OSAC RESEARCH NEEDS ASSESSMENT FORM

Title of research need: Composite quantification of contextual decedent ID criteria

Keyword(s): Disaster victim identification, mass fatality, identification

Submitting subcommittee(s): MDI   **Date Approved:** 2/28/2021

(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)

No.

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)?

No.

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)

None.

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?

There is currently no means to quantify the individualistic value of contextual identifiers, and thus no measure of confidence associated with contextual decedent identifications. There is a need for development of population-level likelihood values for human characteristics/circumstances that are regularly used in support of identification methods (including scars/marks/tattoos, body location, etc).
 The proposed research would help with interpretation of the various disparate identification data during the reconciliation process of a DVI response.

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

The research would provide quantitative support of the individualistic value of contextual identifiers.

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

> The development of population-level likelihood values for human characteristics/circumstances would provide scientific support for the use of contextual identifiers for human identification.

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

		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

Status assessment box: I

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