

## Announcements

For more information and online registration for any of the small conferences listed below, please visit [www.asms.org/conferences](http://www.asms.org/conferences).

### ASMS Sanibel Conference Characterization of Protein Therapeutics by Mass Spectrometry: Recent Developments and Future Trends

January 21 - 24, 2016  
Hilton Clearwater Beach  
Clearwater Beach, Florida

#### Organizers

Guodong Chen, *Bristol-Myers Squibb*  
Justin Sperry, *Pfizer*



### 64th ASMS Annual Conference

June 5 - 9, 2016  
San Antonio, TX

[www.asms.org/conferences/annual-conference/annual-conference-homepage](http://www.asms.org/conferences/annual-conference/annual-conference-homepage)



**Mid-December** - Abstract Submission opens  
**January 4** - Conference Housing opens  
**January 4** - Conference & Short Course Registration opens  
**February 5** - Abstract Submission deadline  
**April 30** - Advance Conference and Short Course Registration deadline

## 2013 ASMS Research Award Winner Article 'Highlight'

The ASMS annually presents two Research Awards to academic scientists within four years of joining the tenure track faculty or equivalent in a North American university. The purpose of these awards, fully sponsored by Thermo Scientific and Waters Corporation, is to promote academic research in mass spectrometry by young scientists.

In this month's issue of *JASMS*, we are pleased to highlight a research article by one of the 2013 ASMS Research Award winners, Dr. Matthew F. Bush, Assistant Professor in the Department of Chemistry at the University of Washington, and Kenneth J. Laszlo, a Ph.D. student in Dr. Bush's laboratory. The article, entitled

"Analysis of Native-Like Proteins and Protein Complexes Using Cation to Anion Proton Transfer Reactions (CAPTR)", was supported by Dr. Bush's ASMS Research Award. This article reports the use of ion/ion proton transfer reactions between native-like protein cations and monoanions. These reactions yield a long series of charge-reduced products that are shown to improve the certainty of charge-state assignments and the resolution of components in mixtures using native mass spectrometry.

Research in the Bush lab focuses on using mass spectrometry to elucidate the structures, assembly, and dynamics of biological molecules. Towards that end, the Bush lab investigates the mechanisms underlying native electrospray ionization, develops ion mobility and ion chemistry technologies for characterizing protein complexes, and applies native mass spectrometry to a wide range of biological systems, including those involved in bacterial secretion, regulating protein degradation, and protein homeostasis. With the support of the ASMS Research Award, the Bush lab began new projects that use ion/ion chemistry to characterize the stoichiometries of protein complexes in solution and the effects of charge on the structures of proteins and protein complexes in the gas phase.

Dr. Bush received his bachelor's degree in chemistry from Carleton College in 2003. He then pursued his Ph.D. from 2003–2008 with Evan Williams and Richard Saykally at the University of California, Berkeley. During that time he used infrared laser spectroscopy and Fourier-transform ion cyclotron resonance mass spectrometry to investigate zwitterion formation in gas-phase biomolecules and the effects of

hydration on ion structure. In 2008 he joined the laboratory of Carol Robinson FRS DBE at the University of Cambridge and the University of Oxford, during which time he was a Waters Research Fellow, a Junior Research Fellow of Jesus College, University of Oxford, and developed analytical frameworks for using ion mobility mass spectrometry experiments to characterize the structures of biological molecules. Dr. Bush joined the chemistry faculty at the University of Washington in 2011, where he is also a member of the Biological Physics, Structure and Design Program and the Molecular Engineering & Sciences Institute. He has been named an Alfred P. Sloan Research Fellow, received the Young Investigator Award in Analytical Chemistry from Eli Lilly, and co-authored 42 peer-reviewed publications.



## 2015 Asilomar Conference

The 31st Asilomar Conference on Mass Spectrometry, organized by Albert Heck (Utrecht University) and Joseph Loo (UCLA), was held on October 16-20, 2015 at the Asilomar Conference Center in Pacific Grove, CA. The topic of the conference was “Native Mass Spectrometry-Based Structural Biology”. Approximately 160 attendees representing over 15 countries listened to presentations on the latest advancements in sample handling, ionization techniques, analyzers, ion activation methods, and new biological applications to study the structures and interactions of large biomolecules and assemblies. A majority of the attendees contributed to the conference directly, with 27 invited lectures, 8 shorter “hot topic” talks, 42 rapid

150-sec poster highlight summaries, and 56 poster presentations. For the old timers of the Asilomar Conference, some traditions were brought back, including the “cutting of the necktie” and the return of Po-Po, the timekeeping monkey (courtesy of Laszlo Tokes and Sharon Pitteri). Other new fun events were also held that hopefully will become traditions at this conference. (These will be described in a full report in a future *JASMS* issue.) For many of the attendees, this was their first time attending an Asilomar meeting at “the refuge by the sea”. The pleasant weather, ocean breezes, and relaxing atmosphere helped to stimulate discussions and hopefully encourage new “interactions” amongst the conferees.



Asilomar Conference organizers Joe Loo (left) and Albert Heck (right) with Po-Po the timekeeper (center).

Asilomar Conference group photo.



The first speaker of the conference, Carol Robinson (University of Oxford; right), with Brian Chait (Rockefeller University; left), the last speaker of the conference.

## Related Events

ASMS is pleased to offer announcements for other non-profit organizations. Please email details including website to [cindi@asms.org](mailto:cindi@asms.org).

### December 2 – 5, 2015

#### 28<sup>th</sup> Annual Tandem Mass Spectrometry Workshop

Lake Louise, Alberta, Canada

[www.lakelouisemsms.org/](http://www.lakelouisemsms.org/)

### February 4 – 7, 2016

#### The 21<sup>st</sup> Annual Lorne Proteomics Symposium

Lorne, Victoria, Australia

[www.australasianproteomics.org/lorne-proteomics-symposium-2016/](http://www.australasianproteomics.org/lorne-proteomics-symposium-2016/)

### February 21 – 25, 2016

#### Mass Spectrometry: Applications to the Clinical Laboratory

Palm Spings, CA

[www.msac1.org/](http://www.msac1.org/)

### March 13 – 16, 2016

#### US HUPO Annual Conference

Boston, MA

[www.ushupo.org/](http://www.ushupo.org/)

### August 20 - 26, 2016

#### 21<sup>st</sup> International Mass Spectrometry Conference

Toronto, Canada

[www.imsc2016.ca/](http://www.imsc2016.ca/)