2023 AWARDS

John B. Fenn Award for Distinguished Contribution in Mass Spectrometry

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

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.
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 plaque.

**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 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.

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 AWARDS

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
Stacy Malaker
Yale University

Research At Primarily Undergraduate Institution (PUI) Award

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.

Funded by
Agilent

Erica Jacobs
St. Johns University

Postdoctoral Career Development Awards

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
University of Arizona

Suttipong Suttapitugsakul
Beth Israel Deaconess Medical Center

Yixuan Xie
Washington University School of Medicine
2023 AWARDS

GRADUATE STUDENT TRAVEL AWARDS

Elizabeth Bayne  
University of Wisconsin-Madison

Danielle Cafer  
University of Connecticut

Hsin-Hsiang Chung  
National Taiwan University

Steven DeFilgia  
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

Xue Sun  
Peking University

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

UNDERGRADUATE STUDENT TRAVEL AWARDS

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