68th Conference on Mass Spectrometry and Allied Topics

May 31 - June 4, 2020
Houston, Texas

Sponsored by American Society for Mass Spectrometry

Susan Richardson
Vice President for Programs

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

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 and HOU. 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.

www.asms.org

FEATURED SPEAKERS

Special Keynote Lecture: Sunday, May 31, 5:00-5:45 pm

Is There Still Gender Bias in Academic Science (and Does It Matter)? What the Scientific Studies Say.
Corinne Moss-Racusin
Skidmore College

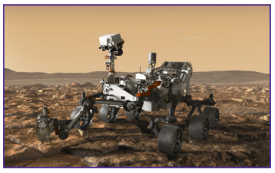
Tutorial Lectures: Sunday, May 31, 5:45-6:30 pm

Glycoprotein Analysis for Understanding Human Disease
Heather Desaire
University of Kansas

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

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

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



Jet Propulsion Laboratory
California Institute of Technology

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

New Dinosaur Discoveries
Steve Brusatte
University of Edinburgh

Closing Event, Thursday, June 4

Advance ticket purchase required

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.

CONFERENCE PROGRAM OVERVIEW

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**
10:00 am - 8:00 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

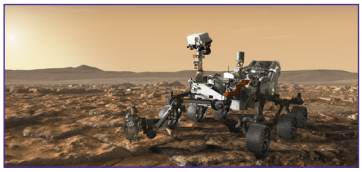
5:45 - 6:30 pm **Tutorial Lectures** (Given in parallel)

Glycoprotein Analysis for Understanding Human Disease
Heather Desaire
University of Kansas

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

6:45 - 7:45 pm **Opening Session: Plenary Lecture**

Mars 2020
Patricia M. Beauchamp
Chief Technologist, Engineering and Science Directorate
Jet Propulsion Laboratory
California Institute of Technology



7:45 - 9:30 pm **Welcome Reception in the Poster/Exhibit Hall**

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

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

2:30 - 4:30 pm **Oral Sessions**
MOA pm: Clinical Analysis: Applications
MOB pm: Exposomics, Toxicology, and Health Outcomes
MOC pm: Drug Discovery and Development : Quantitative Analysis
MOD pm: Informatics: Metabolomics
MOE pm: MS of Really Big Ions
MOF pm: Post-translational Modifications: Qualitative & Quantitative Analysis
MOG pm: Stable Isotope Labeling: Applications
MOH pm: Fundamentals: Ion Activation and Dissociation

4:45 - 5:30 pm **Plenary Session: Award for a Distinguished Contribution in Mass Spectrometry**
5:45 - 7:00 pm **Workshops**
After 8:00 pm **Corporate Hospitality Suites, Hilton Americas**

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: Multiomics 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

CONFERENCE PROGRAM OVERVIEW

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**

After 8:00 pm **Corporate Hospitality Suites, Hilton Americas**

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, GCxGC/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**
WOA pm: Native MS in Structural Biology
WOB pm: Informatics: Innovations
WOC pm: Forensics: Innovations and Applications
WOD pm: Imaging: Pharmaceuticals, Metabolites, and Lipids
WOE pm: Hydrogen-Deuterium Exchange MS: Innovations
WOF pm: Quantitative Proteomics in Systems Biology
WOG pm: Environmental: Emerging Contaminants
WOH pm: Fundamentals for Everyone: Ion Mobility

4:45 - 5:30 pm **ASMS Meeting**

5:45 - 7:00 pm **Workshops**

After 8:00 pm **Corporate Hospitality Suites, Hilton Americas**

THURSDAY JUNE 4

8:30 - 10:30 am **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

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

2:30 - 4:30 pm **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

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

New Dinosaur Discoveries
Steve Brusatte
University of Edinburgh

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

Houston Museum of Science

SHORT COURSES

Go to www.asms.org to view a description of each course.

April 30 is the deadline to register for a short course. After April 30 short course fees increase by $50. Late registration for short courses (May 1 - 24) is on a space available basis only. **Late registration for all courses will close on May 24.** No on-site registration.

