The Department of Homeland Security (DHS)
Notice of Funding Opportunity (NOFO)
National Nuclear Forensics Expertise Development Program (NNFEDP)
Fiscal Year 2023 Nuclear Forensics Research Award (NFRA)

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All entities wishing to do business with the federal government must have a unique entity identifier (UEI). The UEI number is issued by the System for Award Management (SAM). Detailed information on how to request a UEI can be found on SAM.gov at: https://www.grants.gov/web/grants/forms/planned-uei-updates.html

SAM.gov information can be found at: https://sam.gov/content/entity-registration.

Grants.gov registration information can be found at:
https://www.grants.gov/web/grants/register.html.

UEI Updates in Grant Application Forms
On April 4, 2022, the Data Universal Numbering System (DUNS) Number was replaced by a new, non-proprietary identifier requested in, and assigned by, SAM.gov. This new identifier is the Unique Entity Identifier (UEI).

Additional Information can be found on Grants.gov:

https://www.grants.gov/web/grants/forms/planned-uei-updates.html

A. Program Description

1. **Issued By**
   U.S. Department of Homeland Security (DHS), Countering Weapons of Mass Destruction (CWMD) Office, Systems Support Directorate (SSD), Research & Development Division

2. **Assistance Listings Number:** 97.130

3. **Assistance Listings Title:** National Nuclear Forensics Expertise Development Program: Nuclear Forensics Research Award

4. **Funding Opportunity Title**
   Fiscal Year (FY) 2023 Nuclear Forensics Research Award (NFRA)

5. **Funding Opportunity Number**
   DHS-23-CWMD-130-NFRA-001

6. **Authorizing Authority for Program**
   Sections 1923(a)(12) and 1926 of the Homeland Security Act of 2002, Pub. L. No. 107-296 (codified as amended at 6 U.S.C. §§ 592(a)(12), 596).

7. **Appropriation Authority for Program**
   Department of Homeland Security Appropriations Act, 2023, Pub. L. No. 117-328, Title IV, Research, Development, Training, and Services, Countering Weapons of Mass Destruction Office, Research and Development.

8. **Announcement Type**
   Initial

9. **Program Category**
   Radiological/Nuclear

10. **Program Overview, Objectives, and Priorities**

Overview. The National Technical Nuclear Forensics Center (NTNFC) was established on October 1, 2006, within the U.S. Department of Homeland Security (DHS). NTNFC was tasked with two core missions: to provide national-level integration, centralized planning, and stewardship for the National Technical Nuclear Forensics (NTNF) community; and to lead the U.S. Government (USG) in establishing a robust and enduring pre-detonation radiological/nuclear materials forensics capability. A top priority of NTNFC's stewardship mission is to lead USG efforts in addressing the enduring challenge of sustaining a preeminent Nuclear Forensics (NF) workforce.

The National Nuclear Forensics Expertise Development Program (NNFEDP) works to build a nuclear forensics workforce of recognized technical experts and leaders through fostering scholastic and research collaboration between and among academia, the national and defense laboratories, and the National Technical Nuclear Forensics (NTNF) Interagency. The implementation of the NNFEDP fulfills the requirements outlined in Homeland Security Act of 2002, as amended. This program also aligns with Goal 1 of the DHS Strategic Plan fiscal years 2020-2024: "Counter Terrorism and Homeland Security Threats" and Objectives 1.2: "Detect and Disrupt Threats," and 1.4: "Counter Weapons of Mass Destruction and Emerging Threats."

To accomplish this mandate, the following initiative has been implemented:
The Nuclear Forensics Research Award (NFRA) supports the establishment of a team of faculty, students, and technical staff at the national or defense laboratories to conduct research in the field of nuclear forensics.

Objectives.

1. *Recruit and produce a new generation of leaders and technical experts in a wide range of fields relevant to nuclear forensics.*

   The NFRA is designed to link qualified graduate students with a nuclear forensics-relevant research project, that will serve as the basis of his or her thesis and be

completed through work at a partner laboratory and the student's home university. Through faculty and laboratory staff participation, a collaborative research process is established through which this graduate fellow is jointly mentored, further enhancing his or her understanding of the nuclear forensics field.

The NFRA sponsors two graduate fellows per award to pursue Ph.D. - level research within the nuclear forensics field. The award includes full tuition and a stipend for up to five years. Additionally, the NFRA sponsors the participation of two or more undergraduate students per award who are in their junior/senior year of studies.

To maintain eligibility for the fellowship, all students must meet requirements outlined in the Terms of Appointment (TOA) in Appendix A. To maintain eligibility, both undergraduate students and the graduate students will be required to spend at least nine weeks performing hands-on research at the collaborating laboratory as well as maintain a minimum of a 3.0 out of 4.0 grade point average (GPA). The undergraduate students may support some aspects of the graduate students' research project and may remain on the research project for as long as the eligibility requirements are met. Additional details are in Appendix A.

2. *Enhance the ability for universities and the national and defense laboratories to work collaboratively on advanced research that increases the body of knowledge in the field of nuclear forensics.*

   The NFRA is designed to facilitate a multi-year process to build long-term collaborative partnerships among the laboratories, universities, and the next generation of nuclear forensics experts. These partnerships will provide universities opportunities to participate in research that directly supports USG NF strategic goals.

   The Faculty Principal Investigator (PI) will directly oversee the university's participation in the research project and will make joint decisions with the Laboratory PI concerning the path of the project. Multi-university proposals with a collaborative laboratory partner are allowable under the NFRA structure.

Key Personnel. Key Personnel under the NFRA include the university faculty PI, national or defense laboratory co-PI, and identified graduate and undergraduate fellows. All Key Personnel must be U.S. Citizens at the time of application and be able to obtain and maintain a Q security clearance from the U.S. Department of Energy.

Obligations. Upon graduation, the named graduate fellow is obligated to serve for two years in a postdoctoral or staff position at a national or defense laboratory or federal department or agency in the field of nuclear forensics.

In accordance with the Homeland Security Act of 2002, should the undergraduate or graduate fellow not comply with the TOAs, he or she must repay the fellowship in total

to the U.S. Government. If the fellow fails to maintain a high level of academic standing, who is dismissed for disciplinary reasons, or who voluntarily terminates academic training before graduation from the program funded by NFRA, the fellow must repay the U.S. Government within one year. The fellowship total to be repaid includes both the stipend and tuition. Specific to graduate fellows, except in the case of death or disability, should a graduate fellow fail to begin or complete a postdoctoral position at a laboratory or federal agency, the fellow must repay the U.S. Government the total amount of tuition and stipend with interest per the prevailing rate of graduate student loans at the time the student received the award. More information can be found in Appendix A.

Technical Priorities. NF addresses a diverse set of topics related to the collection, analysis, and evaluation of pre-detonation (intact) and post-detonation (exploded) radiological or nuclear materials, devices, and debris, as well as the immediate effects created by a nuclear detonation. Each application will be evaluated based on the information provided in Evaluation Criteria under the Application Review Information section. Technical Mission Areas (TMAs) included below, reflect the technical priorities of the NNFEDP and NFRA, and should be taken into consideration when developing a research project.

TMA 1. Pre-Detonation Material and Device Signatures

Physical, chemical, and isotopic characteristics of a radiological or nuclear material can be used to determine aspects of the material's history and are therefore important to nuclear forensics. In general, a nuclear forensic signature is a set of measurable characteristics that points to the origin or history of a sample and may specifically include or exclude the sample from a specific class or category of materials. Physical signatures may include morphology, texture, size, and shape of a material or parts of the device. Chemical signatures may include the elemental or molecular form of the material (e.g., uranium dioxide, plutonium oxalate) and abundances of impurities in the sample. Isotopic signatures reflect the isotopic composition of a sample (indicating its enrichment, burnup, intended or actual use) and may be used to derive the time since the material was last processed chemically. The R&D focus in these areas includes production, acquisition, and/or retrieval of radiological and nuclear materials of historical interest; laboratory analysis of the materials to document their characteristics; development of production and processing models relating processing parameters (chemical, physical, engineering, machining) to observed product characteristics; assessment of which characteristics persist through (or are modified by) various stages of the production, storage, and transport processes; development of libraries of material characteristics; and ultimately evaluation of material characteristics (or combination of characteristics) for their uniqueness or value as nuclear forensics signatures.

TMA 2. Pre-Detonation Analysis Methods and Tools

While current methods of sample analysis and data interpretation provide a highly sophisticated level of material characterization and classification, even more advanced methods are required to identify new signatures and enable new insights into material

provenance. R&D priorities in this area include development of new laboratory analytical methods for determination of spatially and/or temporally distinct features in radiological and nuclear materials; analytical methods that enable determination of new (i.e., previously unrecognized) characteristics and signatures in radiological/nuclear materials; mathematical and statistical methods to identify and evaluate correlated material characteristics; modeling and simulation tools to predict forward and inverse relationships between physical/chemical material production processes and measurable characteristics; data visualization methods to enable improved interpretation of data relationships; and data management and knowledge capture tools to enable efficient storage, retrieval, and interpretation of diverse sets of material information.

