

UM-St. Louis Office of Research Administration  
**Funding Opportunities: Federal Agencies**

**NOVEMBER 2009**

This report contains a sampling of new/updated funding opportunity announcements issued by U.S. federal agencies that were posted in the previous month. For additional opportunities, visit

- Grants.gov (<http://www.grants.gov>)
- InfoEd (<http://www1.infoed.org/>)
- University Internal Awards program (<http://www.umsl.edu/services/ora/sponsored-projects/internal.html>)

**DEPARTMENT OF AGRICULTURE (USDA)**

USDA: National Institute of Food and Agriculture (NIFA)

Close Date	Opportunity
12/18/2009	<p><b>State and Regional AgrAbility Program</b>  AgrAbility increases the likelihood that individuals with disabilities and their families engaged in production agriculture (AgrAbility customers) become more successful. The primary outcome is enhanced quality of life for people with disabilities in agriculture. The program supports cooperative projects in which State Cooperative Extension Services (CES) based at either 1862 or 1890 Land-Grant Universities subcontract to private, non-profit disability organizations. Measures of success may include improvements in customers' financial stability or access to life activities and the capacity of states and regions to deliver services this population requires in a timely and satisfying manner. To address the specialized needs of AgrAbility's customers, the program builds service capacity on national, regional, state, and local levels through education and networking. In the absence of capacity, projects provide assistance to customers. Projects use marketing to direct the public to initiatives in education, networking, and assistance.</p>
02/05/2010	<p><b>Higher Education Challenge (HEC) Grants Program</b>  Projects supported by the Higher Education Challenge Grants Program will: (1) address a State, regional, national, or international educational need; (2) involve a creative or non-traditional approach toward addressing that need that can serve as a model to others; (3) encourage and facilitate better working relationships in the university science and education community, as well as between universities and the private sector, to enhance program quality and supplement available resources; and (4) result in benefits that will likely transcend the project duration and USDA support.</p>

**DEPARTMENT OF DEFENSE (DOD)**

DOD: Air Force Academy

Close Date	Opportunity
09/30/2019	<p><b>Research Interests of the US Air Force Academy</b>  The Air Force Academy invests in an active research program for three main reasons. First and foremost, research significantly enhances the cadet learning experience. Our research is done by, for and with cadets who work alongside</p>

	<p>fellow cadets and faculty mentors. Research provides cadets with rich independent learning opportunities as they tackle ill-defined problems and are challenged to apply their knowledge and abilities. Secondly, our research program provides opportunities for essential faculty development. Research broadens and deepens the experience base of the faculty. This infuses current, relevant, state-of-the-art and cutting-edge applications and examples into the curriculum. This also helps our faculty remain current in their respective fields. Third, at USAFA we strive to conduct research to enhance the ability of the Air Force to perform its mission. There are currently ongoing research projects spanning topics as diverse as super cooled cesium atoms, cyber security, spatial disorientation and homeland defense.</p>
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DOD: Air Force Office of Scientific Research (AFOSR)

Close Date	Opportunity
03/02/2010	<p><b>Fiscal Year (FY) 2010 Department of Defense Multidisciplinary Research Program of the University Research Initiative</b></p> <p>The MURI program supports basic science and/or engineering research at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts that intersect more than one traditional science and engineering discipline to address issues of critical concern to 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." The DoD's basic research program invests broadly in many specific fields to ensure that it has early cognizance of new scientific knowledge. The FY 2010 MURI competition is for the topics listed below. Detailed descriptions of the topics can be found in Section VIII entitled, "Specific MURI Topics", of this BAA. 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 topics (11) through (20) should be submitted to the Air Force Office of Scientific Research (AFOSR): (11) Novel Catalytic Mechanisms for the Chemical Reduction of Carbon Dioxide to Energy-Dense Liquids (12) Third Order Nonlinear Optical Organics (13) Fundamental Processes in High-Temperature Gas-Surface Interactions (14) Propagation of Ultrashort Laser Pulses through Transparent Media (15) Superconducting Semiconductors (16) Human-Machine Adversarial Networks (17) Biologically-Engineering of Adherent / Spectroscopically Interrogated Microstructures (18) Control of Information Collection and Fusion (19) Stable Metrics for Global Inference in Social Networks to Predict Collective Behavior (20) Solid State Cooling.</p>

DOD: Air Force Research Lab (AFRL)

Close Date	Opportunity
09/30/2014	<p><b>Advances in Bioscience for Airmen Performance</b></p> <p>The 711th Human Performance Wing, Human Effectiveness Directorate is soliciting white papers under this announcement for innovative science and technology projects to support advanced bioscience research. Specifically, the Biosciences and Performance Division is seeking unique and innovative research concepts that address its technical mission areas. Research is sought</p>

	<p>primarily in the following four technical areas: 1) Applied Biotechnology, 2) Biobehavioral Performance, 3) Biomechanics, and 4) Counterproliferation. The purpose of this BAA is to augment core research activities and facilities to provide radically new military capabilities that improve warfighter performance and combat effectiveness. The research will provide for a broad range of revolutionary and evolutionary technologies to meet the critical needs of the warfighter for full dimensional protection, survivability, and performance enhancement.</p>
09/30/2014	<p><b>Warfighter Interface Technologies Advanced Research Programs (WITARP)</b></p> <p>The 711th Human Performance Wing, Human Effectiveness Directorate is soliciting white papers under this announcement for innovative technologies to support the development of Warfighter Interface Technologies Advanced Research Programs (WITARP). The objective of this BAA is to address highly unique and innovative Research &amp; Development (R&amp;D) concept areas in Warfighter Interface Technologies. Proposed work should address the innovative and strategic thought of the 21st century adversaries, and develop new concepts to counter these adversaries with innovative warfighter interface capabilities. The technology research in the BAA will be primarily focused in the following four areas: Battlespace Acoustics; Battlespace Visualizations; Human Role in Autonomous Systems; and Distributed Decision Making.</p>
09/30/2014	<p><b>Science and Technology For Warfighter Training and Aiding</b></p> <p>711th Human Performance Wing, Human Effectiveness Directorate, Wright Research Site is soliciting white papers on the research effort described below. White Papers should be addressed to the Contracting Point of Contact (POC) stated in Section VII of the Full Text Announcement. This is an unrestricted solicitation. Small businesses are encouraged to propose on all or any part of this solicitation. The NAICS Code for this acquisition is 541712 Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology), and the small business size standard is 500 employees. White Papers/Proposals submitted shall be in accordance with this announcement. There will be no other solicitation issued in regard to this requirement. Offerors should be alert for any BAA amendments that may permit extensions to the white paper submission date.</p>
09/30/2014	<p><b>Research and Analytical Support for the 711th HPW Human Effectiveness Directorate</b></p> <p>The goal of this effort is to obtain technical and analytical support for the conduct of research at the 711th Human Performance Wing's Human Effectiveness Directorate. This includes all locations - Wright-Patterson AFB OH; Brooks City-Base TX; and Mesa Research Site. Such support may take the following forms: (a) Provide appropriately training and experienced undergraduate and graduate students; post-doctoral fellows and faculty for direct work on 711 HPW/RH research, analyses, and studies; (b) Provide faculty to supervise students to perform advanced research analysis and studies; (c) Match faculty expertise to designated research and study needs with 711 HPW/RH; (s) provide a pool of subjects for research studies.</p>

DOD: Department of the Army

Close Date	Opportunity
03/02/2010	<p><b>Fiscal Year (FY) 2010 Department of Defense Multidisciplinary Research Program of the University Research Initiative - For Proposal Submission to the Army</b></p> <p>The MURI program supports basic science and/or engineering research at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts that intersect more than one traditional science and</p>

engineering discipline to address issues of critical concern to 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." The FY 2010 MURI competition is for the 30 topics listed in the BAA. Detailed descriptions of the topics can be found in Section VIII entitled, "Specific MURI Topics," of the BAA. 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 topics (21) through (30) should be submitted to the Army Research Office (ARO): (21) Neuronal Behavior in Primary Blast (22) Identifying and Extracting the Mathematical Signatures of Prokaryotic Activity in DNA; Developing a Theoretical Foundation for Predicting DNA Stability (23) Tomography of Social Networks of Asymmetric Adversaries (24) Adaptive Perception and Agile Autonomy in Severe Environments (25) Structured Modeling for Low-Density Languages (26) Directed Self-Assembly of Reconfigurable Materials (27) "Atomtronics": A generalized electronics (28) Bio-Electronic Templates for Interfacing to the Nanoscale (29) Ion Transport In Complex Heterogeneous Organic Materials (30) Defect Reduction in Superlattice Materials.

**USA Medical Research and Materiel Command Broad Agency Announcement**  
 The U.S. Army Medical Research and Materiel Command's (USAMRMC) Broad Agency Announcement (BAA) 10-1 is available. The USAMRMC's mission is to provide solutions to medical problems of importance to the American warfighter at home and abroad. The scope of this effort and the priorities attached to specific projects are influenced by changes in military and civilian medical science and technology, operational requirements, military threat assessments, and national defense strategies. The extramural research and development program plays a vital role in the fulfillment of the objectives established by the Command. The USAMRMC's BAA is intended to solicit research ideas, and is issued under the provisions of the Competition in Contracting Act of 1984 (Public Law 98-369), as implemented in the Federal Acquisition Regulations. This Announcement provides a general description of the Command's research programs, including specific areas of interest; general information; the evaluation and selection criteria; and proposal preparation instructions. The Attachments include forms that are required with the submission of a full proposal. Research proposals are sought from educational institutions, nonprofit organizations and private industry. This is a continuously open announcement; preproposals must be submitted electronically and will be evaluated at any time throughout the year, unless timeframes are stated in a separate announcement. The electronic preproposal form is located at [www.usamraa.army.mil](http://www.usamraa.army.mil) under the BAA button.

