

PROGRAM ANNOUNCEMENT



DEPARTMENT OF DEFENSE

Research and Educational Program for Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI)

Fiscal Year 2011

Broad Agency Announcement W911NF-11-R-0007



Issued by the Army Research Office (ARO)

on behalf of the

**Assistant Secretary of Defense for Research and Engineering
(Research Directorate/Basic Science Office)**

Issued: March 24, 2011

Proposals Due: May 25, 2011

OVERVIEW INFORMATION

A. Required Overview Content

- **Federal Agency Name(s)** – This Department of Defense program will be administered through the Army Research Office (ARO), Office of Naval Research (ONR) and the Air Force Office of Scientific Research (AFOSR).
- **Funding Opportunity Title** – Fiscal Year 2011 Department of Defense Research and Educational Program for Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI)
- **Announcement Type** – This is the initial announcement.
- **Funding Opportunity Number** – W911NF-11-R-0007
- **Catalog of Federal Domestic Assistance (CFDA) Number(s)** – 12.630, Basic, Applied, and Advanced Research in Science and Engineering
- **Dates** – All proposals must be received no later than 4:00 p.m. Eastern Time on Wednesday, May 25, 2011.

B. Additional Overview Content

Under authority of Section 252 of the National Defense Authorization Act for fiscal year 2010 (10 U.S.C.2362) and commensurate with the current Continuing Resolution Authority (CRA) for FY11, the Department of Defense (DoD) announces the 2011 research program for Historically Black Colleges and Universities and Minority-Serving Institutions (HBCU/MI). The program is executed under policy and guidance of Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and administered by the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR), hereafter called “the Agencies.”

The solicitation aims to (a) enhance research programs and capabilities in scientific and engineering disciplines critical to the national security functions of the DoD, (b) encourage greater participation in DoD programs and activities, (c) increase the number of graduates, including underrepresented minorities, in the fields of science, technology, mathematics, and/or engineering (STEM), and (d) encourage research and educational collaboration with other institutions of higher education.

Research proposals are solicited in technical areas relevant to the DoD mission, particularly areas of scientific interest to the Agencies, which are available at the following web sites:

ARO: <http://www.aro.army.mil>. Select the “Business” tab, then select “Broad Agency Announcements,” and select ARO Core Broad Agency Announcement W911NF-07-R-0003-04.

ONR: <http://www.onr.navy.mil>. Select “Find Broad Agency Announcements,” then select 11-001.

AFOSR: <http://www.afosr.af.mil>. Select “Research Interest AFOSR-BAA-2011-1” on Homepage.

The documents referenced above provide detailed information about research topics of interest and technical points of contact (i.e., program managers) for each area. Principal investigators are encouraged to peruse these documents and consult program managers listed therein to explore areas of mutual interest.

NOTE: Use the above-referenced documents to identify research areas of interest to the Agencies. Disregard instructions contained therein regarding proposal preparation, content, and submission requirements. Instead, **follow the instructions in this special DoD Broad Agency Announcement.**

I. FUNDING OPPORTUNITY DESCRIPTION

Basic Research

Eligible institutions are encouraged to submit research proposals in areas of scientific interest to the DoD, particularly those of interest to the Agencies. Each eligible institution may submit up to four (4) proposals.

Research projects must be conducted by a single principal investigator working within a traditional single-institution environment or as a collaborative effort with an investigator at another accredited institution of higher education. Collaborations are not limited to other HBCUs or MIs; other institutions of higher education may collaborate with the lead HBCU or MI. Program funds may be sub-allocated to collaborators. Any subaward to collaborating partners must not exceed 30 percent of the annual budget.

A discussion of collaborations, if any, should be included in the proposal. Provide name and location of the collaborating institution; name and credentials of the collaborating investigator; and explain how the collaborator’s expertise will contribute to the proposed research. Likewise, collaborating investigators should describe their support of the project, including cost sharing where applicable, via a letter addressed to the principal investigator. Such letter(s) must be included with the proposal but will be excluded from the page count.