TMA 3. Post-Detonation Material Collection and Analysis Methods

Post-detonation material R&D explores novel methods and advancements in the ability to collect samples of material, analyze radioactive debris, and identify signatures from debris analysis. The overall goal is to obtain accurate debris characterization more rapidly than is currently possible, and to do so in all environments and conditions. Chronologically, this starts with targeted airborne and ground collection methods that are robust under a wide variety of adverse conditions. Methods with the potential to enable remote characterization and quantification of airborne debris are of interest, as are methods that combine collection and analysis, and field deployable systems, with real-time analysis capability. Following sample collection, improved methods are sought for rapid dissolution and pre-concentration of post-detonation debris using environmentally friendly, potentially field-deployable, techniques on a reasonable time scale. The R&D focus for sample analysis includes non-destructive analytical techniques; innovations that rapidly identify and quantify elemental and isotopic constituents (major, minor, and trace) in fresh radioactive fallout debris; and fundamental phenomenology of laser spectroscopy, mass spectrometry, and associated ionization methods. Improvements are also sought in data handling methodologies for compiling, assessing, and interpreting large sets of data; advancing the treatment of data uncertainties; and improving databases of physical constants, such as nuclear cross sections, decay branching ratios, or nuclear energy levels relevant to nuclear forensic analysis.

TMA 4. Post-Detonation Prompt Signal Analysis

Post-detonation prompt signal analysis explores R&D that may enable accurate knowledge of the specifics of a nuclear device (e.g., special nuclear material type and mass, device sophistication, etc.) after a detonation. Ideally this knowledge would be available in as short a time as possible with a high degree of confidence. This topic investigates basic physical research on the prompt signatures of nuclear explosive events, such as novel methods for yield determination, device reaction history, or the radiation outputs of these nuclear explosions. Research could focus on the understanding of unique identifiers of these explosions, measurements of these identifiers, or other topics. In this context, prompt signatures indicate those which can be measured instantaneously to within a few days after the event. These signatures are generally separate from radiochemical signatures.

11. **Performance Measures**

The NNFEDP adheres to program measurement and evaluation standards in accordance with CWMD and other Government policies and guidance.

Government Program Managers and staff will monitor progress toward goal achievement through periodic program reviews and reviews of required reports (template provided post award). Proposal submissions must clearly define immediate project targets and year end project milestones for which performance can be qualitatively and quantitatively measured. Progress toward project milestones, cost, and schedule will be considered during project reviews in determining project continuances.

Information from proposal submissions and required reports may also be used for DHS-led NNFEDP evaluation, which may be carried out by a third-party on behalf of the Program Office or DHS.

B. Federal Award Information

1. Available Funding for the NOFO

A. Overall, $1,395,000;

B. Subject to the availability of funds, DHS estimates that total of $465,000 per year will be available to fund each NFRA award, with $300,000 for the recipient (i.e., academic institution) to retain, and $165,000 that the recipient must subaward to a national laboratory partner. DHS does not guarantee any total amount of annual or cumulative funding.

2. Projected number of Awards

One (1) or more based on available funding.

3. Maximum Award Amount

$465,000 per year for 3 years ($1,395,000), of which $300K per year for 3 years ($900,000) for the recipient (i.e., academic institution) to retain, and $165,000 per year for 3 years ($495,000) that the recipient must subaward to a national or defense laboratory partner. If the PoP is continued, then for each additional year, subject to the availability of funding, compliance, and performance, CWMD might provide additional funding to cover each additional year. Any additional funding for a possible

extension would be similarly limited to $465,000 per year for up to 2 additional years.

4. **Period of Performance (PoP): 3 years**
5. **Projected Period of Performance Start Date(s):** 09/30/2023
6. **Projected Period of Performance End Date(s):** 09/29/2026

Budget Period(s) for the NOFO: 09/30/2023 to 09/29/2026

a. The available funding for the NOFO described above is for an initial 3-year budget period from 09/30/2023 to 09/29/2026.
b. Funding for a second non-competitive extension (NCE) award for a 1-year budget period of 9/30/2026 to 9/29/2027 and a third (NCE) award for a 1-year budget period of 9/30/2027 to 9/29/2028 are conditioned on the availability of funds, satisfactory progress by the Recipient, program authority, compliance with the terms and conditions of the federal award, and a CWMD determination that continued funding is in the best interests of the Government.
c. Extensions to the period of performance for this program are allowed. Recipients may request a no-cost extension to complete all project activities. The request must be submitted 60 days prior to the expiration of the performance period. Requests for extensions are subject to approval by DHS.

7. **Funding Instrument Type**

Cooperative Agreement – The Program Office will have substantial involvement in the administration of the award, including tracking of faculty and student participants, publications, patents, and research progress. The recipient will be required to maintain close and regular interaction with the Program Office, including a) quarterly and annual reports providing updates on the research, undergraduate and graduate student progress, and any issues related to students, universities, or laboratories involved in the program, and b) regular in-person or virtual meetings to discuss award progress.

Note: Cooperative agreements fall under the umbrella of grants (i.e., they are grants with more sponsor involvement.) For the purposes of this NOFO the term "grant" is used throughout for brevity instead of "cooperative agreement."

C. Eligibility Information

1. Eligible Applicants

The following entities below are eligible to apply for this NOFO*:*

- Private institutions of higher education
- Public & State controlled institutions of higher education

IMPORTANT: Academic recipients are expected to subaward funds to a U.S. Department of Energy national laboratory or Department of Defense laboratory for this award.

2. Applicant Eligibility Criteria

The following listed below are organizations that are eligible and encouraged to submit a proposal:

- Universities. Universities accredited by a U.S. Department of Education recognized accrediting agency, and having a campus located in the United States or U.S. territories.
- Organizations are referred to as academic institutions for the purposes of this NOFO.
- All non-academic institutions regardless of profit or non-profit status are ineligible to apply.

DHS will not consider applications that do not adhere to one or more of the following requirements:

- **University Programs.** Universities must have doctorate-level programs in related chemistry fields such as, analytical, geo- or radiochemistry; nuclear physics or engineering; computer science, physics, mathematics, geology, or materials science. Applications must include active participation from these doctoral programs.
- **Citizenship.** All Key Personnel must be U.S. citizens at the time of proposal submission.
- **Clearance Eligibility.** All Key Personnel must be eligible to obtain and/or maintain a clearance if requested by the Program Office.

3. Other Eligibility Criteria/Restrictions

DHS will not consider applications that do not adhere to one or more of the following requirements:

A. Deadlines. DHS will not accept late applications. Without exception, applications must be received by Grants.gov on or before the deadline in this announcement or they will not be considered.

B. Application relevance. Applications that do not address the purpose of this announcement will not be considered. This NOFO contains four TMAs. Applications that are determined non-compliant to these TMAs will not be considered for technical evaluation.

C. Compliance and completeness. Applications must substantially comply with the application submission instructions and requirements in this announcement, or they will not be considered.

D. Funding Limits. Applications exceeding the funding limits for a given topic will not be considered.

E. Period of Performance. Applications must propose an initial PoP not to exceed 3 years. Applications that propose an initial PoP exceeding 3 years will not be considered.

F. Principal Investigator (PI) Limit. None specified

G. Limit on Number of Proposals per Organization. None specified

H. Limit on Number of Proposals per PI. One (1). Furthermore, an individual researcher may not be named as a participant on more than one proposal submitted to this NOFO. This limitation includes participation as a PI, co-PI, senior researcher, student, consultant, or any other role for which financial remuneration is requested.

I. Terms of Appointment (TOAs). Applications that do not identify two graduate and two undergraduate students for participation will not be considered.

J. Letter of Intent (LOI) Applications that do not include a Letter of Intent with a national or defense laboratory collaborator will not be considered. (Appendix C provides a LOI template which applicants are encouraged to use.) Please note that if an applicant receives an award, it must issue a subaward agreement to a national or defense laboratory in compliance with the subaward requirements at 2 C.F.R. § 200.332. The LOI should be attached to or incorporated into the subaward agreement.

4. Cost Share or Match

There is no cost share or match for awards issued under this NOFO.

D. Application and Submission Information

1. Key Dates and Times

a. Application Start Date: 07/05/2023

b. Application Submission Deadline: 08/14/2023 at 5PM [EST]

All applications must be received by the established deadline.

c. Other Key Dates

Event	Suggested Deadline for Completion
Informational Webinar	Check Grants.gov for date announcement
Initial Registration at SAM.gov (includes UEI issuance)	Four weeks before actual submission deadline
Obtaining a valid EIN	Four weeks before actual submission deadline
Updating SAM registration	Four weeks before actual submission deadline
Starting application in Grants.gov	Two weeks before actual submission deadline

2. Agreeing to Terms and Conditions of the Award

By submitting an application, applicants agree to comply with the requirements of this NOFO and the terms and conditions of the award, should they receive an award.

3. Address to Request Application Package

Application forms and instructions are available at Grants.gov. To access these materials, go to http://www.grants.gov

For a hardcopy of the full NOFO, please send request to:

Shareef Prater
Grants Officer
Grants and Financial Assistance Division
Department of Homeland Security
Email: Shareef.Prater@hq.dhs.gov
Phone: 202.770.4776

Applications will be processed through the Grants.gov portal.

4. Unique entity identifier and System for Award Management (SAM)

Each applicant, unless they have a valid exception under 2 C.F.R. § 25.110, must:

a. Be registered in Sam.Gov before application submission.
b. Provide a valid unique entity identifier in its application.

c. Continue to always maintain an active SAM registration with current information during the Federal Award process.

5. Steps Required to Submit an Application, Unique Entity Identifier, and System for Award Management (SAM)

To apply for an award under this program, all applicants must:

a. Have an account with https://login.gov/
b. Register for, update, or verify their SAM account and ensure the account is active and Employer ID Number (EIN) before submitting the application.
c. Create a Grants.gov account.
d. Add a profile to a Grants.gov account.
e. Establish an Authorized Organizational Representative (AOR) in Grants.gov.
f. Submit an initial application in Grants.gov.
g. Submit the final application in the Grants.gov.
h. Continue to maintain an active SAM registration with current information, including information on a recipient's immediate and highest-level owner and subsidiaries, as well on all predecessors that have been awarded a federal contract or grant/cooperative agreement within the last 3 years, if applicable, at all times during which it has an active federal award or an application or plan under consideration by a federal awarding agency.