DOD: Office of Naval Research (ONR)

Close Date	Opportunity
03/02/2010	<p><b>Department of Defense Multi-Disciplinary Research Program of the University Research Initiative</b></p> <p>The MURI program supports basic science and/or engineering research at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary</p>

research efforts that intersect more than one traditional science and engineering discipline to address issues of critical concern to 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." The DoD's basic research program invests broadly in many specific fields to ensure that it has early cognizance of new scientific knowledge. The FY 2010 MURI competition is for the 30 topics listed below. Detailed descriptions of the topics can be found in Section VIII entitled, "Specific MURI Topics", of this BAA. 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 topics (1) through (10) should be submitted to The Office of Naval Research: (1) Optical Metamaterials (2) Adaptive Cognitive Maps for Autonomous Systems (3) Non-linear Mediums Converting Frequencies of Propagating E/M and Pressure Waves (4) Biofuels: Microbial Communities, Biogeochemistry and Surface Interactions (5) Design, Synthesis, and Characterization of Electro-Active Polymers for Dielectric Energy Storage (6) Reasoning for Image Understanding in Uncertain Environments (7) Fundamental Study of High- and Low-K Dielectrics for III-V Electronic Devices (8) Provably-Safe Perception-Based Control for Autonomous UAS Operations around Complex, Unstructured Terrain (9) Dynamical Systems Theory in 4D Geophysical Fluid Dynamics (10) Hyperspectral, Radar and EO/IR Signatures in the Littorals White papers and Full proposals addressing the following topics (11) through (20) should be submitted to the Air Force Office of Scientific Research (AFOSR): (11) Novel Catalytic Mechanisms for the Chemical Reduction of Carbon Dioxide to Energy-Dense Liquids (12) Third Order Nonlinear Optical Organics (13) Fundamental Processes in High-Temperature Gas-Surface Interactions (14) Propagation of Ultrashort Laser Pulses through Transparent Media (15) Superconducting Semiconductors (16) Human-Machine Adversarial Networks (17) Biologically-Engineering of Adherent / Spectroscopically Interrogated Microstructures (18) Control of Information Collection and Fusion (19) Stable Metrics for Global Inference in Social Networks to Predict Collective Behavior (20) Solid State Cooling White papers and full proposals addressing the following topics (21) through (30) should be submitted to the Army Research Office (ARO): (21) Neuronal Behavior in Primary Blast (22) Identifying and Extracting the Mathematical Signatures of Prokaryotic Activity in DNA; Developing a Theoretical Foundation for Predicting DNA Stability (23) Tomography of Social Networks of Asymmetric Adversaries (24) Adaptive Perception and Agile Autonomy in Severe Environments (25) Structured Modeling for Low-Density Languages (26) Directed Self-Assembly of Reconfigurable Materials (27) "Atomtronics": A generalized electronics (28) Bio-Electronic Templates for Interfacing to the Nanoscale (29) Ion Transport In Complex Heterogeneous Organic Materials (30) Defect Reduction in Superlattice Materials Proposals from a team of university investigators may be warranted because the necessary expertise in addressing the multiple facets of the topics may reside in different universities, or in different departments in the same university. By supporting multidisciplinary teams, the program is complementary to other DoD basic research programs that support university research through single-investigator awards. Proposals must name one Principal Investigator (PI) as the responsible technical point of

	contact. Similarly, one institution will be the primary awardee for the purpose of award execution. The PI must come from the primary institution. The relationship among participating institutions and their respective roles, as well as the apportionment of funds including sub-awards, if any, must be described in both the proposal text and the budget.
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**DEPARTMENT OF EDUCATION (ED)**

Close Date	Opportunity
12/07/2009	<p><b>Office of Postsecondary Education; Overview Information Student Support Services (SSS) Program; 84.042A</b></p> <p>Each funding opportunity description is a synopsis of information in the Federal Register application notice. For specific information about eligibility, please see the official application notice. The official version of this document is the document published in the Federal Register. Free Internet access to the official edition of the Federal Register and the Code of Federal Regulations is available on GPO Access at: <a href="http://www.access.gpo.gov/nara/index.html">http://www.access.gpo.gov/nara/index.html</a>. Please review the official application notice for pre-application and application requirements, application submission information, performance measures, priorities and program contact information. Purpose of Program: The purpose of the SSS Program is to increase the number of disadvantaged low-income college students, first generation college students, and college students with disabilities in the United States who successfully complete a program of study at the postsecondary level. Applications for grants under this program must be submitted electronically using the Electronic Grant Application System (e-Application) accessible through the Department's e-Grants site. The telephone number for the e-app Helpdesk is 1-800-336-8930.</p>
12/14/2009	<p><b>Office of Postsecondary Education: Student Support Services (SSS) Program CFDA 84.042A</b></p> <p>Each funding opportunity description is a synopsis of information in the Federal Register application notice. For specific information about eligibility, please see the official application notice. The official version of this document is the document published in the Federal Register. Free internet access to the official edition of the Federal Register and the Code of Federal Regulations is available on GPO Access at: <a href="http://www.access.gpo.gov/nara/index.html">http://www.access.gpo.gov/nara/index.html</a>. Please review the official application notice for pre-application and application requirements, application submission information, performance measures, priorities and program contact information. Purpose of Program: The purpose of the SSS Program is to increase the number of disadvantaged low-income college students, first generation college students, and college students with disabilities in the United States who successfully complete a program of study at the postsecondary level. Applications for grants under this program must be submitted electronically using the Electronic Grant Application System (e-Application) accessible through the Department's e-Grants site. The telephone number for the e-App Helpdesk is 1-800-336-8930.</p>

**DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS)**

HHS: Centers for Disease Control and Prevention (CDC)

Close Date	Opportunity
12/11/2009	<p><b>Public Health Conference Support Program</b></p> <p>CDC's Procurement and Grants Office has published a funding opportunity announcement entitled, "NCBDDD Public Health Conference Support Program." Approximately \$ 100,000 will be available in fiscal year 2010 to fund 1-12 awards. The purpose of this FOA is to provide partial support for</p>

	specific non-Federal conferences in the areas of health promotion, disease prevention, and educational programs. For complete program details, please see the full announcement on the Grants.gov website at <a href="http://www.grants.gov">www.grants.gov</a> . The estimated funding period is May 14, 2010.
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HHS: National Institutes of Health (NIH)

Close Date	Opportunity
12/17/2009	<p><b>Pathway to Independence Award in Cancer Nanotechnology Research (K99/R00)</b></p> <p>Purpose. This Funding Opportunity Announcement (FOA), issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits applications for the Pathway to Independence Award (K99/R00) in Cancer Nanotechnology Research. This initiative is an integral component of a broader program to continue the interactive NCI Alliance for Nanotechnology in Cancer (the Alliance) (<a href="http://nano.cancer.gov">http://nano.cancer.gov</a>). In addition to this initiative, the Alliance will consist of the Center for Nanotechnology Excellence (CCNEs, as a core of the program infrastructure), platform projects (CNPPs), and Cancer Nanotechnology Training Centers (CNTCs). The primary purpose of this Pathway to Independence Award Program is to increase and maintain a strong cohort of new talented investigators focused on research in cancer nanotechnology. The program is designed to facilitate a timely transition from a mentored postdoctoral research position to a stable independent research position with independent research support at an earlier stage than is currently the norm. Mechanism of Support. This FOA will utilize the NIH Pathway to Independence Award (K99/R00) mechanism. This FOA complements other Alliance FOAs that will support the Centers for Cancer Nanotechnology Excellence awards (U54 funding mechanism, RFA-CA-09-012), the Cancer Nanotechnology Platform Partnerships (U01 mechanism, RFA-CA-09-013), and Cancer Nanotechnology Training Centers (R25 mechanism, RFA-CA-09-014). Funds Available and Anticipated Number of Awards. For this K99/R00 FOA, the NCI has committed approximately \$2 million in total costs for FY 2010 and \$10 million over a 5-year period. Approximately 8-10 awards are expected to be made in connection with this FOA.</p>
12/09/2009	<p><b>Biobehavioral Research Awards for Innovative New Scientists (BRAINS) (R01)</b></p> <p>Purpose. The Biobehavioral Research Awards for Innovative New Scientists (BRAINS) award is intended to support the research and research career development of outstanding scientists who are in the early, formative stages of their careers and who plan to make a long term career commitment to research in specific mission areas of the NIMH. This award seeks to assist these individuals in launching an innovative clinical, translational, basic or services research program that holds the potential to profoundly transform the understanding, diagnosis, treatment, or prevention of mental disorders. Each year the BRAINS program will focus on a specific area of research and/or research career development need. For FY 2010, the BRAINS program will focus on the research priorities and gap areas identified in the NIMH Strategic Plan (<a href="http://www.nimh.nih.gov/about/strategic-planning-reports/index.shtml">http://www.nimh.nih.gov/about/strategic-planning-reports/index.shtml</a>). Mechanism of Support. This FOA will utilize the NIH Research Project Grant (R01) award mechanism and is intended for early stage investigators (<a href="http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-121.html">http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-121.html</a>). Funds Available and Anticipated Number of Awards. The NIMH intends to commit up to \$5,000,000 in total costs to fund 7-10 new grants in FY 2010.</p>
12/10/2009	<p><b>Morris K. Udall Centers of Excellence for Parkinsons Disease Research (P50)</b></p> <p>Purpose. The National Institute of Neurological Disorders and Stroke (NINDS)</p>

