

**February 4, 2010**

**Research Opportunities Compiled by:**

**Ohio Supercomputer Center  
Janet L. Gregory, Grants Manager  
1224 Kinnear Road  
Columbus, OH 43212-1163  
Phone: 614-292-8492  
Fax: 614-688-3184  
Email: [jgregory@osc.edu](mailto:jgregory@osc.edu)**

**Opportunity #1**

**Knowledge Enhanced Compressive Measurement (KECoM)  
Department of Defense - DARPA - Defense Sciences Office  
DARPA-BAA-10-38**

**Description:** The Knowledge Enhanced Compressive Measurement Broad Agency Announcement seeks proposals addressing the basic science and the underlying mathematical principles that govern the measurement of physical signals, paying particular attention to the unified incorporation of prior knowledge and finite measurement resources.

**Link to Full Announcement:**

<http://www07.grants.gov/search/announce.do;jsessionid=2BW8LqFCV9QQlc7jhvgyZyq2LmCGBByRS1GvYn9x9pFqJGYQqW0x4!-1299818899>

**Opportunity #2**

**Media Services for Individuals with Disabilities--Steppingstones of Technology Innovation for Children with Disabilities CFDA 84.327A  
US Department of Education  
ED-GRANTS-020210-002**

**Description:** Each funding opportunity description is a synopsis of information in the Federal Register application notice. For specific information about eligibility, please see the official application notice. The official version of this document is the document published in the Federal Register. Free Internet access to the official edition of the Federal Register and the Code of Federal Regulations is available on GPO Access at:

<http://www.access.gpo.gov/nara/index.html> . Please review the official application notice for pre-application and application requirements, application submission information, performance measures, priorities and program contact information.

Purpose of Program: The purposes of the Technology and Media Services for Individuals with Disabilities program are to:

- (1) Improve results for children with disabilities by promoting the development, demonstration, and use of technology;
- (2) support educational media services activities designed to be of educational value in the classroom setting to children with disabilities; and
- (3) provide support for captioning and video description that are appropriate for use in the classroom setting

**Link to Full Announcement:**

<http://edocket.access.gpo.gov/2010/pdf/2010-2182.pdf>

### **Opportunity #3**

**Technology and Media Services for Individuals with Disabilities--Steppingstones of Technology Innovation for Children with Disabilities CFDA 84.327A  
Department of Education  
ED-GRANTS-020210-005**

**Description:** Each funding opportunity description is a synopsis of information in the Federal Register application notice. For specific information about eligibility, please see the official application notice. The official version of this document is the document published in the Federal Register. Free Internet access to the official edition of the Federal Register and the Code of Federal Regulations is available on GPO Access at: <http://www.access.gpo.gov/nara/index.html> . Please review the official application notice for pre-application and application requirements, application submission information, performance measures, priorities and program contact information.

**Purpose of Program:** The purposes of the Technology and Media Services for Individuals with Disabilities program are to:

- (1) Improve results for children with disabilities by promoting the development, demonstration, and use of technology;
- (2) support educational media services activities designed to be of educational value in the classroom setting to children with disabilities; and
- (3) provide support for captioning and video description that are appropriate for use in the classroom setting

**Link to Full Announcement:**

<http://edocket.access.gpo.gov/2010/pdf/2010-2182.pdf>

### **Opportunity #4**

**NIJ FY 2010 Biometrics Research and Development  
National Institute of Justice  
NIJ-2010-2387**

**Description:** NIJ seeks qualified applicants to research, develop, and demonstrate a hand-held biometric acquisition device that can identify individuals at a distance. NIJ will also entertain applications for the evaluation of existing technologies that meet the requirements for such a device as detailed in the Specific Information section of this solicitation. NIJ is especially interested in research and development proposals for technology to identify or verify the identity of a person in the field. Applications will be submitted through OJP's Grants Management System (GMS). GMS is a Web-based, data-driven computer application that provides cradle to grave support for the application, award and management of grants at OJP. Applicants should begin the process immediately to meet the GMS registration deadline, especially if this is the first time they have used the system.

