

January 28, 2010

Research Opportunities Compiled by:

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Opportunity #1

Characterization and modeling of Nitrogen loading from transportation sources and attenuation by roadside vegetation buffers in an urbanized watershed

USEPA

EPA-ORD-10-GED31588

Description: It is anticipated that the agreement that is awarded will involve or relate to geospatial information and will conform to all data requirements for geospatial information. The U.S Environmental Protection Agency (EPA) is seeking applications proposing innovative approaches to quantify both the generation of ecosystem services from the ecosystems most closely tied to humans in urban environments as well as developing the connectivity networks associate with the production, delivery through the landscape, and consumption of ecosystem services applied to consideration of the value of ecosystem services in environmental decision-making. Atmospheric deposition of nitrogen is now the greatest pollutant source to the watershed and bay and is the focus of a currently active super deposition TMDL assessment study site within the city of Tampa. Research should specifically address the ability of the applicant to quantify the loading of atmospheric nitrogen from transportation sources associated with the Tampa Bay watershed or similar urbanized watershed and be able to assess the potential for road side vegetation buffers to attenuate those loads. Universities are conducting research and using models such as UFORE or I-TREE in urban transition areas to model the ability of plants to provide ecological services and benefits such as nitrogen removal, particulate removal, etc. Proposed research should address research currently being conducted and the availability of existing data sets and information to provide more robust estimates of services in urban transition and transportation zones.

Link to Full Announcement:

http://www.epa.gov/nheerl/about/files/rfa_nitrogen_loading.pdf

Opportunity #2

NASA Environmentally Responsible Aviation Project Pre-Proposal Meeting N+2 Advanced Vehicle Concepts NASA Research Announcement (NRA)

Description: The National Aeronautics and Space Administration (NASA), Aeronautics Research Mission Directorate's (ARMD) Environmentally Responsible Aviation (ERA) Project under the Integrated Systems Research Program (ISRP) is hosting a NASA Research Announcement (NRA) Pre-Proposal Meeting on Thursday February 11, 2010 in Washington, D.C. to share information on the advanced vehicle concepts and technologies of interest and to seek input from the broad aeronautics community to refine the upcoming N+2 Advanced Vehicle Concepts NRA solicitation. A draft of the solicitation is expected to be released one week prior to the NRA Pre-Proposal Meeting. Further information on this meeting may be found at

+ [N+2 Advanced Vehicle Concepts NRA Draft Solicitation Synopsis](#)

+ Registration **NOW OPEN**

Thursday, February 11, 2010
8:00 a.m. to 12:00 Noon
Washington Marriott Hotel
1221 22nd Street, NW
Washington, DC 20037
[Hotel Web Site/Directions](#)

NOTE: Online registration closes at 3:00 p.m. EST on Wednesday, February 10, 2010.

Current Agenda:

Opportunities to ask questions, solicit clarification, and provide input to the solicitation scope will be provided during general Q&A and private (20-minute) sessions. Organization representatives are invited to sign up for private sessions during the on-site registration period before the meeting begins. Teaming with other participants will be encouraged.

7:30 – 8:00 a.m.	On-site Registration/Sign-Up for One-on-One Sessions
8:00 – 8:15 a.m.	ARMD Overview
8:15 – 8:30 a.m.	FAA CLEEN Overview
8:30 – 8:45 a.m.	ISRP Overview
9:00 – 9:30 a.m.	ERA Overview
9:30 – 10:00 a.m.	Q&A
10:00 – 12:00 p.m.	One-on-One Private Sessions

Link to Full Announcement:

<http://www.aeronautics.nasa.gov/calendar/20100211.htm>

Opportunity #3

Notice of Availability of Administrative Supplements for R25 Science Education Grants DHHS - NIH NOT-DA-10-007

Description: The National Institutes of Health Blueprint for Neuroscience Research announces an administrative supplement program of \$600,000 in Fiscal Years 2010 and 2011 to provide funds to Blueprint Institute-supported research education projects (see Eligibility section below).

The purpose of this program is to create and broadly disseminate materials/programs to inform students and teachers in kindergarten-12th grade about the field of neuroscience.

