December 15, 2017

NEW GRANTS

Science and Technology

Department of Defense/DARPA - Information Innovation Office
Configuration Security (ConSec)
Funding Opportunity Number: HR001118S0010
Abstract Due: 12/22/2017
Application Deadline: 2/8/2018
Estimated Maximum Total Value: Unspecified
Maximum Annual Value Per Award: Unspecified
Estimated Contract Duration: Unspecified
Expected Number of Awards: Unspecified

Summary
DARPA is soliciting innovative research proposals to develop technologies for automatically analyzing and improving the configuration of complex composed systems to reduce the attack surface while assuring expected behavior. Proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

Link: HR001118S0010

Department of Energy
U.S. Offshore Wind Research and Development Consortium FOA
Funding Opportunity Number: DE-FOA-0001767
Concept Paper Deadline: 1/23/2018
Application Deadline: 3/26/2018
Estimated Maximum Total Value: $18,500,000
Estimated Contract Duration: 48 months
Expected Number of Awards: 1

Summary
The U.S. Offshore Wind Research and Development Consortium solicits an administrator to establish and lead a voluntary consortium of members committed to shared public/private investment in collaborative R&D focused on realizing technology improvements for the offshore wind industry in the U.S. The U.S. offshore wind industry has unique technological challenges that have yet to be overcome in the global offshore wind market.

Link: DE-FOA-0001767

Department of Energy/Advanced Research Projects Agency Energy
OPEN 2018
Funding Opportunity Number: DE-FOA-0001858
Concept Deadline: 2/12/2018
Application Deadline: TBD
Estimated Maximum Total Value: $100,000,000
Range of Maximum Total Values Per Award: $500,000 - $10,000,000
Estimated Contract Duration: 18 – 36 months
Expected Number of Awards: 30 - 50

Summary
ARPA-E funds research on and the development of high-potential, high-impact energy technologies that are too early for private-sector investment. The agency focuses on technologies that can be meaningfully advanced with a modest investment over a defined period of time in order to catalyze the translation from scientific discovery to early-stage technology. ARPA-E asks applicants to address the potential impact of the proposed technology on the agency’s Mission Areas: reducing imported energy, reducing energy-related emissions, and improving energy efficiency. The critical question for applicants to consider in assessing potential impact is: “If it works, will it matter?”

Link: DE-FOA-0001858

National Science Foundation/EPSCoR Research Infrastructure Improvement Track 4
EPSCoR Research Fellows
Funding Opportunity Number: 18-526
Application Deadline: 3/13/2018
Estimated Maximum Total Value: $6,000,000
Maximum Total Value Per Award: $300,000
Estimated Contract Duration: 24 months
Expected Number of Awards: 20

Summary
RII Track-4 provides opportunities for non-tenured investigators to further develop their individual research potential through extended collaborative visits to the nation’s premier private, governmental, or academic research centers. During these visits, the EPSCoR Research Fellows will be able to learn new techniques, develop new collaborations or advance existing partnerships, benefit from access to unique equipment and facilities, and/or shift their research toward potentially transformative new directions. The experiences gained through the fellowships are intended to have lasting impacts that will enhance the Fellows’ research trajectories well beyond the award period. These benefits to the Fellows are also expected to in turn improve the research capacity of their institutions and jurisdictions more broadly. Those submitting proposals must either hold a non-tenured faculty appointment at an institution of higher education or an early-career career-track appointment at an eligible non-degree-granting institution.

Link: 18-526

Department of Commerce/NOAA National Sea Grant College Program
2018 Ocean, Coastal and Great Lakes National Aquaculture Initiative
Funding Opportunity Number: NOAA-OAR-SG-2018-2005489
Application Deadline: 3/2/2018
Range of Maximum Total Value: $7,000,000 - $11,500,000
Maximum Total Value Per Award: $750,000
Estimated Contract Duration: 3 years
Expected Number of Awards: Unspecified

Summary
The this competition is designed to foster the expansion of a sustainable U.S. ocean, coastal and Great Lakes aquaculture sector by addressing one or more of the following priorities: (a) supporting the development of emerging systems or technologies that will advance aquaculture in the U.S., including projects that will help stimulate aquaculture production by nascent industries; (b) developing and implementing actionable methods of communicating accurate, science based messages and information about the benefits and risks of U.S. marine aquaculture to the public; and (c) increasing the resiliency of aquaculture systems to natural hazards and
changing conditions. Successful applications must describe projects that clearly address major constraints, barriers or hurdles limiting aquaculture production in the U.S.

Link: [NOAA-OAR-SG-2018-2005489](#)

## Health

**HHS/National Institutes of Health**

**Promoting Research in Basic Neuroscience (R01)**

Funding Opportunity Number: PAS-18-483  
Application Deadline: 2/5/2018  
Estimated Maximum Total Value in FY 2019: $5,000,000  
Maximum Total Value Per Award: Unspecified  
Estimated Contract Duration: 5 years  
Expected Number of Awards: Unspecified  

**Summary**  
The goal is to stimulate research addressing fundamental questions in basic neuroscience. Proposed projects can address any area of neuroscience within the missions of the participating institutes and should focus on understanding the development, the structure and/or the function of the normal nervous system. While fundamental basic research often generates insights relevant to disorders of the nervous system, this FOA is not intended to stimulate research that is explicitly disease-related.