Principal investigators are encouraged to consider innovative approaches for their projects with a view toward enhancing the ability of their institution to develop stronger science and engineering programs that will attract and retain good students, expose them to state-of-the-art research, and enable the institution to participate more competitively in defense research programs. Methods through which these goals can be achieved are as varied and diverse as the schools that will submit proposals. Factors such as geographical location, research capabilities, facilities and equipment are unique to each institution. Therefore, the DoD will not prescribe the structure for a research project; instead, it expects to receive proposals that reflect the unique needs and capabilities of each respective institution. The principal investigator is encouraged to invite one

or two graduate students (includes Post-doctoral) or qualified undergraduate students to assist with the research project and may compensate them with program funds.

All proposals will be evaluated on scientific merit and other criteria listed in Section V of this announcement.

II. AWARD INFORMATION

Through this competition, the DoD intends to award approximately \$15 million for FY 2011, subject to the availability of funds. It is anticipated that available funds will support approximately 25 research projects. All awards will be based on merit competition following evaluations by scientists and engineers of the Agencies. All awards will be made by the Army Research Office as project grants.

Research proposals will be supported at a level up to \$140,000 per 12-month period for a total performance period of 36 months. If equipment or instrumentation is necessary to carry out the proposed research, it must be budgeted in the first 12-month period and shall not exceed \$200,000. Thus, a research proposal with equipment or instrumentation acquisition included may be valued up to \$620,000.

Subawards to a collaborating partner are allowable for up to 30 percent of the annual budget limitations above.

III. ELIGIBILITY INFORMATION

1. Eligible Applicants

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

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

These definitions encompass a large and diverse group of institutions. Enrollments, accreditation, and other factors may affect an institution’s eligibility in any given year. Therefore, each institution must determine its eligibility based on these criteria. A current copy of minority certification or Title III or V certificate, and accreditation documents must be included with each proposal. These will not be included in the page count.

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

- 2. Cost sharing or matching** – Cost sharing or matching is not a requirement.

IV. APPLICATION AND SUBMISSION INFORMATION

Proposals must be submitted electronically through Grants.gov. There are several one-time actions your institution must complete in order to submit applications through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number; register with the Central Contract Registry (CCR); register with the credential provider; register with Grants.gov; and obtain approval for an Authorized Organization Representative (AOR) to submit applications on behalf of the organization). Go to http://www.grants.gov/applicants/get_registered.jsp for further information. Use the Grants.Gov Organization Registration Checklist, which may be accessed at http://www.grants.gov/applicants/register_your_organization.jsp to guide you through the process.

Questions: Questions relating to the registration process, system requirements, how an application form works, or the submittal process should be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

VERY IMPORTANT: In order to view, complete, and submit an application package, you will need to download the appropriate software packages. Go to http://www.grants.gov/applicants/apply_for_grants.jsp for further information.

1. Submitting the Application

Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.grants.gov>, select “Apply for Grants,” and then select “Download Application Package.” Enter the CFDA number, 12.630, Basic, Applied, and Advanced Research in Science and Engineering. You could also enter the funding opportunity number for this announcement, W911NF-11-R-0007.

Application Forms – The forms are contained in the Application Package available through the Grants.gov application process. Offerors must complete the mandatory forms and any optional forms that are applicable (e.g., SF-LLL Disclosure of Lobbying Activities) in accordance with the instructions on the forms and the additional instructions below. The required fields should be completed in accordance with the “pop-up” instructions on the forms. To activate the instructions, turn on the “Help Mode” (icon with the pointer and question mark at the top of the form). Files that are attached to the forms must be in Adobe Portable Document Form (PDF) unless otherwise specified in this announcement.

The following formatting rules apply for the file attachments except as indicated below:

Paper size when printed – 8.5 x 11-inch white paper, one-sided
Margins – 1 inch
Spacing – single
Font – No smaller than Times New Roman, 12 point font (excluding mandatory forms)
Number of pages – 25: **The 25-page limit applies to the technical proposal which consists of the following: Project Summary/Abstract, Project Narrative; Facilities and**

Other Resources, and Equipment (all of which are described below).

Pages exceeding this limit will not be considered in the proposal evaluation.

