Overview

Federal Agency Name(s)

This Department of Defense program will be administered through the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR).

Funding Opportunity Title

Fiscal Year 2011 Defense University Research Instrumentation Program (DURIP).

Announcement Type

This is the initial announcement.

Funding Opportunity Number

AFOSR-BAA-2010-4

Catalog of Federal Domestic Assistance (CFDA) Number(s)

12.300, Basic and Applied Research (ONR); 12.431, Basic Scientific Research (ARO); and 12.800, Air Force Defense Research Sciences Program (AFOSR)

Response Date

Proposals must be received by 4:00PM Eastern Time, 14 September 2010.

Additional Overview

The Department of Defense (DoD) announces the Fiscal Year 2011 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as "universities") to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment.

v.2.13

I. Funding Opportunity Description

The Department of Defense (DoD) announces the Fiscal Year 2011 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as "universities") to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment.

This announcement seeks proposals to purchase instrumentation in support of research in areas of interest to the DoD, including areas of research supported by the administering agencies. The research areas of interest for the administering agencies are available on-line at the following addresses:

Army Research Office:

http://www.aro.army.mil/ (select "For the Researcher" and then "Funding Opportunities") See BAA W911NF-07-R-0003-03 U.S. Army Research Office BAA FY 2007 – 2011.

Office of Naval Research:

http://www.onr.navy.mil (select "Technology Locator" or the individual Department Codes).

Air Force Office of Scientific Research:

http://www.wpafb.af.mil/AFRL/afosr/ (select "AFOSR BAA 2010-1" at the bottom).

For detailed information regarding technical goals, potential proposers are advised to refer to the on-line sites cited above and are encouraged to contact DoD program managers listed at those sites to explore mutual interest before submitting proposals. A proposal may be submitted to more than one agency; however, only one award will be given.

A central purpose of the DURIP is to provide equipment to enhance research-related education. Therefore proposals must address the impact of the equipment on the institution's ability to educate students, through research, in disciplines important to DoD missions.

II. Award Information

Through this DURIP competition, the DoD intends to award approximately \$40 million for FY 2011, subject to the availability of funds. These funds will be awarded via grants made by ARO, ONR, and AFOSR (hereafter referred to as "agencies"). Grants will be for the purchase of research equipment costing \$50,000 or more, which typically cannot be purchased within the budgets of single-investigator awards. With very few exceptions (see section III.3.b) an individual award may not exceed \$1,000,000 in DoD funding. In FY 2010, 196 awards totaling \$38.7 million were made. They ranged from approximately \$50,000 to \$930,000, averaging \$235,000.

Sufficient funds are not available to meet all of the instrumentation needs of universities. Awards, therefore, will be made to universities conducting, or being demonstrably capable of conducting (with the proposed new equipment), research in areas of interest to the DoD. DURIP awards are typically one year in length.

III. Eligibility Information

1. Eligible Applicants

This competition is open only to accredited U.S. institutions of higher education with degree granting programs in science, mathematics and/or engineering.

2. Cost Sharing or Matching

Cost sharing is not required.

3. Other

a. Types of instrumentation.

DURIP funds will be used for the acquisition of major equipment to augment current or develop new research capabilities to support research in the technical areas of interest to the DoD. Individual proposals may request funding for more than one item of equipment if the requested items of equipment comprise a "system" that is used for a common research purpose. Proposals for purely instructional equipment are not eligible. General-purpose computing facilities are not appropriate for DURIP funding, but requests for computers for DoD-relevant research programs are appropriate.

- b. Amount of requested DoD funding.
 - General.

With very few exceptions, a DURIP award will provide between \$50,000 and \$1,000,000 of DoD funding for the acquisition of instrumentation.

ii. Exceptions.

