



ONR FOA Announcement #N00014-19-S-F006

Fiscal Year (FY) 2019 Funding Opportunity Announcement (FOA) for the Office of Naval Research (ONR), on behalf of the Office of the Secretary of Defense (OSD), for the Manufacturing Engineering Education Program

Deadlines

White Paper Inquiries and Questions

01 MAR 2019 (Friday)

White Papers must be received no later than

28 MAR 2019 (Thursday) at 3:00 PM Eastern Time

NOTE TO APPLICANTS: The Government seeks only applications that are relevant and responsive to the Funding Opportunity Description in Section II. A. White papers that fail to address the areas listed in the Funding Opportunity Description will be rejected and not considered further.

Application Inquiries and Questions

22 MAY 2019 (Wednesday)

Applications must be received no later than

20 JUNE 2019 (Thursday) at 11:59 PM Eastern Time

Special Note

Applications must be 'VALIDATED' by Grants.gov by the application deadline which can take up to 48 hours after successful submissions.

See Timely Receipt Requirements and Proof of Timely Submission, b. Proposal Receipt Notices

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I. INTRODUCTION

This publication constitutes a Funding Opportunity Announcement (FOA) as contemplated in the Department of Defense Grants and Agreements Regulations (DoDGARS). See 2CFR1103. A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. ONR reserves the right to select for award all, some, or none of the applications in response to this announcement. ONR provides no funding for direct reimbursement of application development costs. Technical proposals and budgets (or any other material) submitted in response to this FOA will not be returned. It is the policy of ONR to treat all white papers and applications as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

This FOA is intended for white papers and invited applications that provide strategic solutions to defense challenges. Submissions of either white papers or applications that do not meet the criteria specified by this document will not be reviewed.

Awards will take the form of grants. Any assistance instrument awarded under this announcement will be governed by the award terms and conditions that conform to DoD's implementation of OMB circulars applicable to financial assistance. Terms and conditions under this FOA will reflect DoD implementation of the OMB guidance in 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards." The DoD Terms and Conditions are located at <https://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx>.

This FOA has a two-part submission process starting with a **MANDATORY** white paper. Applicants **invited** to compete in the second part of the process, submission of an application, should be aware of the following:

- Information regarding application packages can be found at: <https://www.grants.gov/web/grants/applicants/apply-for-grants.html>
- A project abstract is required with the application and must be publically releasable as specified in the following section of this FOA: [Section II. D. 2. b.](#) responses to the Representations indicated in [Section II. H.](#), 2 thru 4 of this FOA are required with the application.
- Grant applications will be reviewed only if they (1) are invited (2) meet the criteria specified by this document, and (3) are submitted through <https://www.grants.gov/web/grants/home.html>

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

Fiscal Year (FY) 2019 Funding Opportunity Announcement (FOA) for the Office of Naval Research (ONR), on behalf of the Office of the Secretary of Defense (OSD), for the Manufacturing Engineering Education Program

3. Announcement Type

Initial Announcement

4. Funding Opportunity Number

N00014-19-S-F006

5. Catalog of Federal Domestic Assistance (CFDA) Numbers

12.300

6. Key Dates

White Papers due: **28 Mar 2019** (Thursday) at 3:00 PM Eastern Time

Applications due: **20 Jun 2019** (Thursday) at 11:59 PM Eastern Time

For a full Table of Events, see [Section II. D. 4. “Significant Dates and Times”](#)

II. DETAILED INFORMATION ABOUT THE GRANT OPPORTUNITY

A. PROGRAM DESCRIPTION

The National Defense Authorization Act (NDAA) for Fiscal Year 2017 established the “Manufacturing Engineering Education Program,” (MEEP) (Section 2196, Title 10, United States Code 10 U.S.C. § 2196), which authorizes the Department of Defense (DoD) to support industry-relevant, manufacturing-focused, engineering training at United States institutions including education, industry, nonprofit, and consortia of such institutions or industry. The purpose of this program is to establish new or to enhance existing programs (or collections of programs) to better position the current and next-generation manufacturing workforce to produce military systems and components that assure technological superiority for the DoD.

Interested parties should focus programs on manufacturing education to support one or more distinct manufacturing technologies of DoD interest, for example: manufacturing of lightweight structures, systems and materials; robotics for manufacturing; manufacturing to exploit nanotechnology; manufacturing of components and systems for power generation, storage, or distribution; or manufacturing of multi-functional electronics and/or optical devices.

Proposed efforts should develop and enhance curricula and programs to effectively develop skills sets needed for students to operate in multidisciplinary design and manufacturing environments, including those for which manufacturing schema are informed by computational tools for modeling and simulation. Students also should be prepared to work effectively in environments where multiple engineering disciplines are engaged during design, development and manufacturing, and where the roles of manufacturers and suppliers in businesses of various sizes, from start-ups to major systems integrators, are optimized. Curricula and programs that develop shop-floor capabilities are also sought and may include welding; manufacturing-related programming (Computer Numerical Control (CNC), Computer Aided Design (CAD), Programmable Logic Controllers (PLC), logic, robotic control, etc.); operation and maintenance of state-of-the-art manufacturing equipment/tooling; process monitoring and optimization, and in-line quality assurance; and manufacturing, supply chain, and distribution management.

