



# Office of Research and Sponsored Programs Newsletter, March 2009

---

<b>ANNOUNCEMENTS</b> .....	3
RESEARCH DAY 2009 .....	3
ORSP INTERNAL GRANTS 2009-2010 .....	3
ORSP HAS MOVED TO HOLMES ENGINEERING .....	3
GRANTS.GOV SUBMISSION GUIDELINES .....	3
ORSP WEBSITE .....	3
HAVE YOU COMPLETED YOUR GENIUS/SMARTS PROFILE IN INFO ED? .....	3
ORSP PROGRAM: STUDENT TRAVEL AWARDS.....	4
ORSP PROGRAM: FACULTY TRAVEL AWARDS.....	4
DO YOU NEED HELP WITH PROPOSAL PREPARATION? .....	4
ORSP KAY HUBBARD SINGS AT STAFF APPRECIATION NIGHT .....	4
<b>CONGRATULATIONS</b> .....	5
AWARDS DURING THE LAST MONTH.....	5
SUBMISSIONS DURING THE LAST MONTH .....	5
<b>FUNDING OPPORTUNITIES</b> .....	6
<b>ARTS AND HUMANITIES</b> .....	6
HUMANITIES PRESERVATION ASSISTANCE GRANTS .....	6
<b>ENGINEERING / COMPUTING SCIENCES</b> .....	7
NSF VIRTUAL ORGANIZATIONS AS SOCIOTECHNICAL SYSTEMS .....	7
BROADENING PARTICIPATION IN COMPUTING .....	9
NANOTECHNOLOGY IN ENGINEERING FOR UNDERGRADUATES .....	11
<b>ENVIRONMENTAL PROGRAMS</b> .....	12
GEOMORPHOLOGY AND LAND USE DYNAMICS .....	12
EARTHSCOPE .....	12
NSF: EMERGING TOPICS IN BIOGEOCHEMICAL CYCLES.....	13
EPA: INNOVATION IN ENVIRONMENTAL PRACTICE .....	13
USDA: ENHANCING ECOSYSTEM MANAGEMENT.....	15
EPA: THE ROLE OF NONCHEMICAL STRESSORS .....	15
NSF: GEOPHYSICS .....	17
NSF: HYDROLOGIC SCIENCES .....	18
NSF: EMERGING TOPICS IN BIOGEOCHEMICAL CYCLES .....	18
<b>HEALTH</b> .....	19
NURSING RESEARCH GRANT .....	19
DESIGNING FOR BETTER HEALTH.....	20
NIH: CHALLENGE GRANTS IN HEALTH AND SCIENCE RESEARCH.....	21
<b>HOMELAND SECURITY</b> .....	21
\$25,000 HOMELAND SECURITY AWARD.....	21
<b>INDIVIDUALS WITH DISABILITIES</b> .....	22
DHHS: ADMINISTRATION ON DEVELOPMENTAL DISABILITIES.....	22

JUSTICE STUDIES .....	23
2009 STATE COURT PROCESSING STATISTICS.....	23
<a href="http://www.ojp.gov/bjs/pub/pdf/scps09sol.pdf">HTTP://WWW.OJP.GOV/BJS/PUB/PDF/SCPS09SOL.PDF</a> .....	23
CRIME AND JUSTICE RESEARCH.....	23
THE SCIENCE OF SCIENCE .....	25
NSF: SCIENCE OF SCIENCE AND INNOVATION .....	25

## ANNOUNCEMENTS

### RESEARCH DAY 2009

Mark your calendars—Research Day is **Friday, April 24, 2009!** Announcements have been distributed, but more will be coming to you. **The deadline for registering is Monday, March 9.** If you haven't registered your poster yet, go to <http://www.fgcu.edu/ORSP/ResearchDay.html> and find the link for the Registration Form.

### ORSP INTERNAL GRANTS 2009-2010

**March 9** is another important deadline—for submitting your application for an ORSP Internal Grant. <http://www.fgcu.edu/ORSP/InternalPrograms.html> takes you to our web site where the link to the Guidelines resides.

### ORSP HAS MOVED TO HOLMES ENGINEERING

The Office of Research and Sponsored Programs has moved to the new Holmes Engineering (HE) building. Please come visit us at our new location in HE, Suite 112.

### GRANTS.GOV SUBMISSION GUIDELINES



Due to heavy traffic on the grants.gov server, ORSP has been advised to begin the submissions process to grants.gov two working days prior to the submission deadline date. This means ORSP needs your completed proposal **four** days prior to the submission deadline. The Grants.gov icon is shown next to this month's Funding Announcements that require this submission process. If you wish to apply for a grant through grants.gov, contact Beth Rieger at [brieger@fgcu.edu](mailto:brieger@fgcu.edu).

### ORSP WEBSITE

ORSP offers a multitude of services to assist you in preparing and submitting grant applications. Our website at <http://www.fgcu.edu/orsp> provides easy access to the forms, announcements, and other useful materials. We would like to include links to websites associated with the many externally funded projects currently active. Send the URLs to [dstremke@fgcu.edu](mailto:dstremke@fgcu.edu) and the link will be added to ORSP's site.

### HAVE YOU COMPLETED YOUR GENIUS/SMARTS PROFILE IN INFO ED?

In order to process your proposals, ORSP needs a GENIUS/SMARTS investigator profile in our web-based database system. To edit a Genius profile, use an on-campus computer and go to <http://fgcu-mako.primary.ad.fgcu.edu>. Click on "Login"; then on "Profile"; and proceed to edit the information contained in your profile. Please select keywords that describe your research interests. For further assistance or if you any questions about these InfoEd products please contact Lucia Soria at [asoria@fgcu.edu](mailto:asoria@fgcu.edu). If you have a GENIUS/SMARTS profile, you can search InfoEd's SPIN Plus from any on-campus computer to find funding. Call Lucia at ext.7020 to send you instructions.

### ORSP PROGRAM: STUDENT TRAVEL AWARDS

ORSP supports enrolled FGCU students by providing funds on a first-come, first-serve basis so they can present their scholarly works at conferences. ORSP staff will assist the students with the necessary paperwork, both before and after the travel. Within 30 days of travel completion, all awardees are required to submit a one-page report to ORSP describing the benefit of the award and the overall experience. Awardees are required to participate in Research Day in April. The guidelines and application form are at: <http://www.fgcu.edu/orsp/internalPrograms.html>

### ORSP PROGRAM: FACULTY TRAVEL AWARDS

ORSP provides travel awards up to \$1,000 for faculty to attend technical workshops or other related activities for the purpose of increasing chances of obtaining a grant. The trip must result in a proposal submission through ORSP. The application consists of the following items: a 50-100 word abstract of the proposed project; workshop information or the specific purpose of the trip; and an estimated budget for travel expenses. Guidelines and application are on our web page at: <http://www.fgcu.edu/orsp/internalPrograms.html>

### DO YOU NEED HELP WITH PROPOSAL PREPARATION?

Please contact Beth Rieger at [brieger@fgcu.edu](mailto:brieger@fgcu.edu) to assist you set up your budget and to complete your proposal/application package. ORSP will then enter the budget information into the sponsor's budget form for you and provide you with a copy to help you prepare the budget justification. ORSP needs to receive your completed proposal package three business days (four business days for grants.gov) before the submission deadline. We ensure all the required forms are attached and that your proposal is compliant with the specifications outlined in the RFP/RFA. Remember that additional forms, releases, and agreements may be required, so make sure [you](#) allow enough time for these documents to be prepared. If ORSP receives the completed proposal with less than the three (or four) business days' lead time, we cannot guarantee that the proposal will be submitted.