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 (Northeastern University), 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)
This course repeats on Sunday, May 31 (see course 19 below.)

Sunday, May 31

18 Advanced Metabolomics: Bioinformatics, Activity & Systems Biology (Sunday)
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)
This is a repeat of course 17 on Saturday.

20 Ion Mobility Mass Spectrometry: An Introduction to Instrumentation, Applications, and Data Analysis (Sunday)
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 (Sunday)
Instructor: Perry Wang (LC-MS Technical Expert)

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

New! 23 Top-Down Proteomics (Sunday)
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 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.

✓	TWO-DAY SHORT COURSES (Saturday and Sunday)	ASMS member*	Non-Member	Student**
	01 Bioinformatics for Protein Identification	$400	$700	$150
	02 Clinical Diagnostics by MS, Innovation, Validation, Implementation, and Operation by MS	$400	$700	$150
	03 DMPK: Experimentation and Data Interpretation, includes cost of textbook.	$506	$806	$256
	04 Glycans and Glycoproteins in Mass Spectrometry	$400	$700	$150
	05 High Resolution MS for Qualitative and Quantitative Analysis: An Introduction	$400	$700	$150
	06 Understanding, Optimizing and Applying LC/MS/MS Techniques using Electrospray, APCI and APPI to Develop Successful Methods	$400	$700	$150
	07 LC-MS: Advanced Techniques and Applications	$400	$700	$150
	08 LC-MS: Practical Maintenance and Troubleshooting	$400	$700	$150
	09 Native Mass Spectrometry	$400	$700	$150
	10 Peptides and Proteins in Mass Spectrometry	$400	$700	$150
	11 Protein Structural Analysis by Mass Spectrometry: HD Exchange and Covalent Labeling	$400	$700	$150
	12 Protein Therapeutics: Practical Characterization and Quantitation	$400	$700	$150
	13 Quantitative Mass Spectrometry	$400	$700	$150
	14 Quantitative Proteomics: Case Studies	$400	$700	$150
	15 Untargeted Metabolomics: From Basic Methods to Advanced Workflows and Isotope Labeling	$400	$700	$150

✓	ONE-DAY SHORT COURSES	Member*	Non-Member	Student**
	Saturday 17 Getting Started with R for Mass Spec Data Analysis (repeats on Sunday)	$300	$500	$75
	Sunday 18 Advanced Metabolomics: Bioinformatics, Activity & Systems Biology	$300	$500	$75
	Sunday 19 Getting Started with R for Mass Spec Data Analysis (also offered on Saturday)	$300	$500	$75
	Sunday 20 Ion Mobility MS: Instrumentation, Applications, & Data Analysis	$300	$500	$75
	Sunday 21 Intro to GLP Regulations and Bioanalytical Method Validation by LC-MS/MS	$300	$500	$75
	Sunday 22 Intro to Lipidomic Workflows	$300	$500	$75
	Sunday 23 Top-Down Proteomics	$300	$500	$75

** 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*

Enter short course amount $ _____

Spouse/Companion includes Welcome Reception on Sunday and name badge. Does not give access to scientific talks, posters or exhibits. Enter $10. **Enter companion amount $** _____

Closing Event Thursday, June 4. $40 per registrant. (Limit one ticket per registrant & one ticket per spouse/companion, see below for spouse/companion closing event ticket) **Closing Event amount $** _____

Closing Event for Spouse/Companion Thursday, June 4. $40 per registered spouse/companion. Separate Spouse/Companion registration ($10) is required. **Closing Event for spouse/companion amount $** _____

ASMS-branded Watter Bottle $10 **ASMS Water Bottle amount $** _____

ENTER TOTAL AMOUNT $ _____

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.

_____
Visa, MasterCard, or Amex Number *Security Code* *Expiration Date*

_____
Card Holder's Name (please print) *Card Holder's Signature*

Send this form with payment to: ASMS Conference, 2019 Galisteo Street, Building I-1, Santa Fe, NM 87505
Email to info@asms.org or Fax: (505) 989-1073 (Email or Fax registrations must include credit card information.)