## June 1, 2009 Research Funding Opportunities

Research Development & Grant Writing Resources

## OPD's monthly E-Research Newsletter

Office of Proposal Development

Research and Graduate Studies

Texas A&M University

Hotlink to SUBSCRIBE or UNSUBSCRIBE: MikeCronan@tamu.edu

## **Grant Writing Resources**

(CTRL+Click)

- Grant Writing Resources
  - ✓ New Agency Reports
  - ✓ ARRA Resources
  - ✓ Junior Faculty
  - √ Post Doctoral
  - ✓ Graduate Students
  - ✓ NSF & ARRA
  - ✓ NIH & ARRA
  - ✓ Open Solicitations
- New OPD Seminars

# Research Funding Opportunities (CTRL+Click)

Due Date by Month

<u>June</u> July

**August & Later** 

## OPD Grant Writing Articles

(CTRL+Click #)

- 1. Energy Research/Education
- 2. ARRA R&D + 3 Months
- 3. Applying for NSF REU Sites

## Archived OPD Grant Writing Articles

(October 2008 to May 2009)

**Articles By** 

Mike Cronan & Lucy Deckard

### OPD-Web (http://opd.tamu.edu/)

Funding opportunities are posted daily and clustered by week

http://opd.tamu.edu/funding-opportunities

**Subscribe to Funding Opportunities RSS Feed** 

 $\frac{http://opd.tamu.edu/fundinq-opportunities/subscribe-to-rss-feeds-for-discipline-specific-fundinq-opportunities}{opportunities}$ 

#### Subscribe to ARRA R&D RSS Feed

http://opd.tamu.edu/funding-opportunities/categories/arra-items/RSS

OPD-Web Content Manager: Lucy Deckard (L-Deckard@tamu.edu)

What's New in Federal Research Budget: R&D Budget & Policy Updates

http://www.aaas.org/spp/rd/new.htm

http://www.aaas.org/spp/rd/fy09.htm

**R&D Budget and Policy Program** 

**American Association for the Advancement of Science** 

## **Research Funding Opportunities in the Humanities**

## The Melbern G. Glasscock Center for Humanities Research Texas A&M University

http://glasscockcenter.blogspot.com/ (funding blog)
http://glasscock.tamu.edu/

**American Society for Theatre Research** 

http://www.astr.org/Default.aspx?tabid=58

The American Society for Theatre Research sponsors or coordinates several awards, grants, fellowships, and prizes to support and recognize outstanding scholarship in theatre and performance studies. Upcoming deadlines below.

Selma Jeanne Cohen Conference Presentation Award. Deadline: Jun. 15, 2009
Co-sponsored Events Awards. Deadlines: Oct. 1, 2009 (application).
David Keller Travel Grants. Deadline: Jun. 15, 2009 (application).
Thomas Marshall Graduate Student Awards. Deadline: Jun. 15, 2009 (application).

Theatre Communications Group - Grants at a Glance <a href="http://www.tcg.org/grants/ataglance.cfm">http://www.tcg.org/grants/ataglance.cfm</a>

UCLA team creates virtual library of medieval manuscripts http://manuscripts.cmrs.ucla.edu/

Subscribe to the NEA RSS Feed http://www.arts.gov:80/about/NEAFeed.html

#### **NEH Summer Stipends**

http://www.neh.gov/grants/guidelines/stipends.html

Online applications accepted through Oct. 1, 2009

Summer Stipends support individuals pursuing advanced research that is of value to scholars and general audiences in the humanities. Recipients usually produce articles, monographs, books, digital materials, archaeological site reports, translations, editions, or other scholarly tools. Summer Stipends support full-time work on a humanities project

## **New Agency Reports** (Top)

Fuels From Coal And Biomass Could Impact U.S. Oil Dependence,
But Significant Technological Investments Are Still Needed
http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12620

BASIC ENERGY SCIENCES -- Serving the Present, Shaping the Future <a href="http://www.er.doe.gov/bes/besac/BESAC\_Kung\_20NOV08.ppt">http://www.er.doe.gov/bes/besac/BESAC\_Kung\_20NOV08.ppt</a>

9,000 National Academies Reports Now Available in Open Access <a href="http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=04102009">http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=04102009</a>

Sign up for email alerts from Recovery.gov http://www.recovery.gov/

DOE provides a variety of materials via e-mail and RSS <a href="http://www.energy.gov/news2009/email\_updates.htm">http://www.energy.gov/news2009/email\_updates.htm</a> <a href="http://apps1.eere.energy.gov/news/rss/">http://apps1.eere.energy.gov/news/rss/</a>

## New ARRA Web Resources (Top)

### ARRA at Texas A&M University

By Theresa A. Maldonado, Ph.D., P.E. Executive Associate Vice President for Research VPR ARRA R&D Tracking ARRA RSS

VPR ARRA Limited Submissions & Related Addenda http://rgs.tamu.edu/arra/limited-submit-arra-solicitations.html

### **Recovery Act NIST Construction Grant Program**

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppld=47564

A Letter of Intent is required and must be received by 3 p.m. Eastern Time, Thursday, June 25, 2009.

A corresponding full proposal must be received by 3 p.m. Eastern Time, Monday, August 10, 2009.

U.S. institutions of higher education and non-profit organizations are eligible to apply for awards under this Program

Teacher Quality Partnership Grants Program; (ARRA Program) CFDA 84.405A

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47572

NOI June 26; proposal July 23 Expected Number of Awards: 35 Estimated Total Program Funding: \$143,000,000

The Department of Energy has posted Notices of Intent to issue funding for several research areas as part of the American Recovery and Reinvestment Act of 2009. To read the NOIs, link to the Department's Fossil Energy Web site at:

http://www.fossil.energy.gov:80/aboutus/budget/stimulus.html

The Office of Fossil Energy has received \$3.4 billion from the Recovery Act. Initiatives will focus on research, development and deployment of technologies to use coal more cleanly and efficiently. Investments will go toward finding and testing new ways to produce energy from coal - such as gasification - and improving techniques to clean or capture and store the emissions from coal-fired power plants. Funds include:

- o \$1.0 billion for fossil energy research and development programs;
- \$800 million for additional amounts for the Clean Coal Power Initiative Round III Funding Opportunity Announcement;

(Read the Notice of Intent to Issue) NEW!

- \$1.52 billion for a competitive solicitation for a range of industrial carbon capture and energy efficiency improvement projects, including a small allocation for innovative concepts for beneficial reuse of carbon dioxide (CO2);
  - \$50 million for a competitive solicitation for site characterization activities in geologic formations (in the context of CO2 sequestration in geologic formations);
    (Read the Notice of Intent to Issue) NEW!
    - \$20 million for geologic CO2 sequestration training and research grants; and
       (Read the Regional Sequestration Technology Training NOI) NEW!
       (Read the Geologic Sequestration Training and Research NOI) NEW!
      - o 10 million for program direction funding.

## RECOVERY ACT, ARL-PHOTOVOLTAICS

**Due June 30/ Eligibility Unrestricted** 

**DOE Raises Award Ceilings for Smart Grid Projects** 

http://apps1.eere.energy.gov/news/news\_detail.cfm/news\_id=12522

<u>DoED Secretary Duncan Urges "States to Act Now" and Submit Stimulus Fund</u>
<u>Applications</u>

The Catalogue for Federal Domestic Assistance (CFDA) has redesigned their website with new tools that address the transparency efforts of the federal government

concerning funding under the Recovery Act of 2009

<u>Quarterly Report To The President On Progress Implementing The American Recovery</u>

<u>And Reinvestment Act Of 2009</u>

Secretary Chu Announces \$2.4 billion in Funding for Carbon Capture and Storage Projects

http://www.energy.gov/news2009/7405.htm

Notice of Upcoming Funding Opportunity Announcement: Recovery Act:
Wind Energy Consortia between Institutions of Higher Learning and Industry
<a href="https://e-">https://e-</a>

center.doe.gov/doebiz.nsf/d76fbc294818822885256d98006c63b6/9785adb13740190a852575a700698474?OpenDo cument

Recovery Act: Consistent Policies Needed to Ensure Equal Consideration of Grant Applications

http://www.gao.gov/products/GAO-09-590R

**RECOVERY ACT-Advanced Research Projects Agency - Energy (ARPA-E)** 

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&opp1d=47045 https://www.fedconnect.net/FedConnect/PublicPages/PublicSearch/Public\_Opportunities.aspx

**Recovery Act and System Alleviation Notice** 

http://www.grants.gov/applicants/bulletin.jsp http://grants-gov.blogspot.com/

Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009 http://www.whitehouse.gov/omb/assets/memoranda\_fy2009/m09-10.pdf

**Recovery Act - Smart Grid Investment Grant Program** 

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=46833

This is a Notice of Intent. The formal Funding Opportunity Announcement is anticipated for release on or about June 17, 2009

**RECOVERY ACT AND GRANTS.GOV** 

http://www.grants.gov//assets/grantspringnewsletter09.pdf

Continuous Updates on ARRA Impact on Grants.gov

http://grants-gov.blogspot.com/

**OMB Memo: Improving Grants.gov** 

http://www.whitehouse.gov/omb/assets/memoranda\_fy2009/m09-17.pdf

DOE and OSTP seek Assistance from Research Universities in Staffing New Advanced Research Projects Agency - Energy (ARPA-E) <a href="http://www.research.umn.edu/documents/AAUARPA-EMemo.pdf">http://www.research.umn.edu/documents/AAUARPA-EMemo.pdf</a>

NOAA Submits Proposed Recovery Plan to Congress to Help Create Jobs, Improve Coastal Communities and Protect Habitat

http://www.noaanews.noaa.gov/stories2009/20090407\_recovery.html

**Agency Recovery Sites** 

http://www.recovery.gov/?q=content/agencies

Grant Writing Resources (Top)

### The Math and Science Partnership Network

http://hub.mspnet.org/index.cfm/home

MSPnet is an electronic learning community for the Math and Science Partnership Program funded by the National Science Foundation.

#### **Integrated Postsecondary Education Data System**

http://nces.ed.gov/ipeds/news\_room/ana\_4\_6\_2009.asp

## QuickStats Data Tool Released National Center for Education Statistics

http://nces.ed.gov/datalab/quickstats/

IES Research and Research Training Grant Programs: Important Dates http://ies.ed.gov/funding/futureComp.asp

#### What Works Clearinghouse: Practice Guides

http://ies.ed.gov/ncee/wwc/publications/practiceguides/#rti\_math\_pg

Practice guides provide practical recommendations for educators to help them address the everyday challenges they face in their classrooms and schools. Developed by a panel of nationally recognized experts, practice guides consist of actionable recommendations, strategies for overcoming potential roadblocks, and an indication of the strength of evidence supporting each recommendation. IES practice guides are subjected to rigorous external peer review.

#### Faculty Panel Discussion: How to Compete for Funding at NSF

http://opd.tamu.edu/seminar-materials/seminar-materials-by-date/february-25-2009-nsf-panel-seminar/february-25-2009-faculty-panel-discussion-how-to-compete-for-funding-at-nsf

## How to Find and Win Funding: Strategies for Faculty at Predominantly Undergraduate Institutions

<u>http://opd.tamu.edu/seminar-materials/seminar-materials-by-date/march-6-2009-angelo-state-university-seminar/march-6-2009-how-to-find-and-win-funding-strategies-for-faculty-at-predominantly-undergraduate-institutions</u>

Many of DARPA's solicitations encourage the submission of a white paper or abstract. What to include in a white paper? Review solicitation instructions or try these websites (STO, IPTO, MTO, DSO, and TTO)

Proposal Writing Guide
Written by Janet S. Rasey, Ph.D.
Research Funding Service University of Washington
http://www.washington.edu/research/osp/writing.html

Writing Grants to Foundations and Non-Profits
Proposal Writing Short Course by The Foundation Center
<a href="http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html">http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html</a>

### **Useful Web sites on hypothesis**

http://www.k-

state.edu/career/2009/Useful%20Web%20sites%20on%20hypothesis.htm

## Junior Faculty Resources (Top)

2009 NSF Sponsored CAREER Proposal Writing Workshop
March 12 and 13, 2009, George Mason University, Arlington, VA
<a href="http://www.k-state.edu/career/2009/09\_Retrospect.htm">http://www.k-state.edu/career/2009/09\_Retrospect.htm</a>

#### Presentation by Dr. George Hazelrigg

http://www.k-state.edu/career/2009/09documnets/2%20George.ppt

**Conflict of Interest briefing by Dr. George Hazelrigg** 

http://www.k-state.edu/career/2009/09documnets/3%20COI%20Briefing.ppt

**Presentation by Dr. Brigid Mullany** 

http://www.k-state.edu/career/2009/09documnets/5%20Brid.pptx

Presentation by Dr. Ilona Kretzschmar

http://www.k-state.edu/career/2009/09documnets/4%20Ilona.ppt

#### February 3, 2009 NSF CAREER Workshop offered via TTVN

http://opd.tamu.edu/seminar-materials/seminar-materials-by-date/february-3-2009-ttvn-career-workshop-offered-via-ttvn

#### **NSF CAREER Seminar**

http://opd.tamu.edu/seminar-materials/seminar-materials-by-date/nov.-19-2008-nsf-career-seminar

#### **Presentations**

The NSF CAREER Program - overview (Lucy Deckard)

Writing an NSF CAREER Proposal - Step-by-Step (Laurie Garton)

The Education Component (Jeff Froyd)

Overview, Programs for Junior Faculty by OPD

http://opd.tamu.edu/the-craft-of-writing-workbook/toolkit-for-programs-for-junior-faculty

### **NIH New and Early Stage Investigators**

http://grants.nih.gov/grants/new\_investigators/index.htm

## Resources for Post Docs (Top)

CGS Releases Report on Broadening Participation in Graduate Education <a href="http://www.cgsnet.org/portals/0/pdf/GR">http://www.cgsnet.org/portals/0/pdf/GR</a> Broadening excerpt.pdf

## Postdoctoral Program in Environmental Chemistry Camille and Henry Dreyfus Foundation

http://www.dreyfus.org/awards/postdoctoral\_program.shtml

Due August 13. The Camille and Henry Dreyfus Foundation seeks to further the development of scientific leadership in the field of environmental chemistry with a postdoctoral fellowship program. The Postdoctoral Program in Environmental Chemistry provides an award to a principal investigator of \$120,000 over two years to appoint a Postdoctoral Fellow in environmental chemistry.

