

SOFT 2010 Workshops

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Workshop #	Title	Chair / Co-Chair	Time / Length
W - 1	Marijuana Pharmacology - Practical Applications for the Forensic Toxicologist	Fiona Couper Amy Miles	10/18/10 Full Day
	<p>According to a 2007 roadside survey by NHTSA, 16.3% of randomly stopped drivers tested positive for drugs. Of that total, marijuana was generally the most common drug class across all the regions both in daytime (3.9%) and nighttime (6.1%) samples. The drug impaired driving case poses several challenges for law enforcement and toxicology communities. This SOFT/AAFS Drugs & Driving Committee sponsored workshop will look at marijuana, the most prevalent drug found in impaired driving cases. Providing the toxicologist with the mechanism of action of marijuana, the interpretive challenges in the chronic versus acute user, actual case histories and how to prepare not only themselves but attorneys for trial.</p>		
W - 2	The tools for DIY methods validation!	Brandi Bellissima Diane Boland	10/18/10 Full Day
	<p>In light of the National Academy of Science report on forensic science and the many laboratories striving for accreditation, the requirement for complete and thorough methods validation is becoming imminent. For this reason, this workshop is designed to provide attendees with an overview of the validation process. Experienced instructors will provide detailed lectures regarding the importance of validating a method and its relevance to the accreditation process. Further topics to be discussed include the parameters commonly associated with methods validation, current MSMS guidelines as related to forensic analysis, and level of uncertainty with regard to analytical measurements. After the fundamental concepts are presented, instructors will focus on the various validation steps required for analytical techniques, specifically immunoassay and LCMSMS. Attention will also be directed towards the validation of alternative matrices. To conclude, the future of Forensic Toxicology in terms of accreditation will be discussed with the hopes of generating questions and input from attendees.</p>		
W - 3	Use of Pharmacogenetics in Personalized Pain Management	Saeed Jortani Elaine Stauble	10/18/10 Morning
	<p>Opioids and NSAIDs are the primary pharmacological tools for pain management. Opioids or NSAIDs (alone or in combination) are used to treat a wide spectrum of pain intensities. Clinically useful opioids are capable of producing a wide variety of desired effects, and severe side effects involving the respiratory system, gastrointestinal tract, cardiovascular system, and mental processes. This workshop will focus on the postoperative pain management using opioids, and the role of genetic variations in metabolism and clinical efficacy of opioids will be discussed. Emphasis will be on codeine and hydrocodone as two of the most popular analgesics used clinically.</p>		
W - 4	Getting the Most from ELISA: Tips and Tricks for the Professional Toxicologist	Christine Moore Jennifer Limoges	10/18/10 Morning
	<p>ELISA testing for drugs in various biological matrices is carried out by the majority of forensic laboratories. While the principles of ELISA are well known by professional laboratory personnel, the utility of cross reactivity, understanding discriminatory points, and the manipulation of sensitivity to create robust assays are areas which have not been well targeted. The workshop will provide the attendee with tips and tricks for the laboratory which will improve routine assays and allow personnel to troubleshoot batch failures by systematically evaluating potential problems.</p>		
W - 5	DFSA Applications and Interpretations	Lauren Marinetti Mark A. LeBeau	10/18/10 Afternoon
	<p>This case-oriented workshop will focus on how toxicologists apply pharmacological and toxicological principles in drug facilitated sexual assault cases. Challenges and solutions in DFSA-related casework will be presented. Pre-registered attendees will receive a complementary copy of the January 2010 Issue of Forensic Science Review on Drug-Facilitated Sexual Assault.</p>		
W - 6	Tips, Tricks and Methods from Current Practitioners of LCMS in Toxicology	Raymond Van Orden John Hughes	10/19/10 Full Day
	<p>The last few years we have seen a large increase in the presentation of applications of Liquid Chromatography – Mass Spectrometry (LC/MS) to forensic toxicology. This workshop is intended to supply the participants with proven information and applications on LC/MS uses in the toxicology field by knowledgeable toxicologists. The participants will walk away with proven LC/MS techniques and applications that they can return to their laboratories and apply.</p>		