An institution may submit a proposal to purchase instrumentation costing more than \$1,000,000 under either of the following two conditions:

The proposal includes a firm commitment from the institution submitting the proposal for the balance of the funds needed to purchase the instrumentation, so that the cost to the DoD remains at or below \$1,000,000; or

In the proposal it submits, an institution requests that the agency receiving the proposal grant an exception to the \$1,000,000 maximum amount of DoD funding. At its discretion, the agency may consider a proposal for an amount in excess of \$1,000,000 if warranted by a critical, priority defense research need. However, as exceptions for awards of this size are expected to be rare, it is strongly recommended that a potential proposer communicate with the sponsoring agency before submitting a formal proposal requesting an amount in excess of \$1,000,000.

See also funding restrictions described in Section IV.5. There are no limits to the number of applications an applicant may submit.

IV. Application and Submission Information

1. Address to Request Application Package

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 follow the instructions. In the

Grants.gov search function, enter the funding opportunity number for this announcement (AFOSR-BAA-2010-4). You can also search for the CFDA Number. CFDA Numbers for the agencies are as follows: 12.300, Basic and Applied Research (ONR); 12.431, Basic Scientific Research (ARO); and 12.800, Air Force Defense Research Sciences Program (AFOSR). On the Selected Grant Applications for Download page, click on 'download' under the heading 'Instructions and Applications' to download the application package.

2. Content and Form of Application Submission

The DoD is interested primarily in the research and related science and engineering education that the equipment would facilitate. For this reason, the proposal must adequately describe the goals of the research and research-related education, so that judgments can be made on relevance to DoD goals. Principal investigators are encouraged to clarify the extent to which their research interests coincide with those of the DoD by: (i) reviewing the information on DoD interests that is provided at the on-line sites listed in Section I of this program announcement; and (ii) contacting the appropriate Agency program managers identified at those sites for additional information.

Proposals to ARO and AFOSR may be submitted either electronically or in hard copy form, but not both. Proposals to the Office of Naval Research must be submitted electronically. A complete proposal consists of these elements:

Standard Form 424 (Research and Related) (SF-424 (R&R)) as the cover page;

SF-424 (R&R) Budget form;

SF-424 (R&R) Other Project Information form;

The project abstract and project narrative, which are attachments to the SF-424 (R&R) Other Project Information form;

Research & Related Senior/Key Person Profile;

SF-424 (R&R) Project/Performance Site Location(s) form; and

SF-LLL form if the proposer has lobbying that it is required to disclose under 31 USC 1352, as implemented by the DoD at 32 CFR 28.

The following paragraphs provide details concerning these elements.

SF 424 (**R&R**) – The SF 424 (**R&R**) form must be used as the cover page for all electronic and hard copy proposals. For a hard copy proposal, no other sheets of paper may precede the SF 424 (**R&R**), which must be signed. Complete all the required fields in accordance with the "pop-up" instructions on the form and the following instructions for the specified fields. To see the instructions, roll your mouse over the field to be filled out. You will see additional information about that field. For example on the SF424 (**R&R**) the Phone Number field reads 'PHONE NUMBER (Contact Person): Enter the daytime phone number for the person to contact on matters relating to this application. This field is required.' Mandatory fields will have an asterisk marking the field and will appear yellow on most computers. In Grants.gov, some fields will self populate based on the BAA selected. Please fill out the SF 424 first, as some fields on the SF 424 are used to auto populate fields in other forms. The completion of most fields is self-explanatory, except possibly for the following special instructions:

Field 2: The Applicant Identifier may be left blank.

Field 3: The Date Received by State and the State Application Identified are not applicable to research.