## National Academies Issues Revised Guide to Responsible Conduct in Research <a href="http://www.nap.edu/catalog.php?record\_id=12192">http://www.nap.edu/catalog.php?record\_id=12192</a>

The National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine have released the third edition of On Being a Scientist: A Guide to Responsible Conduct in Research. The book is available free online, or may be purchased as a PDF download or in paperback. On Being a Scientist was designed to supplement the informal lessons in ethics provided by research supervisors and mentors. The book describes the ethical foundations of scientific practices and some of the personal and professional issues that researchers encounter in their work. It applies to all forms of research--whether in academic, industrial,

or governmental settings-and to all scientific disciplines. On Being a Scientist is aimed primarily at graduate students and beginning researchers, but its lessons apply to all scientists at all stages of their scientific careers.

#### Science Careers Basics Booklet

http://sciencecareers.sciencemag.org:80/careerbasicspdf

http://sciencecareers.sciencemag.org/pdf/career\_basics\_2009/career\_basics\_book.pdf

Struggling with your next career step? Science Careers' editorial team brings you "Career Basics: Advice and Resources for Scientists." The booklet provides advice and help on preparing CVs and resumes, writing grants and scientific papers, networking, and much more. Read each article in the booklet online, or download each chapter or the entire booklet as a PDF. All for free. It is one more tool Science Careers provides to help you jump-start your career, be it in academia or outside the ivory tower!

**Resources for Addressing NSF's Postdoctoral Mentoring Requirement** 

http://opd.tamu.edu/proposal-resources/resources-for-postdoc-

requirement/resources-for-addressing-nsfs-postdoctoral-mentoring-requirement

On Being a Scientist: Third Edition

http://www.nap.edu/catalog.php?record\_id=12192&utm\_source=feeds&utm\_medium = rss&utm\_campaign=new\_from\_nap\_rss

Authors: Committee on Science, Engineering, and Public Policy, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine

#### **Guide to Ethical Conduct in Research Released**

http://www.nationalacademies.org/morenews/20090327.html

March 27, 2009 -- A new edition of On Being a Scientist: A Guide to Responsible Conduct in Research offers researchers -- particularly early-career scientists and their mentors -- guidance on how to conduct research responsibly and avoid misconduct such as fabrication and plagiarism. The guide, issued by the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, includes new case studies and has been updated to reflect the emergence of electronic publishing and globalization of research.

#### National Postdoctoral Association

http://www.nationalpostdoc.org/site/c.eoJMIWOBIrH/b.1388059/k.DBBE/NPA\_Home.

#### **Minority Postdoc**

http://www.minoritypostdoc.org/

**URL Links to Post Doc Resources** 

http://web.mit.edu/career/www/infostats/respostdoc.html

#### **NIH Academic and PostDoc Opportunities**

http://www.training.nih.gov/careers/careercenter/academ.html http://www.training.nih.gov/careers/careercenter/advice.html#acad

## Resources for Graduate Students (Top)

How to Find and Compete for Graduate Fellowships <a href="http://opd.tamu.edu/seminar-materials/seminar-materials-by-date">http://opd.tamu.edu/seminar-materials/seminar-materials-by-date</a>

Congressional Hispanic Caucus Institute Fellowships

http://apply.chci.org/applications/

Various due dates upcoming

2008-2009 Graduate Student Funding Opportunities Guide http://www.tc.columbia.edu/administration/osp/

Office of Sponsored Programs, Teachers College, Columbia University

External Funding and Grants for Humanities Graduate Students
<a href="http://humanities.osu.edu:80/studentinfo/grads/gradexternalfunding.cfm">http://humanities.osu.edu:80/studentinfo/grads/gradexternalfunding.cfm</a>
The Ohio State University College of Humanities

**Proposal Writing: The Art Of Persuasion** 

http://www.holycross.edu:80/departments/gradstudies/website/proposewrite.htm
Holy Cross Office of Distinguished Fellowships and Graduate Studies

Cornell University Graduate School Fellowship Database <a href="http://www.gradschool.cornell.edu:80/?p=132">http://www.gradschool.cornell.edu:80/?p=132</a>

## National Science Foundation (Top)

NSF American Recovery and Reinvestment Act of 2009 Terms and Conditions <a href="http://www.nsf.gov/pubs/policydocs/arra/arratc\_509.pdf?govDel=USNSF\_109">http://www.nsf.gov/pubs/policydocs/arra/arratc\_509.pdf?govDel=USNSF\_109</a>

Major Research Instrumentation Program (MRI-R<sup>2</sup>)
<a href="http://www.nsf.gov/pubs/2009/nsf09561/nsf09561.htm?govDel=USNSF-25">http://www.nsf.gov/pubs/2009/nsf09561/nsf09561.htm?govDel=USNSF-25</a>
<a href="Due August 10">Due August 10</a>

Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R<sup>2</sup>)
<a href="http://www.nsf.gov/pubs/2009/nsf09562/nsf09562.htm?govDel=USNSF\_25">http://www.nsf.gov/pubs/2009/nsf09562/nsf09562.htm?govDel=USNSF\_25</a>
<a href="LOI July 1">LOI July 1</a>; full August 24

NSF Academic Research Infrastructure Program FAQs

<a href="http://www.nsf.gov/dir/index.jsp?org=OIA">http://www.nsf.gov/dir/index.jsp?org=OIA</a>

NSF Academic Research Infrastructure Program Upcoming Webcast

http://www.nsf.gov/od/oia/programs/ari/

NSF 09-35, Directorate for Mathematical and Physical Sciences (MPS) Brochure – 2009 http://www.nsf.gov/pubs/2009/nsf0935/index.jsp?govDel=USNSF\_25

NSF Regional Grants Conference hosted by Arizona State University - March 30-31, 2009 <a href="http://www.nsf.gov/bfa/dias/policy/outreach.jsp">http://www.nsf.gov/bfa/dias/policy/outreach.jsp</a>

2009 NSF CAREER Proposal Writing Workshop <a href="http://www.k-state.edu/career/2009/09\_Retrospect.htm">http://www.k-state.edu/career/2009/09\_Retrospect.htm</a>

NSF 09-29 April 2009 GPG - Table of Contents

http://www.nsf.gov/pubs/policydocs/pappquide/nsf09\_29/qpq\_index.jsp

National Science Board Recommends Comprehensive, Coordinated Federal Strategy to Transform U.S. Energy Economy

http://www.nsf.gov/news/news\_summ.jsp?cntn\_id=114501&org=NSF&from=news

Notice Regarding Competitive Revisions Using Recovery Act Funds for Applications Still Requiring Paper Submission

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-083.html

NSF Announces Partnership with Bill & Melinda Gates Foundation to Foster Sustainable

#### **Agricultural Solutions around the World**

http://www.nsf.gov:80/news/news\_summ.jsp?cntn\_id=114493&govDel=USNSF\_51

DCL: Graduate Research Supplements (GRS) to Current ENG Awards to Broaden Participation

http://www.nsf.gov/pubs/2009/nsf09045/nsf09045.jsp?govDel=USNSF\_25

DCL: Basic Research to Enable Agricultural Development (BREAD)

http://www.nsf.gov/pubs/2008/nsf08070/nsf08070.jsp?govDel=USNSF\_25

Antarctic marine biodiversity data now online

http://www.scarmarbin.be/

NSF American Recovery and Reinvestment Act (Recovery Act)

Frequently Asked Questions

http://www.nsf.gov/pubs/2009/nsf09038/nsf09038.jsp?govDel=USNSF\_25

## NSF describes how it intends to implement the American Recovery and Reinvestment Act, March 27

http://www.nsf.gov:80/news/news\_summ.jsp?cntn\_id=114483&govDel=USNSF\_51

NSF Important Notice To Presidents Of Universities And Colleges
American Recovery and Reinvestment Act of 2009

http://www.nsf.gov/pubs/issuances/in131.pdf

#### Other Types of NSF Proposals

Small Grants for Exploratory Research (SGER) Proposals

http://www.nsf.gov/pubs/gpg/nsf04\_23/2.jsp#IID1

**Proposals for Equipment** 

http://www.nsf.gov/pubs/gpg/nsf04 23/2.jsp#IID4

Proposals for Conferences, Symposia and Workshops

http://www.nsf.gov/pubs/gpg/nsf04\_23/2.jsp#IID7

**Facilitation Awards for Scientists and Engineers with Disabilities** 

http://www.nsf.gov/pubs/gpg/nsf04 23/2.jsp#IID2

#### **Learn How NSF Reviews Your Proposal**

http://www.nsf.gov/bfa/dias/policy/meritreview/

#### Mentoring Requirement for Postdoctoral Research Fellows

### http://www.nsf.gov/pubs/policydocs/pappquide/nsf09\_1/qpg\_sigchanges.jsp

Chapter II – Section C.2d(i), Project Description, has had entirely new guidance added regarding mentoring activities. This was done to address the mentoring requirement of the America COMPETES Act. Each proposal that requests funding to support postdoctoral researchers must include, as a separate section within the 15-page project description, a description of the mentoring activities that will be provided for such individuals. Examples of such activities are provided and the mentoring plan will be evaluated during the merit review process, under the Broader Impacts criterion. Proposals that do not include a separate section on mentoring activities within the Project Description will be returned without review.

## NSF RSS Feeds and Podcasts

http://www.nsf.gov:80/rss/

NSF Grant Proposal Guide, Effective date: January 5, 2009

http://www.nsf.gov/pubs/policydocs/pappquide/nsf09\_1/qpq\_index.jsp

#### **Summary of Significant Changes:**

http://www.nsf.gov/pubs/policydocs/pappquide/nsf09 1/gpg sigchanges.jspThe NSF Grant Proposal Guide (GPG) (now part of a larger document, the Proposal and Award Policies and Procedures Guide) provides the basic policies for both solicited and unsolicited proposals.

#### **Best Practices for IGERT Sustainability**

http://depts.washington.edu/cirgeweb/c/wp-

content/uploads/2008/08/best practices for igert sustainability fin4.pdf

Tami Blumenfield, Renate Sadrozinski & Maresi Nerad, U. Washington

### National Institutes of Health (Top)

NIH ARRA Updated Frequently Asked Questions <a href="http://grants.nih.gov/recovery/fags\_recovery.html">http://grants.nih.gov/recovery/fags\_recovery.html</a>

Biomedical Research: Stimulus Funding Elicits a Tidal Wave of 'Challenge Grants' <a href="http://www.sciencemag.org/cgi/content/full/324/5929/867-a">http://www.sciencemag.org/cgi/content/full/324/5929/867-a</a> (Subscription Reg'd)

La Jolla Institute announces 2.0 launch of major database to aid vaccine development worldwide

Database to assist researchers around the globe in combating infectious disease <a href="http://www.eurekalert.org/pub\_releases/2009-05/ljif-lji050409.php">http://www.eurekalert.org/pub\_releases/2009-05/ljif-lji050409.php</a>

Enhancing Personnel Reliability among Individuals with Access to Select Agents <a href="http://oba.od.nih.gov/biosecurity/meetings/200904-27NSABB%20Draft%20Report%20on%20PR%204-22-09.pdf">http://oba.od.nih.gov/biosecurity/meetings/200904-27NSABB%20Draft%20Report%20on%20PR%204-22-09.pdf</a>

#### **NIH Research Means Hope**

http://www.researchmeanshope.org:80/research\_funding.html

NIAID Announces New Policy for Solicited Collaborative Research Partnerships <a href="http://grants.nih.gov/grants/guide/notice-files/NOT-AI-09-032.html">http://grants.nih.gov/grants/guide/notice-files/NOT-AI-09-032.html</a>

Peer Review and the Challenge Grants

http://nexus.od.nih.gov/nexus/nexus.aspx?ID=234&Month=04&Year=2009

Recovery Act Notice: NIH ARRA Funding Considerations for Applications with Meritorious Scores that Fall Beyond the Pay-line

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-078.html

Recovery Act of 2009: NIH Award Terms and Additional Information for Recipients
Receiving Recovery Act Grant Funding

http://grants.nih.gov:80/grants/guide/notice-files/NOT-OD-09-080.html

Frequently Asked Questions - NIH Challenge Grants - Recovery Act <a href="http://grants.nih.gov/recovery/faqs\_recovery.html">http://grants.nih.gov/recovery/faqs\_recovery.html</a>

Testimony: NIH Acting Director on the Implementation of ARRA <a href="http://appropriations.house.gov/Witness\_testimony/LHHS/Raynard\_Kington\_03\_26\_0">http://appropriations.house.gov/Witness\_testimony/LHHS/Raynard\_Kington\_03\_26\_0</a>
9.pdf

**Assessing the Impact of Research** 

http://becker.wustl.edu/impact/assessment/index.html

## **NIH Recovery Act Solicitations**

Recovery Act Limited Competition: NCMHD Dissertation Research Award to Increase Diversity (R36)

http://grants.nih.gov/grants/guide/rfa-files/RFA-MD-09-008.html
Optional Letters of Intent Receipt Date(s): May 29, 2009
Application Due Date(s): June 30, 2009

Recovery Act Limited Competition: NCMHD Exploratory Centers of Excellence (P20)

<a href="http://qrants.nih.gov/qrants/quide/rfa-files/RFA-MD-09-007.html">http://qrants.nih.gov/qrants/quide/rfa-files/RFA-MD-09-007.html</a>

Optional Letters of Intent Receipt Date: June 1, 2009

Application Receipt Date: July 1, 2009

Recovery Act Limited Competition: NCMHD Community Participation in Health Disparities Intervention Research Planning Phase (R24)

http://grants.nih.gov/grants/guide/rfa-files/RFA-MD-09-006.html
Optional Letters of Intent Receipt Date: May 29, 2009
Application Receipt Date: June 30, 2009

Recovery Act 2009 Limited Competition: Enabling National Networking of Scientists and Resource Discovery (U24)

http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-09-009.html

Letters of Intent Receipt Date: May 18, 2009

Application Receipt Date: June 15, 2009

Recovery Act Limited Competition: Academic Research Enhancement Award (R15)

<a href="http://grants.nih.gov/grants/quide/rfa-files/RFA-OD-09-007.html">http://grants.nih.gov/grants/quide/rfa-files/RFA-OD-09-007.html</a>

Application Due Date(s): September 24, 2009

NCRR Competitive Revision Application Information Now Available
<a href="http://www.ncrr.nih.gov/recovery/revisions/details">http://www.ncrr.nih.gov/recovery/revisions/details</a>
Application Due Date: July 10, 2009

