

ESPP Funding May 1, 2016

OPPORTUNITIES FOR STUDENTS and RECENT GRADUATES

Graduate Research Internship Program (GRIP)

opportunities for NSF Graduate Fellows to enhance their professional development by engaging in mission related research experiences with partner agencies across the federal government. GRIP is open only to NSF Graduate Fellows, recipients of the Graduate Research Fellowship Program (GRFP) award. Research internship opportunities are available through the Partner Agencies listed below in the Related URL section of this webpage. More internship opportunities with additional partner agencies are anticipated in the near future. Please see application details in the Dear Colleague Letter 16-015 and via the individual agency links or emails below.

May 6, 2016

NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)NSF 16-540

Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to Institutions of Higher Education (IHEs) to fund scholarships and to advance the adaptation, implementation, and study of effective evidence-based curricular and co-curricular activities that support recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. The S-STEM program encourages collaborations among different types of partners: Partnerships among different types of institutions; collaborations of STEM faculty and institutional, educational, and social science researchers; and partnerships among institutions of higher education and local business and industry, if appropriate. The program seeks: 1) to increase the number of low-income academically talented students with demonstrated financial need obtaining degrees in STEM and entering the workforce or graduate programs in STEM; 2) to improve the education of future scientists, engineers, and technicians, with a focus on academically talented low-income students; and 3) to generate knowledge to advance understanding of how factors or evidence-based curricular and co-curricular activities affect the success, retention, transfer, academic/career pathways, and graduation in STEM of low-income students.

May 16, 2016

Charles A. and Anne Morrow Lindbergh Foundation

For students, faculty, and others to conduct research and educational projects addressing the balance between technology and preservation of the human/ natural environment. Particular focus on aviation-environmental projects. \$11,000. 8-12 grants awarded annually.

June 9 (annual)

Biological Anthropology Program - Doctoral Dissertation Research Improvement Grants BA-DDRIG NSF 14-561

The Biological Anthropology Program supports multifaceted research which advances scientific knowledge of human biology and ecology, including understanding of our evolutionary history and mechanisms which have shaped human and nonhuman primate biological diversity. Supported research focuses on living and fossil forms of both human and nonhuman primates, addressing time scales ranging from the short-term to

evolutionary, encompassing multiple levels of organization and analysis (molecular and organismal, to the population and ecosystem scales), and conducted in field, laboratory, and captive research environments. Areas of inquiry which promote understanding of the evolution, biology, and adaptability of our diverse species include, but are not limited to, human genetic and epigenetic variation and relationships to phenotype; human and nonhuman primate ecology, socioecology, functional anatomy and skeletal biology; human and nonhuman primate paleontology; and the anthropological science of forensics. Multidisciplinary research which fully integrates biological anthropology with other anthropological fields, such as bioarchaeological or biocultural research, also receives support through the Program.

July 14, 2016

OPPORTUNITIES FOR FACULTY

Woodard & Curran: Promoting Clean Water Sources

The Woodard & Curran Foundation, the charitable arm of integrated engineering, science, and operations company Woodard & Curran, is accepting applications from nonprofits organizations for projects focused on protecting and promoting clean water sources. To that end, the foundation will award grants through two distinct tracks. Applications/LOIs are due on July 1, 2016. 1) Track 1 Grants: Up to three one-year grants of up to \$10,000 will be awarded to support projects dedicated to addressing the problem of water scarcity through STEAM (Science, Technology, Engineering, Arts, and Math) initiatives. This track is limited to 501(c)(3) nonprofit organizations that meet the foundation's general eligibility requirements and are located in states where Woodard & Curran Inc. either has an office or operates a treatment facility, including California, Connecticut, Florida, Georgia, Illinois, Massachusetts, Maine, Missouri, Montana, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Tennessee, or Wyoming. 2) TRACK 2 Impact Grants: Three-year grants of up to \$100,000 for an innovative projects applying or advancing technology to address water issues relating to climate change. This opportunity is open to all U.S.-based 501(c)(3) nonprofits that meet our general eligibility requirements. To be eligible, organizations must be based in the United States and be considered tax exempt under Section 501(c)(3) of the Internal Revenue Code.

July 1, 2016

Antarctic Artists and Writers Program (AAW) NSF16-542

The Antarctic Artists and Writers Program furnishes U.S. Antarctic Program operational support, and round-trip economy air tickets between the United States and the Southern Hemisphere, to artists and writers whose work requires them to be in the Antarctic to complete their proposed project. The Program does not provide any funding to participants, including for such items as salaries, materials, completion of the envisioned works, or any other purpose. U.S. Antarctic Program infrastructure consists of three year-round stations and numerous austral-summer research camps in Antarctica, research ships in the Southern Ocean, and surface and air transportation. These assets support the projects undertaken by the artists and writers. The main purpose of the U.S. Antarctic Program is scientific research and education. The Antarctic Artists and Writers Program supports writing and artistic projects specifically designed to increase the public's understanding and appreciation of the Antarctic and human endeavors on the southernmost continent. Priority will be given to projects that focus on interpreting and representing the scientific activities being conducted in and/or about the unique Antarctic region. Resulting projects must target audiences in the U.S. and be distributed/exhibited in the U.S.

June 1, 2016

Geophysics (PH) NSF 12-598

The Geophysics Program supports basic research in the physics of the solid earth to explore its composition, structure, and processes from the Earth's surface to its' deepest interior. Laboratory, field, theoretical, and computational studies are supported. Topics include seismicity, seismic wave propagation, and the nature and occurrence of geophysical hazards; the Earth's magnetic, gravity, and electrical fields; the Earth's thermal

structure; and geodynamics.

June 1, 2016

Division of Integrative Organismal Systems

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.