The DoD, through the Office of Naval Research (ONR), seeks a broad range of consolidated and integrated multidisciplinary programs of education that encompasses the total manufacturing engineering enterprise with an emphasis on:

- a. Developing targeted instruction and/or curricula that covers desired manufacturing technologies and skills.
- b. Identifying specific opportunities for faculty and student engagement with industry, including opportunities for students to obtain relevant work experience in manufacturing through such activities as internships, summer job placements, or cooperative work-study programs. Identifying specific industrial partnership(s) and providing details of the collaboration is a critical element for any proposed program.
- c. Geographical diversity.

Instruction that encompasses the total manufacturing engineering enterprise may include but is not limited to the following:

- a. Manufacturing engineering education and training through classroom activities, laboratory activities, thesis projects, individual or team projects, internships, cooperative work-study programs, and interactions with industrial facilities, consortia, or other such activities and organizations in the United States and appropriate foreign countries;
- b. Faculty and teacher development programs;
- c. Recruitment of educators highly qualified in manufacturing engineering to teach or develop manufacturing engineering courses;
- d. Presentation of seminars, workshops, and training for the development of specific manufacturing engineering skills;
- e. Activities involving interaction between students and industry, including programs for visiting scholars or industry executives, or other personnel exchanges;
- f. Development of new, or updating and modification of existing, manufacturing curriculum, course offerings, and education programs;
- g. Establishment of programs in manufacturing workforce training;
- h. Establishment of joint manufacturing engineering programs with defense laboratories and depots;
- i. Expansion of manufacturing training and education programs and outreach for members of the armed forces, dependents and children of such members, veterans, and employees of the Department of Defense.

Any proposed program or collection of programs should include quantitative assessment plans to demonstrate the increased understanding of manufacturing engineering challenges and potential solutions, and the enhanced quality and effectiveness of the instruction that result from that increased understanding.

B. FEDERAL AWARD INFORMATION

1. Funding Amount and Period of Performance

Under this MEEP FOA competition, ONR intends to award up to an estimated total value of \$40,000,000, subject to the availability of funds. Each individual award will be up to a maximum of \$5,000,000, for a period of up to three (3) years. Applications for larger amounts will be considered on a case-by-case basis. To enhance diversity, ONR intends to reserve some awards for secondary and post-secondary vocational and technical schools or similar programs at community colleges that focus on participant career choices and training in the respective fields. Projects addressing a larger community effort must consult with the Technical Point of Contact (TPOC) listed in [Section II. G.](#)

ONR expects projects to be completed within the performance period. Any requests for no-cost extensions must be fully justified and submitted no later than 60 days before the end of the period of performance.

2. Peer Reviews

ONR may utilize peer reviewers to assist in the evaluation of white papers and proposals, and periodic appraisal of performance under the awards, as outlined in ONR Instruction 3966.1A. Such periodic program reviews monitor the cost, schedule, and technical performances of funded efforts. The reviews are used in part to determine which MEEP projects will receive continued funding. Peer reviewers who are not U.S. Government employees must sign nondisclosure agreements before receiving full or partial copies of proposals/applications and reports submitted by the performers.

C. ELIGIBILITY INFORMATION

All responsible sources from industry, non-profit institutions, institutions of higher education, or consortia of such institutions or industry may submit white papers under this FOA. Foreign entities will not be considered.

Current and past awardees from this initiative, or previous versions of this initiative, are eligible to receive awards under this FOA.

Federally Funded Research & Development Centers (FFRDCs), including Department of Energy National Laboratories, are not eligible to receive awards under this FOA. However, teaming arrangements between FFRDCs and eligible principal applicants are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC

Navy laboratories, military universities, and warfare centers, as well as other Department of Defense and civilian agency laboratories, are also not eligible to receive awards under this FOA and must not submit either white papers or applications in response to this FOA. If any such organization is interested in the program described herein, the organization may contact Dr. William Mullins at william.m.mullins@navy.mil, to discuss potential projects. The subject line of the email shall read "N00014-19-S-F0006 Potential Project Inquiry." As with FFRDCs, these types of Federal organizations may team with eligible applicants that are submitting white papers under this FOA.

University Affiliated Research Centers (UARC) are eligible to submit white papers under this FOA unless precluded from doing so by their Department of Defense UARC contract.

D. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process

This FOA competition is implemented in two stages:

First - Applicants **must** begin by submitting a white paper; and

Second - Based on assessment of the white paper, applicants will be invited to submit a grant application.

NOTE TO APPLICANTS: The Government seeks only applications that are relevant and responsive to the Funding Opportunity Description in Section II. A. White papers that fail to address the areas listed in the Funding Opportunity Description will be rejected and not considered further.

Submission of White Papers: As mentioned previously, white papers are a **MANDATORY** component of a two-part submission process. **White papers must NOT be submitted through the Grants.gov application process.** Instead, white papers are to be submitted via email to the attention of Dr. William Mullins at william.m.mullins@navy.mil as either a PDF or Microsoft Word 2010 compatible file. The subject line of the email shall read “N00014-19-S-F006 White Paper Submission.” There is an email size limit of 5 MB per email.

