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FY12 Funding Opportunity Announcement (FOA) for Navy and Marine Corps Science, Technology, Engineering & Mathematics (STEM) Programs

INTRODUCTION:

This publication constitutes a Funding Opportunity Announcement (FOA) as contemplated in the Department of Defense Grants and Agreements Regulations (DoDGARS) 22.315. A formal Request for Proposals (RFP), other solicitation, or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. 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 cost 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 as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

This FOA is intended for proposals related to educational programs and outreach projects in science, technology, engineering, and mathematics (STEM).

For Research and Development proposals related to basic research, applied research, or advanced technology development, refer to the Long Range ONR BAA 12-001, which can be found at ONR Broad Agency Announcement (BAA) Webpage- http://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcement.asp

GENERAL INFORMATION:

1. Agency Name - Office of Naval Research

2. Funding Opportunity Title – FY12 Funding Opportunity Announcement (FOA) for Navy and Marine Corps Science, Technology, Engineering & Mathematics (STEM) Programs

3. Program Name - STEM for K-12 & Institutions of Higher Education

4. Funding Opportunity Number - 12-002

5. Response Date -

White papers and proposals will be accepted throughout the open period of FOA 12-002.

This announcement will remain open until 30 September 2012 or until replaced by a successor FOA, whichever first occurs. Proposals may be submitted any time during this period.

6. Funding Opportunity Description -

The Office of Naval Research (ONR) seeks proposals as provided under the authority set forth in subdivision (1) of subsection 2192 (b) of title 10 in support of education programs in science, technology, engineering and mathematics (STEM). The ONR mission of STEM is to: foster an interest in, knowledge of, and study in science, technology, engineering and mathematics nationwide to ensure an educated and well-prepared naval
and national STEM workforce. In support of this mission, the following four investment priorities have been identified:

- **Inspire** the next generation of scientists and engineers. [Programs that fall mostly within Grades K-10]
- **Engage** students in STEM-related hands-on learning activities with Naval relevance. [Programs that fall mostly within Grades 3-12]
- **Educate** students to be well prepared for STEM employment in the Navy and Marine Corps as well as supporting academic institutions and/or the Naval contractor community. [Programs that fall mostly within Higher Education]
- **Employ**, retain and develop Naval STEM professionals. [Programs that fall mostly within Higher Education and Professional Development]

For more information on these priorities, please review the Naval STEM Strategic Plan at www.onr.navy.mil

The purpose of this announcement is to receive proposals in support of the Naval Strategic Plan and the Office of Naval Research's scientific outreach and education mission to develop its next generation of scientists and engineers. The objective of these activities will be to:

1. Establish successful, sustainable, and affordable long-term, national Navy-sponsored programs targeted at elementary and secondary schools as well as institutions of higher learning.
2. Increase the awareness of and exposure to Naval relevant STEM content, research experience and career options through education and outreach programs.
3. Establish and maintain a pipeline of students, particularly women and under-represented minorities, who will apply for and participate in Naval education and outreach programs.
4. Increase the number of domestic students (particularly students from under-represented groups) completing STEM degrees through enhancing student interest and attitudes toward science, technology, engineering, and mathematics.
5. Strengthen peer, family, and school support for STEM programs.
6. Ensure long-term inclusiveness of women and minorities in Naval science and technology programs.
7. Increase the number of students taking college-prep science and mathematics courses.
8. Strengthen the resources and training offered to STEM teachers.

Additional activities supported may include providing financial assistance to organizations supporting STEM activities, providing funding and support for national competitions by arranging for DoD personnel to participate as judges and presenters, providing support for STEM education and outreach conferences and supporting teacher STEM education and training initiatives. Stipends for teachers undertaking professional training in connection with these activities may be supported as well as funding for the acquisition of materials and resources needed to launch, implement, assess, and improve the program. Additionally, evaluations of existing Navy/DoD program efforts and strategies to maximize marketing program opportunities to affected populations may be supported.

ONR encourages the project results to be published in appropriate academic journals at the end of the period of performance.

**Examples of STEM Education & Outreach Projects**

Offerors are encouraged to develop innovative approaches that utilize their unique assets, capabilities, locations, and personnel as well as nationally recognized best practice programs. Proposals should identify programs and methods that will be used to foster and develop students in STEM fields that are relevant to the DoD mission. For a list and description of current Navy STEM projects, please visit www.STEM2Stern.org.

