

Special Topic: Ag x BTO

BACKGROUND:

The Defense Advanced Research Projects Agency (DARPA) is looking for innovative ideas to develop novel capabilities for national security. DARPA's Biological Technologies Office (BTO) wishes to catalyze future efforts to defend agriculture against threats both naturally occurring and manmade. Areas of interest include: (1) advances to early warning systems for chemical and biological threat surveillance and detection; (2) rapid-response agricultural countermeasures to defend against threats; (3) massively accelerated and expanded crop engineering for long-term threat defeat; (4) integrated and comprehensive threat prediction and modeling for our agricultural systems; and (5) novel methods to assess the occurrence of human intervention and to attribute provenance. Ag BTO employs an acquisition strategy to encourage participation by new or non-traditional submitters that bring innovations to BTO.

This Special Topic Area (STA) is a supplementary, limited period announcement to solicit, collect, and assess disruptive solutions, and make those solutions available through rapid acquisition pathways. This STA will be open for submissions from 1 June 2025 through 31 August 2025.

DARPA may select teams to attend a workshop and follow-on Pitch Day hosted in the DC area, based on the submissions from this Special Topic Area.

The ERIS Master Solicitation can be found here:

<https://sam.gov/opp/1e287185b7694348881c2d99dcf0e8bf/view>

WARNING: DO NOT SUBMIT VIA THIS PAGE: This Special Topic Opportunity Page provides the content requirements and instructions for your submission. The actual submission will be made through the ERIS Marketplace, located [here](#).

SUBMISSION INSTRUCTIONS:

The submission & review process for this Special Topic:

Step I – Video pitch submission through the [ERIS Marketplace](#) Opportunity page. **Step II** – Video submissions are assessed in accordance with the ERIS Master Program Solicitation assessment process and rubric.

- Submissions will only be accepted via the ERIS Marketplace, located [here](#).
 - After navigating to the ERIS Marketplace Page, click on the “Request ERIS Account” button to register for an ERIS account.
 - Once registered, click on the “Access ERIS” button to begin the submission workflow.
- To submit your video pitch to Special Topic: Ag BTO Pitch Day, the title of your submission must start with “Ag BTO” and then continue with your solution title (e.g., Ag BTO: High-Tempo Surveillance Network).

- For the content of the video submission, all submissions must adhere to the ERIS Marketplace guidelines and submission instructions in Section VII of the ERIS Master Program Solicitation, located [here](#). The ERIS submission checklist is available via the ERIS Marketplace website. Each submission must include:
 1. 7-minute pitch video
 2. ERIS supplemental slides
 3. Submission form
- Video submissions should address one problem statement from the list below. Videos that do not address one, or address multiple, of the technical areas in the problem statement below will not be assessed.
- If the performer desires to propose against multiple problem statements, separate proposal submissions are required. There is no limit on the number of solutions each performer can submit
- Performer submissions should not include Human Subjects Research (HSR) and/or Animal Subjects Research (ASR). If desired, the submitter and the Government can discuss ASR/HSR, as applicable, after the Marketplace assessment is conducted.

PROBLEM STATEMENT:

The goal of Ag BTO is to fund proposals that catalyze future innovation in agricultural defense throughout the supply chain. Toward this goal, Ag BTO's objective is to spark innovation regarding defending our nation's food supply, **to include crops**, promoting national security interests. Proposed work will serve as a springboard for further program development at DARPA if compelling. Submitters should demonstrate pushing the state of the art forward in at least one of the Technical Areas below.

1. Advances to early warning systems for chemical and biological threat surveillance, where desired attributes include: Geo-spatial resolution, temporal resolution, autonomous operation, and real-time readout.
2. Rapid-response agricultural countermeasures to provide short-term defense against current and future threats, buffering against **crop loss and** threat expansion via protection and containment.
3. Massively accelerated and expanded crop engineering for long-term threat defeat including both prophylactic protection and long-term sustainment approaches.
4. Integrated and comprehensive prediction and modeling of threat pathogenicity and countermeasure effectiveness for our agricultural systems.
5. Novel methods to assess the occurrence of human intervention and to attribute provenance, to support stakeholder decision making in the attribution triaging workflow.

Submitters are responsible for reviewing DARPA-PS-25-05 and any subsequent amendments before preparing a video submission. Video submissions for this Special Topic Area must follow the compliance check and assessment process in Sections VIII and IX of the latest amendment to DARPA-PS-25-05 and are subject to its terms and conditions.