



ONR Announcement N00014-22-S-F005

FUNDING OPPORTUNITY ANNOUNCEMENT (FOA)

**Fiscal Year (FY) 2022 Department of Defense Research and Education
Program for Historically Black Colleges and Universities and Minority-
Serving Institutions**

Deadlines

Application Inquiries and Questions
22 April 2022 (Friday)

Applications must be received no later than
06 May 2022 (Friday) at 11:59 PM Eastern Time

Amendment 0001: The purpose of this amendment is to update the USDRE priority areas (page 7), clarify applicant eligibility (page 11), update the program officer to be listed in field 4b of the SF424 (page 13), update the technical point of contact (page 35), and to remove the DUNS requirements and add the Unique Entity Identifier (UEI) requirements. The DoD transitions from DUNS to UEI on 4 April 2022. If you submitted a proposal BEFORE 4 April 2022, you do NOT need to resubmit your proposal using the new forms.

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I. Overview of the Research Opportunity

This publication constitutes a Funding Opportunity Announcement (FOA) as contemplated in the Department of Defense Grants and Agreements regulations (DoDGARS) 32 CFR 22.315(a). The ONR reserves the right to fund all, some, or none of the proposals received under this FOA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and budget proposals (or any other material) submitted in response to this FOA will not be returned. It is the policy of ONR to treat all proposals submitted under this FOA as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

Hyperlinks have been embedded within this document and appear as underlined, blue-colored words. The reader may “jump” to the linked section by clicking the hyperlink.

A. Overview

1. Federal Awarding Agency Name

Office of Naval Research
One Liberty Center
875 N. Randolph Street
Arlington, VA 22203-1995

2. Funding Opportunity Title

FY 2022 Department of Defense Research and Education Program for Historically Black Colleges and Universities and Minority-Serving Institutions

3. Announcement Type

Initial Announcement

4. Funding Opportunity Number

N00014-22-S-F005

5. Catalog of Federal Domestic Assistance (CFDA Numbers)

12.300 Title: Department of Defense (DoD), Department of the Navy, Office of the Chief of Naval Research, Basic and Applied Research

6. Key Dates

Anticipated Schedule of Events *		
Event	Date (MM/DD/YEAR)	Time (Local Eastern Time)
Questions Regarding Eligibility and Technical Requirements**	04/22/2022	5:00 PM Eastern Time
Questions for Grants Officer Regarding Proposal Submission**	04/22/2022	5:00 PM Eastern Time
Proposals Due Date	05/06/2022	11:59 PM Eastern Time
Notification of Selection for Award*	06/17/2022	
Start Date of Grant*	08/01/2022	

*These dates are estimates as of the date of this announcement.

**Questions submitted after the Q&A deadline may not be answered.

**IMPORTANT NOTE: White Papers are NOT being solicited and will NOT be accepted.
This FOA is for proposal submissions only.**

7. Grants Officer

The Grants Officer for this announcement is identified in [Section G.4.](#)

II. DETAILED INFORMATION ABOUT THE RESEARCH OPPORTUNITY

A. Program Description

Under the authority of 10 U.S.C. § 2362 and pending the availability of funds, the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) in cooperation with the Office of Naval Research (ONR) seeks unclassified research proposals, basic or applied, from Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI) in research topics of interest to DoD and ONR.

Office of Naval Research:

Research topics of interest to ONR are available at <https://www.onr.navy.mil/>. Select “Work With Us,” then “Funding Opportunities,” and then “BAAs, FOAs and Special Program Announcements” to see the FY22 Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology, BAA N00014-22-S-B001. The ONR BAA may also be found on Grants.gov (<https://www.grants.gov>) by entering the BAA number in the “Search Grants” keyword box.

Cognizant Subject Matter Expert/Program Officer/Program Manager(s) across naval entities including the Office of Naval Research (ONR), the Naval Sea Systems Command (NAVSEA), the Naval Information Warfare Systems Command (NAVWAR), the U.S. Naval Research Laboratory (NRL) are available to discuss their research ideas in advance of proposal submission. A list of most ONR Subject Matter Experts/Program Officers/Program Managers and their contact information can be found at: <https://www.onr.navy.mil/our-research/our-program-managers>.

Under Secretary of Defense for Research and Engineering:

The scope of an application must align with the DoD priorities set forth in the National Defense Strategy (NDS) summary prepared by the Secretary of Defense and published in early 2018 (<https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>). The priorities discussed in the NDS have important components that rely on innovation and workforce talent. The research and engineering areas with highest priority to modernize DoD capabilities and support the NDS are:

- Advanced Computing and Software
- Advanced Materials
- Artificial Intelligence / Machine Learning
- Autonomy
- Biotechnology
- Cyber
- Directed Energy
- Fully Networked Command, Control and Communications (FNC3)
- Future Generation Wireless Technology (FutureG)
- Human-Machine Interfaces
- Hypersonics
- Microelectronics
- Quantum Science

- Renewable Energy Generation and Storage
- Space (to include aerospace)

Information about the modernization areas is available at <https://www.cto.mil/modernization-priorities>. Questions should be directed to Agency Contacts in [Section II.G.](#) of this FOA.

This Funding Opportunity Announcement (FOA) aims to (a) enhance research programs and capabilities in scientific and engineering disciplines critical to the national security functions of DoD; (b) enhance the capacity of HBCU/MI to participate more fully in all DoD research programs and activities; (c) increase the number of graduates, including underrepresented minorities, in fields of science, technology, engineering, and mathematics (STEM) important to the defense mission; and (d) encourage commitments by the eligible institutions to invest time and resources that will elevate their standing from R2 status to R1 status commensurate with the Carnegie Classification of Institutions of Higher Education.

The Carnegie Classifications include all U.S. degree-granting, Title IV eligible postsecondary institutions that granted at least one degree in a target year. All-inclusive classifications are time-specific snapshots of institutional attributes and behavior based on data from applicable academic years as reported through the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Carnegie Classification cycles are updated every three years starting in 2018. The 2021 Carnegie Classification Update was completed January 2022 and now contains the new classifications. For the purposes of this FOA, classification eligibility will be based on data from academic year 2019-2020 as reported through the NCES IPEDS. The current classifications and institutional information provided and used throughout the Carnegie Classification site reflect data from 2019 to 2020. Specifically, enrollment and institutional characteristics information is from Fall 2020 and degree completions from academic year 2019-20.

Eligible R2 HBCUs/MIs should be currently listed on the Carnegie Classification website as of the year the classification was issued during the most recent aforementioned update cycle. Institutions may view and download a copy of the current listings of R1/R2 statuses on Carnegie's website. Classification details are available at https://carnegieclassifications.iu.edu/classification_descriptions/basic.php.

The Carnegie Classifications are:

- R1: Doctoral Universities – Highest research activity
- R2: Doctoral Universities – Higher research activity
- R3: Doctoral Universities – Moderate research activity

In order to be classified as Doctoral Universities, institutions must award a minimum of twenty research or scholarship degrees each year. Within the Doctoral Universities classification, institutions are then separated into the three categories above based on research activity metrics.