Only email submissions will be accepted and reviewed. Do NOT send:

- 1) Hardcopies of White Papers (including Facsimiles);**
- 2) ZIP files; and**
- 3) Password protected files.**

The due date and time for receipt of white papers is **28MAR2019 (Thursday) at 3:00 PM Eastern Time.** White papers received after the due date and time will not be considered under any circumstance. Time of receipt will be determined by the date and time the email is received in Dr. Mullins’ email inbox. Some submitters have experienced significant transmission delays when submitting white papers. Early submission is encouraged. Submitters may request verification of receipt.

White Paper Evaluation/Notification: Once the initial evaluation of white papers is completed, applicants will be notified via email of their project’s status on or about **06MAY2019 (Monday).**

Submission of Applications: Applications may only be submitted by invitation and received electronically through <https://www.grants.gov/> no later than **20JUN2019 (Thursday) at 11:59 PM Eastern Time.** Applications are NOT to be submitted via email. Unsolicited applications will be rejected without review.

You are responsible for making sure your application is submitted, received, and validated by Grants.gov before the application deadline. If your application package is submitted late, your application will be ineligible for consideration.

Award Notification: It is anticipated that final selections for award will be made on or about **29 JUL 2019 (Monday).** See [Section II. D. 4. for “Significant Dates and Times.”](#)

2. Content and Format of White Papers/Applications

White papers and applications submitted under this FOA must seek to address unclassified efforts. As a corollary, no classified white papers or applications shall be submitted. White papers and application submissions will be protected from unauthorized disclosure in accordance with applicable laws and DoD regulations.

IMPORTANT NOTE: Titles given to the White Papers/ Applications should be descriptive of the MEEP aspects they cover and should not be merely a copy of the title of this announcement.

a. White Papers

White Paper Format:

- Paper Size – 8.5 x 11-inch paper
- Margins – 1 inch
- Spacing – single spaced
- Font – Times New Roman, 12 point
- Page limit – 5 pages (Cover page, Rough Order of Magnitude Cost, Curricula Vitae, and references are not included in the page limit.)

White Paper Content

White Papers must include the following sections:

- **Cover Page** – The Cover Page shall be labeled "WHITE PAPER", and shall include "N00014-19-S-F006", proposed title, Applicant's administrative and technical points of contact, telephone numbers, facsimile numbers, and email addresses.
- **Summary** (One Page Maximum) – A summary of the proposed effort.
- **Technical Concept** (Four Page Maximum) – White papers must address the Funding Opportunity Description stated in Section II. A, and should:
 1. Contain innovative approaches for improving engineering education and training in advanced manufacturing technology by developing and implementing new programs, or extensively enhancing existing experiments;
 2. Address specific industry needs, and demonstrate deep engagement with the target industries, including specific industrial partners and detailed collaboration plans;
 3. Provide specific significant impacts of the program on the target industries and/or communities;

4. Collect program-specific measures of participant outcomes appropriate to the program;
 5. Describe initiatives or activities to attract superior participants, specifically women, members of minority groups, veterans, and individuals with disabilities as participants;
 6. Demonstrate involvement by fully qualified and experienced education and training personnel;
 7. Contain a business strategy for how, within three years of award, the effort will have a clear path towards financial sustainability without dedicated federal funding; and;
 8. Address specific application evaluation criteria included in Section II. E.
- **Rough Order of Magnitude Cost** (One-half Page Maximum) – White Paper submissions shall include a rough order of magnitude cost showing requested funding per year and total cost, and which suggests spending priorities to satisfy Section II. A.
 - **Project Director / Principal Investigator(s)** – Include resumes or curricula vitae for the Project Director / Principal Investigator(s). The resumes / curricula vitae shall be attached to the white-paper.

b. Grant Application Package

Content and Form of Application:

Prospective applicants invited to submit an application based on the quality of their technical concept and proposed cost 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) unless otherwise specified in this announcement.

Submit **Technical Proposals** using the following format:

- Paper Size – 8.5 x 11-inch paper
- Margins – 1 inch
- Spacing – single spaced
- Font – Times New Roman, 12 point
- Page limit – The technical proposal shall not exceed 15 pages.

Broken out as follows:

Cover Page – 1 page

Table of Contents – 1 page

Technical Approach – no more than 10 pages

Management Approach – no more than 1 page

Qualifications – no more than 1 page

Reports – no more than one-half page

Responsibility – no more than one-half page

EXCLUDED from the Technical Proposal 15-page limit are: resumes, curricula vitae, references, letters of support, and current and pending projects.

Technical Proposals exceeding the page limit may not be evaluated.

Submit **Budgets** using the following format:

- Paper Size – 8.5 x 11-inch paper
- Margins – 1 inch
- Spacing – single spaced
- Font – Times New Roman, 12 point
- Page limit – There is no page limitation to the Budget

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

Required Forms

(1) SF-424 Form (RESEARCH & RELATED) (Mandatory)

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.

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

- Field 3 - Date Received by State: The Date Received by State and the State Application Identifier are not applicable to research. Leave blank.
- Field 4a - Federal Identifier: Enter “N00014”.
- Field 4b - Agency Routing Number: Enter “332 [Mullins, William M.]”.

Applicants who fail to provide an Agency Routing Number may receive a notice that their proposal is rejected.

- Field 4c - Previous Grants.gov Tracking ID: If this submission is for a Changed/Corrected Application, enter the Grants.gov tracking number of the previous proposal submission; otherwise, leave blank.
- 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 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 the “I agree” box in field 17, and attaching the representation to Field 18 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov, the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28 and representation regarding an unpaid delinquent tax liability or a felony conviction under any federal law – DoD appropriations.

