

ESPP Funding Opportunities: Nov. 1, 2015

OPPORTUNITIES FOR STUDENTS and RECENT GRADUATES

2016 Ford Foundation Fellowships Program for Achieving Excellence in College and University Teaching

The National Academies of Sciences, Engineering, and Medicine is accepting applications for the 2016 Ford Foundation Fellowships Programs for Achieving Excellence in College and University Teaching. Full eligibility information and online applications are available on their website at:

<http://nationalacademies.org/ford>

Dissertation and Post-doctoral fellowship applications due Nov. 13, 2015.

MSU COGS Disciplinary Leadership Award

MSU Council of Graduate Students (COGS) established an endowment to recognize disciplinary leadership by graduate and grad-professional students. Graduate students regularly (not provisionally or lifelong) enrolled in a graduate or grad-professional program at MSU and who are in good standing in their programs may apply for the COGS Disciplinary Leadership Award.

Nov. 30, 2015

NSF Graduate Research Fellowship Program - Graduate Research Opportunities Worldwide

The Division of Graduate Education announces the continuation of the NSF Graduate Research Fellowship Program's Graduate Research Opportunities Worldwide (GROW). GROW provides NSF Graduate Research Fellows (referred to as "Fellows") with opportunities to engage in international collaborations with investigators in partner countries around the world. Through GROW, Fellows benefit from partnerships developed by NSF with counterpart funding organizations in other countries (see <http://www.nsf.gov/grow> for a current list of countries and partner organizations). GROW offers funding for international stays of 2-12 months, with the duration varying by country and partner organization. Details for each partner organization, including eligible institutions and organizations, levels of in-country support, and any restrictions on the duration of stays, are available through links to partner websites at <http://www.nsf.gov/grow>. As additional organizations and countries develop partnerships with NSF, updates will be made to the GROW website (<http://www.nsf.gov/grow>).

Dec. 4, 2015

OPPORTUNITIES FOR FACULTY

Specialty Crop Research Initiative Request for Pre-Applications (RFPA) USDA-NIFA-SCRI-005437

The purpose of the SCRI program is to address the critical needs of the specialty crop industry by awarding grants to support research and extension that address key challenges of national, regional, and multi-state importance in sustaining all components of food and agriculture, including conventional and organic food production systems. Projects must address at least one of five focus areas: Research in plant breeding, genetics, genomics, and other methods to improve crop characteristics; Efforts to identify and address threats from pests and diseases, including threats to specialty crop pollinators; Efforts to improve production efficiency, handling and processing, productivity, and profitability over the long term (including specialty crop policy and marketing); new

innovations and technology, including improved mechanization and technologies that delay or inhibit ripening; and methods to prevent, detect, monitor, control, and respond to potential food safety hazards in the production efficiency, handling and processing of specialty crops. Visit the NIFA website to access a factsheet on the Center of Excellence (COE) designation process, including COE criteria, and a list of programs offering COE opportunities in fiscal year 2016. You can also review a recording of COE outreach webinars held in February and March of 2015 from the site. The COE webpages will be updated throughout FY 2016 with additional information, such as a summary of comments received from stakeholders.

Dec. 3, 2015

National Science Foundation Research Traineeship (NRT) Program - Innovations at the Nexus of Food, Energy and Water Systems NSF 16-503

The NSF Research Traineeship (NRT) program is designed to encourage the development and implementation of bold, new, and potentially transformative models for STEM graduate education training. The NRT program seeks proposals that ensure that graduate students in research-based master's and doctoral degree programs develop the skills, knowledge, and competencies needed to pursue a range of STEM careers. The NRT program includes two tracks: the Traineeship Track and the Innovations in Graduate Education (IGE) Track. The Traineeship Track is dedicated to effective training of STEM graduate students in high priority interdisciplinary research areas, through the use of a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. For FY2016, there are four priority areas: (1) Data-Enabled Science and Engineering (DESE), (2) Understanding the Brain (UtB), (3) Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS), and (4) any other interdisciplinary research theme of national priority. The priority research areas for the FY2017 competition will be (1) UtB, (2) INFEWS, and (3) any other interdisciplinary research theme of national priority. The IGE Track focuses on test-bed projects aimed at piloting, testing, and validating innovative and potentially transformative approaches to graduate education. IGE projects are intended to generate the knowledge required for their customization, implementation, and broader adoption. While the Traineeship Track promotes building on the current knowledge base to develop comprehensive programs to effectively train STEM graduate students, the IGE Track supports testing of novel models or activities with high potential to enrich and extend the knowledge base on effective graduate education approaches. The NRT program addresses both workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. For both tracks, strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners are encouraged.