The following research activity metrics are used when determining classifications:

- Research and development (R&D) expenditures in science and engineering (S&E)
- Research expenditures in non-S&E fields
- Number of S&E dedicated research staff (post-doctoral appointees and other non-faculty research staff with doctorates)
- Number of Doctoral degree conferrals in humanities fields, in social science fields, in STEM (science, technology, engineering, and mathematics) fields, and other fields (e.g., business, education, public policy, social work)

Attaining the highest level of research activity requires the highest level of commitment. Some suggestions are:

- To increase R&D expenditures in S&E fields, an institution can start with an assessment of existing strengths and then identify a few multidisciplinary research areas for strategic investments. For example, large-scale research projects could be built around centers or institutes that involve investigators from across the university, other universities, and from industry. Initiatives of this scale can attract grants from federal programs, industry, and foundations leading to larger research expenditures.
- Increasing both overall research expenditures and the number of dedicated S&E research staff depends in part on recruiting faculty who have a track record of consistent grant achievements. A common strategy for improving recruitment efforts is increasing start-up packages and creating research incentives, including distributing a percentage of indirect cost recovery back to departments or individual PIs. Some universities have hired additional instructors to teach classes so that faculty can focus their efforts on research.
- To increase doctoral degree conferrals, institutions must make sure they have sufficient faculty to teach and mentor graduate students. They also should focus on improving the quality of their doctoral degrees as well as improving graduate student recruitment, admissions yield, time to degree, and job placement outcomes.
- Climbing in the classification ranks is complicated by the fact that research designations are relative measures. This means that the research activity at Doctoral Universities is calculated relative to other Doctoral Universities. As a result, the designations depend on institutions continuing to grow their research enterprise faster than other institutions. Achieving a higher designation is therefore simply a first-step in the perpetual process of investment and growth. It is also important to note that the closer a university gets to the top of the rankings, the harder it is for the institution to continue climbing. Institutions that have risen rapidly are unlikely to continue their swift ascent since they will be competing in a new peer group. It is important to set realistic goals and timelines for climbing the ranks.

B. Federal Award Information

1. Eligibility for Competition

Awards under this FOA will support only new research projects. There will be no supplementation of existing projects.

2. Contracted Fundamental Research

With regard to any restrictions on the conduct or outcome of work funded under this FOA, ONR will follow the guidance on and definition of “contracted fundamental research” as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 24 May 2010. The memorandum can be found at [https://www.acq.osd.mil/dpap/dars/pgi/docs/2012-D054%20Tab%20D%20OUSD%20\(ATL\)%20memorandum%20dated%20May%2024%202010.pdf](https://www.acq.osd.mil/dpap/dars/pgi/docs/2012-D054%20Tab%20D%20OUSD%20(ATL)%20memorandum%20dated%20May%2024%202010.pdf).

As defined therein the definition of “contracted fundamental research,” in a DoD contractual context, includes research performed under grants and contracts that are (a) funded by RDT&E Budget Activity 1 (Basic Research), whether performed by universities or industry or (b) funded by Budget Activity 2 (Applied Research) and performed on campus at a university.

Pursuant to DoD policy, research performed under grants and contracts that are (a) funded by Budget Activity 2 (Applied Research) and NOT performed on-campus at a university or (b) funded by Budget Activity 3 (Advanced Technology Development) or Budget Activity 4 (Advanced Component Development and Prototypes) does not meet the definition of “contracted fundamental research.” In conformance with the USD (AT&L) guidance and National Security Decision Directive 189 found at <https://fas.org/irp/offdocs/nsdd/nsdd-189.htm>, ONR will place no restriction on the conduct or reporting of unclassified “contracted fundamental research,” except as otherwise required by statute, regulation or executive order. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant. For certain research projects, it may be possible that although the research being performed by the prime contractor is restricted research, a subcontractor may be conducting “contracted fundamental research.” In those cases, it is the prime contractor’s responsibility in the proposal to identify and describe the subcontracted unclassified research and include a statement confirming that the work has been scoped, negotiated, and determined to be fundamental research according to the prime contractor and research performer.

Normally, fundamental research is awarded under grants with universities and under contracts with industry. Non-fundamental research is normally awarded under contracts and may require restrictions during the conduct of the research and DoD pre-publication review of such research results due to subject matter sensitivity. Potential applicants should consult with the appropriate ONR Technical POCs to determine whether the proposed effort would constitute fundamental or non-fundamental research.

3. Funded Amount and Period of Performance

Pending availability of funds, the OUSD(R&E) intends to make three awards as grants. Each award will focus on an individual research topic of interest to DoD and ONR.

- Total Amount of Funding Available: \$27M
- Anticipated Number of Awards: three (3)
- Anticipated Range of Individual Award Amounts: \$9M total per award
- Previous Year(s) Average Individual Award Amounts: n/a
- Anticipated Period of Performance: five (5) years with a one (1) year option

4. Instrument Type

Any grant awarded under this announcement will be governed by the award terms and conditions that conform to DoD’s implementation of Office of Management and Budget (OMB) guidance applicable to financial assistance. The DoD Terms and Conditions are located at <https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions>

- a. *Grant*: A legal instrument consistent with 31 U.S.C. 6304 is used to enter into a relationship:
 - The principal purpose of which is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law or the United States, rather than to acquire property or services for the Federal Government’s direct benefit or use.
 - Substantial involvement is not expected between the Federal Government and the recipient when carrying out the activity contemplated by the grant.

- No fee or profit is allowed.

C. Eligibility Information

1. Eligible Applicants

As provided in 10 U.S.C. § 2362, eligibility for this competition is open only to “covered educational institutions,” which are defined as:

- a. institutions of higher education eligible for assistance under Title III or V of the Higher Education Act of 1965 (20 U.S.C. 1051 *et seq.*); or
- b. accredited post-secondary minority institutions.

In addition to the above requirements, applicant institutions must have R2 standing as defined by the Carnegie Classification of Institutions of Higher Education at time of proposal submission (see above link).

For institutions that are not formally designated as an HBCU or TCU (Tribal Colleges and Universities), enrollments, accreditation, and other factors may affect eligibility in any given year. To demonstrate that criterion 1.a. above is satisfied, institutions that are not formally designated as an HBCU or TCU must submit a letter from the Department of Education (DoED) certifying eligibility for Title III or Title V assistance. A copy of the DoED certification letter dated **April 2021** or later must be included with each application. **If the DoED letter is not submitted with the proposal, the application will not be considered.** The eligibility letter will not be included in the page limit (see [Section II.D.2.b.i.](#))

Please note that recruitment and selection procedures for students affected by an award under this solicitation must comply with Section 2000d of Title 42, United States Code, which provides: *No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.*

The Principal Investigator (PI) and key personnel must be U.S. citizens at the time of proposal submission. This is a single PI award. Subawards are not allowed. Paid collaborators are not allowed. **The Principal Investigator (PI) on the proposal must be the Provost, Vice-Provost, VP of Research, or someone identified at university who is in leadership representing the institution.**

No more than one (1) application is allowed per institution. If more than one otherwise eligible applications are received from a given HBCU/MI, the institution will be required to withdraw all but one.