(2) R&R Form: Project Abstract Form (Mandatory)

The project abstract must identify the problem and objectives, technical approaches, anticipated outcome of the effort, 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 4,000-character limit including spaces.

Do not include proprietary or confidential information. The project abstract must be marked by the applicant as “Approved for Public Release”. Abstracts of all funded projects will be posted on the public DTIC website:

<https://dodgrantawards.dtic.mil/grants>

(3) R&R Form: Research and Related Other Project Information (Mandatory)

- 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 subjects” as defined in DoD Instruction 3216.02, prior to award, the Applicant must submit the documentation under “Use of Human Subjects in Research” ([Section II. H. 6.](#)).
- Fields 2 and 2a – Vertebrae 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 II. H. 6.](#)).
- 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 various environmental requirements. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. Sections 4321-4370 (a), requires that agencies consider the environmental impact of “major Federal actions” prior to any final agency decision. With respect to those awards which constitute “major Federal actions,” as defined in 40 CFR 1508.18, federal agencies may be required to comply with NEPA and prepare an environmental impact statement (EIS), even if the agency does no more than provide grant funds to the recipient. Questions regarding NEPA compliance should be referred to the technical point of contact. Most research efforts funded by ONR will, however, qualify for a categorical exclusion from the need to prepare an EIS. Navy instructions/regulations provide for a categorical exclusion for basic and applied scientific research usually confined to the laboratory, if the research

complies with all other applicable safety, environmental and natural resource conservation laws.

- Field 7 – Project Abstract: Leave Field 7 blank; complete Form SF424, Project Abstract.
- Field 8 – Project Narrative: Describe clearly the project, 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 in 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 effort by the following:

Cover Page – This must include the words “Technical Proposal” and the following:

- (a) FOA Number: N00014-19-S-F006;
- (b) Title of Application;
- (c) Identity of prime Applicant and complete list of sub-awards, if applicable;
- (d) Technical contact (name, address, phone/fax, electronic mail address);
- (e) Administrative/business contact (name, address, phone/fax, electronic mail address);
- (f) Proposed period of performance (identify both the base period and any options, if included); and
- (g) Total proposed budget.

Table of Contents – A listing of the sections within the proposal, including corresponding page numbers.

Technical Approach – The proposal must consist of a clear description of the technical approach being proposed, and how it advances education for advanced, interdisciplinary manufacturing for Defense- and/or military-related industry. Broadly, the proposal should expound on the white paper’s technical concept, and address in particular, as are relevant, the following points.

1. The details of the proposed education/training program, to include:
 - a) The specific industrial needs to be addressed, with emphasis on the specific collaborations with industrial partners;
 - b) The collection of appropriate program-specific measures of participant outcomes;
 - c) Demonstrate involvement by fully-qualified and experienced education and training personnel; and

- d) The approach to implementing a process of continuous improvement to the program.
2. The initiatives or activities to attract superior participants, specifically women, members of underrepresented groups, veterans, and individuals with disabilities as participants.
3. The unique merits of the proposed project and the rationale for their selection. This should include:
 - a) The innovation and projected effectiveness of the proposed project; and
 - b) The significance of the specific impacts that this project will have on the participants, and on the target industries or communities.
4. The detailed business strategy for how, within three years of award, the effort will have a clear path towards financial sustainability without dedicated federal funding.
5. Address specific application evaluation criteria included in Section II. E.

Management Approach – Describe the overall management approach, and provide rationale for participation of key team members. Describe the planned relationships with any sub-awardees or collaborators. This is a single Project Director / Principal Investigator award; if there are sub-awardees or collaborators, explain how the proposed team fits the single Project Director / Principal Investigator structure.

References – Literature citations.

Current and Pending Project and Proposal Submissions – Applicants are required to provide information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing contracts, grants, and other assistance agreements. Applicants shall provide the following information of any related or complementary proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations):

(Concurrent submission of a proposal to other organizations will not prejudice its review by ONR.)

1. Title of Proposal and Summary;
2. Source and amount of funding (annual direct costs; provide contract and/or grant numbers for current contracts/grants);
3. Percentage effort devoted to each project;
4. Identity of prime Applicants and complete list of sub-awards, if applicable;
5. Technical contact (name, address, phone/fax, electronic mail address);
6. Administrative/business contact (name, address, phone/fax, electronic mail address);
7. Period of performance;

8. The proposed project and all other projects or activities requiring a portion of time of the Project Director / Principal Investigator and other senior personnel must be included, even if they receive no salary support from the project(s);
9. The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months or labor hours per year to be devoted to the project, regardless of source of support; and
10. State how projects are related to the proposed effort and indicate degree of overlap.

Project Director / Principal Investigator Qualifications – A discussion of the qualifications of the proposed Project Director / Principal Investigator and any other key personnel. Include resumes or curricula vitae for the Project Director / Principal Investigator, other key personnel and consultants. The resumes/curricula vitae shall be attached to the proposal.

