68th Conference on Mass Spectrometry and Allied Topics

May 31 - June 4, 2020
Houston, Texas

SHORT COURSES May 30 - 31

George R. Brown Convention Center (‘the GRB’) in Houston holds all conference sessions, short courses, workshops, and exhibits. Corporate hospitality suites are at the Hilton Americas. Discovery Green park is located just steps out the doors of the convention center inviting attendees to stroll its paths, enjoy the greenery, and appreciate the art installations. There are over 20 restaurants within walking distance of the center. As an alternative to walking, Orange and Green Link free buses loop through the downtown core with stops at the GRB.

SOCIAL EVENTS AT THE CONFERENCE

Sunday Welcome Reception in the poster/exhibit hall immediately follows the opening plenary session. A light supper buffet, beer and soft beverages are free to all conference registrants.

Monday - Thursday Poster session coffee break and afternoon pick-me-up snacks in the poster/exhibit hall.

Monday - Wednesday Evening Workshop Snacks: Light snacks, beer and beverages bridge the transition from afternoon plenary session to evening workshops.

Thursday Closing Event at the Houston Museum of Natural Science. This local museum features a world-class paleontology collection along with an incredible exhibition of gems and minerals. Dinner buffet and museum access is included in ticket cost of $40. Advance purchase only, ticket sales close at 12 pm noon on Monday, June 1. Tickets can be added on to your existing conference registration at any time.

TRAVEL. Houston is served by two airports, IAH andHOU. Look for tips to travel from the airport to Downtown Houston at www.asms.org/conferences/annual-conference/hotels-and-travel.

HOTELS. The ASMS hotel block includes 10 hotels with varying nightly rates and services. To reserve at one of the ASMS hotels, use the online housing bureau link posted at www.asms.org/conferences/annual-conference/hotels-and-travel. Beware of housing/travel scams. ASMS does not solicit attendees or speakers to book their hotel rooms.

IMPORTANT DATES

January 15
Deadline to apply for undergraduate or graduate student conference travel awards

February 3
Deadline for abstract submission

April 30
Deadline for advance conference registration and short course registration

April 30
Deadline for hotel reservations at the conference rates

www.asms.org

#ASMS2020
**Saturday May 30**

- **9:00 am - 5:00 pm**: Short Courses
- **2:00 - 5:00 pm**: Conference Registration

**Sunday May 31**

- **9:00 am - 5:00 pm**: Short Courses
- **2:00 - 5:00 pm**: Conference Registration
- **4:00 - 4:45 pm**: Workshop on ‘What to See and Do at ASMS’
- **5:00 - 5:45 pm**: Special Keynote Lecture
  
  **Is There Still Gender Bias in Academic Science (and Does It Matter)? What the Scientific Studies Say.**
  Corinne Moss-Racusin
  Skidmore College

**Monday June 1**

- **8:30 - 10:30 am**: Oral Sessions
  - MOA am: Instrumentation: Innovations in Mass Analyzers
  - MOB am: Ion Mobility: Structure
  - MOC am: Plants: Systems, Biotechnology, and Natural Products
  - MOD am: Informatics: Peptide and Protein Identification, Proteomics
  - MOE am: Microorganisms and the Microbiome
  - MOF am: Biomarkers: Quantitative Analysis
  - MOG am: Environmental: Innovative Approaches and Instrumentation
  - MOH am: Fundamentals: Ion Spectroscopy

**Tuesday June 2**

- **8:30 - 10:30 am**: Oral Sessions
  - TOA am: Instrumentation: New Developments in Ionization and Sampling: In Memory of Burnaby Munson
  - TOB am: Lipidomics: New MS Technologies and Applications
  - TOC am: Therapeutic Proteins, Antibodies, and Antibody/Drug Conjugates
  - TOD am: Informatics: Multimodomics Integration and Applications
  - TOE am: Art, Archaeology, and Paleontology
  - TOF am: Covalent Labeling and Chemical Crosslinking
  - TOG am: Food Safety & Chemistry: Foodomics, Allergens, Bacteria, Foods, and Supplements
  - TOH am: Homeland Security: Chemical/Biological Defense

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**Featured Speakers**

**Glycoprotein Analysis for Understanding Human Disease**
Heather Desaire
University of Kansas

**Single-Cell Mass Spectrometry**
Peter Nemes
University of Maryland, College Park

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**Conference Program Overview**

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**Opening Plenary Lecture: Sunday, May 31, 6:45-7:45 pm**

**Mars 2020**
Patricia M. Beauchamp
Chief Technologist, Engineering and Science Directorate

**Closing Plenary Lecture: Thursday, June 4, 5:45-6:30 pm**

**New Dinosaur Discoveries**
Steve Brusatte
University of Edinburgh

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Join us at the Houston Museum of Science following the Closing Plenary. The museum features an incredible paleontology collection and MUCH more. A dinner buffet and museum access is included. This event is a value of over $150 per person. Your cost is $40! Purchase tickets online via conference registration.

