP 086	Wortelkamp, Stefanie.....	ThP 509
Williams, Peter.....	WP 688	Witkowski, Chuck.....	MP 475	Wouters, Eloy R.....	MP 194
Williams, Robert.....	WP 587	Witkowski, Chuck.....	MP 468	Wright, Elena T.....	ThP 488
Williams, Taufika Islam.....	WP 535	Witkowski, Chuck.....	TP 330	Wright, John.....	WP 427
Williams, Tracie.....	TP 063	Witt, Matthias.....	ThP 189	Wright, Patricia.....	MP 430
Williams, Tracie.....	TP 511	Witt, Matthias.....	MP 050	Wright, Phillip C.....	MP 006
Williams, Tracie.....	MP 460	Witt, Matthias.....	WP 644	Wright, Woodring E.....	ThP 413
Williams, Tracie L.....	TP 014	Witt, Matthias.....	WP 583	Wu, Alan.....	ThP 596
Williams, Jr., D. Keith.....	MP 469	Witte, Frank.....	MP 629	Wu, Alex C.....	TP 209
Williams, Jr., D. Keith.....	MP 470	Wittrig, Becky.....	ThP 131	Wu, Angel.....	ThP 678
Williams, Jr., D. Keith.....	TP 504	Witze, Eric S.....	WP 149	Wu, Baolin.....	MP 060
Williamson, Andrew JK.....	ThP 303	Witzmann, Frank.....	MP 609	Wu, Changgong.....	WP 011
Williamson, Brian.....	MP 169	Witzmann, Frank A.....	MP 067	Wu, Changgong.....	WP 290
Williamson, Brian.....	MP 260	Wodrich, Matthew.....	ThOD am 09:30	Wu, Changgong.....	WP 284
Williamson, Brian L.....	WP 272	Woffendin, Gary.....	ThP 070	Wu, Chien-peng.....	MP 023
Williamson, John D.....	MP 022	Wohlgemuth, Gert.....	WOB am 08:30	Wu, Chih-Ching.....	TP 086
Williamson, Nicholas A.....	TP 337	Wohlgemuth, Gert.....	WP 125	Wu, Chin-Lee.....	TOE pm 3:50
Williamson, Nicholas A.....	ThP 195	Wohlgemuth, Jessica.....	WP 501	Wu, Christine C.....	ThP 035
Williamson, Yulanda M.....	ThP 376	Wolberger, Cynthia.....	TP 260	Wu, Christine C.....	ThP 305
Willingham, David G.....	ThP 352	Wolf, Dieter A.....	TP 534	Wu, Christine C.....	WOE pm 2:50
Williton, Kelly.....	TP 008	Wolfe, Brian J.....	TP 238	Wu, Christine C.....	MP 244

