



# NCITE

NATIONAL COUNTERTERRORISM,  
INNOVATION, TECHNOLOGY,  
AND EDUCATION CENTER

A U.S. DEPARTMENT OF HOMELAND SECURITY CENTER OF EXCELLENCE

## National Counterterrorism Innovation, Technology and Education Center

### 2022/2023 NCITE RESEARCH PROJECTS REQUEST FOR PROPOSALS

Issue date: **February 1, 2022**

Letter of intent due date: **February 18, 2022**

Proposal due date: **March 15, 2022**

NU RAMP ONLINE SUBMISSION

## About NCITE

The National Counterterrorism Innovation, Technology, and Education Center is a consortium of universities and industry partners whose mission is to conduct research, education, and workforce development activities that will respond to challenging problems and offer innovative solutions to issues faced by counterterrorism and targeted violence prevention professionals – both in the public and private sectors. Led by the University of Nebraska at Omaha, the focus of NCITE is to support operationally relevant research and development efforts.

More information on NCITE may be found at:  
<https://www.unomaha.edu/ncite/>

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## NCITE Research Grant Program Overview

The research objective of NCITE is to bring together capabilities of colleges, universities, federal laboratories, industry, and nonprofit organizations to help thwart terrorism as part of NCITE's role as DHS' trusted partner for counterterrorism and terrorism prevention research.

NCITE's research seeks to innovate, educate, and create new counterterrorism and prevention strategies while building a workforce pipeline where it's desperately needed: in STEM and Homeland Security fields.

Our mission is to make these research findings relevant and ready. Our hope is to help America's Homeland Security frontline be known as first in-class in terrorism and targeted violence prevention.

Moving from year 2 to 3, NCITE is requesting proposals focused primarily on our stated research themes (see below). Further, this request for proposals is offered only to institutes of higher education as research leads. Non-government organizations, individual consultants, and technology partners are encouraged on collaborative proposals led by universities, but such non-university partners are not required for funding consideration. Moreover, as NCITE is sponsored from Science and Technology's Office of University Programs, the intent of this call is to spark innovation from university labs and research teams. In 2022-2023, research projects that prioritize challenges outlined in themes 1 and 4 will be prioritized for funding:

The NCITE focus includes:

- 1. The nature of counterterrorism and targeted violence operations (priority area for 2022-2023)**
2. The nationwide suspicious activity reporting initiative
3. Terrorism and targeted violence prevention and program evaluation
- 4. Counterterrorism and targeted violence workforce development (priority area for 2022-2023)**

With those objectives in mind, NCITE requests proposals intended to address research questions/challenges that NCITE, DHS, and/or its partners in the Homeland Security Enterprise (HSE) have posed. NCITE will lead a scientific review of proposals and facilitate a DHS relevancy review after scientific merit has been evaluated.

## Letter of Intent

NCITE requests a letter of intent sent on or before February 18, 2022 to Beth Stinebrink, Project Manager at [BStinebrink@unomaha.edu](mailto:BStinebrink@unomaha.edu). The letter should include:

- The lead university/institution name,
- The name of principal investigator,
- Any partnering institution(s) or organization(s), if known,
- The challenge area addressed,
- The theme of your proposal.



## Estimated Funding

Pending receipt of funding, NCITE intends to award an unspecified number of projects conducted from approximately July 1, 2022 through 12-36 months following grant award, with the opportunity for continuation pending performance and DHS funding availability. We expect to award approximately 3-4 new projects in 2022-2023. Average award in 2021-2022 for a one-year period of performance was \$155K, and individual awards varied depending on level of effort and evaluation of impact to DHS mission areas.

## Eligible Grantees

As noted above, organizations eligible to receive NCITE grants for 2022-2023 are institutes of higher education for research and education projects. NCITE does not award grants to individuals, private non-higher education organizations, or to federal, state, county, or local government entities — though those groups may be partners in the work conducted by the grant recipient. The proposal's designated principal investigator must be an employee of the organization applying for an NCITE grant.