2. Cost Sharing or Matching

Cost sharing is not expected and will not be used as a factor during the merit review of any application hereunder.

D. Application and Submission Information

1. Address to Request Application Package

This FOA may be accessed from the sites below. Amendments, if any, to this FOA will be posted to these websites when they occur. Interested parties are encouraged to periodically check these websites for updates and amendments.

- Grants.gov (www.grants.gov)
- ONR website (<https://www.onr.navy.mil/work-with-us/funding-opportunities>)

2. Content and Form of Application Submission

a) General Information

All submissions will be protected from unauthorized disclosure in accordance with applicable law and DoD/DoN regulations. Applicants are expected to appropriately mark each page of their submission that contains proprietary information. Titles given to the submissions should be descriptive of the work they cover and not be merely a copy of the title of this announcement.

White papers are not requested and will not be accepted.

b) Full Proposals

Prospective applicants/offerors must complete the mandatory forms in accordance with the instructions provided on the forms and the additional instructions below. Files that are attached to the forms must be in Adobe Portable Document Format (.PDF); must not contain macros, and must not be password protected. If an attachment is not in .PDF, contains macros or is password protected, the attachment will not pass ONR's automated acceptance check and will be rejected by the system. A resubmission must be marked "New" in block 2, "Type of Application" of the SF 424.

i. Format for Technical Proposal

- Paper size – 8.5 x 11 inch
- Margins – 1 inch
- Spacing – single-spaced
- Font – Times New Roman, 12-point
- Page Limit – Technical Proposal: 25 pages.
- **NOTE: Pages exceeding the limit will not be considered.**

There are no page limitations for the budget.

INCLUDED in the page limit	EXCLUDED from the page limit
Project Summary/Abstract	Everything else
Project Narrative	
Facilities & Other Resources	

ii. Content

NOTE: The electronic file name for all documents submitted under this FOA must not exceed 68 characters in length, including the file name extension.

Mandatory SF-424 Research and Related (R&R) Family Forms

The mandatory forms are found at <https://www.grants.gov/web/grants/forms.html>

(1) SF-424 (R&R)

The SF-424 (R&R) form must be used as the cover page for all proposals. Complete all required fields in accordance with the “pop-up” instructions on the form and the following instructions for specific fields. Please complete the SF-424 first, as some fields on the SF-424 are used to auto-populate fields on other forms. Guidance can be found at <https://www.grants.gov/web/grants/forms/r-r-family.html>.

The completion of most fields is self-explanatory, with the exception of the following special instructions:

- Field 3 - Date Received by State: Leave Blank
- Field 4a - Federal Identifier: For new proposals, enter N00014.
- Field 4b - Agency Routing Number: Enter 340 [Smith, Anthony]

Applicants who fail to provide a Program Officer Code identifier may receive a notice that their proposal is rejected.

- Field 4c - Previous Grants.gov Tracking ID: Leave Blank (previous proposals are N/A).
- Field 5 – Application Information: Email address entered by the grantee on the SF424 application to create the EDA notification profile. ONR recommends that organizations provide a global business address.
- Field 7 - Type of Applicant. Complete as indicated: If the organization is a Minority Institution, select “Other” and under “Other (Specify)” note that the institution is a Minority Institution (MI).
- Field 9 - Name of Federal Agency: List the Office of Naval Research as the reviewing agency. This field is pre-populated in Grants.gov.
- Field 11 – Descriptive Title of Applicant’s Project: White Paper Tracking is not applicable.
- Field 14 – Project Director/Principal Investigator: Email address entered by the grantee on the SF424 application to create the EDA notification profile
- Field 16 - Is Application Subject to Review by State Executive Order 12372 Process? Choose “No.” Check “Program is Not Covered by Executive Order 12372.”
- Field 17 – Certification: All awards require some form of certifications of compliance with national policy requirements. By checking “I Agree” on the SF 424 (R&R) block 17, you agree to abide by the following statement: “By signing this application, I certify (1) to the statements

contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001).” In addition, the Financial Assistance General Certifications and Representations must be completed in SAM.gov.

- Field 19 – Authorized Representative: Email address entered by the grantee on the SF424 application to create the EDA notification profile. This must be the same person who signs the SF424.

(2) PROJECT/ABSTRACT

The project summary/abstract must identify the research problem and objectives, technical approaches, anticipated outcome of the research if successful, and impact on DoD capabilities. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed and there is a one page or 4,000-character (including spaces) limit whichever is less.

Do not include proprietary or confidential information. The project summary/ abstract must be marked by the applicant as “Approved for Public Release.” Abstracts of all funded research projects will be posted on the public DTIC website: <https://dodgrantawards.dtic.mil/grants>

(3) RESEARCH AND RELATED OTHER PROJECT INFORMATION

- Fields 1 and 1a – Human Subject Use: Each proposal must address human subject involvement in the research by completing Fields 1 and 1a of the R&R Other Project Information form. For proposals containing activities that include or may include “research involving human subject” as defined in DoDI 3216.02, prior to award, the Applicant must submit the required documentation under “Use of Human Subjects in Research” (Section F).
- Fields 2 and 2a – Vertebrate Animal Use: Each proposal must address animal use protocols by addressing Fields 2 and 2a of the R&R Other Project Information form. If animals are to be utilized in the research effort proposed, the applicant must submit the documents described under “Use of Animals” (Section F).
- Fields 4a through 4d – Environmental Compliance: Address these fields and briefly indicate whether the intended research will result in environmental impacts outside the laboratory, and how the applicant will ensure compliance with environmental statutes and regulations.

Federal agencies making grant or cooperative agreement awards and recipients of such awards must comply with all applicable environmental planning and regulatory compliance requirements. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. for example, requires that agencies consider the environmental impact of “major Federal actions” prior to any final agency decision. With respect to those awards that constitute “major Federal actions,” as defined in 40 C.F.R. 1508.1(q), federal agencies may be required to comply with NEPA and prepare environmental planning documentation such as an environmental impact statement (EIS), even if the agency does no more than provide grant funds to the recipient. Most field research funded by ONR, however, constitute activities covered by a NEPA categorical exclusion that do not require preparation of further environmental planning documentation. This is particularly true with regard

to basic and applied scientific research conducted entirely within the confines of a laboratory, if the research complies with all other applicable safety, environmental and natural resource conservation laws. Questions regarding NEPA or other environmental planning or regulatory compliance issues should be referred to the technical point of contact.

- **Field 7 – Project Summary/Abstract:** Leave Field 7 blank; complete Form SF 424 Project Abstract. If an error message occurs when leaving Block 7 blank, upload the Project Abstract.
- **Field 8 – Project Narrative:** Clearly describe the research to be performed, including the objective and approach to be performed, keeping in mind the evaluation criteria. Attach the entire proposal narrative to R&R Other Project Information form in Field 8. To attach a Project Narrative to Field 8, click on “Add attachment” and attach the technical proposal as a single PDF file. Save the file as “Technical Proposal” as typing in the box is prohibited.