Background: The NIH Blueprint for Neuroscience Research (<http://neuroscienceblueprint.nih.gov/>) is a collaborative framework that includes the NIH Office of the Director and the NIH Institutes and Centers that support research on the nervous system. By pooling resources and expertise, the Blueprint identifies cross-cutting areas of research, and confronts challenges too large for any single Institute or Center. Since its inception in 2004, the Blueprint has supported the development of new tools, training opportunities and other resources to assist neuroscientists. In 2009, the Blueprint Grand Challenges were launched to catalyze research with the potential to transform our basic understanding of the brain and our approaches to treating brain disorders. In addition to promoting cutting edge neuroscience research, the Blueprint recognizes the importance of improving science education in order to maintain U.S. competitiveness and meet future demands in the international technology marketplace. In order for NIH to fulfill its mission, there is a need to ensure that adequate numbers of students are entering science education tracks and eventually pursuing careers in biomedical sciences. This science literacy should not only include basic science knowledge, but also an understanding of the process of biomedical research and an ability to evaluate the quality of research studies that are reported in the media. It is also important to the NIH Blueprint for Neuroscience Research that all members of society understand the role of science, biology, and technology as they relate neuroscience. There is a lack of public understanding of research in general, including the role of research in improving health. By educating school children, it is likely that we will reach the adults in their lives as well. To address these areas, this initiative provides Administrative Supplement support for innovative and novel activities that will promote neuroscience learning in the kindergarten-12th grade through NIH funded R25 grants, including the Science Education Drug Abuse Partnership Award (SEDAPA) and Science Education Partnership Award (SEPA).

Eligibility: The current announcement is for supplements to NIH Blueprint for Neuroscience Institutes R25 science education grants. To be eligible, the parent grant must be active, and the science education project proposed in the supplement must be accomplished within the competitive segment. The proposed supplement MUST be within the general scope of the peer-reviewed activities and aims approved within the parent grant, including projects on a no-cost extension; while supplemental funds may be awarded to grants during a no-cost extension, the period of support cannot extend beyond the award period for the additional time that was granted. Note that while NIH recommends that a no-cost extension already be in place **before** an administrative supplement request is submitted, this is not a requirement for all administrative supplement requests.

Institutions may submit more than one supplement request but only one supplement will be funded for each NIH funded R25 grant.

IMPORTANT: The research proposed by the NIH grantee in the supplement application must be within the original scope of the NIH-supported grant project. The funding mechanism being used to support this program, administrative supplements, can be used to cover cost increases that are associated with achieving certain new research objectives as long as they are within the original scope of the project. Any cost increases need to result from making modifications to the project in order to take advantage of opportunities that would increase the value of the project consistent with its originally approved objectives and purposes.

The funding method being used to support this program, administrative supplements, can be used to cover cost increases that are associated with increasing the speed of projects funded under the parent grant and/or achieving certain new science education objectives as long as they are within the scope of the parent project. Some examples of the types of supplements that could be appropriate include, but are not limited to, hiring additional personnel or funding investments in equipment and technology to leverage the goals of the project or to enhance energy efficiency of the conduct of the project. Any cost increases need to result from making modifications to the parent project in order to take advantage of opportunities that would increase the value of the project consistent with its originally approved objectives and purposes or to accelerate the tempo of science education activities.

Areas of Interest:

NIH intends to accept applications for supplements under this notice in order to promote science education in the field of neuroscience for children in grades K-12. Examples of responsive projects include, but are not limited to:

- Support specific neuroscience focused components to curricula developed through an NIH R25 grant such as a SEPA/SEDAPA.
- Develop neuroscience education programs for low literacy students.
- Develop new or expand existing Teacher Professional Development programs for neuroscience content and pedagogy.
- Develop interactive and inquiry-based neuroscience curricula for elementary school students.
- Develop web based education material or educational games for middle and/or high school students based on neuroscience.
- Expand the content of existing SEPA/SEDAPA-funded science museum exhibits or develop traveling versions of their existing SEPA/SEDAPA exhibits to include neuroscience related topics.

