



### **A169 Improved Location of Forensic Evidence Through Implementation of the Scientific Working Group on Dog and Orthogonal Detector Guidelines (SWGDOG)**

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After attending this presentation, attendees will have a better understanding of how establishing best practices for detection teams is improving interdiction efforts as well as courtroom acceptance of dog alert evidence by improving the consistency and performance of deployed detector dogs.

This presentation will impact the forensic science community by providing a better understanding of how improving the consistency and performance of deployed detector dog teams and their optimized combination with emerging electronic detectors improves the collection of evidence by maximizing the discovery of trace evidence in an efficient, cost effective manner while minimizing the collection of samples not relevant to an investigation.

The Scientific Working Group on Dog and Orthogonal detector Guidelines (SWGDOG) are being developed by a membership of respected scientists, practitioners, and policy makers representing diverse backgrounds. SWGDOG is cooperatively funded by the NIJ, FBI and DHS with general meetings held biannually since 2005. This project was undertaken as a response to concerns coming from a variety of sectors including law enforcement and homeland security regarding the need to improve the performance, reliability, and courtroom defensibility of detector dog teams and their optimized combination with electronic detection devices.

The approval of each subcommittee best practice document takes six months to complete including a two month period of public comments. The nine SWGDOG subcommittees and target timetable for posting of the best practice guidelines are as follows: (1) Unification of terminology (Part A - April '06; Part B - October '06; Part C - March '07; Part D - August '07; Part E - March '08; Part F – September '08); (2) General guidelines (April '06) - Publication in FSC October '06) First Revision (September '08) Second Revision (September '09); (3) Selection of serviceable dogs and replacement systems (October '06); (4) Kenneling, keeping, and health care (October '06); (5) Selection and training of handlers and instructors (October '06); (6) Procedures on presenting evidence in court (October '06); (7) Research and technology (March '07); (8) Substance dogs: Agriculture; Accelerants; Drugs; Explosives; (August '07) Human remains (September '09); and, (9) Scent dogs: Scent identification; Search and Rescue; Trailing dogs; Tracking dogs (Part A - March '07; Part B – August '07; Part C – March '08; Part D – September '08; Part E – March '09; Part F – September '09)

Establishing consensus based best practices for the use of detection teams is providing a variety of benefits to local law enforcement and homeland security. Benefits include improved interdiction efforts as well as courtroom acceptance by improving the consistency and performance of deployed teams and optimizing their combination with electronic detection devices. This paper also provides an update of ongoing studies involving the identification of odorants used by certified law enforcement detector dogs and using these signature chemicals for instrumental detection to reliably locate forensic specimens including drugs, explosives and human scent.

The current success of SWGDOG is being manifest by a shift of some national canine organizations to adopt the approved best practice guidelines proposed. Though SWGDOG guidelines are not mandatory, this positive change is the ultimate goal of the working group. The continued approval and revision of SWGDOG documents has received an increased number of public responses and input which has shaped the documents making them publicly vetted. While it is not technically part of the scope of SWGDOG, a future accreditation program based on SWGDOG guidelines is being proposed to further facilitate the adoption of these SWGDOG guidelines.

#### **Detector Dog, Evidence Recovery, SWGDOG**