### ORSP KAY HUBBARD SINGS AT STAFF APPRECIATION NIGHT

**Kay Hubbard**, Compliance Monitor Specialist in ORSP, sang the National Anthem at the Men's basketball game on February 2<sup>nd</sup>, 2009 for FGCU's Staff Appreciation Night.

Congratulations, Kay!



## CONGRATULATIONS

### AWARDS DURING THE LAST MONTH

<b>College of Arts and Sciences</b>			
CORCORAN, Peter Blaze	Germeshausen Foundation	Earth Charter Scholarship Project/ Germeshausen	<b>\$75,000.00</b>
ISERN, Sharon Barreto, Jose Michael, Scott	Defense Threat Reduction Agency	Novel Protection and Decontamina- tion Strategies	<b>\$1,500,000.00</b>
PARSONS, Michael	Florida Fish and Wildlife Conservation Commission	Monitoring of Red Tide in the North- western Everglades and Adjacent Coastal Areas	<b>\$20,000.00</b>
PIRES, Ricky	South Florida Water Management District / Fort Myers	Wings of Hope 2009 (Ft. Myers)	<b>\$20,000.00</b>
TOLLEY, S. Gregory Volety, Aswani K.	Florida Sea Grant	Elise B. Newell Seminar Series	<b>\$2,207.00</b>
VOLETY, Aswani	South Florida Water Management District	10K Island Oyster Reconnaissance and Salinity Study	<b>\$49,500.00</b>
<b>College of Education</b>			
GREENE, Marci	Florida Department of Education	Parents Educating Parents 2008-2009	<b>\$90,000.00</b>
WEINGARTT, Eleanor H.	Charter Schools USA, Inc.	Accelerated Induction Into Teaching	<b>\$20,000.00</b>
<b>College of Health Professions</b>			
WOLF, Donna	Daved Rosensweet, MC	Laboratory Hormone Optimal Ranges	<b>\$ 4,973.43</b>
<b>Academic Affairs</b>			
DOYLE, Cathy	Lee County Public Education Center	Lee County-Services to Scholars Club 2007-2008	<b>\$5,000.00</b>

### SUBMISSIONS DURING THE LAST MONTH

<b>College of Arts and Sciences</b>			
ALLMAN, Phillip	National Science Foundation	Collaborative Research: IRES: Modeling Social, Economic and Ecological Sustainability on the Coast of Ghana	<b>\$ 49,745.00</b>
WILSON, Jo Ann Dubetz, Terry	Motorola Foundation	Girls in Engineering, Math, And Science 2009-2010	<b>\$41,079.00</b>
<b>Academic Media Technology Services</b>			
JOHNSON, Rick Sklodowski, Paula	Thirteen/WNET New York	NATURE 2009	<b>\$10,000.00</b>
<b>College of Business</b>			
CSAVINA, Kristine	National Institute of Standards & Technology	Rescue Robot	<b>\$7,500.00</b>
CSAVINA, Kristine	National Institute of Standards & Technology	Pipeline Safety	<b>\$7,500.00</b>
GEIGER, Chris Isern, Sharon Michael, Scott	National Science Foundation	MRI: Acquisition of An Inverted Confocal Microscope For FGCU	<b>\$391,357.00</b>
ZALEWSKI, Janusz	University of Central Florida	FUNSAT V Project	<b>\$1,250.00</b>

## FUNDING OPPORTUNITIES

### ARTS AND HUMANITIES

#### HUMANITIES PRESERVATION ASSISTANCE GRANTS



The NEH Preservation Assistance Grants help institutions—particularly small and mid-sized institutions—improve their ability to preserve and care for their humanities collections, including special collections of books and journals, archives and manuscripts, prints and photographs, moving images, sound recordings, architectural and cartographic records, decorative and fine arts, textiles, archaeological and ethnographic artifacts, furniture, and historical objects. Institutions such as libraries, museums, historical societies, archival repositories, arts and cultural organizations, and town and county records offices are encouraged to apply.

Applicants must draw on the knowledge of consultants whose preservation skills and experience is related to the types of collections and the nature of the activities that are the focus of their projects. Within the conservation field, for example, conservators usually specialize in the care of specific types of collections, such as objects, paper, or paintings. Because the organization and the preservation of archival collections must be approached in tandem, an archival consultant should also provide advice about the management and processing needs of such holdings as part of a preservation assessment that includes long-term plans for the arrangement and description of archival collections.

#### **Preservation Assistance Grants may be used for purposes like these.**

- **General preservation assessments** Applicants may engage a conservator, preservation librarian, archivist, or other appropriate consultant to conduct a general preservation assessment and to help draft a long-range plan for the care of humanities collections. The consultant visits the institution to assess policies, practices, and conditions affecting the care and preservation of humanities collections and prepares a report that summarizes the findings and contains prioritized recommendations for future preservation action.
- **Consultations with professionals to address a specific preservation issue, need, or problem** Applicants may hire a consultant to help address challenges facing the care of humanities collections. For example, consultants can provide advice about
  - developing disaster preparedness and response plans;
  - establishing environmental monitoring programs, instituting integrated pest management programs, and developing plans for improving environmental conditions or security or fire protection for collections;
  - studying light levels in exhibition and storage spaces and recommending appropriate methods for controlling light and reducing damage to collections;
  - developing plans for arranging, describing, and addressing the preservation needs of archival and manuscript holdings;
  - developing detailed plans for improving storage or rehousing a collection; and
  - assessing the conservation treatment needs of selected items in a collection.

From preliminary discussions about the proposed assessment, a consultant may be able to anticipate an institution's need for basic preservation supplies. In such cases, the applicant may request funds to purchase the recommended supplies, and the consultant's letter of commitment should provide a general description of the supplies and justification for their use. After the on-site visit, the consultant can refine the list of supplies to be purchased.

- **Purchase of storage furniture and preservation supplies.** Applicants who have completed a preservation assessment or consulted with an appropriate professional may request funds to purchase permanent and durable furniture and supplies (e.g., cabinets and shelving units, storage containers, boxes, folders, and sleeves). If an institution's staff and volunteers have limited experience in rehousing collections, the institution should enlist the help of a consultant to provide guidance and training at the beginning of the project. Applicants requesting supplies to rehouse archival collections should discuss how the rehousing activities relate to plans for arranging and describing the materials.
- **Purchase of environmental monitoring equipment for humanities collections.** Applicants may purchase environmental monitoring equipment (e.g., dataloggers, hygro-thermographs, and light meters). If the institution's staff does not have experience using the equipment, the application should include a request for training in the use and installation of the equipment and the interpretation of the monitoring data.
- **Education and Training Applicants** may request support to send staff members who work with humanities collections to workshops and training courses that focus on the care of collections. Applicants may also hire a consultant to conduct on-site training for staff and volunteers. On-site workshops may be tailored to meet specific needs and holdings of the institution. Staff and volunteers from neighboring organizations may also be invited to participate in on-site workshops. Education and training requests may address both preservation and access topics. For example, workshops could focus on such topics as the following:
  - developing disaster preparedness and response plans;
  - establishing environmental monitoring programs, instituting integrated pest management programs, and developing plans for improving environmental conditions or security or fire protection for collections;
  - studying light levels in exhibition and storage spaces and recommending appropriate methods for controlling light and reducing damage to collections;
  - developing plans for arranging, describing, and addressing the preservation needs of archival and manuscript holdings;
  - developing detailed plans for improving storage or rehousing a collection; and
  - assessing the conservation treatment needs of selected items in a collection.