Link to Full Announcement:

<http://grants1.nih.gov/grants/guide/notice-files/NOT-DA-10-007.html>

Opportunity #4

Technology-Based Adherence Interventions for Substance Abusing Populations with HIV (R01) DHHS – NIH PAS-10-097

Description: Through this FOA, the National Institute on Drug Abuse (NIDA) seeks to stimulate and support research on the determination of efficacy and potency of interventions that utilize technological tools (e.g., mobile enabling technologies, Ecological Momentary Assessment (EMA), enhanced Medication Event Monitoring System, computer software, portable digital devices, cell phone and/or Digital Assistant Device among others) to foster adherence to Human Immunodeficiency Virus (HIV) treatment regimens among substance abusing populations in naturally occurring timeframes and contexts. Multidisciplinary collaboration between social scientists, medical (physician/nurse) researchers and technology experts to develop and refine mobile technological instrumentation, e-health technology and software as interventions (or as part of interventions) that foster adherence to HIV treatment regimens and access to care in real time is encouraged. This FOA will utilize the R01 grant mechanism and runs in parallel with FOA of identical scientific scope, PAS-10-098 that encourages applications under the R34 mechanism. NIDA intends to commit up to \$1.5 million in total costs in FY 2010 and 1.5 million in FY 11 to support 6-9 new projects under this FOA and the accompanying R34 FOA.

Link to Full Announcement:

<http://grants.nih.gov/grants/guide/pa-files/PAS-10-097.html>

Opportunity #5

Technology-Based Adherence Interventions for Substance Abusing Populations with HIV (R34) DHHS – NIH PAS-10-098

Description: Through this FOA, the National Institute on Drug Abuse (NIDA) seeks to stimulate and support research on the development, determination of feasibility, and pilot testing of interventions that utilize technological tools (e.g., mobile enabling technologies, Ecological Momentary Assessment (EMA), enhanced Medication Event Monitoring System, computer software, portable digital devices, cell phone and/or Digital Assistant Device among others) to foster adherence to Human Immunodeficiency Virus (HIV) treatment regimens among substance abusing populations in naturally occurring timeframes and contexts. Multidisciplinary collaboration between social scientists, medical (physician/nurse) researchers and technology experts to develop and refine mobile technological instrumentation, e-health technology and software as interventions (or as part of interventions) that foster adherence to HIV treatment regimens and access to care in real time is encouraged. This FOA will utilize the R34 grant mechanism and runs in parallel with FOA of identical scientific scope, PAS-10-097 that encourages applications under the R01 mechanism. NIDA intends to commit up to \$1.5 million in total costs in FY 2010 and 1.5 million in FY 11 to support 6-9 new projects under this FOA and the accompanying R01 FOA.

Link to Full Announcement:

<http://grants.nih.gov/grants/guide/pa-files/PAS-10-098.html>

Opportunity #6

Deep Sequencing and Analysis of Pharmacogenomic Regions: Discovery and Analysis of Genetic Variants Contributing to Drug Abuse and Addiction (R01)

DHHS – NIH

RFA-DA-10-019

Description: Genome-wide association studies (GWAS) have been critical for identifying genomic regions associated with addiction phenotypes, and have highlighted several areas that require further refinement using deep sequencing approaches. The goal of this FOA is to support studies proposing to use next-generation sequencing technologies to identify the structural variants and SNP variants with rare to moderate frequencies that affect addiction risk in well-characterized samples with drug abuse phenotypes. Applications may propose strategies for deep sequencing based on family based designs; deep sequencing of regions identified by GWAS to be associated with addiction risk; sequencing candidate genes in individuals with extreme phenotypes; or other analytic approaches that capitalize on the genetic architecture. Applicants must use existing DNA samples with appropriately obtained consents for broad data sharing. This FOA will utilize the **R01** award mechanism. The total amount to be awarded for this FOA will be up to \$10M in total costs per year, with the anticipated number of awards ranging from 1-4. Budgets for direct costs of up to \$2.5M per year and a project duration of up to five years may be requested. The **R01** Research Strategy section may not exceed **12** pages, including tables, graphs, figures, diagrams, and charts. More than one PD/PI (i.e., multiple PDs/Pis) may be designated on the application. Applicants may submit more than one application, provided each application is scientifically distinct. Resubmission applications are not permitted in response to this FOA. Renewal applications are not permitted in response to this FOA.