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Wu, Chunping	ThP 335	Xia, Cindy	MP 360	Xu, Mingguo	TP 066
Wu, Chunping	TP 184	Xia, Gang	TP 454	Xu, Mingjiang	MP 513
Wu, Cong	MP 135	Xia, Qiangwei	ThP 040	Xu, Ping	ThOE pm 3:10
Wu, Cong	TP 261	Xia, Qiangwei	MP 192	Xu, Ping	TP 338
Wu, Di	ThP 423	Xia, Qiangwei	WP 678	Xu, Ping	WP 299
Wu, Dianqing	TOE pm 2:30	Xia, Qiangwei	WP 304	Xu, Qingge	MP 595
Wu, Fang	ThP 255	Xia, Yu	TP 359	Xu, Qingge	ThP 257
Wu, Fang	WP 405	Xia, Yu	WP 363	Xu, Qingge	ThP 543
Wu, Frank	ThP 678	Xia, Yuan-qing	ThOB pm 3:30	Xu, Quoling	TP 267
Wu, Haun-Ting	ThP 271	Xia, Yuan-qing	MP 426	Xu, Rongda	ThOB pm 3:50
Wu, Hsin-Chieh	WP 076	Xia, Zanzian	ThP 438	Xu, Rongda	ThP 675
Wu, Hsin-Yi	ThP 264	Xian, Feng	TP 281	Xu, Shiyao	MP 307
Wu, Huaiqin	MP 367	Xiang, Fan	MP 284	Xu, Songyun	ThP 424
Wu, Huaiqin	WP 693	Xiang, Fan	WP 621	Xu, Tao	MP 189
Wu, Huaiqin	MP 368	Xiang, Fan	ThP 386	Xu, Wei	ThP 543
Wu, Jenny	TP 142	Xiang, Fan	MP 082	Xu, Wei	WP 319
Wu, Jianyong	TP 498	Xiang, Fan	ThP 547	Xu, Xia	WP 271
Wu, Jin	MP 356	Xiang, Fan	WP 507	Xu, Xia	TOB pm 3:10
Wu, Jing-tao	ThP 369	Xiang, Fan	WP 511	Xu, Xin	WP 020
Wu, Jing-Tao	WP 334	Xiang, Fan	MP 085	Xu, Xu	ThP 087
Wu, Jing-Tao	WOB pm 3:10	Xiang, Feng	TP 172	Xu, Yafei	TP 398
Wu, Jinn	WP 171	Xiang, Feng	MP 010	Xu, Yan	TP 493
Wu, Monica	WP 696	Xiang, Yun	MP 608	Xu, Yang	ThP 051
Wu, Peng	WP 017	Xiao, Gang	ThP 535	Xu, Ying	TOC am 10:10
Wu, Peng	ThP 430	Xiao, Gary Guishan	ThP 128	Xu, Ying	ThP 066
Wu, Peng	MP 232	Xiao, Gary Guishan	WP 094	Xuan, Yue	MP 588
Wu, Quincey	WP 696	Xiao, Gary Guishan	WP 090	Xuan, Yue	TP 290
Wu, Rong	MP 066	Xiao, Hui	WP 298	Xue, Changyong	WP 355
Wu, Sheng-Jiun Sam	TP 462	Xiao, Jing	WP 094	Xue, Peng	MP 232
Wu, Shiao-Lin	WP 502	Xiao, Jing	ThP 128	Xue, Peng	WP 017
Wu, Shiao-lin	TP 072	Xiao, Junfeng	TP 486	Xue, Peng	ThP 430
Wu, Shiao-lin	WP 494	Xiao, Kunhong	TP 024	Xue, Richard	ThP 219
Wu, Shiao-lin	ThP 549	Xiao, Xiaoyao	WP 260	Xuereb, Fabien	MP 598
Wu, Shiao-lin	ThP 540	Xiao, Zilan	MP 204	Xun, Zhiyin	WP 538
Wu, Shiao-lin	ThP 309	Xiao Wei, Ge	WP 235	Yachtin, Zhanna	ThP 033
Wu, Shuai	WP 473	Xie, Fang	TP 507	Yager, James	WP 516
Wu, Shuangding	TP 534	Xie, Hongwei	MP 119	Yamada, Yasuhiro	ThOB pm 4:10
Wu, Siva	MP 080	Xie, Hongwei	ThP 534	Yamagishi, Yoko	WP 240
Wu, Steven T.	ThP 359	Xie, Ling	TP 148	Yamaguchi, Hiroaki	ThP 497
Wu, Steven T.	MP 425	Xie, Ling	ThP 041	Yamaguchi, Hiroaki	TP 005
Wu, Sz-wei	TP 520	Xie, Qingmei	ThP 128	Yamaguchi, Minoru	ThP 197
Wu, Terence	WP 506	Xie, Qingmei	WP 090	Yamaguchi, Shinichi	ThP 625
Wu, Wei	ThP 577	Xie, Xiaolei	ThP 253	Yamaguchi, Shinichi	TP 067
Wu, Wei	ThP 282	Xie, Xiaolei	MP 085	Yamaguchi, Shinichi	TP 579
Wu, Wells	TP 037	Xie, Xiaolei	TP 034	Yamaki, Satoshi	WP 576
Wu, Xiaoyun	ThP 223	Xie, Yongming	WP 274	Yamaki, Satoshi	WP 349
Wu, Yin	ThP 247	Xie, Yongming	MP 443	Yamamoto, Takushi	WP 576
Wu, Yi-Ting	WP 192	Xie, Zhengsheng	MP 232	Yamamoto, Tatsuya	WP 419
Wu, Zhaoxiang	MP 589	Xie, Zhengsheng	WP 017	Yamamura, Yutaro	WP 376
Wu, Zhuanzhang	TP 294	Xie, Zhengsheng	ThP 430	Yamaoka, Hiroshi	WP 675
Wuhrer, Manfred	MP 496	Xin, Baomin	MP 279	Yamashita, Kouwa	MP 364
Wujcik, Chad E	MP 465	Xin, Lei	ThP 003	Yamauchi, Emiko	MP 132
Wulf, Volker	WP 622	Xin, Lei	MP 295	Yamazaki, Jun	ThP 373
Wunschel, David	TP 662	Xin, Lei	MP 056	Yamazaki, Keiko	MP 364
Wunschel, David S.	ThP 142	Xiong, Bob	ThP 595	Yamazaki, Syuji	ThP 373
Wunschel, David S.	TOG am 08:50	Xiong, Bob	WP 562	Yan, Huiming	MOG pm 2:50
Wyer, Jean	ThOD am 08:50	Xiong, Bob	TP 018	Yan, Kok-Phen	ThP 284
Wylie, Philip L.	MP 560	Xiong, Lei	MOG pm 3:10	Yan, Wei	MOE am 09:30
Wynalda, Michael	TP 414	Xiong, Lei	ThP 410	Yan, Xinjian	WP 044
Wynalda, Michael	TP 417	Xiong, Shuling	WP 010	Yanagisawa, Isao	WP 340
Wynne, Adam	WP 051	Xiong, Wei	MP 072	Yanbao, Yu	TP 148
Wynne, Colin	ThP 212	Xiu, Liyun	ThP 025	Yanes, Oscar	ThP 071
Wynne, Colin	ThP 201	Xiu, Liyun	TP 058	Yanes, Oscar	WP 183
Wyrick, David	TP 171	Xu, Bibo	MP 164	Yanes, Oscar	TP 106
Wysocka, Joanna	WP 297	Xu, Bibo	ThP 224	Yanes, Oscar	ThOG pm 2:30
Wysocki, Vicki	TOG am 09:50	Xu, Chong-Feng	MP 019	Yang, Austin	ThP 678
Wysocki, Vicki H.	WOC am 10:10	Xu, Fang	TP 128	Yang, Austin	WP 692
Wysocki, Vicki H.	ThOC am 09:10	Xu, Hua	WP 027	Yang, Austin J.	WP 025
Wysocki, Vicki H.	ThP 390	Xu, Hua	ThP 010	Yang, Austin J.	WP 001
Wysocki, Vicki H.	MOC pm 3:30	Xu, Keyang	MP 391	Yang, Bing	ThP 025
Wysocki, Vicki H.	WOA pm 3:50	Xu, Meng	ThP 630	Yang, Catherine F.	ThP 557
Wysocky, Rebecca	MOE am 10:10	Xu, Meng	ThP 692	Yang, Charles T.	TP 066