The SF 424 (R&R) cover page must be typed using upper and lower case letters. **The Grants.gov forms, including the SF 424 (R&R) cover page, are not included in the page count.**

The following SF 424 forms and, as applicable, attachments are required for all proposals:

FORM: SF 424 (R&R) cover page – Complete this form first to populate data in other forms. Authorized Organization Representative (AOR) usernames and passwords serve as “electronic signatures” when your organization submits applications through Grants.gov. By using the SF 424 (R&R), proposers are providing the certification required by 32 CFR Part 28 regarding lobbying as contained in Section VI.2.

FORM: Research & Related Senior/Key Person Profile – Biographical sketches are required for the Principal Investigator and for other key personnel (not to exceed three pages each). These will not be included in the page count. Please be sure to include education and years.

To attach biographical sketches, click “Add Attachment.”

FORM: Research & Related Other Project Information – Complete questions 1 through 5 and attach files. The files must comply with the following instructions:

Project Summary/Abstract (Field 7 on the form) – The project summary/abstract **must** be a **single page** that provides a concise description of the proposed project including objective(s) of the project, approaches to be utilized, anticipated outcomes, and the impact the project is expected to have on capabilities of the institution(s), on students, and on the DoD mission. It should identify the lead Principal Investigator, partnering institutions/investigators, and other key personnel critical to the project’s success. The project summary/abstract should indicate the technical area(s) relevant to the Agencies’ research interests (see Section B) and **provide suggested proposal reviewer information in the following format:**

- (a) Lead Agency to evaluate the proposal: Specify Agency (ies)
- (b) Scientific Division(s) or Directorate(s), if known, and
- (c) Technical Area(s)/Program Officer(s), if known.

To attach a project summary/abstract, click “Add Attachment.”

Project Narrative (Field 8 on the form) – Select from below as applicable:

Narrative for Basic Research Proposal

- a. Describe in detail the research to be undertaken. State the objectives and approaches to be used and the relationship to the state of knowledge in the field and to comparable work elsewhere.

b. Describe the nature of anticipated results and, if known, the manner in which the work will contribute to the DoD mission, particularly as it relates to the research interests of the Agencies.

c. Describe the facilities available for performing the proposed research.

d. Describe the involvement of undergraduate and graduate students in the research effort. Estimate the number of students who will be directly associated with the project. To attach the project narrative, click “Add Attachment.”

Bibliography & References Cited (Field 9 on the form) – Include an appropriate bibliography and list of literature citations, if applicable.

To attach a bibliography, click “Add Attachment.”

Facilities and Other Resources (Field 10 on the form) – Describe the facilities available for performing the proposed research. Describe any additional facilities or equipment that the institution proposes to acquire.

To attach facilities information, click “Add Attachment.”

Equipment (Field 11 on the form) – Provide a rationale for each item of equipment or instrumentation requested in the budget. Describe how each item will contribute to achieving the goals of the proposal and enhancing the research and/or educational capabilities of the institution. For example, will the equipment be available to other faculty members? Will the equipment be available for student research projects? Describe how the proposed equipment or instrumentation will interface with existing facilities or upgrade other equipment currently available. As applicable, also indicate (1) any special circumstances regarding the installation of the equipment (for example, will installation require plumbing or electrical upgrades? If so, this should be budgeted); (2) the estimated useful life of the equipment and the plan to service and maintain it, including source(s) of funds and (3) if faculty members will require training for optimum use of the equipment (if so, this should be budgeted).

To attach equipment information, click “Add Attachment.”