<http://www.neh.gov/grants/guidelines/pag.html>

**Deadline: May 14, 2009**

## ENGINEERING / COMPUTING SCIENCES

### NSF VIRTUAL ORGANIZATIONS AS SOCIOTECHNICAL SYSTEMS



There has been a growing shift away from traditions of individual based science toward more collaborative models. The intellectual challenges and institutional conditions of 21<sup>st</sup> century science and engineering necessitate collaboration. In many fields, scholars are confronted with

challenges of a scale and complexity that defy the boundaries of traditional fields as well as the limits of individual capacity, thus requiring more diversified and at the same time unified participation from researchers. Many scientists and engineers find themselves today working in collaborations, many of which cross disciplinary, institutional, and geographic borders via the support of cyberinfrastructure.

Computer networking was first developed as a communication tool for scientists and engineers; and, e-mail and file transfers have long since supported distributed networks of scientific communication. However, more recent capabilities in high performance computing, remote instrumentation, federated databases, and advanced simulation and visualization environments are allowing these intellectually diverse, geographically dispersed, and electronically connected networks of researchers to collaborate around data, workflows, and resources across time and space in unprecedented ways. Indeed, while technology may allow the formation of these end-to-end collaborations, it is the common purpose and/or shared goals of the participating scientists and engineers that transform them from loosely-coupled technostructures into more coherent sociotechnical systems—*aka* virtual organizations.

A virtual organization is a group of individuals whose members and resources may be dispersed geographically, yet who function as a coherent unit through the use of cyberinfrastructure. Virtual organizations may be known by a range of names, including: collaborations, distributed work groups, virtual teams, online communities, and science gateways. Common characteristics across different types and classes of virtual organizations include:

- Distributed across space, with participants spanning localities and institutions;
- Distributed across time, allowing synchronous as well as asynchronous interactions;
- Dynamic structures and processes, at every stage of the organizational lifecycle;
- Computationally enabled, via collaboration support systems including e-mail, teleconferencing, telepresence, awareness, social computing, and group information management tools; and,
- Computationally enhanced, with simulations, databases, instrumentation, analytic tools and services which facilitate interaction with human affiliates that are integral to the functioning of the organization.

Virtual organizations are often positioned in terms of their potential to advance national priorities of scientific innovation, educational development, and economic competitiveness. The proposition being that virtual organizations can more efficiently and effectively leverage the combination of diverse information and knowledge, skills and resources from different locations and thereby enhance the individual opportunity to learn and the organizational capacity to innovate. To date, however, these claims remain largely untested. Nevertheless, in several science and engineering domains, virtual organizations are becoming increasingly thought of as indispensable, not only to the advancement of transformational breakthroughs but also to the everyday practice of research and learning. The virtual organization concept has moved beyond pilot projects to the point where many new large-scale projects are underway, despite the fact the forecasted potentialities versus limitations of this new organizational form have not yet been empirically established.

While many virtual organizations are being designed with attention to the information technologies required to be effective, their establishment must also give equal consideration to the social aspects of collaboration that successful virtual organizations will either necessitate or initiate. Technological advances may make virtual organizations possible, but at the core of this revolution is a social transformation. Our ability to leverage the potential of virtual organizations thus depends on our capacity to generate more systematic knowledge about the intertwined social and technical issues of effective virtual organizations, explicating the conditions under which virtual organizations change both how research and education is practiced and what is produced as outcomes.

Proposals submitted under this program solicitation must explain explicitly how the proposed work fits within streams of sociotechnical systems theory and research, so that the potential contribution to one or more fields of research is clear. They must also indicate potential contributions to practice.

[http://www.nsf.gov/pubs/2009/nsf09540/nsf09540.htm?govDel=USNSF\\_25#budg\\_cst\\_shr\\_txt](http://www.nsf.gov/pubs/2009/nsf09540/nsf09540.htm?govDel=USNSF_25#budg_cst_shr_txt)  
**Due Date: April 29, 2009**

### BROADENING PARTICIPATION IN COMPUTING

The NSF's Broadening Participation in Computing (BPC) program aims to significantly increase the number of U.S. citizens and permanent residents receiving post secondary degrees in the computing disciplines, with an emphasis on students from communities with longstanding underrepresentation in computing. Those underrepresented groups are women, persons with disabilities, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders. The BPC program seeks to engage the computing community to develop and implement innovative methods, frameworks, and strategies to improve recruitment and retention of these students through undergraduate and graduate degrees. Projects that target stages of the academic pipeline from middle school through the early faculty ranks are welcome. New with this solicitation is the emphasis on national impact: All BPC projects must have the potential for widespread impact. That is, they should either develop an effective practice that could be widely deployed or they should deploy existing effective practices so as to reach larger audiences.

**Alliance and Alliance Extension Projects** are broad coalitions of academic institutions of higher learning, secondary (and possibly middle) schools, government, industry, professional societies, and other not-for-profit organizations that design and carry out comprehensive programs addressing underrepresentation in the computing disciplines. They have a large regional or national scope. Typically, Alliances operate across multiple stages of the academic pipeline and address multiple targeted groups. Together, Alliance participants:

- (1) develop and implement interventions that support students and early career faculty,
- (2) create sustainable changes in culture and practices at the institutional, departmental, and organizational levels,
- (3) serve as models and contribute to repositories for effective practices to broaden participation, and

- (4) leverage the work of existing BP efforts and other Alliances. Competitive projects will have significant impact both in the quality of opportunities afforded to participants and in the number of participants potentially served.

Successful Alliances are eligible to compete for additional funding: an Alliance Extension increases the duration of the Alliance award as well as its scope, introducing additional targeted student groups, partners, and/or projects.

**Demonstration Projects (DPs)** are more focused than Alliance projects. Typical DPs pilot innovative programs that, once fully developed, could be incorporated into the activities of an Alliance or otherwise scaled for widespread impact. Projects might, for example, be proposed by a single institution or might focus on a single underrepresented community, a single point in the academic pipeline, or a single impediment to full participation in computing.

**Leveraging, Scaling or Adapting (LSA) Projects** are intended to extend the impact of our most effective practices through leveraging, scaling and/or adaptation. Typical LSA projects will use existing organizational structures and demonstrated best practices. They can leverage the work of BPC-funded Alliances or DPs, as well as efforts by other organizations. They might, for example, copy and adapt a successful regional Alliance infrastructure for a new region, combine and leverage the work of two or more Alliances, adapt an effective intervention for a different audience, or take an effective intervention and implement it across an Alliance or other organization with a broad reach.

All BPC projects have significant assessment and evaluation efforts with both formative and summative components.

This solicitation replaces [NSF 07-548](#) and includes the following major revisions

1. A new category of awards, Leveraging, Scaling, or Adapting (LSA) Projects, is added to emphasize the widespread adoption of effective practices for maximum impact.
2. Alliances may compete for two possible extension awards, the first for two years and the following one for up to five years.
3. The description of Alliance and Demonstration Projects has been modified to further encourage collaboration and cooperation among BPC projects and, especially in the case of K-12 efforts, with other existing, successful STEM programs.

Please be advised that the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) includes revised guidelines to implement the mentoring provisions of the America COMPETES Act (ACA) (Pub. L. No. 110-69, Aug. 9, 2007.) As specified in the ACA, each proposal that requests funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals. Proposals that do not comply with this requirement will be returned without review (see the PAPP Guide Part I: *Grant Proposal Guide* Chapter II for further information about the implementation of this new requirement).

