



SUCCESS STORY

NIJ and Florida International University

NIST's Dogs and Sensor Subcommittee Builds on Achievements by SWGDOG

Moving Knowledge from Research to Impact



“SWGDOG set the stage and provided a strong foundation of canine detector best practices that the OSAC Dogs and Sensor Subcommittee is currently developing into scientifically robust standards. The Subcommittee continues to uphold SWGDOG’s mission of defining credibility and enabling improved reliability and performance of detector dogs.”

—Dr. Cynthia M. Otto, DVM, PhD, BS
Director, Penn Vet Working Dog Center, School of Veterinary Medicine; NIST OSAC Dogs and Sensor Subcommittee Member

Synopsis of Problem and Solution

Dog “detector teams” support law enforcement and first responders in a variety of applications ranging from drug and contraband interdiction to locating human remains. Dogs offer a useful screening tool when trained and managed appropriately. Unfortunately, the lack of peer-reviewed research combined with recent media coverage of dog detection failures has raised concerns about the effectiveness of dog-based detection and its admissibility in court. Furthermore, the widespread application of dog detector teams makes the standardization of protocols difficult; many national canine organizations have developed standards but only for their respective programs.

With National Institute of Justice (NIJ) funding support, Dr. Kenneth G. Furton organized the Scientific Working Group for Dog and Orthogonal Detector Guidelines (SWGDOG). SWGDOG was a professional forum of 55 experts from academia, law enforcement, military, and canine organizations. Partnering with local, state, federal, and international stakeholders, the group developed consensus-based best practice guidelines for dog detector teams. SWGDOG identified research priorities in the dog detector community and created best practice guidelines to ensure the applicability of these documents for a variety of stakeholders. SWGDOG developed and approved 39 guidelines in nine different subject areas, including common terminology, service dog selection, and training protocols.

In 2014, Scientific Working Groups transitioned to Organization of Scientific Action Committees (OSACs) for Forensic Sciences within the National Institute of Standards and Technology (NIST). The next generation of SWGDOG emerged as the [Dogs and Sensor Subcommittee](#), chaired by Dr. Furton. This OSAC group is currently developing SWGDOG’s 39 best practice guidelines into scientifically validated standards through the American Academy of Forensic Sciences (AAFS) Standards Board (ASB) process. To date, one technical report has been approved, and five standards have been submitted to the ASB. This rigorous standards development process improves quality with input from experts, including human factors and quality assurance. These standards are aimed to improve training and operational methods that enhance the credibility of testimony in a court of law.

Key Benefits

Standardization in dog-related sensor practices

- ▶ improves the performance of dog detector teams with higher levels of consistency in the training, maintenance, and selection of dogs used for multiple types of detection;
- ▶ integrates input from multiple stakeholder groups
- ▶ provides no-cost guidelines and a database of published literature.



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More Information

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NIJ-funded Research

During 2004–2008, NIJ funding supported the organization of the SWGDOG group and facilitated the coordination of semiannual member meetings, where best practice documents were developed. These documents were vetted at the SWGDOG meetings and then released to the public for review and feedback. NIJ support enabled the assembly of detector dog stakeholders and the subsequent development of best practice guidelines. In addition to NIJ funding, SWGDOG was supported by the Department of Homeland Security, the FBI, and the Technical Support Working Group of the Combating Terrorism Technical Support Office.

Bringing Research to Practice

- ▶ One Technical Report ([Dogs and Sensors Terms and Definitions](#)) has been approved and published by the ASB in 2017, and five standards (Dogs and Sensors Pre-Scented Canines-Location Check, Dogs and Sensors Pre-Scented Canines-Aged Trail Search, Dogs and Sensors Tracking/Trailing One of More Persons Based on Last Known Position, and Standard for Disaster Live Human Detection Dogs Programs- Training, Certification, and Documentation [2]) were recently submitted to the ASB.
- ▶ Numerous national canine organizations have adopted part or all of the SWGDOG best practice guidelines into practice, including the [California Narcotic Canine Association](#) (CNCA) and the [National Police Canine Association](#) (NPCA).
- ▶ [SWGDOG’s website](#) disseminates best practice guidelines and invites feedback from the public.
- ▶ In 2013, the U.S. Supreme Court cited SWGDOG guidelines in [Florida v. Harris](#), which ruled that an officer had probable cause to conduct a vehicle search based on a narcotics dog’s alert.

The Future

The OSAC Dogs and Sensor Subcommittee is in the process of developing SWGDOG best practice guidelines into ASB-approved standards. The subcommittee is currently prioritizing five documents, including general canine guidelines and terminology, and they hope to develop most of the 39 SWGDOG best practice guidelines into standards in the next few years. Dr. Furton hopes that eventually, there will be widespread adoption of these standards and that a process whereby organizations with dog detector teams can be certified will be developed.

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