



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. Description of research need:

Is there or should there be a required number of points of concordance between the postmortem evidence and antemortem data to establish a positive dental identification? Survey ME/Cs and forensic dentists to query. How does the type and quality of antemortem dental data affect the identification process.

2. Key bibliographic references relating to this research need:

Establishing personal identification based on specific patterns of missing, filled, and unrestored teeth.

Adams BJ. J Forensic Sci. 2003 May;48(3):487-96.

Dental misidentification on the basis of presumed unique features.

Kieser JA, Firth NA, Buckley H. J Forensic Odontostomatol. 2001 Dec;19(2):36-9.

Person identification by means of a single unique dental feature.

de Villiers CJ, Phillips VM. J Forensic Odontostomatol. 1998 Jun;16(1):17-9.

3a. In what ways would the research results improve current laboratory capabilities?

Could increase or decrease the time and effort spent in making dental identifications and amount of antemortem dental data needed to compare to the postmortem evidence.

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

Could establish a minimum threshold for the number of points of concordance needed to make a dental identification and the type and quality of antemortem records necessary.

3c. In what ways would the research results improve services to the criminal justice system?

To provide the trier of fact a quantitative assessment of the number of points of concordance that was established to make a dental identification and how it correlated to the minimum number required.

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

III

	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.

Approvals:

Subcommittee

Approval date:

(Approval is by majority vote of subcommittee. Once approved, forward to SAC.)

SAC

1. Does the SAC agree with the research need? Yes No

2. Does the SAC agree with the status assessment? Yes No

If no, what is the status assessment of the SAC:

Approval date:

(Approval is by majority vote of SAC. Once approved, forward to NIST for posting.)