## Eligible Projects

In 2022-2023, NCITE will fund projects that should either generate new knowledge (research projects) or inspire and develop the current and/or future HSE workforce.

Funding decisions will be based on how well an invited proposal meets the evaluation criteria detailed at Appendix C. Quantitative scoring of the evaluation criteria will be provided by scientific reviewers and then advanced to DHS for a relevancy review. The [September 2019 DHS Strategic Framework for Countering Terrorism and Targeted Violence](#) and the [2021 National Strategy for Countering Domestic Terrorism](#) identified a number of challenge areas needing additional research and development:

ALL SELECTED PROJECTS MUST BE ABLE TO COMPLETE THE PROPOSED RESEARCH USING SIMULATED AND/OR SYNTHETIC DATA OR VIA NON-DHS DATA SOURCES. PROJECTS NEED TO IDENTIFY THEIR ANTICIPATED DATA SOURCES.

DHS is unable to provide operational data suitable for algorithm development and testing to performers under this award. Each proposal must identify how and where it will acquire real, simulated, or other synthetically generated data.



## Challenge Area 1: Nature of Counterterrorism and Targeted Violence Operations

1. What is the nature of novel terrorism and targeted violence threats against the United States? What novel terrorist violence techniques and targets will emerge in the next 3-5 years? DHS Objectives Addressed:
  - 1.1.6: Detect anomalies & provide early warning of terrorist plots (e.g., weapons of mass destruction plots).
  - 2.2.1: Prevent insider threats (e.g., aviation insiders, rapid radicalization of security workforce).
  - 4.2.1: Enhance security of soft targets.
2. How can terrorists make malign use of emerging technologies (e.g., Unmanned Aircraft Systems (UAS), cryptocurrencies, deep fakes, 3D printing), and what groups and/or individuals are most likely to adopt them? DHS Objectives Addressed:
  - 1.1.4: Maximize actionable transportation-related intelligence.
  - 1.1.5: Assess technological advances and risks from emerging technologies (e.g., UAS).
  - 1.2.1: Identify the key technologies to enhance our homeland security posture.
  - 2.1.6: Disrupt illicit trade activity that funds terrorism.
  - 4.3.1: Further develop public awareness campaigns addressing misuse of UAS & other emerging technologies.
3. What emerging technologies can improve information sharing to counter terrorism and targeted violence? DHS Objectives Addressed:
  - 1.1.7: Improve information sharing across the Department and with SLTT partners.
  - 1.3.1: Enhance intelligence sharing for JTTFs.
  - 2.1.2: Prioritize interoperability of information sharing.
  - 2.1.5: Stop WMD from entering the country (improve info sharing IRT WMD).
  - 2.3.2: Improve international coordination of counterterrorism efforts.
  - 2.4.1: Improve information flow to maritime field operators.
  - 2.4.2: Integrate maritime operations with other counterterrorism actors.
  - 3.1.2: Increase societal awareness of violent extremism & mobilization to violence.
  - 4.2.4: Integrate frontline operator capabilities w/DHS response & recovery efforts in the event of a WMD terrorist incident.
4. What emerging technologies can augment operations against current and emerging threats of terrorism and targeted violence? DHS Objectives Addressed:
  - 1.2.1: Identify the key technologies to enhance our homeland security posture.
  - 1.3.1: Enhance intelligence sharing for JTTFs.
  - 2.1.3: Improve vetting capabilities.
  - 2.2.2: Improve and adapt screening capabilities for travelers, transportation sector workers, and cargo.
  - 2.3.3: Improve international standards for counterterrorism collection and use of passenger data.
  - 4.3.4: Defend against threats from unmanned systems & other emerging technologies.
5. What is the impact of the January 6<sup>th</sup> attack and arrests on domestic terrorism in the United States? What upcoming state, local, tribal, or territorial legislation might impact domestic terrorism in the United States? What is the role of the internet and social media-based violent extremist, conspiratorial, and foreign influence-linked content in influencing the domestic terrorism landscape? What is the recidivism risk of domestic terrorism actors? To what extent and why are we seeing US-based terrorism actors influenced by a mix of different violent extremist ideologies? To what extent are we seeing online, financial, and in-person connectivity between US-based and overseas-based domestic terrorism actors, including travel to conflict zones overseas? DHS Objective Addressed:



- 1.1.7: Improve information sharing across the Department and with SLTT partners.
  - 1.3.1: Enhance intelligence sharing for JTTFs.
  - 3.1.2: Increase societal awareness of violent extremism & mobilization to violence.
  - 4.2.1: Enhance security of soft targets.
6. To what extent are foreign and domestic terrorism actors exploiting publicly available information concerning US critical infrastructure to identify vulnerabilities? To what extent are foreign and domestic terrorists targeting US critical infrastructure for physical and cyber-attacks? DHS Objectives Addressed:
- 1.1.5: Assess technological advances and risks from emerging technologies (e.g., UAS).
  - 1.1.6: Detect anomalies & provide early warning of terrorist plots (e.g., weapons of mass destruction plots).
  - 1.1.7: Improve information sharing across the Department and with SLTT partners.
  - 1.2.1: Identify the key technologies to enhance our homeland security posture.
  - 1.3.1: Enhance intelligence sharing for JTTFs.
  - 2.3.2: Improve international coordination of counterterrorism efforts.
  - 3.1.2: Increase societal awareness of violent extremism & mobilization to violence.
  - 4.2.1: Enhance security of soft targets.



## Challenge Area 2: Nationwide Suspicious Activity Reporting Initiative\*

1. What data accurately characterize terrorists' interest in and capability to use chemical, biological, radiological, and nuclear (CBRN) materials in an attack? DHS Objectives Addressed:
  - 1.1.6: Detect anomalies and provide early warning of terrorist weapons of mass destruction plots.
  - 1.1.7: Improve information sharing across the Department and with SLTT partners.
  - 1.1.8: Further improve upon SAR reporting.
2. What characterizes targeted violence-related SAR compared to terrorism-related SAR? How can we facilitate partners' abilities to identify, evaluate, and share tips/leads associated with targeted violence? DHS Objectives Addressed:
  - 1.1.8: Further improve upon SAR reporting.
  - 3.3.6: Evaluate programming & expand research & training on threat assessment, intervention, reintegration, and counter-recidivism.
3. How can the NTER program be expanded? What improvements should be made to reflect latest trends and research in threat assessment? DHS Objectives Addressed:
  - 1.1.8: Further improve upon SAR reporting.
  - 1.2.1: Identify the key technologies to enhance our homeland security posture.
4. What can we do to protect civil rights and liberties in evaluating new technology to support the NTER Program? DHS Objectives Addressed:
  - 1.1.8: Further improve upon SAR reporting.
  - 1.2.1: Identify the key technologies to enhance our homeland security posture.

*\*We do not anticipate focusing on funding for research proposals in Challenge Areas 2 & 3 for Year 3; specific technology development or education projects in these areas may be considered if a clear stakeholder inside the HSE is identified.*



### **Challenge Area 3: Terrorism and Targeted Violence Prevention & Program Evaluation\***

1. What can NCITE do to support Regional Prevention Coordinators? DHS Objectives Addressed:
  - 3.1.1: Form partnerships that support locally based prevention.
  - 3.1.2: Increase societal awareness of violent extremism & mobilization to violence.
  - 3.1.3: Build trust through engagement exercises.
  - 3.2.1: Engage with partners in the private sector.
  - 3.3.4: Train SLTT law enforcement partners & connect them with local referral networks & intervention resources.
2. How can NCITE expand research & training on counter-recidivism of incarcerated individuals at risk for terrorism or targeted violence? DHS Objectives Addressed:
  - 3.3.6: Evaluate programming & expand research & training on threat assessment, intervention, reintegration, and counter-recidivism.
  - 3.4.1: Develop & implement awareness briefings & trainings for corrections officials.
  - 3.4.2: Coordinate with & provide support to Federal & SLTT actors & NGOs engaged in recidivism reduction programming.
  - 3.4.4: Support R&D focused on recidivism reduction.