NIH Announces the Availability of Recovery Act Funds for Administrative Supplements Providing Summer Research Experiences for Students and Science Educators <a href="http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-060.html">http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-060.html</a>

Release Date: March 18, 2009

Receipt Date: OPEN (See Institute/Center Web sites for specific deadlines)

NIH Announces the Availability of Recovery Act Funds for Administrative Supplements <a href="http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-056.html">http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-056.html</a>
Release Date: March 18, 2009; Open response

Recovery Act Limited Competition: Core Facility Renovation, Repair, and Improvement (G20)

http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-09-007.html
Application Receipt Date: September 17

Recovery Act Limited Competition: Extramural Research Facilities Improvement Program (C06)

http://grants.nih.gov/grants/quide/rfa-files/RFA-RR-09-008.html
Application Receipt Dates: June 17, July 17

Extramural Research Facilities Improvement Program (C06) Questions and Answers <a href="http://www.ncrr.nih.gov:80/the\_american\_recovery\_and\_reinvestment\_act/C06\_Q&A.asp">http://www.ncrr.nih.gov:80/the\_american\_recovery\_and\_reinvestment\_act/C06\_Q&A.asp</a>

Core Facility Renovation, Repair and Improvement (G20) Questions and Answers <a href="http://www.ncrr.nih.gov/the\_american\_recovery\_and\_reinvestment\_act/G20\_Q&A.as">http://www.ncrr.nih.gov/the\_american\_recovery\_and\_reinvestment\_act/G20\_Q&A.as</a>

Recovery Act of 2009: NIH Review Criteria, Scoring System, and Suspension of Appeals Process

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-054.html

Clinical Research Study Investigator's Toolbox

http://www.nia.nih.gov/ResearchInformation/CTtoolbox/
Health Disparities Toolbox

http://www.nia.nih.gov/ResearchInformation/HDToolbox.htm

## Open Solicitations (Top)

#### **DARPA Intelligence**

 $\frac{https://www.fbo.gov:443/index?s=opportunity\&mode=form\&id=4539dc1cc3aa10b46cbf655811648137\&tab=core\&\_cview=0\&cck=1\&au=\&ck\_$ 

**Centers in Integrated Photonics Engineering Research (CIPhER)** 

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47041

Posted Date: Apr 27, 2009

Closing Date for Applications: Apr 27, 2010

DARPA is soliciting innovative proposals for university research centers in the area of integrated photonics engineering. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice. All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal abstract or full proposal to this RA, should be directed to one of the administrative addresses below; <a href="mailto:DARPA-RA-09-35@darpa.mil">DARPA-RA-09-35@darpa.mil</a> or <a href="mailto:www.darpa.mil/mto/">www.darpa.mil/mto/</a> to retrieve the RA.

### **Grand Challenges in Global Health**

http://www.grandchallenges.org/Explorations/Pages/Introduction.aspx

The grant program is open to anyone from any discipline, from student to tenured professor, and from any organization – colleges and universities, government laboratories, research institutions, non-profit organizations and for-profit companies.

**U.S. Department of State Open Solicitations** 

http://exchanges.state.gov/grants/open2.html

**CDC Grant Funding Opportunity Announcements (FOAs)** 

http://www.cdc.gov/od/pgo/funding/FOAS.htm

#### Strategic Technology Office (STO) Broad Agency Announcement (BAA)

https://www.fbo.gov/index?tab=documents&tabmode=form&subtab=core&tabid=208 12289c8800e7aaf6bf83447643790

#### Open March 11, 2009 to March 10, 2010

The Defense Advanced Research Projects Agency's (DARPA) Strategic Technology Office (STO) is soliciting proposals under this Broad Agency Announcement (BAA) for the performance of research, development, design, and testing that directly supports Strategic Technology Office (STO). This includes Space and Near-Space Sensors and Systems; Strategic and Tactical Networks; Information Assurance; Counter Underground Facilities; Weapons of Mass Destruction (WMD) Defense; Small Unit Operations; Maritime Operations; and Core Strategic Technologies. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems.

## Funding Opportunities - National Center for Research Resources <a href="http://www.ncrr.nih.gov:80/research\_funding\_opportunities/">http://www.ncrr.nih.gov:80/research\_funding\_opportunities/</a>

#### Space-Based Advanced Sensing -- 5 year BAA

http://www07.grants.gov/search/search.do;jsessionid=0KvyJlfb7ps6qtJn2dF3Lc22MJ5 J1hyTNyJq2vJcLbH8vbb02ftf!2022393237?opp1d=45100&flag2006=false&mode=VIEW Open to May 12, 2012

This is a 5-year, opened-ended Broad Agency Announcement (BAA) to solicit research proposals for the United States Air Force Research Laboratory's (AFRL) Space-Based Advanced Sensing and Protection Branch, which is looking to conduct research and development of space payload technologies including phenomenology, advanced focal plane components and arrays, cryogenic systems, passive and active surveillance, and protection capabilities for contemporary and future space systems. Multiple awards of contracts and/or assistance instruments of various values are anticipated with a period of performance ranging from 6 to 60 months. Periodically over the 5-year period, proposal call announcements (CALLS) may be issued in the FedBizOps/EPS and GRANTS.GOV/FIND to request proposals for specific research efforts under technical topic areas. These subsequent CALLS will contain specific descriptions of the research effort to be addressed, anticipated period of performance, information peculiar to the specific research technical topic area, and the expected dollar range for proposals received under the CALL.

### Microsystems Technology Office-Wide Broad Agency Announcement

 $\frac{http://www07.grants.gov/search/search.do;jsessionid=qYyRJbvSslyIVtvGxpXzGWKQY72S8SWnzdMSX2}{NqHwSGMDtyfXSB!448014197?opp1d=45351&flaq2006=false\&mode=VIEW}$ 

#### Open to Feb. 17, 2010

The Microsystems Technology Office's (MTO) mission is to exploit breakthroughs in materials, devices, circuits, and mathematics to develop beyond leading edge Microsystems components with revolutionary performance and functionality to enable new platform capability for the Department of Defense. To execute this mission, MTO supports revolutionary research in electronics, photonics, MEMS, algorithms, and combined Microsystems technology to deliver new capabilities to sense, communicate, energize, actuate, and process data and information for the war fighter. MTO regularly publishes Broad Agency Announcements requesting responses to specific program topics.

#### Understanding the Role of Nonchemical Stressors and Developing Analytic Methods for Cumulative Risk Assessments

http://es.epa.gov:80/ncer/rfa/2009/2009\_star\_cumulative\_risk.html

#### Open Feb. 13; close June 17

The U.S. Environmental Protection Agency, as part of its Science to Achieve Results (STAR) 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. This RFA is focusing on two challenges that exist in conducting cumulative risk assessments: (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.

Measurement Science and Engineering (MSE) Research Grants Programs

http://www07.grants.gov/search/search.do;jsessionid=Zw6hJf7KQXpzrZh1Nh96JQCf25fq9LFBZ8SVJDdjt2pSrmxTq10t!448014197?oppId=45413&flaq2006=false&mode=VIEW

Posted Feb. 20; continuous

**Department of Energy Solicitations by Date** 

https://e-center.doe.gov:443/iips/faopor.nsf/Solicitation+By+Date?OpenView

Department of Energy Office of Science Grants and Contracts Web

http://www.sc.doe.gov/grants/grants.html

**USAF Directed Energy Materials Program** 

https://www.fbo.gov/index?s=opportunity&mode=form&id=e3c1bd55cc417de2b0113

7a3c94cfae7&tab=core&\_cview=0

Opened January 26, 2009

The Air Force is in pursuit of materials technology advances for directed energy systems for high energy laser systems, high power microwave systems and midinfrared laser source and laser development.

**Defense Sciences Office Current Solicitations** 

http://www.darpa.mil/dso/solicitations/solicit.htm

#### **NSPIRES**

http://nspires.nasaprs.com:80/external/solicitations/solicitations.do?method=open&st ack=push

Office of Naval Research Currently Active BAAs

http://www.onr.navy.mil/02/baa/

Office of Naval Research ONR Overview of Budget/Funding

http://www.ncura.edu/content/educational\_programs/sites/50/handouts/docs/T10\_1 130AM\_G3.PPT

**Army Research Office ARO Budget/Funding Update** 

http://www.ncura.edu/content/educational\_programs/sites/50/handouts/docs/T10\_1 130AM\_G2.PPT

Air Force Office of Scientific Research (AFOSR) Update

http://www.ncura.edu/content/educational\_programs/sites/50/handouts/docs/T10\_1
130AM\_G1.PPT

**DARPA Zeno-based Opto-Electronics (ZOE)** 

http://www.darpa.mil/dso/solicitations/solicit.htm

Open to Dec. 10, 2009

**Defense Sciences Office within DARPA, Current Solicitations** 

http://www.darpa.mil/dso/solicitations/solicit.htm

## Harnessing Infrastructure for Building Reconnaissance (HIBR) http://www.darpa.mil/STO/solicitations/BAA09-08/index.html

DARPA is developing broad and diverse technologies necessary for external sensing deep inside buildings with the objective of providing a suite of sensing technologies for situational awareness both above- and belowground suitable across a broad range of building environments. The component technologies must support all external ISR concepts of operations ranging from pre-mission planning through detailed assessment of targeted structures, and live updates during mission execution. The intent of this solicitation, DARPA-BAA-09-08, Harnessing Infrastructure for Building Reconnaissance, is to investigate individual technological approaches that leverage building infrastructure to opportunistically collect information for interior awareness. DARPA believes that opportunistic sensing may be exploited to infer urban interior building awareness using exterior observations. **Open to 10/9/2009.** 

#### DARPA Mathematical Challenges Open to 9/25/09

http://www.darpa.mil/dso/solicitations/baa08-65.html

## FY2008-2010 Basic Research for Combating Weapons of Mass Destruction Broad Agency Announcement" (HDTRA 1-08-10-BRCWMD-BAA)

#### http://www.dtra.mil:80/baa/index.cfm

http://www.dtra.mil/documents/newsservices/news-releases/pdf/080906 NewsRelease Grants Final.pdf NOTE Young Investigator Awards: Proposals that focus on exploratory aspects of a unique problem, a high risk approach, or innovative research in subjects with potential for high impact to C-WMD science from non-tenured faculty who received a Ph.D. or equivalent degree on or after 1 October 2003. Young Investigator Awards will average \$100K a year with a POP of up to two (2) years.

### Long Range Broad Agency Announcement (BAA 09-001) for Navy and Marine Corp Science and Technology

#### http://www.onr.navy.mil/02/baa/

This BAA is an announcement to declare ONR's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines. Work funded under this BAA may include basic research, applied research and some advanced technology development. Open to 9/30/09.

## Office of Naval Research Currently Active BAAs

http://www.onr.navy.mil/02/baa/

## ONR's Education/University Research Initiative Programs

http://www.onr.navy.mil/education/default.asp

## United States Army Medical Research and Material Command's Broad Agency Announcement (BAA) 08-1 (Open to 9/30/09)

 $\frac{\text{https://www.fbo.qov/index?s=opportunity\&mode=form\&id=8a632d0224aebc9e04aa1181c8351a3b\&ta}{b=core\&\_cview=0}$ 

#### **Army Research Office Broad Agency Announcement**

http://www.arl.army.mil/www/DownloadedInternetPages/CurrentPages/DoingBusinesswithARL/resear ch/07r0003-02.pdf

ARO solicits proposals for basic and applied scientific research in mechanical sciences, environmental sciences, mathematical and computer sciences, electronics, computational and information sciences, physics, chemistry, life sciences, and materials science. Open FY 2007 - FY 2011

#### **DOD CDMRP Research Funding for 2009**

#### http://cdmrp.army.mil/pubs/press/2008/08fundingann.htm

Research topics under the FY09 Peer Reviewed Medical Research Programs are restricted to: Alcoholism, Autoimmune Diseases, Blood Cancer, Childhood Asthma, Drug Abuse, Epilepsy, Kidney Cancer, Listeria Vaccine for infectious disease and cancer, Lupus, Mesothelioma, Molecular Signatures in Tumors,

Neuroblastoma, Osteoporosis and related bone disease, Paget's Disease, Pediatric Cancer, Polycystic Kidney Disease, Social Work Research, Tinnitus, West Nile Virus Vaccine. Program Announcements are anticipated to be released this fall in 2008 and early in 2009 with detailed descriptions of funding mechanisms, evaluation criteria, submission requirements, and deadlines.

## Upcoming EPA 2009 Environmental Research Grant Announcements <a href="http://es.epa.gov/ncer/rfa/">http://es.epa.gov/ncer/rfa/</a>

Center for Disease Control and Prevention
Upcoming Grant Funding Opportunity Announcements
<a href="http://www.cdc.gov/od/pgo/funding/FOAs.htm">http://www.cdc.gov/od/pgo/funding/FOAs.htm</a>

## Department of Defense Neurofibromatosis Research Program Funding Opportunities for Fiscal Year 2009

#### http://cdmrp.army.mil/pubs/press/2008/09nfrppreann.htm

The Fiscal Year 2009 (FY09) Defense Appropriations Act provides \$10 million to the Department of Defense Neurofibromatosis Research Program (NFRP) to find and fund the best research to eradicate the clinical impact of neurofibromatosis (NF) and Schwannomatosis. This program is administered by the US Army Medical Research and Materiel Command through the Office of the Congressionally Directed Medical Research Programs (CDMRP).