Applicants are advised that DHS may not make a federal award until the applicant has complied with all applicable SAM requirements. Therefore, an applicant's SAM registration must be active not only at the time of application, but also during the application review period and when DHS is ready to make a federal award. Further, as noted above, an applicant's or recipient's SAM registration must remain active for the duration of an active federal award. If an applicant's SAM registration is expired at the time of application, expires during application review, or expires any other time before award, DHS may determine that the applicant is not qualified to receive a federal award and use that determination as a basis for making a federal award to another applicant.

The Standard Language for Using Grants.gov to Apply is provided to aid in fulfilling these requirements (if applicable), based off of *https://www.grants.gov/web/grants/grantors/grantor-standard-language.html*.

6. Electronic Delivery

DHS is participating in the Grants.gov initiative to provide the applicant community with a single site to find and apply for funding opportunities. DHS encourages or requires applicants to submit their applications online through Grants.gov, depending on

the funding opportunity. For this funding opportunity, the Program Office requires applicants to submit applications through Grants.gov.

7. How to Register to Apply through Grants.gov

Instructions: Registering in Grants.gov is a multi-step process. Read the instructions below about registering to apply for DHS funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to four weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required application submission deadlines.

Organizations must have a Unique Entity Identifier (UEI) Number with an active System for Award Management (SAM) registration, and Grants.gov account to apply for grants. If individual applicants are eligible to apply for this grant funding opportunity, then you may begin with step 3, Create a Grants.gov account, listed below.

Creating a Grants.gov account can be completed online in minutes, but SAM registration may take several weeks. Therefore, an organization's registration should be done in sufficient time to ensure it does not impact the entity's ability to meet required application submission deadlines. Complete organization instructions can be found on Grants.gov here: https://www.grants.gov/web/grants/applicants/organization-registration.html.

a. *Register with SAM:* All organizations applying online through Grants.gov must register with the System for Award Management (SAM). Failure to register with SAM will prevent your organization from applying through Grants.gov. SAM registration must be renewed annually. Organizations will be issued a UEI number with the completed SAM registration.

   For more detailed instructions for registering with SAM, refer to: https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html.

b. *Create a Grants.gov Account:* The next step is to register an account with Grants.gov. Follow the on-screen instructions or refer to the detailed instructions here: https://www.grants.gov/web/grants/applicants/registration.html.

c. *Add a Profile to a Grants.gov Account:* A profile in Grants.gov corresponds to a single applicant organization the user represents (i.e., an applicant) or an individual applicant. If you work for or consult with multiple organizations and have a profile for each, you may log in to one Grants.gov account to access all of your grant applications. To add an organizational profile to your Grants.gov account, enter the UEI Number for the organization in the UEI field while adding a profile.

   For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/registration/add-profile.html.

d. *EBiz POC Authorized Profile Roles:* After you register with Grants.gov and create an Organization Applicant Profile, the organization applicant's request for Grants.gov roles and access is sent to the EBiz POC. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the Authorized Organizational Representative (AOR) role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been assigned the AOR role.

   For more detailed instructions about creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/registration/authorize-roles.html.

e. *Track Role Status:* To track your role request, refer to: https://www.grants.gov/web/grants/applicants/registration/track-role-status.html.

f. *Electronic Signature:* When applications are submitted through Grants.gov, the name of the organization applicant with the AOR role that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize people who are able to make legally binding commitments on behalf of the organization as a user with the AOR role; **this step is often missed, and it is crucial for valid and timely submissions.**

8. How to Submit an Application to DHS via Grants.gov

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different webforms within an application. For each NOFO, you can create individual instances of a workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities using Workspace, refer to: *https://www.grants.gov/web/grants/applicants/workspace-overview.html*.

a. *Create a Workspace*: Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

b. *Complete a Workspace:* Add participants to the workspace to work on the application together, complete all the required forms online or by downloading PDF versions, and check for errors before submission. The Workspace progress bar will display the state of your application process as you apply. As you apply using Workspace, you may click the blue question mark icon near the upper-right corner of each page to access context-sensitive help.

c. *Adobe Reader:* If you decide not to apply by filling out webforms you can download individual PDF forms in Workspace. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.

   NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at: *https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html*.

d. *Mandatory Fields in Forms:* In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

e. *Complete SF-424 Fields First:* The forms are designed to fill in common required fields across other forms, such as the applicant's name, address, and UEI number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.

f. *Submit a Workspace:* An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

g. *Track a Workspace Submission:* After successfully submitting a workspace application, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the application. The number will be listed on the Confirmation page that is generated after submission. Using the tracking number, access the Track My Application page under the Applicants tab or the Details tab in the submitted workspace.

For additional training resources, including video tutorials, refer to: *https://www.grants.gov/web/grants/applicants/applicant-training.html*.

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at support@grants.gov. For questions related to the specific grant opportunity, contact the number listed in the application package of the grant to which you are applying.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist DHS with tracking your issue and understanding background information on the issue.

9. Timely Receipt Requirements and Proof of Timely Submission

Online Submission. All applications must be received by 5:00PM Eastern time on the due date established for each program. Proof of timely submission is automatically recorded by Grants.gov. An electronic date/time stamp is generated within the system when the application is successfully received by Grants.gov. The applicant with the AOR role who submitted the application will receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of their application. This applicant with the AOR role will also receive the official date/time stamp and Grants.gov Tracking number in an email serving as proof of their timely submission.

When DHS successfully retrieves the application from Grants.gov, and acknowledges the download of submissions, Grants.gov will provide an electronic acknowledgment of receipt of the application to the email address of the applicant with the AOR role who submitted the application. Again, proof of timely submission shall be the official date and time that Grants.gov receives your application. Applications received by Grants.gov after the established due date for the program will be considered late and will not be considered for funding by DHS.

Applicants using slow internet, such as dial-up connections, should be aware that transmission can take some time before Grants.gov receives your application. Again, Grants.gov will provide either an error or a successfully received transmission in the form of an email sent to the applicant with the AOR role attempting to submit the application. The Grants.gov Support Center reports that some applicants end the transmission because they think that nothing is occurring during the transmission process. Please be patient and give the system time to process the application.

10. Informational Webinar

Applicants should visit the Grants.gov website for information and a link for any scheduled NFRA Informational Webinar.

11. Content and Form of Application Submission

Mandatory forms must be completed for this announcement, including the SF-424 Research & Related (R&R) Application for Federal Assistance, SF-424A Budget Information for Non-Construction Programs, and other forms or information in accordance with the application instructions on Grants.gov and additional instructions below. If submitting any information that is deemed proprietary, please denote the beginning and ending of such information with asterisks (***).

a. MANDATORY FORMS OR INFORMATION

- **SF-424 (R&R) Application for Federal Assistance (SF-424-V5.0)** (available at https://www.grants.gov/web/grants/forms/r-r-family.html)
  Please complete this form in its entirety. If you fill this form out first, other required forms will populate with basic data such as name, address, etc. Signature and date will auto-fill when you submit the application package through Grants.gov.
  a. Block 1, Type of Submission – Please check "Application."
  b. Block 8, Type of Application – Please check "New."
  c. Block 12, Proposed Project – Enter Dates of Entire Project Period
  d. Block 15a, Estimated Project Funding – Please check $465,000
  e. Block 16, E.O. 12372 review question – Please check "No."
  f. Block 17 - By submitting this application, your organization is providing certifications and assurances regarding:
  i. Drug-Free Workplace Requirement
  ii. Debarment, Suspension, and Other Responsibility Matters—Primary Covered Transactions
  iii. Assurance that your organization is not delinquent on any Federal debt.

- **SF-424A Research & Related (R&R) Budget**
  An R&R Budget is required for ALL applications. Please ensure that the total amount requested corresponds to Block 15.a on the SF 424 R&R form.
  Include up to three to five annual budgets, one for each year of the duration of the award; a cumulative budget will be automatically generated by Grants.gov. A detailed budget justification (up to three pages) should document proposed expenses. Multi-university proposals should use the award-sub award proposal mechanisms or the collaborative mechanism. Attach an expanded equipment list (see item C on R&R Budget Form) if necessary.

Funds must be included in each year of the proposal budget for attendance at professional meetings or program reviews as required by the Program Office, as described under Funding Restrictions. For budgetary purposes, the professional meetings may be assumed to be in the U.S. and be up to five days duration.

- **Budget Justification**
  A Budget Justification is required for all applications. Please ensure that items listed in the budget justification correspond to the funds requested on the R&R Budget form. Attach the Budget Justification to the R&R Budget form. If you need to attach more than one file to fully capture your budget justification, you may use the optional "Attachments" form.
  Please use the following guidance when assembling your budget justification:
  Use the following cost categories to group items of cost in your budget justification.
  PERSONNEL
  FRINGE BENEFITS
  TRAVEL
  EQUIPMENT (see item C on R&R Budget Form)
  SUPPLIES (see item F.1 on R&R Budget Form)
  CONTRACTUAL (see item F.5 on R&R Budget Form)
  OTHER DIRECT COSTS (see items under item F on R&R Budget Form)
  INDIRECT COSTS

  If you wish to display your budget justification by task, please ensure that you supply a total for each of the cost categories listed above (and related fields on the R&R Budget Form) for the proposed budget period in your application.

  The period of performance for this award is 3 years. Recipient must submit a proposal which covers the full 3-year period. **The budget and justification of costs should only include the initial 3-year budget period.**

- **Project/Performance Site Location(s)**
  Per 2 C.F.R. Part 170, please provide information for every site (including any subawards of $30,000 or more) in your project.