FORM: SF 424 (R&R) Research & Related Budget – Complete Sections A through J and attach a budget justification in Section K. The budget justification should provide additional data (not included in Sections A through J) by element of cost, sufficient to meet the guidance provided below and ensure meaningful evaluation. The budget must define the period of performance (assume a proposed start date of December 19, 2011), the total cost of the project, and the amount and source(s) of project funding (i.e., funds requested from DoD; any funds provided under current grants or contracts with DoD or other federal agencies; and any non-federal funds that will be utilized for the project). The project costs must be shown in total as well as broken down by cost elements for each year of the program. **Use a separate Research & Related Budget form for each year.** The Research & Related Budget-Cumulative Budget form will reflect the total costs. The following additional guidance is provided:

a. Salary Costs: For all employees/labor categories, indicate the amount of time being charged to the proposed project (e.g., number of months) and show resulting costs based on current or projected salary and fringe benefits.

b. Equipment: Describe any equipment to be acquired and the basis of cost estimates. Costs should be based on recent quotations from manufacturers or distributors.

c. Travel: Identify any travel requirements associated with the proposed research and define its relationship to the project. List proposed destinations, cost estimate, and basis of cost estimate. Domestic travel must not exceed \$2,500 per year per principal investigator. Special approval is required for foreign travel which is limited to \$1,800 per year per principal investigator.

d. Student/Trainee Support Costs: Estimate stipends, fees, and health insurance for students, if applicable. Travel costs must follow the above guidelines.

e. Other Direct Costs:

Materials and Supplies: Estimate costs of materials and supplies. List types of materials needed and costs. Provide basis for cost estimates.

Publication Costs: Estimate the costs of publishing and reporting research results.

Subaward Costs: Provide a description of the work to be performed by subrecipients and a detailed budget for each. For subaward budgets, use the Research & Related Budget form. Under Budget Type, select "Subaward/Consortium."

Equipment Rental/User Fees: Estimate anticipated direct costs such as rental for computers or other equipment and facility usage fees. Unusual or expensive items should be fully justified.

Other: Add in other proposed direct costs (such as communications) under Other Direct Costs on the Research & Related budget form.

f. Indirect Costs (Overhead, General and Administrative, and Other): Provide the most recent rates, dates of negotiations, the period to which the rates apply, and a statement identifying whether the proposed rates are provisional or fixed. If the rates have been negotiated by a Government agency, state when and by which agency. Include a copy of the current indirect rate agreement.

g. Total Direct and Indirect Costs: Provide the total costs, year by year, and a cost summary for the entire proposed period.

h. Cost Sharing or Matching: Cost sharing or matching is not required. To attach the budget justification at Section K, click "Add Attachment."

Note: Be sure that the total amount requested in the budget agrees with the amount

entered in Block #16 of the Proposal Cover Page (form SF 424 (R&R)).

FORM: Disclosure of Lobbying Activities (Standard Form LLL) – If applicable, this form must be completed. This form is applicable 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 application for a grant under this BAA.

2. Submission Dates and Times - Proposals must be received no later than 4:00 p.m. Eastern Time on Wednesday, May 25, 2011.

Proposal Receipt Notices – After a proposal is submitted to Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three emails from Grants.gov. The first two emails should be received within 24 to 48 hours after submission. The first email will confirm receipt of the application by the Grants.gov system and the second will indicate that the application has either been successfully validated by the system prior to transmission to the grantor agency or has been rejected due to errors. A third email should be received once the agency has confirmed receipt of the proposal. The document, Tracking Your Application Package, located at <http://www.grants.gov/assets/TrackingYourApplicationPackage.pdf> explains this process. The proposal is not considered properly received until the AOR receives email #3.

It is recommended that grant applications be submitted 24-48 hours prior to the due date and time to avoid delays caused by high system usage and other submission problems prior to the due date and time.

Late Submission of Proposals – Any proposal submitted through Grants.gov where the date and time of submission (as recorded in the third email from Grants.gov) is after the specified deadline for proposal submission, will be considered late and will not be evaluated unless the Grants.gov website was not operational on the due date and was unable to receive the proposal submission. If this occurs, the time specified for the receipt of proposals through Grants.gov will be extended to the same time of day specified in this BAA on the first workday on which the Grants.gov website is operational.