The technical proposal must describe the research in sections as described below:

- **Cover Page (not included in page limit):** This must include the words “Technical Proposal” and the following:
 - FOA Number: N00014-22-S-F005;
 - Title of proposal;
 - Identity of prime applicant and complete list of subawardees, if applicable;
 - Technical contact (name, address, phone/fax, electronic mail address);
 - Administrative/business contact (name, address, phone/fax, electronic mail address); and
 - Proposed period of performance (identify both the base period and options, if included).
- **Table of Contents (not included in page limit):** An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.
- **Technical Approach (included in page limit):** Describe the scientific or technical concepts that will be investigated and provide the complete research plan. Describe what is innovative about the proposed approach. Describe the proposed approach compared to alternate approaches other researchers in the field have taken. Given a successful completion, describe the results, new knowledge, or insights.
 - **Future DoD/Naval Relevance:** A description of potential DoD/Naval relevance and contributions of the effort to the agency’s specific mission.
 - **Project Schedule and Milestones:** A summary of the schedule of events and milestones.
- **Management Approach (included in page limit):** Describe the overall management approach and provide rationale for participation of key team members. This is a single PI award. Subawards are not allowed. Paid collaborators are not allowed. If appropriate, briefly describe anticipated schedule.
- **Principal Investigator Qualifications (included in page limit):** A discussion of the qualifications of the proposed Principal Investigator and any other key personnel.
- **Data Management Plan (not included in page limit):** A data management plan is a document that describes which data generated through the course of the proposed

research will be shared and preserved, how it will be done, or explains why data sharing or preservation is not possible or scientifically appropriate, or why the costs of sharing or preservation are incommensurate with the value of doing so. See also: [DoD Instruction 3200.12](#).

- In no more than 2 pages, discuss the following:
 - The types of data, software, and other materials to be produced.
 - How the data will be acquired?
 - Time and location of data acquisition, if scientifically pertinent.
 - How the data will be processed?
 - The file formats and the naming conventions that will be used.
 - A description of the quality assurance and quality control measures during collection, analysis, and processing.
 - A description of dataset origin when existing data resources are used.
 - A description of the standards to be used for data and metadata format and content.
 - Appropriate timeframe for preservation.
 - The plan may consider the balance between the relative value of data preservation and other factors such as the associated cost and administrative burden. The plan will provide a justification for such decisions.
 - A statement that the data cannot be made available to the public when there are national security or controlled unclassified information concerns (e.g., “This data cannot be cleared for public release in accordance with the requirements in DoD Directive 5230.09.”)
- Field 9 – Bibliography & References Cited: Upload your Bibliography/References cited as a single PDF.
- Field 10 – Facilities & Other Resources: Describe facilities available for performing the proposed research and any additional facilities the applicant proposes to acquire at its own expense. Indicate government-owned facilities already possessed that will be used. **NOTE: Funding for facilities and equipment will not be provided under this FOA.**
- Field 11 – Equipment: Describe any equipment available or any additional equipment the application proposes to acquire at its own expense. Indicate government owned equipment that will be use. Justify the need for each equipment item **NOTE: Funding for facilities and equipment will not be provided under this FOA.**
- Field 12 – Other Attachments: Optional, as necessary

Grants do not include the delivery of software, prototypes or other hardware deliverables.

(4) RESEARCH AND RELATED BUDGET

The applicant must use the Grants.gov forms (including the Standard Form (SF) Research and Related (R&R) Budget Form) from the application package template associated with the FOA on the Grants.gov web site located at <http://www.grants.gov/>. If options are proposed, the cost proposal must provide the pricing information for the option periods; failure to include the proposed costs for the option periods will result in the options not being included in the award.

The applicant shall provide a detailed cost breakdown of all costs, by cost category. A separate Adobe .pdf document shall be included in the application that provides appropriate justification and/or supporting documentation for each element of cost proposed. This document shall be attached under Section K. "Budget Justification" of the Research and Related Budget form. Click "Add Attachment" to attach.

- **Part 1:** The itemized budget shall include the following. All costs shall be rounded to the nearest dollar.
- Direct Labor – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.
- Administrative and Clerical Labor – Salaries of administrative and clerical staff are normally indirect costs (and included in an indirect cost rate). Direct charging of these costs may be appropriate when a major project requires an extensive amount of administrative or clerical support significantly greater than normal and routine levels of support. Budgets proposing direct charging of administrative or clerical salaries must be supported with a budget justification that adequately describes the major project and the administrative and/or clerical work to be performed.

Fringe Benefits and Indirect Costs (Facilities and Administration (F&A), Overhead, G&A, etc.) – The proposal shall show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the non-Federal entity has never received a negotiated indirect cost rate, they may elect to charge a de minimis rate of 10% of modified total direct costs or provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. See 2 CFR 200.414(f) regarding the use of a de minimis rate.

- Travel – The proposed travel cost **must** include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organizations historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principles. Applicants may include travel costs for the Principal Investigator to attend the peer reviews described in Section II of this FOA.
- Subawards/Subcontracts – Subawards are not allowed.
- Consultants – Consultants are not allowed.
- Materials & Supplies – Provide an itemized list of all proposed materials and supplies including quantities, unit prices, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Recipient Acquired Equipment or Facilities – Equipment and/or facilities shall be furnished by the Recipient. The acquisition of equipment or instrumentation will not be supported under this FOA.

- Other Direct Costs – Provide an itemized list of all proposed other direct costs such as Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).
- Fee/Profit – Fee/profit is unallowable under assistance agreements.

(5) RESEARCH AND RELATED SENIOR/KEY PERSON PROFILE (EXPANDED)

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. A§ 1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in STEM disciplines.

The R&R Senior/Key Person Profile (Expanded) form will be used to collect the following information for all senior/key personnel, including Project Director/Principal Investigator and Co-Project Director/Co-Principal Investigator, whether or not the individuals' efforts under the project are to be funded by the DoD:

- Degree Type and Degree Year fields as the source for career information.
- Current and Pending Support shall include a list of all current projects the individual is working on, in addition to any future support the individual has applied to receive, regardless of the source. Upload this document by clicking “Add Attachment.” The following information shall be included for each current or pending project:
 - Title and objectives
 - The percentage per year to be devoted to the other projects
 - The total amount of support the individual is receiving in connection to each of the other research projects or will receive if the other proposals are awarded
 - Name and address of the agencies and/or other parties supporting the other research projects
 - Period of performance for the other research projects
- Upload the biosketch/CV/resume to the Biographical Sketch field.

Additional senior/key persons can be added by selecting the “Next Person” button. Note that, although applications without these fields completed may pass Grants.gov edit checks, if ONR receives an application without the required information, ONR may determine that the application is incomplete and may cause it to be returned without further review. DoD reserves the right to request further details from the applicant before making a final determination on funding the effort.