Link: [PAS-18-483](#)

**HHS/National Institutes of Health**

**The Role of Stem/Progenitor Cells in the Pathogenesis and Treatment of Gynecologic Disorders (R01 - Clinical Trial Optional)**

Funding Opportunity Number: RFA-HD-19-013  
Letter of Interest Deadline: 2/28/2018  
Application Deadline: 3/30/2018  
Estimated Maximum Total Value in FY 2019: $1,500,000  
Maximum Annual Direct Costs Per Award: $499,999  
Estimated Contract Duration: 5 years  
Expected Number of Awards: 2 - 3  

**Summary**  
The purpose is to encourage research into the role of pluripotent progenitor/stem cells in the pathogenesis and treatment of selected gynecologic disorders, specifically uterine fibroids, endometriosis, adenomyosis, endometrial polyps, and pelvic organ prolapse.

Link: [RFA-HD-19-013](#)

**HHS/National Institutes of Health**

**NIDCD Early Career Research(ECR) Award (R21 - Clinical Trials Optional)**

Funding Opportunity Number: PAR-18-487  
Application Deadline: 2/27/2018  
Estimated Maximum Total Value: $Unspecified  
Maximum Total Direct Costs Per Award: $300,000  
Estimated Contract Duration: 3 years  
Expected Number of Awards: Unspecified  

**Summary**  
The award is intended to support both basic and clinical research from scientists who are beginning to establish an independent research career. The research must be focused on one or more of the areas within the biomedical and behavioral scientific mission of the NIDCD: hearing, balance, smell, taste, voice, speech, or language.

Link: [PAR-18-487](#)
HHS/National Institutes of Health
Studies in Neonatal and Pediatric Resuscitation (R01 Clinical Trial Optional)
Funding Opportunity Number: PA-18-485
Letter of Interest Deadline: 1/5/2018
Application Deadline: 2/5/2018
Estimated Maximum Total Value: Unspecified
Maximum Annual Value Per Award: Unspecified
Estimated Contract Duration: 5 years
Expected Number of Awards: Unspecified
Summary
The purpose is to stimulate research on a wide range of topics related to neonatal and pediatric resuscitation. Possible topics may include: fetal-neonatal transitional cardiovascular and pulmonary physiology, optimizing steps of resuscitation, management of third stage of labor and its effect on the fetus, resuscitation of children with malformations, effect of resuscitation on long-term outcomes and post-resuscitation practices.
Link: PA-18-485

HHS/National Institutes of Health
Using Information Technology to Support Systematic Screening and Treatment of Depression in Cancer (R01 Clinical Trial Optional)
Funding Opportunity Number: PA-18-493
Application Deadline: 2/5/2018
Estimated Maximum Total Value: Unspecified
Maximum Annual Value Per Award: Unspecified
Expected Number of Awards: Unspecified
Summary
This opportunity encourages research to understand how information technology (IT) can support systematic screening and treatment of depression in cancer patients in a variety of oncology practice settings. The goals are to: identify new, IT-enabled delivery models that support systematic screening and treatment of depression in cancer patients; test the feasibility of implementing these new delivery models in a variety of oncology practice settings, especially those serving under-served populations; and test the effectiveness of these new delivery models, and their components, in a variety of oncology practice settings, especially those serving under-served populations.
Link: PA-18-493

HHS/National Institutes of Health
Using Information Technology to Support Systematic Screening and Treatment of Depression in Cancer (R21 Clinical Trial Optional)
Funding Opportunity Number: PA-18-492
Application Deadline: 2/16/2018
Estimated Maximum Total Value: Unspecified
Maximum Total Direct Costs Per Award: $275,000
Estimated Contract Duration: 2 years
Expected Number of Awards: Unspecified
Summary
This funding opportunity encourages research to understand how information technology (IT) can support systematic screening and treatment of depression in cancer patients in a variety of oncology practice settings. The goals are to: identify new, IT-enabled delivery models that support systematic screening and treatment of depression in cancer patients; test the feasibility of implementing these new delivery models in a variety of oncology practice settings, especially those serving under-served populations; and test the effectiveness of these new delivery models, and their components, in a variety of oncology practice settings, especially those serving under-served populations.
Link: PA-18-492
HHS/National Institutes of Health
Studies in Neonatal and Pediatric Resuscitation (R03 - Clinical Trial Optional)
Funding Opportunity Number: PA-18-491
Letter of Interest Deadline: 1/16/2018
Application Deadline: 2/16/2018
Estimated Maximum Total Value: Unspecified
Maximum Annual Direct Costs Per Award: $50,000
Estimated Contract Duration: 2 years
Expected Number of Awards: Unspecified

Summary
The purpose is to stimulate research on a wide range of topics related to neonatal and pediatric resuscitation. Possible topics may include: fetal-neonatal transitional cardiovascular and pulmonary physiology, optimizing steps of resuscitation, management of third stage of labor and its effect on the fetus, resuscitation of children with malformations, effect of resuscitation on long-term outcomes and post-resuscitation practices. It is anticipated that the results from well-conducted studies will enable translation of knowledge into evidence-based resuscitation practices ensuring a optimal short- and long-term outcomes for all newborn infants and children.