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**Welcome Reception in the Poster/Exhibit Hall**
TUESDAY JUNE 2 (continued)

10:30 am - 2:30 pm
Poster Session, Exhibits, Lunch Break

2:30 - 4:30 pm
Oral Sessions
- TOA pm: Instrumentation: Portable and Transportable Mass Spectrometers
- TOB pm: Lipidomics: Targeted and Untargeted
- TOC pm: Biomarkers: Qualitative Analysis
- TOD pm: Imaging: Instrumentation & Method Development
- TOE pm: Cannabis Testing
- TOF pm: Nucleic Acids and Oligonucleotides
- TOG pm: Glycopeptides and Glycoproteins
- TOH pm: Fundamentals: Native MS

4:45 - 5:30 pm
Plenary Session: Biemann Medal

5:45 - 7:00 pm
Workshops
Corporate Hospitality Suites, Hilton Americas

After 8:00 pm

WEDNESDAY JUNE 3

8:30 - 10:30 am
Oral Sessions
- WOA am: Instrumentation: Innovative Separations Approaches Coupled to MS
- WOB am: Cancer Research
- WOC am: Drug Target Identification by MS
- WOD am: Informatics: Data-Independent Acquisition
- WOE am: GC/MS, OGC/MS, GC-MS/MS, and GC/HRMS
- WOF am: Top Down Protein Analysis
- WOG am: Food Safety & Chemistry: Innovations
- WOH am: Energy, Petroleum, and Biofuels: Instrumentation and Applications

10:30 am - 2:30 pm
Poster Session, Exhibits, Lunch Break

2:30 - 4:30 pm
Oral Sessions
- ThOA am: Instrumentation: Ambient Ionization and Applications
- ThOB am: Ion Mobility: Small Molecules, Pharmaceuticals, and DMPK
- ThOC am: Clinical Analysis: Innovations
- ThOD am: Metabolomics: Untargeted Profiling
- ThOE am: MS in the Process Development Lab
- ThOF am: Single Cell MS
- ThOG am: Membrane Protein MS
- ThOH am: Fundamentals: DDA and DIA LC-MS

4:45 - 5:30 pm
Closing Session: Plenary Lecture

THURSDAY JUNE 4

8:30 - 10:30 am
Oral Sessions
- ThOA pm: Pharmaceuticals: Impurity Analysis
- ThOB pm: Ion Mobility: New Developments & Applications
- ThOC pm: Biotherapeutics: Characterization
- ThOD pm: Metabolomics: New Technologies and Applications
- ThOE pm: Protein-Ligand Interactions
- ThOF pm: Carbohydrates
- ThOG pm: Synthetic Polymers
- ThOH pm: Fundamentals for Everyone: Imaging

10:30 am - 2:30 pm
Poster Session, Exhibits, Lunch Break

2:30 - 4:30 pm
Oral Sessions
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4:45 - 5:30 pm
Closing Session: Plenary Lecture

6:30 -  9:30 pm
Closing Event
Join us at the Houston Museum of Science following the Closing Plenary.
(advance ticket purchase required)
## Two-Day Short Courses

### Saturday and Sunday, May 30 - 31

**01 Bioinformatics for Protein Identification**
Instructors: Nuno Bandeira (University of California San Diego), Meghan C. Burke (NIST) and David Tabb (Stellenbosch University)

**02 Clinical Diagnostics: Innovation, Validation, Implementation and Operation by Mass Spectrometry**
Instructors: Matthew Crawford, Brian Rappold and Chris Shuford (LabCorp)

**03 DMPK: Experimentation and Data Interpretation**
Instructors: Mark Hayward (Stemline Therapeutics), Naidong Weng (Janssen Research and Development), Mingshe Zhu (MassDefect Technologies).

**04 Glycans and Glycoproteins in Mass Spectrometry**
Instructors: Jon Amster (University of Georgia), Carlito Lebrilla (University of California, Davis), Ron Orlando (University of Georgia), Joe Zaia (Boston University)

**05 High Resolution Mass Spectrometry for Qualitative and Quantitative Analysis: An Introduction**
Instructors: Matthew Blatnik (Pfizer), Cong Wei (Biogen) and Graham West (Pfizer)

**06 LC/LC/MS: Understanding, Optimizing and Applying Techniques using Electrospray, APCI and APPI to Develop Successful Methods**
Instructor: Robert D. Voyksner (LCMS Limited)

**07 LC-MS: Advanced Techniques and Applications**
Instructor: Jack Henion (Advion, Inc.)

**08 LC-MS: Practical Maintenance and Troubleshooting**
Instructors: Susan Abbatiello (Northeastern University) and Will Thompson (Duke University)

**09 Native Mass Spectrometry**
Instructors: Vicki Wysocki (The Ohio State University), Sophie Harvey (The Ohio State University), David Russell (Texas A&M University), Arthur Laganowski (Texas A&M University)

