2018 Workshop Schedule with Abstracts

Workshop 1: How to Navigate Your Way through the Epidemic of Emerging Drugs

Time: 8 am-5:30 pm Monday, October 8, 2018

Workshop Chairs: Amy Cadwallader and Michelle Peace

Abstract: Emerging drugs, especially designer fentanyl compounds, are a public health crisis that need actionable solutions from multiple stakeholders. Eliminating the epidemic of emerging drugs in the United States requires a comprehensive, multidisciplinary, multi-agency effort. Increased surveillance and early warning systems informed by laboratories and epidemiologic surveillance tools resulting in actionable information that can quickly reach law enforcement, public health officials, physicians, and vulnerable populations are solutions to mitigate the growing epidemic of emerging drugs. Toxicologists play a key role in compound analysis, generation of relevant data, and provide valuable information that can inform stakeholders in the early recognition of outbreaks, discovery of new substances, and potential patient treatments. This workshop will overview the challenges faced by many of the stakeholders toxicologists interact with and will provide tools and best practices for the practicing toxicologist to use for effective liaising and valuable contribution to local community, state, and national stakeholders. The workshop will actively engage participants and speakers in discussions to break down forensic toxicology laboratory silos.

Workshop 2: Weaving Together the Toxicologist and the Drug Recognition Expert (DRE)

Time: 8 am-5:30 pm Monday, October 8, 2018

Workshop Chairs: Curt Harper and Amy Miles

Abstract: The Drug Evaluation and Classification (DEC) program began in the early 1970s in Los Angeles, California. Today, all 50 states, plus the District of Columbia, participate in the program. A Drug Recognition Expert (DRE) is a police officer trained to recognize impairment in drivers under the influence of drugs other than, or in addition to, alcohol. A DRE is skilled in detecting and identifying persons under the influence of drugs and in identifying the category or categories of drugs causing the impairment by performing a detailed, 12-step diagnostic examination. DREs classify drugs in one of seven categories: Central Nervous System (CNS) Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis. This workshop will highlight the role of a Toxicologist, Traffic Safety Resource Prosecutor (TSRP), and DRE in Driving Under the Influence of Drug (DUID) cases. Specific DUID and DRE case scenarios/studies will be presented. In addition, the use of oral fluid drug testing in DUID cases and the DRE program will be discussed. The demonstration DRE evaluation will give the audience a unique opportunity to view the 12-step diagnostic examination firsthand. The mock court session will illustrate the symbiotic relationship between DRE officers and toxicologists by showing how both can add value to a DUID case.
Workshop 3: "Can We Say That?" - Drug Impaired Driving Testimony

Time: 8 am-12 pm Monday, October 8, 2018

Workshop Chairs: Laura Liddicoat and Michele Glinn

Abstract: This half-day workshop will explore the challenges of court testimony for Driving Under the Influence of Drugs (DUID) cases. Scientific evidence of the impairing effects of licit and illicit drugs on driving will be reviewed, along with legal requirements for opinion testimony on impairment. The evolving guidelines by OSAC and DOJ on acceptable impairment testimony will be presented. The session will conclude with the presentation of actual DUID cases and panel discussion of the opinions and testimony. This workshop is an official offering of the joint SOFT/AAFS Drugs and Driving Committee.

Workshop 4: ISO Confused: How to Navigate ISO standards

Time: 8 am-12 pm Monday, October 8, 2018

Workshop Chairs: Melissa Kennedy and Joe Kahl

Abstract: In the United States, ISO standards are frequently thought of in terms of accreditation, but the purpose of these standards is much wider and does not assume the user will seek accreditation. The goal of standardization is to provide quality and confidence in products, services, systems, and approaches.

This workshop will discuss the most relevant ISO standards to forensic toxicology: ISO/IEC 17025, ISO 17034, and ISO 15189. Each of these standards has an impact on forensic toxicology laboratories from the viewpoint of providing and receiving services and products. But why so many ISO standards, and which one is right? Workshop participants will learn how each of these standards can benefit a forensic toxicology laboratory’s quality assurance program.