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry



## INDEX OF AUTHORS

Yang, Charles T.....	WP 313	Yang, Zhibo.....	ThP 635	Yin, Hongfeng.....	WP 491
Yang, Chih-Jen.....	MOB pm 2:30	Yang, Zhihua.....	WP 371	Yin, Hongfeng.....	WP 470
Yang, Chloe.....	MOF pm 4:10	Yang, Zhongyu.....	TOD pm 2:30	Yin, Ping.....	TP 497
Yang, Chung-Shi.....	WP 192	Yang, Zhongyu.....	ThP 614	Yin, Sheng.....	ThOC pm 3:10
Yang, Fan.....	WOC am 08:30	Yanni, Susan E.....	WP 180	Yin, Sheng.....	MOC pm 2:30
Yang, Feng.....	ThOE am 10:10	Yao, Chunxiang.....	ThP 578	Yin, Sheng.....	WP 495
Yang, Frank.....	ThP 678	Yao, Chunxiang.....	ThP 275	Ying, Wantao.....	MP 292
Yang, Fuquan.....	TP 258	Yao, Chunxiang.....	MP 285	Ying, Wantao.....	ThP 243
Yang, Fuquan.....	MP 232	Yao, Chunxiang.....	ThP 272	Ying, Wantao.....	ThP 120
Yang, Fuquan.....	WP 017	Yao, Ming.....	TOA pm 4:10	Yip, Ping F.....	WP 112
Yang, Fuquan.....	ThP 430	Yao, Ming.....	MOB am 09:50	Yocum, Anastasia K.....	MP 124
Yang, Han-ying.....	ThP 392	Yao, Ming.....	TP 575	Yohannes, Elizabeth.....	WP 527
Yang, Hyang Hee.....	TP 405	Yao, Xudong.....	ThP 115	Yohannes, Elizabeth.....	TP 100
Yang, Hyang Hee.....	TP 408	Yao, Xudong.....	ThP 524	Yohannes, Elizabeth H.....	WP 058
Yang, Hyang Hee.....	TP 406	Yao, Xudong.....	TP 358	Yokoi, Akira.....	TP 104
Yang, Hyang-Hee.....	MP 412	Yao, Xudong.....	ThP 116	Yokoyama, Chie.....	MP 447
Yang, Hyo-jik.....	ThP 500	Yashunsky, Dmitry V.....	WP 307	Yong, Ben.....	ThP 356
Yang, Hyo-jik.....	WP 509	Yassine, Hussein.....	TP 624	Yong, K. Y.....	MP 553
Yang, Hyo-jik.....	WP 403	Yassine, Hussein.....	ThP 565	Yoo, Chul.....	WP 169
Yang, Jeong Soo.....	MP 293	Yassine, Mahmoud M.....	ThP 610	Yoo, Hwan-Soo.....	TP 335
Yang, Jing.....	MP 279	Yasuno, Hideyuki.....	TP 489	Yoo, Hyun Ju.....	WP 108
Yang, Jiong.....	MP 156	Yates, John.....	TP 627	Yoo, Jeong Ha.....	WP 231
Yang, Jun.....	WP 248	Yates, John.....	MOB pm 2:50	Yoo, Jong Shin.....	ThP 429
Yang, Jun.....	ThP 077	Yates, John.....	ThP 023	Yoo, Jong Shin.....	TP 064
Yang, Juncong.....	WP 514	Yates, John.....	MP 189	Yoo, Jong Shin.....	WP 377
Yang, Juncong.....	MOB pm 3:10	Yates, John.....	TP 097	Yoo, Jong Shin.....	WP 641
Yang, Junhai.....	ThP 174	Yates, Misti.....	WP 518	Yoo, Jong Shin.....	TP 090
Yang, Kui.....	MOA am 08:50	Yates, Nathan.....	WP 553	Yoo, Soo-jeon.....	TP 594
Yang, Lee.....	WP 150	Yates, Nathan.....	MP 121	Yoon, Hyejin.....	TP 224
Yang, Li.....	WP 156	Yates, Nathan.....	TP 082	Yoon, Hye-Joo.....	TP 007
Yang, Li.....	WP 155	Yates, Nathan.....	ThP 208	Yoon, Hyunjin.....	TP 552
Yang, Mei.....	WP 520	Yates, Sandy.....	TP 205	Yoon, Seo Hyun.....	TP 406
Yang, Min.....	MP 519	Yavor, Mikhail.....	ThP 615	Yoon, Seo Hyun.....	MP 412
Yang, Min J.....	ThOB am 09:10	Yavor, Mikhail I.....	TOD pm 4:10	Yoon, Seo Hyun.....	TP 405
Yang, Min J.....	WP 270	Ye, Joshua.....	MP 336	Yoon, Seo Hyun.....	TP 408
Yang, Min J.....	MP 536	Ye, Juanying.....	ThP 306	Yoon, Sung Hwan.....	WOA pm 3:50
Yang, Min J.....	ThP 670	Ye, Michael.....	ThP 354	Yoshida, Kazumi.....	WP 333
Yang, Ming-Hui.....	MP 068	Ye, Mingliang.....	ThP 308	Yoshida, Tatsunari.....	WP 576
Yang, Ming-Hui.....	MP 276	Ye, Song.....	MP 381	Yoshida, Yoshikazu.....	ThP 625
Yang, Ming-Hui.....	WP 076	Ye, Song.....	TP 059	Yoshida, Yoshikazu.....	TP 189
Yang, Na.....	WP 511	Ye, Wei-Ping.....	ThP 038	Yoshimura, Hidetoshi.....	ThP 622
Yang, Na.....	MP 082	Ye, Xiang-Yang.....	MP 401	Yoshimura, Yayoi.....	ThP 242
Yang, Pan-Chyr.....	TP 035	Ye, Xiaoxia.....	ThP 102	Yoshioka, Tsuyoshi.....	MPZ 575
Yang, Rong-sheng.....	MP 350	Ye, Xiaoying.....	MP 052	Yost, Michael G.....	ThP 604
Yang, Shuiping.....	ThP 164	Yeatman, Timothy.....	TP 611	Yost, Richard A.....	MP 585
Yang, Shuiping.....	MP 615	Yefchak, George.....	WP 382	Yost, Richard A.....	ThP 181
Yang, Shuiping.....	TP 293	Yeh, Suzie.....	MP 280	Yost, Richard A.....	WP 485
Yang, Siao-huei.....	MPZ 568	Yeh, Suzie.....	TP 418	Yost, Richard A.....	ThP 165
Yang, Songhyun.....	WP 577	Yeh, Ting-Feng.....	WP 535	Yost, Richard A.....	MP 590
Yang, Thomas Ching-Cherng.....	TP 648	Yehl, Peter.....	TP 306	Yost, Richard A.....	TP 214
Yang, Tzung-Jie.....	MP 362	Yehl, Peter M.....	TP 295	Yost, Richard A.....	TP 209
Yang, Tzung-Jie.....	MP 556	Yen, Chia-yu.....	WP 149	Yost, Richard A.....	MP 584
Yang, Weijie.....	ThP 003	Yen, Ten-yang.....	TP 073	Yost, Richard A.....	TP 211
Yang, Wen-Bin.....	MP 491	Yeo, InJoon.....	WP 658	Yost, Richard A.....	ThP 065
Yang, Wenchu.....	MP 264	Yeo, Leslie.....	TP 337	Yost, Richard A.....	MP 503
Yang, X. William.....	WP 463	Yeo, Sunghoon.....	WP 274	Yost, Richard A.....	ThP 179
Yang, Xiaohui.....	MP 201	Yergey, Alfred L.....	ThP 298	Yost, Richard A.....	WP 198
Yang, Xiaohui.....	TP 301	Yergey, Alfred L.....	WP 264	Yost, Richard A.....	TP 208
Yang, Xiaoyu.....	TP 070	Yerino, Phyllis.....	MP 543	You, Jia.....	TP 311
Yang, XiaoYuan.....	ThP 119	Yeung, Anthony.....	WP 111	You, Jinsam.....	ThP 106
Yang, Xiao-Yuan.....	MP 055	Yeung, Anthony T.....	TP 085	You, Sungyong.....	TP 249
Yang, Yanou.....	TOB am 09:10	Yeung, Bernice.....	WP 415	You, Tiangen.....	TP 574
Yang, Yingbo.....	TP 581	Yeung, Charles S.....	MOF pm 4:10	You, Youwen.....	TP 659
Yang, Yingbo.....	TP 567	Yeung, Edward S.....	ThP 072	You, Youwen.....	ThP 666
Yang, Yingying.....	TP 142	Yeung, Edward S.....	WOA am 09:50	Youhnovski, Nikolay.....	WP 243
Yang, Yong.....	TP 009	Yeung, Ka Yee.....	MOG pm 3:30	Youm, Jeong-Rok.....	MP 274
Yang, Yuanzhong.....	TP 121	Yi, Jizu.....	TP 237	Young, Fiona BJ.....	WP 306
Yang, Yuling.....	ThP 164	Yi, Rong.....	TP 388	Young, Graeme.....	MOA pm 2:30
Yang, Zhaoguang.....	ThP 370	Yi, Rong.....	MP 342	Young, Graeme.....	MOA pm 2:30
Yang, Zhengyu.....	TP 181	Yi, Rong.....	TP 391	Young, J. Bryce.....	TP 162
Yang, Zhibo.....	MOF am 08:30	Yi, Zhengping.....	TP 626	Young, J. Bryce.....	TP 171
Yang, Zhibo.....	WP 673	Yim, Yong-Hyeon.....	TP 335	Young, J. Bryce.....	TP 509