(6) RESEARCH AND RELATED PERSONAL DATA

This form will be used by ONR as the source of demographic information, such as gender, race, ethnicity, and disability information for the Project Director/Principal Investigator and all other persons identified as Co-Project Director(s)/Co-Principal Investigator(s). Each application must include this form with the name fields of the Project Director/Principal Investigator and any Co-Project Director(s)/Co-Principal Investigator(s) completed; however, provision of the demographic information in the form is voluntary. If completing the form for multiple individuals, each Co-Director/Co-Principal Investigator can be added by selecting the “Next Person” button. The demographic information may be accessible to the reviewer, but will not be considered in the

evaluation. Applicants who do not wish to provide some or all of the information should check or select the “Do not wish to provide” option.

3. Unique Entity Identifier and System for Award Management (SAM)

All applicants submitting proposals or applications **must**:

- a. Be registered in the SAM prior to submission;
- b. Provide a valid UEI number in its application; and
- c. Maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or proposal under consideration by a Federal awarding agency;

SAM may be accessed at <https://www.sam.gov/SAM/>

A Federal awarding agency may not make a Federal award to an applicant/offeror until the applicant has complied with all applicable unique entity identifier and SAM requirements and, if an applicant/offeror has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant/offeror is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant/offeror.

4. Submission Dates and Times

See Section A.6 above, “Key Dates” for information.

5. Intergovernmental Review

There is no requirement for intergovernmental review under this FOA.

6. Funding Restrictions

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain the equipment, services, or systems prohibited systems as identified in section 889 of the NDAA for FY 2019.

1. In accordance with 2 CFR 200.216 and 200.471, all awards that are issued on or after August 13, 2020, recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
 - (1) Procure or obtain;
 - (2) Extend or renew a contract to procure or obtain; or
 - (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

- (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - (iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- 2. In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.
- 3. See Public Law 115-232, section 889 for additional information.

COVERED FOREIGN COUNTRY means the People's Republic of China.

Additional Funding Restrictions

- Applications may not request funds for the construction or modification of buildings or building support systems (e.g., heating/ventilation/air conditioning).
- Applications may not request funds for operation and maintenance of instrumentation or equipment, extended warranties, or user fees.
- Applications may not request funds for instrumentation or equipment.

7. Other Submission Requirements

Grants.gov Application Submission and Receipt Procedures

This section provides the application submission and receipt instructions for ONR program applications. Please read the following instructions carefully and completely.

a. Electronic Delivery

ONR is participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. ONR applicants shall submit their applications online through Grants.gov.

b. How to Register for Grants.gov

- i. *Instructions:* Read the instructions below about registering to apply for ONR 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.

Organizations must have 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 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 registrations may take additional time. Therefore, an organization's registration should be done in sufficient time to ensure it does not impact the entity's ability to meet requirement application submission deadlines.

Complete organization instructions can be found on Grants.gov here:

<https://www.grants.gov/web/grants/applicants/organization-registration.html>

1) *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. 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>

2) *Create a Grants.gov Account:* The next step in the registration process is to create an account with Grants.gov. Follow the on-screen instructions or refer to the detailed instructions here at:

<https://www.grants.gov/web/grants/applicants/registration.html>

3) *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>

4) *EBiz POC Authorize 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 Organization 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>

6) *Track Role Status:* To track your role request, refer to:

<https://www.grants.gov/web/grants/applicants/registration/track-role-status.html>

- ii. *Electronic Signature:* When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are

able to make legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

c. How to Submit an Application to the Office of Naval Research via Grants.gov

All attachments to grant applications submitted through Grants.Gov **must** be in Adobe Portable Document Format (PDF). Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe PDF will not be considered for award.

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 web forms within an application. For each funding opportunity announcement (FOA), 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, refer to:

<https://www.grants.gov/web/grants/applicants/apply-for-grants.html>

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

2) *Complete a Workspace*: Add participants to the workspace, complete all the required forms, 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.

- a. *Adobe Reader*: If you decide not to apply by filling out web forms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or ONR forms. 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>

- b. *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.
- c. *Complete SF-424 Fields First*: The forms are designed to fill in common required fields across other forms, such as the applicant 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.

3) *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.

4) *Track a Workspace*: After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. 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. (Foreign applicants should contact 1-606-545-5035.) For questions related to the specific grant opportunity, contact the number listed in the application package of the grant for 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 number. The Support Center ticket number will assist ONR with tracking your issue and understanding background information on the issue.

d. Timely Receipt Requirements and Proof of Timely Submission

i. Online Submission.

All applications must be received by **11:59 PM** Eastern time on **05/06/2022**. 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 AOR will receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of their application. The 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 the Office of Naval Research 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. 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 the Office of Naval Research.

Applicants using slow internet, such as dial-up connections, should be aware that transmission could 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. 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.

E. Application Review Information

1. Criteria

The primary basis for selecting proposals for acceptance will be technical merit, importance to agency programs, and funds availability. To the extent appropriate, cost realism and reasonableness will also be considered when selecting proposals. ONR reserves the right to request and require any additional information and documentation after it makes the type of award instrument determination. ONR

reserves the right to remove Applicant s from award consideration when the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, or when the Applicant fails to timely provide requested or required additional information.

Applicant's full proposals will be evaluated against the following criteria:

Primary evaluation criteria:

1. Scientific and technical merit of the proposed research.
2. Relevance of the proposed research to interests of DoD and ONR, and potential contributions of the proposed research to the DoD mission. As part of the Naval relevance criteria, in accordance with the National Defense Authorization Act (NDAA) for FY 2019, Section 1286, as amended by Section 1299C of the NDAA for 2021, ONR will consider the protection of intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security and limit undue influence, including foreign talent programs by countries that desire to exploit United States' technology within the DoD research, science and technology, and innovation enterprise. Consideration will be given to improper technology transfer, intellectual property theft, or cyber or human espionage, are known to recruit foreign individuals for the purpose of transferring knowledge, provide misleading information or attempt to conceal the connections of an individual or institution or pose a serious risk of improper technology transfer of data, technology, or research that is not published or publically available.
3. Potential of the proposed project to develop new research capabilities or enhance existing research capabilities, and to strengthen the research base in support of national defense.
4. Ability of the proposed research to contribute to elevating the institution's Carnegie Category from R2 to R1 status.
5. Potential of the proposed project to attract and retain research faculty and students, and enhance institutional infrastructure for more competitive participation defense-related research.
6. Qualifications of the Principal Investigator to achieve the objectives of the project.

Criteria 1 through 6 are equally important.

Secondary evaluation criteria, of less importance than primary criteria:

7. Potential of the project to enhance education in STEM disciplines relevant to interests of DoD and ONR.
8. Budgetary realism and cost effectiveness of the proposed budget.

Criteria 7 through 8 are equally important.

In addition, per NDAA 2021 Section 1062, beginning October 1, 2024, DoD may not fund institutions of higher education (as defined by 20 USC 1002) that host a Confucius Institute, other than amounts provided directly to students as education assistance, unless a waiver is provided. A Confucius Institute is defined as a cultural institute directly or indirectly funded by the Government of the People's Republic of China.