June 1, 2016

GEO Opportunities for Leadership in Diversity 16-516

This solicitation describes an Ideas Lab on “GEO Opportunities for Leadership in Diversity.” Ideas Labs are intensive workshops focused on finding innovative solutions to grand challenge problems. The ultimate aim of this Ideas Lab, organized by the NSF Directorate for Geosciences (GEO), is to facilitate the design, pilot implementation, and evaluation of innovative professional development curricula that can unleash the potential of geoscientists with interests in broadening participation to become impactful leaders within the community. The expectation is that mixing geoscientists with experts in broadening participation research, behavioral change, social psychology, institutional change management, leadership development research, and pedagogies for professional development will not only engender fresh thinking and innovative approaches for preparing and empowering geoscientists as change agents for increasing diversity, but will also produce experiments that contribute to the research base regarding leader and leadership development. U.S. scientists and educators may submit preliminary proposals only via FastLane as an application to participate in the Ideas Lab, through which a set of multidisciplinary ideas will be developed. The Ideas Lab will be held March 20-24, 2016 in the Washington, DC metro region. Promising approaches developed through the Ideas Lab process will be submitted as full proposals from invited participants.

June 2, 2016

Methane Emissions Mitigation and Quantification from Natural Gas Infrastructure DE-FOA-0001538

Methane (CH₄) is recognized as an efficient greenhouse gas that contributes to global climate change. In the United States, the rapid growth of domestic natural gas resources, coupled with the operational challenges of legacy interstate high pressure pipelines and an aging gas utility delivery system increase the likelihood of methane leakage (emissions) to the atmosphere. Natural gas distribution systems represent approximately 20 percent of all methane leaks from gas systems. Emissions from local gas distribution systems come largely from two sources—leak prone pipelines and meters and regulators at city-gates. The Transmission and Storage Segment systems emits approximately 35 percent of total natural gas system methane emissions. The largest methane sources of emissions from the transmission and storage were reciprocating and centrifugal compressors, pneumatic controllers, blowdowns, and equipment leaks. A public research effort is needed to find more effective and cost efficient ways to mitigate methane emissions and better quantify the sources, volumes and rates of methane emissions across the natural gas infrastructure. The objective of the mitigation-focused research portion of the Program is the development for a suite of natural gas leak mitigation technologies that will enable companies to effectively mitigate leaks. The objective of the methane emission quantification-focused portion of the Program is to better quantify methane emissions from the natural gas value chain.

June 13, 2016

Science Learning+ Partnership Grants

Science Learning+ is an open call for proposals for Partnership Grants through an international partnership between the NSF and the Wellcome Trust with the UK Economic and Social Research Council (ESRC). The aims of Science Learning+ are to strengthen the research and knowledge base; bridge the practice and research gap; and/or share knowledge and experience in informal science, technology, engineering and mathematics (STEM) experiences. Furthermore, the initiative seeks to support practice-based research which falls within or across the following priority areas: understanding learning; engagement in STEM; skills development; equity;

diversity; access to informal learning settings; and measurement of outcomes. Proposals must address at least one priority area and include: collaborations between at least one organization in the US and one in the UK/Republic of Ireland. In addition, the proposal should include a substantive research program, not solely a public engagement activity; genuine partnerships between researchers and practitioners of STEM engagement; experts from more than one STEM area; and more than one informal STEM learning location, platform, or environment. Proposers should submit a single, comprehensive proposal with two budget components, one for US activities and one for UK/Republic of Ireland activities, to NSF.

June 14, 2016

2017 National Urban and Community Forestry Grant Program USDA-FS-UCF-01-2017

The National Urban and Community Forestry Advisory Council seeks innovative (new, cutting-edge or builds upon existing studies) grant proposals for program development, study, and collaboration that will address strategies in the National Ten Year Urban Forestry Action Plan (2016-2026). This Request for Proposals is to address the following priority issues: • Developing a National Urban Forestry Funding Assessment and Methodology • Understand Urban Forest Ecosystem/Ecological Services Detailed information about each category follows this section. Proposals are to meet the request and intent of each applicable category.

Organizations, local governments, tribal agencies, and partnerships are encouraged to submit proposals that will demonstrate the reach, resources, and expertise needed to address the three priority issues in ways that will lead to meaningful, replicable results across the country.

June 16, 2016

ENabling Extreme Real-time Grid Integration of Solar Energy (ENERGISE) DE-FOA-0001495

As part of the Department of Energy's Grid Modernization and SunShot Initiatives, this Enabling Extreme Real-Time Grid Integrations of Solar Energy (ENERGISE) Funding Opportunity Announcement (FOA) supports the research and development of highly scalable distribution system planning and real-time operation solutions that enables seamless interconnection and integration of high penetration solar generation onto the electricity grid in a cost-effective, secure, and reliable manner. The envisioned ENERGISE solutions will require the extensive use of sensor, communication, and data analytics technologies to gather up-to-the-minute measurement and forecast data from diverse sources and perform continuous optimization analysis and active control for existing and new PV installations in real time. The solutions need be compatible with the existing grid architecture in the near term and with the advanced grid architecture in the long term. The solutions should also be designed with consideration of the interoperability and cybersecurity requirements. The full Funding Opportunity Announcement (FOA) is posted on the EERE eXCHANGE website at <https://eere-exchange.energy.gov>. Applications must be submitted through the EERE eXCHANGE website to be considered for award. The applicant must first register and create an account on the EERE eXCHANGE website. A User Guide for the EERE eXCHANGE can be found on the EERE website <https://eere-exchange.energy.gov/Manuals.aspx> after logging in to the system. Information on where to submit questions regarding the content of the announcement and where to submit questions regarding submission of applications is found in the full FOA posted on the EERE eXCHANGE website.

Aug. 26, 2016