[http://www.nsf.gov/pubs/2009/nsf09534/nsf09534.html?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09534/nsf09534.html?govDel=USNSF_25)

**Due Date: May 13, 2009**

## NANOTECHNOLOGY IN ENGINEERING FOR UNDERGRADUATES



One nanometer (one billionth of a meter) is a magical point on the dimensional scale. Nanostructures are at the confluence of the smallest of human-made devices and the largest molecules of living systems known today. Nanoscale science and engineering here refer to the fundamental understanding and resulting technological advances arising from the exploitation of new physical, chemical, and biological properties of systems that are intermediate in size, between isolated atoms and molecules and bulk materials, where the transitional properties between the two limits can be controlled. During the last few years, novel structures, phenomena, and processes have been observed at the nanoscale (from a fraction of a nanometer to about 100 nm) and new experimental, theoretical, and simulation tools have been developed for investigating them. These advances provide exciting opportunities for scientific and technological developments in nanoparticles, nanostructure materials, nanodevices, and systems.

Nanotechnology is the creation and utilization of functional materials, devices, and systems with novel properties and functions that are achieved through the control and restructuring of matter at the atomic, molecular and macromolecular levels. A revolution has begun in science, engineering, and technology based on the ability to organize, characterize, and manipulate matter systematically at the nanoscale. Far-reaching outcomes for the 21st century are envisioned in both scientific knowledge and a wide range of technologies in most industries, healthcare, conservation of materials and energy, biology, environment, and education. Fundamental research in nanoscale science and engineering (NSE) underpins innovation in critical areas ranging from manufacturing to medicine.

NSE has technological, economic, environmental, social, and ethical dimensions that may change the world in which we live. Increased understanding and appreciation of the potential for nanoscale science and engineering will be needed to create an informed citizenry and a competitive workforce.

The Nanotechnology Undergraduate Education (NUE) in Engineering program aims to integrate nanoscale science, engineering, and technology into the undergraduate engineering curricula. The NUE program provides funding for projects that will address the educational challenges of these emerging fields and generate practical ways of introducing nanotechnology into undergraduate engineering education with a focus on devices and systems and/or on social, economic, and ethical issues relevant to nanotechnology. Given the worldwide expansion of research and education in nanoscale science and engineering, international collaborations that advance underlying nanoscale science and engineering education goals and strengthen U.S. activities are encouraged.

### **Limit on Number of Proposals per Organization: 1**

**This is a limited submission proposal. Please contact Donna Stremke in the Office of Research and Sponsored Programs before **April 3, 2009** if you intend to submit a proposal to this program.**

[http://www.nsf.gov/pubs/2009/nsf09533/nsf09533.html?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09533/nsf09533.html?govDel=USNSF_25)

**Due Date: April 29, 2009**

## ENVIRONMENTAL PROGRAMS

### GEOMORPHOLOGY AND LAND USE DYNAMICS



The NSF Division of Geomorphology and Land-Use Dynamics supports innovative research into processes that shape and modify landscapes over a variety of length and time scales. The program encourages research that investigates quantitatively the coupling and feedback among such processes, their rates, and their relative roles, especially in the contexts of variation in climatic and tectonic influences and in light of changes due to human impact.

The Geomorphology and Land-Use Dynamics Program is committed to supporting the most meritorious research in any relevant area, including interdisciplinary and multidisciplinary research, as well as research involving international collaboration. The Program is especially interested in proposals in emerging fields. Where appropriate, proposals may be considered for joint support with other programs in EAR or with other Divisions at the National Science Foundation. In some cases, proposals may be transferred to other programs within EAR or to other Divisions within the National Science Foundation when it is deemed appropriate by Program Officers from the respective programs or divisions. Principal Investigators are encouraged to contact the cognizant program officers regarding proposals that may cross disciplinary boundaries before submission.

[http://www.nsf.gov/pubs/2009/nsf09537/nsf09537.htm?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09537/nsf09537.htm?govDel=USNSF_25)

**Due Dates: July 16, 2009; January 16, 2010**

### EARTHSCOPE



EarthScope is an Earth science program to explore the 4-dimensional structure of the North American continent. The EarthScope Program provides a framework for broad, integrated studies across the Earth sciences, including research on fault properties and the earthquake process, strain transfer, magmatic and hydrous fluids in the crust and mantle, plate boundary processes, large-scale continental deformation, continental structure and evolution, and composition and structure of the deep-Earth. In addition, EarthScope offers a centralized forum for Earth science education at all levels and an excellent opportunity to develop cyberinfrastructure to integrate, distribute, and analyze diverse data sets.

The EarthScope facilities, consisting of the Plate Boundary Observatory (PBO), the San Andreas Fault Observatory at Depth (SAFOD), and the US Array, are a multi-purpose array of instruments and observatories that greatly expands the observational capabilities of the Earth Sciences and permits us to advance our understanding of the structure, evolution and dynamics of the North American continent.

This Solicitation calls for single or collaborative proposals to conduct scientific research associated with the EarthScope Facility and support activities that further the scientific and educational goals of EarthScope.

[http://www.nsf.gov/pubs/2009/nsf09535/nsf09535.html?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09535/nsf09535.html?govDel=USNSF_25)

**Due Date: July 16, 2009**

### NSF: EMERGING TOPICS IN BIOGEOCHEMICAL CYCLES

The NSF Directorate for Geosciences and the Directorate for Biological Sciences are enhancing support for interdisciplinary research which bridges across the biological, atmospheric, geological, oceanographic and hydrological sciences, in the area of biogeochemical cycles and processes.

We seek to support research that will advance our quantitative and/or mechanistic understanding of **biogeochemical cycles, including the water cycle**. Competitive proposals should integrate physical, geological, chemical, and/or hydrologic processes with biological processes over various temporal and/or spatial scales and/or various levels of biological organization. Proposals should be interdisciplinary and address biogeochemical processes and dynamics within and/or across one or more of the following systems: terrestrial, aquatic, and/or atmospheric. We encourage proposals that focus on nonlinear dynamics and/or on interactions and thresholds in climate, ecological, and/or hydrological systems. Goals are to increase our understanding of how biological systems respond to changing physical and chemical conditions and how biological systems influence the physical and chemical characteristics of soils and sediments, air, or water.

These types of emerging and challenging problems require integration of concepts and observations across diverse fields. A goal of the Biological Sciences and Geosciences Directorates is to enhance such integration. Successful proposals will generate intellectual excitement in all participating disciplinary communities. Also encouraged are proposals that have broad educational, diversity, or societal impacts that capitalize on this interdisciplinary opportunity.

Proposals must bridge the biological and geosciences disciplines and be relevant to at least one program in the BIO Directorate and at least one Program in the GEO Directorate. Proposals involving programs in two different divisions in GEO are also permitted, but they must address the goals of this Dear Colleague Letter.

This is not a special competition or new program. ETBC proposals should be submitted to an existing GEO or BIO program according to the program's regular target or deadline dates.

[http://www.nsf.gov/funding/pgm\\_list.jsp?org=GEO&ord=date](http://www.nsf.gov/funding/pgm_list.jsp?org=GEO&ord=date)

**Due Dates: Specified individually**

### EPA: INNOVATION IN ENVIRONMENTAL PRACTICE

The U.S. Environmental Protection Agency (EPA) is soliciting proposals for a "Partnership to Promote Sharing of Environmental Innovations" to support the next two symposia over a four year period. The National Center for Environmental Innovation (NCEI) is managing the competition for this funding opportunity.

