WS 13: A Forensic Toxicologists Guide to Pharmacology Studies

Audience Knowledge: Intermediate

Workshop Chairs

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Abstract

Pharmacology forms the basis of interpretive forensic toxicology. For most routinely encountered drugs, key pharmacological parameters are well established and available via the scientific literature. However, for the novel drug categories, this data is limited, if at all available. Access to research sites to determine the pharmacological parameters of interest is beyond the resource of most forensic toxicology laboratories.

The workshop aims to provide attendees with an understanding of the tools required to conduct laboratory based pharmacological experimentation on novel drugs (NPS) using traditional drugs as controls. Experienced speakers, from a variety of laboratories, will explain various in-vitro and vivo techniques used to establish major pharmacokinetic (lipophilicity, plasma binding, metabolism), pharmacodynamic (receptor activity and binding) and pharmacogenomic drug properties.

An understanding of general pharmacology will be beneficial for attendees of this workshop.

Speakers

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Workshop Agenda

Time	Topic	Speaker
08:00 AM - 08:10 AM	Opening remarks	Scott
08:10 AM - 08:50 AM	Plasma Protein Binding & Lipophilicity	Nisbet
08:50 AM - 09:30 AM	Metabolism using Hepatocytes & HLMs	Walton, Green
09:30 AM - 10:00 AM	Pharmacogenomics	Green
10:00 AM - 10:30 AM	Break	
10:30 AM - 11:00 AM	Receptor Binding	Walton
11:00 AM - 11:30 AM	Receptor Activity Assays	Green
11:30 AM - 11:55 AM	Ion Channel Assays	Norman
11:55 AM - 12:00 PM	Closing Remarks	Scott