

Workshop #5: Lessons Learned from Implementing QTOF Analysis into Routine Workflow

Date: Monday, October 30

Time: 1:30-5:30 PM

Cost:

MEMBER RATES		
Early Bird Registration June 1 – Aug 31 \$150	Late Registration Begins Sept 1 \$175	On-site Registration Begins October 11 \$200
NON – MEMBER AND DAILY RATES		
Early Bird Registration June 1 – Aug 31 \$200	Late Registration Begins Sept 1 \$225	On-site Registration Begins October 11 \$250

Chairs

Dani Mata, MS, D-ABFT-FT
Senior Forensic Scientist
Orange County Crime Lab
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Brittany Casey, PhD, F-ABFT
Toxicology Team Manager
NMS Labs
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Abstract

Analyzing by LC-QTOF-MS (QTOF) has become increasingly prevalent in forensic toxicology laboratories due to its greater specificity and selectivity. Additional capabilities such as retrospective data analysis and unknown compound data mining maximize the benefits of this technology. Early adopters of the technology had to develop methods and workflows empirically and in house, as its application in the field of forensic toxicology was limited at that time. As the rate of QTOF adoption increases, however, the foundation of knowledge and experience available to laboratories looking to adopt QTOF screening also increases. With each laboratory that newly implements QTOF screening, the field becomes more collaborative in nature, benefiting both existing and future users. Furthering that collaboration, this workshop will focus on the implementation of a validated QTOF method into traditional workflow and the resulting lessons learned by those early adopters, ultimately saving attendees from making the same mistakes. This will include determining final data processing criteria, suitable internal standards, and reporting conventions. It will close with a comparison of screening workflows on DUID samples prior to QTOF implementation and after.

Learning Objectives

1. Inform attendees how to streamline a validation of tens to hundreds of drugs qualitative analysis.
2. Provide attendees the pros and cons of implementing a QTOF screen in a forensic toxicology laboratory.
3. Discuss the various aspects of QTOF analysis that need to be considered during implementation.

Faculty

Maria V. Sarkisian, MS
Forensic Toxicology Ph.D. Candidate
San Francisco Office of the Chief Medical Examiner

Britni Skillman, PhD
Assistant Professor
Sam Houston State University

Dani Mata, MS, D-ABFT-FT
Senior Forensic Scientist
Orange County Crime Lab

Marie Mardal, PhD
Associate Professor in Forensic Chemistry
University of Copenhagen, Denmark

Celia Modell, MSFT, D-ABFT-FT
Forensic Toxicologist
South Carolina Law Enforcement Division

Samantha Wong, BS
Forensic Scientist III
Orange County Crime Lab

Audience Knowledge Level

Intermediate - Involves more advanced concepts requiring some technical working knowledge or prior exposure to the subject matter

Workshop Agenda

Time	Topic	Speaker
1:30 – 1:35 PM	Welcome	Dani Mata & Brittany Casey
1:35 – 2:05 PM	Data Processing Criteria	Maria Sarkisian
2:05 – 2:35 PM	QTOF for Quantitation	Britni Skillman
2:35 – 3:30 PM	Implementation Considerations	Dani Mata
3:30 – 4:00 PM	Break	
4:00 – 4:30 PM	Retrospective Data Analysis: What Can It Do for You?	Marie Mardal
4:30 – 4:50 PM	Reporting Process and Considerations	Celia Modell
4:50 -5:10 PM	Cost Evaluation/Return on Investment	Samantha Wong
5:10 – 5:30 PM	Q&A	All Speakers