June ( <u>Top</u> )	
RECOVERY ACT-Advanced Research Projects Agency - Energy (ARPA-E)  http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppld=47045 https://www.fedconnect.net/FedConnect/PublicPages/PublicSearch/Public Opportunities.aspx Advanced Research Projects Agency ¿Energy (ARPA-E). ARPA-E is a new organization within the Department of Energy (DOE), created specifically to foster research and development (R D) of transformational energy-related technologies. Transformational technologies are by definition technologies that disrupt the status quo. They are not merely better than current technologies, they are significantly better. This FOA supports the Nation apos;s need for transformational energy-related technologies to overcome the threats posed by climate change and energy security, arising from its reliance on traditional uses of fossil fuels and the dominant use of oil in transportation.	June 2
PREPARE (Pandemic Preparedness)  http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47189  USAID is launching a coordinated and comprehensive program designed to minimize the impact of specific newly emergent diseases of animal origin, which pose a significant threat to human health and development. This program must be managed by the USAID Avian and Pandemic Influenza Unit. USAID will work closely with international, host governments, USG, and private sector entities to coordinate activities and ensure that USAID's involvement is consistent with that of the global health community.	June 4
Special Grant Program in Chemical Sciences, Camille and Henry Dreyfus Foundation <a href="http://www.dreyfus.org/awards/special_grant_program_chemical.shtml">http://www.dreyfus.org/awards/special_grant_program_chemical.shtml</a> The Special Grant Program in the Chemical Sciences supports innovative projects in any area consistent with the Foundation's broad objective to advance the chemical sciences.	LOI June 4 ; full Nov. 12
Rockefeller Philanthropy Advisors - Gulf Coast Fund for Community Renewal and Ecological Health Request for Proposals <a href="http://rockpa.org/special_programs/gulf-coast-fund/rfp/">http://rockpa.org/special_programs/gulf-coast-fund/rfp/</a> The Rockefeller Philanthropy Advisors has issued a Request for Proposals for the Gulf Coast Fund	June 4

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

for Community Renewal and Ecological Health. The Gulf Coast Fund for Community Renewal and Ecological Health is a collaborative grant making fund supporting community, state and regional efforts that engage, empower and benefit displaced and returning residents, and that promote the sustainable and just rebuilding of neighborhoods, cities and ecosystems throughout the Gulf Coast. The Fund supports projects that strengthen and amplify local organizing, social justice concerns and movement-building, and that address the underlying causes that contributed to the severity of the disasters in the Gulf Coast.	
Joint Mathematics/Computer Science Institute  https://e-center.doe.gov/lips/faopor.nsf/UNID/A0FBFC22386E266B852575AE005586BC?OpenDocument http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47221  The Office of Advanced Scientific Computing Research (ASCR) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby invites applications for research under a unified management structure to address key challenges where collaborative research in applied mathematics and computer science efforts are required to bridge the gap between large complex scientific applications software and next-generation hardware.	June 5
Petrology and Geochemistry <a href="http://www.nsf.gov/pubs/2009/nsf09543/nsf09543.htm?govDel=USNSF_25">http://www.nsf.gov/pubs/2009/nsf09543/nsf09543.htm?govDel=USNSF_25</a> The Petrology and Geochemistry Program supports basic research that address the formation and evolution of our planet using petrological and geochemical characteristics of Earth materials in the crust, mantle, and core. Proposals in this program generally address the petrology and high-temperature geochemistry of igneous and metamorphic rocks (including mantle samples), mineral physics, economic geology, and volcanology. Proposals that bridge disciplinary boundaries or that include development of analytical tools for potential use by the broad community are also encouraged.	Window June 6 to July 6
Maximally scalable Optical Sensor Array Imaging with Computation (MOSAIC)  http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppld=46958  DARPA's MOSAIC program aims to overcome the limits of conventional imaging system design strategies and to demonstrate the feasibility of innovative design approaches providing for nearlinear growth of optical information throughput with increasing imaging system scale. This will enable extraordinarily high imaging performance in reasonably small and affordable form factors. The specific MOSAIC challenge problem is to design and demonstrate an imaging system that achieves very high angular resolution over a wide field of view without paying the heavy penalties in size, weight, and temporal complexity or SNR degradation incurred by today's approaches. DARPA is particularly interested in integrated system approaches that exploit the co-design of optics, sensors, and processing to manage the transduction and management of enormous quantities of data from photons to information within compact, power efficient, and affordable form factor. All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal to this BAA, should be directed to the administrative addresses below; e-mail or fax is preferred. The administrative addresses for this BAA are: Electronic Mail: DARPA-BAA-09-50@darpa.mil (Addressed to: DARPA/MTO, DARPA-BAA-09-50).	June 8
Hydrologic Sciences <a href="http://www.nsf.gov/pubs/2009/nsf09538/nsf09538.htm?govDel=USNSF_25">http://www.nsf.gov/pubs/2009/nsf09538/nsf09538.htm?govDel=USNSF_25</a> 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	June 9

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

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.	
Basic Research Challenge (BRC) Program http://www07.grants.gov/search/search.do:jsessionid=63L4JdBck1gcWn5D2d2nQf08rBvDT2 mP8mBfZyzvIJc8YypCgHnNI-108218008?oppId=45397&flag2006=false&mode=VIEW The Basic Research Challenge (BRC) program supports basic science and/or engineering research within academia and industry. The program is focused on stimulating new, high-risk basic research projects. The BRC for FY 2009 is for the three (3) topics listed below. The detailed descriptions are intended to provide the proposer a frame of reference and are not meant to be restrictive to the possible approaches to achieving the goals of the topic and the program. Innovative ideas addressing these research topics are highly encouraged. White papers and full proposals addressing the following BRC topics are solicited: (1) Irreducible Uncertainty and the Limits of Predictability; (2) Elastomeric Polymer-by-Design to Protect the Warfighter against Traumatic Brain Injury by Diverting the Blast Induced Shock Waves from the Head; (3) DNA-based Molecular-scale Nanoelectronics Fabrication. Please see the full announcement.	June 9
http://www.darpa.mil  DARPA seeks to develop a dynamic putty which, when packed in/around a compound bone fracture, provides full load-bearing capabilities within hours, creates an osteoconductive bone-like internal structure, and degrades over time to harmless resorbable by-products as normal bone regenerates.	Open to June 9
Human Social, Cultural, and Behavioral Modeling https://www.bids.tswg.gov/tswg/bids.nsf/DownloadBAAs?OpenView https://www.bids.tswg.gov/TSWG/bids.nsf/BAAExcerpts/EA7AB3D88F91205D852575A5006 3DCFF/\$FILE/09-Q-4590 BAA Pkg+05.14.09.pdf  Due Date for Receipt of Phase 1 White Papers with supporting Quad Charts No Later Than June 11, 2009. This Broad Agency Announcement (BAA) is soliciting concepts for innovative research and development projects in the following mission area: Human Social, Cultural, and Behavioral Modeling (HSC). The BAA process constitutes a solicitation of concepts from those offerors capable of satisfying the Government's needs. The Government encourages nonprofit organizations, educational institutions, small businesses, small disadvantaged businesses, government laboratories, and HBCU/MIs, foreign contractors, as well as large businesses, to submit research concepts for consideration. The BAA selection process will be conducted in two phases fully described in the BAA Package. The BAA Package describes the full process for the concept submission and evaluation as well as specific requirements. Direct any questions regarding this BAA to 09-Q-4590@tswg.gov. For any difficulties associated with downloading the BAA, contact the CTTSO office at bidshelp@tswg.gov.	June 11
Joint NNSA & AFRL Broad Agency Announcement (BAA) for Fiscal Year 2010 for Nuclear Explosion Monitoring Research & Development (Solicitation for Proposals)  https://e-center.doe.gov/iips/faopor.nsf/UNID/5669CF461B004424852575B3007599577OpenDocument  The NNSA and the AFRL invite proposals for research and development (R&D) to improve national capabilities to detect, locate and identify nuclear explosions in support of the Air Force Technical Applications Center (AFTAC), the U.S. government agency responsible for operation of the nuclear explosion monitoring systems. The NNSA Office of Nuclear Detonation Detection (NA-222) within the Office of Nonproliferation Research and Development (NA-22) has the responsibility to apply the broad base of U.S. expertise that has been acquired in testing nuclear weapons and support disciplines to improve national capabilities to detect, locate and identify nuclear explosions and to	June 15

provide cost-effective technologies, algorithms, hardware, and software to U.S. government agencies that are responsible for nuclear explosion monitoring. The AFRL has the responsibility to execute Department of Defense (DoD) R&D related to nuclear explosion monitoring. **Gulf of Mexico Alliance Regional Partnership Projects** June 15 http://www.epa.gov/gmpo/ Grants awarded under this announcement may involve Geospatial Information. An estimated amount of up to \$3,000,000 depending on Agency funding levels and other applicable considerations for approximately 10 to 50 cooperative agreements may be awarded under this announcement to eligible applicants for projects that improve the health of the Gulf of Mexico by addressing improved water quality and public health, priority coastal habitat conservation and restoration, more effective coastal environmental education, improved ecosystems integration and assessment, strategic nutrient reductions, and coastal community resilience. Projects must actively involve stakeholders and focus on support and implementation of the Gulf of Mexico Alliance Governors' Action Plan II for Healthy and Resilient Coasts. For more information go to http://www2.nos.noaa.gov/gomex/action\_plan2/welcome.html . NIDCR Small Research Grants for Data Analysis and Statistical Methodology (R03) June 16 http://grants.nih.gov/grants/guide/pa-files/PAR-09-182.html The goal of this funding opportunity announcement (FOA) is to support meritorious research projects that involve secondary data analyses or statistical methodology using existing dental or craniofacial database resources. 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. **DoD 2009.2 SBIR SOLICITATION** June 17 http://www.dodsbir.net/solicitation/sbir092/default.htm http://www.dodsbir.net/solicitation/sbir092/osd092.htm April 20, 2009: Solicitation was issued for public release May 18, 2009: DoD will begin accepting proposals June 17, 2009: Deadline for receipt of proposals by 6:00 a.m. EST Topics: OSD09-HS1; Weather/Climate Variability Impact on Energy, Water and Food Resources and Implications for Regional Stability OSD09-HS2; A Cultural Architecture Generator for Immersion Training in Virtual Environments OSD09-HS3; Algorithmic Behavior Forecasting OSD09-HS4; Using Serious Games for Socio-Cultural Scenario Training. June 17 Understanding the Role of Nonchemical Stressors and Developing Analytic Methods for Cumulative Risk Assessments http://es.epa.gov/ncer/rfa/2009/2009\_star\_cumulative\_risk.html The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) 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. This RFA is focusing on two challenges that exist in conducting cumulative risk assessments: (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.

#### DARPA Deep Learning

#### https://www.fbo.gov/download/f45/f451dac7a3cbcd699ca5f4cdcba862a9/Deep\_Le arning\_BAA\_Apr\_10.pdf

DARPA is soliciting innovative research proposals in the area of deeply layered machine learning or, simply, Deep Learning (DL). Over the course of the envisioned program, performer teams will build a universal machine learning engine that uses a single set of methods in multiple layers (at least three internally) to generate progressively more sophisticated representations of patterns, invariants, and correlations from data inputs. The engine is expected to be applicable to multiple input modalities given only changes to the inputs? preprocessing, and is expected to be able to learn important characteristics of the inputs and produce useful representations solely on the basis of unlabeled inputs. Accomplishing many of the tasks set by the program will require that the engine be able to produce and utilize sophisticated spatio-temporal representations.

June 18

#### RESEARCH OPPORTUNITIES IN COMBUSTION SCIENCE

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47157
This is a National Aeronautics and Space Administration (NASA) Research Announcement (NRA) which solicits ground-based proposals to conduct low gravity research on the combustion of materials. This solicitation (NRA NNH09ZTT001N), entitled, "Research Opportunities in Combustion Science," will be available on or about May 18, 2009, by opening the NASA Research Opportunities homepage at http://nspires.nasaprs.com/ and then linking through the menu listings "Solicitations" to "Open Solicitations." Proposals are solicited by the Exploration Systems Mission Directorate (ESMD) Advanced Capabilities Division for fundamental studies of material flammability as a function of gravity, flow and orientation; investigations of the relevance of existing flammability test methods for low and partial gravity environments; development and validation of test approaches for assessment of material flammability under microgravity and partial gravity conditions; and quantification of low-gravity gaseous and particulate products of combustion for materials used in the habitable volume of spacecraft developed in NASA's Constellation program.

NOI June 16; full August 18

National Security Science and Engineering Faculty Fellowship (NSSEFF) http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppld=47524

Estimated Total Program Funding: \$42,500,000. This Broad Agency Announcement (BAA) seeks outstanding researchers for the National Security Science and Engineering Faculty Fellowship (NSSEFF) program for the purpose of conducting innovative basic research in areas of interest to the Department of Defense (DoD) and fostering long-term relationships between the NSSEFF Fellows and the DoD. As defined by the DoD, "basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress." <a href="https://www.defenselink.mil/comptroller/fmr/02b/02b\_05.pdf">www.defenselink.mil/comptroller/fmr/02b/02b\_05.pdf</a>.

The DoD's basic research program invests broadly in many scientific fields to ensure that it has early cognizance of new scientific knowledge. Areas of research that have produced significant improvement in military capabilities include electronics, materials science, physics, chemistry, mathematics, computer science, mechanics, biological and life sciences, atmospheric and space sciences, cognitive and neural sciences, terrestrial sciences, and ocean sciences. DoD's basic research investment in this program also will result in the development of the next generation of high performing scientists and engineers, who will be educated and trained as a part of the NSSEFF Fellows' work. Ensuring that students are actively engaged in conducting research funded

LOI June 23; white paper July 7

by the DoD is an important priority. The NSSEFF program helps to ensure that our Nation has an active, long-term and aggressive research and engineering portfolio that attracts the foremost creative, innovative and productive university faculty scientists, engineers and their students.

## Chemistry Research Instrumentation and Facilities: Departmental Multi-User Instrumentation (CRIF:MU)

http://www.nsf.gov/pubs/2009/nsf09546/nsf09546.htm?govDel=USNSF\_25

The Chemistry Research Instrumentation and Facilities Program (CRIF) is structured to enable the National Science Foundation's Division of Chemistry to respond to a variety of needs for infrastructure that promotes research and education in areas traditionally supported by the Division (NSF Chemistry Homepage). The Departmental Multi-User Instrumentation component of CRIF (CRIF:MU) provides funds to universities, colleges, and consortia thereof for the purchase of multi-user instruments. The maximum request is \$500,000 for instrumentation. Up to an additional \$100,000, including indirect cost, may be requested for personnel who are needed to support cyber-enhanced projects if the instrument is cyber-enabled.

#### **Recovery Act NIST Construction Grant Program**

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&opp1d=47564

A Letter of Intent is required and must be received no later than 3 p.m. Eastern Time, Thursday, June 25, 2009. A corresponding full proposal must be received no later than 3 p.m. Eastern Time, Monday, August 10, 2009.

U.S. institutions of higher education and non-profit organizations are eligible to apply for awards under this Program

The American Recovery and Reinvestment Act of 2009 (Recovery Act) (Public Law 111-5) appropriated \$180 million to NIST "for a competitive construction grant program for research science buildings." Additional information on the program was provided on page 418 of the Conference Report to accompany House Report 111-16 (Feb. 12, 2009): ". . . \$180,000,000 shall be for the competitive construction grant program for research science buildings, including fiscal year 2008 and 2009 competitions."