	<p>invites new and competing renewal applications for the Morris K. Udall Centers of Excellence for Parkinsons Disease Research program. Proposed Centers must involve multidisciplinary teams engaged in integrative basic, translational and clinical research on Parkinsons disease (PD), with the primary objective of transforming this research into the development of new treatments. Investigations on related parkinsonian disorders may be included, to the extent that these inform and/or expand research on PD.</p> <p>Accomplishment of the stated goals of the Center, and of each project, must require substantial collaborative efforts and the utilization of common resource cores. All proposed Centers must include a pre-clinical and/or clinical translational research project. In this context, pre-clinical translation is defined as pre-IND/IDE (Investigational New Drug/Investigational Device Exemption) stage research on potential therapeutic or diagnostic candidates. Clinical translational projects are early-stage projects in human subjects that are designed as first steps toward transformation of scientific discoveries arising from basic research, clinical research or population studies into new modalities for the prevention, treatment and cure of PD. All Centers are required to have an Administrative Core; inclusion of other research and core components is flexible within stated budget limits. Inclusion of a clinical component, a clinical translational research project plus a clinical resource core, is encouraged, as is emphasis on training and public outreach activities. The Udall Center Director (PI) must be an established leader in scientific research with visionary leadership skills and proven expertise in research project and personnel management. Eligible institutions must demonstrate commitment to and support for the establishment and continuation of the proposed Udall Center. Successful applicants will participate in a network of existing Udall Centers to foster the translation of new scientific findings and technological developments into novel treatments for PD.</p>
12/11/2009	<p><b>Nathan Shock Centers Of Excellence in Basic Biology of Aging (P30)</b>  Purpose. The National Institute on Aging (NIA) invites applications for support of Centers, known as Nathan Shock Centers of Excellence in Basic Biology of Aging. These Center grants will provide funding for research and training activities that belong within the areas supported by the Division of Aging Biology of the NIA (<a href="http://www.nia.nih.gov/ResearchInformation/ExtramuralPrograms/BiologyOfAging/">http://www.nia.nih.gov/ResearchInformation/ExtramuralPrograms/BiologyOfAging/</a>). They are intended for institutions that can demonstrate a substantial current investment in and commitment to research on the basic biology of aging, but they are not intended to support the Principal Investigators research directly, nor clinical research or clinical trials.</p>
12/17/2009	<p><b>Cancer Nanotechnology Training Centers (CNTCs)(R25)</b>  Purpose. This Funding Opportunity Announcement (FOA) solicits applications for the development of: Cancer Nanotechnology Training Centers (CNTCs) as a component of the NCI Alliance for Nanotechnology in Cancer (The Alliance) (<a href="http://nano.cancer.gov">http://nano.cancer.gov</a>). In addition to the CNTCs, the Alliance will consist of the Centers for Cancer Nanotechnology Excellence (CCNEs, as the core of the program infrastructure), platform projects (CNPPs), and a K99/00 career transition program. The CNTCs are designed to establish innovative research education programs supporting the development of a multi-disciplinary nanotechnology workforce capable of pursuing cancer research. The proposed CNTCs should target graduate student and post-doctoral researchers of broad background (in medicine, biology, and other health sciences as well as in the physical sciences, chemistry, and engineering). The program of multi-disciplinary research education in cancer nanotechnology should be primarily focused on mentored laboratory-based training through participation in dedicated training research projects. In addition to funds for the training projects, CNTC awards may be used to support participants salaries for up to two years. Courses, seminars, and other forms of research education may also</p>

	<p>be included in the CNTC program. This FOA is open to all qualified applicants regardless of whether or not they participated in the previous issuance of the Alliance program. Mechanism of Support. This FOA will use the NIH Research Education (R25) grant mechanism. Research education programs may not be transferred from one institution to another, unless strongly justified (see Section VI.2). Separate FOAs will solicit applications for the Centers for Cancer Nanotechnology Excellence awards (U54 funding mechanism, RFA-CA-09-012), the Cancer Nanotechnology Platform Partnerships (U01 mechanism, RFA-CA-09-013), and K99/R00 career transition grants (RFA-CA-09-015). Funds Available and Anticipated Number of Awards. For this CNTCs FOA, the NCI has committed approximately \$2.5 million in total costs for FY 2010. Approximately 3-5 awards are expected in connection with this FOA.</p>
01/20/2010	<p><b>Cellular and Molecular Mechanisms of Arterial Stiffening and Its Relationship to Development of Hypertension (R01)</b>  Purpose. The National Heart, Lung, and Blood Institute (NHLBI) invites Research Project Grant applications that propose basic physiological, cellular and molecular investigations to elucidate the mechanisms that lead to conduit artery stiffening in the context of hypertension and explore the temporal relationship between arterial stiffening and the development of hypertension in animal models. Mechanism of Support. This FOA will utilize the R01 grant mechanism. Funds Available and Anticipated Number of Awards. Include a statement about the total amount to be awarded and the anticipated number of awards. The NHLBI intends to commit approximately \$4 million in total costs in FY2010, and up to \$16 million over four years, to fund up to 10 grants under this FOA. Awards issued under this FOA are contingent upon availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/22/2010	<p><b>Roadmap Transformative Research Projects Program (R01)</b>  Purpose. As part of the NIH Roadmap for Biomedical Research, the National Institutes of Health invites transformative Research Project Grant (R01) applications from institutions/organizations proposing groundbreaking, exceptionally innovative, high risk, original and/or unconventional research with the potential to create new scientific paradigms or challenge existing ones. Projects must clearly demonstrate potential to produce a major impact in a broad area of biomedical or behavioral research. Mechanism of Support. This FOA will utilize the NIH Research Project Grant (R01) award mechanism. Funds Available and Anticipated Number of Awards. The NIH common fund intends to commit \$25 million dollars in FY 2010. The number of awards will depend on the size and scope of the most meritorious applications.</p>
02/03/2010	<p><b>Lung Transplantation: Planning Grants for Clinical Trials of Novel Therapies (R34)</b>  Purpose. The National Heart, Lung, and Blood Institute (NHLBI) invites applications to support the initial organization, protocol development, and necessary preliminary studies critical for the design of robust clinical trials in lung transplantation. This Funding Opportunity Announcement (FOA) should be used to position investigators or groups of investigators to develop competitive clinical trials to test important new strategies to enhance the quality of lungs available for transplant and improve management and long term outcomes of lung transplant recipients. This may include assembling a research team, consisting of a principal clinical site and having several collaborating ancillary sites, defining and prioritizing research questions, collecting information on the feasibility of the therapy and patient availability, and developing protocol(s). Applications must demonstrate that the proposed work is both necessary and sufficient to permit proceeding to the design of important clinical trial(s). During the evaluation of applications in response to this FOA, the review group will also consider the significance and potential impact of the full-scale clinical trial(s) that would be proposed following the R34 award period. Of most importance, the NHLBI anticipates that the R34</p>

	<p>award period will yield competitive investigator-initiated clinical trial grant applications that evaluate interventions for the treatment of complications during and after lung transplantation. Mechanism of Support. This FOA will utilize the R34 grant mechanism. Funds Available and Anticipated Number of Awards. The NHLBI intends to commit approximately \$1,500,000 total costs for FY2010. The total amount to be awarded for this program will be a maximum of \$3,000,000 total costs for the 2-year project period. It is anticipated that NHLBI will fund up to 2 awards.</p>
03/02/2010	<p><b>Metagenomic Evaluation of Oral Polymicrobial Disease (R01)</b>  Purpose. This Funding Opportunity Announcement (FOA) issued by The National Institute of Dental and Craniofacial Research (NIDCR), National Institutes of Health (NIH), solicits Research Project Grant (R01) applications from institutions/organizations that propose to utilize current metagenomic analytical technologies to study the role of polymicrobial communities, those specifically composed of archaea, bacteria, and fungi, in the initiation and progression of oral microbial diseases. Mechanism of Support. This FOA will utilize the R01 grant mechanism. Funds Available and Anticipated Number of Awards. The NIDCR intends to commit up to a total of \$3 million to support approximately 3-4 awards in FY2010. Awards issued under this FOA are contingent upon availability of funds and the submission of a sufficient number of meritorious applications.</p>
04/15/2010	<p><b>Superfund Hazardous Substance Research and Training Program (P42)</b>  Purpose. The National Institute of Environmental Health Sciences (NIEHS) is announcing the continuation of the Superfund Hazardous Substance Research and Training Program [referred to as the Superfund Research Program (SRP)]. SRP grants will support coordinated, multi-project, interdisciplinary research programs to address the mandates legislated under the Superfund Amendments and Reauthorization Act of 1986. These mandates include the development of: (1) advanced techniques for the detection, assessment, and evaluation of the effect on human health of hazardous substances; (2) methods to assess the risks to human health presented by hazardous substances; (3) methods and technologies to detect hazardous substances in the environment; and (4) basic biological, chemical, and physical methods to reduce the amount and toxicity of hazardous substances. The objective for the SRP is to develop a holistic research agenda for the protection of human health. This is accomplished by the establishment of interdisciplinary programs that link and integrate biomedical research with related non-biomedical (e.g., engineering, geology, ecology) research within the context of unique scientific themes developed by the applicant. Mechanism of Support. This FOA will utilize the NIH P42 multi-project grant mechanism. Applicants must include a minimum of two biomedical projects and two non-biomedical projects. Funds Available and Anticipated Number of Awards. The NIEHS intends to commit approximately \$11.0 million in FY 2011 to fund four to five SRP grants in response to this Funding Opportunity Announcement (FOA).</p>
09/30/2010	<p><b>Application and Early Stage Development of Emerging Technologies in Cancer Research (R21)</b>  Purpose. This Funding Opportunity Announcement (FOA), issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits grant applications that propose exploratory research projects on the initial application of emerging analytical technologies as laboratory or clinical tools. An emerging technology is defined as one that has passed the initial developmental stage, but has not yet been evaluated within the context of its intended use. Projects proposed in response to this FOA should have the potential to produce a major impact in a broad area of cancer-relevant research. If successful, these technologies would accelerate research in cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control</p>

