San Antonio combines Mexican, German and Old West cultures to create a unique experience. At the top of the list of most visited sites in the USA is the Alamo. This enduring symbol of courage and freedom is recognized around the world, but it’s only one of five historic Spanish missions in the city. Collectively, these incredible landmarks have been honored as the first UNESCO World Heritage Site in Texas.

Opportunities for Students. ASMS offers conference travel awards for Graduate Students ($1,000) and Undergraduate Students ($500). The application deadline is January 15. In addition, travel stipends are available to students. View details at www.asms.org.

Corporate Membership and Exhibits. The participation of ASMS Corporate Members is an integral part of the conference. A Corporate Member exhibit booth or hospitality suite provides access to over 6,500 scientists attending one of the most dynamic conferences in the world. Information is online: www.asms.org.

Spouse/Companion Badge. Spouse/companion badges allow access to the Welcome Reception and hospitality suites. Spouse/companion may not attend posters, talks, or exhibits. A purchased ticket is required for the Closing Event.

Closing Event at the Briscoe Western Art Museum. Join your colleagues for a festive social event on Thursday evening. Just a short walk from the convention center, the museum is housed in the historic former public library. Enjoy buffet dinner and entertainment in the sculpture garden and event space overlooking the river. Advance purchase tickets are required. Cost is $30 per person. Purchase online with your conference registration at www.asms.org.

Accommodations. Hotel reservations are managed online: www.asms.org.

<table>
<thead>
<tr>
<th>Hotel / Venue</th>
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<tr>
<td>1 Convention Center</td>
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<td>2 Grand Hyatt</td>
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<td>3 Marriott Rivercenter</td>
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<td>4 Marriott Riverwalk</td>
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<tr>
<td>5 Hilton Palacio del Rio</td>
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<td>6 La Quinta Inn &amp; Suites</td>
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<td>7 Springhill Suites</td>
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<td>8 Fairfield Inn &amp; Suites</td>
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<td>10 Homewood Suites</td>
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<td>11 Westin Riverwalk</td>
<td>$175 - $195</td>
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<td>12 Menger Hotel</td>
<td>$130</td>
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## Short Courses

### Two-Day Short Courses: Saturday and Sunday, June 4 – 5, 2016

**01 Bioinformatics for Protein Identification**
Instructors: Nuno Bandiera (University of California San Diego), Alexey Novotnicky (University of Michigan Health System), David Tabb (Stellenbosch University)

**02 Clinical Diagnostics: Innovation, Validation, Implementation and Operation by Mass Spectrometry**
Instructors: Russell Grant, Chris Studof (Laboratory Corporation of America), Brian Rappold (Essential Testing)

**03 DMPK: Experimentation and Data Interpretation**
Instructors: Mark Hayward (ITP Solutions and Active Ingredient Technologies), Mike S. Lee (Milestone Development Services), Naidong Weng (Janssen Research and Development), Mengshu Zhu (Bristol-Myers Squibb)

**04 Glycans and Glycoproteins in Mass Spectrometry**
Instructors: Ragu Ramanathan, Matthew Blatnik, Cong Wei (Pfizer)

**05 High Resolution Mass Spectrometry for Qualitative and Quantitative Analysis: An Introduction**
Instructors: Jon Amster (University of Georgia), Carlito Lebrilla (University of California, Davis), Ron Orlando (University of Georgia), Joe Zaua (Boston University)

**06 LC-MS: Techniques of Electrospray, APC and APP: Understanding and Optimizing to Develop Successful LC-MS Methods**
Instructor: Robert D. Voiksnner (LCMS Limited)

**07 LC-MS: Advanced Techniques and Applications**
Instructor: Jack Henion (Advin Biosciences)

**08 MALDI Imaging Mass Spectrometry: Basic Tools and Techniques**
Instructors: Shannon Cornett (Bruker Daltonics), Michelle Heyzer (Vanderbilt University)

**09 Mass Analyzers: Everything You Wanted to Know about Common Mass Spectrometers but Didn’t Know Who to Ask**
Instructors: Gary Gilsh (University of North Carolina), Michael Easterling (Bruker Daltonics), Kevin Owens (Drexel University), Richard Vachet (University of Massachusetts)

**10 MS/MS: An Introduction to Instrumentation, Fundamentals, and Spectral Interpretation**
Instructors: Linda Brei, George Tsapralis (University of Arizona), Ardap Somogy, Vicki Wysoci (Ohio State University)

**11 Peptides and Proteins in Mass Spectrometry**
Instructors: Kevin Blackbum (North Carolina State University), Arthur Mueley (Duke University), Douglas Shelly (National Center for Research Resources/NHR)

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

### One-Day Short Courses

**13 Protein Therapeutics: Practical Characterization and Quantitation by Mass Spectrometry**
Instructors: Guodong Chen, LiTao (Bristol-Myers Squibb), David M. Hambley (Amgen)

**14 Quantitative Mass Spectrometry**
Instructor: Robert Bethem (Independent Contractor), Dwight E. Matthews (University of Vermont)

**15 LC-MS Practical Maintenance and Troubleshooting (Repeated Saturday and Sunday)**
Instructors: Susan Abbatell (The Broad Institute), Thomas Blau (Ion Technology Support, Inc), Will Thompson (Duke University)