Field 4a: For ONR submission, enter N00014

Field 4b: For ONR submission, enter the three (3) digit Program Office Code (e.g. 331) and, if known, the Program Officer's name, last name first, in brackets (e.g. [Shifler, David])

- Field 7: Complete as indicated. If the organization is a Minority Institution, select "Other" and under "Other (Specify)" note that you are a Minority Institution (MI).
- Field 8: Complete fields as indicated. If the proposal is being submitted to other DURIP participating agencies, please state in the third area of this field, the name(s) and phone number(s) of the Point(s) of Contact at those agencies. If you run out of space in Field 8, include an attachment to R&R Other Project Information form in Field 12, naming the document "Continuation of SF 424 (R&R) Field 8."
- Field 9: List the appropriate DoD agency (e.g., Air Force Office of Scientific Research, Army Research Office, Office of Naval Research) as the reviewing agency. This field is prepopulated in Grants.gov.
- Field 16: Choose "No." Check 'Program is not covered By Executive Order 12372'.
- Field 17: Select "I Agree" to:

Provide the certification regarding lobbying that is required by law (13 USC 1352, as implemented by the DoD at 32 CFR Part 28). The full text of this certification may be found at http://www.wpafb.af.mil/shared/media/document/AFD-070817-127.pdf or a copy will be provided upon request.

Certify that the statements in the proposal are true, complete and accurate to the best of your knowledge.

Field 18: Attach the SF-LLL or other explanatory documentation if there is lobbying that must be disclosed under 13 USC 1352, as implemented by the DoD at 32 CFR Part 28.

Attachments: All attachments to all Grants.gov forms must be submitted in PDF format (Adobe Portable Document Format). To convert attachments into PDF format, Grants.gov provides a list of PDF file converters at http://www.grants.gov/resources/download_software.jsp

R&R Research and Related Budget Form – Include a budget that identifies equipment to be purchased, cost per item and total cost, indicate the proposed source of the equipment, and include the name and phone number of a contact at that source or a website address listing the equipment and price. All equipment being requested must be considered part of one "system" costing more than \$50,000, and thus all equipment being purchased must be exempt from indirect costs. The budget must make clear how DURIP funding will affect the successful and complete purchase of the requested equipment. Relevant information includes details of any other federal funds to be used and any funds to be contributed by nonfederal sources toward the purchase of the instrumentation. For budgeting purposes, presume a grant start date of 15 June 2011, although this is subject to negotiation.

R&R Other Project Information Form - Complete all information as requested. Attach the Abstract and Project Narrative as described in the following paragraphs.

Abstract and Project Narrative – The project abstract and narrative, whether submitted electronically or in hard copy, may be NO LONGER THAN 25 PAGES, ALL INCLUSIVE when printed out. The curriculum vitae to be attached under the Research & Related Senior/Key Person Profile Form (see below) is also included in the 25-page limit. (NOTE: the SF 424 forms are not included in this 25-page limit).

If printed for hard copy submission, the font is to be 10-12 point, on one-sided $8 \frac{1}{2} \times 11$ inch white paper. Other attachments separate from the abstract and narrative, such as institutional brochures or reprints, will not be accepted.

If submitted electronically, all attachments to all Grants.gov forms must be submitted in PDF format (Adobe Portable Document Format). To convert attachments into PDF format, Grants.gov provides a list of PDF file converters at http://www.grants.gov/resources/download_software.jsp. Please be sure to not password protect attachments.

Attach the proposal abstract to Field 7 on the SF-424 Research and Related Other Project Information form. Include a concise (not to exceed 300 words) abstract that describes the instrumentation requested and the research and research-related education that will be supported by that instrumentation. In the header of the abstract please include (if known) the Agency program manager's name(s) and directorate to receive the proposal for consideration and evaluation. To assist in directing the proposal, please refer to Section I, above, for the list of Agency web sites that contain research interest topics and descriptions.