The list below is provided as a reference, highlighting some of ONR’s signature STEM related education and outreach programs.
K - 12 Projects:

**SeaPerch:** SeaPerch is a hands-on activity for students, which gets kids excited about science. Students build an underwater robot from a kit composed of low-cost, easily accessible parts, following a curriculum that teaches basic engineering and science concepts with a marine engineering theme. Students follow steps to completely assemble the underwater robot, test it, and then participate in launching their vehicles. With one project, schools are able to teach many of the concepts required for their grade level: an efficient use of time, and a fun, hands-on activity for students.

**Iridescent:** Iridescent is a science-education nonprofit that helps engineers design, develop and teach inquiry-based Family Science Courses (which increase participants' interest in science, content knowledge, and self-efficacy) to 3rd - 7th grade underserved, underprivileged minority children and their families. Topics of the Courses range from Physics of MRI to Bird Flight Aerodynamics, illustrating the real-world applications of science concepts and exploiting the power of narrative stories instead of discrete disconnected topics.

**ASM:** The STEM Secondary School teacher Professional Development Training program is a partnership with the American Society of Materials (ASM) Education Foundation. This partnership will result in 1,260 high school STEM teachers from the Gulf Coast region being trained in hands-on, inquiry-driven materials science experiences that may be readily incorporated into their physical science classrooms. Additionally, students will be given the opportunity to attend one of 42 Materials Camps. During the Camps, principles of hands-on manipulative inquiry enable and encourage students to apply materials science concepts and skills to problems found in everyday life inside and outside of school.

**FIRST Robotics:** The Navy supports FIRST Robotics by sponsoring teams and providing engineering and technical mentors across the country. The mission of FIRST (For Inspiration Into Research, Science, and Technology) Robotics is to inspire young people to be science and technology leaders, by engaging them in exciting mentor-based programs that build science, engineering and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership. FIRST Robotics competitions target high school students, while First LEGO League targets elementary and middle schools students.

**YES Program:** Saint Louis Science Center's Youth Exploring Science (YES) Program serves St. Louis area teenagers ages 14-18. Through the YES program, teens receive academic support and life skills training as they participate in STEM activities in a work-based, inquiry-learning environment. The YES Program helps youth acquire process skills and develop an understanding of complex science concepts in the context of performing authentic tasks and long-term STEM projects.

**SEAP:** The Science and Engineering Apprentice Program (SEAP) provides an opportunity for high school students to gain a hands-on experience at a Department of Navy (DoN) laboratory during the summer. The goals of the SEAP are to encourage participating high school students to pursue science and engineering careers, to further education via mentoring of students by laboratory personnel and their participation in research, and to make them aware of DoN research and technology efforts. Participating students typically spend ten weeks during the summer working with scientists and engineers at one of approximately 12 DoN Laboratories. To participate, the high school students should be either in the junior and senior years.

**STEP:** The Science Technology Education Partnership (STEP) was established to bridge the skills gap between our K-12 students and high-technology industry needs. STEP produces its flagship science and technology education event every year, the STEP Conference. This conference serves to ignite the imagination of thousands of students, so that they might pursue promising careers in high-technology fields. It also provides hands-on training to hundreds of K-12 teachers, ensuring they have the latest tools to keep our students competitive in the global marketplace.
Community College and Undergraduate Programs:

NREIP: The Naval Research Enterprise Intern Program (NREIP) provides an opportunity for students to participate in research at a Department of Navy (DoN) laboratory during the summer. The goals of the NREIP are to encourage participating students to pursue science and engineering careers, to further education via mentoring by laboratory personnel and student participation in research, and to make them aware of DoN research and technology efforts, which can lead to employment within the DoN. Participating students typically spend ten weeks during the summer conducting research at one of approximately 12 DoN laboratories. To participate, a student must be enrolled at an accredited college/university and have completed at least his/her sophomore year before beginning the internship.

SMART: The Science, Mathematics and Research for Transformation (SMART) Scholarship for Service Program has been established by the Department of Defense (DoD) to support undergraduate and graduate students pursuing degrees in STEM disciplines. The program aims to increase the number of civilian scientists and engineers working at DoD laboratories. After graduation, the student is required to work at a DOD lab for a period equivalent to the time that the scholarship was received. SMART scholars spend summers at sponsoring organization to be groomed for employment.

