

JOHN B. FENN AWARD FOR A DISTINGUISHED CONTRIBUTION IN MASS SPECTROMETRY

2023 RECIPIENT: CAROL V. ROBINSON

AWARD LECTURE: 4:45 PM, MONDAY, HALL B3



The ASMS Award for Distinguished Contribution in Mass Spectrometry honors the memory of John B. Fenn who shared the 2002 Nobel Prize for the development of electrospray ionization. The award is conferred at the ASMS Annual Conference with the presentation of a \$10,000 cash award, a recognition plaque, and the award lecture.

Carol V. Robinson is the recipient of the 2023 ASMS John B. Fenn Award for a Distinguished Contribution in Mass Spectrometry for the development of mass spectrometry methods for the analysis and characterization of membrane proteins. Dr. Robinson's pioneering contributions have improved our fundamental understanding of membrane protein complex structure and the role of lipid binding in membrane protein function. Her work has enabled new knowledge into disease mechanisms and has had tremendous impact in drug discovery. Specific accomplishments include: (1) pioneering development of methods to enable gas phase analysis of membrane protein complexes; (2) the application of ion mobility MS and collision-induced unfolding methods to investigate lipid-membrane protein binding; (3) the application of high-resolution MS to resolve the complexity of lipid-protein binding events; and (4) the innovative development of methods for native analysis of membrane protein complexes and lipid binding.

Her collective achievements have been amplified by her dedication to the dissemination of detailed protocols and troubleshooting advice to the research community – ensuring that others had the necessary information to implement the methods. This outreach has resulted in an active cohort of MS researchers across the globe working on the mass spectrometry of membrane protein complexes.

In 2013 Carol was elevated to the title of "Dame Commander of the Order of the British Empire (DBE)" for services to science and Industry. Professor Dame Carol Robinson is University Chair and Professor of Chemistry, University of Oxford.



BIEMANN MEDAL

2023 RECIPIENT: BRANDON RUOTOLO

AWARD LECTURE: 4:45 PM, TUESDAY, HALL B3



The Biemann Medal is awarded to recognize significant achievement in basic or applied mass spectrometry in the early stages of an academic career. The Medal is conferred at the ASMS Annual Conference with the presentation of a \$5,000 cash award and the award lecture.

Brandon Ruotolo is the recipient of the 2023 ASMS Biemann Medal for his significant contributions in the development and application of novel high performance mass spectrometry technologies for protein and protein complex structure elucidation. Examples of his innovative scientific contributions include: (1) leadership in the development of ion mobility MS (IM-MS) for structural characterization of biopolymers; (2) refinement of collision induced unfolding (CIU) methods that enable determination of the number of autonomously folded domains within proteins and characterization of stability reflective of changes in both local and global protein structure; (3) the use of CIU to probe the relative stability of protein-ligand interactions; (4) the development of chemical cross-linkers to stabilize protein structure in the absence of bulk solvent; (5) integration of IM-MS and other structural MS methods as a high-throughput approach for structural proteomics; and (6) application of IM-MS as a screening tool for therapeutic drug discovery. Dr. Ruotolo has built an impressive research program that is addressing application of high impact to the biology and medical communities.

Dr. Ruotolo is Professor of Chemistry, University of Michigan.

AL YERGEY MS SCIENTIST AWARDS**2023 RECIPIENTS****AWARD PRESENTATIONS: 4:45 PM, MONDAY, HALL B3**

The Al Yergey MS Scientist Awards are sponsored by ASMS to recognize dedication and significant contributions to mass spectrometry-based science by “unsung heroes.” The awards are named in memory of Al Yergey a well-respected scientist who was known as a dedicated mentor. Each award is conferred at the ASMS Annual Conference with \$1,000 cash award and a recognition memento.



Eduard Denisov (Thermo Fisher Scientific) is one of key people whose hard and creative work over the last two decades was crucial for making Orbitrap mass spectrometry the leading technique in high resolution mass spectrometry. He took a leading part in experimental development of all major elements of the Orbitrap technology. Over all these years he remained a reliable, modest and at the same time a very passionate enthusiast of Orbitrap technology, who really cares that every user of this technology is getting the best results.



Jodie Johnson (University of Florida) is so extremely valuable to MSREC, the University of Florida, and the larger MS community. No matter where you are in your MS career, from novice to 20 years of experience, one can learn invaluable knowledge from Dr. Johnson. He is a dedicated mentor and his knowledge is expansive in areas of chromatography and mass spectrometry. He loves to share his knowledge and loves to engage in research discussions.