2. Review and Selection Process

a. Evaluation

Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. ONR's intent is to review all proposals received as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

The ultimate recommendation for award of proposals is made by ONR's scientific/technical community. Recommended proposals will then be forwarded to the ONR Contracts and Grant Awards Management office. Any notification received from ONR that indicates that the Applicant's full proposal has been recommended does not ultimately guarantee an award will be made. This notice indicates that the proposal has been selected in accordance with the evaluation criteria stated above and has been sent to the Grant's Department to conduct cost analysis, to determine the Applicant's qualifications, to confirm whether funds are available, and to take other relevant steps necessary prior to making an award.

b. Options

The Government will evaluate options for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the options during grant performance. The Government reserves the right to exercise options at time of award.

c. Evaluation Panel

The cognizant Program Officer and other Government scientific experts will perform the evaluation of technical proposals. Restrictive notices notwithstanding, one or more support contractors may be utilized for administrative purposes or as subject-matter-expert technical consultants. Each support contractor's employee having access to white papers and technical and cost proposals submitted in response to this FOA will be required to sign the ONR Non-Disclosure Agreement (NDA) for Contractor Support prior to receipt of any submissions. This NDA includes third-party beneficiary language giving the submitter of proprietary information a right of direct action against the contractor employee and/or his/her employer in the event that the NDA is violated. Proposal selection and award decisions are solely the responsibility of the Under Secretary of Defense for Research and Engineering.

3. Recipient Qualifications

a. Recipient Qualifications

The Grants Officer is responsible for determining a recipient's qualification prior to award. In general, a Grants Officer will award grant, cooperative agreements, or TIAs only to qualified recipients that meet the standards at 32 CFR 22.415. To be qualified, a potential recipient must:

- i. Have the management capability and adequate financial and technical resources, given those that would be made available through the grant, to execute the program of activities envisioned under the grant or cooperative agreement;

- ii. Have a satisfactory record of executing such programs or activities (if a prior recipient of an award);
- iii. Have a satisfactory record of integrity and business ethics; and
- iv. Be otherwise qualified and eligible to receive a grant under applicable laws and regulations. Applicants are requested to provide information with proposal submissions to assist the Grants Officer's evaluation of recipient qualification.

b. FAPIIS

In accordance with Office of Management and Budget (OMB) guidance in parts 180 and 200 of Title 2, CFR, it is DoD policy that DoD Components must report and use integrity and performance information in the Federal Awardee Performance and Integrity Information System (FAPIIS), or any successor system designated by OMB, concerning grants, cooperative agreements, and TIA's as follows:

If the total Federal share will be greater than the simplified acquisition threshold on and Federal award under a notice of funding opportunity (see 2 CFR 200.88 Simplified Acquisition Threshold):

- i. The Federal awarding agency, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, will review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. 2313);
- ii. An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM;
- iii. The Federal awarding agency will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, 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 CFR 200.206 Federal awarding agency review of risk posed by applicants.

F. Federal Award Administration Information

1. Federal Award Notices

a) Email

All applicants will receive a notification email advising if their proposal has been selected or not selected for award.

Applicants whose proposals are recommended for award may be contacted by a Grant Specialist to discuss additional information required for award. This may include representations and

certifications, revised budgets or budget explanations, and/or other information as applicable to the proposed award.

The notification e-mail must not be regarded as an authorization to commit or expend funds. The Government is not obligated to provide any funding until a Government Grants Officer, as applicable, signs the award document.

The award document signed by the Grants Officer is the official and authorizing award instrument.

b) *Electronic Document Access (EDA)*

Office of Naval Research (ONR) award/modification documents are only available via the Department of Defense (DoD) Electronic Document Access System (EDA) within the Procurement Integrated Enterprise Environment (PIEE) (<https://piee.eb.mil/piee-landing/>).

2. Administrative and National Policy Requirements

a) *Export Control*

Applicants should be aware of recent changes in export control laws. Applicants are responsible for ensuring compliance with all U.S. export control laws and regulations, including the International Traffic in Arms Regulation (ITAR)(22 CFR Parts 120 - 130) and Export Administration Regulation (EAR) (15 CFR Parts 730 – 774), as applicable. In some cases, developmental items funded by the Department of Defense are now included on the United States Munition List (USML) (22 CFR Part 121) and are therefore subject to ITAR jurisdiction. In other cases, items that were previously included on the USML have been moved to the EAR Commerce Control List (CCL). Applicants should address in their proposals whether ITAR or EAR restrictions apply to the work they are proposing to perform for ONR. The ITAR and EAR are available online at <http://www.ecfr.gov/cgi-bin/ECFR?page=browse>. Additional information regarding the President's Export Control Reform Initiative can be found at <https://export.gov/ecr/index.asp>.

Applicants must comply with all U.S. export control laws and regulations, including the ITAR and EAR, in the performance of any award or agreement resulting from this FOA. Applicants shall be responsible for obtaining any required licenses or other approvals, or license exemptions or exceptions if applicable, for exports of hardware, technical data, and software (including deemed exports), or for the provision of technical assistance.

b) *Requirements Concerning Live Organisms:*

i. Use of Animals:

The DoD policies and requirements for the use of animals in DoD-supported research are described in the current version of DoD Instruction 3216.01, Use of Animals in DoD Conducted and Supported Research and Training and its implementing instruction, DHA-MSR 6025.02, “The Care And Use Of Animals In DoD Research, Development, Test, And Evaluation (RDT&E) Or Training Programs,” the version of which is current at the time of award. If animals are to be utilized in the research effort proposed, the Applicant must submit a Full Appendix or Abbreviated Appendix (see Guidance link below) with supporting documentation (such as copies

of Institutional Animal Care and Use Committee (IACUC) Approval, IACUC Approved Protocol, and most recent United States Department of Agriculture (USDA) Inspection Report) prior to award. For assistance with submission of animal research related documentation, contact the ONR Animal Use Administrator at (703) 696-4318. Guidance: <https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/animal-use>

ii. Use of Human Subjects in Research:

1. Applicants must protect the rights and welfare of individuals who participate as human subjects in research awarded pursuant to this FOA and must comply with the requirements of the Common Rule at 32 CFR part 219 (the DOD implementation of 45 CFR part 46) and applicable provisions of DoD Instruction 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Conducted and -Supported Research (April 15, 2020, the DON implementation of the human research protection program contained in SECNAVINST 3900.39E Change 1, (or its replacement), 10 USC 980 “Limitation on Use of Humans as Experimental Subjects,” and when applicable, Food and Drug Administration (FDA) and other federal and state law and regulations.
2. For proposals containing activities that include or may include “research involving human subjects” as defined in DoDI 3216.02, prior to award, the Applicant must submit the following documentation:
 - a. Approval from an Institutional Review Board (IRB) (IRB-approved research protocol, IRB-approved informed consent document, documentation showing the IRB considered the scientific merit of the research and other material considered by the IRB and the IRB registration number); proof of completed human research training (e.g., training certificate for the principal investigator, and institutional verification that the principal investigator, co-investigators, and research support personnel have received appropriate training to be considered qualified to execute the research); and the Applicant’s Department of Health and Human Services (DHHS)-issued Federal Wide Assurance (FWA#), including notifications of any FWA suspensions or terminations.
 - b. Any claimed exemption under 32 CFR 219.104), including the category of exemption, supporting documentation considered by the Applicant’s institution in making the determination (e.g., protocol, data collection tools, advertisements, etc.). The documentation shall include a short rationale supporting the exemption determination. This documentation should be signed by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the Applicant’s human research protection program.
 - c. Any determinations that the proposal does not contain activities that constitute research involving human subjects or contains only activities that are deemed not to be research under 32 CFR 219.102(1), including supporting documentation considered by the Applicant’s institution in making the determination. This documentation should be issued by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the Applicant’s human research protection program.
 - d. Documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. The HRPO retains final judgment on whether the documentation satisfies the use of human subjects in research requirements. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official (HRPO) at (703) 696-4318.