- **SF-424B Assurances for Non-Construction Programs**
  Submit this form. It will be electronically signed upon submission to Grants.gov as part of your application.

- **Certification Regarding Lobbying (GG_Lobbying Form-V1.1)**
  Submit this form. If paragraph two of the certification applies, then complete and submit the SF-LLL Disclosure of Lobbying, which is provided as an optional form in the application package.

- **Research & Related Senior/Key Person Profile**
  Please supply biographical information on Key Personnel. The files can be attached at item 12 on the "Other Project Information Form" or use the optional "Attachments" form.

- **Indirect Cost Agreement or Proposal**
  If the budget includes indirect costs and if the applicant is required to have an indirect cost rate agreement or proposal, the agreement or proposal must be submitted with the application. If the applicant does not have or is not required to have an indirect cost rate agreement or proposal, please see Section D.13 of this NOFO, "Funding Restrictions and Allowable Costs," for further information regarding allowability of indirect costs and whether alternatives to an indirect cost rate agreement or proposal might be available or contact the relevant DHS staff identified in Section G of this NOFO, "DHS Awarding Agency Contact Information" for further instructions.

- **Terms of Appointment**
  Please refer to Section C.3, Other Eligibility Criteria/Restrictions, subsection I (Terms of Appointment) and Appendix A.

- **Letter of Intent**
  Please refer to Section C.3, Other Eligibility Criteria/Restrictions, subsection J (Letter of Intent) and Appendix C.

- **Proposal Package**
  See instructions below regarding additional content and formatting of Proposal Package. Only one proposal package is permitted per PI, co-PI, senior researcher, student, consultant, or any other role for which funding is requested.

b. <u>PROPOSAL PACKAGE PREPARATION INSTRUCTIONS</u>

- **Cover Sheet:**
  The cover sheet is provided in Appendix B. Note: for a proposal ID, please follow the following naming convention:
  - NTNFNOFO23-XXXX-YYYY-TMA-0#-0## XXXX = four letter (maximum 4 letter) character shortcut for organization name
  - YYYY = four letter (maximum 4 letter) character shortcut for department/division name
  - # = Technical Mission Area number
  - ## = number of proposal submission

  Example: Organization A, Dept. B's submission for its first proposal to topic 01 would have the ID listed: ORGA-DEPB-TMA-01-001

- **Project Summary**
  This space is limited to 200 words or less. Applicants should provide an overview of the research project and how PIs will effectively conduct the research as a team, integrating the graduate and undergraduate fellows. All highlights of the proposal should be listed here. The information provided on the Summary Page may be used as a public information document. Please do not include any proprietary information in this section of the application.

- **Project Narrative:**
  This is the main body of the application and should provide clear and specific statements regarding the proposed research. This section should demonstrate the applicant's understanding of nuclear forensics as an applied science and how the proposed program aligns with U.S. Government TMAs as outlined on pages three-five.

  Describe the goals of the proposed research, approaches, and methodologies to attain the goals, and the expected outcomes. The narrative should include how the university and national or defense laboratory will jointly manage the proposed research project, to include student participation. Please include a proposed project timeline, listing milestones and deliverables as appropriate.

  Also articulate how the research project will offer opportunities for underrepresented minority groups and women, if applicable. The description of work should demonstrate congruency with the Evaluation Criteria (please refer to Section E).

  High-risk proposals with the potential for high impact are encouraged. The Management Plan, Project Narrative, and References Cited sections are limited to a total of ten (10) pages. The following sections on Key Personnel and the Mentoring Plan are limited to a total of five (5) pages.

- **Proposed Research:** Narrative consisting of the following items:
  - An explanation of the scientific context, intellectual merit, relevance to the technical mission areas on pages three-five, potential long-term impact, and timeliness of the proposed project.
  - A detailed description of the proposed research, its goals, objectives and milestones, and any substantive risks and risk mitigation strategies.
  - If appropriate, a discussion of the multidisciplinary approach taken and its proposed benefits.
  - A description of the contribution to be made by Key Personnel.
  - A description of how project progress will be tracked and continuously evaluated; and
  - A timeline for the planned work.

- **Management Plan:** Narrative describing:
  - Demonstration of effective and appropriate financial controls, budget processes, administrative oversight, and personnel management.
  - How the project will be coordinated, including any use of cyberinfrastructure.
  - How decisions will be made regarding the conduct of the project; and
  - How the effectiveness of the collaboration will be evaluated.

- **Mentoring Plan:** Narrative describing:
  - Establishment of a mentoring process, including goals, defining roles and responsibilities, and describing communication methods, for co-mentoring of the graduate and undergraduate fellows.
  - How the design will be implemented; and
  - How the effectiveness of mentoring will be evaluated.

- **References Cited:**
  References should include full titles of articles and book chapters cited. This section should include bibliographic citations only and must not be used to provide parenthetical information outside of the project description. Indicate with an asterisk (*) references co-authored by two or more proposal investigators.

c. OTHER SUBMISSION REQUIREMENTS

- **Formatting:** The format applies to the Proposal Package cover sheet through mentoring plan items above:
  - Margins – Margins for length and width should be at least one (1) inch.
  - Page formatting – Use standard, single-column format.
  - Figures, Tables, Diagrams – Use captions and appropriate references with at least size 10 font for caption descriptions.
  - Spacing – Use at least single spacing (for size 12 font)
  - Font and size (except for item c above) – Use Times New Roman, 12-point, Black font.

- **Applicants are encouraged to register early. The registration process can take four weeks or more to be completed. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required submission deadlines.**

- All submissions should follow the instructions in Section D6 (Electronic Delivery). All files submitted in the application shall be in .pdf format. Limit filenames to 50 characters.

12. Intergovernmental Review

An intergovernmental review may be required. Applicants must contact their state's Single Point of Contact (SPOC) to comply with the state's process under Executive Order 12372.

(See https://www.archives.gov/federal-register/codification/executive-order/12372.html; https://www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf).

13. Funding Restrictions and Allowable Costs

All costs charged to awards covered by this NOFO must comply with the Uniform Administrative Requirements, Cost Principles, and Audit Requirements at 2 C.F.R. Part 200, unless otherwise indicated in the NOFO, or the terms and conditions of the award. This includes, among other requirements, that costs must be incurred, and products and services must be delivered, within the budget period. 2 C.F.R. § 200.403(h). Additionally, all costs charged to awards must comply with the grant program's applicable statutes, policies, requirements in this NOFO as well as with the terms and conditions of the award.

Grant funds may not be used for matching funds for other federal grants/cooperative agreements, lobbying, or intervention in federal regulatory or adjudicatory proceedings. In addition, federal funds may not be used to sue the federal government or any other government entity.

a. Pre-Award Costs

Not allowed

b. Management and Administration (M&A) Costs

M&A are not operational costs but are necessary costs incurred in direct support of the grant or cooperative agreement or as a consequence of it, such as travel, meeting-related expenses, and salaries of full-/part-time staff in direct support of the program. As such these can be itemized in financial reports.

c. Indirect Facilities and Administrative (F&A) Costs

Indirect Costs (IDC) are allowable by the recipient and subrecipients as described in 2 C.F.R. Part 200, including 2 C.F.R. § 200.414. Applicants with a current negotiated IDC rate agreement who desire to charge indirect costs to an award must provide a copy of their IDC rate agreement at the time of application. Not all applicants are required to have a current negotiated IDC rate agreement. Applicants that are not required to have a negotiated IDC rate agreement but are required to develop an indirect cost rate proposal must provide a copy of their proposal at the time of application. Applicants who do not have a current negotiated IDC rate agreement (including a provisional rate) and wish to charge the de minimis rate must reach out

to the Program Office and the Grants Office for further instructions. Applicants who wish to use a cost allocation plan in lieu of an indirect cost rate must reach out to the Program Office and the Grants Office for further instructions.

d. Foreign Travel: Foreign travel required in the performance of the duties approved in this award must be approved by DHS in advance and in writing and comply with the applicable rules in 2 C.F.R. Part 200. Requests for foreign travel identifying the traveler, the purpose, the destination, and the estimated travel costs must be submitted to the DHS Grants Officer 60 days prior to the commencement of travel.

e. Evaluation Costs: Per section F.8 of this NOFO, "Program Evaluation," evaluation costs are allowable unless otherwise prohibited by statute or regulation.

E. Application Review Information

1. Application Evaluation Criteria

a. Programmatic Criteria

The evaluation of proposals submitted in response to this NOFO will be accomplished through independent technical reviews using the following criteria, which are of equal importance.

Criterion I: Scientific Merit and Technical Approach
The following elements will be considered and evaluated:

- The application is responsive to the Technical Mission Areas outlined in the Technical Priorities Section of the NOFO.
- The intellectual merit of the proposed research will serve to advance knowledge and understanding within the related technical field and/or across multiple related disciplines.
- The proposed University PI and National Laboratory Co-PI have the necessary experience (including prior, if applicable) and expertise to conduct the proposed research.
- The proposed research project addresses at least the following in a clear and complete manner: goals, schedule, methodology, and expected outcome.
- The proposed research exhibits creative, original (non-duplicative), innovative, and/or potentially transformative concepts.
- The dissemination of the results will broadly enhance scientific and technological understanding that may be beneficial to the nuclear forensics community.