	<p>and epidemiology, and/or cancer health disparities. This FOA solicits R21 applications that have high potential impact and allows for an element of technical risk; preliminary data are not required. All projects must include quantitative milestones (i.e. technical metrics that determine whether the specific aims have been accomplished). Projects proposing to use established technologies where the novelty resides in the biological or clinical question being pursued are not appropriate for this solicitation and will be returned as non-responsive. This funding opportunity is part of a broader NCI-sponsored Innovative Molecular Analysis Technologies (IMAT) Program. Mechanism of Support. This FOA will utilize the R21 grant mechanism and runs in parallel with a FOA of identical scientific scope, RFA-CA-10-004, that solicits applications under the NIH Application R33 grant mechanism. Funds Available and Anticipated Number of Awards. The NCI intends to commit a total of approximately \$2,250,000 to this FOA in fiscal year 2010 to fund up to 7 applications in response to this FOA. Budget and Project Period. The total project period for an application submitted in response to this funding opportunity may not exceed 2 years. Direct costs are limited to \$275,000 over an R21 2-year period, with no more than \$200,000 in direct costs allowed in any single year.</p>
09/30/2010	<p><b>Innovative Technology Development for Cancer Research (R21)</b>  Purpose. This Funding Opportunity Announcement (FOA) issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits grant applications proposing technically innovative feasibility studies focused on early stage development of cancer-relevant technologies. If successful, these technologies would accelerate the research and understanding of basic cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities. This FOA solicits R21 applications and is suitable for projects at their inception, conceptual or idea based, where technical feasibility of the proposed technology or methodology has not yet been established. The R21 mechanism requires high potential impact and allows for an element of technical risk; projects proposed in response to this FOA may reflect this level of risk but must have concurrent potential to produce a major impact in a broad area of cancer-relevant research. All projects must include quantitative milestones (i.e. technical metrics that determine whether the specific aims have been accomplished). Projects proposing to use technology that is already established or projects where the novelty resides in the biological or clinical question being pursued are examples of topics not appropriate for this solicitation and will be returned as non-responsive. This funding opportunity is part of a broader NCI-sponsored Innovative Molecular Analysis Technologies (IMAT) Program. Mechanism of Support. This FOA will utilize the NIH Exploratory/Developmental (R21) grant mechanism. Funds Available and Anticipated Number of Awards. The NCI intends to commit a total of approximately \$5,000,000 to this FOA in fiscal year 2010 to fund up to 15 applications in response to this FOA.</p>
09/30/2010	<p><b>Validation and Advanced Development of Emerging Technologies for Cancer Research (R33)</b>  Purpose. This Funding Opportunity Announcement (FOA), issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits grant applications proposing research projects on the advanced development of emerging molecular and cellular analysis technologies through technical/analytical validation in an appropriate cancer-relevant biological system. An emerging technology is defined as one that has passed the pilot developmental stage and shows promise, but has not yet been evaluated within the context of its intended use. If successful, these technologies would accelerate research in cancer biology, cancer treatment and diagnosis, cancer prevention, cancer control and epidemiology, and/or cancer health disparities.</p>

	<p>This FOA solicits R33 applications; this mechanism is suitable for projects where proof-of-principle of the proposed technology or methodology has been established and supportive preliminary data are available. Projects proposed to this FOA should reflect the potential to produce a major impact in a broad area of cancer-relevant research. Projects proposing to use established technologies where the novelty resides in the biological or clinical question being pursued are not appropriate for this solicitation and will be returned as non-responsive. This funding opportunity is part of a broader NCI-sponsored Innovative Molecular Analysis Technologies (IMAT) Program. Mechanism of Support. This FOA will utilize the R33 grant mechanism and runs in parallel with a FOA of identical scientific scope, RFA-CA-10-003, that solicits applications under the NIH Exploratory/Developmental R21 grant mechanism. Funds Available and Anticipated Number of Awards. The NCI intends to commit a total of approximately \$2,250,000 to this FOA in fiscal year 2010 to award up to 7 grants.</p>
09/30/2010	<p><b>Innovative and Early-Stage Development of Emerging Technologies in Biospecimen Science (R21)</b></p> <p>Purpose. This Funding Opportunity Announcement (FOA), issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits grant applications proposing technically innovative feasibility studies focused on early stage development of cancer-relevant technologies that address the issues related to pre-analytical variations in the collection, processing, handling, and storage of biospecimens or its derivatives. The overall goal is to develop technologies capable of interrogating and/or maximizing the quality and utility of biospecimens or their derived samples for downstream molecular analyses. This FOA will support the development of tools, devices, instrumentation, and associated methods to assess sample quality, preserve/protect sample integrity, and establish verification criteria for quality assessment/quality control and handling under diverse conditions. These technologies are expected to have a potential to accelerate and/or enhance the research in cancer biology, prevention, diagnosis, treatment, epidemiology, and cancer health disparities, by reducing pre-analytical variations that affect biospecimen and/or sample quality. All projects must include quantitative milestones (i.e. technical metrics that determine whether the specific aims have been accomplished). This funding opportunity is part of a broader NCI-sponsored Innovative Molecular Analysis Technologies (IMAT) Program. Mechanism of Support. This FOA will utilize the NIH Exploratory/Developmental (R21) grant mechanism, and runs parallel with a FOA of identical scientific scope, RFA-CA-10-002, that solicits applications under the NIH R33 grant mechanism. Funds Available and Anticipated Number of Awards. The NCI intends to commit a total of approximately \$1,500,000 to this FOA in fiscal year 2010 to fund up to seven applications in response to this FOA. Budget and Project Period. The total project period for an application submitted in response to this FOA may not exceed 2 years. Direct costs are limited to \$275,000 over an R21 2-year period, with no more than \$200,000 in direct costs allowed in any single year.</p>
09/30/2010	<p><b>Validation and Advanced Development of Emerging Technologies in Biospecimen Science (R33)</b></p> <p>Purpose. This Funding Opportunity Announcement (FOA), issued by the National Cancer Institute (NCI), National Institutes of Health (NIH), solicits grant applications proposing technically innovative feasibility studies focused on the advanced development and validation of cancer-relevant technologies that address the issues related to pre-analytical variations in the collection, processing, handling, and storage of biospecimens or its derivatives. The overall goal is to develop technologies capable of interrogating and/or maximizing the quality and utility of biospecimens or their derived samples for downstream molecular analyses. This FOA will support the development of</p>

	<p>tools, devices, instrumentation, and associated methods to assess sample quality, preserve/protect sample integrity, and establish verification criteria for quality assessment/quality control and handling under diverse conditions. This FOA solicits R33 applications; this mechanism is suitable for projects where proof-of-principle of the proposed technology or methodology has already been established and supportive preliminary data are available. Projects proposing to use established technologies where the novelty resides in the biological or clinical question being pursued is an example of a topic not appropriate for this solicitation and will be returned as non-responsive. This funding opportunity is part of a broader NCI-sponsored Innovative Molecular Analysis Technologies (IMAT) Program. Mechanism of Support. This FOA will utilize the R33 grant mechanism and runs in parallel with a FOA of identical scientific scope, RFA-CA-10-001 that solicits applications under the NIH Exploratory/Developmental R21 grant mechanism.</p>
09/20/2012	<p><b>Specialized Programs of Research Excellence (SPOREs) in Human Cancer for Years 2010, 2011 and 2012 (P50)</b>  Purpose. The National Cancer Institute (NCI), the National Institute of Dental and Craniofacial Research (NIDCR), and the National Institute of Neurological Disorders and Stroke (NINDS), at the National Institutes of Health (NIH), invite new or renewal (competing) applications for P50 Research Center Grants for Specialized Programs of Research Excellence (SPOREs). The program will fund 5-year P50 SPORE grants to support state-of-the-art investigator-initiated research that will contribute to improved detection, diagnosis, treatment, and prevention of an organ-specific cancer (or a related group of cancers). SPOREs are expected not only to conduct a wide spectrum of research activities, but also to contribute significantly to the development of specialized research COREs, improved research model systems, and collaborative research projects with other institutions. The research supported through this program must be translational in nature and must always be based upon knowledge of human biology stemming from research using cellular, molecular, structural, biochemical, and/or genetic experimental approaches. Mechanism of Support. This FOA will utilize the NIH specialized center grant (P50) mechanism to fund up to approximately 10-20 new SPORE awards per year. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Drug Discovery for Nervous System Disorders (R21)</b>  Purpose. This funding opportunity announcement (FOA) encourages Exploratory/Developmental (R21) grant applications from applicant organizations directed toward the discovery and preclinical testing of novel compounds for the prevention and treatment of nervous system disorders. Mechanism of Support. This FOA will use the NIH Exploratory/Developmental (R21) award mechanism and runs in parallel with a FOA of identical scientific scope, PAR-10-001 that encourages applications under the Research Project Grant (R01) award mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Behavioral and Integrative Treatment Development Program (R34)</b>  Purpose. The purpose of this R34 Funding Opportunity Announcement (FOA) is to advance evidence-based treatment research through 1) the development, manualization, standardization, early-stage efficacy and/or pilot testing of novel or adapted treatments and/or interventions (i.e. Stage 1 treatment research, see below), 2) the refinement, modification, adaptation and/or pilot testing of interventions with demonstrated efficacy for use in broader scale efficacy or effectiveness trials, or 3) novel treatment research that requires preliminary testing or development. It is expected that research conducted via this R34 mechanism will primarily consist of Stage I treatment development</p>