This funding opportunity is guided by *Strategic Plan* Objective 5.2, which requires that our efforts improve environmental performance through pollution prevention and innovation; and Sub-objective 5.2.4, which promotes environmental policy innovation. Ideally, the symposia will also address through the propagation of innovation, other EPA Strategic Goals that strive to address the causes, effects, extent, prevention, reduction, and/ or elimination of air, water, or solid/ hazardous waste

pollution, or, “carryout the purposes of” the Toxic Substances Control Act or the Federal Insecticide, Fungicide and Rodenticide Act.

The primary audience for these symposia will be State environmental agency officials with practical experience implementing innovative approaches to environmental protection. Representatives from American Indian Tribes, local governments, other governments, NGOs, and the business community will also be invited to participate as appropriate to the ultimate symposia agendas. While EPA will have participants at the symposia, the primary goal of the meetings is to identify and highlight environmental innovations that can help States and other governmental entities learn about new ways to achieve environmental results. The symposia should be designed to:

- Identify and showcase successful, innovative projects and programs that have accomplished important environmental results at the State, federal, or other levels;
- Facilitate information transfer so that proven approaches can be used by other states or other entities to achieve improved environmental results;
- Enable discussion about specific issues facing innovators, such as how to effectively evaluate pilot-scale efforts, how to replicate successful innovations on a larger scale (e.g., from a pilot project at one facility to a program for the entire sector) or in other programs (e.g., from use in the air program to the water program), and how to sustain innovation over time so that project continue evolving to reflect new knowledge, experience, and/or technology;
- Expand the network of State, federal and other environmental practitioners who are interested in applying and advancing new approaches; and
- Stimulate ideas for new innovative initiatives and pilot projects.

The recipient will be responsible for preparing symposia agendas, identifying relevant speakers and presenters, promoting the event, and managing all symposia logistics. While the recipient will be expected to be knowledgeable about a broad array of environmental policy issues and innovative approaches that have been tested to address them, the recipient will establish a Steering Committee to serve as a resource and help inform planning of the symposia. The Steering Committee will include members from the recipient, EPA offices supporting the symposium, and State environmental agencies, with the latter forming the majority. The Steering Committee will assist with analyzing environmental innovations, developing symposia agendas, identifying and suggesting appropriate speakers and presenters, and promoting the event within their respective organizations.

EPA is interested in seeing the first symposium held in 2010, and a second symposium approximately two years later. In addition to the costs associated with planning and follow-up, EPA funding will be used to support the costs associated with hosting the symposia. For each event, the recipient will arrange for breakfast, lunch and light refreshments for up to 750 attendees in order to assure attendees’ full participation throughout the working day including lunch-time plenary and working sessions. The recipient will offer up to 50 scholarships to pay travel costs for non-federal participants, and more if the budget allows. The goal is to maximize participation for State officials and other invited participants. While Steering Committee members may advise the recipient on these scholarships, final decisions will be made by the recipient. The recipient may also need to pay honoraria for plenary speakers in order to attract nationally recognized experts to fulfill these roles.

The recipient will evaluate the expected costs for potential symposia locations and provide a recommendation to the Steering Committee. This recommendation will be weighed with other factors in making a final decision (e.g., a particular State being interested in hosting, other meetings in a location or within a certain time frame that might facilitate State participation, a locality of special

significance in demonstrating the use of environmental innovations that may provide exceptional opportunity for learning events and field trips into the community). In planning the symposia, the recipient will incorporate as many environmentally-sound techniques, as possible. A listing of green meeting techniques can be found on the EPA green meeting website at [www.epa.gov/oppt/greenmeetings](http://www.epa.gov/oppt/greenmeetings)

<http://www.epa.gov/innovation/symposium-solicitation.pdf>

**Due Date: April 22, 2009**

### USDA: ENHANCING ECOSYSTEM MANAGEMENT

The U. S. Department of Agriculture, as part of its Agricultural and Food Research Initiative Competitive Grants Program and the U.S. Environmental Protection Agency, as part of its Science to Achieve Results program, are seeking applications proposing research on the ecosystem services provided by agricultural lands. Ecosystem services are the goods and services derived from natural and managed ecosystems upon which human welfare depends. Because of the global intensification of land use, these services are in decline, especially in agricultural ecosystems. Ecosystem services are essential in maintaining both human welfare as well as ecological integrity, yet these services can be affected by natural changes and management actions. In addition, agricultural lands are experiencing significant land use changes as demonstrated by the rapid conversion of these lands from traditional farming use, to alternate farming practices, to urban development, and to non-agricultural use.

Agricultural ecosystems provide a vast array of goods and services. Even though ecosystem services relate to all USDA and CSREES strategic goals, CSREES AFRI is interested in expanding the current ecosystem services portfolio and would like to focus on Goal 3, "Supporting Increased Economic Opportunities and Improved Quality of Life in Rural America," and Goal 6, "Protect and Enhance the Nation's Natural Resource Base and Environment." Agroecosystems of interest include cropping, forestry, range and grasslands ecosystems. A program focusing on ecosystem services provides an organized approach in developing basic and applied research projects to deliver scientifically based information for advising and guiding agricultural management, social, and policy decisions. Using a systems approach would expand current CSREES efforts on ecosystem services to evaluate multiple ecosystem services interactions and attributes at larger geographic scales. As more services become monetized, the issues of scale become increasingly important. One service should not be provided at the expense of other services and the long-term productivity of the system. Validation and quantification of the levels and number of services provided for will become necessary to maximize production efficiencies.

[http://es.epa.gov/ncer/rfa/2009/2009\\_star\\_ecosystem\\_services.html](http://es.epa.gov/ncer/rfa/2009/2009_star_ecosystem_services.html)

**Due Date: May 26, 2009**

### EPA: THE ROLE OF NONCHEMICAL STRESSORS



The U.S. Environmental Protection Agency, as part of its Science to Achieve Results grants program, is seeking applications from interdisciplinary teams to address research needs that currently limit the ability to conduct cumulative risk assessments. Exposure to different combinations of environmental stressors can contribute to increased risk for negative health consequences. It has become clear that cumulative risk assessments should include both chemical

and nonchemical stressors, exposures from multiple routes, and factors that differentially affect exposure or toxicity to communities. For this Request for Applications (RFA), *environmental stressor* is defined as a chemical, physical, biological, or social entity that can cause an adverse response to humans, and *community* refers to a group of people that share a common characteristic or characteristics, for example, ethnicity, socioeconomic status, or geographic location. Some of these factors may contribute to negative health effects, but others might increase *resiliency*, which is the ability to overcome stressful conditions. How these factors interact has tremendous public health implications. For example, a pollutant exposure that is benign to children living in a wealthy community may harm children living in a less advantaged environment. In order to protect the most sensitive individuals, an understanding of the complex interactions of various stressors is critical.

Because risk assessments have traditionally focused on the effects of one chemical on one individual via a single route or pathway and have not considered the role of nonchemical stressors and other community-related factors, conducting cumulative risk assessments poses many challenges. This RFA is focusing on two of the challenges

- (a) **STAR-E1:** The development of statistical and other analytical techniques that will enable the analysis of disparate types of data, and
- (b) **STAR-E2:** The evaluation of the combined effects of nonchemical and chemical stressors. In order to address these challenges successfully, collaborations will need to be developed among biomedical scientists, public health scientists, mathematical and statistical scientists, social scientists, and community members

There are two distinct areas of research covered by this solicitation. Responsive applications must propose to do one of the following:

- a) **STAR-E1:** Develop analytic techniques to characterize effects and health risks at the community and individual levels; synthesize information from multiple datasets; extrapolate data among datasets and/or across communities; develop quantitative functions relating a health outcome to levels of multiple stressors; and characterize the uncertainty and/or limitations associated with these studies.
- b) **STAR-E2:** Evaluate the combined effects of nonchemical and chemical stressors.