Criterion II: Student Component
The following elements will be considered and evaluated:

- At least 2 undergraduate fellows and 2 graduate fellows are proposed.
- The proposed undergraduate fellows are pursuing or planning to pursue an undergraduate degree in, and the proposed graduate fellows are pursuing or planning to pursue doctoral study in specialties directly relevant to nuclear forensics, which include, but are not limited to:
    - o Analytical, Geo- and Radiochemistry
    - o Nuclear or General Physics
    - o Material Science
    - o Nuclear Engineering
    - o Computer Science
    - o Geology; and
    - o Mathematics.
- The proposed graduate fellows have at least 3 years of graduate work remaining at the beginning of the period of performance.
- The graduate fellows must agree to the TOAs outlined in Appendix A of the NOFO.
- At least two undergraduate students are actively integrated into the research process, including a plan to support some aspects of the graduate students' research. Undergraduate students must be in their junior or senior year of studies. The undergraduate students also must agree to the TOAs outlined in Appendix A of the NOFO.
- The mentoring plan addresses at least the following in a clear and complete manner: roles and responsibilities, implementation, and periodic evaluation.
- The research activity will advance discovery and understanding while promoting teaching, training, and learning to support fostering the next generation of scientists and engineers.

Criterion III: Collaboration Concept and Management Plan
The following elements will be considered and evaluated:

- A direct, formalized agreement has been established between the University and a collaborating national or defense laboratory. The letter must be provided before the release of award funds. However, to facilitate meeting the application deadline, DHS CWMD allows for a Letter of Intent (LOI) to be provided with the proposal submission in lieu of a formalized agreement between the University and Laboratory. Applicants may use the DHS-approved LOI template provided in Appendix C.
- The proposed activity will broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.).
- An effective Management Plan which outlines project administration, coordination, and administrative processes.

b. Financial Integrity Criteria

Prior to making a federal award, DHS is required by 31 U.S.C. § 3354, as enacted by the Payment Integrity Act of 2019, Pub. L. No. 116-117 (2020); 41 U.S.C. § 2313; and 2 C.F.R. § 200.206 to review information available through any Office of Management and Budget (OMB)-designated repositories of government wide eligibility qualification or financial integrity information, including whether the applicant is suspended or debarred.

DHS staff in the Grants and Financial Assistance Division (GFAD) will evaluate the risks to the program posed by each applicant, including conducting due diligence to ensure an applicant's ability to manage federal funds. This evaluation is in addition to the evaluation of the applicant's eligibility and the quality of its application on the basis of the Programmatic Criteria, and results from this evaluation may assist funding decisions. If an award is made, DHS may apply special conditions that correspond to the degree of risk of the award. DHS may pose additional questions to the applicant to aid in conducting the pre-award risk review. Therefore, application evaluation criteria may include the following risk-based considerations of the applicant:

- Financial stability.
- Quality of management systems and ability to meet management standards.
- History of performance in managing federal awards, including previous DHS awards, cooperative agreements, or procurement awards such. Under this factor, DHS will evaluate:
  - Timeliness of compliance with applicable reporting requirements.
  - Accuracy of data reported.
  - Conformance to the terms and conditions of previous federal awards.
  - If applicable, the extent to which any previously awarded amounts will be expended prior to future awards.
- Reports and findings from audits, including from single audits performed under 2 C.F.R. Part 200, Subpart F – Audit Requirements.
- Publicly available information, including information from the applicant organization's website.
- Ability to effectively implement statutory, regulatory, or other requirements.

In addition, organizations who have not received prior DHS GFAD awards may be required to complete a risk assessment questionnaire as part of the pre-award financial and administrative review.

c. Supplemental Financial Integrity Criteria and Review

Prior to making a federal award where the anticipated total federal share will be greater than the simplified acquisition threshold, currently $250,000:

- The Program Office is required to review and consider any information about the applicant that is in the designated integrity and performance system

accessible through SAM, which is currently the Federal Awardee Performance and Integrity Information System (FAPIIS) and is accessible through the SAM.gov website.

- An applicant, at its option, may review information in FAPIIS and comment on any information about itself that a federal awarding agency previously entered.
- The Program Office will consider any comments by the applicant, in addition to the other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 2 C.F.R. § 200.206.

2. Review and Selection Process

Application Receipt: All completed applications submitted through Grants.gov in response to this NOFO will be subjected to a technical evaluation by a panel review.

Application Handling: Completed applications will be handled following DHS information safeguarding procedures.

Panel Evaluators and Reviewers/Advisors: Only federal employees will serve on the Panel as Evaluators. The Panel will include at least three Panel Evaluators who will review all applications, independently evaluate, and score each application, and who will be responsible for determining, with respect to each evaluation factor, the final ratings of the applications. Each Evaluator is a subject-matter expert (SME) assigned to the appropriate topics (TMA) based on their technical expertise. The Evaluators will be selected by the Program Office, which will also facilitate the review. Applicants are advised that the Government will use non-federal contractor SMEs who have signed appropriate non-disclosure agreements, to support CWMD as proposal Reviewers/Advisors throughout the objective review process. Contractor SMEs serve as non-voting Advisors to the objective review process.

Evaluation: Evaluators will conduct their individual evaluation for each assigned application. Following the individual evaluation, a consensus review will be held to formulate an overall score and ultimately a recommendation for each application.

Each criterion will be scored according to the following adjectival/numerical ratings:

- EXCELLENT (5): Excellent in all respects; offers one or more very significant strengths not offset by weaknesses. Application demonstrates excellent understanding of the criterion as described in the funding opportunity and

presents an approach that significantly exceeds performance or capability standards necessary for acceptable award performance.

- VERY GOOD (4): High quality in almost all respects; offers one or more significant strengths not offset by weaknesses. Application demonstrates very good understanding of the criterion as described in the funding opportunity and presents an approach that exceeds performance or capability standards necessary for acceptable award performance.

- SATISFACTORY (3): Good quality in most respects; offers one or more strengths not offset by weaknesses. Application demonstrates good understanding of the criterion as described in the funding opportunity and presents an approach that meets performance or capability standards necessary for acceptable award performance.

- MARGINAL (2): Marginal quality in most respects; strengths are offset by weaknesses. Application demonstrates shallow understanding of the as described in the funding opportunity and presents an approach that only marginally meets performance or capability standards necessary for acceptable award performance.

- UNSATISFACTORY (1): Poor quality in most respects; strengths (if any) are offset by weaknesses. Application demonstrates a lack of understanding of the criterion as described in the funding opportunity and presents an approach that does not meet performance or capability standards necessary for acceptable award performance.

The overall score, based on the consensus ratings of the Evaluators, will be calculated as follows:

Evaluation Categories	Rating Scale
Scientific Merit and Technical Approach	1-5
Student Component	1-5
Collaboration Concept and Management Plan	1-5

OVERALL SCORE 1-5, **Unsatisfactory - Excellent**

The Overall Score is computed by the following: 1/3*(Scientific Merit and Technical Approach) + 1/3*(Student Component) + 1/3*(Collaboration Concept and Management Plan). If a decimal results, the Evaluators will round to a whole number. Subjective judgment may be used in choosing to round up or down.

Recommendation

The rating of recommendations for each application will follow:

- **Recommended (R) –** Proposals have met and/or exceed the topic requirements/objectives and will conduct successful research. Proposals under this rating are recommended for funding.
- **Selectable (S) –** Proposals will likely satisfy the topic requirements/objectives and have a likelihood of successful research. Proposals under this rating are recommended for funding, if available.
- **Not Recommended (NR) –** Proposals that are non-responsive to the topic area requirements/objectives and/or do not satisfy the evaluation criteria and will unlikely conduct successful research. Proposals under this rating are not recommended for funding.

Applications that receive a consensus rating of 1 in any criterion are deemed "not recommended." All remaining applications will be considered "selectable." Based upon the overall score of the remaining applications, the applications will be ranked in order of score, and the highest ranked applications will be deemed "recommended" based on availability of funding.

A summary of the recommendation and accompanying narrative will be completed by each reviewer. The Program Office will make the selection based on the consensus evaluation. Please note that decisions to fund all the recommended proposals are subjected to available funding.

After programmatic approval has been obtained, the proposals recommended for funding will be forwarded to DHS GFAD for review of business, financial, and policy implications. After an administrative review has occurred, Grants Officers will perform the processing and issuance of an award. Proposers are cautioned that only a Grants Officer may make commitments, obligations, or awards on behalf of DHS or authorize the expenditure of funds. No commitment on the part of CWMD should be inferred from technical or budgetary discussions with a CWMD Program Officer. A principal investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the DHS Grants Officer does so at their own risk.

F. Federal Award Administration Information

1. Notice of Award

Before accepting the award, the AOR and recipient should carefully read the award package. The award package includes instructions on administering the award and the terms and conditions associated with responsibilities under federal awards. By submitting an application, applicants agree to comply with the requirements of this NOFO and the terms and conditions of the award, should they receive an award.

Applicants are advised that DHS FAO's practice is to provide a separate notice stating that an application has been selected before it makes the federal award letter. This notice is not an authorization to begin performance (to the extent that it allows charging to federal awards of pre-award costs at the non-federal entity's own risk). The notice of federal award signed by the grants officer (or equivalent) is the authorizing document and will be provided through electronic means to notified awardees.

2. Pass-Through Requirements

Recipients must pass through at least $165,000 per year for 3 years; if the award is continued, then recipients must also pass through at least $165,000 per year for the additional 2 years.

Recipients must issue subawards to national or defense laboratories in compliance with 2 C.F.R. § 200.332.

3. Administrative and National Policy Requirements

All successful applicants for DHS grant and cooperative agreements are required to comply with DHS Standard Terms and Conditions, which are available online at: DHS Standard Terms and Conditions.

The applicable DHS Standard Terms and Conditions will be those in effect at the time the award was made unless the application is for a continuation award. In that event, the terms and conditions in effect at the time the original award was made will generally apply. What terms and conditions will apply for the award will be clearly stated in the award package at the time of award.