	<p>research that will provide feasibility, tolerability, and acceptability information and/or pilot data for larger scale Stage II or Stage III behavioral and integrative treatment studies. This FOA seeks to support research, as described above, within the domains of behavioral, combined, sequential, or integrated behavioral and pharmacological (1) drug abuse treatment interventions, including interventions for patients with comorbidities, in diverse settings; (2) interventions to prevent the acquisition or transmission of HIV infection among individuals in drug abuse treatment; (3) interventions to promote adherence to drug abuse treatment, HIV and addiction medications; and (4) interventions to treat chronic pain. Mechanism of Support. This FOA will use the R34 mechanism and runs in parallel with FOAs of identical scientific scope, PA-10-012, which encourages applications under the Research Project Grant (R01) mechanism, and PA-10-011 which encourages applications under the NIH Small Research Grant (R03) mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Behavioral and Integrative Treatment Development Program (R03)</b>  Purpose. The purpose of this FOA for R03s is to encourage early career investigators or investigators who are striving to make a shift in their research to propose discrete, well-defined projects that can be completed within two years with limited resources. Projects of interest fall within the research domain of behavioral, combined, sequential, or integrated (behavioral/pharmacological) (1) drug abuse treatment interventions, including interventions for patients with comorbidities, in diverse settings; (2) interventions to prevent the acquisition or transmission of HIV infection among individuals in drug abuse treatment; (3) interventions to promote adherence to drug abuse treatment, HIV and addiction medications; and (4) interventions to treat chronic pain. Specific examples include: 1) Stage I pilot or feasibility studies; 2) secondary analysis of existing data; 3) small, self-contained research projects; 4) development of research assessments or methodology; and 5) development of new research technology. Mechanism of Support. This FOA will use the NIH Small Research Grant (R03) mechanism and runs in parallel with the FOAs of identical scientific scope, PA-10-012, which encourages applications under the Research Project Grant (R01) mechanism and PA-10-013 which encourages applications under the R34 mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Behavioral and Integrative Treatment Development Program (R01)</b>  Purpose. The purpose of this FOA for R03s is to encourage early career investigators or investigators who are striving to make a shift in their research to propose discrete, well-defined projects that can be completed within two years with limited resources. Projects of interest fall within the research domain of behavioral, combined, sequential, or integrated (behavioral/pharmacological) (1) drug abuse treatment interventions, including interventions for patients with comorbidities, in diverse settings; (2) interventions to prevent the acquisition or transmission of HIV infection among individuals in drug abuse treatment; (3) interventions to promote adherence to drug abuse treatment, HIV and addiction medications; and (4) interventions to treat chronic pain. Specific examples include: 1) Stage I pilot or feasibility studies; 2) secondary analysis of existing data; 3) small, self-contained research projects; 4) development of research assessments or methodology; and 5) development of new research technology. Mechanism of Support. This FOA will use the NIH Small Research Grant (R03) mechanism and runs in parallel with the FOAs of identical scientific scope, PA-10-012, which encourages applications under the Research Project Grant (R01)</p>

	<p>mechanism and PA-10-013 which encourages applications under the R34 mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Exploratory/Developmental Bioengineering Research Grants (EBRG) [R21]</b>  Purpose. This Funding Opportunity Announcement (FOA) is intended to encourage innovation and high risk/impact bioengineering research in new areas. While minimal or no preliminary data are expected to be described in the application, applications should clearly indicate the significance of the proposed work and that the proposed research and/or development is scientifically sound, that the qualifications of the investigators are appropriate, and that resources available to the investigators are adequate. An EBRG application may propose hypothesis-driven, discovery-driven, developmental, or design-directed research. The research proposed under this program can explore approaches and concepts new to a particular substantive area; research and development of new technologies, techniques or methods; or initial research and development of data upon which significant future research may be built. Mechanism of Support. This FOA will use the NIH Exploratory/Developmental (R21) grant mechanism and runs in parallel with a FOA of similar scientific scope, PA-10-009 Bioengineering Research Grants, and PAR-07-352, Bioengineering Research Partnerships. Funds Available and Anticipated Number of Awards. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary.</p>
01/07/2013	<p><b>Bioengineering Research Grants (BRG)(R01)</b>  Purpose. Participating Institutes and Centers of the NIH invite applications for R01 awards to support Bioengineering Research Grants (BRGs) for basic and applied multi-disciplinary research that addresses important biological, bioengineering or medical research problems. The BRGs support multi-disciplinary research performed in a single laboratory or by a small number of investigators that applies an integrative, systems approach to develop knowledge and/or methods to prevent, detect, diagnose, or treat disease or to understand health and behavior. A BRG application may propose hypothesis-driven, discovery-driven, developmental, or design-directed research. Mechanism of Support. This FOA will utilize the NIH Research Project Grant (R01) grant mechanism and runs in parallel with a FOA of similar scientific scope, Exploratory/Developmental Bioengineering Research Grants, PA-10-010, that encourages applications under the R21 mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>MBRS Research Initiative for Scientific Enhancement (RISE) (R25)</b>  The Minority Biomedical Research Support (MBRS) Program was created in response to a legislative mandate of increasing the participation of underrepresented (UR) minority faculty, investigators and students engaged in biomedical and behavioral research, and to broaden the opportunities for their participation in biomedical and behavioral research. To accomplish this goal, the Research Initiative for Scientific Enhancement (RISE) program provides institutional grants to establish research education programs at minority-serving institutions that will increase the preparation and skills of UR students in the biomedical and behavioral sciences as they academically advance in the pursuit of the Ph.D. degree in these fields.</p>
01/07/2013	<p><b>Mechanisms, Models, Measurement, and Management in Pain Research (R01)</b>  Purpose. The purpose of this Funding Opportunity Announcement (FOA), Mechanisms, Models, Measurement, and Management in Pain Research issued</p>

	<p>by the National Institute of Nursing Research (NINR), in conjunction with members of the NIH Pain Consortium as listed above, is to inform the scientific community of the pain research interests of the various Institutes and Centers (ICs) at the National Institutes of Health (NIH) and to stimulate and foster a wide range of basic, clinical, and translational studies on pain as they relate to the missions of these ICs. New advances are needed in every area of pain research, from the micro perspective of molecular sciences to the macro perspective of behavioral and social sciences. Although great strides have been made in some areas, such as the identification of neural pathways of pain, the experience of pain and the challenge of treatment have remained uniquely individual and unsolved. Furthermore, our understanding of how and why individuals transition to a chronic pain state after an acute insult is limited. Research to address these issues conducted by interdisciplinary and multidisciplinary research teams is strongly encouraged, as is research from underrepresented, minority, disabled, or women investigators. Mechanism of Support. This FOA will utilize the NIH Research Project Grant (R01) grant mechanism and runs in parallel with FOAs of identical scientific scope, PA-10-008, which encourages applications under the R03 Small Research Grant mechanism and PA-10-007, which encourages applications under the R21 Exploratory/Developmental Grant mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Mechanisms, Models, Measurement, and Management in Pain Research (R03)</b>  Purpose. The purpose of this Funding Opportunity Announcement (FOA), Mechanisms, Models, Measurement, and Management in Pain Research, issued by the National Institute of Nursing Research (NINR), in conjunction with members of the NIH Pain Consortium as listed above, is to inform the scientific community of the pain research interests of the various Institutes and Centers (ICs) at the National Institutes of Health (NIH) and to stimulate and foster a wide range of basic, clinical, and translational studies on pain as they relate to the missions of these ICs. New advances are needed in every area of pain research, from the micro perspective of molecular sciences to the macro perspective of behavioral and social sciences. Although great strides have been made in some areas, such as the identification of neural pathways of pain, the experience of pain and the challenge of treatment have remained uniquely individual and unsolved. Furthermore, our understanding of how and why individuals transition to a chronic pain state after an acute insult is limited. Research to address these issues conducted by interdisciplinary and multidisciplinary research teams is strongly encouraged, as is research from underrepresented, minority, disabled, or women investigators. 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. Mechanism of Support. This FOA will utilize the NIH Small Research Grant (R03) award mechanism and runs in parallel with FOAs of identical scientific scope, PA-10-006, which encourages applications under the NIH R01 Research Project Grant mechanism and PA-10-007 which encourages applications under the R21 Exploratory/Developmental Grant mechanism. Funds Available and Anticipated Number of Awards. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. The total amount awarded and the number of awards will depend upon the mechanism numbers, quality, duration, and costs of the applications received.</p>

