

**AACC/MSSS:  
Mass Spectrometry and Separation Sciences for Laboratory Medicine  
5th Annual Conference**

*October 1-2, 2015 \* Doubletree Hotel \* Chicago, IL*

**Organizing Committee:** Steven W. Cotten, PhD (Ohio State University Wexner Medical Center); R. Brent Dixon, PhD (Physician's Choice Laboratory Services); Saeed A. Jortani, PhD (University of Louisville); Steven H. Wong, PhD (Conference Chair, Wake Forest University School of Medicine); Victoria Y. Zhang, PhD (University of Rochester Medical Center); Yusheng Zhu, PhD (Medical University of South Carolina)

*Developed in cooperation with AACC's Mass Spectrometry and Separation Sciences Division*

DAY 1

*Thursday, October 1*

7:30-8:30 am

**REGISTRATION AND BREAKFAST**

*State Ballroom/Foyer*

**GENERAL SESSION**

*LaSalle Ballroom I*

8:30 am

*SESSION I*

*SCOPE OF MASS SPEC TESTING FOR LABORATORY MEDICINE/PATHOLOGY*

**Welcome and Program Open**

*AACC President David D. Koch, PhD*

*Emory University School of Medicine (Atlanta, GA)*

**Conference Overview**

*Steven H. Wong, PhD*

*Wake Forest University School of Medicine (Winston-Salem, NC)*

*Chair, Conference Organizing Committee*

**KEYNOTE ADDRESS**

**High Resolution Mass Spectrometry for Laboratory Medicine – Current Status and Perspectives in TDM-Tox**

*Professor Dr. Hans Maurer*

*Saarland University (Homburg, Germany)*

Q&A w/ Prof. Maurer

**Panel Discussion: Navigating Development and Implementation of Mass Spec-based LDTs**

*Saeed A. Jortani, PhD – Moderator*

*University of Louisville (Louisville, KY)*

*Henry Rodriguez, PhD, MBA*

*National Institutes of Health/National Cancer Institute (Bethesda, MD)*

*Alberto Gutierrez, PhD*

*U.S. Food and Drug Administration (Silver Spring, MD)*

*Steven J. Soldin, PhD*

*National Institutes of Health Clinical Center (Bethesda, MD)*

*Charles Root, PhD*

*CodeMap, LLC (Schaumburg, IL)*

- \* Discovery/Funding
- \* Development/Translation to Clinical Setting
- \* Regulatory/CLIA/Roll of Lab Director
- \* New Guidance/FDA Expectations for Lab
- \* Reimbursement
- \* Recommendations

