

## **WS 17: Global Perspectives on Oral Fluid Drug Testing in DUID Investigations**

Audience Knowledge: Intermediate

### **Workshop Chairs**

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### **Abstract**

Oral fluid has emerged as an important biological matrix for detecting drugs in driving under the influence of drugs (DUID) investigations and other forensic toxicology applications. Over the past two decades, multiple countries have implemented oral fluid drug testing programs with differing legislative frameworks, roadside screening strategies, laboratory confirmation protocols, and interpretive approaches.

This workshop is designed to provide attendees with a structured understanding of how oral fluid drug testing programs are developed and implemented across jurisdictions, with emphasis on transferable best practices and key decision points.

The modern use of oral fluid drug testing in impaired-driving investigations began in Australia, where roadside oral fluid drug testing programs were implemented for more than twenty years. These programs were subsequently adopted in a number of European jurisdictions and more recently throughout the Americas, including Brazil and the United States. In the United States, oral fluid drug testing programs are relatively new, with the first statewide implementation beginning in 2018.

This workshop provides an international overview of oral fluid drug testing programs in several regions, including Australia, Europe, South America, and the United States. Presentations focus on the scientific foundations of oral fluid drug testing, the distinction

between roadside oral fluid screening devices and laboratory-based confirmatory testing, and the practical implementation of oral fluid testing programs within different legal and policy frameworks for DUID investigations.

Rather than primarily presenting isolated regional data sets, the workshop is structured to highlight common themes, critical differences, and practical considerations that influence program design, including device selection, cutoff strategies, and integration into DUID enforcement frameworks, as well as key differences in legal thresholds for testing (e.g., probable cause requirements versus random or checkpoint-based testing), and how these differences influence enforcement practices, deterrence, and overall program effectiveness.

The workshop begins with an overview of the pharmacological basis of drug detection in oral fluid and key analytical considerations for oral fluid drug testing, including the critical distinction between roadside screening and confirmatory laboratory analysis. Subsequent presentations examine national and regional oral fluid drug testing programs, including roadside screening technologies, confirmatory laboratory methods, analytical cutoffs, and the integration of oral fluid drug testing into impaired-driving enforcement and DUID investigations.

By bringing together experts directly involved in the development and implementation of oral fluid drug testing programs across multiple regions, this workshop will provide attendees with a comparative international perspective on oral fluid drug testing in DUID investigations. Participants will gain practical insight into program implementation, operational challenges, and best practices, including how to evaluate roadside screening technologies, understand limitations of oral fluid, and effectively integrate oral fluid drug testing into impaired-driving enforcement. The workshop emphasizes comparative analysis and real-world application rather than region-specific data presentation alone.

The workshop concludes with a panel discussion and Q&A addressing scientific, analytical, legal, and operational considerations related to oral fluid drug testing programs worldwide.

The learning objectives for this workshop are as follows: Participants will be able to:

- Differentiate between roadside oral fluid screening and laboratory confirmation
- Compare key elements of oral fluid drug testing programs across diverse international implementation models
- Apply best practices for implementing oral fluid drug testing in DUID investigations under different legal frameworks

This workshop is co-sponsored by the SOFT/AAFS Drugs and Driving Committee and the SOFT/AAFS Oral Fluid Committee.

## **Speakers**

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## Workshop Agenda

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>08:00 AM - 08:30 AM</b>	Scientific Foundations of Oral Fluid Drug Testing: Roadside Screening Versus Laboratory Evidentiary Confirmation	Huestis
<b>08:30 AM - 09:15 AM</b>	Early Implementation of Oral Fluid Drug Testing Programs: Design, Device Selection, and Operational Lessons from Australia	Gerostamoulos
<b>09:15 AM - 10:00 AM</b>	Oral Fluid Drug Testing in Europe: Legal Frameworks, Roadside Screening, and Confirmatory Strategies – A Belgian Perspective	Wille
<b>10:30 AM - 11:10 AM</b>	Oral Fluid Drug Testing in South America: Epidemiological Applications and Emerging Forensic Perspectives from Brazil	da Costa
<b>11:10 AM - 11:50 PM</b>	Implementation of Oral Fluid Drug Testing in the United States: Translating Pilot Projects into Practice	Harper