**Link to Full Announcement:**

<http://www.ncjrs.gov/pdffiles1/nij/sI000896.pdf>

### **Opportunity #5**

**NIJ FY 2010 Technology Research and Development: Assured Communications for Law Enforcement Operations  
National Institute of Justice  
NIJ-2010-2389**

**Description:** With this solicitation, NIJ seeks qualified applicants to develop solutions to assure that law enforcement agencies are able to communicate in the manner needed to support effective operations—voice, video, data, and other applications in a mobile environment—under one or more of the following three scenarios:

- A severely degraded terrestrial communications infrastructure resulting from a man-made or natural disaster.
- An inadequate terrestrial communications infrastructure, such as may be found in some rural or tribal areas, but also in some parts of the urban law enforcement operating environment such as in buildings and subterranean areas.
- The availability of multiple, overlapping communications infrastructures with varying attributes.

NIJ will also consider applications seeking funding to demonstrate, test, and/or evaluate existing solutions that have the potential to meet these needs.

**Link to Full Announcement:**

<http://www.ncjrs.gov/pdffiles1/nij/sI000895.pdf>

**Opportunity #6**

**NIJ FY 2010 Pursuit Management Technologies  
National Institute of Justice  
NIJ-2010-2419**

**Description:** The U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), National Institute of Justice (NIJ) is pleased to announce that it is seeking applications for funding to develop solutions to safely and effectively resolve police motor vehicle pursuits. This program furthers the Department's mission by sponsoring research to provide objective, independent, evidence-based knowledge and tools to meet the challenges of crime and justice, particularly at the State and local levels.

**Solicitation: Pursuit Management Technologies Eligibility**

In general, NIJ is authorized to make grants to, or enter into contracts or cooperative agreements with, States (including territories), local governments (including federally-recognized Indian tribal governments as determined by the Secretary of the Interior and published in the Federal Register), nonprofit and profit organizations (including tribal nonprofit and profit organizations), institutions of higher education (including tribal institutions of higher education), and certain qualified individuals. Foreign governments, foreign organizations, and foreign institutions of higher education are not eligible to apply.

NIJ is interested in applications for funding to develop solutions that can resolve police motor vehicle pursuits, while at the same time minimizing the potential for injury or damage to property. How to Apply: Applications will be submitted through OJP's Grants Management System (GMS). GMS is a Web-based, data-driven computer application that provides cradle to grave support for the application, award and management of grants at OJP. Applicants should begin the process immediately to meet the GMS registration deadline, especially if this is the first time they have used the system. Complete instructions on how to register and submit an application in GMS can be found at [www.ojp.usdoj.gov/gmscbt/](http://www.ojp.usdoj.gov/gmscbt/).

**Link to Full Announcement:**

<http://www.ncjrs.gov/pdffiles1/nij/sl000923.pdf>

## Opportunity #7

### Chemistry and Materials Research at the Interface between Science and Art (SCIART) National Science Foundation NSF 10-534

**Description:** The National Science Foundation (NSF) seeks to enhance opportunities for collaborative activities between conservation scientists and chemists and materials scientists to address grand challenges in the field of science of cultural heritage. A recent workshop, which was co-sponsored by NSF and the Andrew W. Mellon Foundation, concluded that the field of cultural heritage science could greatly benefit from collaboration between conservation scientists, primarily located in US museums, and chemists and materials scientists in academic institutions. Largely in line with the workshop report, which can be found at <http://mac.mellon.org/NSF-MellonWorkshop> the program solicits collaborative proposals between researchers in US museums and academic institutions that aim to:

- a) develop new and improved analytical techniques and instruments with high sensitivity and spatial resolution (large and small scale) for restricted volume and/or standoff detection of component materials, degradation products and deterioration markers and which are suitable for non-destructive analysis of cultural heritage objects;
- b) study dynamic changes leading to degradation of cultural heritage objects;
- c) design new multi-functional treatment materials for cultural heritage objects;
- d) develop new theoretical models to predict dynamic processes in cultural heritage objects that lead to their degradation while taking into account their molecular and materials properties and their surface and bulk interactions with environmental parameters.