Space Grant Internships: The Space Grants Internships are summer internships for college aged girls in engineering programs. In partnership with the Maryland Space Grant Consortium, we are able to provide short term opportunities as instructional assistants in our summer programs and as research assistants in our ongoing engineering programs. The students are exposed to the educational aspects and ownership of scientific concepts provided by our summer camps, have ample opportunities to interact with practicing engineers (male and female) from many different disciplines (aerospace, mechanical, systems, electrical, and ocean) and experience hands-on research with engineering faculty. Graduate Programs:

Graduate Programs:

NREIP: Similar to the Undergraduate program but with a higher stipend and greater responsibilities.

SMART: Similar to the Undergraduate program.

Doctoral Programs:

SMART: Similar to the Graduate program.

NDSEG: The National Defense Science and Engineering Graduate (NDSEG) Fellowship is a highly competitive, portable fellowship that is awarded to U.S. citizens and nationals who intend to pursue graduate study in one of the 15 supported disciplines. An NDSEG fellowship confers high honors upon its recipients and allows them to attend whichever U.S. institution they gain admission to. NDSEG Fellowships last for three years and pay for full tuition and all mandatory fees, a monthly stipend, and up to $1,000 a year in medical insurance.

7. Point(s) of Contact -

Questions of a technical nature should be submitted to:

Dr. Kam Ng
Deputy Director of Research
Code: 03R
Questions of a **business** nature should be submitted to:

Ms. Elizabeth Ford  
Grants Specialist  
Code: 025  
Office of Naval Research  
875 North Randolph Street  
Arlington, VA 22203-1995  
Email: elizabeth.ford@navy.mil

Any questions regarding this solicitation must be provided to the Technical Point of Contact and Business Point of Contact listed in this solicitation. All questions must be submitted in writing by electronic mail.

Answers to questions submitted in response to this FOA will be addressed in the form of an Amendment to the FOA and will be posted to one or more of the following webpages:


8. **Instrument Type(s) – Assistance Awards**

Awards will take the form of grants. However, ONR reserves the right to award a Cooperative Agreement if deemed to be in the best interest of the Government.

9. **Catalog of Federal Domestic Assistance (CFDA) Numbers** -

12.330

10. **Catalog of Federal Domestic Assistance (CFDA) Titles** -

Science, Technology, Engineering & Mathematics’ (STEM) for K-1 & Institutions of Higher Learning-Navy.

11. **Other Information** -

This FOA is intended for proposals related to educational programs and outreach projects in science,
technology, engineering, and mathematics (STEM).

II. AWARD INFORMATION

The amount and period of performance of each selected proposal may vary depending on the research area and the technical approach to be pursued by the selected offeror. There is no limit to the number of proposals an institution can submit.

The Office of Naval Research (ONR) plans to make multiple awards under this FOA, which represent the best value to the Government in accordance with the evaluation criteria contained in Section V, Evaluation Criteria of FOA 12-002. ONR is seeking participants for this program that are capable of supporting the goals and desired outcomes as described in this FOA. Offerors have the opportunity to be creative in the selection of the technical and management processes and approaches to address the areas of interest described above. The Government does not have a preference regarding whether programs are directed to local, regional, state, or national levels; however, the programs should take into consideration the broadest impact possible.

The period of performance of the awards will typically range from twelve (12) months to thirty-six (36) months. ONR anticipates a budget of approximately $10 million per year for the STEM program.

ONR plans to fund individual awards up to $200,000 per year. However, cost proposals for larger amounts will be considered when appropriate.

III. ELIGIBILITY INFORMATION

All responsible sources from academia (colleges and universities), middle and high schools, non-profit organizations, and industry may submit proposals under this FOA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals. However, no portion of this FOA will be set aside for HBCU and MI participation.

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 bidders are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC.

Navy laboratories and warfare centers as well as other Department of Defense and civilian agency laboratories are also not eligible to receive awards under this FOA. However, teaming arrangements between FFRDCs and eligible principal bidders are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC.

University Affiliated Research Centers are eligible to submit proposals under this FOA unless precluded from doing so by their Department of Defense UARC contracts.

