Title of research need: Identification of odorant chemicals present in and above targets

Keywords: Odorant chemicals, canine, human remains, human scent, explosives, drugs

Submitting subcommittee(s): Dogs and Sensors  Date Approved: 08242016

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

Background information:

1. Description of research need:

Research is needed to identify the odorants, volatile organic compounds that are present in target odor compounds particularly human remains, as well as explosives, drugs, and human scent.

2. Key bibliographic references relating to this research need:


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

Research would result in improved understanding in how to train canines more effectively, safely, and efficiently.
3b. 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 be used in drafting standards related to training and certification.

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

The standards will result in improved detector canine operational performance as a result of an expected increase in more effective and efficient canine training.

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

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<thead>
<tr>
<th>Major gap in current knowledge</th>
<th>Minor gap in current knowledge</th>
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<tbody>
<tr>
<td>No or limited current research is being conducted</td>
<td>I</td>
</tr>
<tr>
<td>Existing current research is being conducted</td>
<td>II</td>
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</tbody>
</table>

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.
<table>
<thead>
<tr>
<th>Subcommittee</th>
<th>Approval date: 08242016</th>
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(Approval is by majority vote of subcommittee. Once approved, forward to SAC.)

<table>
<thead>
<tr>
<th>SAC</th>
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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.)