Consistent with the Conference Report language NIST intends to issue grant awards for approximately \$60 million to unfunded meritorious proposals submitted under the fiscal year 2008 competition and issue grant awards for approximately \$120 million under a new fiscal year 2009 competition. The goals and objectives of the program are to provide competitively awarded grant funds for research science buildings through the construction of new buildings or expansion of existing buildings.

For purposes of this program, "research science building" means a building or facility whose purpose is to conduct scientific research, including laboratories, test facilities, measurement facilities, research computing facilities, and observatories. In addition, "expansion of existing buildings" means that space to conduct scientific research is being expanded from what is currently available for the supported research activities.

Consistent with Section 3 of the Recovery Act, the projects undertaken through this program will result in the preservation of jobs and the promotion of economic recovery; the provision of investments needed to increase economic efficiency by spurring technological advances; and the investment in infrastructure that will provide long-term economic benefits. Activities will be commenced as quickly as possible while ensuring prudent management. NIST anticipates funding 8-12 projects with the Federal shares in the \$10 million - \$15 million range and with a project period of performance of up to five (5) years, although there is an expectation that most of the projects will be completed prior to 5 years. The anticipated start date will be one month after the award is made. The period of performance depends on the construction schedule proposed.

Although cost sharing is not required it is encouraged for a proposal to be selected for funding.

LOI June 25; full August

10

June 23

A cost share of 25% would be viewed favorably, 50% even more favorably. Cost sharing is that portion of the project costs not borne by the Federal government and includes direct and indirect costs. Sources of cost share include cash and third party in-kind contributions. Cash contributions can be from recipient, state, county, city, or other non-Federal sources. Third party in-kind contributions can be made by non-Federal third parties and can include, but are not limited to, equipment and materials and supplies. The purchase of land cannot be used as cost sharing. See also section IV.6. Funding Restrictions. Any cost sharing must be in accordance with the "cost sharing or matching" provisions of 15 CFR Part 14, Uniform Administrative Requirements for Grants and Cooperative Agreements with Institutions of Higher Education, Hospitals, Other Non-Profit, and Commercial Organizations.

Teacher Quality Partnership Grants Program; (ARRA Program) CFDA 84.405A <a href="http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47572">http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47572</a>

**Expected Number of Awards: 35** 

**Estimated Total Program Funding: \$143,000,000** 

NOI June 26; proposal July 23

The purposes of the Teacher Quality Partnership (TQP) Grants Program are to: Improve student achievement; improve the quality of new and prospective teachers by improving the preparation of prospective teachers and enhancing professional development activities for new teachers; hold teacher preparation programs at institutions of higher education (IHEs) accountable for preparing highly qualified teachers; and recruit highly qualified individuals, including minorities and individuals from other occupations, into the teaching force. More specifically, the TQP Grants Program seeks to improve the quality of new teachers by creating partnerships among IHEs, highneed school districts (local educational agencies (LEAs)) their high-need schools, and/or highneed early childhood education (ECE) program. These partnerships would create model teacher preparation programs at the pre-baccalaureate level through the implementation of specific reforms of the IHE's existing teacher preparation programs, and/or model teaching residency programs for individuals with strong academic and/or professional backgrounds but without teaching experience. The TQP Grants Program may also support school leadership programs to train superintendents, principals, ECE program directors, and other school leaders in high-need or rural LEAs. Catalog of Federal Domestic Assistance (CFDA) Number: 84.405A. Applications for grants under the Teacher Quality Partnership--CFDA Number 84.405A must be submitted electronically using e-Application, accessible through the Department's e-Grants Web site at: http://e-grants.ed.gov. While completing your electronic application, you will be entering data online that will be saved into a database. You may not e-mail an electronic copy of a grant application to us.

Instrumentation for Materials Research - Major Instrumentation Projects http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=nsf09547

June 29

The Instrumentation for Materials Research - Major Instrumentation Project (IMR-MIP) program in the Division of Materials Research provides support for the design and construction of major instruments costing more than \$4 million but less than \$20 million. The program also supports the development of detailed conceptual and engineering design for new tools for materials preparation or characterization at major user facilities. Such instruments may include, for example, neutron beam lines, synchrotron beam lines, and high field magnets, as well as development of detectors and preparation environments necessary to support materials research. The program supports two types of awards: Conceptual and Engineering Design (CED) awards and Construction (CNST) awards. A CED award will enable the proposer to do the necessary engineering design of the instrument.

#### RECOVERY ACT, ARL-PHOTOVOLTAICS

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=475 Eligibility Unrestricted/universities/industry

June 30

The fundamental research solutions sought through this announcement are intended to revive the renewable energy industry and provide the capital over the next three years to eventually double domestic renewable energy capacity. Offerors should be mindful of this objective in their responses to this announcement The U.S. Army Research, Development and Engineering Contracting Center, Research Triangle Park Contracting Division on behalf of the U.S. Army Research Laboratory, Sensors and Electron Devices Directorate (SEDD) is soliciting white papers for Novel Materials and Device Development for High Efficiency Solar Photovoltaics and intends to award no more than two assistance instruments or contracts under topic areas 2.48 Directed Energy, Paragraph 7 Photovoltaic (PV) Power Sources and/or; 2.52 Infrared Detectors and Power Sources through Army Research Laboratory and Army Research Office Broad Agency Announcement (BAA) Number W911NF-07-R-0001-03 effective from 01 October 2007 through 30 September 2011.

June 30

#### **Recovery Act - Demonstration of Integrated Biorefinery Operations**

http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=47227
The full Funding Opportunity Announcement (FOA) is posted in FedConnect, and is found by going to <a href="https://www.fedconnect.net/FedConnect/PublicPages/PublicSearch/Public Opportunities.aspx">https://www.fedconnect.net/FedConnect/PublicPages/PublicSearch/Public Opportunities.aspx</a>. Under Search Criteria, select Reference Number, and in the next field enter the FOA number (you may also search by other criteria). It is the responsibility of the applicant, prior to the Application due date and time, to verify successful transmission. The American Recovery and Reinvestment Act of 2009 (Recovery Act) enables DOE to support renewable energy research, development, demonstration and deployment activities, which includes accelerating the development of biomass technologies. Recovery Act funds specifically assist in expediting the construction and deployment of ¿shovel-ready¿ projects and to create jobs. Other requirements for Recovery Act projects can be found at Recovery.gov and in the OMB guidelines. All proposals must demonstrate the understanding of and compliance with Recovery Act intentions and OMB guidelines.

## July (Top)

#### AHA Award Programs: July 2009 Application Cycle

http://research.uiowa.edu/grantbulletin/show.php/23225

The American Heart Association has announced its National Center and Midwest Affiliate award programs for the July 2009 application cycle. Note that opportunities this cycle are quite limited, as the AHA has suspended the National Established Investigator Award, National Innovative Research Grant, Midwest Affiliate Grant-in-Aid, and Midwest Affiliate Scientist Development Grant, closing them to application this cycle and possibly the next.

Various July

## Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R<sup>2</sup>) <a href="http://www.nsf.gov/pubs/2009/nsf09562/nsf09562.htm?govDel=USNSF\_25">http://www.nsf.gov/pubs/2009/nsf09562/nsf09562.htm?govDel=USNSF\_25</a>

The solicitation is a revision of the 1996 Academic Research Infrastructure Program: Facilities Modernization Solicitation. The ARI-R<sup>2</sup> program will invest in the repair, renovation, or in exceptional cases, the replacement of existing research facilities. It will not support the construction of new research facilities. Awards made in response to this solicitation will be funded under the American Recovery and Reinvestment Act of 2009 (ARRA) (Public Law 111-5). As such, awards will include special reporting requirements and other non-standard terms and conditions. Unless otherwise specified, ARRA funding should be considered one-time funding. Organizations

LOI July 1; full August 24

may submit one proposal, either as lead or as a sub-awardee but not both. Sub-awards solely for the provision of a widely recognized commercial service, for example, architectural design, construction, or telecommunications services, are not subject to this restriction. A Letter of Intent (LOI) must be submitted by the organization's sponsoring project office by the July 1, 2009 LOI deadline in order for an organization's full proposal to be eligible for review. July 1 **NSF Earth Sciences Postdoctoral Fellowships** http://www.nsf.gov/pubs/2009/nsf09526/nsf09526.html The Division of Earth Sciences (EAR) awards Postdoctoral Fellowships to highly qualified investigators within 3 years of obtaining their PhD to carry out an integrated program of independent research and education. The research and education plans of each fellowship must address scientific questions within the scope of EAR disciplines. The program supports researchers for a period of up to 2 years with fellowships that can be taken to the institution or national facility of their choice. The program is intended to recognize beginning investigators of significant potential, and provide them with experience in research and education that will establish them in leadership positions in the Earth Sciences community. Because the fellowships are offered only to postdoctoral scientists early in their career, doctoral advisors are encouraged to discuss the availability of EAR fellowships with their graduate students early in their doctoral programs. Fellowships are awards to individuals, not institutions, and are administered by the Fellows. Urban Long-Term Research Area (ULTRA) Exploratory Awards (ULTRA-Ex) July 7 http://www.nsf.gov/pubs/2009/nsf09551/nsf09551.htm?govDel=USNSF 25 The Urban Long-Term Research Areas: Exploratory Research Projects (ULTRA-Ex) competition will provide support to enable teams of scientists and practitioners to conduct interdisciplinary research on the dynamic interactions between people and natural ecosystems in urban settings in ways that will advance both fundamental and applied knowledge. The National Science Foundation and the U.S. Forest Service invite proposals to enable interdisciplinary teams of scientists and practitioners to conduct research on the dynamic interactions between people and natural ecosystems in urban settings in ways that will advance both fundamental and applied knowledge. Because of the highly integrated character of the coupled human and natural ecosystems that will be studied, these teams will require the involvement of researchers from the social and behavioral, ecological, and technical sciences. Up to 16 awards of up to two-years duration and up to \$300,000 per award are expected to be made. July 9 Population and Community Ecology http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=503414&govDel=USNSF\_25 The Population and Community Ecology Cluster supports research that advances the conceptual or theoretical understanding of population ecology, species interactions and community dynamics in terrestrial, wetland and freshwater habitats. We encourage projects that integrate theoretical, modeling, and empirical approaches, or that promote synthesis across spatial and temporal scales. The cluster seeks to fund projects that are transformative -- that is, those that will change the conceptual bases of population and community ecology and have broad implications for future research. Proposals that develop research questions within the context of existing theory, consider alternate mechanisms, and design critical tests to distinguish among mechanisms are particularly encouraged, together with those that use contemporary approaches to develop new paradigms. Inter- and multi-disciplinary proposals that cross traditional programmatic boundaries are welcomed in the Population and Community Ecology Cluster; such proposals may be coreviewed with other programs in DEB, in other Divisions in the Biology Directorate, or in other Directorates. Studies that focus on the ecology of marine organisms should be directed to the Biological Oceanography Program in the Division of Ocean Sciences. Research focused on human

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

disease or health is not supported.	
Earth Sciences: Instrumentation and Facilities (EAR/IF)	July 8
Decision Making Under Uncertainty Collaborative Groups (DMUU)  http://www.nsf.gov/pubs/2009/nsf09544/nsf09544.htm  The Decision Making Under Uncertainty collaborative groups competition offers awards to support teams of researchers who will advance fundamental understanding of decision making under uncertainty for climate change and related long-term environmental risks. The focus of these collaborative groups will be to generate fundamental new knowledge as well as information and tools that decision makers will find useful to help them incorporate climate change and related long-term environmental risks in their decision making. The focus of these collaborative groups should be to provide new knowledge about how public officials, firms in the private sector, other groups, and/or individuals can incorporate existing knowledge about climate change and related long-term environmental risks into their decisions. In addition to generating societally useful information and tools, DMUU collaborative groups should enhance basic understanding within and across the social and behavioral sciences as well as related science and engineering disciplines.	July 14
Humanities Collections and Resources <a href="http://www07.grants.gov/search/search.do;jsessionid=Vtq4JbGJfBD6h32hxZhcDcG5dDD5YhnR7GZ1vnvMTykDBycx2Gjb!-802466050?oppId=46645&amp;flaq2006=false&amp;mode=VIEW">http://www07.grants.gov/search/search.do;jsessionid=Vtq4JbGJfBD6h32hxZhcDcG5dDD5YhnR7GZ1vnvMTykDBycx2Gjb!-802466050?oppId=46645&amp;flaq2006=false&amp;mode=VIEW</a> The Humanities Collections and Reference Resources program supports projects that provide an essential foundation for scholarship, education, and public programming in the humanities. Thousands of libraries, archives, museums, and historical organizations across the country"	July 15

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

maintain important collections of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art and material culture, electronic records, and digital objects. Funding from this program strengthens efforts to extend the life of such materials and make their intellectual content widely accessible, often through the use of digital technology. Awards are also made to create various reference resources that facilitate use of cultural materials, from works that provide basic information quickly to tools that synthesize and codify knowledge of a subject for in-depth investigation.	
DHS Multidisciplinary, Multi-Institutional Science and Technology Competitions <a href="http://www.grants.gov/search/search.do?mode=VIEW&amp;flaq2006=false&amp;oppld=47408">http://www.grants.gov/search/search.do?mode=VIEW&amp;flaq2006=false&amp;oppld=47408</a> The U.S. Department of Homeland Security (DHS) Science and Technology (S&T) Directorate is requesting applications from accredited U.S. colleges and universities to conduct multidisciplinary research. These organizations should demonstrate expertise in an individual or combined research area described in this funding opportunity announcement. DHS S&T is congressionally mandated in the Homeland Security Act of 2002 to "establish a coordinated, university-based system to enhance the Nation's homeland security." Therefore, eligible applications under this funding opportunity will be submitted by a lead organization (accredited U.S. college and university) with a specific plan to partner with at least one other organization in order to fully address the required multidisciplinary research components. DHS S&T is requesting applications in one of the four topics as follows: 1) Community Participation and Resilience, 2) Multiple Sensor Integration 3) Port Systems Resilience, or 4) Immigration Security. Each topic is of interest to multiple DHS S&T Divisions and DHS component agencies and crosses the subject matter expertise of multiple universities, existing DHS Centers of Excellence (COE), and other research consortia. Institutions may submit applications for more than one topic.	July 15
Living Stock Collections for Biological Research (LSCBR)  http://www.nsf.gov/pubs/2009/nsf09550/nsf09550.htm?govDel=USNSF_25  The Living Stock Collections for Biological Research (LSCBR) program supports improvements in and partial operation of existing collections of living organisms (including viruses and bacteriophages) to be used in basic biological research. The program provides support for two types of projects. Short-term projects are one-time awards (up to 36 months) leading to innovative handling of living stocks or to well-defined improvements in existing collections, including those not otherwise supported by LSCBR. Longer-term projects (up to 60 months) help support ongoing operation of collections significant to the NSF research community. Collections receiving longer-term support are expected to receive significant support from user fees or other mechanisms of revenue generation.	July 15
EarthScope <a href="http://www.nsf.gov/pubs/2009/nsf09535/nsf09535.html?govDel=USNSF_25">http://www.nsf.gov/pubs/2009/nsf09535/nsf09535.html?govDel=USNSF_25</a> 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.	July 16
NASA Group 5 University Research Centers (URC) <a href="http://www.grants.gov/search/search.do?mode=VIEW&amp;flag2006=false&amp;oppId=47095">http://www.grants.gov/search/search.do?mode=VIEW&amp;flag2006=false&amp;oppId=47095</a> The NASA Office of Education, Integration Division, Minority University Research and Education Program (MUREP) has released a solicitation for proposals for the NASA Group 5 University	July 19