4. Reporting

A. **Federal Financial Reporting Requirements**

The Federal Financial Report (FFR) form, also known as Standard Form 425 (SF-425), is available online at: SF-425 OMB #4040-0014

1) **Quarterly Federal Financial Reports (FFRs)** – The Recipient shall submit a quarterly FFR (SF-425) into the GrantSolutions system no later than thirty (30) days after the end of each federal quarter. Reports are due on 1/30, 4/30, 7/30, and 10/30. The report shall be submitted electronically via www.GrantSolutions.gov using the submission guidance entitled, "Recipient Reporting Process: Federal Financial Report" found here: https://www.Grantsolutions.gov/support/granteeUsers.html.

2) **Final Federal Financial Report** – the Recipient shall submit the final FFR (SF-425) into the GrantSolutions system no later than 120 days after the end of the PoP. The report shall be submitted electronically using the submission guidance entitled, "Recipient Reporting Process: Federal Financial Report" found here: https://www.Grantsolutions.gov/support/granteeUsers.html.

B. **Programmatic Performance Reporting Requirements**

1) **Quarterly Performance Report:** The Recipient shall submit performance reports into the GrantSolutions system no later than thirty (30) days after the end of each federal quarter. Reports are due on 1/30, 4/30, 7/30, and 10/30. The report shall be submitted via www.GrantSolutions.gov using the performance reporting feature and submission guidance found here: https://www.grantsolutions.gov/support/granteeUsers.html. A courtesy copy of the report should also be e-mailed to the Program Office at NTNFCMonthlyReports@hq.dhs.gov.

   The following performance metrics must be included in the Quarterly Performance Reports:

   a) A summary of research conducted, to include quantifiable outcomes and any setbacks.
   b) Expected research objectives/goals in the next quarter.
   c) Any requests for funding and research deviations from the original proposal and a comprehensive explanation as to the reason for the request.
   d) Efforts undertaken with regard to the Mentoring Plan.
   e) Graduate Fellow academic and research progress.
   f) Undergraduate Student academic and research progress.
   g) Summary of student practical research at the collaborating national or defense laboratory (if applicable).
   h) Travel and conference attendance within the last quarter and upcoming travel/conference attendance.
   i) Copies of any formal presentations or articles as a result of the research; and
   j) A summary of activities with regard to engagement of underrepresented groups, if applicable.

2) **Annual Project Summary and Accomplishments:** In addition to the required performance report, an updated project quad chart and summary of fiscal year accomplishments must be submitted to the Program Office, as requested by CWMD for every year of the project's duration. Specific due dates and templates

will be distributed by the Program Office at least one month prior to the requested submission date.

3) **Final (End of Program) Performance Report:** The Recipient shall submit the Final Performance Report into the GrantSolutions system no later than 120 days after the end of the PoP. The report shall be submitted via www.GrantSolutions.gov using the performance reporting feature and submission guidance found here: https://www.grantsolutions.gov/support/granteeUsers.html A courtesy copy of the report should also be e-mailed to the Program Office at NTNFCMonthlyReports@hq.dhs.gov

C. Closeout Reporting Requirements

Within 120 days after the end of the period of performance, or after an amendment has been issued to close out a grant, recipients must submit the following:

a) The final request for payment, if applicable.
b) The final FFR (SF-425).
c) The final progress report detailing all accomplishments.
d) A qualitative narrative summary of the impact of those accomplishments throughout the period of performance; and
e) Other documents required by this NOFO, terms and conditions of the award, or other Program Office guidance.

If applicable, an inventory of all construction projects that used funds from this program must be reported with the final progress report.

After these reports have been reviewed and approved by the Program Office, a closeout notice will be completed to close out the grant. The notice will indicate the period of performance as closed, list any remaining funds that will be de-obligated, and address the requirement of maintaining the grant records for three years from the date of the final FFR, unless a longer period applies, such as due to an audit or litigation, for equipment or real property used beyond the period of performance, or due to other circumstances outlined in 2 C.F.R. § 200.334, Retention Requirements for Records.

In addition, any recipient that issues subawards to any subrecipient is responsible for closing out those subawards as described in 2 C.F.R. § 200.344, Closeout. Recipients acting as pass-through entities must ensure that they complete the closeout of their subawards in time to submit all necessary documentation and information to the Program Office during the closeout of their prime grant award.

The recipient is responsible for returning any funds that have been drawn down but remain as unliquidated on recipient financial records.

5. Disclosing Information per 2 C.F.R. § 180.335

This reporting requirement pertains to disclosing information related to government-wide suspension and debarment requirements. Before a recipient enters a grant award with the Program Office, the recipient must notify the Program Office if it knows if it or any of the recipient's principals under the award fall under one or more of the four criteria listed at 2 C.F.R. § 180.335:

a) Are presently excluded or disqualified.
b) Have been convicted within the preceding three years of any of the offenses listed in 2 C.F.R. § 180.800(a) or had a civil judgment rendered against it or any of the recipient's principals for one of those offenses within that time period.
c) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses listed in 2 C.F.R. § 180.800(a); or
d) Have had one or more public transactions (federal, state, or local) terminated within the preceding three years for cause or default.

At any time after accepting the award, if the recipient learns that it or any of its principals falls under one or more of the criteria listed at 2 C.F.R. § 180.335, the recipient must provide immediate written notice to the Program Office in accordance with 2 C.F.R. § 180.350.

6. Reporting of Matters Related to Recipient Integrity and Performance

Per 2 C.F.R. Part 200, Appendix I § F.3, the additional post-award reporting requirements in 2 C.F.R. Part 200, Appendix XII may apply to applicants who, if upon becoming recipients, have a total value of currently active grants, cooperative agreements, and procurement contracts from all federal awarding agencies that exceeds $10,000,000 for any period of time during the period of performance of an award under this funding opportunity. Recipients that meet these criteria must maintain current information reported in FAPIIS about civil, criminal, or administrative proceedings described in paragraph 2 of Appendix XII at the reporting frequency described in paragraph 4 of Appendix XII.

7. Monitoring and Oversight

Per 2 C.F.R. § 200.329, the Program and Grants Offices, through their authorized representatives, have the right, at all reasonable times, to conduct desk reviews, make

site visits to review project accomplishments and management control systems to review project accomplishments and to provide any required technical assistance. During site visits, The Program and Grants Offices, will review grant recipients' files related to the grant award. As part of any monitoring and program evaluation activities, grant recipients must permit the Program and Grants Offices, upon reasonable notice, to review grant-related records and to interview the organization's staff and contractors regarding the program. Recipients must respond in a timely and accurate manner to Program and Grants Office requests for information relating to the grant program.

8. Program Evaluation

Recipients and subrecipients are encouraged to incorporate program evaluation activities from the outset of their program design and implementation to meaningfully document and measure their progress towards the outcomes proposed. Title I of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), Pub. L. No. 115-435 (2019) defines evaluation as "an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency." Evidence Act § 101 (codified at 5 U.S.C. § 311). Credible program evaluation activities are implemented with relevance and utility, rigor, independence and objectivity, transparency, and ethics (OMB Circular A-11, Part 6 Section 290).

Evaluation costs are allowable costs (either as direct or indirect), unless prohibited by statute or regulation, and such costs may include the personnel and equipment needed for data infrastructure and expertise in data analysis, performance, and evaluation. (2 C.F.R. Part 200).

In addition, recipients are required to participate in a DHS-led evaluation if selected, which may be carried out by a third-party on behalf of the Program Office or DHS. By accepting grant funds, recipients agree to participate in the evaluation, which may include analysis of individuals who benefit from the grant, and provide access to program operating personnel and participants, as specified by the evaluator(s). Recipients are also encouraged to participate in any additional evaluations once the period of performance ends. For sponsored graduate students, because of the statutory requirement for the graduate student to serve for 2 years in a post-doctoral position at a laboratory or federal agency, DHS will continue monitoring for 2 years after the period of performance ends to ensure compliance with this requirement.

9. Other Requirements

a. Students: Students supported under this project are classified as trainees and must be United States citizens.

b. **Kick-Off:** This meeting will be held remotely or on-site to discuss in detail the technical and programmatic aspects of the proposed research.

c. **Collaboration Meeting:** Periodic collaboration meetings will enable the recipients and subrecipients to review progress, exchange information, and promote and foster collaboration. It is required that all PIs and graduate students supported through this award attend and participate in these meetings in their entirety.

G. DHS Awarding Agency Contact Information

1. Contact and Resource Information

The **Program Officer** shall be the DHS official responsible for monitoring the completion of work and technical performance of the projects or activities described in the Program Narrative Statement:

Sandra Gogol
Mail Stop: 0315
Department of Homeland Security
2707 Martin Luther King Jr Ave SE
Washington, DC 20528-0315
Mobile: (202) 527-3452
Email: Sandra.Gogol@hq.dhs.gov

The **Grants Officer** shall be the DHS official that has the full authority to negotiate, administer and execute all terms and conditions of this Award in concurrence with the Program Officer:

Shareef Prater
Office of Procurement Operations (MGMT I OPO)
245 Murray Lane SW, Mail Stop 0115
Washington, D.C. 20528-0115
Office: 202.770.4776
Email: Shareef.Prater@hq.dhs.gov

2. Systems Information

a. **Grants.gov**

For technical assistance with Grants.gov, call the customer support hotline 24 hours per day, 7 days per week (except federal holidays) at (800) 518-4726 or e-mail at support@grants.gov.

b. Grantsolutions.gov
Information for GrantSolutions.gov access will be provided only to applicants who are selected for funding.