01/07/2013	<p><b>Drug Discovery for Nervous System Disorders (R01)</b>  Purpose. This funding opportunity announcement (FOA) encourages research grant applications from applicant organizations directed toward the discovery and preclinical testing of novel compounds for the prevention and treatment of nervous system disorders. Mechanism of Support. This FOA will utilize the NIH Research Project Grant (R01) award mechanism and runs in parallel with an FOA of identical scientific scope, PAR-10-002 that encourages applications under the Exploratory/Development (R21) award mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>NHLBI Clinical Trial Pilot Studies (R34)</b>  Purpose. The National Heart, Lung, and Blood Institute (NHLBI) (<a href="http://www.nhlbi.nih.gov">http://www.nhlbi.nih.gov</a>) invites applications proposing pilot studies to obtain data that is critical for the design of robust clinical trials. This Funding Opportunity Announcement (FOA) should be used to fill gaps in scientific knowledge necessary to develop a competitive full-scale clinical trial. Appropriate pilot studies might demonstrate feasibility of an intervention or an experimental design, estimate intervention parameters, or gather other data important for the design of a trial. Applicants who propose solely to write a protocol or manual of operations or to develop infrastructure for a clinical trial will not be considered appropriate for to this announcement. Applications must demonstrate that the proposed pilot studies are both necessary and sufficient to permit the design of the clinical trial. During the evaluation of applications in response to this FOA, the review group will also consider the significance and potential public health impact of the full-scale clinical trial that would be proposed following the R34 award period. The NHLBI anticipates that the R34 award period will yield more competitive investigator-initiated clinical trial grant applications and more robust and successful clinical trials that evaluate interventions for the treatment or prevention of heart, lung, blood, or sleep disorders. Mechanism of Support. This FOA will utilize the R34 grant mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Mechanisms, Models, Measurement, and Management in Pain Research (R21)</b>  Purpose. The purpose of this Funding Opportunity Announcement (FOA), Mechanisms, Models, Measurement, and Management in Pain Research, issued by the National Institute of Nursing Research (NINR), in conjunction with members of the NIH Pain Consortium as listed above, is to inform the scientific community of the pain research interests of the various Institutes and Centers (ICs) at the National Institutes of Health (NIH) and to stimulate and foster a wide range of basic, clinical, and translational studies on pain as they relate to the missions of these ICs. New advances are needed in every area of pain research, from the micro perspective of molecular sciences to the macro perspective of behavioral and social sciences. Although great strides have been made in some areas, such as the identification of neural pathways of pain, the experience of pain and the challenge of treatment have remained uniquely individual and unsolved. Furthermore, our understanding of how and why individuals transition to a chronic pain state after an acute insult is limited. Research to address these issues conducted by interdisciplinary and multidisciplinary research teams is strongly encouraged, as is research from underrepresented, minority, disabled, or women investigators. Mechanism of Support. This FOA will use the NIH Exploratory/Developmental (R21) grant mechanism and runs in parallel with FOAs of identical scientific scope, PA-10-006, which encourages applications under the NIH R01 Research Project Grant mechanism and PA-10-008, which encourages applications under the R03</p>

	<p>Small Research Grant mechanism. Funds Available and Anticipated Number of Awards. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. The total amount awarded and the number of awards will depend upon the mechanism, numbers, quality, duration, and costs of the applications received.</p>
09/20/2012	<p><b>Specialized Programs of Research Excellence (SPOREs) in Human Cancer for Years 2010, 2011 and 2012 (P50)</b>  Purpose. The National Cancer Institute (NCI), the National Institute of Dental and Craniofacial Research (NIDCR), and the National Institute of Neurological Disorders and Stroke (NINDS), at the National Institutes of Health (NIH), invite new or renewal (competing) applications for P50 Research Center Grants for Specialized Programs of Research Excellence (SPOREs). The program will fund 5-year P50 SPORE grants to support state-of-the-art investigator-initiated research that will contribute to improved detection, diagnosis, treatment, and prevention of an organ-specific cancer (or a related group of cancers). SPOREs are expected not only to conduct a wide spectrum of research activities, but also to contribute significantly to the development of specialized research COREs, improved research model systems, and collaborative research projects with other institutions. The research supported through this program must be translational in nature and must always be based upon knowledge of human biology stemming from research using cellular, molecular, structural, biochemical, and/or genetic experimental approaches. Mechanism of Support. This FOA will utilize the NIH specialized center grant (P50) mechanism to fund up to approximately 10-20 new SPORE awards per year. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of sufficient number of meritorious applications.</p>
01/07/2013	<p><b>Drug Discovery for Nervous System Disorders (R21)</b>  Purpose. This funding opportunity announcement (FOA) encourages Exploratory/Developmental (R21) grant applications from applicant organizations directed toward the discovery and preclinical testing of novel compounds for the prevention and treatment of nervous system disorders. Mechanism of Support. This FOA will use the NIH Exploratory/Developmental (R21) award mechanism and runs in parallel with a FOA of identical scientific scope, PAR-10-001 that encourages applications under the Research Project Grant (R01) award mechanism. Funds Available and Anticipated Number of Awards. Awards issued under this FOA are contingent upon the availability of funds and the submission of a sufficient number of meritorious applications.</p>

**ENVIRONMENTAL PROTECTION AGENCY (EPA)**

Close Date	Opportunity
12/07/2009	<p><b>FY 2010 Training Workshop Support Activities for the Section 303(d) and Water Quality Monitoring Programs</b>  The U.S. Environmental Protection Agency (EPA) is accepting proposals from eligible applicants to conduct the following two training workshop support activities: (I) plan, prepare, and provide technical support for five annual Clean Water Act (CWA) Section 303(d) National Listing and Total Maximum Daily Loads (TMDL) Training Workshops; and (II) plan, prepare, and provide technical support for six to nine State and Tribal Aquatic Resource Monitoring Technical Training Workshops on aquatic resource specific (i.e., rivers/streams, lakes, coastal waters, and wetlands) issues, and two national State and Tribal Aquatic Resource Monitoring Technical Training Workshops covering all aquatic resource types on a biennial basis (i.e., one workshop in FY 2010 and one workshop in FY 2012). Funds awarded under this</p>

	announcement for either of the two training workshop support activities may be used to promote participation and to support travel expenses of non-federal personnel to attend workshops.
01/07/2010	<p><b>Approaches to Assessing Potential Food Allergy from Genetically Engineered Plants</b></p> <p>The U.S. Environmental Protection Agency (EPA), as part of its Science to Achieve Results (STAR) program, is issuing this request for applications (RFA) for applied research on innovative or improved methods to predict whether or not a pesticide protein is a food allergen. Research to characterize the key factors that influence human immune responses to dietary proteins is needed in order to better assess potential food allergy from genetically engineered plants. Proposals are requested on the role of dose, route of sensitization, and/or the physicochemical properties of ingested proteins and their influence on the development of immune sensitization, oral tolerance, or the elicitation of allergic symptoms. Also of interest is how the food matrix and gastrointestinal environment in which proteins are ingested may affect these immune responses. The overall aim of the research program is to improve safety assessment for genetically engineered plants by enhancing the ability to estimate the potency of unknown proteins relative to known allergenic and non-allergenic proteins. Because there is no single, definitive test for determining the allergenic potential of novel pesticide proteins in the diet, risk assessment associated with the regulation of foods derived from modern biotechnology currently uses a "weight-of-evidence" approach. The research will contribute to improved methods for assessing the potential dietary allergenicity of pesticide proteins in genetically engineered plants.</p>

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)**

Close Date	Opportunity
12/01/2009	<p><b>ROA 2009: C.3 NextGen-Airportal Project (AP1R) (Recovery Act)</b></p> <p>The NextGen-Airportal Project works in close collaboration with the NextGen-Airspace Project to conduct airspace and Airportal foundational research and discipline-based technology development for the nation. The Project focuses NASA's technical expertise and world-class facilities to enable the highest possible efficiency in the use of gates, taxiways, runways, metroplex airspace, and other Airportal resources. In pursuit of that goal, the project is researching, developing, demonstrating, and validating operational concepts, proof-of-concept systems, algorithms, technologies, tools, and operational procedures designed to maximize capacity and throughput in the Airportal environment while enabling associated elements of the Next Generation Air Transportation System (NextGen) as defined by the Joint Planning and Development Office (JPDO). Project performance objectives seek to use 4-D trajectories (aircraft path from "block-to-block," including the path along the ground) to plan and execute system-wide operations; integrate 4-D trajectory operations with safe, optimized surface and terminal area traffic operations (particularly those associated with C-14 wake hazard prediction and avoidance); balance environmental issues in, and around, airports; match surface and airside capacities with arrival and departure air traffic flow; and assess local benefits of Airportal transformation by modeling changes to the current airport configuration. In support of these objectives, research activities will focus on:</p> <ul style="list-style-type: none"> <li>• Optimization of surface traffic</li> <li>• Dynamic airport configuration management</li> <li>• Advanced technologies to detect and avoid wake vortex hazards</li> <li>• New procedures for performing safe, closely spaced and converging approaches at closer distances than are currently allowed</li> <li>• Modeling, simulation, and experimental validation focused on efficient operations of single and multiple regional airports (metroplex)</li> </ul> <p>NextGen-Airportal Project research focus areas (RFAs) are the following: Safe and</p>