ISO/IEC 17025:2017 outlines expectations for testing and calibration laboratories. The workshop will provide an overview of the concepts of this standard, along with benefits and challenges of implementing this standard in your laboratory. ISO 17034 contains general requirements for the competence of reference material producers. An overview of this document will provide participants with an understanding of differing expectations for reference material (RM) and certified reference material (CRM). Preparation of in-house reference material and use of externally purchased RM and CRM are the foundation of a toxicology laboratory’s quality assurance program. The presenters will discuss implementation of the ISO 17034 concepts within this standard and what expectations are valid when selecting RM/CRM from an external provider. ISO 15189 contains the requirements for quality and competence in medical laboratories. This standard is based upon ISO/IEC 17025 and ISO 9001 (Quality Management Systems Requirements) with an emphasis on medical laboratories and needs within that particular sector. Participants will be provided an overview of the document, the similarities and differences between this document and ISO/IEC 17025, and an understanding of the benefits and challenges to implementing this standard within your laboratory. Attend this workshop and impress your co-workers, trivial pursuit buddies, and attorneys with your knowledge of ISO standards.
Workshop 5: Effective Communication Skills for Successful Forensic Toxicology Practice

**Time:** 1:30-5:30 pm Monday, October 8, 2018

**Workshop Chairs:** Peter Stout and Dayong Lee

**Abstract:** This presentation will address the importance of sharing information with stakeholders and tools that can help with the seamless transfer of information within the laboratory and externally to law enforcement, the courts, lawyers, the public and other practitioners. Faculty will discuss the challenges of defining disclosable information and delivering that information in a timely manner with limited resources. The workshop will also provide attendees with guidance on how to improve communication skills, including how to write an article for publication in a peer-reviewed journal, prepare presentations and find relevant references from journals, search engines, literature databases and various online sites to substantiate testimony and expert opinions.

This presentation impacts the forensic toxicology community by providing guidance in effectively utilizing information technology and literary resources to fulfill forensic laboratories’ duties to transfer quality, timely and transparent information to law enforcement, legal and public stakeholders, as well as to the scientific community.

Forensic science is fundamentally informatics. Forensic toxicology laboratories generate information in the form of test reports, examination findings and related data from the scientific analysis of biological evidence. To effectively assist the justice system, the information must be delivered in a timely fashion to various stakeholders. Furthermore, sharing this information with the scientific community through professional meeting presentations and peer-reviewed publication enhances the credibility of practitioners and the forensic toxicology discipline overall. Forensic toxicologists must be effective communicators in order to fulfill their obligation to the public and the justice system. Yet practitioners struggle daily with a lack of time and resources needed to do this successfully.

This workshop will show participants how to expand the scope and utility of the data available to stakeholders by using a website containing electronic records for discovery orders and other documents. The presentation will also demonstrate how sharing such information on a public website can decrease the resources required to fill onerous discovery and public information requests while also improving a laboratory’s credibility with the public it serves.

Workshop 6: Risky Business: The dance between ISO/IEC 17025:2017’s Risk Based Requirements and Forensic Toxicology Laboratories

**Time:** 8 am-5:30 pm Tuesday, October 9

**Workshop Chairs:** Laurel Farrell and Melissa Kennedy

**Abstract:** The 2017 version of ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories was recently published. This international standard has placed an emphasis on laboratories approaching decision making from a risk based perspective. Forensic Toxicology laboratories are no stranger to risk and typically have many processes in place to address diverse areas
such as employee hiring/training, quality assurance, testimony expectations and method validation. While there are many approaches to evaluating risk, ISO/IEC 17025 does not specify a particular approach, nor a formal or documented process. This workshop aims to help laboratories answer the question -- where’s the right spot between going overboard and not doing enough? And are there risks I should have seen coming?!