While the current solicitation is limited to chemistry and materials research topics, it is envisioned that the program will be expanded in future years to include additional areas of interest to the field of cultural heritage science. The program seeks highly innovative 3-year collaborative projects that break new ground and demonstrate a high level of synergy between the collaborating investigators. Formation of new collaborations is strongly encouraged. Investigators who have been collaborators must demonstrate that the proposed project represents a new research direction for the collaborative team. The program will not accept proposals for projects that are currently funded by other funding sources. The program will also not accept proposals for projects that largely overlap or are closely related to research projects that are currently funded by other sources nor will it accept projects that only constitute an incremental extension of projects that are already carried out in the collaborators' laboratories. The program also requires that the proposed projects will meaningfully involve the participation of undergraduate students, graduate students and postdoctoral research associates, including those from underrepresented groups. The program also encourages the development and use of cyber infrastructure to increase the level of synergy of the proposed projects.

- Anticipated Type of Award: Standard Grant or Continuing Grant
- Estimated Number of Awards: 5 to 10
- Anticipated Funding Amount: \$4,000,000 pending availability of funds. The anticipated 3-year awards will total approximately \$420,000 (\$140,000 per year) including direct and indirect costs. However, principal investigators are advised that there are no set aside funds for this solicitation and the exact number of awards and their level would depend on the quality of the proposed projects in comparison to all other proposals submitted to the Division of Chemistry (CHE) and the Division of Materials Research (DMR).
- Organization Limit: Proposals may only be submitted by the following:
  - Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.
  - Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.
- PI Limit: Since the solicitation calls for collaborative projects between cultural heritage scientists and chemistry and materials scientists in academic institutions, a principal investigator (PI) must demonstrate expertise in at least one of these areas and be a member of a multi-disciplinary collaborative team to be eligible to submit a proposal in response to this solicitation.
- Limit on Number of Proposals per Organization: None Specified
- Limit on Number of Proposals per PI: 1, An investigator may be a PI or Co-PI of only one proposal submitted in response to this solicitation.

#### Link to Full Announcement:

[http://www.nsf.gov/pubs/2010/nsf10534/nsf10534.txt?WT.mc\\_id=USNSF\\_179](http://www.nsf.gov/pubs/2010/nsf10534/nsf10534.txt?WT.mc_id=USNSF_179)

### **Opportunity #8**

#### **American Competitiveness in Chemistry Fellowship (ACC-F) National Science Foundation NSF 10-535**

**Description:** The American Competitiveness in Chemistry-Fellowship program is a program to support postdoctoral associates in chemistry. It seeks to

- (1) build ties between academic and industrial, and/or national laboratory, and/or Chemistry Division-funded center researchers (partners) and
- (2) involve beginning scientists in efforts to broaden participation in chemistry

Fellows will pursue research with industrial, and/or national laboratory, and/or Chemistry Division-funded center partners that will enrich their in-house research program. In addition, fellows will develop and implement their own plans for broadening participation in the chemical sciences. Successful applicants must propose a well-integrated, synergistic research plan with their chosen affiliate as well as an effective outreach plan that will broaden participation by underrepresented groups in chemistry. The research must be in a thematic area that is supported by the NSF Division of Chemistry. The Program will support Fellows for two years of postgraduate study. The Chemistry Division envisions that Postdoctoral Fellows with successful programs who pursue careers in academia will have opportunities for significant additional funding, either through supplements to their original ACC-F award, or through new awards from the Division.

Proposals may only be submitted by the following:

- Fellowship proposals may be submitted by a US university, college, or non-profit, non-academic organization with the prospective Fellow as the Principal Investigator (PI).
- Fellowship proposals may also be submitted by individuals who are unaffiliated or who are affiliated with for-profit organizations, state or local governments or federal agencies.

PI Limit: The PI on an American Competitiveness in Chemistry-Fellowship must be the prospective Fellow. No co-PIs are allowed.

At the time of the award, a Fellow must hold a doctorate in the chemical sciences and must be a US citizen or permanent resident.

For a Postdoctoral Fellowship, the individual must have received his or her doctorate within four years from the start date of the fellowship. PIs who have not yet received their PhD are eligible to apply, but must have received their Ph.D. by the start date of the fellowship.