Program Code: M, T, W, Th = Day    O = Oral    Time  
M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Young, Jacque.....	ThP 391	Yu, Yi-Kuo.....	TP 353	Zekavat, Behrooz.....	TP 357
Young, Ken H.....	MP 595	Yu, Yi-kuo.....	WOE am 09:30	Zekavat, Behrooz.....	TP 280
Young, Lawrence J. T.....	MP 478	Yu, Ying-qing.....	ThP 294	Zekavat, Behrooz.....	TP 424
Young, Leah C.....	WP 405	Yu, Ying-qing.....	ThP 400	Zeledon, Adriana.....	WP 429
Young, Leah C.....	ThP 255	Yu, Yonghao.....	ThP 441	Zelenyuk, Alla.....	ThP 607
Young, Mark.....	TP 478	Yu, Yonghao.....	TOE pm 3:50	Zelesky, Veronica.....	MP 434
Young, Mark.....	TP 477	Yu, Zhan.....	TP 187	Zell, Manfred.....	MP 452
Young, Melissa.....	TP 252	Yu, Zhan.....	MP 322	Zeller, Martin.....	ThP 296
Young, Nancy A.....	TP 085	Yu, Myeong-Hee.....	TP 133	Zeller, Martin.....	MP 150
Young, Nicolas L.....	TOE pm 3:30	Yuan, Bifeng.....	ThOF am 09:50	Zeman, Stacey L.....	MP 344
Young, Nicolas L.....	MP 289	Yuan, Bifeng.....	ThP 410	Zeng, Hang.....	ThP 322
Young, Nicolas L.....	ThOD pm 3:10	Yuan, Chao.....	WP 541	Zeng, Jianing.....	WP 354
Young, Nicolas L.....	TP 272	Yuan, Chao.....	TP 017	Zeng, Lu.....	ThP 675
Young, Rebecca.....	TP 131	Yuan, Chao.....	WP 023	Zeng, Peiting.....	ThP 161
Young, Sarah M.....	WP 667	Yuan, Cheng-Hui.....	ThP 317	Zeng, Rong.....	TP 001
Young, Steven L.....	WP 556	Yuan, Chungang.....	MOG pm 2:50	Zeng, Yu.....	WP 069
Youngpairaj, Ae S.....	MP 422	Yuan, Huimin.....	ThP 403	Zenkevich, Igor.....	MP 662
Youngs, Wiley.....	WP 619	Yuan, Huimin.....	ThP 412	Zenobi, Renato.....	TP 293
Ytterberg, A. Jimmy.....	ThP 501	Yuan, Long.....	WP 244	Zenobi, Renato.....	TP 297
Ytterberg, A. Jimmy.....	TP 517	Yuan, Long.....	MP 281	Zenobi, Renato.....	TP 479
Yu, Alice L.....	WP 582	Yuan, Moucun.....	ThP 361	Zenobi, Renato.....	TP 480
Yu, David.....	MP 072	Yuan, Moucun.....	ThP 360	Zenobi, Renato.....	TP 488
Yu, Fang.....	ThP 346	Yuan, Moucun.....	MP 160	Zenobi, Renato.....	MOF am 09:30
Yu, Fei.....	TOC am 08:50	Yuan, Yang.....	MP 281	Zenobi, Renato.....	MP 171
Yu, Haiqiang.....	ThP 051	Yuan, Zuofei.....	TP 058	Zenobi, Renato.....	TP 186
Yu, Heshui.....	WP 385	Yuan, Zuofei.....	WP 043	Zentella, Rodolfo.....	ThP 252
Yu, Hongbin.....	WP 571	Yue, Bingfang.....	WP 273	Zeringo, Nicholas.....	ThP 652
Yu, Hyeong Gon.....	MP 032	Yue, Yingxia.....	WP 305	Zeringo, Nicholas.....	ThP 655
Yu, Jao-song.....	MP 023	Yue Dai, Anna.....	TP 008	Zetterberg, Henrik.....	TP 093
Yu, Jau-Song.....	TP 086	Yuen, Denis.....	WOE am 09:50	Zetterberg, Henrik.....	TP 092
Yu, Jian.....	MP 527	Yuki, Hashi.....	WP 381	Zettergren, Henning.....	ThOD am 08:50
Yu, Jiyoung.....	MP 032	Yukihira, Daichi.....	TP 578	Zhachkina, Anna.....	ThP 632
Yu, Kate.....	TP 574	Yukihira, Daichi.....	ThP 094	Zhai, Bo.....	TP 024
Yu, Kate.....	WP 385	Yurimoto, Hisayoshi.....	ThP 343	Zhai, Jianjun.....	WP 303
Yu, Kate.....	WP 126	Zabet Moghaddam, Masoud.....	ThP 556	Zhai, Peiyong.....	WP 011