H. Additional Information

1. Period of Performance Extensions

Extensions to the period of performance under this program are *allowed.*
Note: Extensions are only allowed during the last year of the award. Please follow the instructions below to apply for an extension.

- Send a request for the form to the Program Office and Grants Officer. Upon completion of the Extension Request form, send your completed forms to the Program Office and Grants Officer.
- Requests shall be submitted at least two months prior to the end of period of performance.

2. Automatic Carry-forward/Carry-over

This award has a single 3-year budget period. Any unobligated funds remaining at the end of a budget period will automatically transfer to the next budget period, a process commonly known as carry-forward or carry-over, subsequent budget period amounts may be reduced in proportion to the carry- forward/carryover amounts. DHS may request estimated Federal Financial Reports (FFRs) be submitted prior to the budget period end date to determine potential unobligated amounts. Large unobligated amounts may result in restriction of automatic carryover authority.

3. Other Information

a. Only Grants Officers can bind the Federal Government to the expenditure of funds. Publication of this NOFO does not obligate DHS to award any specific number of grants and/or cooperative agreements or to obligate any particular amount of funding.
b. Applicants are advised to visit frequently the Grants.gov website for notifications of subsequent amendments to the NOFO, such as website links, Information Bulletins, etc.

4. Appendices

a. Appendix A: Terms of Appointment
b. Appendix B: Cover Page
c. Appendix C: Letter of Intent

TERMS OF APPOINTMENT

NUCLEAR FORENSICS RESEARCH AWARD – UNDERGRADUATE AND GRADUATE FELLOWSHIP

The purpose of the Department of Homeland Security (DHS), Countering Weapons of Mass Destruction Office (CWMD), Nuclear Forensics Research Award (NFRA) Undergraduate and Graduate Fellowship is to recruit and develop the next generation of uniquely qualified scientists and engineers required to execute the U.S. Government's (USG) National Technical Nuclear Forensics (NTNF) mission.

PERIOD OF APPOINTMENT

The appointment period is defined in the Appointment Letter, of which these Terms are a part, and may be extended by DHS for specific time increments: for undergraduate fellows, any extension may not exceed a total of 4 years, and for graduate fellows, any extension may not exceed a total of 5 years per section 1923(a)(12) of the Homeland Security Act of 2002 (codified as amended at 6 U.S.C. § 592(a)(12)). All appointments are subject to the continuing availability of appropriated funds. In the event that appropriated funding is not available, the fellow will be notified as soon as possible regarding the procedures for ending the appointment.

REQUIREMENTS FOR MAINTAINING APPOINTMENT

Maintain a minimum 3.0 out of 4.0 GPA for the duration of the appointment.

Attend and present technical findings at the periodic collaboration meeting or other CWMD-sponsored meetings, as necessary and/or requested.

Spend nine weeks per year performing hands-on research at a national or defense laboratory in support of the award goals. This time commitment does not have to be fulfilled consecutively. For undergraduate fellows, at least one of the annual hands-on research requirements must be performed through a summer internship, if possible. For graduate fellows, at least two of the annual hands-on research requirements must be performed through summer internships, if possible.

Be eligible to receive and maintain a U.S. Department of Energy (DOE) Q clearance.

DUPLICATION OF BENEFITS

The fellow may not receive additional compensation for services rendered under the NFRA award during the appointment period, unless approved by the CWMD Program Office. The fellow, however, may accept awards, prizes, and other payments that do not require a service or are unrelated to the NFRA award. Veterans Administration benefits are excluded from this restriction.

ACCESS AUTHORIZATION (Q SECURITY CLEARANCE)

Upon acceptance of the appointment, the fellow may be required to complete applications for

*Initials*_____ *Date*_____

a security clearance with DOE. This clearance may be required for the fellow to perform research at the collaborative national or defense laboratory. If a clearance is not granted, the undergraduate or graduate fellow will be allowed to complete the current year's appointment, and the undergraduate or graduate fellow will not be required to reimburse the U.S. Government for any NFRA-funded stipend, tuition, or fees. No renewal appointments, however, will be granted to a fellow who is not able to obtain a security clearance when it was requested. The university will be required to replace the graduate fellow as a condition of maintaining the NFRA.

Security clearances will be processed by the appropriate personnel security office of the laboratory which is actively collaborating under the auspices of the NFRA.

OBLIGATIONS

NFRA Graduate Fellowship appointments are part of the National Nuclear Forensics Expertise Development Program, authorized in section 1923(a)(12) of the Homeland Security Act (6 U.S.C. § 592(a)(12)). The fellow must agree to specific terms of appointment in accordance with this law and the terms and conditions of the award. Specifically:

- The fellow must complete his/her academic programs with a consistently high level of academic standing, meaning maintaining a minimum 3.0 out of 4.0 GPA for the duration of the appointment.
- The fellow must attend and present technical findings at a periodic collaboration meeting or other CWMD-sponsored meetings, as necessary and/or requested.
- The fellow must also spend at least nine weeks per year performing hands-on research at the collaborating national or defense laboratory (this time commitment does not have to be fulfilled consecutively).
    - Undergraduate fellows must perform this hands-on research through at least one summer internship, if possible.
    - Graduate fellows must perform hands-on research through at least two summer internships, if possible.
- Additionally, graduate fellows, upon graduation, must serve for two years in a postdoctoral or other staff position at a DOE national laboratory, a Department of Defense laboratory, or a federal agency in a technical nuclear forensics-related specialty. The Program Office will work closely with the fellow throughout the award to foster strong professional connections, which will be further strengthened through the university-laboratory collaboration process.

Repayment requirements apply if the fellow does not abide by these requirements. Specifically:

- Should a fellow fail to maintain a high level of academic standing, who is dismissed for disciplinary reasons from the university, or who voluntarily terminates academic training before graduation from the program funded by NFRA, the fellow must repay the U.S. Government within one year of the date of default of all NFRA funds paid to the fellow or to the university on behalf of the fellow per 6 U.S.C. § 592(a)(12)(C)(I).
- Specific to graduate fellows, except in the case of death or disability, should a graduate fellow fail to begin or complete a post-doctoral position at a laboratory or federal

*Initials*_____ *Date*_____

agency, the fellow must repay the U.S. Government the total amount of the tuition and stipend, including interest at the maximum legally prevailing rate current for student loans at the time the fellowship was awarded per 6 U.S.C. § 592(a)(12)(C)(II).

During the appointment, each fellow is a member of the professional community of the facility to which he or she is assigned and is subject to the rules, privileges, and responsibilities of that community. Failure to adhere to facility requirements will, at the determination of the CWMD Program Office, be basis for revocation of the fellowship and cessation of any further payments.

REPORTS AND PUBLICATIONS

The Program Office requires that research performed by the fellow is aligned with the NFRA research project and that the security and sensitivity of the work is protected.

Reports, presentations, and publications (including any final dissertations) containing research supported through the NFRA must be submitted to the collaborating laboratory for technical and classification review prior to being sent to the CWMD Program Office for approval and before being made available to the public. The fellow should follow laboratory-specific review processes and allow at least two weeks (at least four weeks for dissertations) for CWMD Program Office approval.

For graduate fellows, normally, the laboratory advisor will serve on the fellow's graduate committee. If not, when the fellow distributes his/her final draft of the undefended thesis to the graduate committee, he/she must also provide a copy to the laboratory advisor, allowing at least two weeks for review and comment.

PUBLICATION ACKNOWLEDGMENT

The Program Office encourages the publication of reports and articles in scientific and engineering journals. The fellow must submit any articles, reports, or theses, which have been approved as described above, prior to submission for publication to the CWMD Program Office. All publications must show the joint affiliation of the fellow with the university and with the laboratory at which the research was conducted. Support from the NFRA should also be acknowledged in the following manner:

"*This material is based upon work supported by the U.S. Department of Homeland Security under Notice of Funding Opportunity Number, DHS-23-CWMD-130-NFRA-00X.*"

In addition, the following disclaimer should be added to all publications and presentations:

"*The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security.*"

DISCLAIMER OF LIABILITY

DHS, the collaborating laboratory facility, its sponsoring agency, and/or persons acting on the

*Initials*_____ *Date*_____

behalf of the facility are not responsible for:

1. Any alleged or actual liability, cost, or expense incurred as a result of personal injury to or death of persons including the fellow, or damage to or destruction of property, or for any other loss, damage, or injury of any kind.

2. Any claims, losses, expenses (except as otherwise provided in these Terms of Appointment or NFRA award terms and conditions) or damages, including but not limited to bodily injury, death, or property damage, caused by the negligence or misconduct of the fellow.

3. Any claims, losses, expenses, or damages, including, but not limited to, bodily injury, death, or property damage, arising out of, or resulting in any way from, the use or misuse of information acquired by the fellow during the appointment under these Terms of Appointment.

4. Neither DHS, nor the collaborating laboratory facility, its sponsoring agency, and/or persons acting on the behalf of the facility, make any warranty, expressed or implied, **(I)** with respect to the accuracy, completeness, or usefulness of any information acquired by the fellow under these Terms of Appointment, **(II)** that the use of any such information may not infringe upon privately owned rights, **(III)** that the information acquired by the fellow under these Terms of Appointment will not result in injury or damage when used for any purpose, or **(IV)** that information acquired by the fellow under these Terms of Appointment will accomplish any particular results or is safe for any purpose, including the intended purpose.

