

## **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

Karen Scott

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### Workshop Agenda

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>08:00 AM - 08:10 AM</b>	Opening remarks	Scott
<b>08:10 AM - 08:05 AM</b>	Plasma Protein Binding & Lipophilicity	Nisbet
<b>08:50 AM - 09:30 AM</b>	Metabolism using Hepatocytes & HLMs	Walton, Green
<b>09:30 AM - 10:00 AM</b>	Pharmacogenomics	Green
<b>10:00 AM - 10:30 AM</b>	Break	
<b>10:30 AM - 11:00 AM</b>	Receptor Binding	Walton
<b>11:00 AM - 11:30 AM</b>	Receptor Activity Assays	Green
<b>11:30 AM - 11:55 AM</b>	Ion Channel Assays	Norman
<b>11:55 AM - 12:00 PM</b>	Closing Remarks	Scott