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252, requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR 170.110. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or other transaction agreements) as either a prime or sub-recipient under this BAA must provide information in their proposal that describes the necessary processes and systems in place to comply with the reporting requirements.
IV. APPLICATION AND SUBMISSION INFORMATION

1. Application and Submission Process - White Paper, Full Proposals

Prospective offerors are encouraged to submit white papers to minimize the labor and cost associated with the production of detailed full proposals that have very little chance of being selected for funding. Each white paper should state that it is submitted in response to this FOA and should be submitted via e-mail to the technical POC in Section 7 of this announcement. There is no deadline for White paper submission, but offerors should allow sufficient time (approximately 4-6 weeks) for review and comment by the technical points of contact before submitting full proposal. Do not submit "White Papers" through Grants.gov.

Each white paper will be evaluated by the government to determine whether the technical concept proposed appears to be of particular value to the Department of the Navy. A full proposal will be subsequently encouraged from those offerors whose proposed technical concept has been identified as being of "particular value" to the Navy. However, any such request does not assure a subsequent award. Any offeror whose white paper was not identified as being of "particular value" to the Navy, can still submit a full proposal under the FOA.

Full proposals will be accepted without the submission of a white paper.

Full proposals must be receive no later than 30 September 2012 or before the date that a successor FOA is published, whichever first occurs.

The only acceptable method for submission of full proposals is via http://www.grants.gov/.

Notice of Navy selections based on full proposal submissions will be issued via e-mail.

2. Content and Format of White Papers/Full Proposals -

White Papers and Full Proposals submitted under the FOA are expected to be unclassified.

Unclassified Proposal Instructions: Unclassified White Papers and Full Proposals shall be submitted in accordance with Section IV. Application and Submission Information.

Proposal submissions will be protected from unauthorized disclosure in accordance with FAR Subpart 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

IMPORTANT NOTE: Titles given to the White Papers/Full Proposals should be descriptive of the work they cover and not be merely a copy of the title of this solicitation.

Alternatives to the format and content identified below may be appropriate depending on the scope and nature of the proposed effort. Coordinate any alternative proposal formats and contents relating to white papers and
technical proposals (Volume 1 of the full proposal) with the cognizant ONR Program Officer (Technical Point of Contact), who is listed in Section I.7. Alternative formats and content may be directed by the ONR Program Officer (Technical Point of Contact) or may result from Offerors' suggestions approved by the ONR Program Officer (Technical Point of Contact).

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
- Max. Number of Pages permitted: 7 pages (excluding cover page, resumes, bibliographies, and table of contents)
- Copies - One (1) electronic copy in Adobe PDF or Word 2007 delivered via email. Electronic (email) submissions should be sent to the attention of the TPOC at: (Email Address of the TPOC, e.g. jane.doe@navy.mil). The subject line of the email shall read "ONR BAA12-002 White Paper Submission."

NOTE: 1) Do not send .ZIP files; 2) Do not send password protected files.

In order to provide traceability and evidence of submission, Offerors may wish to use the "Delivery Receipt" option available from Microsoft Outlook and other email programs that will automatically generate a response when the subject email is delivered to the recipient's email system. Consult the User's Manual for your email software for further details on this feature.

White Paper Content

- **Cover Page:** The Cover Page shall be labeled "WHITE PAPER", and shall include the FOA number, proposed title, Offeror's administrative and technical points of contact, with telephone numbers, facsimile numbers, and Internet addresses, and shall be signed by an authorized officer.

- **Technical Concept:** A description of the technology innovation and technical risk areas. Provide a clear description of the program, event, conference or activity being proposed. Provide potential naval or defense relevance as it relates to the agency's STEM mission. Provide information on potential to achieve the educational objectives and impact toward improving science and engineering education in the United States.

- **Cost Estimate:** Cost information is needed, although not at the level of detail as required with the full proposal. White paper submissions shall include a cost summary showing requested funding per year. The cost summary (not to exceed one (1) page shall be segregated by both task and year (over the period of performance (i.e., 1, 2 or 3 years).

b. FULL PROPOSALS
i. **INSTRUCTIONS FOR GRANTS**

The offeror must use the Grants.gov forms 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. Assume that performance will start no earlier than three (3) months after the date the cost proposal is submitted. 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.

