

WS06: The "Postmortem Blood Drug Screen": Analytical and Managerial Approaches

Date: Monday, October 27

Time: 1:30-5:30 PM

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

Rates:

Membership	Early Bird (June 25 - Sep 10)	Late (Begins Sept 11)	Onsite (Begins Oct 9)
Member	\$150	\$175	\$200
Student	\$150	\$175	\$200
Non-Member	\$200	\$225	\$250

Workshop Chairs:

Carl E. Wolf

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Specialty Toxicology Laboratory

Department of Pathology, School of Medicine

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Justin L Poklis

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Department of Pharmacology & Toxicology

Virginia Commonwealth University

Manager of the Pharmacology & Toxicology Mass Spectrometry Laboratory

Abstract

In modern postmortem toxicology laboratories, the "Blood Drug Screen" is a crucial analytical technique used to identify drugs that may have contributed to the cause of death or significantly impacted the circumstances surrounding it. This workshop will provide an in-depth overview of the analytical procedures employed by five major postmortem toxicology laboratories. It will cover specific immunoassay tests and chromatographic methods in use in these various size laboratories, including sample preparation, chromatographic conditions, calibration, and quality control procedures. Additionally, the workshop will address challenges associated with these methods, regulatory considerations, and the increasing variety of psychoactive substances, all in relation to the "Blood Drug Screen". At the conclusion of the session, there will be a Q&A period to discuss reporting, personnel, laboratory concerns, and available resources.

Learning Objectives

1. Be aware of the challenges and limitations of methods used for postmortem blood drug screening.
2. Describe the different analytical techniques used for the analysis of postmortem blood in a modern toxicology laboratory.

3. Recognize the uniqueness of laboratory circumstances based on the size of the laboratory and need when screening postmortem blood.

Speakers

Justin L. Poklis

Department of Pharmacology & Toxicology

Virginia Commonwealth University

Manager of the Pharmacology & Toxicology Mass Spectrometry Laboratory

Sara K. Dempsey

Chief of Forensic Chemistry

Dallas County Southwestern Institute of Forensic Sciences

Jesse L. Patterson

Forensic Scientist Senior - Toxicology

Virginia Department of Forensic Science

Kimberly L. Samano

Chief Toxicologist

Medical Examiner's Office at Johnson County, KS

Torki Al Zughaibi

Assistant Professor

King Abdulaziz University Jeddah, Saudi Arabia

Erin L. Karschner

Forensic Toxicologist

Division of Forensic Toxicology

Armed Forces Medical Examiner System

Defense Health Agency

Workshop Agenda

Time	Topic	Speaker
1:30-1:45 PM	Introduction	Justin L. Poklis
1:45-2:20 PM	Blood Drug Screen: Dallas County	Sara K. Dempsey
2:20-2:55 PM	Blood Drug Screen: Commonwealth of Virginia	Jesse L. Patterson
2:55-3:30 PM	Blood Drug Screen: Johnson County, KS	Kimberly L. Samano
3:30-4:00 PM	Break	
4:00-4:35 PM	Blood Drug Screen: Saudi Arabia	Torki Al Zughaibi
4:35-5:10 PM	Blood Drug Screen: Armed Forces Medical Examiner System	Erin L. Karschner
5:10-5:30 PM	Q&A	Speakers