Responsibility – Applicants must provide the following information to ONR in order to assist in ONR's evaluation of the applicant's responsibility:

1. Describe how you have adequate resources or the ability to obtain such capability as required to complete the activities proposed;
2. Describe how you have the ability to comply with the grant conditions, taking into account all existing and currently prospective commitments of the applicant, nongovernmental and governmental;
3. Describe your performance history; specifically, your record in managing Federal awards and the extent to which any previously awarded amounts will be expended prior to future awards;
4. Describe your record of integrity and business ethics;
5. Describe qualifications and eligibility to receive an award under applicable laws and regulations; and
6. Describe your organization, experience, accounting, and operational controls and technical skills, or the ability to obtain them (including as appropriate such elements as property control systems, quality assurance measures, and safety programs applicable to the services to be performed).

Reports – The Applicant must acknowledge that the following reports are required under an ONR funded MEEP effort:

- Monthly Technical and Financial Progress Reports – A one-page template will be provided to each starting grant. This report will include information on current expenses and invoices for the time period, programmatic developments, and major successes or major problems that warrant ONR attention.
- Annual Reports – Complete annual Performance Progress Report mandated by ONR. Reporting occurs during the summer months regardless of grant start date.
- Final Report – Detail the full programmatic accomplishments summarized from prior reports and a forecast for ongoing program sustainability and expansion.

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

Facilities & Equipment – Describe facilities available for performing the proposed effort and any additional facilities or equipment the organization proposes to acquire at its own expense. Indicate government-owned facilities or equipment already possessed that will be used. Justify the need for each equipment item. (Additional facilities and equipment will not be provided unless the proposed effort cannot be completed by any other practical means.)

(4) R&R Form: Research & Related Budget

The applicant must use the Grants.gov forms from the application package template associated with the BAA on the Grants.gov web site located at <https://www.grants.gov/>. If options are proposed, the budget 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.

A separate Adobe .pdf document should 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.

The itemized budget should include the following:

- 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 which adequately describes the major project and the administrative and/or clerical work to be performed.
- Fringe Benefits and Indirect Costs (F&A, Overhead, G&A, etc.) – The proposal should 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 rates have not been approved/negotiated, provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. Additional information may be requested, if needed. If composite rates are used, provide the calculations used in deriving the composite rates.

- 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 principals.
- Subawards/Subcontracts – Provide a description of the work to be performed by the subrecipient/subcontractor. For each subaward, a detailed budget is required to be submitted by the subrecipient(s). A proposal and any supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal. ONR's preferred method of receiving subcontract information is for this information to be included with the Prime's proposal. However, a subcontractor's budget can be provided via email directly to the Program Officer at the same time the prime proposal is submitted. The email should identify the proposal title, the prime Applicant and that the attached proposal is a subcontract.
- Consultants – Provide a breakdown of the consultant's hours, the hourly rate proposed, any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant's proposed statement of work if it is not already separately identified in the prime contractor's proposal.
- 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 are normally furnished by the Recipient. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). Allowable items normally are limited to research equipment not already available for the project. General purpose equipment (i.e., equipment not used exclusively for research, scientific or other technical activities, such as personal computers, laptops, office equipment) should not be requested unless they will be used primarily or exclusively for the project. For computer/laptop purchases and other general purpose equipment, if proposed, include a statement indicating how each item of equipment will be integrated into the program or used as an integral part of the research effort.
- Other Direct Costs – Provide an itemized list of all other 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 at either the prime or subaward level but may be permitted on subcontracts issued by the prime awardee.

(5) Research and Related Senior/Key Person Profile (Expanded) (Mandatory)

The Degree Type and Degree Year fields on the Research and Related Senior/Key Person Profile (Expanded) form will be used by DoD as the source for career information. In addition to the required fields on the form, applicants must complete these two fields for all individuals that are identified as senior or key persons on this form. 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 DoD receives an application without the required information, DoD may determine that the application is incomplete and should not be processed.

(6) Research and Related Personal Data (Mandatory)

This form will be used by DoD 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, if provided, will be used for statistical purposes only and will not be made available to merit reviewers. Applicants who do not wish to provide some or all of the information should check or select the “Do not wish to provide” option.

NOTE: The Government Accountability Office, in its report GAO-16-14, WOMEN IN STEM RESEARCH: Better Data and Information Sharing Could Improve Oversight of Federal Grant-making and Title IX Compliance, December 3, 2015, recommended that the Department of Defense collect certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in science, technology, engineering, or mathematics disciplines. To enable this assessment, each application must include the following forms completed as indicated.

3. Grants.gov Application Submission and Receipt Procedures

NOTE: White Papers must **not** be submitted through the Grants.gov application process. White paper submissions must be emailed directly to Dr. William Mullins at william.m.mullins@navy.mil. The subject line of the email shall read “N00014-19-S-F006 White Paper Submission.” White paper format requirements are found in [Section II. D. 2. a.](#)

How to Register to Apply through Grants.gov

a. *Instructions:* Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

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

If individual applicants are eligible to apply for this grant funding opportunity, refer to: <https://www.grants.gov/web/grants/applicants/individual-registration.html>

Organization applicants can find complete instructions here: <https://www.grants.gov/web/grants/applicants/organization-registration.html>

(1) *Obtain a DUNS Number:* All entities applying for funding, including renewal funding, must have a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B). Applicants must enter the DUNS number in the data entry field labeled "Organizational DUNS" on the SF-424 form.