**10 Peptides and Proteins in Mass Spectrometry**
Instructors: Matthew Foster (Duke University), Arthur Moseley (Duke University), Douglas Sheeley (NIH), Eric Soderblom (Duke University)

**11 Protein Structural Analysis by Mass Spectrometry: Hydrogen Exchange and Covalent Labeling**
Instructors: Mark Chance (Case Western Reserve), John Engen (Northeastern University), Janna Kiselar (Case Western Reserve), Thomas W. Wales (Northeastern University)

**12 Protein Therapeutics: Practical Characterization and Quantitation by Mass Spectrometry**
Instructors: Jason Hogan and Li Tao (Bristol-Myers Squibb)

**13 Quantitative Mass Spectrometry**
Instructors: Dwight E. Matthews (University of Vermont) and Robert Bethem (Consultant)

**14 Quantitative Proteomics: Case Studies**
Instructors: Meena Choi (Case Western Reserve), Birgit Schilling (Buck Institute), Ting Huang (Northeastern University), Olga Vitek (Northeastern University)

**15 Untargeted Metabolomics: From Basic Methods to Advanced Workflows and Isotope Labeling**
Instructor: Gary Patti (Washington University - Saint Louis)

## One-Day Short Courses

**Saturday, May 30**

**New! 17 Getting Started with R for Mass Spectrometry Data Analysis**
Instructors: Ryan Benz (SoCal Bioinformatics), Jeffrey Jones (SoCal Bioinformatics) and Heath Patterson (Vanderbilt University)

**New! 18 Advanced Metabolomics: Bioinformatics, Activity & Systems Biology**
Instructors: Gary Siuzdak, H. Paul Benton, Carlos Guijas and Erica Majumder (The Scripps Research Institute)

**New! 19 Getting Started with R for Mass Spectrometry Data Analysis (Sunday, repeat of Saturday)**
Instructors: Ryan Benz (SoCal Bioinformatics), Jeffrey Jones (SoCal Bioinformatics) and Heath Patterson (Vanderbilt University)

**New! 20 Ion Mobility Mass Spectrometry: An Introduction to Instrumentation, Applications, and Data Analysis**
Instructors: Erin Baker (North Carolina State University), Brian H. Clowers (Washington State University), John A. McLean (Vanderbilt University)

**21 Introduction to GLP Regulations and Bioanalytical Method Validation by LC-MS/MS**
Instructor: Perry Wang (LC-MS Technical Expert)

**New! 22 Introduction to Lipidomic Workflows**
Instructors: John Bowden (University of Florida), Valentina Pirro (Purdue University) and Gavin Reid (University of Melbourne)

**New! 23 Top-Down Proteomics**
Instructors: Ying Ge (University of Wisconsin), Neil Kelleher (Northwestern University), Joseph Loo (UCLA) and Ljiljana Pasa-Tolic (PNNL)
# ASMS CONFERENCE & SHORT COURSE REGISTRATION

**Deadline: April 30, 2020**

Register online: [www.asms.org](http://www.asms.org) The deadline for advance registration is April 30. After April 30, fees increase by $50 for conference registration and short course registration.

**Cancellations.** To cover the cost of handling and processing, $40 is deducted from the total refund for cancellations. May 15 is the deadline to request a cancellation for refund of conference registration or short course. Requests must be sent to info@asms.org. After May 15, no refunds.

Name: ___________________________ Company/Institution: ___________________________

Address: ___________________________ City: ___________________________

State: __________________ Zip: ___________ Country: ___________________________

Phone: ___________________________ Email: ___________________________

### CONFERENCE REGISTRATION

After April 30 registration fees increase by $50.

- □ ASMS Member, $200*
- □ ASMS Student Member, $90**
- □ Non-member, $400
- □ Student Non-member, $160**
- □ Emeritus Member, No Charge

Enter Conference Registration amount $ ___________

### SHORT COURSES

After April 30 course fees increase by $50. Late registration for courses is on a space available basis only.

Registration for all courses will close on May 24. No on-site registration.

<table>
<thead>
<tr>
<th>TWO-DAY SHORT COURSES (Saturday and Sunday)</th>
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* To register as a member, ASMS dues for 2019 must have been processed by ASMS prior to conference registration.

** To qualify for the student rate, you must be enrolled full-time in a degree program up to and including the Ph.D. at the time of the conference.

### Payment Method

- □ I have enclosed a check or money order payable to ASMS for the TOTAL AMOUNT. Purchase orders or money transfers cannot be accepted. Checks must be payable in U.S. dollars and through a U.S. bank.
- □ Please charge the TOTAL AMOUNT to my Visa, MasterCard, or AMEX.

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Send this form with payment to: ASMS Conference, 20 Galisteo Street, Building 1-1, Santa Fe, NM 87505

Email to info@asms.org or Fax: (505) 989-1073 (Email or Fax registrations must include credit card information.)