**16 Metabolomics: Analyzing Chemical and Biological Diversity (Repeated Saturday and Sunday)**
Instructor: Gary Patti (Washington University School of Medicine)

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

**18 Ion Mobility Mass Spectrometry: An Introduction to Instrumentation, Applications, and Data Analysis (Sunday only)**
Instructors: Brian H. Clowers (Washington State University), Erin Baker (PNNL), J. Michael McLean (Vanderbilt University)

### 2016 Program Overview

**Saturday June 4**
- 9:00 am - 4:00 pm: Short Courses
- 2:00 - 5:00 pm: Conference Registration

**Sunday June 5**
- 9:00 am - 4:00 pm: Short Courses
- 10:00 am - 8:00 pm: Tutorial Lectures
- 5:00 - 6:30 pm: Forensic Mass Spectrometry: Tell Me Something I Don't Know.
  - Facundo Fernandez (Georgia Institute of Technology) and Glen Jackson (West Virginia University)

**Monday June 6**
- 8:30 - 10:30 am: Welcome Reception in the Poster/Exhibit Hall
- 10:30 am - 2:30 pm: Poster Session, Exhibits, Lunch Break
- 2:30 - 4:30 pm: Oral Sessions
  - MDA: Synthetic Polymers
  - MOB: Fundamentals: Ion-Ion and Ion-Neutral Interactions
  - MOC: Ion Mobility: Small Molecules, Pharmaceuticals, and DMPK
  - MOD: Instrumentation: FTMS
  - MOE: Diagnostic Clinical Chemistry
  - MDF: Informatics: Discovery Proteomics
  - MDO: Metabolomics: Untargeted Profiling
  - MDF: Membrane Protein MS

**Tuesday June 7**
- 8:30 - 10:30 am: Short Courses
- 10:30 am - 2:30 pm: Oral Sessions
  - TOA: Energy, Petroleum, and Biofuels: Instrumentation and Method Development
  - TOB: Fundamentals: Metal Ion Cationization, Metal-Ligand Interactions and Catalysis
  - TOC: HRMS for Quantitation in Drug Discovery, Development and Beyond
  - TOD: Imaging: Instrumentation & Method Development
  - TOE: Quantitative Proteomics in Systems Biology
  - TOF: Instrumentation: Non-FT Based Analyzers
  - TOG: Lipids and Profiling
  - TOH: Native MS in Structural Biology

**Wednesday June 8**
- 8:30 - 10:30 am: Oral Sessions
  - TOA: Environmental: New Instrumentation and Approaches for In-Field Measurements
  - TOB: Drug Development: Quantitative Analysis
  - TOC: Ion Mobility, FAIMS & DMS: New Developments and Applications
  - TOE: Quantitative and Qualitative Analysis of Post-translational Modifications
  - TOF: Imaging: Computational Methods and Analysis
  - TOG: Metabolomics: New Technologies and Applications
  - TOH: Protein-Ligand Interactions

**Poster Sessions, Exhibits, Lunch Break**
- 2:30 - 4:30 pm: Plenary Session: Biemann Medal
- 4:45 - 5:30 pm: Corporate Hospitality Suites, Grand Hyatt Hotel
Register online: www.asms.org  The deadline for advance registration is April 30. After April 30, fees increase by $50. Short Course registration closes on April 30.

Cancellations. To cover the cost of handling and processing, $40 is deducted from the total refund for cancellations. Conference registration cancellation must be received in writing on or before May 15, 2016. Short Course cancellation must be received by May 15.

Name: __________________________________________

Company/Institution: ______________________________

Address: _______________________________________

Phone: __________________________ Email: __________________

Advance Conference Registration
☐ ASMS Member, $150*  ☐ ASMS Student Member, $75**  ☐ Non-member, $300
☐ Student Non-member, $120**  ☐ Emeritus Member, No Charge

Non-members ONLY If you are registering as a non-member, you may receive a one-year subscription to the Journal of the American Society for Mass Spectrometry (JASMS) for an additional $20.

Check ONE course for which you wish to register

☐ Two-DAY SHORT COURSES (Saturday and Sunday)

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<th>Non-Member</th>
<th>Student**</th>
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<td>Quantitative Mass Spectrometry</td>
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Check one or two courses for which you wish to register

☐ One-DAY SHORT COURSES

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<tr>
<td>18</td>
<td>Ion Mobility MS: Instrumentation, Applications, &amp; Data Analysis(Sunday only)</td>
<td>$300</td>
<td>$500</td>
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* To register as a member, ASMS dues for 2016 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 $ ________

Enter companion amount  $ ________

Closing Event amount $ ________

ENTER TOTAL AMOUNT $ ________

Enter registration amount $ ________

If you are registering as a non-member, you may receive a one-year subscription to the Journal of the American Society for Mass Spectrometry (JASMS) for an additional $20.

Non-members ONLY, enter $20 for optional JASMS subscription $ ________

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

Fax: (505) 989-1073 (Faxed registrations must include credit card information.)
64th Conference on Mass Spectrometry and Allied Topics

June 5 - 9, 2016
San Antonio, Texas

IMPORTANT DEADLINES

January 15, 2016
Deadline to apply for undergraduate or graduate student conference travel award

February 5, 2016
Abstract online submission
www.asms.org

April 30, 2016
Advance conference registration and short course registration

April 30, 2016
Hotel reservations at conference rates

www.asms.org

SHORT COURSES June 4 - 5, 2016