Yu, Kate.....	MP 253	Zabrouskov, Vlad.....	WP 494	Zhang, Allen.....	MP 459
Yu, Kate.....	ThOB pm 4:10	Zabrouskov, Vlad.....	MP 459	Zhang, Baichen.....	WP 575
Yu, Keping.....	MP 390	Zabrouskov, Vlad.....	TOD pm 3:30	Zhang, Bing.....	TOE am 09:10
Yu, Keping.....	ThP 422	Zabrouskov, Vlad.....	MOD pm 2:30	Zhang, Chengcheng.....	WP 147
Yu, Keping.....	WP 048	Zabrouskov, Vlad.....	ThP 245	Zhang, Cunjie.....	TP 029
Yu, Kenneth.....	ThP 052	Zabrouskov, Vlad.....	ThP 202	Zhang, Di.....	ThP 543
Yu, Kenneth.....	ThP 018	Zabrouskov, Vlad.....	WP 313	Zhang, Duxi.....	WP 244
Yu, Kenneth H.....	MP 114	Zagol-Ikapitte, Irene.....	TP 183	Zhang, Duxi.....	TOA pm 4:10
Yu, Kyung-Sang.....	TP 405	Zagorevski, Dmitri.....	WP 404	Zhang, Fujian.....	WP 303
Yu, Kyung-Sang.....	MP 412	Zagorevski, Dmitri.....	TP 525	Zhang, Guangyu.....	WP 072
Yu, Kyung-Sang.....	TP 408	Zagorevski, Dmitri.....	TOB am 09:30	Zhang, Guoan.....	ThP 435
Yu, Kyung-Sang.....	TP 406	Zagorevski, Dmitri.....	TP 486	Zhang, Guoan.....	ThP 445
Yu, Linning.....	TP 347	Zahedi, René P.....	ThP 509	Zhang, Guofang.....	MP 621
Yu, Li-Rong.....	ThOG pm 3:50	Zahran, Nagwa.....	MP 645	Zhang, Hailong.....	MP 494
Yu, Li-Rong.....	WP 413	Zaia, Joseph.....	WP 488	Zhang, Hailong.....	ThP 042
Yu, Long.....	WOA pm 3:30	Zaia, Joseph.....	WOC pm 2:50	Zhang, Haixia.....	TP 079
Yu, Marvin S.....	TP 124	Zaia, Joseph.....	WP 491	Zhang, Haiying.....	TOB am 09:10
Yu, Myeong-Hee.....	MP 127	Zaia, Joseph.....	WP 490	Zhang, Haiying.....	ThP 577
Yu, Qianli.....	ThOC am 09:10	Zaia, Joseph.....	WP 489	Zhang, Haiying.....	TOA pm 2:50
Yu, Rui.....	ThP 145	Zaikin, Vladimir.....	MP 657	Zhang, Hao.....	WP 451
Yu, Rui.....	MP 341	Zaikin, Vladimir.....	WP 623	Zhang, Hao.....	MOC am 09:30
Yu, Sean.....	TP 418	Zakian, Virginia A.....	ThP 489	Zhang, Hengwei.....	WP 090
Yu, Shaoxia.....	WP 334	Zamfir, Alina D.....	WP 483	Zhang, Hengwei.....	ThP 128
Yu, Shaoxia.....	WOB pm 3:10	Zamfir, Alina D.....	WP 487	Zhang, Hong.....	MP 342
Yu, Tianwei.....	ThP 086	Zamfir, Alina D.....	WP 474	Zhang, Hong.....	TP 391
Yu, Wen.....	ThP 260	Zappacosta, Francesca.....	TP 548	Zhang, Hongjie.....	TP 320
Yu, Yanbao.....	WP 517	Zarbl, Helmut.....	MOG pm 3:30	Zhang, Hua-Jie.....	TP 139
Yu, Yanbao.....	TP 556	Zare, Richard.....	MP 515	Zhang, Hui.....	TOC pm 2:50
Yu, Yanbao.....	WP 560	Zare, Richard N.....	WP 649	Zhang, Hui.....	WP 085
Yu, Yanbao.....	TP 128	Zare, Richard N.....	TP 298	Zhang, Hui.....	TP 571
Yu, Yanbao.....	TP 539	Zavalin, Andrey I.....	WOD pm 3:50	Zhang, Hui.....	MP 451
Yu, Yanbao.....	MP 388	Zavolan, Mihaela.....	ThP 420	Zhang, Hui.....	TP 628
Yu, Yanbao.....	ThP 041	Zborovskaya, Irina.....	TP 080	Zhang, Hui.....	MP 490
Yu, Yanling.....	MP 443	Zee, Anne.....	ThOA am 08:30	Zhang, Hui-Min.....	TP 450
Yu, Yao.....	ThP 079	Zee, OkPyo.....	TP 197	Zhang, Hui-Min.....	TOG pm 3:30
Yu, Yi-kuo.....	ThP 204	Zeh, Herbert J.....	MP 128	Zhang, Ji.....	ThP 369
Yu, Yi-kuo.....	ThP 002	Zeigler, Christian.....	WP 589	Zhang, Ji.....	MP 360