- e. Grant awards and any subawards or modifications will include a statement indicating successful completion of the HRPO review. Research involving human subjects must not be commenced under any contract award or modification or any subcontract or grant subaward or modification until awardee receives notification from the Contracting or Grants Officer that the HRPO has approved the assurance as appropriate for the research under the award or modification and that the HRPO has reviewed the protocol and accepted the IRB approval or determination for compliance with Federal, DoD and DON research protection requirements. The Government will not reimburse or otherwise pay for work performed in violation of this requirement. See, DFARS 252.235-7004. Guidance: <http://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/Human-Subject-Research.aspx>

c) *Biosafety and Biosecurity Requirements:*

Applicants must comply with applicable provisions of the current version of DODM 6055.18, Safety Standards for Microbiological and Biomedical Laboratories, including ensuring compliance with standards meeting at least the minimum applicable requirements of the current edition of Centers for Disease Control and Prevention, “Biosafety in Microbiological and Biomedical Laboratories (BMBL),” and National Institutes of Health, “The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines).”

d) *Research Involving Recombinant (rDNA) or Synthetic Nucleic Acid Molecules:*

Applicants must not begin performance of research within the scope of “The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines)” until receiving notice from the Contracting or Grants Officer that ONR has reviewed and accepted the Applicant’s documentation. In order for ONR to accomplish that review, an applicant must provide the Contracting or Grants Officer, generally as part of an original proposal prior to award, sufficient documentation to enable the review, including:

- (1) A written statement that the Applicant is in compliance with NIH Guidelines. This statement should be made by an official of the institution other than the Principal Investigator and should be on university or company letterhead.
- (2) Evidence demonstrating that the proposed research protocol has been approved (or determined exempt from the NIH Guidelines) by an Institutional Biosafety Committee (IBC); and a copy of the Department of Health and Human Services (DHHS) Letter of Approval of the IBC, or the most recent letter from DHHS stating the IBC is in compliance with the NIH Guidelines. For assistance with requirements involving countries outside the United States, please contact the ONR HRPO at (703) 696-4318.

e) *Institutional Dual Use Research of Concern:*

As of September 24, 2015, all institutions and United States Government (USG) funding agencies subject to [the United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern](http://www.phe.gov/s3/dualuse) must comply with all the requirements listed therein. If your research proposal directly involves certain biological agents or toxins, contact the cognizant Technical Point of Contact. U.S. Government Science, Safety, Security (S3) guidance may be found at <http://www.phe.gov/s3/dualuse>.

f) Department of Defense High Performance Computing Program:

The DoD High Performance Computing Program (HPCMP) furnishes the DoD S&T and RDT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR grants and other assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer Approval is obtained and if security/screening requirements are favorably completed. Additional information may be found at <https://www.hpc.mil/>.

g) Project Review Meetings and Program Review Meetings:

Individual Project Review Meetings between the ONR sponsor and the performer may be held as necessary. Project Review Meetings typically last approximately one day. Typically, there are two in-person Project Review Meetings each year. Additional Project Review Meetings are likely, but these will be accomplished by video telephone conferences, telephone conferences, or web-based collaboration tools.

In addition to Project Review Meetings, Program Review Meetings may be held to provide a forum for reviews of the latest results from individual project experiments and any other incremental project progress towards major demonstrations. Program Review Meetings are generally held once per year and last two to three days.

For cost estimating purposes, applicants should assume that in FY22 most of the reviews will be virtual and in FY23 and beyond 50% of the review meetings will be at or near Washington, DC, and 50% will be held at the applicant's facilities.

The Government sometimes finds it advantageous to hold Program Review Meetings at a performer's facility. Applicants interested in hosting such meetings should include an estimated cost and the following language in their proposals, which become part of any award (note: if a contract is awarded, use of the facility will be included as an option):

[Name of entity] offers the use of its facilities for an ONR Program Review Meeting to discuss the status of programs related to the subject of this proposal. Such meetings may include attendees representing multiple research efforts. The meetings will discuss only "contracted fundamental research" as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 24 May 2010, the results of which are open to the public. No fee will be charged Program Review Meeting attendees. [Name of entity] understands it will not be asked to host a Performance Review Meeting more than once per year, if at all.

Applicants are not required to include the foregoing term in their proposals, and whether they do or not will not affect their selection for award.

h) Federal Funding Accountability and Transparency Act of 2006:

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252 and expanded by the Digital Accountability and Transparency Act of 2014 (Public Law 113-101), requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR Part 170. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or TIAs) as either a prime or sub-recipient under this FOA must

provide information in its proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR Part 170 Appendix A. Entities are required to meet reporting requirements unless an exception or exemption applies. Please refer to 2 CFR Part 170, including Appendix A, for a detailed explanation of the requirements, exceptions, and exemptions.

i) Financial Assistance Certification

The Federal Assistance Certifications Report is an attestation that the entity will abide by the requirements of the various laws and regulations and the supplemental at Section F.2.iv above. Therefore, as applicable, you are still required to submit any documentation, including the SF LLL Disclosure of Lobby Activities (if applicable), and disclosure of any unpaid delinquent tax liability or a felony conviction under any Federal law.

j) Certifications Regarding Restrictions on Lobbying:

Grant awards greater than \$100,000 require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via <https://www.grants.gov/> (complete Block 17). The following certification applies likewise to each grant seeking federal assistance funds exceeding \$100,000:

- (1) No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The applicant shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

k) Certifications Regarding the Prohibition on Using Funds with Entities that Require Certain Internal Confidentiality Agreements (Grant Information Circular (GIC) 19-02 November 2019) (Supplement to SF424 (R&R), block 17, Financial Assistance Certifications and Representations)

By checking “I Agree” on the SF 424 (R&R) block 17 you agree to abide by the following statement: “By signing this application, I certify (1) to the statements contained in the list certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001).