Exceptions to this time-related restriction can be made for extenuating personal circumstances, such as a career interruption due to family responsibilities, but must be approved by a cognizant program officer prior to submission of the proposal.

Limit on Number of Proposals per Organization: None Specified

#### **Link to Full Announcement:**

[http://www.nsf.gov/pubs/2010/nsf10535/nsf10535.htm?WT.mc\\_id=USNSF\\_179](http://www.nsf.gov/pubs/2010/nsf10535/nsf10535.htm?WT.mc_id=USNSF_179)

### **Opportunity #9**

#### **Research on Alcohol and HIV/AIDS (R01)**

**DHHS – NIH**

**PA-10-103**

**Description:** This Funding Opportunity Announcement (FOA) is intended to appeal to a broad audience of alcohol and HIV/AIDS researchers, including alcohol researchers with no prior experience in HIV/AIDS research, but with a keen appreciation for the relationship between problem drinking and HIV/AIDS and a strong interest in acquiring such experience; HIV/AIDS researchers with no prior alcohol research experience who realize the importance of more intensive alcohol interventions to improving clinical outcomes among HIV+ individuals; and those with prior research experience in the area of co-occurring HIV/AIDS and alcohol and other substance abuse. The primary objectives for this announcement are to increase research :

- 1) to characterize the relative importance of reducing alcohol misuse in the prevention of acquisition and transmission of HIV in order to identify and apply appropriate alcohol and HIV interventions as public health measures,
- 2) to more fully understand and prevent the progression of HIV disease in the presence of continued alcohol exposure and
- 3) to develop operational research frameworks for addressing the occurrence and persistence of infections in high-risk populations (e.g. minority women, young gay men, etc.), and translate findings these targeted populations.

Given the breadth of research objectives included in this announcement, potential applicants are encouraged to carefully review all sections of the announcement for research opportunities.

**Link to Full Announcement:**

<http://grants.nih.gov/grants/guide/pa-files/PA-10-103.html>

### **Opportunity #10**

#### **Research on Alcohol and HIV/AIDS (R03)**

**DHHS – NIH**

**PA-10-104**

**Description:** This Funding Opportunity Announcement (FOA) is intended to appeal to a broad audience of alcohol and HIV/AIDS researchers, including alcohol researchers with no prior experience in HIV/AIDS research, but with a keen appreciation for the relationship between problem drinking and HIV/AIDS and a strong interest in acquiring such experience; HIV/AIDS researchers with no prior alcohol research experience who realize the importance of more intensive alcohol interventions to improving clinical outcomes among HIV+ individuals; and those with prior research experience in the area of co-occurring HIV/AIDS and alcohol and other substance abuse. Given the breadth of research objectives included in this announcement, potential applicants are encouraged to carefully review all sections of the announcement for research opportunities. The R03 grant mechanism supports different types of projects including pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology; and development of new research technology. The R03 is intended to support small research projects that can be carried out in a short period of time with limited resources. This FOA will utilize the R03 grant mechanism and runs in parallel with an FOA of identical scientific scope, PA-10-103 , that encourages applications under R01 and PA-10-105 , that encourages applications under the R21 mechanism. The Research Strategy section of the R03 application may not exceed **6** pages, including tables, graphs, figures, diagrams, and charts. More than one PD/PI (i.e., multiple PDs/PIs), may be designated on the application. Applicants may submit more than one application, provided that each application is scientifically distinct. Applicants may submit a resubmission application, but such application must include an Introduction addressing the previous peer review critique (Summary Statement). See new NIH policy on resubmission (amended) applications ([NOT-OD-09-003](#), [NOT-OD-09-016](#)). The R03 is not renewable.