	<p>Efficient Surface Operations (SESO), Coordinated Arrival and Departure Operations Management (CADOM), and Airportal and Metroplex Integration (AMI). SESO conducts research to manage traffic on the airport surface (gates, taxiways, and runways) safely and efficiently to enable maximum throughput and capacity in the airport environment. CADOM focuses on concepts and technologies needed to mitigate operational constraints to maximizing single and multiple airport capacity. AMI focuses on management of metroplex operations, integration of work across the Project's technical areas, and crosscutting research (e.g., human/system integration and concept analyses for portfolio management). The NextGen-Airportal Project team has developed a plan that will enable capacity and efficiency improvements in the airportal domain through joint research efforts and partnerships with other government agencies. In addition to conducting core research and development, NASA will establish Space Act Agreements with U.S. industry to address research partnerships at the system-wide level, including systems integration and operational applications. The Project will utilize this NASA Research Announcement (NRA) to leverage in-house foundational research with academic institutions, non-profit organizations and industry performing foundational research to address technology gaps.</p>
12/01/2009	<p><b>ROA 2009: C.4 NextGen-Airspace Project (AS2R) (Recovery Act)</b></p> <p>The NextGen Airspace Project develops and explores fundamental concepts and integrated solutions that address the optimal allocation of ground and air automation technologies necessary for next generation air transportation system (NextGen). The Project will focus NASA's technical expertise and world-class facilities to address the question of where, when, how and the extent to which automation can be applied to moving aircraft safely and efficiently through the National Airspace System (NAS). Research in this Project will address 4D Trajectory Operations, including advances in the C-34 science and applications of multi-aircraft trajectory optimization that solves the demand/capacity imbalance problem while taking into account weather information and forecast uncertainties and while keeping aircraft safely separated. The Project's research will develop and test concepts for advanced traffic flow management to provide trajectory planning and execution across the spectrum of time horizons from "strategic planning" to "separation assurance." Ultimately, the roles and responsibilities of humans and automation influence every technical area and will be addressed. The NextGen Airspace Project team has developed a plan that will integrate solutions for a safe, efficient and high-capacity airspace system through joint research efforts and partnerships with other government agencies. In addition to core research and development to be conducted by NASA, Space Act Agreements will be established with U.S. industry to address research partnerships at the system-wide level including systems integration and operational applications. The Project will utilize this NASA Research Announcement (NRA) to leverage in-house foundational research with academic institutions, non-profit organizations and industry performing foundational research to address technology gaps. This current solicitation seeks proposals related to the following NextGen Airspace Project research focus areas: System-Level Design, Analysis, and Simulation Tools (SLDAST). SLDAST will develop system design and analysis tools to assess the functional/temporal distribution of authority and responsibility among/between automation and humans. Solicitations for other research focus areas will be posted in future announcements. Milestone references for Subtopics in this section of the NRA are provided below under the heading "Milestones Supported" so that it is possible to see how the NRA topics fit into the NASA Aeronautics research plan. These milestones are listed on project roadmaps that are available on the ARMD website (<a href="http://www.aeronautics.nasa.gov">www.aeronautics.nasa.gov</a>, under the Programs link).</p>

**NATIONAL ENDOWMENT FOR THE HUMANITIES (NEH)**

Close Date	Opportunity
01/13/2010	<p><b>America's Historical and Cultural Organizations Planning Grants</b></p> <p>America's Historical and Cultural Organizations grants support projects in the humanities that explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Grants for America's Historical and Cultural Organizations should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for America's Historical and Cultural Organizations: Planning and Implementation Grants. Planning grants are available for projects that may need further development before applying for implementation. This planning can include the identification and refinement of the project's main humanities ideas and questions, consultation with scholars in order to strengthen the humanities content, preliminary audience evaluation, preliminary design of the proposed interpretive formats, beta testing of digital formats, development of complementary programming, research at archives or sites whose resources might be used, or the drafting of interpretive materials. Implementation grants support the final preparation of a project for presentation to the public. Applicants must submit a full walkthrough for an exhibition, or a prototype or storyboard for a digital project that demonstrates a solid command of the humanities ideas and scholarship that relate to the subject. Applicants for implementation grants should have already done most of the planning for their projects, including the identification of the key humanities themes, relevant scholarship, and program formats. For exhibitions, implementation grants can support the final stages of design development, but these grants are primarily intended for installation. Applicants are not required to obtain a planning grant before applying for an implementation grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. If an application for a project is already under review, another application for the same project cannot be accepted.</p>
01/13/2010	<p><b>America's Media Makers Production Grants</b></p> <p>Grants for America's Media Makers support projects in the humanities that explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Grants for America's Media Makers should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for media projects, Development Grants and Production Grants. Development grants enable media producers to collaborate with scholars to develop humanities content and format and to prepare programs for production. Development grants should culminate in the refinement of a project's humanities ideas, a script, or a design document for (or a prototype of) digital media components or projects, or a prototype for a digital media project together with a detailed plan for outreach and public engagement in collaboration with partner organizations. Production grants support the preparation of a program for distribution. Applicants must submit a script for a radio or television program, or a prototype or storyboard for a digital media project, that demonstrates a solid command of the humanities ideas and scholarship related to a subject. The script for a radio or television program,</p>

	<p>or prototype or storyboard for a digital media project, must also show how the narrative elements, visual approach, and interactive design combine to present the project's humanities ideas. Applicants must have consulted with appropriate scholars about the project and obtained their commitment as advisers. Finally, applicants must have recruited the media team, including at a minimum the producer, director, writer, and, for a digital media project, the interactive designer. Applications may be submitted for any phase of a project. Applicants are not required to obtain a development grant before applying for a production grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. An applicant must choose whether to apply for development or production of a particular project. If an application for a project is already under review, another application for the same project cannot be accepted.</p>
01/13/2010	<p><b>America's Media Makers Development Grants</b></p> <p>Grants for America's Media Makers support projects in the humanities that explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Grants for America's Media Makers should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for media projects: Development Grants and Production Grants. Development grants enable media producers to collaborate with scholars to develop humanities content and format and to prepare programs for production. These grants cover a wide range of activities that include, but are not limited to, meetings and individual consultations with scholars, research, preliminary interviews, preparation of program scripts, designs for interactivity and digital distribution, and the creation of partnerships for outreach activities and public engagement with the humanities. Development grants should culminate in the refinement of a project's humanities ideas, a script, or a design document for (or a prototype of) digital media components or projects. Before applying, applicants must have a solid command of the major humanities scholarship on their subject, have clarified the ideas that the project will consider, and have consulted with a team of scholarly advisers to work out the intellectual issues that the program will explore. Applicants must also have made preliminary decisions about the format and storyline and located essential materials for the program(s). Finally, they must have recruited the appropriate media professionals, especially the producer, writer, or interactive designer. Production grants support the preparation of a program for distribution. Applicants must submit a script for a radio or television program, or a prototype or storyboard for a digital media project, that demonstrates a solid command of the humanities ideas and scholarship related to a subject. NEH also supports Chairman's Special Award projects. These projects are more complex and would be of compelling interest to the general public; they have the capacity to examine important humanities ideas in new ways and promise to reach large audiences. These goals can often be accomplished through combining a variety of program formats, forming creative collaborations among diverse institutions, and expanding the scope and reach of a project. The Chairman's Special Award projects. These projects are more complex and would be of compelling interest to the general public; they have the capacity to examine important humanities ideas in new ways and promise to reach large audiences. These goals can often be accomplished through combining a variety of program formats, forming creative collaborations among diverse institutions, and expanding the scope and reach of a project. The Chairman's Special Award is offered at the production stage, but not at the development stage. Applications may be submitted for any</p>

	<p>phase of a project. Applicants are not required to obtain a development grant before applying for a production grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. An applicant must choose whether to apply for development or production of a particular project. If an application for a project is already under review, another application for the same project cannot be accepted.</p>
01/13/2010	<p><b>Interpreting America's Historic Places Implementation Grants</b>  Interpreting America’s Historic Places grants support public humanities projects that exploit the evocative power of historic places to explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Interpreting America’s Historic Places projects may interpret a single historic site or house, a series of sites, an entire neighborhood, a town or community, or a larger geographical region. Grants for Interpreting America’s Historic Places should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for Interpreting America’s Historic Places: Planning and Implementation Grants. Planning grants are available for those projects that may need further development before applying for implementation. This planning can include the identification and refinement of the project’s main humanities ideas and questions, consultation with scholars in order to strengthen the humanities content, preliminary audience evaluation, preliminary design of the proposed interpretive formats, beta testing of digital formats, development of complementary programming, research at archives or sites whose resources might be used, or the drafting of interpretive materials. See application guidelines for Planning Grants. Implementation grants support the final preparation of a project for presentation to the public. Applicants must submit a full walkthrough for an exhibition, or a prototype or storyboard for a digital project that demonstrates a solid command of the humanities ideas and scholarship that relate to the subject. Applicants for implementation grants should have already done most of the planning for their projects, including the identification of the key humanities themes, relevant scholarship, and program formats. For exhibitions, implementation grants can support the final stages of design development, but these grants are primarily intended for installation. Applicants are not required to obtain a planning grant before applying for an implementation grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. If an application for a project is already under review, another application for the same project cannot be accepted.</p>
01/13/2010	<p><b>America's Historical and Cultural Organizations Implementation Grants</b>  America’s Historical and Cultural Organizations grants support projects in the humanities that explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Grants for America’s Historical and Cultural Organizations should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for America’s Historical and Cultural Organizations: Planning and Implementation Grants. Planning grants are available for projects that may</p>