*\*We do not anticipate focusing on funding for research proposals in Challenge Areas 2 & 3 for Year 3; specific technology development or education projects in these areas may be considered if a clear stakeholder inside the HSE is identified.*





**Challenge Area 4: Research on Counterterrorism and Targeted Violence Workforce Development (*all challenge area 4 questions address DHS Objectives of enabling resources and ensuring a highly trained workforce*)**

1. What are the most up-to-date technologies and datasets that DHS can provide its CT workforce (e.g., those assigned to JTTFs or DHS HQ offices)?
2. What counterterrorism training is needed for Federal and SLTT law enforcement partners to ensure HSE has the most up-to-date training on terrorism and targeted violence?
3. What best practices from the broader Intelligence Enterprise (IE) can be applied to resource allocation, career pathing, and training curriculums for the DHS CT workforce?
4. What type of educational programs might offer resilience to those engaged in terrorism research and analysis?
5. What educational programs have the most impact on changing perceptions about security work? How do we best measure and evaluate the effectiveness of homeland security workforce development programming in today's college students?



## Deadline and Submission Guidance

Due date for grant proposals is 5 pm (Central Daylight Time) on **March 15, 2022** via NU Ramp.  
<https://nuramp.nebraska.edu/ems/event.php?EMSEventUUID=1bd6a683-5634-42a5-92dc-53d5c250786c>

See Appendix A for cover page guidelines and Appendix B for details on proposal requirements.

## Multi-Year Project Proposals

Applicants may submit multi-year proposals with deliverables and budgets with a period of performance beginning July 1, 2022. Budgets submitted in year one will be reviewed each year. Continued funding after the initial 12-month period will be contingent upon acceptable performance in reviews by NCITE and DHS, available funding, and continued need. In funding a project one year, NCITE makes no guarantee that it will continue to fund the program in successive years.

Partners awarded multi-year projects must follow the same reporting schedule for semiannual and annual reports.

## Applicant Notification and Timeline

NCITE will strive to notify applicants regarding our intent to fund in June 2022 for a period of performance beginning on July 1, 2022 for new projects.

Research grant awards will be subject to the Terms and Conditions found at on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite), click the RFP tab. Applicants are encouraged to review the Appendices prior to drafting and submitting a proposal to determine their ability and/or willingness to adhere to the proposal requirements and to accept the terms and conditions in a subaward should one be awarded.

## Questions about this Request for Proposals

On February 1, 2022, NCITE will post a pre-recorded webinar for all interested applicants for this year's call. The webinar recording will be available on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite), click the RFP tab. Applicants are encouraged to view the webinar prior to and during the proposal writing process.

Written questions will be accepted until March 8, 2022 to [Bstinebrink@unomaha.edu](mailto:Bstinebrink@unomaha.edu).

*NCITE reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this request for proposals. Submission requirements for this grant program may be waived at the discretion of NCITE.*

*In accordance with University of Nebraska at Omaha policy, NCITE does not discriminate on the basis of race, color, age, ethnicity, religion, national origin, pregnancy, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran.*



## Appendix A: Cover Page

*Information to be Included in your cover page:*

- NCITE Research Challenge Area addressed
- NCITE Proposal Track addressed

### **Project information:**

- Principal Investigator contact information: Name and Institution
- Co-Principal Investigators
- Administrative contact
- Project title



## Appendix B: Proposal Requirements

All project proposals either research and development or workforce development in response to this call must explicitly include the following sections below with a single-spaced document, 10-page limit.