Letter in Intent Due: Dec. 9, 2015 (5 p.m. EST). Full Proposal Deadline: Feb. 9, 2016 and Feb. 7, 2017 (5 p.m. EST)

Assistance to High Energy Cost Rural Communities RD-RUS-HECG15

The Rural Utilities Service (RUS), an agency of the United States Department of Agriculture (USDA), announces the availability of up to \$10 million in competitive grants to assist communities with extremely high energy costs. The grant funds may be used to acquire, construct, or improve energy

generation, transmission, or distribution facilities serving communities where average annual residential expenditure for home energy exceeding 275 percent of the national average. Eligible projects also include on-grid and off-grid renewable energy projects and implementation of energy efficiency, and energy conservation projects for eligible communities. Projects cannot be for the primary benefit of a single household or business. Grant funds may not be used for the preparation of the grant application, payment of utility bills, fuel purchases, routine maintenance or other routine operating costs, or for the purchase of any equipment, structures, or real estate not directly associated with provision of community energy services. See the published Notice of Solicitation of Applications which describes the eligibility and application requirements, the criteria that will be used by RUS to award funding, and information on how to obtain application materials.

Dec. 14, 2015

FY 2015 Support for Water Quality Framework Training Workshop, Nonpoint Source Agriculture Training and Technical Assistance, and Hypoxia and Agricultural Nutrient Outreach and Technical Assistance Request for Proposals EPA-OW-OWOW-15-04

The U.S. Environmental Protection Agency (EPA) is soliciting proposals from eligible applicants to provide support for training and technical assistance activities to build the capacity of state and tribal officials and nongovernmental stakeholders in the Clean Water Act (CWA) Sections 303(d), 305(b), and TMDL Programs. The National Priority Activities identified in this announcement are: 1) to plan, prepare and conduct three State and Tribal Data Management and Data Sharing Training Workshops in support of CWA Section 303(d), CWA Section 305(b), TMDLs, and water quality monitoring and assessment; 2) to provide and advance Nonpoint Source Agriculture Training and Technical Assistance; and 3) to provide training and technical assistance on Gulf of Mexico Hypoxia and Agricultural-Related Nutrient Issues. Funds awarded under this announcement for training and technical assistance support activities may be used to promote participation and to support travel expenses of non-federal personnel to attend workshops.

Dec. 14, 2015

Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML) NSF16-506

Biological Field Stations and Marine Laboratories (FSMLs) are off-campus facilities for research and education conducted in the natural habitats of terrestrial, freshwater, and marine ecosystems. FSMLs support environmental and basic biological research and education by preserving access to study areas and organisms, by providing facilities and equipment in close proximity to those study areas, and by fostering an atmosphere of mutual scientific interest and collaboration in research and education. To fulfill these roles, FSMLs must offer modern research and educational facilities, equipment, communications and data management for a broad array of users. In recognition of the importance of FSMLs in modern biology, NSF invites proposals that address these general goals of FSML improvement.

Jan. 11, 2016

Division of Integrative Organismal Systems NSF 16-505

The Division of Integrative Organismal Systems (IOS) supports research aimed at understanding

why organisms are structured the way they are and function as they do. Proposals should focus on organisms as a fundamental unit of biological organization. Principal Investigators (PIs) are encouraged to apply systems approaches that will lead to conceptual and theoretical insights and predictions about emergent organismal properties. Areas of inquiry include, but are not limited to, developmental biology and the evolution of developmental processes, nervous system development, structure, and function, physiological processes, functional morphology, symbioses, interactions of organisms with biotic and abiotic environments, and animal behavior.