Attach the proposal narrative to Field 8 of the SF-424 Research and Related Other Project Information form. The narrative must be complete and self-contained to qualify for review. The proposal narrative provides key information by which the quality of the proposal is determined. Principal investigators are strongly encouraged to fully develop their proposal's narrative using the information sources provided in Section I. The written proposal narrative must:

Describe how the proposed instrumentation will:

a. enhance the quality of research and research-related education currently funded by the DoD (indicate the DoD organization, the contract or grant number, and the Principal Investigator; and concisely describe the thrust of the research and research-related education in sufficient detail to enable review of the proposal by an evaluator who is not familiar with your research program), and/or

b. contribute to research and research-related education currently proposed to the DoD (indicate the organization and Principal Investigator of the proposal under consideration, the prospective DoD sponsor; and concisely describe the thrust of the research and research-related education in sufficient detail to enable review of the DURIP proposal by an evaluator who is not familiar with your research proposal), and/or

c. establish new research capabilities or enhance current research capabilities for performing research and research-related education in areas of interest to the DoD.

Describe how the proposed instrumentation will interface with existing facilities or upgrade other instrumentation now available for research and research-related education.

Describe the amounts and sources of ongoing or proposed support for the research and research-related education to be facilitated by the instrumentation.

Describe any special circumstances regarding the acquisition or installation of the equipment.

Indicate the estimated useful life of the equipment.

SF-LLL Form "Disclosure Form to Report Lobbying" -- If your university has lobbying activities that you are required to disclose under 31 USC 1352, as implemented by the DoD at 32 CFR part 28, you also must complete and attach the SF-LLL form in the downloaded Adobe forms package at Grants.gov.

SF-424 (**R&R**) Research and Related Project/Performance Site Location(s) Form – Complete all information as requested.

Research & Related Senior/Key Person Profile Form – Complete all information as requested. Include curriculum vitae for the Principal Investigator and for other senior investigators, all of which will be counted as part of the 25 page limit.

3. Submission Dates and Times

Full proposals must be received no later than 4:00 PM Eastern Time on Tuesday, 14 September 2010, whether submitted electronically or in hard copy. Exceptions:

For electronic submission, the proposal must be validated by the Grants.gov to indicate that the Grants.gov has received and kept the submission. See the section below, Application Receipt Notices, about late submissions.

For hard copy submission, in case the operation of a designated agency is interrupted and the agency is unable to receive the proposal, the deadline is extended to the same time of the first day when the agency is in operation.

Application Receipt Notices and Consequence of Late Submission Details for electronic and hard copy submissions are as follows:

For electronic submission, the applicant's approved account holder for Grants.gov will receive a confirmation page upon completing the submission. This confirmation page is a record of the time and date stamp that is used to determine whether the proposal was submitted by the deadline. 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. The last notice is sent to the institution, an acknowledgment of receipt, in e-mail form from the designated agency within ten days from the proposal due date. The e-mail notes that the proposal has been received and provides the assigned tracking number.

<u>Late Submission of Grants.gov Proposals</u> – Any proposal submitted through Grants.gov where the date and time of submission (as recorded in the first 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.

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 immediately prior to the due date and time and/or other potential electronic submission problems.

For hard copy submission, an applicant that submits a hard copy proposal to ARO or AFOSR will receive an e-mail from the agency approximately ten days after the proposal due date to acknowledge receipt of the proposal and provide the agency's assigned tracking number. ONR will not accept hard copy submissions. The acknowledgement e-mail is sent to the submitter. A hard copy proposal received at an agency's listed mailing address after the deadline is "late" and will not be considered for an award, except for cases in which there is acceptable evidence to establish that the proposal:

- a. Was delivered to the agency and was under the agency's control prior to the deadline; or
- b. Was sent to the agency's listed mailing address by U.S. Postal Service Express Mail three or more business days prior to the date specified for the receipt of the proposals. The term "business days" excludes weekends and US federal holidays.

4. Intergovernmental Review – Not applicable.

5. Funding Restrictions

Funds provided under DURIP may not be used for the construction or modification of buildings, building support systems (e.g. heating/ventilation/air conditioning, plumbing, and electrical), or fixed equipment (e.g. clean rooms and fume hoods). DURIP funds may not be requested or used for direct salaries of faculty, postdoctoral associates, or students. DURIP proposal budgets may include costs for design, construction, assembly, and/or installation of the equipment by an external contractor or by university technicians/engineers. Costs for continued operation and maintenance, including extended warranties, are not eligible for funding within DURIP.