Program Code: M, T, W, Th = Day O = Oral Time  
M, T, W, Th = Day P = Poster Poster Space Number  
57<sup>th</sup> ASMS Conference on Mass Spectrometry

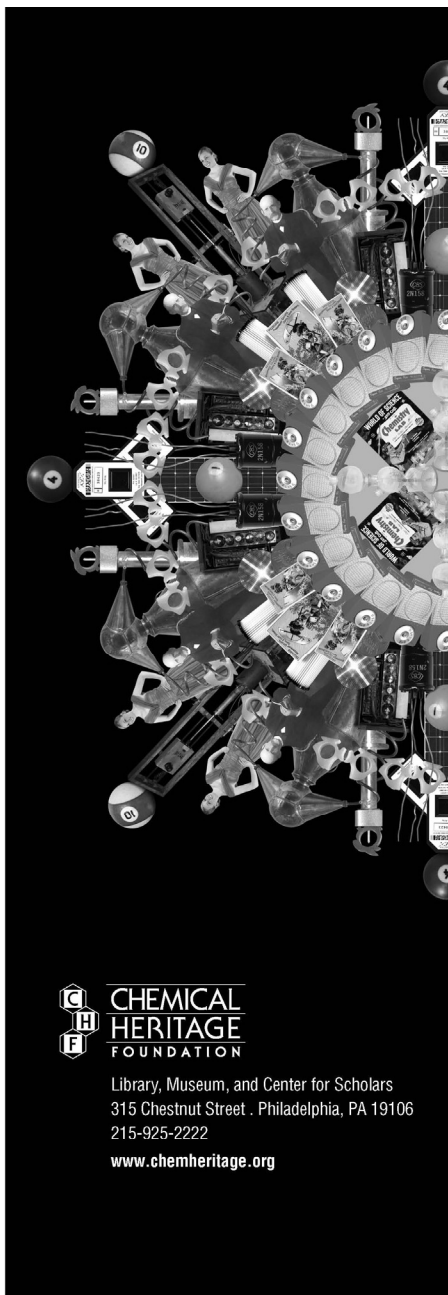
## INDEX OF AUTHORS

Zhang, Ji	WP 334	Zhang, Yuehong	WP 355	Zheng, Qi	MP 422
Zhang, Jiang	ThP 601	Zhang, Yuesheng	ThP 591	Zheng, Ran	TP 258
Zhang, Jiang	MP 595	Zhang, Yun	ThP 644	Zheng, Suping	TP 346
Zhang, Jianjun	ThP 121	Zhang, Yuzhuo	TP 172	Zheng, Suping	ThP 407
Zhang, Jianming	TP 449	Zhang, Yuzhuo	ThP 465	Zheng, Ting	WP 637
Zhang, Jianpeng	MP 139	Zhang, Ze	ThP 668	Zheng, Xiaojing	WP 430
Zhang, Jianqiu	WP 063	Zhang, Zheling	TP 527	Zheng, Yu Zi	ThP 516
Zhang, Jianye	TP 608	Zhang, Zhenyu	ThP 051	Zheng, Yufang	MP 668
Zhang, Jie	WP 245	Zhang, Zhihong	WP 297	Zheng, Zhiguo	TP 003
Zhang, Jie	WP 385	Zhang, Zhihong	TOE pm 3:10	Zheng, Zhiguo	MP 620
Zhang, Jing	MP 139	Zhang, Zhiping	ThOF pm 2:50	Zhi, Wenbo	TP 329
Zhang, Jing	MP 149	Zhang, Zhongqi	WP 476	Zhixin, Tian	ThP 104
Zhang, Jing	TP 623	Zhang, Zhongqi	TP 056	Zhong, Dafang	TP 574
Zhang, Jing	WP 544	Zhang, Zhongqi	ThP 535	Zhong, Feng	ThP 124
Zhang, Jun	ThOC am 08:30	Zhang, Zichuan	TP 172	Zhong, Feng	ThP 505
Zhang, Jun	ThP 662	Zhang, Zijuan	ThP 462	Zhong, Hongying	WP 305
Zhang, Jun	TOC am 09:50	Zhang, Zong-ping	MP 443	Zhong, Jun	ThP 059
Zhang, Jun	WP 423	Zhao, Bei	MP 027	Zhong, Jun	TP 613
Zhang, Jun C.	MP 367	Zhao, Guanghua	MP 155	Zhong, Wendy	MP 156
Zhang, Junhui	TOE pm 2:30	Zhao, Guangyu	MP 369	Zhou, An	TP 513
Zhang, Junmei	WP 297	Zhao, Harry	TP 410	Zhou, Changhua	MP 072
Zhang, Junsheng	TP 301	Zhao, Harry	TP 398	Zhou, Chuanqi	ThP 196
Zhang, Junsheng	MP 201	Zhao, Harry	TP 399	Zhou, Dawei	WP 171
Zhang, Junyan	WP 355	Zhao, Hong	TP 100	Zhou, Dawei	ThP 241
Zhang, Kai	TOE pm 3:10	Zhao, Jamie	MP 410	Zhou, Diansong	ThP 671
Zhang, Kai	MP 293	Zhao, Jamie	MP 411	Zhou, Feng	ThP 448
Zhang, Kangling	TP 267	Zhao, Jamie	MP 418	Zhou, Guangchun	ThP 240
Zhang, Liangyi	WOA pm 3:10	Zhao, Jamie	MP 416	Zhou, Haihong	MP 076
Zhang, Li-kang	MP 184	Zhao, Jamie	WP 218	Zhou, Houjiang	ThP 308
Zhang, Lili	MP 615	Zhao, Jamie	TP 407	Zhou, Kai	WP 553
Zhang, Lili	ThP 164	Zhao, Jamie	TP 397	Zhou, Kai	MP 121
Zhang, Liwen	ThP 010	Zhao, Jamie	TP 400	Zhou, Li	ThP 265
Zhang, Liwen	WP 291	Zhao, Jamie	MP 414	Zhou, Manshui	ThP 084
Zhang, Mei-Yi	MP 282	Zhao, Jia	ThP 550	Zhou, Min	WOE pm 4:10