Amina Woods (NIDA IRP, NIH) has made significant contributions to MS-based science and her dedication to the field of mass spectrometry is amply featured by her record of research, service and teaching. Amina has willingly offered her knowledge through many venues. Biological mass spectrometry became an integral component of her research activities in the early 1990s when she became affiliated with the late Bob Cotter using plasma desorption MS to characterize biological molecules. From then on, mass spectrometry has been at the heart of much of her research portfolio and her community participation in many mass spectrometry organizations including ASMS.

RON HITES AWARD OUTSTANDING RESEARCH PUBLICATION IN JASMS**AWARD PRESENTATION: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL B3**

The Ron Hites Award recognizes an outstanding publication of original research published in JASMS. The award is named to honor Professor Ron Hites of Indiana University, who led the creation of JASMS in 1988 while president of ASMS. The Award includes \$2,000 and plaque for principal author and certificates for co-authors.



Joshua Sharp (University of Mississippi) is recipient of the 2023 Hites Award along with co-authors Emily E. Chea, Sandeep K. Misra, Ron Orlando, Marla Popov, Robert W. Egan, David Holman, and Scot R. Weinberger for their paper “Flash Oxidation (FOX) System: A Novel Laser-Free Fast Photochemical Oxidation Protein Footprinting Platform”, 2021, **32**, 1601-1609.

2023 RESEARCH AWARDS

AWARD PRESENTATIONS: 4:45 PM, TUESDAY, HALL B3

Research Awards promote the research of academic scientists within the first four years of joining the tenure track or research faculty of a North American University at the time the award is conferred. The awards, in the amount of \$35,000 for the recipient's proposed research are fully funded by Bruker, Thermo Fisher Scientific, and Waters Corporation and are made to the institution of each recipient.



Funded by



Kelly Marie Hines
University of Georgia



Funded by



Jesse Meyer
Cedars-Sinai Medical Center



Funded by

Waters

Stacy Malaker
Yale University

Research At Primarily Undergraduate Institution (PUI) Award

AWARD PRESENTATION: 4:45 PM, TUESDAY, HALL B3

Funded by



Agilent

This award promotes academic research in mass spectrometry by faculty members and their students at primarily undergraduate institutions (PUIs). The Award of \$20,000 for the recipient's proposed research is fully funded by Agilent and is made to recipient's institution.



Erica Jacobs
St. Johns University

2023 POSTDOCTORAL CAREER DEVELOPMENT AWARDS

AWARD PRESENTATIONS: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL B3

Postdoctoral Career Development Awards in the amount of \$5,000 promote professional career development of postdoctoral fellows in the field of mass spectrometry.



Emma Guiberson
Stanford University



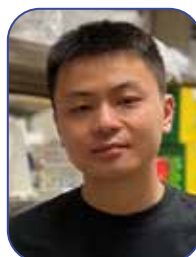
Haiyan Lu
University of Wisconsin-Madison



Melanie Odenkirk
Colorado State University



Suttipong Suttapitugsakul
Beth Israel Deaconess Medical Center



Yixuan Xie
Washington University School of Medicine

2023 GRADUATE STUDENT TRAVEL AWARDS

AWARD PRESENTATIONS: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL B3

Elizabeth Bayne*University of Wisconsin-Madison***Danielle Caefer***University of Connecticut***Hsin-Hsiang Chung***National Taiwan University***Steven DeFiglia***University of Michigan***Sarah Dowling***Indiana University-Purdue University
Indianapolis***Kimberly Fabijanczuk***Purdue University***Ashley Frankenfield***George Washington University***Viraj Gandhi***Indiana University-Purdue University
Indianapolis***Yanting Guo***University of Oklahoma***Amanda Khoo***University of Toronto***David Koomen***Vanderbilt University***Nicolas Morato***Purdue University***Leena Pade***University of Maryland-College Park***Austin Salome***University of Wisconsin-Madison***Madison Turner***University of Guelph***Benqian Wei***University of California, Los Angeles***David Williamson***University of Utah***Tingyuan Yang***Texas A&M University***Kejun Yin***Georgia Institute of Technology*

2023 UNDERGRADUATE STUDENT TRAVEL AWARDS

AWARD PRESENTATIONS: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL B3

Megan Bindra*Saint Mary's College of California***Emily Boyette***South Florida State College***Olivia Dioli***North Carolina State University***Celine Ertekin***University of California, Santa Cruz***Dinuri Fernando***University of North Carolina, Chapel Hill***Yu Tin Lin***University of Florida***Lawren Paris***University of Oregon***Aliyah Remoroza***University of Maryland Baltimore
County***Philenroza Thavrin***Oregon State University***Oliver Wu***University of Oklahoma*