Research Centers (URC). This solicitation is in cooperation with NASA's four Mission Directorates -Aeronautics Research, Exploration Systems, Science, and Space Operations and NASA's ten Field Centers. Each University Research Center (URC) is expected to be a multi-disciplinary scientific, engineering and/or commercial research center designed to provide a broad-based, competitive NASA-related research capability among the Nation's Minority Institutions, foster new aerospace science and technology concepts, provide mechanisms for expanded participation by faculty and students of Minority Institutions in mainstream research, and increase the number of underrepresented and underserved U.S. students obtaining advanced degrees in NASA-related fields and entering the aerospace workforce. All institutions designated by the Department of Education as a Historically Black College or University, Hispanic-Serving Institution, or Minority-Serving Institution are eligible to apply for this cooperative agreement funding opportunity.

#### Research Coordination Networks in Biological Sciences (RCN)

http://www.nsf.gov/pubs/2009/nsf09554/nsf09554.htm?govDel=USNSF\_25

The goal of this program is to advance a field or create new directions in research or education. Innovative ideas for implementing novel networking strategies are especially encouraged. Groups of investigators will be supported to communicate and coordinate their research, training and educational activities across disciplinary, organizational, institutional, and geographical boundaries. There are two tracks in the RCN program, the research coordination network track (RCN), the original target of the program, and the undergraduate biology education track (RCN-UBE), which was added in 2008. The proposed networking activities should focus on a theme to give coherence to the collaboration. For a research track RCN, the focus could be on a broad research question, a specific group of organisms, or particular technologies or approaches. For an education track RCN, the focus could be on any topic that is likely to lead to improved participation, learning, or assessment in undergraduate biology curricula.

## Improvements to Biological Research Collections (BRC)

http://www.nsf.gov/pubs/2009/nsf09548/nsf09548.htm?org=NSF

Proposals are accepted from U.S. organizations, including colleges and universities that maintain research collections, natural history museums including herbaria, and other collections administered by independent organizations or by state, county, or local governments; non-federal and non-profit research organizations that maintain collections; and field stations, marine laboratories, botanical gardens, zoological parks, and aquaria that maintain research collections that document biological diversity. The size of an organization is not a factor in determining eligibility. In any single round of the BRC competition, only one proposal may be submitted from any individual collection within an organization. Organizations that house multiple collections, submitting proposals from more than one collection, should engage in internal planning activities in order to prioritize the needs of the several collections such that the organization does not submit a multiplicity of proposals to any one BRC competition.

#### Air Force Fiscal Year 2010 Young Investigator Research Program

http://www.grants.gov/search/announce.do;jsessionid=3pkMJWXGTyYqpGhNVK4C9 pXpD8ZNpTBrysLyQpmN16YcVR0Xd0My!-802466050

The AFOSR's Young Investigator Research Program (YIP) is to support scientists and engineers who have received Ph.D. or equivalent degrees in the last five years (on or after 1 May 2004) and who show exceptional ability and promise for conducting basic research. The objective of this program is to foster creative basic research in science and engineering, enhance early career development of outstanding young investigators, and increase opportunities for the young investigators to recognize Air Force mission and the related challenges in science and engineering. Proposals addressing the research areas of interest for the Air Force Research Laboratory will be considered. The basic research areas of current interest are available on-line at the AFOSR web

July 23

July 24

July 28

site: http://www.wpafb.af.mil/AFRL/afosr/ Select "Research Interests of the Air Force Office of Scientific Research (AFOSR-BAA-2009-1) For detailed information regarding technical goals, potential applicants are advised to refer to the announcement cited above and may contact AFOSR program managers listed therein to explore mutual interests before submitting proposals. The individual award will be made to a U.S. institution of higher education, industrial laboratory, or non-profit research organization where the principal investigator is employed on a full-time basis and holds a regular position. Researchers working at the Federally Funded Research and Development Centers and Government Laboratories will not be considered for the YIP competition. The principal investigator must be a U.S. citizen, national, or permanent resident who has received a Ph.D. or equivalent degrees in the last five years as indicated in the BAA.

## Multicultural Scholars Grants Program

http://www.csrees.usda.gov/funding/rfas/multicultural\_selg.html

The purpose of this competitive undergraduate scholarship grant program is to increase the multicultural diversity of the food and agricultural scientific and professional workforce, and advance the educational achievement of all Americans by providing competitive grants to colleges and universities. This program solicits applications to train students in the Emphasis Areas of (1) Veterinary Medicine (First Professional Degree in Veterinary Medicine); (2) Agricultural Sciences and Engineering for Bioenergy; (3) Natural Resources Sciences Training; (4) Human Sciences Training; (5) Food Science and Human Nutrition Training; and (6) Agrosecurity Science Training. Applications are sought for student training that: (i) will prepare graduates to meet the demand for highly qualified personnel entering the workforce in the food and agricultural sciences domain; (ii) will pipeline more undergraduates into graduate education in the food and agricultural sciences; (iii) will address the substantial gap between White, Latino and African American populations entering graduate schools to enable the American system of higher education to remain competitive with the rest of the world; (iv) will promote students' success in food and agricultural science disciplines at the undergraduate/DVM level; and (v) will focus on student learning, e.g., academic preparation, social support structure (tutoring, mentoring, experiential opportunities in research and study abroad), and professional mentoring to ensure matriculation and entry into food and agricultural sciences areas of graduate education or the workforce. Also, Special Experiential Learning (SEL) opportunities to support eligible USDA Multicultural Scholars to conduct research or to undertake studies at sites within or outside of the United States. SEL awards for eligible USDA Multicultural Scholars will only be available as provided for within this announcement. Applications may be submitted by: (1) land-grant institutions, (2) colleges and universities having significant minority enrollments and a demonstrable capacity to carry out the teaching of food and agricultural sciences, and (3) other colleges and universities having a demonstrable capacity to carry out the teaching of food and agricultural sciences.

## August (Top)

## Harry Frank Guggenheim Foundation Research Grant www.hfg.org/rg/guidelines.htm

The Harry Frank Guggenheim Foundation (HFG) welcomes proposals from any of the natural and social sciences and the humanities that promise to increase understanding of the causes, manifestations, and control of violence, aggression, and dominance. Highest priority is given to research that can increase understanding and amelioration of urgent problems of violence, aggression, and dominance in the modern world. Priority will be given to areas and methodologies not receiving adequate attention and support from other funding sources. HFG ordinarily makes awards in the range of \$15,000 to \$30,000 a year for periods of one or two years. Applications for

July 28

August 1

larger amounts and longer durations must be very strongly justified. Dissertation awards are also available: Ten or more fellowships (\$15,000 each) are awarded each year to individuals who will complete the writing of the dissertation within the award year. August 5 Exploring Linkages Between Health Outcomes and Environmental Hazards, Exposures, and Interventions for Public Health Tracking and Risk Management http://epa.gov:80/ncer/rfa/2009/2009\_star\_ephi.html The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is seeking applications to develop new or improved environmental public health indicators (EPHIs) to build linkages between environmental hazards, human exposures, and public health outcomes. The aim of the research is to develop indicators that can be used for long-term tracking and surveillance of environmental public health, making better informed decisions, and assessing the actual impacts of environmental risk management decisions. Proposed projects should capitalize on existing knowledge bases, data sources, or cohorts to develop EPHIs that reflect a better understanding of the relationships between environmental conditions, human exposure, and/or public health outcomes. Novel application of statistical methods or models may be needed to establish probable relationships between existing datasets or investigate the consequences of environmental actions and policy changes. Major Research Instrumentation Program (MRI-R<sup>2</sup>) August http://www.nsf.gov/pubs/2009/nsf09561/nsf09561.htm?govDel=USNSF\_25 10 The parameters of this Major Research Instrumentation-Recovery and Reinvestment (MRI-R2) competition differ from those for the regular MRI competition. For this MRI-R2 competition only: Eligible organizations1 may submit a maximum of three (3) proposals, independent of the number of proposals that may have been submitted under the NSF 09-502 MRI competition. However, proposals that wholly or substantially duplicate those that were accepted for review under NSF 09-502 will not be accepted for this competition. A maximum of two submissions can be for instrument acquisition. If three proposals are submitted, at least one submission must be for instrument development. Biotechnology, Biochemical, and Biomass Engineering Full **Proposal** http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=501024 The Biotechnology, Biochemical, and Biomass Engineering (BBBE) program deals with Window: fundamental problems involved in the processing and manufacturing of products of economic August importance by effectively utilizing renewable resources of biological origin and bioinformatics 15, 2009 originating from genomic and proteomic information. The BBBE program emphasizes basic Sept. engineering and biological research that advances the fundamental knowledge base that 15, 2009 contributes to a better understanding of cellular and biomolecular processes (in vivo, in vitro, and/or ex vivo) and eventually to the development of generic enabling technology and practical application. Quantitative assessments of bioprocesses and their rates at the levels of gene regulation and expression, signal transduction pathways, posttranslational protein processing. enzymes in reaction systems, metabolic pathways, cells and tissues in cultivation, and biological systems including animal, plant, microbial and insect cells, etc. are considered vital to the successful research projects in the BBBE program. Advancing Public Health Protection through Water Infrastructure Sustainability August Advancing Public Health Protection through Water Infrastructure Sustainability: EPA-17 G2009-STAR-F1 Early Career Projects: Advancing Public Health Protection through Water

http://www.epa.gov/ncer/rfa/2009/2009\_star\_water\_infrastructure.html

Infrastructure Sustainability: EPA-G2009-STAR-F2

The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is seeking new and innovative research applications that link opportunities to advance public health protection with improvements in the condition and function of the water infrastructure. For purposes of this RFA, the water infrastructure includes centralized and decentralized systems that convey, store, and distribute potable and non-potable water and collect and manage municipal and industrial wastewater, stormwater, and on-site rainwater. Innovation can take the form of wholly new applications or applications that build on existing knowledge and approaches for new uses. The focus of the solicitation is on improving the effectiveness of the water infrastructure for protecting public health. Projects should clearly demonstrate an integrated, multi-disciplinary approach that leads to advances in design, operation, and management of the water infrastructure and should directly tie those advances to public health protection in conjunction with improving water efficiency and reducing energy requirements.

#### **Panoptic Analysis of Chemical Traces (PACT)**

http://www.grants.gov/search/search.do;jsessionid=Ls1TnmvtBLGbLtGmy32GnNRk LP2nGKfvVTnThx1JznvyYLKKjhd6!-

#### 294918046?oppId=42664&flag2006=false&mode=VIEW

The Defense Advanced Research Projects Agency's (DARPA) Strategic Technology Office (STO) is soliciting proposals under this Broad Agency Announcement (BAA) for the Panoptic Analysis of Chemical Traces (PACT) program. The PACT program will develop technology capable of analyzing complex gas mixtures without reliance on preconceived libraries of anticipated analytes. PACT will provide automated, high-throughput analysis of atmospheric sampling efforts aimed at producing exhaustive chemical maps of urban and military environments.

#### **International Research Network Connections (IRNC)**

#### http://www.nsf.gov/pubs/2009/nsf09564/nsf09564.htm?govDel=USNSF\_25

The United States research and education community communicates, cooperates, and collaborates with colleagues in the global community. Members of this community access remote instruments, data, and computational resources located throughout the world, often as part of international collaborations. Similarly, major NSF investments in large-scale science and engineering facilities located both inside and outside the United States are utilized by multinational research and education collaborations. To support such activities, NSF solicits proposals for International Research Network Connections (IRNC). NSF expects to make a set of awards to: provide network connections linking U.S. research networks with peer networks in other parts of the world; leverage existing international network connectivity; improve the quality of end-toend networking on international paths; explore experimental networking; stimulate the deployment and operational understanding of emerging technologies such as IPv6 in an international context. Links funded by this program are intended to support science and engineering research and education applications, and preference will be given to solutions which provide the best economy of scale and demonstrate the ability to support the largest communities of interest with the broadest services. Funded projects will assist the U.S. research and education community by enabling state-of-the-art international network services and access to increased collaboration and data services. Through extended international network connections, additional research and production network services will be enabled, complementing those currently offered or planned by domestic research networks. This program supports international research network connections across three areas: Production network environments (IRNC:ProNet); Experimental networking activities in support of cyber-science applications (IRNC:Exp); and special projects including advanced network development, deployment, security, monitoring, and other approaches (IRNC:SP).

Open to August 20

August 21

#### **Cognitive Neuroscience**

#### http://www.nsf.gov/pubs/2009/nsf09563/nsf09563.htm?govDel=USNSF\_25

August 27

The Cognitive Neuroscience program seeks highly innovative proposals aimed at advancing a rigorous understanding of how the human brain supports thought, perception, affect, action, social processes, and other aspects of cognition and behavior. Topics may bear on core functions such as sensory, learning, language, reasoning, emotion, and executive processes, or more specialized processes such as empathy, creativity, representation of self and other, or intentionality, among many other possibilities. Topics may also include how such processes develop and change in the brain. The program is particularly interested in supporting the development of new techniques and technologies for recording, analyzing, and modeling complex brain activity. Such projects should include a plan for sharing new software and other technologies with the research community at large. Studies of disease states (e.g., brain damaged patients) may be components of projects supported by this program. However, the emphasis in such projects must be to advance basic scientific understanding of neural mechanisms, and not on disease etiology, diagnosis, or treatment. The program also intends to foster projects that integrate perspectives across disciplines, e.g., from the cognitive sciences, developmental sciences, biology, computer science, engineering, education, anthropology, physics, mathematics and statistics. For example, projects that involve collaborations among individuals with expertise in one of the cognitive sciences, neuroimaging, neural microcircuitry, and modeling complex systems are strongly encouraged. Other interdisciplinary emphases are also of keen interest.