Proposals must contain all of the following elements. Applicants should strictly abide by this framework:

1. A completed cover page that contains the information shown in Appendix A, identifying the research question/challenge need that your research project will address. (Not included in 10-page limit)
2. Detailed descriptions of your project to include the following sections:
  - a) **Abstract (objectives, outcomes, value proposition – a summary)**
    - i) Provide a summary overview of the research concept being proposed
    - ii) Describe at a high level your research objectives
    - iii) Describe the intended outcomes of your project
    - iv) Summarize the value proposition for your project
  - b) **Objectives/Purpose**
    - i) A description of the tangible objectives and outcomes of your research and detail how those outcomes map onto the [DHS Strategic Framework for Countering Terrorism and Targeted Violence](#).
    - ii) A purpose description, including key literature references, that this concept will help address a resiliency need identified by DHS, its federal partners, or the homeland security enterprise that is NOT currently being adequately addressed.
  - c) **Baseline**
    - i) Identify the baseline of state of knowledge/practice in your target domain (e.g., currently, the counterterrorism terrorism mission center does not know the future impact pending FSLTT laws on domestic terrorism in the U.S.).
  - d) **Methodology**

A method discussion of the proposed work, including:

    - i) Clearly describe your research methodology (to include the data needed, proposed method, and analytic techniques).
  - e) **Project milestones and deliverables**

There are required specific deliverables and reporting metrics throughout the course of the project as outlined below:

    - i) Required to begin work
      - Submission of institutional approvals to DHS Compliance and Assurance Program Office (CAPO) and Privacy Office via NCITE administrative team and OUP Program Manager.
      - Government Kick-off via MS Teams or other online platform
    - ii) Required Reporting
      - Semi-Annual Report: describes scientific and applied outcomes of research, as well as students impacted, government engagement, and field & industry outreach.



- Annual Report: describes scientific and applied outcomes of research, as well as students impacted, government engagement, and field & industry outreach.
- iii) Required Participation
  - Participation in Annual NCITE Meeting in Omaha, DC, or Virtual (tbd, pending public health conditions)

Using the proposal template below, add in your project milestone and deliverables *in addition* to the required items, organizing by date.

A milestone would be identified for conceptual moments and steps.

A deliverable would be considered a tangible product, report, or final outcome.

Milestone or Deliverable	Description of Activity Proposed	Projected Date
<b>Milestone</b>	Hold Project Team/NCITE/ Government Kick-off Meeting [Required]	July – August 2022
<b>Milestone</b>	Submission of IRB Approvals [Required]	ASAP
<b>Deliverable</b>	Semiannual Progress Report [Required]	December 1, 2022
<b>Milestone</b>	Attendance at Annual Meeting [Required]	Spring 2023
<b>Deliverable</b>	Annual Progress Report/Final Report [Required]	July 31, 2023

- f) **Performance metrics used to evaluate progress and assessments of current concept of end user (e.g., DHS, community or industry partners, etc.) operations and baselines/state of art in use**
- g) **Transition plans for delivering end user value to include development steps, intellectual property management plans, and market specific considerations**
- h) **Stakeholder engagement**
  - i. List and describe current DHS/Homeland Security Enterprise stakeholders and partner relationships.
  - ii. Describe the benefits that would accrue to DHS and/or the Homeland Security Enterprise through successful completion of your research. Identify *specific* DHS components and agencies and owners and operators that would benefit and describe your proposed plan to engage with them throughout the project.
- i) **Potential programmatic risks to completion**
  - i. Describe any potential risks or barriers to completing the work.
- j) **Project outcomes and outputs, including information on how project outcomes will advance or impact current policies, procedures, technologies, or capabilities**
  - i) Describe how your project will improve upon that state of knowledge/practice.



**k) Qualifications**

A summary of the expertise and capabilities being brought to bear, including:

- i) The applicant's credentials in this topic area, including past accomplishments.
- ii) The names of public- and private-sector partners.
- iii) Commitments from partners in terms of collaboration and resources.