**Link to Full Announcement:**

<http://grants1.nih.gov/grants/guide/pa-files/PA-10-104.html>

### **Opportunity #11**

**Research on Alcohol and HIV/AIDS (R21)**  
**DHHS – NIH**  
**PA-10-105**

**Description:** This Funding Opportunity Announcement (FOA) is intended to appeal to a broad audience of alcohol and HIV/AIDS researchers, including alcohol researchers with no prior experience in HIV/AIDS research, but with a keen appreciation for the relationship between problem drinking and HIV/AIDS and a strong interest in acquiring such experience; HIV/AIDS researchers with no prior alcohol research experience who realize the importance of more intensive alcohol interventions to improving clinical outcomes among HIV+ individuals; and those with prior research experience in the area of co-occurring HIV/AIDS and alcohol and other substance abuse. Given the breadth of research objectives included in this announcement, potential applicants are encouraged to carefully review all sections of the announcement for research opportunities. This FOA will use the NIH Exploratory/Developmental (R21) award mechanism and runs in parallel with a FOA of identical scientific scope, PA-10-103, that encourages applications under the R01 mechanism and PA-10-104 that encourages applications under the R03 mechanism.

**Link to Full Announcement:**

<http://grants.nih.gov/grants/guide/pa-files/PA-10-105.html>

### **Opportunity #12**

**Scientific Meetings for Creating Interdisciplinary Research Teams (R13)**  
**DHHS – NIH**  
**PA-10-106**

**Description:** This FOA encourages Research Conference Grant (R13) applications from institutions and organizations that propose to develop interdisciplinary research teams. Teams must include investigators from the social and/or behavioral sciences, and may include the life and/or physical sciences. The goal is to broaden the scope of investigation into scientific problems, yield fresh and possibly unexpected insights, and increase the sophistication of theoretical, methodological, and analytical approaches by integrating the analytical strengths of two or more disparate scientific disciplines while addressing gaps in terminology, approach, and methodology. This program will allow investigators from multiple disciplines to hold meetings in order to provide the foundation for developing interdisciplinary research projects. This FOA will utilize the R13 grant mechanism.

**Link to Full Announcement:**

<http://grants.nih.gov/grants/guide/pa-files/PA-10-106.html>

### **Opportunity #13**

**Centers of Research Translation (P50)**  
**DHHS – NIH**  
**RFA-AR-11-002**

**Description:** This Funding Opportunity Announcement (FOA), issued by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), invites applications for Centers of Research Translation (CORT) (P50). It is expected that a CORT will have a disease-targeted translational theme with individual projects providing synergy for the theme, directed at elucidating the relevance of basic research to human disease in an area within the NIAMS mission. Two major features of the CORT program include:

- 1) the overarching aim of disease-specific research translation, and
- 2) the inclusion of resources and an administrative structure to facilitate research translation.

**Link to Full Announcement:**

<http://grants.nih.gov/grants/guide/rfa-files/RFA-AR-11-002.html>

#### **Opportunity #14**

#### **DoD Breast Cancer Predoctoral Traineeship Award Department of Defense - Dept. of the Army -- USAMRAA W81XWH-10-BCRP-PREDOC**

**Description:** The BCRP Predoctoral Traineeship Award was first offered in FY93. Since that time, 3,521 Predoctoral Traineeship Award applications have been received, and 1,195 have been recommended for funding. The Predoctoral Traineeship Award supports the training of promising graduate students studying breast cancer under the guidance of a designated mentor to prepare them for successful careers in breast cancer research. Under this award mechanism, the predoctoral trainee is considered the Principal Investigator (PI) and, as such, should write the application with appropriate direction from the mentor. The mentor, who may be a junior or senior faculty member, must clearly demonstrate a commitment to guiding the PI's research and training, and must have a track record in breast cancer research. If the mentor is not an experienced breast cancer researcher, then a formal co-mentorship by an established breast cancer researcher is required. Applications should emphasize:

- The PI's talent, potential, and commitment to breast cancer research,
- The mentor's (and co-mentor's, if applicable) qualifications and experience in breast cancer research,
- The level of the mentor's (and co-mentor's, if applicable) support of the PI's research and training,
- The strength of the training program in breast cancer research, and
- The institution's commitment to training future leaders in breast cancer research.

**Link to Full Announcement:**

<http://www07.grants.gov/search/announce.do;jsessionid=2BW8LqFCV9QQlc7jhvgyZyq2LmCGBByRS1GvYn9x9pFgJGYQqW0x4!-1299818899>