For more detailed instructions for obtaining a DUNS number, refer to: <https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html>

(2) *Register with SAM:* In addition to having a DUNS number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Failure to register with SAM will prevent your organization from applying through Grants.gov.

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>

(3) *Create a Grants.gov Account:* The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's DUNS number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to:
<https://www.grants.gov/web/grants/applicants/organization-registration/step-3-username-password.html>

(4) *Authorize Grants.gov Roles*: After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the 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 anytime after you have been approved as an AOR.

For more detailed instructions about creating a profile on Grants.gov, refer to:
<https://www.grants.gov/web/grants/applicants/organization-registration/step-4-aor-authorization.html>

5) *Track Role Status*: To track your role request, refer to:
<https://www.grants.gov/web/grants/applicants/organization-registration/step-5-track-aor-status.html>

b. *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.**

How to Submit an Application to ONR via Grants.gov

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

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

b. *Complete a Workspace*: Add participants to the workspace, complete all the required forms, and check for errors before submission.

1. *Adobe Reader*: If you decide not to apply by filling out webforms 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>

2. *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.

3. *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 DUNS 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.

c. *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.

d. *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.

For additional training resources, including video tutorials, refer to:

<https://www.grants.gov/web/grants/applicants/applicant-training.html>

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

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

Timely Receipt Requirements and Proof of Timely Submission

a. *Online Submission.* All applications must be received by 11:59pm Eastern time on the due date established. 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. Applicant AORs will also receive the official date/time stamp and Grants.gov Tracking number in an email serving as proof of their timely submission.

When ONR 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 ONR.

Applicants using slow internet, such as dial-up connections, should be aware that transmission can take some time before Grants.gov receives your application. Again, Grants.gov will provide either an error or a successfully received transmission in the form of an email sent to the applicant with the AOR role. 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.

b. *Proposal Receipt Notices.* After a proposal is submitted through Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three emails. It is extremely important that the AOR watch for and save each of the emails. You will know that your proposal has reached ONR when the AOR receives email Number 3. You will need the Submission Receipt Number (email Number 1) to track a submission. The three emails are:

Number 1 – The applicant will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted.

Number 2 – **The applicant will receive an email indicating that the proposal has been validated by Grants.gov within two days of submission (This means that all of the required fields have been completed).** After an institution submits an application, Grants.gov generates a submission receipt via email and also sets the application status to “Received.” This receipt verifies the Application has been successfully delivered to the Grants.gov system. Next, Grants.gov verifies the submission is valid by ensuring it does not contain viruses, the opportunity is still open, and the applicant login and applicant DUNS number match. If the submission is valid, Grants.gov generates a submission validation receipt via email and sets the application status to “Validated.” If the application is not validated, the application status is set to "Rejected." The system sends a rejection email notification to the institution, and the institution must resubmit the application package. Applicants can track the status of their application by logging in to Grants.gov.

Number 3 – The third notice is an acknowledgment of receipt in email form from ONR

within ten days from the proposal due date, if applicable. The email is sent to the authorized representative for the institution. The email for proposals notes that the proposal has been received and provides the assigned tracking number.

4. Significant Dates and Times

Schedule of Events		
Event	Date	Time
Questions Regarding white papers	01MAR2019*	
White Papers Due	28MAR2019	3:00 PM Eastern Time
Notification of Evaluations of White Papers	06MAY2019**	
Questions Regarding Applications	22MAY2019	
Applications Due	20JUN2019	11:59 PM Eastern Time
Notification of Selection for Award	29JUL2019**	
Estimated award date of grant	SEP 2019**	
Estimated start date of grant	SEP 2019**	

* Questions submitted after the Q&A deadline as noted in the table above may not be answered. The due date for submission of the white paper and/or application will not be extended.

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

E. APPLICATION REVIEW INFORMATION

1. Evaluation Criteria

Awards under this FOA will be made to Applicants on the basis of the evaluation criteria listed below. The primary basis for selecting proposals for award will be technical merit, relevance to the subject of the solicitation, proposed cost realism and reasonableness, and the availability of funds to support the effort. If offered, voluntary cost sharing may be considered as a demonstration of an offeror's commitment to their proposed project. Any proposed cost sharing becomes a binding term of any award. ONR reserves the right to request and require additional supporting information and documentation after it makes the selection determination. ONR reserves the right to remove Applicants from award

consideration if the parties fail to reach agreement on award terms, conditions, or cost/price within a reasonable time; or if the Applicants fail to provide requested or required additional information in a timely manner.

Applicants' proposals will be evaluated against the following criteria:

1. **Technical Merit** - Overall technical merits of the proposal, and responsiveness to the topic. This includes, but is not limited to, the degree of innovation, the soundness of educational structure of the proposed approach, the strength of the approach to attract diverse and superior participants, the relevance and overall impact on the manufacturing industry, the quality of the program's plan to assess participant outcomes, and the strength of the long-term sustainability of the project. Also considered is: (1) the Proposer's capabilities, related experience, facilities, techniques or unique combinations of these which are integral factors for achieving the proposal objectives; and (2) the qualifications, capabilities and experience of the proposed Project Director / Principal Investigator, team leader and key personnel who are critical to achieving the proposal objectives.
2. **Relevance to the Subject of the Solicitation** - The manufacturing activities, industrial sectors and specific partners, or regional interests that have been identified as foci; the impact on these targeted industries and/or regions; and the potential relevance to national security and economic competitiveness.
3. **The realism and reasonableness in the proposed budget.** The availability of funds to support the effort.