The following information must be completed as follows in the SF 424 to ensure that the application is directed to the correct individual for review: Block 4a, Federal Identifier: Enter the previous ONR award number, or N00014 if the application is not a renewal or expansion of an existing award; Block 4b, Agency Routing Number: Enter the three (3) digit Program Office Code [03R] and the Program Officer's name, last name first, in brackets [Ng, Kam]. Applicants who fail to provide a Department code identifier may receive a notice that their proposal will be rejected.

Please note that Volume I, Technical Proposal should be submitted as an attachment to the SF 424 rather than being inserted into Block 8, Project Narrative. Block 8 should be completed with a statement that Volume 1 is attached. To attach the Technical Proposal, open the Attachment Form in the Optional Documents box of the application package, scroll down to the Attachment page, and follow the instructions. The file should be titled "Volume I - Technical Proposal."

**Full Proposal Format - Volume 1 - Technical and Volume 2 - Cost Proposal**

- Paper Size - 8.5 x 11 inch paper
- Margins - 1 inch
- Spacing - single-spaced
- Font - Times New Roman, 12 point
- Number of Pages - Volume (Vol. 1) is limited to no more than 19 pages. Limitations within sections of the proposal, if any, are indicated in the individual descriptions shown below. The cover page, table of contents, resumes and current and pending project and proposal submissions information are excluded from the page limitations. Full Proposals exceeding the page limit may not be evaluated. There are no page limitations to Volume 2.
- Copies - the full proposal should be submitted electronically at http://www.grants.gov as delineated in paragraph 5 below.

**Full Proposal Content**

**Volume 1: Technical Proposal**

- **Cover Page:** This should include the words "Technical Proposal" and the following:
  1. FOA number 12-002;
  2. Title of Proposal;
  3. Identity of prime Offeror and complete list of subcontractors, if applicable;
  4. Technical contact (name, address, phone/fax, electronic mail address)
  5. Administrative/business contact (name, address, phone/fax, electronic mail address) and;
  6. Proposed period of performance (identify both the base period and any options, if included);
7. Signature of Authorized Representative.

- **Table of Contents:** An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.

- **Technical Approach and Justification:** The proposal should consist of a clear description of the technical approach being proposed and its potential naval or defense relevance and contribution to the agency’s specific education and science and engineering workforce. Discuss scientific and technical merits and its potential to achieve the educational objectives of the program, including the extent to which the proposed effort would enhance current capabilities. Identify metrics used to determine impact and or success of the program and the methodology for obtaining and validating the metrics. Identify proposed outreach initiative for increasing and maintaining the educational pipeline and the potential of the proposed program to educate future scientists and engineers in STEM disciplines critical to the defense mission. Discuss increased or enhanced opportunities to disseminate information on navy or defense programs and careers. Discuss impact of the initiatives toward improving science and engineering education in the United States. Discuss potential and extent to which the proposed program engages naval or defense laboratories as active participants in program execution. Limit the number of pages for this section to 9.

- **Project Schedule and Milestones:** A summary of the schedule of events and milestones. Limit the number of pages for this section to 1.

- **Reports:** The following are sample reports that are typically required under a research effort:

  - Technical and Financial Progress Reports
  - Presentation Materials
  - Final Report

**Grants do not include the delivery of software, prototypes, and other hardware deliverables.** Limit the number of pages for this section to 1.

- **Management Approach:** A discussion of the overall approach to the management of this effort, including brief discussions of the total organization; use of personnel; project/function/subcontractor/subrecipient relationships; government research interfaces; and planning, scheduling and control practice. Identify which personnel and subcontractors/subrecipients (if any) will be involved. Include a description of the facilities that are required for the proposed effort with a description of any Government Furnished Equipment/Hardware/Software/Information required, by version and/or configuration. Limit the number of pages for this section to 6.

- **Current and Pending Project and Proposal Submissions:** Offerors 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. Offerors shall provide the following information of any related proposal submissions from whatever sources (e.g., ONR, Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations).

The information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including ONR. 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 Offeror and complete list of subcontractors, if applicable;
5) Technical contact (name, address, phone/fax, electronic mail address)
6) Administrative/business contact (name, address, phone/fax, electronic mail address);
7) Duration of effort (differentiate basic effort);
8) The proposed project and all other projects or activities requiring a portion of time of the 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.

