

# OSAC RESEARCH NEEDS ASSESSMENT FORM



**Title of research need:** Standard Forensic Speaker Recognition Test Data

**Describe the need:** Development of a standard forensic speaker recognition dataset for use in methodology validation and personnel training.

**Keyword(s):** Forensic speaker recognition testing data samples realistic standardized

**Submitting subcommittee(s):** Speaker Recognition **Date Approved:** February 26, 2021

*(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)

Yes – it is necessary for planned forensic speaker recognition (FSR) technique validation and training standards.

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)?

While some FSR testing databases exist, they are of limited size, limited scope, and/or have limited access. Most are focused on general speaker recognition problems, or specific non-forensic niches cases. None are accepted as a standard for forensic technique validation.

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)

TBD

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?

Development of standard FSR test data would allow the meaningful validation and comparison of FSR techniques, and support the standardization of FSR training, analysis, and reporting.

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

A standardized set of FSR test data would help researchers focus their activities on scenarios of interest to the subcommittee, accelerating the development of systems pertinent to forensic activities.

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

A standardized data set is a key part of certifying the validity and performance of new and existing FSR methods, and would also help in identifying ineffective or fraudulent methods.

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

I

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

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