

JOHN B. FENN AWARD FOR A DISTINGUISHED CONTRIBUTION IN MASS SPECTROMETRY
2022 RECIPIENT: EVAN R. WILLIAMS
AWARD LECTURE: 4:45 PM, MONDAY, HALL A


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.

Evan R. Williams is the recipient of the 2022 ASMS John B. Fenn Award for a Distinguished Contribution in Mass Spectrometry for the development of ion chemistry in aqueous nanodrops: fundamentals and applications. Dr. Williams has made pioneering contributions that have improved our fundamental understanding of ion

chemistry in aqueous nanodrops both inside and outside the mass spectrometer. His work has had tremendous impact and represents a cohesive and successful sustained effort to understand the chemistry occurring in aqueous solution during the transition in the electrospray process from bulk solution to individual ions or solvated ions.

He has taken advantage of nanodrop chemistry to: 1) manipulate ion charging and desalting ions during the electrospray ionization process, 2) develop rapid mixing in electrospray droplets to investigate ultrafast chemistry (<1 to 100 microseconds) to track peptides and fast-folding proteins in the act of folding, 3) investigate how the organization of water around ions can pattern the hydrogen bonding network of water to long distance, and how water can affect the structure of ions, and 4) develop thermochemical methods, including blackbody infrared radiative dissociation and ion nanocalorimetry, to probe the thermochemistry of processes, such as electrochemical reductions in mass selected aqueous nanodrops.

This collective theme has influenced not just the field of mass spectrometry and ion chemistry but has also improved our understanding about the role of water on ion chemistry in solution, an outcome which impacts many areas ranging from biomolecule structure and folding to atmospheric aerosol chemistry.

Dr. Williams is a Distinguished Professor of Chemistry and Biophysics, University of California, Berkeley.

BIEMANN MEDAL
2022 RECIPIENT: ERIN BAKER
AWARD LECTURE: 4:45 PM, TUESDAY, HALL A


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.

Erin Baker is the recipient of the 2022 ASMS Biemann Medal for her significant contributions in the development and application of IMS-MS technologies. The impact of her work has been amplified due to her notable and unique ability to form a bridge between the new IMS-MS technology development and the diverse applications the technology enables. Examples of innovative scientific contributions include: (1) development of new IMS techniques and methods and significant contributions to the improvement of drift

tube IMS (DTIMS) platforms; (2) coupling of this improved IMS-MS platform with solid-phase extraction and LC separations to enable high-throughput IMS measurements with enhanced sensitivity for metabolomics, lipidomics, proteomics and exposomics applications; (3) creation of one of the first collision cross section (CCS) databases for more than 500 metabolites and xenobiotics to enable large-scale metabolomics and exposomic studies by IMS technology; and (4) development of a cheminformatic toolbox called Structural-based Connectivity and Omic Phenotype Evaluations (SCOPE), to enable the assessment and visualization of lipidomic associations in environmental and clinical studies.

In addition, Dr. Baker has contributed to the mass spectrometry community through her key role in the establishment of the new group "Females in Mass Spectrometry (FeMS)" whose initial activities coincided with the onset of the coronavirus pandemic. During this unusual situation that has isolated individuals from their communities, FeMS has built a worldwide network (also including males, transgender, and nonbinary participants) that provides frequent virtual opportunities for education, collaboration, and mentorship.

Dr. Baker is Associate Professor of Chemistry, North Carolina State University.

AL YERGEY MS SCIENTIST AWARDS

2022 RECIPIENTS

AWARD PRESENTATIONS: ASMS MEETING, 4:45 PM, MONDAY, HALL A

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.



Gordon A. Anderson is recognized for his immense, impactful, and sustained contributions to mass spectrometry. His technical contributions, strength of character, and mentoring of junior scientists exemplify the spirit of the Al Yergey Award. Gordon is now the chief engineer of a family run enterprise (GAA Custom Electronics) that broadly serves the MS community with a range of innovative and highly functional MS-specific electronic solutions.



Michael A. Grayson has championed the cause of history for the Society as archivist, historian, oral history interviewer, and the ASMS representative to the Heritage Council of the Science History Institute. His dedication to preserving the history of significant individuals and events has resulted in the rich resources available through asms.org. Now retired, Michael continues to actively contribute to the many projects of the ASMS History Committee.



Martha M. Vestling has contributed to MS-based research, extensive service to the MS community, and dedication to education and training of students and users from diverse scientific backgrounds for five decades. As the Director of the Mass Spectrometry Laboratory at University of Wisconsin-Madison, she has developed a “go-to” facility for researchers on campus and many other biomedical science departments and units.

RON HITES AWARD OUTSTANDING RESEARCH PUBLICATION IN JASMS

AWARD PRESENTATION: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL A

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 certificates.



Elyssia Gallagher, Assistant Professor, Baylor University, is recipient of the 2022 Hites Award along with co-authors O. Tara Liyanage, Ana V. Quintero, Jacob B. Hatvany for their paper “Distinguishing Carbohydrate Isomers with Rapid Hydrogen/ Deuterium Exchange-Mass Spectrometry,” *J. Am. Soc. Mass Spectrom.* (2021) **32**, 152-156

2022 RESEARCH AWARDS

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

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 each, are fully supported by Bruker, Thermo Fisher Scientific, and Waters Corporation.



Sponsored by



Franklin E. Leach, III
University of Georgia



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Gloria Sheynkman
University of Virginia



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Thanh D. Do
University of Tennessee-Knoxville

Research At Primarily Undergraduate Institution (PUI) Award

AWARD PRESENTATION: ASMS MEETING, 4:45 PM, WEDNESDAY, HALL A

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

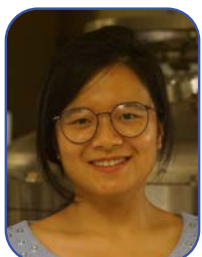
Mac Gilliland
Furman University



2022 POSTDOCTORAL CAREER DEVELOPMENT AWARDS

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

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



Yangjie Li
Stanford University



Xin Ma
Georgia Institute of Technology



Melissa Pergande
University of Wisconsin-Madison



Stephanie Rankin-Turner
Johns Hopkins University



Hua Zhang
University of Wisconsin-Madison

2022 GRADUATE STUDENT TRAVEL AWARDS

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

Hongxia Bai*North Carolina State University***Alexandria Battison***University of Connecticut***Hsi-Chun Chao***Purdue University***Janine Fu***University of California, Los Angeles***Michael Gilbert***University of Pennsylvania***Jian Guo***University of British Columbia***Hang Hu***Purdue University***Jacob Jordan***University of California, Berkeley***Kaylie Kirkwood***North Carolina State University***Zachary Kirsch***University of Massachusetts, Amherst***Gordon Luu***University of California, Santa Cruz***Jake Melby***University of Wisconsin-Madison***Hannah Miles***University of Wisconsin-Madison***Alice Passoni***Istituto di Ricerche Farmacologiche**Mario Negri IRCCS***Amber Rolland***University of Oregon***Jonathan Specker***University of Florida***Diana Velosa***Florida Institute of Technology***Shunyang Wang***University of California, Davis***Tian Xu***Michigan State University***Dong Zhang***Texas Tech University*

2022 UNDERGRADUATE STUDENT TRAVEL AWARDS

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

Mustafa Ahmed*George Washington University***Nickolas Fisher***University of Texas, Austin***Keely Fuller***Stanford University***Peter McPike***University of Akron***Hsu-Ching Yen***University of Wisconsin-Madison*