Criteria 1, 2, and 3 are equally important.

2. Review and Selection Process

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 proposals 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 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 Grants Department to conduct cost analysis, determine the Applicant's responsibility, to confirm whether funds are available, and to take other relevant steps necessary prior to making the award.

3. 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.

4. Evaluation Panel

Technical and budgets submitted under this FOA will be protected from unauthorized disclosure. The cognizant Program Officer and other Government subject matter experts will perform the evaluation of technical proposals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. However, proposal selection and award decisions are solely the responsibility of the Director, Naval Materials Science and Technology Division. Each support contractor employee that has access to technical and cost proposals submitted in response to this FOA will be required to sign a nondisclosure statement prior to receipt of any proposal submissions.

5. General Information Regarding the Review and Selection Process

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):

- a. 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);
- b. 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;
- c. 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 200.205 Federal awarding agency review of risk posed by applicants.

F. FEDERAL AWARD ADMINISTRATION INFORMATION

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

System for Award Management (SAM): All Applicants submitting proposals or applications must:

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

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

2. Federal Award Notices

a. Applicants whose proposals are recommended for award may be contacted by a Contract or Grant specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, subcontracting plan for small businesses, 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 Contracting Officer or Grants Officer, as applicable, signs the award document.

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

b. Office of Naval Research (ONR) award/modification documents are only available via the Department of Defense (DoD) Electronic Document Access System (EDA) within the Wide Area WorkFlow e-Business Suite (<https://wawf.eb.mil/>). EDA is a Web-based system that provides secure online access, storage and retrieval of awards and modifications to DoD employees and vendors.

ONR creates an award notification profile for every award.

For grants, the notification profile will use the email addresses from the Application for Federal Assistance, SF424, to notify the recipient of an award. ONR recommends that organizations provide a global business address for their entity in Field 5 (Application Information) of the SF424. ONR is using the following three email addresses entered by the grantee on the SF424 application to create the EDA notification profile:

- i. Applicant Information (Field 5 - Email)
- ii. Project Director / Principal Investigator (Field 14 - Email)
- iii. Authorized Representative (Field 19 - Email)

For all other awards, the notification profile will use the email address from the Business Point of Contact to notify the recipient of an award.

IMPORTANT: In some cases, EDA notifications are appearing in recipients' Junk Email folder. If you are experiencing issues receiving EDA notifications, please check your junk email. If found, please mark EDA notifications as "not junk."

If you do not currently have access to EDA, you may complete a self-registration request as a "Vendor" via <https://wawf.eb.mil/> following the steps below:

1. Click "Accept"
2. Click "Register" (top right)
3. Click "Agree"
4. In the "What type of user are you?" drop down, select "Vendor"
5. Select the systems you would like to access (WAWF at a minimum)
6. Complete the User Profile and follow the site instructions

Allow five business days for your registration to be processed. EDA will notify you by email when your account is approved.

To access awards after your registration has been approved, log into <https://wawf.eb.mil/>, select "EDA", select either EDA location, Select "Contracts", select your search preference, enter the Contract Number (or, if applicable, enter the Grant Number in the Contract Number field), and select "View".

Registration questions may be directed to the EDA help desk toll free at 866-618-5988, commercial at 801-605-7095, or via email at disa.ogden.esd.mbx.cscassig@mail.mil (Subject: EDA Assistance).

3. Reporting

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 U.S.C. 200 Appendix XII), is applicable as follows:

a. Reporting of Matters Related to Recipient Integrity and Performance

(1) **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 section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, 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.

(2) 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:
 - (i) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
 - (ii) 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;
 - (iii) 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
 - (iv) Any other criminal, civil, or administrative proceeding if:
 - (a) It could have led to an outcome described in paragraph 2.c.(i), (ii), or (b) of this award term and condition;
 - (c) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
 - (d) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. 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.

4. 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.

5. 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:

(i) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and

(ii) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

G. FEDERAL AWARDING AGENCY CONTACTS

When contacting the POC below, please include in the subject line of the email, “N00014-19-S-F006.”

Questions about **technical** nature and/or **funding** should be submitted to:

Dr. William Mullins
Title: Program Officer

Office of Naval Research
875 North Randolph Street
Arlington VA 22203-1995
Email: william.m.mullins@navy.mil

Questions of a business nature should be submitted to:

Ms. Veronica Lacey
Grants Officer
Office of Naval Research
875 North Randolph Street
Arlington VA 22203-1995
Email: veronica.lacey@navy.mil

H. OTHER INFORMATION

1. 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 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. Refer to 2 CFR Part 170, including Appendix A, for a detailed explanation of the requirements, exceptions, and exemptions.

2. Certification regarding Restrictions on Lobbying

Grant, Cooperative Agreement, and Technology Investment Agreement (TIA) 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 [Grants.gov](https://www.grants.gov) (complete Block 17). The following certification applies likewise to each Cooperative Agreement and TIA seeking federal assistance funds exceeding \$100,000:

- a. 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.

b. 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.

c. 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 Section 1352, title 31, U.S.C. 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.