Link to Full Announcement:

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-DA-10-019.html>

Opportunity #7

NEI Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grants (T32) for Statistical Genetics and Genome Informatics

DHHS – NIH

RFA-EY-10-001

Description: The NEI Institutional Research Training Grants (T32) for Statistical Genetics and Genome Informatics is a Ruth L. Kirschstein National Research Service Award program that is intended to support predoctoral and postdoctoral training at institutions having the potential to develop meritorious training programs in genomic medicine, computational genomics, and statistical genetics. The goal of this program is to initiate a training program to develop ophthalmic statistical genetics and bioinformatics research skills critical for investigators seeking to identify genes and genetic variations underlying ocular diseases. This training program is designed to attract individuals in early career stages, in order to increase their knowledge and awareness of research in the genetics of ophthalmic disorders, and to encourage them to pursue research career opportunities in these scientific fields. Such training will help meet a growing need for investigators trained in computational genomics related to basic biomedical, clinical, and translational ophthalmic research. The NEI plans a long-term commitment to this area. Trainee appointments will be determined by the institution and conducted in a manner that will include the recruitment of individuals from diverse backgrounds. This FOA will utilize the National Institutes of Health (NIH) Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (T32) mechanism.

Link to Full Announcement:

<http://grants.nih.gov/grants/guide/rfa-files/RFA-EY-10-001.html>

Opportunity #8

DoD Bone Marrow Failure Exploration-Hypothesis Development Award
Department of Defense – Dept. of the Army -- USAMRAA
W81XWH-10-BMFRP-EHDA

Description: This award supports the initial exploration of innovative, untested, novel, and potentially groundbreaking concepts in bone marrow failure research. Results of studies conducted through this award may provide the scientific rationale upon which a new hypothesis can be based, or provide initial principles of an innovative hypothesis. Because this award is designed to provide investigators with the opportunity to pursue serendipitous observations, some gaps in the supporting rationale may exist due to lack of available information. The award mechanism is not intended to support the continuation of existing studies.

Link to Full Announcement:

<http://www07.grants.gov/search/announce.do;jsessionid=dqRhLhMQhKRC2HJQYpJRImGcYXJQvJ4d1byh1RL6jqy47LBmvfR!-1299818899>

Opportunity #9

DoD Bone Marrow Failure New Investigator Award
Department of Defense - Dept. of the Army -- USAMRAA
W81XWH-10-BMFRP-NIA

Description: The intent of the BMFRP NIA is to support the career transition and/or continued development of promising, independent, non-mentored investigators, who are in the early stages of their scientific careers, in the field of BMF disease research. Principal Investigators (PIs) should have a strong desire to pursue a career as a BMF researcher and demonstrate the potential for a successful career focused on BMF research. Experience in BMF research is not required. PIs with a limited background in BMF research are strongly encouraged to include a collaborator who is experienced and has published in the field of BMF research. Additionally, the research proposed by the PI should include innovative ideas and approaches with the potential for high impact to meet the objectives of the FY10 BMFRP.

Link to Full Announcement:

<http://www07.grants.gov/search/announce.do;jsessionid=dqRhLhMQhKRC2HJQYpJRImGcYXJQvJ4d1byh1RL6jqy47LBmvfR!-1299818899>

Opportunity #10

DoD Ovarian Cancer Translational Pilot Award
Department of Defense - Dept. of the Army -- USAMRAA
W81XWH-10-OCRTPA

Description: NEW for FY10, the OCRP Translational Pilot Award mechanism supports innovative translational research addressing a critical problem or question in ovarian cancer that will accelerate the movement of promising ideas toward clinical applications. The proposed research should provide a catalyst to challenge or expand current thinking and/or approaches to ovarian cancer. It must involve early-stage translation of an idea from the laboratory to the clinic, or from the clinic back to the laboratory. Observations that generate a translational pilot research idea may be derived from a laboratory discovery, literature review, population-based studies, novel findings from a clinical trial, or a clinician's firsthand knowledge of patients and anecdotal data. Preliminary data are not required, but are allowed. The strength of the proposal should be based on sound scientific rationale and logical reasoning.

Link to Full Announcement:

<http://www07.grants.gov/search/announce.do;jsessionid=dqRhLhMQhKRC2HJQYpJRImGcYXJQvJ4d1byh1RL6jqy47LBmvfR!-1299818899>