**l) Citations** (Not included in 10-page limit)

**m) Estimated Cost**

Detail the total estimated cost for the project using a 12-month (or multi-year) period of performance with submission of the budget template and budget justification (templates found in on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite), click the RFP tab.

Note that upon award, NCITE may require additional documentation, such as a human- subject research plan or a research safety plan, if applicable and per the deliverable requirements to conduct this work.

Applicants may append any additional documentation they feel will help the decision process of NCITE. Examples of such information may include resumes of key personnel and letters of commitment from research partners. Although such appendices are not subject to the 10-page limit, applicants should exercise discretion in providing additional material.

## **Project Reporting**

If ultimately awarded a research grant - in addition to other promised deliverables, the grantee shall provide NCITE with progress reports throughout the project period – usually via teleconference. Final deliverables must be submitted within 30 days following the grant end date.

NCITE may track metrics on funded projects for up to two years after their completion. The metrics will include information on publications, patents, commercialization, student education, external sponsorship, and further collaborations among the partners that were facilitated by NCITE funding.

## **Templates and Supplemental Documents**

The full written RFP along with project proposal templates can be found on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite), click the RFP tab.

All proposals must include:

- required sections listed above as outlined in the appropriate template,
- a written budget justification,
- an Excel budget sheet.

Research grant awards will be subject to the Terms and Conditions found at on the NCITE webpage at [www.unomaha.edu/ncite](http://www.unomaha.edu/ncite), click the RFP tab.



## Appendix C: Proposal Evaluation Criteria

Full proposals will be evaluated according to the criteria in table below. NCITE will be looking for strength in: Technical merit, Impact, Capability, Collaboration, Inclusion of Students, and Cost.

Weight	Criteria
25%	Technical Merit
30%	Scientific and /Or Practical Impact
20%	Capability of Research Team
10%	Collaboration
10%	Inclusion of Students
5%	Cost

The technical description of the proposed project and the work plan convincingly present and justify the following:

1. Validity of the proposed approach and likelihood of success based on current state of the art and on the scientific principles underpinning the proposed approach.
2. Development of a comprehensive and complete workplan and schedule with milestones and interrelated tasks that clearly lead to the successful completion of the project.
3. The identification of key technical risks and mitigation strategies to address them.
4. A clear set of milestones leading up to deliverables.

The project significantly advances NCITE's ability to address the operational needs identified by the Department of Homeland Security and its partners.

1. The team provides an appropriate level of expertise and capability.
2. Past performance of the team provides high confidence of success.
3. The team is multi-disciplinary, has a plan to draw from STEM and social science expertise.
4. A plan to inspire students—the future generation of the counterterrorism workforce—is included.
5. The proposed budget is appropriate and reasonable for the planned work.



## Appendix D: Intellectual Property Guidelines

Intellectual Property (IP) that will either be brought into the project (Background Intellectual Property) or will be developed via the project will require a basic IP Management Plan **PRIOR TO BEING AWARDED** should your project be selected. The IP plan should address the following if applicable to your project.

- Identify ownership of Project IP (who will *own* the IP?);
- Licensing rights of project-developed IP, including revenue sharing amount joint owners of project participants, if applicable (who will have what license rights to the IP?);
- The project participant(s) that will have rights to enforce rights in project-developed IP (who can enforce those rights?)
- Background Intellectual Property (BIP) needed for the Project and terms (if any) under which that BIP will be made available to Project Participants both during and after performance of the Project;
- Terms under which the collective IP will be made available to government and/or industry upon its transition to general use;
- Who will bear the filing and other costs of managing that Project IP, including the cost of prosecuting foreign and domestic patent rights;
- An affirmation of the adoption, without exception, of the provisions of Article I, Section A, paragraph 15 and Article II, Section J, of the most current Terms & Conditions of Cooperative Agreement #20STTPC00001-02-01.