The certification reads as follows:

By submission of its proposal or application, the applicant represents that it does not require any of its employees, contractors, or subrecipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting those employees, contractors, subrecipients from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

l) Certification Regarding Disclosure of Funding Sources (Supplement to SF424 (R&R), block 17, Financial Assistance Certifications and Representations)

By checking “I Agree” on the SF 424 (R&R) block 17 you agree to abide by the following statement: “By signing this application, I certify the proposing entity is in compliance with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 which requires that: (a) the PI and other key personnel certify that the current and pending support provided on the proposal is current, accurate and complete; (B) agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and (c) the PI and other key personnel have been made aware of the requirements under Section 223(a)(1) of this Act. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001).

m) Conflict of Interest:

Applicants for assistance are required to comply with 2 CFR 200.318(c), Codes of Conduct, to prevent real or apparent conflicts of interest in the award and administration of any contracts by which a recipient or subrecipient purchases property or services, supported by federal funds.

General Requirement for Disclosure

You and your organization must disclose any potential or actual scientific or nonscientific conflict of interest(s) to us. You must also disclose any potential or actual conflict(s) of interest for any identified sub recipient you include in your application. We may have to ask you more questions if we need more information.

At our discretion, we may ask you for a conflict of interest mitigation plan after you submit your application. Your plan is subject to our approval.

Scientific Conflict of Interest

Scientific collaborations on research and development projects are generally the result of close collaboration prior to the submission of applications for support. Accordingly, these collaborations should be considered when considering potential conflicts of interest. The potential conflict is mitigated by the disclosure of these collaborations, and the list of current and pending support you provide for senior and key researchers. Therefore, you must include in your list of current and pending support all collaborators, even if they did not formally provide support.

n) Code of Conduct

Applicants for assistance are required to comply with 2 CFR 200.318(c), Codes of Conduct, to prevent real or apparent conflicts of interest in the award and administration of any contracts supported by federal funds. This provision will be incorporated into all assistance instruments awarded under this FOA.

o) Peer Review

In the case of proposals funded as basic research, ONR may utilize peer reviewers from academia, industry, and Government agencies to assist in the periodic appraisal of performance under the awards, as outlined in ONR Instruction 3966.1A. Such periodic peer reviews monitor the quality of funded basic research efforts. The reviews are used in part to determine which basic research projects will receive continued ONR funding. Peer reviewers who are not U.S. Government employees must sign nondisclosure agreements before receiving full or partial copies of proposals and reports submitted by the basic research performers. Applicants may include travel costs for the Principal Investigator (PI) to attend the peer review. Peer reviews may consider information derived from individual project or program review meetings (see FOA Section F.2.a.viii for further guidance).

p) ix. Prohibition on Procurement of Foreign- Made Unmanned Aircraft Systems

Commercial Off The Shelf Unmanned Aircraft Systems (COTS UAS) may not be purchased pursuant to this grant or contract or other transaction agreement for prototype until a waiver per the Deputy Secretary of Defense Memorandum “Unmanned Aerial Vehicle Cybersecurity Vulnerabilities,” May 23, 2018 is obtained by the cognizant ONR Program Officer.

(1) A waiver is not required when the research is supported via a grant award AND it is unclassified and funded with either basic research funds (i.e., 6.1) or applied research funds (i.e., 6.2) and performed on campus by a university. A waiver must be obtained for all other grants and assistance agreements.

(2) Notwithstanding 1.a. above, a waiver is required for all efforts (regardless of award or funding type) that involve interactions with military personnel, DoD property, or DoD facilities; work conducted by US Government laboratories, UARCs, or FFRDCs; or are Public Aircraft Operation (PAO), classified, or explore specific military utility. For these efforts, a Cyber Security waiver or Authority to Operate (ATO) and Cyber Vulnerability Assessment must be obtained.

(3) A waiver is required for all contract awards and other transaction agreements. For these efforts, a Cyber Security waiver or ATO and Cyber Vulnerability Assessment must be obtained.

Prospective performers or current performers are required to notify the cognizant ONR Program Officer of any anticipated COTS UAS purchase that may be subject to waiver at time of white paper, proposal submission or award changes. Performers shall provide documentation specifying the details including the type of drone, effort, location, etc.

Performers will agree to cooperate and provide additional information as requested to support the waiver and cyber vulnerability assessment.

In no event shall federal funding be expended or purchase made pursuant to any award subject to waiver requirement, unless and until performer is notified by ONR that the waiver, cyber vulnerability and other requirements have been met.

3. Reporting

- a.** If the Federal share of any Federal award may include more than \$500,000 over the period of performance, the post award reporting requirements, Award Term and Condition for Recipient Integrity and Performance Matters (2 CFR Part 200 Appendix XII), is applicable as follows:
 - i.** Reporting of Matters Related to Recipient Integrity and Performance
 - a)** General Reporting Requirement. If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under 41 U.S.C. 2313. All information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.
 - ii.** Proceedings about Which You Must Report. Submit the information required about each proceeding that:
 - a)** Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
 - b)** Reached its final disposition during the most recent five-year period; and
 - c)** Is one of the following:
 - 1)** A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - 2)** A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more;
 - 3)** An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of \$5,000 or more or reimbursement, restitution, or damages in excess of \$100,000; or
 - 4)** Any other criminal, civil, or administrative proceeding if:

- a. It could have led to an outcome described in paragraph 2.c. (1), (2), or (3) of this award term and condition;
 - b. It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - c. The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.
- iii. Reporting Procedures. Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.
- iv. Reporting Frequency. During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five-year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.
- v. Definitions. For purposes of this award term and condition:
 - a) Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.
 - b) Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.
 - c) Total value of currently active grants, cooperative agreements, and procurement contracts includes—
 - 1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
 - 2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

b. Post Award Reporting Requirements

The post award reporting requirements can be found under the relevant ONR Addendum to the DoD R&D General Terms and Conditions and ONR Programmatic Requirements located at the following link: <https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions>.

G. Federal Awarding Agency Contacts

All UNCLASSIFIED communications shall be submitted via e-mail to the Technical Point of Contract (POC) with a copy to the designated Business POC, as designated below.

Comments or questions submitted should be concise and to the point, eliminating any unnecessary verbiage. In addition, the relevant part and paragraph of the Funding Opportunity Announcement (FOA) should be referenced. Questions submitted within 2 weeks prior to a deadline may not be answered, and the due date for submission of the white paper and/or full proposal will not be extended.

1. **Questions of a technical nature and DoD/Naval relevance** should be submitted to the cognizant Subject Matter Expert/Program Officer/Program Manager(s) (see [section II.A. Program Description](#)).

2. **Questions regarding eligibility and non-technical issues** should be submitted to:

Point of Contact Name: Mr. Anthony C. Smith, Sr.
Point of Contact Occupation Title: Director
Division Title: DoN HBCU/MI Program Office
Division Code: Warfighter Performance Code 34
Email Address: Anthony.C.Smith9.civ@us.navy.mil

3. **Questions regarding the DoD HBCU/MI program and the R2 to R1 objectives** should be submitted to:

Name: Ms. Evelyn Kent
Title: Director, DOD HBCU/MI Program and Outreach
Organization: Office of the Under Secretary of Defense for Research and Engineering
Email Address: Evelyn.W.Kent.civ@mail.mil

4. **Questions regarding Grants proposal submissions** should be submitted to:

Name: Anastasia Lenfest
Title: Grants Officer
Organization: Office of Naval Research
Email Address: Anastasia.E.Lenfest.civ@us.navy.mil