Zhang, Michelle	WP 062	Zhao, Jinghua	WP 112	Zhou, Min	MOC am 08:50
Zhang, Qiang	MP 072	Zhao, Junfang	TOF am 10:10	Zhou, Ping	MP 112
Zhang, Qing	WP 068	Zhao, Junfang	WP 668	Zhou, Tong	ThP 580
Zhang, Qing	MP 013	Zhao, Liang	MP 284	Zhou, Wei	ThP 367
Zhang, Rena	TP 418	Zhao, Peng	TP 123	Zhou, Wei	ThP 222
Zhang, Rena	MP 280	Zhao, Qin	MP 622	Zhou, Weidong	WP 074
Zhang, Rui	WP 146	Zhao, Rong	WP 531	Zhou, Weidong	ThP 437
Zhang, Sheng	TP 009	Zhao, Rong	MP 124	Zhou, Weidong	MP 129
Zhang, Sheng	WP 452	Zhao, Rong	MP 604	Zhou, Wen	MP 497
Zhang, Terry	MP 459	Zhao, Rui	TP 232	Zhou, Wenjun	MP 346
Zhang, Terry	ThP 245	Zhao, Rui	ThOE am 10:10	Zhou, Wenjun	WOG pm 3:50
Zhang, Tianyi	MP 348	Zhao, Rui	TP 218	Zhou, Xiangjun	TP 009
Zhang, Wei	TP 410	Zhao, Song	MP 158	Zhou, Ying	MP 103
Zhang, Wei	TP 399	Zhao, Song	ThP 360	Zhou, Yong	TOC pm 2:50
Zhang, Wenzhu	TP 331	Zhao, Sophie	MOD am 10:10	Zhou, Yu	MP 371
Zhang, Wujuan	MP 102	Zhao, Ting	ThP 562	Zhou, Yufen	MP 615
Zhang, Wujuan	MP 226	Zhao, Weiping	TOA pm 2:50	Zhou, Yufen	ThP 164
Zhang, Xiang	ThP 092	Zhao, XianZhen	MP 204	Zhou, Zhaohui	ThP 293
Zhang, Xiang	WP 060	Zhao, Xuemei	MP 076	Zhu, Haining	WP 303
Zhang, Xie	ThP 164	Zhao, Yingchun	WP 090	Zhu, Huaen	WP 274
Zhang, Xie	MP 615	Zhao, Yingchun	WP 094	Zhu, Jinghua	MP 078
Zhang, Xin	TP 071	Zhao, Yingchun	ThP 128	Zhu, Lee	ThP 135
Zhang, Xinxin	WP 551	Zhao, Yingming	WP 297	Zhu, Liang	TP 297
Zhang, Xinxin	TOE am 08:50	Zhao, Yingming	TOE pm 3:10	Zhu, Liang	TP 293
Zhang, Xu	WP 347	Zhao, Yingming	MP 293	Zhu, Liang	TP 186
Zhang, Xu	MP 402	Zhao, Yingming	TP 265	Zhu, Mingshe	MOB am 09:50
Zhang, Yajun	MP 347	Zhao, Yingxin	MP 054	Zhu, Mingshe	TOA pm 2:50
Zhang, Yan Ling	WP 379	Zhao, Yong	ThP 423	Zhu, Mingshe	TOA pm 4:10
Zhang, Yaofang	TP 318	Zhao, Yuli	MP 346	Zhu, Mingshe	ThOB pm 3:30
Zhang, Yaoyang	MP 069	Zhao, Yuli	WOG pm 3:50	Zhu, Mingshe	TOB am 08:30
Zhang, Yi	ThP 448	Zhao, Yuwen	MP 411	Zhu, Nanqun	ThP 091
Zhang, Yi	ThOE am 09:30	Zhao, Yuwen	MP 414	Zhu, Peijuan Penny	TP 583
Zhang, Ying	ThP 558	Zhao, Yuwen	WP 218	Zhu, Peijuan Penny	TOA pm 3:50
Zhang, Ying	MP 038	Zhao, Yuwen	MP 418	Zhu, Wenhong	WP 073
Zhang, Ying	MP 163	Zhao, Yuwen	TP 400	Zhu, Xiang	TP 555
Zhang, Yinong	ThP 675	Zhao, Zhiyun	WP 464	Zhu, Xiang	ThP 036
Zhang, Yong	MP 462	Zheng, Dong	MP 098	Zhu, XiangDong	WP 497
Zhang, Yong	TP 029	Zheng, Haiyan	WP 003	Zhu, Xiaodong	MP 420