This workshop will discuss the expectations of the new standard, with an emphasis on evaluating potential risks to your laboratory. This will be an interactive workshop, with exercises designed to foster brainstorming and discussion among participants related to risk evaluation/mitigation. The workshop facilitators have worked in state, local, and private toxicology laboratories in addition to years of experience interpreting ISO/IEC 17025 requirements. By the end of the day, we’ll all have a risky attitude (and quite likely will have started wearing Ray Bans). The only risk to attending? Showing up without brushing up on your Risky Business movie trivia.

**Workshop 7: Defending Your Testing Services Through Testimony**

**Time:** 8 am-12 pm Tuesday, October 9

**Workshop Chair:** Faye Caldwell

**Abstract:** Forensic testing service providers are regularly called to present witnesses to defend their services, either in an administrative hearing, agency investigation, or litigation by a donor. This workshop provides valuable tips in preparing anyone, from collectors, MROs, to laboratory personnel to confidently provide information necessary to establish the forensic defensibility of their role in the forensic testing process.

**Workshop 8: How Do I Analyze for That?!?**

**Time:** 8 am-12 pm Tuesday, October 9

**Workshop Chairs:** Dani Mata and Kevin Shanks

**Abstract:** Recently there has been a huge upswing in designer drugs across the USA. Depending on where you reside, you may have a different prevalence of designer drugs than your neighboring state or even bordering county. But just because you know a novel psychoactive drug is present in your community, doesn’t mean you know how to detect it or even if you’re able to. The Designer Drug Committee presents a workshop on your options when trying to detect these novel psychoactive drugs. This workshop will start with determining how we know when a drug is in our area. Then we will review the ever-changing Federal Laws and some notable state ones too. A discussion on how standards are made and gotten by forensic labs will be followed by a discussion on whether or not we need quantitative or qualitative results when interpreting the data. Many different analytical techniques will be discussed, those you use in your lab and some you may consider, to determine what may be best if you decide to move forward with analyzing for these drugs. The final talk will tie together all aspects of the workshop with a case report.
Workshop 9: The Real C.S.I. Miami - A Collaborative Approach to Death Investigation with an Emphasis on Investigative Postmortem Toxicology

**Time:** 1:30-5:30 pm Tuesday, October 9

**Workshop Chairs:** Liz Zaney and George Hime

**Abstract:** The Miami-Dade County Medical Examiner Department has been at the forefront of forensic medicine since its inception in 1956. Dr. Joseph H. Davis, the first Chief Medical Examiner, envisioned a department that engages all aspects of its operation in the investigation of deaths. The Toxicology Laboratory, one of the first operations formed in the Department, continues this philosophy by utilizing investigative and autopsy information in its daily processing of each medical examiner case. In today’s world, this approach to investigative postmortem forensic toxicology appears to be fading from our historical beginnings, a trend that may result in major shifts in our profession. This workshop will emphasize investigative toxicology, which utilizes a holistic approach to case investigation to ensure accurate cause and manner of death determination. Case examples will be presented that demonstrate the benefits of this approach and its value to medical examiners, forensic toxicologists, and the communities they serve.

Workshop 10: Incorporating the Updated NSC ADID Lab Guidelines into Casework: Pharmacology, Methodologies, and Case Reports for Buprenorphine, Fentanyl, and Tramadol

**Time:** 1:30-5:30 pm Tuesday, October 9

**Workshop Chairs:** Jennifer Limoges and Erin Karschner

**Abstract:** The National Safety Council’s Alcohol, Drugs, and Impairment Division (NSC ADID) recently published updated guidelines for the investigation of suspected alcohol and drug impaired driving cases and motor vehicle fatalities. Buprenorphine, fentanyl, tramadol, and their metabolites were added to the Tier 1 list of drugs that should be tested for in all cases. This workshop will provide laboratories with the information needed to incorporate these compounds into routine testing and to understand their potential to impair driving.