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W - 7	A Stroll through the Cannabinoid Field: Pharmacology, Therapeutics and Untoward Effects	Justin Poklis Aron Lichman	10/19/10 Morning
	<p>This workshop will focus on the pharmacology of Cannabis sativa, ⁹-tetrahydrocannabinol the primary psychoactive constituent of this plant, and other naturally occurring and synthetic cannabinoids. Basic scientists with expertise in cannabinoid pharmacology from the Department of Pharmacology and Toxicology at Virginia Commonwealth University will present an overview of the pharmacology of marijuana; medical marijuana versus various plant derived, endogenously produced, and synthetic cannabinoids; pre-clinical investigation of cannabinoids; and untoward effects of cannabinoids.</p>		
W - 8	Elemental Analysis and Interpretation of Findings	Laura Labay Barry Logan	10/19/10 Morning
	<p>Elements are ubiquitous in the environment and some play critical roles in the maintenance of proper physiologic function. At times, element(s) is suspected in causing either an illness or a death. To best evaluate this type of circumstance from a toxicological perspective it is important to understand and consider the factors that are involved when processing and interpreting cases of this type. This workshop will provide an introduction to elemental analysis and review some commonly utilized analytical techniques. Best specimen collection and handling practices, signs and symptoms associated with exposure and/or poisoning will be discussed in conjunction with the interpretation of analytical findings. Postmortem cases and occupational and environmental exposures will be considered. Finally, the workshop will conclude by discussing some case examples.</p>		
W - 9	Drug Recognition Expert Program - Principles and Practice	Brianna Peterson Matthew Juhascik	10/19/10 Morning
	<p>The Drug Recognition Expert (DRE) program is coordinated by the International Association of Chiefs of Police with support from the National Highway Traffic Safety Administration and the U.S. Department of Transportation. The program was designed to train law enforcement officers with the knowledge and skills to determine if an individual is under the influence of drug(s), and identify the broad category(ies) of drugs inducing the observable signs and symptoms of impairment. The ability of a toxicologist to understand the components of a DRE examination and how to interpret the DRE matrix can assist in directing their analyses. In addition, these observations are often used to support the toxicology results in court.</p>		
W - 10	The Historical Practice of Medicine in Virginia	Carrie Haglock Julia Pearson	10/19/10 Afternoon
	<p>With the rich early American history that Richmond, Virginia has to offer, it was only appropriate that SOFT 2010 will host a historical workshop. This workshop will be based on the medicinal, medical and surgical procedures of the Colonial period through the Civil War. Resources from Williamsburg and Jamestown to the Battlefield Parks of Richmond will be represented in this half day workshop</p>		
W - 11	Piperazines, Designer Amphetamines and Tryptamines	Frank Peters Sarah Kerrigan	10/19/10 Afternoon
	<p>Piperazines, new designer amphetamines and tryptamines are of growing concern among forensic toxicology laboratories in the United States. This workshop will highlight the prevalence and scheduling of these substances by the Drug Enforcement Administration, and attempt to highlight the drugs of greatest concern. The workshop will provide an overview of the toxicology of these emerging drugs and discuss analytical approaches for detection in toxicological samples.</p>		
W - 12	“To Err is Human... to Identify it is Divine”	Jennifer Limoges Dan Anderson	10/19/10 Afternoon
	<p>The dichotomy of the forensic industry goes something like this... there is no room for error, yet human error is inevitable. The way to balance this reality is to have a strong quality assurance program. Laboratory must first set a strong foundation through comprehensive training programs and well written SOPs. then implement monitoring processes, ranging from daily QC tracking to annual self assessments, to identify and prevent problems. When problems are discovered, the laboratory must be prepared to handle them quickly and effectively. This workshop will assist laboratories in developing and strengthening their QA program using a variety of tools from ISO guides, accreditation programs, and forensic labs with successful quality assurance programs. This will better prepare laboratories for accreditation and also maintain accreditation, and provide customers with the utmost confidence in their product.</p>		