6. Other Submission Requirements

a. Advanced Preparation For Electronic Submission

Electronic proposals must be submitted through Grants.gov. There are several one-time actions your organization must have completed before it will be able to submit applications through Grants.gov. Well before the DURIP submission deadline, you must verify that the persons authorized to submit proposals for your organization have completed those actions. If not, it may take up to 21 days to complete the actions before being able to submit DURIP applications.

Should you have questions relating to the registration process, system requirements, how an application form works or the submittal process, please call Grants.gov at 1-800-518-4726 or support@Grants.gov.

b. Need to mark or otherwise identify proprietary information

If proprietary information is submitted, we will make every effort to protect the confidentiality of the proposal and any evaluations. However, under the Freedom of Information Act (FOIA) requirements, such information (or portions thereof) may potentially be subject to release. It is the proposer's responsibility to notify the receiving agency of proposals containing proprietary information and to identify the relevant portions of their proposals that require protection. The entire proposal (or portions thereof) without protective markings or otherwise identified as requiring protective

tion will be considered to be furnished voluntarily to the receiving agency without restriction and will be treated as such for all purposes.

c. Submission to multiple agencies

In some cases, proposed instrumentation and associated research may be relevant to more than one of the participating agencies. In such cases, proposers can request that a proposal be reviewed at more than one agency (but only one DURIP award will be made). To have the proposal reviewed by more than one Agency, proposals must be submitted directly to each reviewing agency.

For electronic submission, if more than one agency will review the proposal, the SF 424 (R&R) may be saved and modified to indicate the updated agency and CFDA number to that agency. This requires up to three electronic submissions, one in response to the DURIP announcement posted at Grants.gov by each agency that will review the proposal, or two mailings of hard copies following the hard copy instructions below plus one electronic submission (ONR does not accept hardcopy proposals). As a reminder, only one DURIP award will be made.

For hard copy submission to ARO or AFOSR, the original proposal and five (5) copies must be delivered to ARO or AFOSR directly. ONR will not accept hard copies of proposals. Proposals submitted in whole or in part by electronic media (computer disk or tape, facsimile machine, electronic mail, etc.) will not be accepted (note, however, that the full proposal may be submitted through Grants.gov in accordance with the electronic submission instructions in this announcement). Mailing addresses for FY2011 DURIP proposals being submitted to ARO and/or AFOSR:

Use this address for commercial carriers for ARO: Use this address for U. S. mail for ARO:

Army Research Office RDRL-ROS-I (DURIP) 4300 South Miami Boulevard Durham, NC 27703-9142

Air Force Office of Scientific Research

ATTN: RSPE/DURIP 875 North Randolph Street Suite 325, Room 3112 Arlington, VA 22203-1768 Army Research Office RDRL-ROS-I (DURIP) P. O. Box 12211 Research Triangle Park, NC 27709-2211

V. Application Review Information

1. Criteria

Proposals submitted under this BAA are evaluated through a merit review process. The primary evaluation criteria, of equal importance, are:

- a. The impact of the equipment on research currently funded by the DoD and/or the impact on research currently planned for DoD funding and/or the likelihood of the equipment to establish new research capabilities or to enhance current research capabilities that are relevant to DoD areas of research interest.
- b. The importance and priority to DoD missions of the research to be supported by the proposed instrumentation.

c. The potential to enhance the institution's ability to educate, through the research to be conducted with the proposed equipment, future scientists and engineers in disciplines important to the DoD mission, thereby contributing to DoD research-related educational objectives.