For **STAR-E1**, the focus must be on exposures to one of the following:

- (1) multiple chemicals,
- (2) a chemical and a nonchemical stressor together,
- (3) multiple chemicals and a non-chemical stressor,
- (4) a chemical and multiple nonchemical stressors,
- (5) multiple chemicals and multiple nonchemical stressors. In addition, for all developed tools, models or approaches, uncertainties and/or limitations must be characterized. The use of existing datasets is acceptable, but not required.

Research responsive to **STAR-E1** must develop tools, models or approaches to accomplish at least one of the following:

- Integrate research results and information from multiple studies, multiple data sources, and across multiple scales of time and/or space to address various components within cumulative risk assessment.

- Determine dose/concentration-response curves when multiple stressors exist.
- Develop metrics or methodologies for assessing and integrating the cumulative effects of multiple sources of stress, including quantitative and qualitative indicators of non-chemical sources of stress.

For **STAR-E2**, animal studies are acceptable as are epidemiological investigations focused on humans. Research responsive to STAR-E2 must accomplish at least one of the following:

- Determine the biological impact of psychosocial stress and its interaction with chemical exposures, including mechanisms of action and the resulting health consequences. This may consider exposure influences, such as sequence and timing, and lifestage.
- Develop dose-response models for combined exposures to chemical and nonchemical stressors. Effects of timing of the exposures may be considered if appropriate.
- Incorporate psychosocial stress into chemical or class-specific PBPK and PBPD models.
- Identify which nonchemical stressors exacerbate negative health outcomes resulting from chemical exposures for particular populations or life stages.

[http://es.epa.gov/ncer/rfa/2009/2009\\_star\\_cumulative\\_risk.html](http://es.epa.gov/ncer/rfa/2009/2009_star_cumulative_risk.html)

**Due Date: June 17, 2009**

### NSF: GEOPHYSICS

As part of the NSF's contribution to the National Earthquake Hazard Reduction Program, the Geophysics Program invites research proposals directed toward the fundamental understanding of earthquake processes. This Program is committed to supporting the most meritorious research in any relevant area, including interdisciplinary and multidisciplinary research, as well as that involving international collaboration. The Program is especially interested in proposals in emerging fields. Where appropriate, proposals may be considered for joint support with other programs in EAR or with other Divisions at the NSF. In some cases, proposals may be transferred to other programs within EAR or to other Divisions within the NSF when it is deemed appropriate by Program Officers from the respective programs or divisions. Principal Investigators are encouraged to contact the cognizant program officers regarding proposals that may cross disciplinary boundaries before submission.

Equipment needs that can be demonstrably linked to the conduct of a specific research project being proposed to EAR may be included within the budget of the related research proposal. In general, equipment requests on proposals submitted to EAR research programs should not exceed a total of \$50,000. Equipment requests in excess of \$50,000 usually require a separate proposal directly to the Instrumentation and Facilities Program. However, equipment requests of less than \$50,000 that are unassociated with specific research proposals may be submitted to the Instrumentation and Facilities Program. Investigators planning on submitting an EAR research proposal with a significant equipment budget are encouraged to discuss these plans with the relevant research program officer prior to submission.

[http://www.nsf.gov/pubs/2009/nsf09539/nsf09539.htm?govDel=USNSF\\_25#budg\\_cst\\_shr\\_txt](http://www.nsf.gov/pubs/2009/nsf09539/nsf09539.htm?govDel=USNSF_25#budg_cst_shr_txt)

**Due Date: June 5, 2009**

## NSF: HYDROLOGIC SCIENCES



Hydrologic Sciences focuses on the flow of water and transport processes within streams, soils, and aquifers. Particular attention is given to spatial and temporal heterogeneity of fluxes and storages of water, particles, and chemicals coupling across interfaces with the landscape, microbial communities, and coastal environments, to upscaling and downscaling given these heterogeneities and interfaces and how these processes are altered by climate and land use changes. Studies may address aqueous geochemistry as well as physical, chemical, and biological processes within water bodies. These studies commonly involve expertise from many basic sciences and mathematics, and proposals often require joint review with related programs.

Hydrologic Sciences focuses on terrestrial processes within the hydrologic cycle including evapotranspiration, precipitation, infiltration, overland and stream flow, subsurface percolation and the transport of solutes, nutrients, and particles by these fluxes. This program encourages studies probing the spatial and temporal heterogeneity of water and chemical fluxes and storages from local to global scales, coupling for simulating residence times, interfacial fluxes, pathways among system compartments; and pursuing topics in ecohydrology, geomorphology, and hydrologic impacts on microbial communities. Hydrologic Sciences also supports research in aqueous geochemistry directly connected to hydrologic processes and the physical, chemical, and biological processes taking place as water bodies change. Since the study of hydrologic processes requires expertise from many basic sciences and mathematics, Hydrologic Sciences encourages interdisciplinary proposals and provides joint review with related programs.

The Hydrologic Sciences Program is committed to supporting the most meritorious research in any relevant area, including interdisciplinary and multidisciplinary research, as well as research involving international collaboration. The Program is especially interested in proposals in emerging fields. Where appropriate, proposals may be considered for joint support with other programs in EAR or with other Divisions at the NSF. Proposals may be transferred to other programs within EAR or to other Divisions within the NSF when it is deemed appropriate by Program Officers from the respective programs or divisions. Principal Investigators are encouraged to contact the cognizant program officers regarding proposals that may cross disciplinary boundaries before submission.

[http://www.nsf.gov/pubs/2009/nsf09538/nsf09538.htm?govDel=USNSF\\_25#budg\\_cst\\_shr\\_txt](http://www.nsf.gov/pubs/2009/nsf09538/nsf09538.htm?govDel=USNSF_25#budg_cst_shr_txt)  
**Due Date: June 1, 2009**

## NSF: EMERGING TOPICS IN BIOGEOCHEMICAL CYCLES



The NSF Directorate for Geosciences and the Directorate for Biological Sciences are enhancing support for interdisciplinary research which bridges across the biological, atmospheric, geological, oceanographic and hydrological sciences, in biogeochemical cycles and processes.

We seek to support research that will advance our quantitative and/or mechanistic understanding of **biogeochemical cycles, including the water cycle**. Competitive proposals should integrate physical, geological, chemical, and/or hydrologic processes with biological processes over various temporal and/or spatial scales and/or various levels of biological organization. Proposals

should be interdisciplinary and address biogeochemical processes and dynamics within and/or across one or more of the following systems: terrestrial, aquatic, and/or atmospheric. We encourage proposals that focus on nonlinear dynamics and/or on interactions and thresholds in climate, ecological, and/or hydrological systems. Goals of this effort are to increase our understanding of how biological systems respond to changing physical and chemical conditions and how biological systems influence the physical and chemical characteristics of soils and sediments, air, or water.

These types of emerging and challenging problems require integration of concepts and observations across diverse fields. A goal of the Biological Sciences and Geosciences Directorates is to enhance such integration. Successful proposals will generate intellectual excitement in all participating disciplinary communities. Also encouraged are proposals that have broad educational, diversity, or societal impacts that capitalize on this interdisciplinary opportunity.

Proposals must bridge the biological and geosciences disciplines and be relevant to at least one program in the BIO Directorate and at least one Program in the GEO Directorate. Proposals involving programs in two different divisions in GEO are also permitted, but they must address these goals.