#### Social-Computational Systems (SoCS)

### http://www.nsf.gov/pubs/2009/nsf09559/nsf09559.htm?govDel=USNSF\_25

The Social-Computational Systems (SoCS) program seeks to reveal new understanding about the properties that systems of people and computers together possess, and to develop a practical understanding of the purposeful design of systems to facilitate socially intelligent computing. By better characterizing, understanding, and eventually designing for desired behaviors arising from computationally mediated groups of people at all scales, new forms of knowledge creation, new models of computation, new forms of culture, and new types of interaction will result. Further, the investigation of such systems and their emergent behaviors and desired properties will inform the design of future systems.

#### Sept. 1

Sept. 1

## Coordinating Council for Women in History Fellowships http://theccwh.org/awards.htm#Berks

The CCWH/Berkshire Conference of Women Historians Graduate Student Fellowship is a \$1000 award to a woman graduate student completing a dissertation in a history department. The CCWH Ida B. Wells Graduate Student Fellowship is a \$1000 award to an A.B.D. woman graduate student working on a historical dissertation, not necessarily in a history department. Applicants working on issues of race are particularly welcome.

#### Sept. 9

#### Science of Science and Innovation Policy (SciSIP)

#### http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=501084&govDel=USNSF\_25

The Science of Science & Innovation Policy (SciSIP) 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 also 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

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

current discovery, particularly proposals that demonstrate the viability of collecting and analyzing data on knowledge generation and innovation in organizations.	
Cooperating Technical Partner Program <a href="http://www07.grants.gov/search/search.do:jsessionid=gGDWJntDvJNyJJDsgMXfZhGnGbLdgbTGpNkJG2G24vm1n8r0tktb!1216815379?oppld=44687&amp;flag2006=false&amp;mode=VIEW">http://www07.grants.gov/search/search.do:jsessionid=gGDWJntDvJNyJJDsgMXfZhGnGbLdgbTGpNkJG2G24vm1n8r0tktb!1216815379?oppld=44687&amp;flag2006=false&amp;mode=VIEW</a> The purpose of the CTP Program is to provide, through a cooperative agreement, funds to ensure that CTP partners can perform program management and mapping-related activities, which are defined in the program guidance each fiscal year. Recipients must be a partner in the CTP program, either be or represent a National Flood Insurance Program (NFIP) community in good-standing, have the capability to perform funded activities, and have existing non-Federally funded processes and/or systems in place to support activities that contribute to flood hazard identification. Projects or initiatives that are eligible for funding under this announcement may or may not involve geospatial issues. FEMA is seeking qualified Partners to collaborate in maintaining up-to-date flood hazard maps and other flood hazard information. For more information about the CTP Program, including a tool for determining whether the CTP Program is right for your community or agency, as well as information on who to contact to discuss participation, please visit one of the referenced links on the right-hand side of this page.	Sept. 15
Recovery Act Limited Competition: Core Facility Renovation, Repair, and Improvement (G20) <a href="http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-09-007.html">http://grants.nih.gov/grants/guide/rfa-files/RFA-RR-09-007.html</a> This FOA issued by the National Center for Research Resources, National Institutes of Health, solicits applications from institutions that propose to renovate, repair, or improve core facilities. For the purpose of this FOA, a core facility is defined as a centralized shared resource that provides access to instruments or technologies or services, as well as expert consultation to investigators supported by the core. The major objective of this FOA is to upgrade core facilities to support the conduct of PHS supported biomedical and/or behavioral research. Support can be requested to alter and renovate (A&R) the core facility as well as to improve the general equipment in the core facility or to purchase general equipment for specialized groups of researchers. Specialized equipment over \$100,000 in cost cannot be requested as part of this FOA. In situations when similar core facilities exist in different departments at an institution, funding can be requested in support of centralizing these core facilities.	Sept. 17
Recovery Act Limited Competition: Academic Research Enhancement Award (R15) <a href="http://grants.nih.gov/grants/quide/rfa-files/RFA-OD-09-007.html">http://grants.nih.gov/grants/quide/rfa-files/RFA-OD-09-007.html</a> This NIH Funding Opportunity Announcement (FOA) is supported by funds provided to the NIH under the American Recovery & Reinvestment Act of 2009 ("Recovery Act" or "ARRA"), Public Law 111-5. The purpose of the Academic Research Enhancement Award (AREA) program is to stimulate research in educational institutions that provide baccalaureate or advanced degrees for a significant number of the Nation's research scientists, but that have not been major recipients of NIH support. These AREA grants create opportunities for scientists and institutions otherwise unlikely to participate extensively in NIH programs, to contribute to the Nation's biomedical and behavioral research effort. AREA grants are intended to support small-scale health-related research projects proposed by faculty members of eligible, domestic institutions.	Sept. 24
Searle Scholars Program <a href="http://www.searlescholars.net/go.php?id=1">http://www.searlescholars.net/go.php?id=1</a> The Searle Scholars Program makes grants to selected academic institutions to support the independent research of outstanding individuals who are in the first or second year of their appointment at the assistant professor level, and whose current appointment is a tenure-track position. Today, 142 institutions are invited to participate in the Program.	Sept. 25

### Office of Proposal Development (http://opd.tamu.edu), Texas A&M University

DARPA Mathematical Challenges  http://www.grants.gov/search/search.do;jsessionid=LdNpFGz2xBps1X2dmQvlyv8cf2yXscj15  QGSHpKQLV7JYmQpmfch!-2083667940?opp1d=42914&flag2006=false&mode=VIEW  DARPA is soliciting innovative research proposals in the area of DARPA Mathematical Challenges, with the goal of dramatically revolutionizing mathematics and thereby strengthening DoD's scientific and technological capabilities. To do so, the agency has identified twenty-three mathematical challenges, listed below, which were announced at DARPA Tech 2007. This RPA seeks innovative proposals addressing these Mathematical Challenges. Proposals should offer high potential for major mathematical breakthroughs associated to one or more of these challenges. Responses to multiple challenges should be addressed in separate proposals. Submissions that merely promise incremental improvements over the existing state of practice will be deemed unresponsive.	Open to Sept. 25
USA Medical Research and Materiel Command Broad Agency Announcement <a href="http://www.grants.gov/search/search.do:jsessionid=LjGcG21P4yxK7jFY2KF5b7IGG20J060LVVVtjp1bypLbVSWHSqT8V!-227388786?oppId=42947&amp;flaq2006=false&amp;mode=VIEW">http://www.grants.gov/search/search.do:jsessionid=LjGcG21P4yxK7jFY2KF5b7IGG20J060LVVVtjp1bypLbVSWHSqT8V!-227388786?oppId=42947&amp;flaq2006=false&amp;mode=VIEW</a>	Open to Sept. 29
International Research in Homeland Security Science & Technology Mission Areas <a href="http://www.grants.gov/search/search.do:jsessionid=JHrdQWhTZZ2GRbH69WylMzhcjNYhNcMpbk10S1XwHNN7HdNMl21V!-1513911680?oppId=43220&amp;flaq2006=false&amp;mode=VIEW">http://www.grants.gov/search/search/search.do:jsessionid=JHrdQWhTZZ2GRbH69WylMzhcjNYhNcMpbk10S1XwHNN7HdNMl21V!-1513911680?oppId=43220&amp;flaq2006=false&amp;mode=VIEW</a> The Department of Homeland Security (DHS) Science and Technology (S&T) Directorate is soliciting applications for international research projects aligned with the mission and requirements of DHS S&T. These projects should be designed to augment and complement, through international research and collaboration, the depth and breadth of homeland security science and technology research. This funding opportunity is restricted to accredited institutions of higher education.	Open to Sept. 29
USAID Philippines Conservation of Biodiversity and Management of Natural Resources, APS FY09 <a href="http://www07.grants.gov/search/search.do;jsessionid=0p4fJLhWcLrmb5pmL3C8Clz1NdDz5DR7RHCPmvC19rgyL0mg1y6p!1691723039?oppId=45135&amp;flag2006=false&amp;mode=VIEW">mode=VIEW</a> This USAID/Philippines Annual Program Statement solicits applications from prospective partners to implement activities to improve the conservation and management of priority biodiversity through the reduction of the most pressing threats to these critical ecosystems. USAID will support programs and activities that contribute to "Conservation of Biodiversity and Management of Natural Resources" in the Philippines. Programs eligible for funding are those that contribute to the objectives, as described under "Background" below, of the Assistance Agreement between the Republic of the Philippines and United States of America for Environment and Energy Programs.	Sept. 30
Personnel Security Thesis, Dissertation and Institutional Research Awards Program <a href="http://www07.grants.gov/search/search.do:jsessionid=TnYrJn3Jy0TMTVILkvvMvjnHclks7Qkxfr82QvClndxZ6HcG922W!1216815379?oppId=44676&amp;flag2006=false&amp;mode=VIEW">http://www07.grants.gov/search/search.do:jsessionid=TnYrJn3Jy0TMTVILkvvMvjnHclks7Qkxfr82QvClndxZ6HcG922W!1216815379?oppId=44676&amp;flag2006=false&amp;mode=VIEW</a> The Department of Defense Polygraph Institute DoDPI began in 1999 an effort to broaden its presence in the scientific and academic communities in response to the need for more advanced technical expertise to fulfill DoDPIs research mission. The Personnel Security Thesis, Dissertation, and Institutional Research Awards Program seeks to give the DoDPI a research workforce that is competitive with the best minds from the complex cerebral worlds of academia, and the emerging technologies.	BAA Open to Sept. 30, 2010
Beckman Young Investigators Program	Oct. 1

#### http://www.beckman-foundation.com/byi\_quides.html

Statement of Research Grant Policy & Procedures

The Arnold and Mabel Beckman Foundation makes grants to non-profit research institutions to promote research in chemistry and the life sciences, broadly interpreted, and particularly to foster the invention of methods, instruments and materials that will open up new avenues of research in science. The Beckman Young Investigator (BYI) Program is intended to provide research support to the most promising young faculty members in the early stages of academic careers in the chemical and life sciences and who have little or no external funding.

## Article 1, (Top)

## ARRA Energy Research and Education at NSF & DOE By Mike Cronan

The National Science Foundation reports it is joining the Department of Energy and other government agencies in efforts to educate students at all levels in fields contributing to **fundamental understanding of energy science and engineering systems**. At NSF, this will be implemented across many of its core programs that advance the integration of research and education at all levels, an underlying theme in many NSF programs.

The focus will be on **Specialized Energy Centers** modeled on Engineering Research Centers (ERCs) and Science and Technology Centers (STCs), Individual Fellowships to Graduate Students involved in Clean Energy Research, Integrative Graduate Training Programs involving Clean Energy, a **new flagship IGERT** (Integrative Graduation Education Research Traineeship), and Focused Research in K-12 Science Education Strategies and Innovative Technology Experiences for Students and Teachers (More...).

Similar to NSF's plans for an energy focus in ERCs (Engineering Research Centers) and STCs (Science and Technology Centers), and new NSF **Specialized Energy Centers**, <u>ScienceInsider</u> reports that Energy Secretary Steven Chu on May 7 highlighted the department's biggest new research initiative, a set of **eight new Energy Innovation Hubs**, each one focused on a different energy-related challenge: solar electricity; fuels produced directly from sunlight; batteries and other kinds of energy storage; carbon capture and storage; new technologies for the electrical grid; efficient buildings; extreme materials; and modeling and simulation. The centers will be modeled on DOE's three recently established bioenergy research centers. Each one will be funded for 5 years, at about \$25 million annually. **The 2010 budget proposal includes \$280 million for these hubs**. (More...)

Although both NSF and DOE are pursuing similar goals, it is reasonable to assume for planning purposes that any future solicitations related to energy centers from NSF and DOE will be distinctly different in their configuration. NSF advances a vision for the integration of research and education across all their flagship programs, including those mentioned above, something clearly required in the upcoming round of competition for ERC funding, called "Gen-3 ERCs" by NSF. In many ways, in contrast to DOE centers, NSF centers are umbrella research and education structures that integrate discrete NSF flagship programs like the Clean Energy IGERT mentioned above and

others into a robust and synergistic center configuration.

How either future NSF or DOE centers related to energy are finally configured will not be known until there are actual solicitations. However, in the case of NSF it is likely that any center structure will mirror existing research centers in core programmatic components, whereas for a mission agency such as DOE anticipating future center structures can be done with much less certainty, thereby making advance competitive positioning more difficult. For example, for an NSF energy center the importance of research and education integration, diversity, etc. will likely be emphasized as core program areas but will likely not be addressed for DOE.

Therefore, while advance strategic planning for the development and writing of NSF centers related to energy will be a challenging task, it something that can be done with enough certainty to make the process worthwhile. However, as with all NSF center grants, there are often many "Achilles heels" that manifest themselves in the development and writing process that need to be addressed early on in order to be competitive for funding. At NSF, competitiveness requires the capacity to define a clear research vision tightly mapped to the framework of the agency's center concept.