Other evaluation criteria, which are of lesser importance than the primary criteria but of equal importance to each other, are:

- d. The past performance, experience, and qualifications of the institution to perform the research, and to operate and maintain the equipment proposed for purchase.
- e. The past performance, qualifications, and experience of the Principal Investigator and other key personnel to conduct research of interest to the DoD.
- f. Realism and reasonableness of cost. Cost sharing is not an evaluation factor.

2. Review and Selection Process

Proposals will undergo a multi-stage evaluation procedure. First, cognizant DoD research program managers and/or other technical experts will review proposals received in their technical areas. Second, agency officials will determine which proposals will be funded, based on evaluations of program managers and other technical evaluators. Third, the agencies, in coordination with the Office of the Director for Basic Research in the Office of the Secretary of Defense, will reconcile any overlap and coordinate complementary efforts so as to ensure the broadest possible impact with the funds available.

3. Anticipated Announcement and Award Dates

Decisions are expected to be announced on or about 29 March 2011, followed by acceptance/ declination letters or e-mails to the proposers. Awards are expected to be in place by 15 June 2011; this must be cited as the start date of the proposal and associated budget. Grants will be awarded by the individual participating agencies: the Army Research Office, Office of Naval Research and Air Force Office of Scientific Research.

VI. Award Administration Information

1. Award Notices

Successful proposers will receive a separate notice (acceptance letter or e-mail as indicated in V. 3) stating that an application has been selected (before the award is in place). The notification letter or e-mail 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 under a DURIP award until a Government Grants Officer signs the grant document. Negotiations may result in funding levels that are less than proposed.

2. Administrative and National Policy Requirements

In keeping with the provisions of 31 USC 6306 and with the intent of this program to increase university capabilities to conduct DoD-relevant research and research-related education, title to equipment will be vested with the university without further obligation to the government.

The Army, Navy, and Air Force administering agencies' requirements are available on-line at the following addresses:

ARO to http://www.aro.army.mil Menu TAB select "For the Researcher." See Research Terms and Conditions.

 $ONR \ \underline{http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx.}$

AFOSR - http://www.wpafb.af.mil/shared/media/document/AFD-080228-008.PDF

3. Reporting

A financial report using the Standard Form SF-425 is required. A final technical report is required to indicate fulfillment of the proposed objective by the acquisition and use of the instrumentation.

VII. Agency Contacts

For questions concerning programmatic content, potential proposers are advised to contact DoD program managers identified at the locations listed in Section I of this Broad Agency Announcement. For help with administrative questions or problems, points of contact at the three agencies are as follows:

Army Research Office: Army DURIP Program Manager

Phone: (919) 549-4234.

E-mail: aror.durip@us.army.mil

Office of Naval Research:

Primary: Dr Joseph Plaia Secondary: Dr. William Lukens

Phone: (703) 696-2926 Phone: (703) 696-4668 FAX: (703) 588-1013 FAX: (703) 588-1013

E-mail: joseph.plaia@navy.mil E-mail: William.lukens1@navy.mil

Air Force Office of Scientific Research: Dr. Stan Rifkin

Phone: (703) 696-9586 FAX: (703) 696-7320

E-mail: stan.rifkin@afosr.af.mil

VIII. Additional Information

- 1. Only grants officers are legally authorized to bind the government.
- 2. Responses should reference Broad Agency Announcement AFOSR-BAA-2010-4.
- 3. To submit a proposal electronically through Grants.gov, the proposer must be registered in the Central Contractor Registration. A recipient of an award resulting from this announcement, to receive payments during performance under the award, must maintain a current CCR registration through final payment. Potential proposers may obtain information on registration and annual confirmation requirements via the Internet at http://www.ccr.gov or by calling 1-888-606-8220, or 269-961-5757.
- 4. Applicants are advised that employees of commercial firms under contract to the Government may be used to administratively process proposals. By submitting a proposal, applicants consent to allowing access to their proposals by these support contractors. These support contracts include

nondisclosure agreements prohibiting their contractor employees from disclosing any information submitted by proposing institutions.