

OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need: Personnel Selection and Retention of Friction Ridge Science Practitioners

Describe the need:

To research ways in which Forensic Science Providers (FSP's) can optimize

- 1) the recruitment and selection of qualified candidates to the field of Friction Ridge Science (FRS),
- 2) the training of practitioners to competency/proficiency in their respective FRS disciplines, and
- 3) the retention of FRS practitioners within an FSP.

Areas in need of research include, but are not limited to

- A. Determination of baseline "candidate personas" for each FRS discipline, including
 - a. the core tasks within the science's disciplines, and the requisite abilities/traits needed to carry out the core tasks, and
 - b. the preferred qualities to perform the tasks well (e.g., troubleshooting, cross-discipline collaboration, leadership potential)
- B. Establishment of best practices for recruitment of FRS personnel, including effective means of attracting candidates that
 - a. best fit the "candidate personas"
 - b. best fit the working culture of an FSP, and
 - c. demonstrate leadership potential within an FSP
- C. Establishment of assessment tools or research on existing tools, to evaluate candidates':
 - a. ability to perform core tasks, moreover, to perform them well
 - b. ability to best fit within the working culture of an FSP
 - c. leadership potential within the context of an FSP
- D. Establishment of best practices for retention of FRS personnel, to include, but not be limited to
 - a. establishment of best practices for initial training and continuing education of FRS personnel
 - b. establishment of necessary resources required to deal with work-related stress and/or trauma that is inherent to work in the forensic sciences
 - c. establishment of incentives, such as tenure-based rewards, developmental opportunities, and higher quality work environments

Keyword(s): Personnel selection, personnel retention, pre-employment assessment, candidate personas

Submitting subcommittee(s): Friction Ridge **Date Approved:** June 27, 2022

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)

While much research has been done in the area of general employee selection and retention within the field of Human Resources Management, the factors addressing the needs specific to forensic science positions, and friction ridge positions in particular, are still in development.

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)?

A primer has been written detailing the hiring, training and retention practices done in two agencies, and addressing the general needs for such practices in the field but is currently in peer-review and has not yet been published. Additionally, no specific research has been done regarding the methods of hiring, training and retention of forensic science practitioners, to date.

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)

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?

Would help with "Determination of the optimal content and frequency of proficiency tests to evaluate performance and mitigate risk" and "Understanding of the cognitive processes involved in pattern recognition as applied to forensic comparative analysis". This does not fit in directly with other stated priorities but is still of vital importance to a well-functioning discipline.

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

Research into all three areas promises to reduce the time and resources needed to procure and train practitioners and may contribute to continued retention of competent/proficient practitioners.

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

N/A

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

Hiring and retention of qualified personnel will necessarily improve the services those personnel provide.

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.