

# OSAC RESEARCH NEEDS ASSESSMENT FORM



**Title of research need:**

**Keyword(s):**

**Submitting subcommittee(s):**  **Date Approved:**

*(If SAC review identifies additional subcommittees, add them to the box above.)*

## Background Information:

1. Does this research need address a gap(s) in a current or planned standard? (ex.: Field identification system for on scene opioid detection and confirmation)

Obtaining a clear understanding of how detector dogs actually work and what variables affect their probability of detection is critical in all standards being developed so that there is a correct understanding of their capabilities and limitations. This research need includes actual experimentation on training methodologies, types of reinforcement, relationship between training and operations performance and questions on generalization and concept formation.

2. Are you aware of any ongoing research that may address this research need that has not yet been published (e.g., research presented in conference proceedings, studies that you or a colleague have participated in but have yet to be published)?

limited

3. Key bibliographic references relating to this research need: (ex.: Toll, L., Standifer, K. M., Massotte, D., eds. (2019). Current Topics in Opioid Research. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88963-180-3)

Lazarowski L, Krichbaum S, DeGreeff LE, Simon A, Singletary M, Angle C, Waggoner LP. (2020) Methodological considerations in canine olfactory detection research. Frontiers in Veterinary Science doi: 10.3389/fvets2020.00408

4. Review the annual operational/research needs published by the National Institute of Justice (NIJ) at <https://nij.ojp.gov/topics/articles/forensic-science-research-and-development-technology-working-group-operational#latest>? Is your research need identified by NIJ?

No

5. In what ways would the research results improve current laboratory capabilities?

A thorough understanding of how the dogs are presently working will yield to better training protocols that are effective for current detection threats. A clear understanding of variables that affect a canine's detection capability will enhance understanding of limitations for better manipulations of established training processes.

6. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

The research would improve understanding of the subcommittee to create superior best practice standard documents used by the canine community. Improve training, K9 handling, better understanding of source storage/handling of training aids.

7. In what ways would the research results improve services to the criminal justice system?

The improved best practice standards will result in superior canine performance, resulting in a law enforcement tool that is more accurate and reliable.

8. Status assessment (I, II, III, or IV):

II

	<b>Major gap in current knowledge</b>	Minor gap in current knowledge
<b>No or limited</b> current research is being conducted	<b>I</b>	<b>III</b>
<b>Existing</b> current research is being conducted	<b>II</b>	<b>IV</b>

*This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.*