[http://www.nsf.gov/pubs/2009/nsf09030/nsf09030.jsp?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09030/nsf09030.jsp?govDel=USNSF_25)

**Due Date: June 15, 2009**

**HEALTH**

### NURSING RESEARCH GRANT

Each year, ANF provides funds to beginner and experienced nurse researchers to conduct studies that contribute toward the advancement of nursing science and the enhancement of patient care. Awards are given in all areas of nursing, including healthy patient outcomes, health care policy development, critical care, gerontology, women's health, community and family intervention.

The Nursing Research Review Committee is composed of doctorally prepared nurse researchers. Collateral reviewers, also doctorally prepared experienced nurse researchers, are used when the subject of some proposals fall outside the areas of expertise represented on the Committee. The Committee will review applications between May and August. Final approval of the Committee's funding recommendations will be made by the ANF Board of Trustees. After actions by the Board, all principal investigators will be notified of the disposition of their application. Applications are treated as privileged communication and are restricted to the Nursing Research Review Committee, Board of Trustees, ANF staff, collateral reviewers, and the external funding organization upon request.

<http://www.anfonline.org/MainCategory/NursingResearchGrant.aspx>

**Due Date: May 1, 2009**

## DESIGNING FOR BETTER HEALTH

Welcome to the “Designing for Better Health” collaborative competition through the Robert Wood Johnson Foundation, which aims to find innovative solutions and catalyze a community of changemakers around “nudges”—innovative little pushes—that help people make better decisions regarding their own health and the health of others.

The competition is open to all types of organizations (charitable organizations, private companies, or public entities) from all countries. We consider all entries that:

- Reflect the theme of the competition: Designing for Better Health. Entries will demonstrate innovative solutions around financial transactions for social change.
- Indicate growth beyond the stage of idea, concept, or research. At a minimum, entries should be at the demonstration stage and indicate success. While we support new ideas at every stage and encourage their entry, the judges are only able to evaluate programs that are beyond the conceptual stage, and have demonstrated a proof of impact, even at small scale.
- Are submitted in English, Spanish or Portuguese.

### **Assessment Criteria**

The winners of this Changemakers collaborative competition will be those entries that best meet the following criteria:

- **Innovation:** This is the knock-out test. The entrant must describe a systematic and/or disruptive innovation that encourages choices to promote healthy living. The innovation should be a unique model of change, demonstrating a substantial difference from other initiatives in the field and ready for large-scale expansion.
- **Social Impact:** It is important that the innovation provides a solution toward increasing financial security for everyone. The entry must demonstrate impact on the target population it addresses, either a specific underserved community or the society at large. Some innovations will have proven success at a small level, while others will have grown to engage millions of people. Regardless of the level of demonstrated impact, it is important that the innovation has a potential for application globally. This will be judged by considering the innovation's potential for scale and replication, in addition to the entrant's ability to formulate a clear “road map” to reaching larger goals.
- **Sustainability:** For an innovation to be truly effective it must have a long-term plan for securing financial backing and community support. Entries should describe not only how they are currently financing their work, but also how they plan to finance their work in the future. The most successful entrants go beyond discussing whether or not they will charge for services and describe a business plan. They should also demonstrate that they have strong partnerships and support networks to address an ongoing need, and to aid in scalability and the maintenance of a clear financial strategy.

<http://www.changemakers.net/en-us/node/14381/competition/guidelines>

**Due Date: April 1, 2009**

## NIH: CHALLENGE GRANTS IN HEALTH AND SCIENCE RESEARCH



As part of the Recovery Act, the NIH invites NIH Challenge Grant (RC1) applications from domestic institutions/organizations proposing novel research in areas that address specific knowledge gaps, scientific opportunities, new technologies, data generation, or research methods that would benefit from an influx of funds to quickly advance the area in significant ways. This program is designed to support research in scientific areas identified by the Institutes and Centers.

The mission of NIH is science in pursuit of fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to extend healthy life and reduce the burdens of illness and disability. To that end, the NIH, through the extramural grants programs of its Institutes and Centers, supports a broad range of biomedical research. Previous research has enormously increased our understanding of the molecular, cellular and behavioral bases of disease and our approaches to health care. At the same time, these advances have identified new gaps in our knowledge and have created needs for new technologies. This FOA is designed to provide investigators with the opportunity to address these unique challenges by addressing new avenues of research in defined areas where progress would produce a significant impact on biomedical or behavioral science and/or health research.

The NIH has identified a range of Challenge Areas that focus on specific knowledge gaps, scientific opportunities, new technologies, data generation, or research methods that would benefit from an influx of funds to quickly advance the area in significant ways. Within each broad Challenge Area the NIH Institutes, Centers, and Offices have specified particular Challenge Topics that address their missions. These broad Challenge Areas are provided below.

Click on the Challenge Area for the detailed description of the specific Challenge Topics within that area that have been accorded the highest priority by the NIH Institute, Center or Office indicated.

- |  |  |
|--|--|
| (01) <a href="#">Behavior, Behavioral Change, and Prevention</a> | (10) <a href="#">Information Technology for Processing Health Care Data</a>            |
| (02) <a href="#">Bioethics</a>                                   | (11) <a href="#">Regenerative Medicine</a>   |
| (03) <a href="#">Biomarker Discovery and Validation</a>          | (12) <a href="#">Science, Technology, Engineering and Mathematics Education (STEM)</a> |
| (04) <a href="#">Clinical Research</a>                           | (13) <a href="#">Smart Biomaterials – Theranostics</a>                                 |
| (05) <a href="#">Comparative Effectiveness Research (CER)</a>    | (14) <a href="#">Stem Cells</a>  |
| (06) <a href="#">Enabling Technologies</a>                       | (15) <a href="#">Translational Science</a>   |
| (07) <a href="#">Enhancing Clinical Trials</a>                   |  |
| (08) <a href="#">Genomics</a>                                    |  |
| (09) <a href="#">Health Disparities</a>                          |  |

<http://grants.nih.gov/grants/guide/rfa-files/RFA-OD-09-003.html>

**Due Date: April 27**

## **HOMELAND SECURITY**

### \$25,000 HOMELAND SECURITY AWARD

The *\$25,000 Homeland Security Award* is designed to encourage and promote "cutting edge" innovation in the homeland security area to provide incentive for continuing research.

### **ELIGIBILITY:**

1. This is a competition NOT a grant application. The Christopher Columbus Fellowship Foundation, herein known as the Foundation, is asking individuals and companies to compete with each other to develop new concepts or inventions that will bring homeland security and stability to America and Americans, whether against threats from natural or man-made disasters, terrorists or cyberspace criminals.
2. Nominations must demonstrate innovative thinking that has or will lead to creative work, process, product or other achievement in the homeland security area that has or will make a significant and beneficial impact on society. There must be substantial evidence presented as to the impact.
3. Candidates/companies must be United States citizens/companies and be permitted, by their employer or any other relevant authority, to accept a \$25,000 award bestowed by the Foundation, a Federal government agency.
4. The award may be taxable income to the recipient. All tax liabilities are the sole responsibility of the winner. All Federal, State and local laws and regulations apply.
5. The winner must attend the awards ceremony on TBA, in Washington, DC. in order to receive the award. Anyone who cannot attend the award ceremony will automatically be disqualified.
6. All Nominations are received online at: [www.ccolumbusfoundationawards.org](http://www.ccolumbusfoundationawards.org). The deadline for submissions is May 29, 2009.
7. The Foundation reserves the right to cancel or change the *Homeland Security Award* competition at any time at its full discretion.