V. APPLICATION REVIEW INFORMATION

1. Evaluation Criteria for Research Proposals – Primary evaluation criteria (of equal importance to each other) are:

- a. Scientific and technical merits of the proposed research;
- b. Potential contributions of the proposed research to the mission of the DoD and particularly to the research interests of the Agencies;
- c. Likelihood of the proposed project to develop new research capabilities or enhance existing research capabilities and to broaden the research base in support of national defense;

d. Qualifications, capabilities, experience, and research accomplishments of the Principal Investigator and other key personnel whose involvement is critical to achieving the objectives of the proposal;

Secondary evaluation criteria, of less importance than primary criteria but of equal importance to each other, are:

e. The potential of the project to contribute to the education of future scientists and engineers in STEM disciplines critical to the defense mission, particularly in research areas of interest to the Agencies;

f. The impact of past, present or proposed collaborative research and education activities with other colleges/universities.

g. Budgetary realism and cost effectiveness of the proposal.

2. Review and Selection Process – Scientists and engineers of the Agencies will evaluate proposals according to the above criteria. The most meritorious proposals will be recommended for award. Approval of the recommendation is the authority of the Research Director of the ASD(R&E) Research Directorate/Basic Science Office.

3. Anticipated Announcement and Award Dates – An announcement of selections will be made by the DoD Public Affairs Office via a News Release that is expected to be available on or around October 21, 2011 at <http://www.defense.gov/releases> (search for title containing “DoD Awards to HBCU/MI”). Grant awards are expected to be in place no later than December 19, 2011. This date should be cited as the start date for the proposal performance period on the Proposal Cover (SF 424 (R&R)) and for budget planning purposes.

VI. AWARD ADMINISTRATIVE INFORMATION

1. Award Notices

When the DoD News Release is posted, ARO will send written notification via e-mail to all Principal Investigators who submitted a proposal. The notification of a successful proposal must not be regarded as an authorization to commit or expend funds (except at the recipient’s own risk, to the extent that the recipient elects to charge up to 90 days of pre-award costs, as permitted under paragraph 32.25(d)(2)(i) of 32 CFR Part 32). The Government is not obligated to provide any funding until a Government Grants Officer signs the grant award document.

2. Administrative and National Policy Requirements

Lobbying – Federal regulations (Appendix A to 32 CFR Part 28) require certification regarding lobbying at the time of proposal submission. By signing and submitting the required cover page (SF 424 R&R), the proposer is certifying compliance with this regulation, which provides:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned 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 31 U.S.C. Sec. 1352, as implemented by the DoD at 32 CFR Part 28. 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. Reporting Requirements

Reporting requirements and instructions for report preparation will be included in the grant award document signed by the Grants Officer.

4. Equipment

In compliance with provisions of 31 U.S.C. 6306 and with the intent of this program to enhance university capabilities in STEM education and research, title to instrumentation and equipment acquired under this solicitation will be vested with the university without further obligation to the government.

5. Dun and Bradstreet Universal Numbering System (DUNS) Number and Central Contractor Registration (CCR)

Central Contractor Registration and Universal Identifier Requirements.

- A. *Requirement for recipients.* Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the Central Contractor Registration (CCR) until you submit the final financial report required under this award or receive the final payment, whichever is later.
- B. *Requirement for subrecipients.* If you are authorized to make subawards under this award, you:
1. Must notify potential subrecipients that no entity (*see* definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its Data Universal Numbering System (DUNS) number to you and is registered in the CCR.
 2. May not make a subaward to an entity unless the entity has provided its DUNS number to you and is registered in the Central Contractor Registration.
- C. *Definitions.* For purposes of this award term:
1. *Central Contractor Registration (CCR)* means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site <http://www.ccr.gov>. Assistance with registration is available at 1-888-227-2423.
 2. *Data Universal Numbering System (DUNS) number* means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).
 3. *Entity*, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
 - a. A Governmental organization, which is a State, local government, or Indian tribe;
 - b. A foreign public entity;
 - c. A domestic or foreign nonprofit organization;
 - d. A domestic or foreign for-profit organization; and

- e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
4. *Subaward*:
- a. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - b. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, *see* attachment to OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations”).
 - c. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.
5. *Subrecipient* means an entity that:
- a. Receives a subaward from you under this award; and
 - b. Is accountable to you for the use of the Federal funds provided by the subaward.

VII. AGENCY CONTACTS

Questions regarding program policy shall be directed to:

Evelyn Kent
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Questions regarding program execution and administration shall be directed to:

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