FELLOW DATA AGREEMENT

In consideration of performing research at the collaborative facilities, the fellow hereby agrees as follows:

1. The fellow shall provide the collaborative facility, and DHS if requested, in written form, any and all technical data produced or generated during the course of the appointment in whatever form it may be recorded. If not recorded or written, the fellow shall (upon request) provide the collaborative facility and/or DHS a written report of any technical data generated by the fellow during the course of the appointment. “Technical data” includes recorded information, regardless of form or characteristic, of a scientific or technical nature. It may be, for example, documented, experimental, or developmental research; demonstration or engineering work usable or to be used to design a process or to procure or produce materials; or support to maintain or operate a facility. The data may be graphic or pictorial delineations in media such as drawings or photographs, text in specifications or related performance or design-type documents, or computer software (including computer programs, computer software databases, and computer software documentation). Examples of technical data include research and engineering data, engineering drawings and associated lists, specification, standards, process sheets, manuals, technical reports, catalog item identification and related information. Technical data as used herein does not include financial reports, cost analyses, or other information incidental to contract administration.

2. Per 2 C.F.R. § 200.315(d), the U.S. Government including federal agencies, shall have the

*Initials*_____ *Date*_____

right to and authorize others to receive, obtain, reproduce, publish, or otherwise use the fellow's technical data, in whole or in part, produced under the NFRA award, in any manner and for any purpose whatsoever and reserve the right to permit others to do so as well.

3. The fellow understands and agrees to respect any and all access limitations to any classified information, military sensitive unclassified information, proprietary information (including but not limited to proprietary data, trade secrets, or other information which is restrictively marked or designated), or any other technical data, commercial, or financial information which is privileged or confidential during or as a result of such appointment as may be established by the collaborative facility or DHS. In the event that the fellow should receive or in any way obtain access to any such information in connection with this appointment, whether by authorization, inadvertently, or otherwise, the fellow further understands that unauthorized disclosure of or failure to safeguard such information may subject the fellow to civil and/or criminal liability under applicable laws of the United States.

4. In recognition of the statutory intent set forth in 35 U.S.C. § 212, the fellow acknowledges that this appointment is considered to be in the nature of a scholarship, fellowship, training grant, or other funding agreement made on behalf of a federal agency primarily to an awardee for educational purposes, and therefore, no provision shall be contained herein, nor shall any section be construed as permitting or authorizing the federal agency to assert any rights to inventions made by the awardee.

ACCEPTANCE OF TERMS OF APPOINTMENT

I have carefully read the above Terms of Appointment and I understand that this appointment is granted subject to said Terms. By accepting the appointment, I am bound by the Terms of Appointment, the Appointment Letter, and the terms and conditions of the NFRA award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. 18 U.S.C. § 1001; 31 U.S.C. §§ 3729-3733, 3801-3812.

_____
Name of fellow

_____
Signature of fellow

*Initials*_____ *Date*_____

FY23 CWMD Nuclear Forensics Research Awards Notice of Funding Opportunity	
Proposal ID: NFRA-XXXX-YYYY-2-T0#-	**Funding Opportunity Number:** DHS-23-CWMD-130-NFRA-001
Proposed Amount:	**Proposed Duration (in months):**
Project Title:	
Primary Organization Information	
Organization Name and Address: Organization Name Street Number and Name City, State Zip Code	**Organization Postal Name and Address:** Organization Name Street Number and Name City, State Zip Code
UEI:	**TIN/EIN:**
Principle Investigator (PI)/Project Leader Information	
PI Full Name and Address:	
PI Phone (include area code):	**PI Fax (include area code):** / **PI E-mail:**
Co-PI, Organization:	**Co-PI, Organization:**
Co-PI, Organization:	**Co-PI, Organization:**
Collaborative Effort? Yes/No **Subcontractor? Yes/No.** **If yes, list organization and lead technical contact name for each collaborator and subcontractor:**	
Executive Summary (less than 2500 characters w/ spaces)	
Provide a brief summary of your concept's anticipated performance relative to the research topic goals and current state-of-the-art solutions, and why, if the research is successful, it could have a strategic impact on the CWMD mission to counter attempts by terrorists or other threat actors to carry out an attack against the United States or its interests using a weapon of mass destruction. Describe what is unique about this proposed technology, how it fits within the topic area, and how it would, if successfully realized, have a significant impact on the CWMD mission objectives to detect and prevent the illicit entry, transport, assembly, or potential use of unauthorized chemical, biological, radiological, or nuclear (CBRN) materials, devices or agents within the United States and otherwise help protect against an attack using such materials, devices, or agents. Provide a concise description of the scientific, technical, and/or engineering approach you propose to pursue and address in this effort. Describe the key aspects, core concepts or components and/or developmental capability proposed and relevant details about how such will function or perform. *This summary should contain enough information to fully capture the program concept/intent and should completely describe the overall program without relying on other sections of the proposal.*	

AUTHORIZATION	
Preliminary Proposal Submission Date:	**Authorized Representative Name and Signature:**

Project Information		
Number of Graduate Students:	**Number of Undergraduate Students:**	**Number of Postdoctoral Researchers:**
Number of High School Students: N/A	**Total Number of Research Personnel:**	**Are any of the researchers on this project foreign nationals? Yes/No.** **If Yes, please list number of persons and country/countries of citizenship.**

LETTER OF INTENT

between

(NAME of UNIVERSITY)
(Name of Division)
(Address of University)

and

(Name of U.S. National or Defense Laboratory)
(Name of Division)
(Address of National or Defense Laboratory)

(Name of University) on behalf of its (unit name) and (Name of U.S. National or Defense Laboratory) on behalf of its (unit name) establish this Letter of Intent (LOI) and hereby agree to foster a research collaboration, in case the (Name of University)'s application was selected for funding, in the context of the Nuclear Forensics Research Awards (NFRAs) Notice of Funding Opportunity (NOFO) (Funding Opportunity Number DHS-23-CWMD-130-NFRA-00X) issued by the U.S. Department of Homeland Security (DHS), Countering Weapons of Mass Destruction (CWMD) Office, Systems Support Directorate (SSD), Research & Development Division. (Name of University) and (Name of U.S. National or Defense Laboratory) are referred to as "Party" or "Parties."

1. The signatory Parties will encourage the following activities as reasonably practicable to promote research collaboration:

   a) Full engagement of faculty and laboratory staff with the graduate student and joint mentorship of the graduate student towards the student's Ph.D.-level thesis in an approved nuclear forensics research project.

   b) Availability of faculty, laboratory staff, facilities, equipment, and other resources in both the graduate student's home university and the partner laboratory in which the student will perform his/her Ph.D.-level thesis research.

   c) Faculty mentorship of the undergraduate student(s), and student access to laboratory staff, facilities, equipment, and other resources in both the student's home university and the partner laboratory in which the student will assist/perform nuclear forensics related work throughout the collaborative research process established by the Parties.

   d) Monitoring of student performance by the Parties, and participation in jointly convened meetings to discuss student and research project progress.

   e) Review of relevant academic/research manuscripts including, but not limited to, thesis/dissertation, pre-publication research papers, technical presentations for conferences, workshops, or other nuclear forensics related venues.

   f) Security classification reviews of final work products prior to publication/ presentation in professional venues is to be performed by the laboratory partner – on behalf of the academic partner – and by the DHS CWMD Office.

   g) Exchange of academic and partner laboratory sponsored final work products (e.g., research data and analysis, final reports, publications, and presentations).

   h) Laboratory sponsorship of security clearances for university faculty and students, as needed.

   i) Compliance with training, and other requirements to meet university faculty and student onsite access.

   Before implementing these activities, the Parties will discuss the opportunities and challenges presented and may thereafter enter into a formalized agreement based on the mutually agreed objectives and outcomes.

2. This LOI forms the framework for research collaboration between the Parties to identify and achieve shared goals and objectives, and to facilitate and develop a genuine and mutually beneficial research relationship. This LOI is non-binding and does not impose any legal or financial obligations or liabilities on either Party.

3. This LOI, which is to be provided by the national or defense laboratory to the academic institution and is included as part of the NOFO application, will suffice for completion of the application package to meet the submission deadline. However, as stated in the NOFO, a formalized agreement will be required prior to final award, and a formal subaward agreement to pass through funds from (Name of University) to (Name of U.S. National or Defense Laboratory) will be required after award.

4. Each Party shall comply with the laws and regulations that are applicable to such Party in the jurisdiction in which it is located, including, without limitation, export control, non-discrimination, data privacy, etc. Nothing in this LOI is intended to conflict with applicable laws or regulations. If a term of this LOI conflicts or is otherwise inconsistent with such authority, then that term shall be invalid, but all other terms shall remain valid.

5. This LOI is for the sole and exclusive benefit of the Parties, and this LOI shall not be construed to bestow any legal right or benefit upon any other persons or entities.

6. This LOI may be revised or supplemented as necessary by the Parties. Substantive revisions or supplements will be in writing and signed by the Parties, with copies provided to DHS CWMD.

7. Each party shall designate a person or office to serve as liaison for implementing this Letter of Intent. For (Name of University), the contact person will be (name, address, phone, fax, email). For (Name of U.S. National or Defense Laboratory), the contact person will be (name, address, phone, fax, email).

8. This LOI does not provide funding. If (Name of University) receives a NFRA award, any funding from the (Name of University) to (Name of U.S. National or Defense Laboratory) will be provided by (Name of University) executing a separate subaward agreement in accordance with federal grant regulations in 2 C.F.R. Part 200 and the terms and conditions of the NFRA award.

(Name of University)

(PRINT: First name, Last name)

(Name and title of Department Chair or Dean of Sponsoring Unit)

SIGNATURE: _____

DATE: _____

(Name of U.S. National or Defense Laboratory)

(PRINT: First name, Last name)

(Name and title of National/Defense Laboratory counterpart)

SIGNATURE: _____

DATE: _____