Program Code: M, T, W, Th = Day    O = Oral    Time  
 M, T, W, Th = Day    P = Poster    Poster Space Number

## INDEX OF AUTHORS

Zhu, Xiaodong.....	MP 353
Zhu, Xin .....	WP 246
Zhu, Yixin .....	MP 003
Zhu, Yongdong .....	MP 417
Zhu, Yongdong .....	TP 403
Zhu, Yongdong .....	TP 397
Zhu, Yongdong .....	MP 410
Zhu, Yongdong .....	TP 407
Zhu, Yongdong .....	TP 390
Zhu, Yongdong .....	MP 418
Zhu, Yongdong .....	TP 389
Zhu, Yongdong .....	MP 413
Zhu, Yu.....	TP 632
Zhu, Yuerong .....	WP 119
Zhu, Yun.....	MP 072
Zhu, Zhengjiang .....	ThOG pm 4:10
Zhuge, Yan .....	MP 341
Zichner, Thomas .....	WP 690
Zickus, Michael.....	MP 624
Zidian, Wu.....	MP 092
Zilch, Lloyd.....	WP 312
Zimmer, Andreas.....	WP 347
Zimmerman, Lisa .....	ThP 020
Zimmerman, Lisa J.....	WP 522
Zimmerman, Lisa J.....	MOB pm 4:10
Zimmerman, Tyler A .....	WP 182
Zimmermann, Carolyn M. ....	MP 632
Zimmermann, Ralf.....	TP 638
Zimmermann, Ralf.....	WOG am 09:10
Zimmermann, Ralf.....	ThOG am 09:30
Zingaro, Lorenzo.....	MP 323
Zink, M. Christine.....	MP 606
Zinniker, David A. ....	WP 646
Zinniker, David A. ....	MP 658
Zirah, Severine.....	ThP 284
Zoerntlein, Siegfried.....	TP 650
Zohrabyan, George.....	TP 038
Zolodz, Melissa.....	ThP 533
Zolotarevsky, Eugene.....	WP 507
Zordan, Christopher A. ....	ThOG am 09:50
Zou, Hanfa.....	ThP 308
Zou, Qin .....	WP 493
Zou, Wei.....	WP 105
Zougman, Alexandre.....	WOE pm 2:30
Zrada, Matthew .....	MP 436
Zu, Chengli.....	ThP 315
Zubarev, Alexander R. ....	TOB am 09:50
Zubarev, Alexander R. ....	ThOA pm 3:30
Zubarev, Alexander R. ....	TP 041
Zubarev, Roman .....	TOE pm 4:10
Zubarev, Roman.....	TOB am 09:50
Zubarev, Roman A. ....	ThOA pm 3:30
Zubarev, Roman A. ....	TP 041
Zubieta, Jon-Kar.....	ThP 470
Zuccato, Ettore.....	WOG pm 2:50
Zucchetti, Massimo.....	TP 423
Zucchi, Riccardo.....	WP 247
Zucht, Hans-Dieter.....	MP 474
Zucht, Hans-dieter.....	ThP 588
Zulich, Alan W.....	TP 384
Zulkoski, John.....	MP 424
Zuniga, Azeret.....	ThP 098
Zurek, Gabriela .....	WP 118
Zurek, Gabriela .....	WP 120
Zverina, Elaina.....	MP 262
Zybailov, Boris.....	WP 022
Zybailov, Boris.....	ThP 295
Zyk, Nikolay V.....	ThP 394



**CHEMICAL  
HERITAGE  
FOUNDATION**

Library, Museum, and Center for Scholars  
315 Chestnut Street · Philadelphia, PA 19106  
215-925-2222

[www.chemheritage.org](http://www.chemheritage.org)

The Chemical Heritage  
Foundation welcomes  
ASMS members to Philadelphia  
and celebrates our 20 years of affiliation!

## Don't Miss the Museum at CHF

### *Making Modernity*

This major new exhibition brings the exciting untold story of chemistry to life. Discover the science and innovation behind Newton's manuscripts, Bakelite, buckyballs, fuel cells, computers, and more.

### *sLowlife*

Examine the remarkable chemistry of plants with photographs, time-lapse movies, and original sound compositions based on plant movements.

### SPECIAL EXTENDED HOURS

during the 57th ASMS Meeting  
on Mass Spectrometry!

Sunday, 31 May, 1:00 to 5:00 p.m.

Free shuttle bus from the Pennsylvania  
Convention Center to CHF

### REGULAR HOURS

Monday through Friday, 10 a.m. to 4 p.m.  
Admission is FREE.

*Making Modernity* is made possible by the generous support of the Arnold and Mabel Beckman Foundation. *sLowlife* is a collaborative project of the United States Botanic Garden, the Chicago Botanic Garden, and Roger Hangarter, Indiana University. Original sounds by John Gibson, Indiana University. Additional support was provided by Indiana University, the National Science Foundation, and the American Society of Plant Biologists.

**NOTES**

**NOTES**

**NOTES**