### **Application Materials:**

- 1) If a Nomination is selected as a semifinalist, the **Nominator** will be notified and asked to provide copies of supporting materials.
- 2) All Nominations and materials submitted in connection with the *Homeland Security Award* and any reproductions made therefrom, shall be solely, exclusively and entirely the property of the Foundation and shall not be returned.
- 3) The Foundation shall have the sole and exclusive right to use, and permit others to use, the above stated Nomination and materials, including the candidate/company name, likeness, and other biographical promotions, news releases and advertising in connection with either present or future Foundation programs or similar programs or awards. All materials submitted become the property of the Foundation without any compensation to the candidate, but the Foundation does not claim ownership of the "intellectual property" submitted.

<http://www.ccolumbusfoundationawards.org/homeland/rules.cfm>

**Due Date: May 29, 2009**

**INDIVIDUALS WITH DISABILITIES**

**DHHS: ADMINISTRATION ON DEVELOPMENTAL DISABILITIES**



The purpose of the DD Act of 2000 is to assure that individuals with developmental disabilities and their families participate in the design of and have access to needed community services, individualized supports, and other forms of assistance that promote self-determination, indepen-

dence, productivity, integration and inclusion in all facets of community life, through culturally competent programs [Section 101(b)]. To achieve this purpose, the DD Act of 2000 authorizes the following programs:

1. State Councils on Developmental Disabilities (Subtitle B);
2. Protection and Advocacy Systems (Subtitle C);
2. University Centers for Excellence in Developmental Disabilities Education, Research, and Service (UCEDDs) (Subtitle D); and
3. (4) Projects of National Significance (Subtitle E).

Each of these programs engages in systemic change, capacity building, and advocacy activities both as a collaborative network and as independent entities to improve the lives of individuals with developmental disabilities and their families and enhance participation in community life in the State.

<http://www.acf.hhs.gov/grants/open/HHS-2009-ACF-ADD-DD-0084.html>

**Due Date: March 26, 2009**

**JUSTICE STUDIES**

### 2009 STATE COURT PROCESSING STATISTICS



The Bureau of Justice Statistics (BJS) is seeking proposals to administer the State Court Processing Statistics Project (SCPS) project. SCPS is a recurring data collection involving the compilation of felony cases processed in a sample of state courts in the nation's 75 most populous counties. Historically, the data collected have included current arrest charges, demographic characteristics, prior arrests and convictions, criminal justice status at arrest, type of pretrial release or detention, bail amount, court appearance record, adjudication outcome, and sentence received if convicted.

In fiscal year 2008, BJS awarded funds to redesign and re-conceptualize the SCPS project. The redesign examines the utility and feasibility of several proposed changes to the data collection instrument and the sampling framework, and will result in a number of recommendations to enhance the existing collection. The redesign work is expected to be completed by July 2009.

<HTTP://WWW.OJP.GOV/BJS/PUB/PDF/SCPS09SOL.PDF>

**Due Date: April 8, 2009**

### CRIME AND JUSTICE RESEARCH



The Crime and Justice Research solicitation an "open" solicitation for social and behavioral research and evaluation on topics relevant to State and/or local criminal and juvenile justice policy and practice. Although most crime and justice topics relevant to policymakers and practitioners are eligible for consideration, there are several priority research areas for FY 2009:

**Predicting Crime:** Where and when future crime may occur. Proposals may address predicting crime by developing new analytical methods and/or enhancing existing techniques or evaluating current techniques for accuracy. Specific questions to examine would include identifying the best

indicators of crime; determining how far into the future crime trends can be accurately predicted; evaluating whether geography matters in accurately predicting where and when crime will occur; testing whether crime prevention strategies have worked in situations where an increased level of crime is predicted; and analyzing whether regional crime trends have an impact on local crime patterns. Since many studies have shown that a large percentage of crime occurs in a very small percentage of places, these techniques or models may include spatial components within the analyses.

**Emerging Crime** such as terrorism, electronic crime, and identity theft. NIJ is interested in proposals to conduct research on extremist and terrorist groups that will inform national criminal justice policy and practice. Proposed research should aim to improve criminal justice strategies for preventing, preparing for, responding to, and mitigating terrorist incidents at the Federal, State, and local levels. Specifically, NIJ is interested in applications addressing two areas in particular. The first is an evaluation of programs in State and local criminal justice agencies that track and interdict financial support to terrorist groups, with an eye toward validating and improving these programs. NIJ is also interested in applications that examine radicalization pathways within correctional facilities in the United States that yield recruits for these groups—especially among, but not limited to, security threat groups. Applications may address either domestic or international terrorism. However, applicants must demonstrate that the research has direct, immediate, and obvious implications for criminal justice policy and practice relevant to State and local criminal justice agencies in the United States.

**Human Trafficking:** To better understand the role of State and local law enforcement in identifying, investigating, and prosecuting human trafficking cases. NIJ is particularly interested in learning about what factors promote and hinder identification, investigation, and prosecution of human trafficking at the State and local level (training, coordination with Federally-funded anti-trafficking task forces or collaboration with local NGOs). NIJ seeks proposals involving the review and comparison of case files from law enforcement agencies in states with and without anti-trafficking laws to determine how cases progressed from initiation and investigation to arrest and resolution (i.e. prosecutions, deportations or dismissals). While NIJ is interested in cases that started as human trafficking investigations and were prosecuted as such, studies should also consider cases that began as human trafficking investigations, but were not prosecuted as such, or were initiated as part of an investigation for another crime but were later found to involve human trafficking.

NIJ also needs to learn more about how State and local law enforcement are addressing labor trafficking--studies that examine trafficking in persons for labor services in settings such as domestic help, agriculture, industry, construction, retail, panhandling, etc. NIJ is also interested in research that identifies how State and local law enforcement agencies from diverse jurisdictions define labor trafficking and gauges their ability and interest in investigating labor trafficking cases, particularly in how training and the existence of State anti-trafficking laws may impact jurisdictions' ability and interest in investigating labor trafficking cases. This may include ethnographic or survey based research that offers insights into labor trafficking across the US.

<http://www.ncjrs.gov/pdffiles1/nij/sl000869.pdf>

**Due Date: April 9, 2009**

**NSF: SCIENCE OF SCIENCE AND INNOVATION**



This program supports research designed to advance the scientific basis of science and innovation policy. Research funded by the program thus develops, improves and expands models, analytical tools, data and metrics that can be applied in the science policy decision making process. For example, research proposals may develop behavioral and analytical conceptualizations, frameworks or models that have applications across a broad array of SciSIP challenges, including the relationship between broader participation and innovation or creativity. Proposals may develop methodologies to analyze science and technology data, and to convey the information to a variety of audiences. Researchers are also encouraged to create or improve science and engineering data, metrics and indicators reflecting current discovery, particularly proposals that demonstrate the viability of collecting and analyzing data on knowledge generation and innovation in organizations.

Among the many research topics supported are:

- examinations of the ways in which the contexts, structures and processes of science and engineering research are affected by policy decision;
- the evaluation of the tangible and intangible returns from investments in science and from investments in research and development;
- the study of structures and processes that facilitate the development of usable knowledge, theories of creative processes and their transformation into social and economic outcomes;
- the collection, analysis and visualization of new data describing the scientific and engineering enterprise.

The SciSIP program invites the participation of researchers from all of the social, behavioral and economic sciences as well as those working in domain-specific applications such as chemistry, biology, physics, or nanotechnology. The program welcomes proposals for individual or multi-investigator research projects, doctoral dissertation improvement awards, conferences, workshops, symposia, experimental research, data collection and dissemination, computer equipment and other instrumentation, and research experience for undergraduates. The program places a high priority on interdisciplinary research as well as international collaboration.

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=501084&govDel=USNSF\\_25](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501084&govDel=USNSF_25)

**Due Date: September 9, 2009**