Preliminary deadline: Jan. 15, 2016. Letter of intent deadline: April 29, 2016. Full proposal deadline: June 1, 2016 (Edge track). Full proposal deadline: Aug. 5, 2016 (Core track)

Long Term Ecological Research NSF 16-509

NSF currently supports 25 LTER research sites and, through this solicitation, invites proposals to establish three (3) new LTER sites. Research proposals should address questions in one of two broad ecosystems: Arid/semi-arid ecosystems: The Division of Environmental Biology (DEB) anticipates support and management of one (1) new site with a focus on arid or semi-arid ecosystems. The location of the research site for proposals submitted to develop a new arid/semi-arid ecosystem LTER must be within the United States, including its territories and protectorates. Ocean/coastal ocean ecosystems: The Division of Ocean Sciences (OCE) anticipates support and management of two (2) new sites that focus on ocean or coastal ocean ecosystems; defined as ecological systems from the shoreline outward on continental shelves and including the Laurentian Great Lakes, Congressionally defined as interior oceans. Preference will be given to proposals developing a new ocean/coastal ocean ecosystem LTER site located within the United States, including its territories and protectorates, but other locations are not precluded. To address ecological questions that cannot be resolved with short-term observations or experiments, NSF established the Long Term Ecological Research Program (LTER) in 1980. Two components differentiate LTER research from projects supported by other NSF programs: 1) the research is located at specific sites chosen to represent major ecosystem types or natural biomes; and 2) it emphasizes the study of ecological phenomena over long periods of time based on data collected in five core areas. The five core areas of long-term data collection are: 1) patterns and controls of primary production, 2) spatial and temporal population dynamics and food web interactions, 3) patterns and controls of organic matter accumulation and decomposition, 4) patterns of inorganic inputs and movements of nutrients, and 5) patterns and frequency of disturbances. The LTER program provides a unique opportunity for researchers to obtain an integrated, holistic understanding of ecosystems that is not possible through individual, short-term awards. Research at LTER sites must test important, current ecological theories and significantly advance understanding of the long-term dynamics of populations, communities and ecosystems. It often integrates multiple disciplines and, through cross-site interactions, examines patterns or processes over broad spatial scales. Recognizing that the value of long-term data extends beyond use at any individual site, NSF requires that data collected by all LTER sites be made broadly accessible. The LTER program is a multi-disciplinary, cross-Foundation effort supported by the Division of Environmental Sciences (DEB), the Division of Ocean Sciences (OCE), and the Division of Polar Programs (PLR).

Preliminary proposal deadline: Feb. 1, 2016. Full proposal deadline: Aug. 2, 2016.

Dimensions of Biodiversity NSF 15-611

Despite centuries of discovery, most of our planet's biodiversity remains unknown. The scale of the unknown diversity on Earth is especially troubling given the rapid and permanent loss of biodiversity across the globe. The goal of the Dimensions of Biodiversity campaign is to transform, by 2020, how we describe and understand the scope and role of life on Earth. This campaign promotes novel integrative approaches to fill the most substantial gaps in our understanding of the diversity of life on Earth. It takes a broad view of biodiversity, and focuses on the intersection of genetic, phylogenetic, and functional dimensions of biodiversity. Successful proposals must integrate these three dimensions to understand interactions and feedbacks among them. While this focus complements several core programs in BIO and GEO, it differs by requiring that multiple dimensions of biodiversity be addressed simultaneously, in novel ways, to understand their synergistic roles in critical ecological and evolutionary processes. The Dimensions of Biodiversity program again includes partnerships with the National Natural Science Foundation of China (NSFC) and São Paulo Research Foundation (FAPESP) of Brazil in fiscal year 2016. Investigators wishing to inquire about the suitability of potential projects for Dimensions of Biodiversity are encouraged to email a brief summary and contact information to Dimensions@nsf.gov.

March 17, 2016