The <u>NSF response</u> to President Obama's "New Energy for America" plan is sweeping across many of NSF's most prestigious and sought-after flagship programs. However, the transition from successful researcher to successful center leader can be difficult, and requires a compelling strategic vision to answer the core NSF evaluation question of "why is it better to fund the umbrella structure of a center rather that funding discrete awards to different PIs." For NSF, the right answer embeds itself in synergy and integration. While the NSF **Specialized Energy Centers** and related educational programs above are not yet defined, it is not to early to think of competitive strategies to pursue them based on what is already well known about competing for NSF centers, particularly in planning to avoid the common pitfalls that lead to non-competitive submittals, including:

- Lack of prior collaborations among team members
- Lack of a competitive research track level at the center level
- Need to bring substantive expertise to each of the center goals, not just the research goal
- Centers need to be defined in a much larger research context than a research proposal
- Centers represent a complex configuration of multiple center elements surrounding research core—synthesis and integration of the parts is key.
- Searching for money with ideas ancillary
- Trying to force fit discrete research to a center structure
- Hobbled by pre-existing research partnerships and dynamics (wrong team)
- Unable to define an overarching vision for the center
- Unable to explain why the integration of N research strands achieves a compelling vision and synergy not possible if the research strands were funded as N discrete projects
- Lacks integrative skills required for center's multiple components
- Poor organizational, scheduling, and communications skills
- Poorly managed proposal development process
- Lacks capacity for teaming
- Lacks perspective to appreciate the importance of all agency required center components in addition to research core
- Supplants the agency's center concept with the PI's center concept

#### **Recovery Act: Wind Energy Consortia**

The Department of Energy's (DOE) Golden Field Office (GO) intends to issue, on behalf of the DOE Office of Energy Efficiency and Renewable Energy (EERE), Wind and Hydropower Technologies Program (WHTP), a Funding Opportunity Announcement (FOA) entitled "Recovery Act: Wind Energy Consortia between Institutions of Higher Learning and Industry" (More...). Below is a limited list of areas in which proposals will be sought.

#### Partnerships for Wind Research and Turbine Reliability

Universities in regions of the country representative of the mid-west wind belt (typically having a steady Class 3-4 resource all year) are encouraged to team with industry partners to establish facilities/equipment and a research agenda necessary to study major challenges facing today's wind industry. Proposals that address one or more challenges described in the "20% Wind Energy by 2030" report and include descriptions of how the wind hardware and software purchased will be requested. DOE will highly encourage research in "turbine reliability" as a topic in any consortia proposal.

#### Wind Energy Research & Development

University R&D to advance material design, performance measurements, analytical models, and leveraging partnerships with industry to improve power systems operations, maintenance or repair operations, wind turbine and/or component manufacturing, and interdisciplinary system integration. Fellowships, internships, etc. may be used to support the research agenda. For this, DOE will provide \$24 million for the development of **up to three consortia between universities and industry** to focus on critical wind energy challenges. These partnerships will allow universities to establish research and development programs to advance material design, performance measurements, analytical models, and work with the industry to improve power systems operations, maintenance and repair, and component manufacturing (More...).

Also in May, Secretary Chu Announced Nearly \$800 Million from Recovery Act to Accelerate Biofuels Research and Commercialization. The Biomass Program plans to use \$110 million to support fundamental research in key program areas, distributed in the following manner:

- Expand the resources available for sustainability research through the Office of Science Bioenergy Research Centers and establish a user-facility/small-scale integrated pilot plant (\$25 million);
- Create an advanced research consortium to develop technologies and facilitate subsequent demonstration of infrastructure-compatible biofuels through a competitive solicitation (\$35 million); and
- Create an algal biofuels consortium to accelerate demonstration of algal biofuels **through a competitive solicitation** (\$50 million) (More...).

Find more information on ARRA R&D at the Department of Energy at **DOE Recovery** Act Site. DOE funding opportunities are posted at **e-Center**.

## Article 2, (Top)

## Recovery Act R&D Update at Three Months By Mike Cronan

The Recovery Act (American Recovery and Reinvestment Act of 2009 signed by President Obama on February 16, 2009) is now some three months old. Nearly two-thirds of the allocation of \$21.5 billion in R&D funding of interest to universities under ARRA went to NIH (\$10.4 billion) and NSF (\$3 billion). Research announcements by Secretary Chu related to ARRA R&D funding from the DOE Energy Programs (\$2.5 billion) and from the DOE Office of Science (\$1.6 billion) began to be published in May, but are not yet fully implemented in terms of allocations to competitive DOE solicitations for basic research. In late May the first *Quarterly Report* to the President On Progress Implementing the American Recovery and Reinvestment Act Of 2009 was submitted.

Generally, however, after a tsunami of initial activity related to the startup of ARRA R&D funding across various federal agencies, including the establishment of agency-specific <u>ARRA tracking web sites</u>, the pace of agency ARRA announcements and the posting of solicitations of interest to the academic research community has now quelled considerably. The key questions, listed below, are now mostly answered as they relate to the "research" portion of ARRA funded R&D that will be awarded through the peer-reviewed, merit-based process for funding basic research at NIH and NSF:

- How will the ARRA R&D money be allocated among federal agencies and programmatically within each agency?
- How will each agency award the money, e.g., solicitations, supplements, non-funded but well reviewed proposals in-house, etc.?
- Are there important competitive factors PIs need to be aware of in applying for research funding under the ARRA program, e.g., special review criteria?

At NSF, the majority of proposals eligible for Recovery Act funding at NSF include those that are already in house and will be reviewed and/or awarded **prior to September 30**, **2009**, with the exception of the recently announced solicitations for the Major Research Instrumentation Program (MRI-R<sup>2</sup>) and Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R<sup>2</sup>), both with August due dates, and the yet to be announced Science Masters programs. NSF also will consider proposals declined on or after October 1, 2008. The reversal of the decision to decline will be based on both high quality of the reviews received on the initial submission and lack of available funding at the time the original decision was made. The cognizant program officer will contact the institution when a reversal is being considered by NSF ( NSF Important Notice 131). The NSF *Terms and Conditions May 2009, National Science Foundation* for the American Recovery and Reinvestment Act of 2009 were published in May.

At NIH, in addition to numerous new solicitations receiving ARRA funding, ARRA funding is going to active NIH grants through several mechanisms, including Competitive Revision Applications, Administrative Supplements, and Administrative Supplements Providing Summer Research

Experiences. If you are funded by NIH currently you may become better funded under ARRA through one of these mechanisms.

In most cases, some NSF programs being an exception, ARRA requires that the money be spent in two years, and this has served to significantly compress the solicitation process into a very tight time frame. In the case of NIH and NSF solicitations receiving ARRA funding for equipment, instrumentation, facilities, and core facilities, the open period from the date of announcement of the opportunity to the application due date has been significantly reduced. These ARRA solicitations place limits on the number of proposals that can be submitted by one institution, thereby requiring an accelerated internal process for selecting proposals that may be submitted by an institution.

According to <u>ScienceInsider</u> researchers face a very competitive environment when seeking Recovery Act funding. NIH reports that 2,400 letters of intent were submitted to the Grand Opportunity (GO) program that will likely have a 10% funding rate, and the Challenge Grant program will have an estimated 2% funding rate for the 20,000 applications submitted. By comparison, NIH received fewer than 1,600 applications for competitive revision awards and expects to fund nearly 30% of them, according to NIH acting Director Raynard Kington.

The funding rate for the NIH <u>C06</u> Research Facilities Improvement and <u>G20</u> Core Facility Renovation grants is likely to be very low as well given the estimated number of awards possible out of the total \$1 billion of funding available, with awards ranging from \$2-\$15 million and \$1-\$10 million, respectively. The number of proposals submitted to these programs is likely to be very large given the intense interest in the grants by universities, medical centers, and other 501(c)(3) research entities. Further inflating the number of expected proposals will be that an eligible institution is defined as an organization with a separate IPF code, three proposals per IPF are allowed for the C06 and two for the G20, and many larger research universities and medical centers will have multiple IPF codes.

One key take away message from all this is that it is important not to let the ARRA money divert the eye from the ball of the existing research opportunities (non-ARRA dollars) at NIH and NSF. Both agencies expect the success rate for all research funding to increase above the normal success rate while ARRA funding lasts, but to drop below it afterward, particularly at NIH.

## Article 3, (Top)

Applying for NSF REU Sites

By Lucy Deckard

One of NSF's priorities is to encourage more U.S. students to pursue degrees in science, math, engineering and technology (STEM) fields, encourage more students to pursue careers in STEM research, and increase the diversity of future scientists and engineers. One approach that NSF sees as particularly effective in accomplishing these goals is providing research experiences for undergraduate students. NSF's Research Experiences for Undergraduate program aims to make these research experiences available to more students and currently funds over 600 REU Sites. This program provides an excellent opportunity for departments and programs to bring in

undergraduates from other institutions for summer research experiences, providing infrastructure for broader impacts components of other NSF proposals while also serving as a recruiting tool and raising the profile of the department or program.

NSF REU programs come in two categories: sites and supplements. REU Site proposals are typically due each August, while REU Supplement proposals can be submitted throughout the year, at the discretion of the Program Officer. REU Sites typically host 6 to 12 undergraduate students each year, usually during the summer for 8 to 10 weeks. REU Supplements provide funding to PIs already funded with an NSF grant to allow one or two undergraduate students to participate in research experiences related to the funded project. We will focus here first on REU Sites and then on REU Supplements.

#### **REU Sites**

REU Site grants may be funded for a period from two to five years, with three years being typical. REU Sites usually involve a number of faculty who agree to act as mentors to student participants. Faculty mentors should have active research projects in research areas supported by NSF but do not necessarily need to be funded by NSF grants. A track record of success by these faculty in mentoring undergraduates in research will improve the proposal's competitiveness. It is important for all participating faculty to understand that REU grants do not fund research; they fund stipends, living expenses, and additional activities for participating students. It is assumed that the research is already supported by other sources, although expenses such as consumables used by the student may be included in the budget.

Since NSF's goal is to provide research experiences for students who otherwise might not have the opportunity to participate in research, large research universities are expected to recruit most participating students from outside their institutions, focusing on predominantly undergraduate institutions, community colleges, or small institutions with limited research programs. Undergraduate institutions who host REU Sites may have a larger proportion of participants from their own institutions, with 50% being typical. The REU proposal must include a plan for recruiting and selecting student participants, including strategies to promote diversity of the students. Successful recruiting strategies include leveraging the university's other recruiting activities, working through faculty collaborators at other institutions to recruit students, taking advantage of existing institutional partnerships, and visiting institutions personally. Selection criteria will depend on the goals of your particular project but should be stringent enough to admit students who are likely to succeed while not being so stringent that only the very best students gualify.

In addition to the recruitment and selection plan, REU proposals must include discussions of the research projects in which the students will participate, additional enrichment activities planned, the qualifications of the faculty mentors, and a plan for assessing the project. While all of these components are important, the core of the proposal is the description of the research projects and specifically how students will participate. Reviewers must be convinced that participating students will have a meaningful research experience; therefore, proposals should include not only general descriptions of faculty mentors' research but also specific descriptions of what the students will do as part of that research. It is important that they are not merely assistants to graduate students or faculty but have a project that will allow them to take ownership of the process. At the same time, procedures should be in place to keep students on track and help them when they reach a roadblock

in their research project. These strategies should be discussed in the project description. There are a wide range of literature and online resources available discussing "best practices" for mentoring undergraduates in research, and it's a good idea to read some of that literature (and cite it in your proposal) when planning your REU project. Some key resources on how to plan REU projects are listed on the OPD website at <a href="http://tinyurl.com/o76bwk">http://tinyurl.com/o76bwk</a>.

It is also expected that a variety of enrichment activities will be available to the students. These activities might include, for example, additional training, information on research careers or graduate school, opportunities to connect with faculty and with other students, social events, and tours of the campus. These activities should help to promote communication and bonding among the students while also advancing the goals of the project.

Another important component of REU proposals is the assessment plan. NSF has steadily raised the bar for what it expects in assessment over the last several years so that a strong assessment plan is now a requirement to winning one of these grants. As with any program, the assessment plan must relate to explicitly stated program goals and objectives and should be structured to determine if the program goals are being met. For example, one goal might be to encourage participating undergraduates to attend graduate school. The program's success in meeting that goal might be measured by tracking the students to see if they did indeed attend graduate school as well as by surveying them before and after their research experience about their plans for graduate school, and determining if they took the GRE test. In addition several survey instruments specifically designed for undergraduate experiences by David Lopatto (and funded by the Howard Hughes Medical Institute) are posted at <a href="http://www.grinnell.edu/academic/psychology/faculty/dl/sure&cure/">http://www.grinnell.edu/academic/psychology/faculty/dl/sure&cure/</a>.

Other resources for assessment, as well as more detailed advice on how to write an REU proposals are posted on the OPD website at <a href="http://tinyurl.com/o76bwk">http://tinyurl.com/o76bwk</a>.

#### **REU Supplements**

Applying for an REU supplement (or committing in an NSF proposal to apply for an REU supplement if funded) is an excellent way to enhance the broader impacts of your NSF project. This will help you to establish a track record in mentoring undergraduates which can be helpful when you apply for your next NSF project. REU supplements may support research experiences for students at your institution or from other institutions and may run through the academic year or may support summer experiences. They typically support one or two students.

Before applying for a supplement, be sure to check with your NSF Program Officer. They will let you know if they are open to funding an REU supplement and when to apply (typically, Program Officers encourage REU Supplement applications in the spring). They will also let you know what kinds of REU projects they would be willing to support (for example, will they support an REU experience for a student from your institution or do they prefer that you recruit students from elsewhere). The 3-page REU supplement proposal is much easier to write than an REU site proposal, but it is still important to convincingly describe what your goals will be for the experience, why the experience will be valuable to the participating student(s), and how you will assess whether the REU project was successful. In addition, if you have identified the students who will participate, you will be asked to include their biosketches.

REU Supplement proposals have a 3-page limit and include the following sections:

- Summary
- Form and Nature of Prospective Students' Involvement (What will the student be doing? What enrichment activities do you have planned? How will you assess the experience?)
- Experience of the PI in Involving Undergraduates in Research
- Process and Criteria for Selection of Students (if your student or students are identified, discuss their backgrounds and why the research experience will be valuable to them here).

Funding decisions on REU Supplements are made by the Program Officer, so the funding decision is generally made relatively quickly.

Finally, it is very important when developing either an REU Site or REU Supplement proposal to pay close attention to the proposed budget. Hosting a student for a summer experience may require not only funds for stipend, lodging and meals but also funds to enroll the student in your institution so that they have access to campus facilities such as the health center and library. Other expenses can include travel to and from their homes, expenses related to social or enrichment activities, and funding for travel to present their results at a conference. Not including these expenses in the budget, or underestimating expenses for room and board can result in significant headaches for the PI when implementing the project, so it is important to work out these details during the proposal development process. NSF expects typical expenses to be about \$700 - \$900 per student per week of the experience, which includes a stipend to the student of at least \$450 per week. For descriptions of funded REU sites, go to NSF's REU page, click on the link, "Abstracts of Recent Awards Made Through This Program" near the bottom of the page, and then look for projects with titles that start with "REU Site."