	<p>need further development before applying for implementation. This planning can include the identification and refinement of the project's main humanities ideas and questions, consultation with scholars in order to strengthen the humanities content, preliminary audience evaluation, preliminary design of the proposed interpretive formats, beta testing of digital formats, development of complementary programming, research at archives or sites whose resources might be used, or the drafting of interpretive materials. See application guidelines for Planning Grants. Implementation grants support the final preparation of a project for presentation to the public. Applicants must submit a full walkthrough for an exhibition, or a prototype or storyboard for a digital project that demonstrates a solid command of the humanities ideas and scholarship that relate to the subject. Applicants for implementation grants should have already done most of the planning for their projects, including the identification of the key humanities themes, relevant scholarship, and program formats. For exhibitions, implementation grants can support the final stages of design development, but these grants are primarily intended for installation. Applicants are not required to obtain a planning grant before applying for an implementation grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. If an application for a project is already under review, another application for the same project cannot be accepted.</p>
01/13/2010	<p><b>Interpreting America's Historic Places Planning Grants</b></p> <p>Interpreting America's Historic Places grants support public humanities projects that exploit the evocative power of historic places to explore stories, ideas, and beliefs that deepen our understanding of our lives and our world. The Division of Public Programs supports the development of humanities content and interactivity that excite, inform, and stir thoughtful reflection upon culture, identity, and history in creative and new ways. Interpreting America's Historic Places projects may interpret a single historic site or house, a series of sites, an entire neighborhood, a town or community, or a larger geographical region. Grants for Interpreting America's Historic Places should encourage dialogue, discussion, and civic engagement, and they should foster learning among people of all ages. To that end, the Division of Public Programs urges applicants to consider more than one format for presenting humanities ideas to the public. NEH offers two categories of grants for Interpreting America's Historic Places: Planning and Implementation Grants. Planning grants are available for those projects that may need further development before applying for implementation. This planning can include the identification and refinement of the project's main humanities ideas and questions, consultation with scholars in order to strengthen the humanities content, preliminary audience evaluation, preliminary design of the proposed interpretive formats, beta testing of digital formats, development of complementary programming, research at archives or sites whose resources might be used, or the drafting of interpretive materials. Implementation grants support the final preparation of a project for presentation to the public. Applicants must submit a full walkthrough for an exhibition, or a prototype or storyboard for a digital project that demonstrates a solid command of the humanities ideas and scholarship that relate to the subject. Applicants for implementation grants should have already done most of the planning for their projects, including the identification of the key humanities themes, relevant scholarship, and program formats. For exhibitions, implementation grants can support the final stages of design development, but these grants are primarily intended for installation. Applicants are not required to obtain a planning grant before applying for an implementation grant. Applicants may not, however, submit multiple applications for the same project at the same deadline. If an application for a project is already under review, another application for the same project cannot be accepted.</p>

**NATIONAL SCIENCE FOUNDATION (NSF)**

Close Date	Opportunity
12/07/2009	<p><b>Interdisciplinary Research (IDR)</b></p> <p>The Directorate for Engineering (ENG) welcomes and encourages the submission of transformative, interdisciplinary research proposals to its Divisions. Definition of Interdisciplinary Research: "Interdisciplinary Research (IDR) is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice." Reference: Facilitating Interdisciplinary Research, Committee on Facilitating Interdisciplinary Research, Committee on Science, Engineering and Public Policy, National Academy of Sciences, National Academy of Engineering, and Institute of Medicine of the National Academies, National Academies Press, Washington, D.C. Characteristics of IDR Proposals: IDR submissions should have a level of interdisciplinary content not covered in the core programs of ENG. To be funded, IDR proposals must ultimately attract funding from at least two programs in at least two divisions of the NSF. The primary funding division must be within ENG. IDR proposals may be on any topic relevant to engineering and, in particular, should not be constrained by the current program structures. It is hoped that new fields of research will eventually emerge from IDR awards. While not an absolute requirement, an IDR proposal typically will be submitted by a small team of 2-4 investigators. The typical anticipated total award size will be \$400,000-600,000 (for up to three years), although requests of lesser or greater size, up to a total of \$1,000,000, will be considered, consistent with the scope of the proposed work. Submission of IDR Proposals: IDR proposals that do not comply with the following requirements will be returned without review. The deadline for proposal submissions is not later than 5:00 PM local time on December 7, 2009. Proposals must be submitted as unsolicited proposals and directed to the IDR program (Program Element 7951) in the CBET, CMMI, or ECCS Divisions. Proposals must have a proposal title that begins with "IDR:". Proposals must explicitly address the interdisciplinary nature of the proposed research in a separate paragraph within the one-page Project Summary. Proposals must explicitly address both Intellectual Merit and Broader Impacts and conform with all other requirements of the NSF Grant Proposal Guide (Document #NSF 09-29). IDR proposals should be prepared so that reviewers from any of the different fields to which the proposal relates can appreciate the intellectual merit, transformative nature, and broader impact of the interdisciplinary research proposed.</p>
01/20/2010	<p><b>Innovations in Engineering Education, Curriculum and Infrastructure</b></p> <p>The Innovations in Engineering Education, Curriculum, and Infrastructure (IEECI) program supports research which addresses three aspects of engineering education: (1) how students best learn the ideas, principles, and practices to become creative and innovative engineers, and how this learning is measured (2) how to more effectively translate successes in engineering education research into widespread practice with consideration of curriculum, student learning, innovation models, and cyber-learning technology, and (3) implementation of programs for students supported by the GI Bill.</p>

**NUCLEAR REGULATORY COMMISSION (NRC)**

Close Date	Opportunity
12/16/2009	<b>U.S. Nuclear Regulatory Commission Funding Opportunity</b>

	<p><b>Announcement, Scholarship and Fellowship Education Grant, Fiscal Year 2010</b></p> <p>The U.S. Nuclear Regulatory Commission (NRC) is an independent agency, established by the Energy Reorganization Act of 1974, tasked with licensing and regulating the Nation's civilian use of byproduct, source, and special nuclear material to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. Funding under this \$15 million program includes support for nuclear science, engineering, and related disciplines to develop a workforce capable of supporting the design, construction, operation, and regulation of nuclear facilities and the safe handling of nuclear materials. The total amount of funding available for undergraduate scholarships, graduate fellowships, trade school scholarships, and faculty development grants together in FY2010 totals \$15 million. This announcement is for undergraduate scholarships and graduate fellowships. The announcements for trade school and community college scholarships (HR-FN-1009-NED03) and faculty development grants (HR-FN-1009-NED02) are published separately. As a condition for receiving scholarships or fellowships, recipients must demonstrate satisfactory academic progress in their fields of study, as determined by criteria contained in this announcement and as established by the NRC. The nuclear development supported by this funding is intended to benefit the nuclear sector broadly. Consequently, NRC requires scholarship and fellowship recipients to serve six (6) months in nuclear-related employment for each full or partial year of academic support. The employment may be with NRC, other Federal agencies, State agencies, Department of Energy laboratories, nuclear-related industry, or academia in the recipients sponsored fields of study. NRC may waive, in whole or in part, the service obligation, upon determination that compliance by the individual is impractical. There is no guarantee that sufficient funds will be available to initiate or continue grant activities where funding has been recommended by NRC. Future opportunities for submitting applications may be available, depending on future NRC funding authorization. An award funding an individual's scholarship for one academic year does not guarantee that funding will continue for any subsequent years necessary for completion of the individual's degree. That funding does not continue for subsequent years does not alter the terms of the service/employment agreement between the student and the NRC, as described above and discussed in full below.</p>
12/22/2009	<p><b>U.S. Nuclear Regulatory Commission Funding Opportunity Announcement, Faculty Development Grant, Fiscal Year 2010</b></p> <p>The U.S. Nuclear Regulatory Commission (NRC) is an independent agency, established by the Energy Reorganization Act of 1974, tasked with licensing and regulating the Nation's civilian use of byproduct, source, and special nuclear material to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. Funding under this opportunity includes support for nuclear science, engineering, and related disciplines to develop a workforce capable of the design, construction, operation, and regulation of nuclear facilities and the safe handling of nuclear materials. This announcement is for Faculty Development Grants. Related announcements for undergraduate scholarships, graduate fellowships, and trade school or community college scholarships are published separately. The Faculty Development Grants Program recognizes the need to attract, recruit or retain highly-qualified individuals in academic teaching careers. Funding under this announcement is intended to support faculty and their research in the nuclear-related fields of Nuclear Engineering, Health Physics, Radiochemistry and related disciplines as determined by the NRC. The grants specifically target probationary, tenure-track faculty in these academic areas during the first 6 years of their career. Grants may include support for developing applications for research and amounts for initiating or continuing research projects in their areas of expertise. Other areas might</p>

	<p>include course development, equipment stipends, participation in professional society meetings, preparation of papers, travel, and support for graduate assistants, and associated expenses as related to research projects or an institution's faculty development plan. Awards may be increased to the extent that a portion of the award is matched by the institution. The program intends to provide support to enable new faculty to enhance their careers as professors and researchers in the University department where employed.</p>
02/01/2010	<p><b>U.S. Nuclear Regulatory Commission Funding Opportunity Announcement, Nuclear Education Curricula Development Grant, Fiscal Year 2010</b></p> <p>The U.S. Nuclear Regulatory Commission (NRC) is an independent agency, established by the Energy Reorganization Act of 1974, tasked with licensing and regulating the Nation's civilian use of byproduct, source, and special nuclear material to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment. The Energy Policy Act of 2005 authorized the NRC Nuclear Education Grant Program to support courses, studies, training, curricula, and disciplines pertaining to nuclear safety, nuclear security, nuclear environmental protection, and other fields that the Commission determines to be critical to the NRC's regulatory mission. The NRC Nuclear Education Grant Program's primary purpose is supporting and developing the educational infrastructure necessary to allow the Nation to safely move its nuclear energy initiatives forward. The NRC currently supports curriculum development in the following technical areas: Nuclear Engineering • Criticality safety courses for nuclear professionals • Thermal-hydraulics model development • Reactor physics • Nuclear power plant safety • Nuclear power plant design and operations (including operating and emergency operating procedures) • Fuel performance Radiochemistry and Radiobiology Health Physics • Health physics modeling • Dosimetry and measurements • Environmental transport, dissolution, and migration • Decontamination and decommissioning • Reprocessing, recycle chemistry, and technology courses Materials and Mechanical Engineering • Welding principles, and nondestructive examination (NDE) technology • Management of aging plants (components and systems) • Material corrosion Reliability and Risk Analysis Electrical Engineering • Power generation and distribution or electrical components • Digital instrumentation and control systems Safeguards and Security • Material control and accountability courses • Vulnerability analysis Human Factors and Human Reliability • Human factors modeling • Applied-experimental psychology, specializing in human performance and human factors Fire Protection Engineering • Fire Modeling for Fuel Cycle Facilities • Fire Modeling for Nuclear Power Plants</p>