Mass Spectrometry in the Clinical Lab: Best Practices and Current Applications

October 9-10, 2014 * Sheraton City Center Hotel * St. Louis, MO

DAY 1
Thursday, October 9

7:00-8:00 am
Registration and Breakfast – hosted by Thermo Fisher Scientific
Breckenridge Ballroom Foyer

SESSION I
IMPLEMENTING MASS SPEC TESTING: KNOW YOUR TECHNOLOGIES
Breckenridge Ballroom A/B

8:00-8:05 am
Welcome and program overview

Basics of Mass Spectrometry in the Clinical Laboratory
Deborah French, PhD, DABCC, FACB
University of California San Francisco (San Francisco, CA)

An Introduction to Liquid Chromatography
Brian A. Rappold
Essential Testing (Collinsville, IL)

Cleaning Up Your Sample Prep Processes
Julia C. Drees, PhD, DABCC
Kaiser Permanente of Northern California (Richmond, CA)

Q&A with Session I Speakers

10:20-10:30 am
Coffee Break
Breckenridge Ballroom C

SESSION II – Part I
LIFE CYCLE OF A MASS SPECTROMETRY ASSAY: Practical Considerations in Getting Your New Method Up and Running (The Birth of a Method)

Justification, Instrument Selection, Due Diligence, and Setting Up a Clinical Lab for Successful Implementation of MS
Robert L. Fitzgerald, PhD, DABCC, FACB
University of California San Diego (San Diego, CA)
Considerations for Method Development and Method Validation
William A. Clarke, PhD, MBA, DABCC, FACB
Johns Hopkins Hospital (Baltimore, MD)

Q&A with Session II, Part 1 Speakers

12:05-1:05 pm
Luncheon – hosted by Biotage
City View Ballroom B/C

SESSION II – Part 2
LIFE CYCLE OF A MASS SPECTROMETRY ASSAY: Practical Considerations for Method Validation and Implementation (Raising Your Method Right)

Post-Implementation Monitoring: Keeping Your LC-MS/MS Method on the Right Track
Julianne C. Botelho, PhD
Centers for Disease Control and Prevention (Atlanta, GA)

Applying Your Validated Methods in the Real World
James C. Ritchie, PhD, DABCC, FACB
Emory University Hospital (Atlanta, GA)

Q&A with Session II, Part 2 Speakers

2:40-2:55 pm
Coffee Break
Breckenridge Ballroom C

SESSION II – Part 3
LIFE CYCLE OF A MASS SPECTROMETRY ASSAY: Practical Considerations for Maintaining the Test Process in a Real-Life Setting (Preparing Your Method for the Real World)

Getting a Handle on Your Biggest Mass Spec Test Volumes
Russell P. Grant, PhD, FACB
LabCorp (Burlington, NC)

Putting IT All Together: Moving Data and Reporting Results
Judy A. Stone, PhD, MT(ASCP), DABCC
University of California at San Diego (San Diego, CA)

Q&A with Session II, Part 3 Speakers

4:45-5:45 pm
Reception – hosted by Shimadzu Scientific Instruments & Select Laboratory Partners
Atrium B

End of Day 1
DAY 2  
*Friday, October 10*

7:00-8:00 am  
**Registration and Breakfast – hosted by Agilent Technologies**  
*Breckenridge Ballroom Foyer*

8:00 am  
SESSION III  
SOME COMMON CURRENT APPLICATIONS  
*Breckenridge Ballroom A/B*

The Laboratory’s Role in Pain Management Testing  
*Frederick G. Strathmann, PhD, DABCC*  
*ARUP Laboratories (Salt Lake City, UT)*

Delivering Accurate Adrenal and Sex Steroid Results with LC-MS/MS: Why Owning an Expensive Bicycle Doesn’t Make You a Good Cyclist  
*Daniel T. Holmes, MD*  
*St. Paul’s Hospital Providence Health Care (Vancouver, British Columbia)*

Mass Spectrometry in Babies and Beyond  
*Shannon M. Haymond, PhD, DABCC, FACB*  
*Lurie Children’s Hospital of Chicago (Chicago, IL)*

Q&A with Session III Speakers

9:45-9:55  
**Coffee Break**  
*Breckenridge Ballroom C*

SESSION IV  
INDUSTRY VIEWPOINT

10:00-10:20 am  
**Applied Mass Spectrometry: Translational Research IVD**  
*Sherry L. Gregory*  
*Thermo Fisher Scientific (West Palm Beach, FL)*

10:20-10:40 am  
**TITLE TBD**  
*Michael P. Scott*  
*Agilent Technologies (Cary, NC)*

10:40-11:00  
**TITLE TBD**  
*Frank Kero, PhD*  
*Biotage (Charlotte, NC)
11:00-11:20 am
TITLE TBD
Matthew P. Clabaugh
*AB SCIEX (Redwood City, CA)*

11:20-11:35
Q&A with Session IV Speakers

SESSION V
A LOOK TO THE FUTURE

MALDI-TOF for Microbiology Applications
*Susan Butler-Wu, PhD, DABMM*
*University of Washington (Seattle, WA)*
* Review commercially available MALDI-TOF-MS platforms for microbiology*
* Discuss the general performance of MALDI-TOF-MS for routine organism identification*
* Outline potential future applications of MALDI-TOF in clinical microbiology*

Using Mass Spectrometry to Measure Proteins in the Clinical Laboratory
*Andrew N. Hoofnagle, MD, PhD*
*University of Washington (Seattle, WA)*
* Benefits of using mass spectrometry to measure proteins in clinical samples*
* Outline the procedure for measuring proteins in complex samples by mass spectrometry*
* Methods for improving the sensitivity of mass spectrometric protein assays*

Q&A with Session V Speakers

12:45
Closing Remarks and Program Ends