**Q&A w/ Panelists**

10:25-10:35 am

**COFFEE BREAK**

**State Ballroom**

10:35 am

**SESSION II**

**ESSENTIAL CONCEPTS IN CLINICAL MASS SPEC**

**Common Mistakes in LC-MS/MS Assay Development – What They Are and How to Avoid Them**

*Daniel T. Holmes, MD*

*St. Paul's Hospital Providence Health Care (Vancouver, British Columbia)*

**Sample Preparation – A Practical Approach for Robust Analyses**

*R. Brent Dixon, PhD*

*Physicians' Choice Laboratory Services (Rock Hill, SC)*

**Bringing Mass Spectrometry to Clinical Practices: Finance, Personnel and Interface Considerations**

*Victoria Y. Zhang, PhD*

*University of Rochester Medical Center (Rochester, NY)*

**Q&A w/ Holmes, Dixon, Zhang**

12:10-1:10 pm

**CONFERENCE LUNCHEON (included in registration)**

*LaSalle Ballroom II*

1:10 pm

**Method Development and Validation for Certification in Accordance with CLSI C62-A and CAP Guidelines**

*Steven W. Cotten, PhD*

*The Ohio State University Wexner Medical Center (Columbus, OH)*

**Antifungals, TDM, and DAU Chiral Analysis by LC-MS/MS**

*Steven H. Wong, PhD*

*Wake Forest University School of Medicine (Winston-Salem, NC)*

**Complementary Role of GC/MS in the Clinical Laboratory and Beyond**

*Uttam Garg, PhD*

*Children's Mercy Hospitals and Clinics (Kansas City, MO)*

Q&A w/ Cotten, Wong, Garg

2:40-2:55 pm

**COFFEE BREAK**

*State Ballroom*

2:55 pm

*SESSION III*

*INDUSTRY PERSPECTIVES*

**LC-MS/MS Development for the Clinical Lab – The SCIEX Perspective**

*Matthew Clabaugh*

*SCIEX Diagnostics (Framingham, MA)*

**Agilent Mass Spectrometry: Go Faster**

*Mike Scott*

*Agilent Technologies (Santa Clara, CA)*

**Title TBD**

*Randall Julian, PhD*

*Indigo BioAutomation (Indianapolis, IN)*

**Opportunities in Clinical Mass Spec**

*Sherry Gregory*

*Thermo Fisher Scientific (West Palm Beach, FL)*

*SESSION IV*

**Open Forum: “Clinics in Mass Spec Analyses”**

- \* Tips for practical day-to-day operation of mass spec tools
- \* Audience Q&A

5:00-6:30 pm

**NETWORKING RECEPTION (Included in registration)**

*State Ballroom*

**End of Day 1**

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DAY 2

*Friday, October 2*

7:30-8:30 am

**REGISTRATION AND BREAKFAST**

*State Ballroom/Foyer*

**GENERAL SESSION**

*LaSalle Ballroom I*

8:30 am

*SESSION V –Translating Mass Spectrometry Tools to Clinical Practice*

**PLENARY LECTURE**

**The Role of Assay Specificity in Improving Diagnosis and Treatment of Endocrine Disorders**

*Steven J. Soldin, PhD*

*National Institutes of Health Clinical Center (Bethesda, MD)*

**Measurement of Water Soluble Vitamins by UPLC-MS/MS**

*Yusheng Zhu, PhD*

*Medical University of South Carolina (Charleston, SC)*

Q&A w/ Soldin and Zhu

9:55-10:05 am

**COFFEE BREAK**

*State Ballroom*

10:05 am

**PLENARY LECTURE**

**Metabolomic Analysis for Newborn Screening and Diagnosis of Metabolic Disorders**

*Michael J. Bennett, PhD*

*Children's Hospital of Philadelphia (Philadelphia, PA)*

**Advanced Pain Management – Pharmacogenomics Data to Complement Oral Fluid Compliance Testing**

*R. Brent Dixon, PhD*

*Physicians' Choice Laboratory Services (Rock Hill, SC)*

**The Future of Reimbursement for Mass Spec-based LDTs**

*Charles Root, PhD*

*CodeMap, LLC (Schaumburg, IL)*

**Q&A w/ Bennett, Dixon, Root**

12:00-1:15 pm

**LUNCH ON OWN**

1:15 pm

**SESSION VI**

**"NEXT GENERATION" MASS SPEC ANALYSES FOR 2020**

**SPECIAL LECTURE**

**Emerging Mass Spec Applications in Anatomic Pathology: Tissue Imaging**

*Richard M. Caprioli, PhD*

*Vanderbilt University (Nashville, TN)*

**Translating "-Omics" Biomarkers from Bench to Bedside**

*Victoria Y. Zhang, PhD*

*University of Rochester Medical Center (Rochester, NY)*

**Linking Massive DNA Sequencing with Mass Spec Proteomics for Advancing Cancer Research and Precision Medicine**

*Henry Rodriguez, PhD, MBA*

*National Institutes of Health/National Cancer Institute (Bethesda, MD)*

**Q&A w/ Caprioli, Zhang, Rodriguez**

3:00-3:10 pm

**COFFEE BREAK**

**State Ballroom**

3:10 pm

**Mass Spectrometry-based Single Cell Measurement**

*Sean C. Bendall, PhD*

*Stanford University School of Medicine (Stanford, CA)*

**Panel Discussion**

**Envisioning “Next Generation” Clinical Mass Spec-based Diagnostics in 2020**

*Steven H. Wong, PhD– Moderator*

*Wake Forest University School of Medicine (Winston-Salem, NC)*

*Richard M. Caprioli, PhD*

*Vanderbilt University (Nashville, TN)*

*Saeed A. Jortani, PhD*

*University of Louisville (Louisville, KY)*

*Angella Charnot-Katsikas, MD*

*The University of Chicago (Chicago, IL)*

*Henry Rodriguez, PhD, MBA*

*National Institutes of Health/National Cancer Institute (Bethesda, MD)*

4:45 pm

**Closing Remarks and Program Ends**