Qualifications: A discussion of the qualifications of the proposed Principal Investigator and any other key personnel. Limit the number of pages for this section to 2.
Include resumes for the Principal Investigator and other key personnel and full curricula vitae for Principal Investigators and consultants. The resumes and curricula vitae shall be attached to the proposal and will not count toward the page limitations.

VOLUME 2: Cost Proposal

Part 1: The itemized budget must 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 - (i.e., 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 should 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 organization's 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 - Provide a description of the work to be performed by the subrecipients. For each subaward, a detailed cost proposal is required to be submitted by the subrecipient(s). Fee/profit is unallowable. The subawardee's or subrecipient-s cost proposal can be provided in a sealed envelope.
with the recipient's cost proposal or via e-mail directly to both the Program Officer and the business point of contact at the same time the prime proposal is submitted. The e-mail should identify the proposal title, the prime Offeror and that the attached proposal is a subcontract. A proposal and supporting documentation must be received and reviewed before the Government can complete its cost analysis of the proposal and enter negotiations.

- **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 would be 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, lap tops, and office equipment, etc.) 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).

- **Food and Beverage** – In general, federal funds are not to be used for the provision of food or beverages at a conference, workshop or symposium and the proposal should include the following statement: “The funds provided by ONR will not be used for food or beverages.” Any proposer seeking funds for a conference, workshop or symposium grant who wishes to include a food or beverage element must explain in detail within the proposal why provision of these items would qualify as a necessary and allowable expense under the relevant OMB cost principles. **NOTE:** The proposer should clarify whether its proposal should still be considered for funding if its request for food and beverage costs is not accepted by ONR.

- **Options** - The Base Period of Performance and Option Periods must be priced at the submission of the proposal. Unpriced options will not be included in any resulting award.

- **Fee/Profit** - Fee/profit is unallowable under grants at either the prime or subaward level but may be permitted on any subcontracts issued by the prime awardee.

**Part 2** - Cost breakdown by Government fiscal year and task/sub-task corresponding to the same task breakdown in the proposed Statement of Work. When options are contemplated, options must be separately identified and priced by task/subtask.
3. Significant Dates and Times -

White papers and proposals will be accepted throughout the open period of FOA 12-002.

This announcement will remain open until 30 September 2012 or until replaced by a successor FOA, whichever first occurs. Proposals may be submitted any time during this period.

4. Submission of Grant Proposals through Grants.gov


As stated in Section IV. 1 (page 9), White Papers **may not** be submitted through the Grants.gov Apply process, but rather should be sent directly to ONR. White paper submissions should be e-mailed directly to the Technical Point of Contact. White Paper format requirements are found in Section IV, item 2a above.

By completing Block 17 of the SF 424 R&R the Grant Applicant is providing the certification on lobbying required by 32 CFR Part 28. Refer to Section VI, ‘Award Administration Information’ entitled “Certifications” for further information.

For electronic submission of grant full proposals, there are several one-time actions that must be completed in order to submit an application through Grants.gov. These include obtaining a Dun and Bradstreet Data Universal Numbering System (DUNS) number, registering with the Central Contract Registry (CCR), registering with the credential provider, and registering with Grants.gov. See www.grants.gov, specifically www.grants.gov/GetStarted.

Use the Grants.gov Organization Registration Checklist at http://www.grants.gov/applicants/register_your_organization.jsp which will provide guidance through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called 'MPIN' are important steps in the CCR registration process. Applicants who are not registered with CCR and Grants.gov should allow at least 21 days to complete these requirements. The process should be started as soon as possible. Any questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

**Special Notices Relative to Grant Applications to be submitted through Grants.Gov:**

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

**Proposal Receipt Notices:**

After a full proposal is submitted through Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three e-mails. You will know that your proposal has reached ONR when the AOR receives e-mail Number 3. You will need the Submission Receipt Number (e-mail Number 1) to track a submission. The three e-mails 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 e-mail 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 e-mail notification to the institution, and the institution must resubmit the application package. Applicants can track the status of their application by logging into Grants.gov.

Number 3 - The third notice is an acknowledgement of receipt in e-mail form from ONR within ten days from the proposal due date, if applicable. The e-mail is sent to the authorized representative for the institution. The e-mail for proposals notes that the proposal has been received and provides the assigned tracking number.

