

Workshop #8: beMUsed by Measurement Uncertainty? Let's Talk

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

Sue Pearing, MS, D-ABFT-FT

Quality Manager

San Francisco Office of the Chief Medical Examiner

suepearing@sfgov.org

Tate Yeatman, MS, F-ABFT, ABC-DA

Crime Laboratory Director

Palm Beach County Sheriff's Office

YeatmanD@pbso.org

Abstract

Evaluation of measurement uncertainty is a component of method validation in determining a method's fitness for purpose. Reporting of measurement uncertainty is critical for the comparison of forensic results. While the concept of measurement uncertainty is not unique to forensic toxicology, increased foundational knowledge and understanding of its connection to measurement traceability and quality assurance is needed. ISO/IEC 17025:2017 outlines specific requirements for measurement uncertainty and ASB 056 Standard for Evaluation of Measurement Uncertainty in Forensic Toxicology Laboratories and Breath Alcohol Programs is currently being developed by the Academy Standards Board. This workshop will cover the basics of measurement uncertainty and importance within the context of forensic toxicology followed by a review of ASB 056. Instruction will be provided on the process of evaluating measurement uncertainty using the standard including examples of strategies employed by laboratories currently. The workshop will conclude with a thought-provoking discussion regarding factors that laboratories should consider when determining the acceptability of their calculated measurement uncertainty to ensure confidence in produced results.

Learning Objectives

1. Provide an understanding of the concept of Measurement Uncertainty and its relevance to forensic toxicology.
2. Provide an overview and an update on the status of ASB 056 Standard for Evaluation of Measurement Uncertainty in Forensic Toxicology Laboratories and Breath Alcohol Programs.

- Demonstrate how to evaluate measurement uncertainty and provide examples of this in breath alcohol, antemortem, and postmortem analyses.

Faculty

Sue Pearing, MS, D-ABFT-FT
 Quality Manager
 San Francisco Office of Chief Medical Examiner

Laurel Farrell, BA
 Consultant

Tate Yeatman, MS, F-ABFT, ABC-DA
 Crime Laboratory Director
 Palm Beach Sheriff’s Office Crime Laboratory

Michael Stypa, MS, D-ABFT-FT
 Forensic Laboratory Supervisor – Toxicology
 Las Vegas Metropolitan Police Department

Jessica Gadway, MS
 Supervising Criminalist I – Quality Assurance Coordinator
 Los Angeles Department of Coroner-Medical Examiner

Audience Knowledge Level

Basic - suitable for individuals new to the field, requires little prior knowledge to the subject matter

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

Workshop Agenda

Time	Topic	Speaker
1:30 – 1:50 pm	Introduction & MU Basics	Sue Pearing
1:50 – 2:15 pm	Making a Case for MU	Laurel Farrell
2:15 – 2:50 pm	ASB 056 Standard	Tate Yeatman
2:50 – 3:30 pm	How Do I Do This?	Sue Pearing
3:30 – 4:00 pm	Break	
4:00 – 4:20 pm	Example – Breath Alcohol	Michael Stypa
4:20 – 4:40 pm	Example – Blood Alcohol	Michael Stypa
4:40 – 5:00 pm	Example – Drugs in Bloods and Other Matrices	Jessica Gadway
5:00 – 5:15 pm	Is My MU Appropriate?	Tate Yeatman
5:15 – 5:30 pm	Panel Q&A	All