3. Representation Regarding an Unpaid Delinquent Tax Liability or a Felony Conviction Under any Federal Law - DoD Appropriations

All grant applicants are **required to complete** the "Representation on Tax Delinquency and Felony Conviction" found at <https://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal.aspx> by checking the "I agree" box in Field 17 and attaching the representation to Field 18 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

a. The applicant represents that it **is/ is not** a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

b. The applicant represents that it **is/ is not** a corporation that was convicted of a felony criminal violation under any Federal law within the preceding 24 months. NOTE: If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information about its tax liability or conviction to the agency's SDO as soon as it can do so, to facilitate completion of the required consideration before award decisions are made.

4. Representation Regarding the Prohibition on Using Funds with Entities that Require Certain Internal Confidentiality Agreements

Agreement with the representation below will be affirmed by checking the "I agree" box in Field 17 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation 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.

Note that, as applicable, the bases for this representation are the prohibition(s) as follow:

- a. Section 743 of the Financial Services and General Government Appropriation Act, 2015 (Division E of the Consolidated and Further Continuing Appropriations Act, 2015, Pub. L. 113-235)
- b. Pub. L. 114-53, Continuing Appropriation Act, 2016, or any other Act that extends to fiscal year 2016 funds the same prohibitions as contained in section 743 of Division E, title VII of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and the Consolidated Appropriations Act, 2016 (Pub. L. 114-113).
- c. Pub. L. 114-223, Continuing Appropriations Act, 2017, or any other Act that extends to fiscal year 2017 funds the same prohibitions as contained in section 743, Division E, title VII, of the Consolidated Appropriations Act, 2016 (Pub. L. 114-113) and the Consolidated Appropriations Act, 2017 (Pub. L. 115-31)
- d. Pub. L. 115-56, Continuing Appropriations Act, 2018 and Supplemental Appropriations for Disaster Relief Requirements Act, 2017, or any other Act that extends to fiscal year 2018 funds the same prohibitions as contained in Section 743, Division E, title VII, of the Consolidated Appropriations Act, 2017 (Pub. L. 115-31) and the Consolidated Appropriations Act, 2018 (Pub. L. 115-141)
- e. Pub. L. 115-245, Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019 and Continuing Appropriations Act, 2019, or any other Act that extends to fiscal year 2018 funds the same prohibitions as contained in Section 743, Division E, title VII, of the Consolidated Appropriations Act, 2018 (Pub. L. 115-41)
- f. Any successor provision of law on making funds available through grants and cooperative agreements to entities with certain internal confidentiality agreements or statements.

5. Code of Conduct

Applicants for grants, cooperative agreements, or other transaction agreements as applicable 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.

6. Requirements Concerning Live Organisms

Use of Animals:

The DoD policies and requirements for the use of animals in DoD-supported research are described in DoD Instruction 3216.01, *Use of Animals in DoD Programs*, and SECNAVINST 3900.38C, *The Care and Use of Laboratory Animals in DOD Programs*. If animals are to be utilized in the research effort proposed, the Applicant must submit a Full Appendix or Abbreviated Appendix with supporting documentation (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) 696-4046.

Guidance: <https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/animal-use>

Use of Human Subjects in Research:

- a. 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 and applicable provisions of DoD Instruction 3216.02, *Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research* (2011), the DON implementation of the human research protection program contained in SECNAVINST 3900.39E (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.
- b. For proposals containing activities that include or may include “research involving human subjects” as defined in DoD Instruction 3216.02, prior to award, the Applicant must submit documentation of:

- (i) Approval from an Institutional Review Board (IRB) (IRB-approved research protocol, IRB- approved informed consent document, and other material they considered); proof of completed human research training (e.g., training certificate or institutional verification of training for the principal investigator, co-investigators); and the Applicant’s Department of Health and Human Services

(DHHS)-issued Federal Wide Assurance (FWA), including notifications of any suspensions or terminations to the FWA),

(ii) Any claimed exemption under 32 CFR 219 101(b), 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 human research protection program.

(iii) Any determinations that the proposal does not contain activities that constitute research involving human subjects, 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 human research protection program.

c. Documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. If the research is determined by the IRB to be greater than minimal risk, the Applicant also must provide the name and contact information for the independent research monitor and a written summary of the monitors' duties, authorities, and responsibilities as approved by the IRB. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official (HRPO) at (703) 696-4046.

d. 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. See, DFARS 252.235-7004. Guidance: <http://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/Human-Subject-Research.aspx>

Biosafety and Biosecurity Requirements:

Applicants must comply with applicable provisions of DOD 6055.18-M, 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)."

Research Involving Recombinant 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:

a. 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.

b. Evidence demonstrating that the proposed research protocol has been approved 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.

Guidance: <https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/Animal-Recombinant-DNA.aspx>

7. 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 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 <https://www.phe.gov/s3/dualuse>.

8. 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 contracts, 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 and an application may be found at <https://www.hpcmo.hpc.mil/>.

9. Project Meetings and Reviews

Individual program reviews between Program Office, Dr. William Mullins and the performer may be held as necessary. Department of Defense colleagues may participate in these reviews. Program status reviews may also be held to provide a forum for reviews of the latest results from programs and any other incremental progress towards the major demonstrations. These meetings will typically be held at the Applicant’s facility or in Arlington, VA. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.