V. EVALUATION INFORMATION

1. Evaluation Criteria -

Award decisions will be based on a competitive selection of proposals resulting from a scientific and cost review. Evaluations will be conducted using the following evaluation criteria:

1. Potential naval or defense relevance and contributions of the effort to the agency's specific education and science and engineering workforce. Scientific and technical merit of the proposal and its potential to achieve the educational objectives of the program, including the extent to which the proposed effort would enhance current capabilities. Appropriateness of the metrics used to determine impact and or success of the program. Appropriateness of the methodology for obtaining and validating the metrics.
2. Outreach initiatives proposed for increasing and maintaining the educational pipeline and the potential of the proposed program to educate future scientists and engineers in STEM disciplines critical to the defense mission. Increased or enhanced opportunities to disseminate information on navy or defense programs and careers. Impact of the initiatives toward improving science and engineering education in the United States. Extent to which the program engages naval or defense laboratories as active participants in program execution.
3. Personnel qualifications, capabilities, availability, and experience. Key personnel must commit time and attention to ensure success of the program.
4. Potential contributions of the proposed programs to the Navy STEM initiatives.
5. The realism of the proposed costs and availability of funds.

Overall, the technical factors (1 – 4) above are significantly more important than the cost factor (5), with the technical factors all being of equal value. The degree of importance of cost will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the proposal's technical superiority to the Government.

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 the period of performance.
2. Evaluation Panel -

Technical and cost proposals submitted under this FOA will be protected from unauthorized disclosure. 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 as subject-matter-expert technical consultants. However, proposal selection and award decisions are solely the responsibility of Government personnel. Each support contractor's employee having access to technical and cost proposals submitted in response to this FOA will be required to sign a non-disclosure statement prior to receipt of any proposal submissions.

VI. AWARD ADMINISTRATION INFORMATION

Administrative Requirements -

- Central Contractor Registration: All Offerors submitting proposals or applications must:
  
  (a) be registered in the Central Contractor Registration (CCR) prior to submission;
  (b) maintain an active CCR 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.

NOTE: Central Contractor Registry (CCR), Subcontracting Plan requirements and Certification requirements are all set forth in the ONR Technical and Cost Proposal Template for those submitting contract proposals.

Grant and Cooperative Agreement Requirements:
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 Grants.gov (complete Block 17).

CERTIFICATION REGARDING LOBBYING ACTIVITIES

(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 sub awards at all tiers (including sub contracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients 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.

Grants and Cooperative Agreements not through Grants.gov:
Proposers seeking grants or cooperative agreements who have received Grants.gov waiver approval for awards greater than $100,000 shall complete and submit electronic representations and certifications at the Contracts and Grants Section of the ONR Home Page at http://www.onr.navy.mil/Contracts-Grants/submit-proposal/contracts-proposal.aspx.

VII. OTHER INFORMATION

1. Government Property/Government Furnished Equipment (GFE) and Facilities
RESERVED

2. Security Classification
RESERVED

3. Use of Animals and Human Subjects in Research
RESERVED

4. Recombinant DNA
RESERVED

5. Department of Defense High Performance Computing Program
RESERVED

6. Organizational Conflicts of Interest

All Offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any ONR technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval, a contractor cannot simultaneously be a SETA and a research and development performer. Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be rejected without technical evaluation and withdrawn from further consideration for award. If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with ONR by sending his/her contact information and a summary of the potential conflict by e-mail to the Business Point of Contact in Section I, item 7 above, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively avoided or mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.
7. Project Meetings and Reviews

Individual program reviews between the ONR sponsor and the performer may be held as necessary. Program status reviews may also be held to provide a forum for reviews of the latest results from experiments and any other incremental progress towards the major demonstrations. These meetings will be held at various sites throughout the country. For costing purposes, offerors should assume that 40% of these meetings will be at or near ONR, Arlington VA and 60% at other contractor or government facilities. Interim meetings are likely, but these will be accomplished via video telephone conferences, telephone conferences, or via web-based collaboration tools.

8. Executive Compensation and First-Tier Subcontract Reporting

RESERVED

9. Other Guidance, Instructions, and Information

RESERVED