Link: PA-18-491

HHS/National Institutes of Health
Microphysiological Systems (MPS) for Modeling Diabetes (UG3/UH3 Clinical Trial Not Allowed)
Funding Opportunity Number: RFA-DK-17-035
Letter of Interest Deadline: /2018
Application Deadline: /2018
Estimated Maximum Annual Total Values: NIDDK: $3,000,000 for FY 2018 and FY 2019, $6,000,000 for FYs 2020 – 2022; NCATS: $1,000 for FYs 2018 - 2022
Estimated Contract Duration: 5 years
Expected Number of Awards: 2-3

Summary
NIDDK requests applications to join a new research consortium "Microphysiological Systems (MPS) for Modeling Diabetes (MPS-MOD)". NIDDK will support the development and validation of human tissue chips that closely mimic the normal physiology of key metabolic tissues, including the pancreatic islet, liver, skeletal muscle, and white adipose tissue (WAT). Experimental designs for the MPS-MOD platforms should incorporate strategies to measure pathophysiological changes associated with metabolic disease, including the impact of immune cells on metabolic dysfunction. These multi-dimensional MPS-MOD platforms will serve as the foundation for NIDDK’s advanced strategy to identify new and novel therapeutics for diabetes.

Link: RFA-DK-17-035

HHS/National Institutes of Health
Interaction of HIV Infection and Alcohol Abuse on Central Nervous System Morbidity Limited Competition (U01 Clinical Trial Not Allowed)
Funding Opportunity Number: RFA-AA-18-008
Letter of Interest Deadline: 1/8/2018
Application Deadline: 2/22/2018
Estimated Maximum Total Value in FY18: $1,250,000
Maximum Annual Direct Costs: $800,000
Estimated Contract Duration: 5 years
Expected Number of Awards: 1

Summary
The purpose is to continue support for an ongoing research program that has accumulated longitudinal structural and functional brain imaging data, and neurocognitive assessments, concurrent with extensive clinical
data in an actively followed cohort comprising four groups: HIV infection, alcoholism, HIV with alcoholism, and unaffected controls. This project must address several questions of current interest, including, coinfection with the Hepatitis C virus, involvement of peripheral neuropathy in frailty, potential neurotoxic effects of antiretroviral medications, and interactive effects with advancing age on sensory and motor functioning.

Link: RFA-AA-18-008

HHS/National Institutes of Health
Development of Medications to Prevent and Treat Opioid Use Disorders and Overdose (UG3/UH3) (Clinical Trials Optional)
Funding Opportunity Number: RFA-DA-19-002
Letter of Interest Deadline: 30 days prior to submission
Application Deadline: accepted on a rolling basis, beginning on 1/25/2018
Estimated Maximum Total Annual Value: $10,000,000
Maximum Annual Direct Costs Per Award: $3,000,000
Estimated Contract Duration: 2 years for the UG3 phase and 3 years for the UH3 phase
Expected Number of Awards: 3-4 per year

Summary
The purpose is to support the discovery and development of medications to prevent and treat opioid use disorders (OUD) and overdose. The UG3 is to support a project with specific milestones to be accomplished by the end of the 2-year period. The UH3 is to provide funding for 3 years to a project that successfully completed the milestones set in the UG3. Application may include preclinical or clinical research studies that will have high impact and quickly yield the necessary results to advance closer to FDA approval medications that are safe and effective to prevent and treat OUDs and overdose.

Link: RFA-DA-19-002

HHS/National Institutes of Health
Deciphering the Molecular Landscape of Lung Aging in Humans (U01 - Clinical Trial Not Allowed)
Funding Opportunity Number: RFA-HL-19-012
Letter of Interest Deadline: 1/27/2018
Application Deadline: 2/27/2018
Estimated Maximum Annual Total Value for FYs 19-22: $3,720,000
Maximum Annual Direct Costs Per Award: $400,000
Expected Number of Awards: 5

Summary
This Funding Opportunity Announcement (FOA) invites applications to study the normal biological aging process in the human lungs; specifically focusing on a) changes in molecular hallmarks of aging and b) building a dynamic molecular map of aging in the lung that can be used as a reference for researchers to better define the mechanisms of age-related lung diseases

Link: RFA-HL-19-012

HHS/National Institutes of Health
BRAIN Initiative: Targeted BRAIN Circuits Planning Projects Targeted BCPP (R34 - Clinical Trials Not Allowed)
Funding Opportunity Number: RFA-NS-18-014
Letter of Interest Deadline: 2/15/2018
Application Deadline: 3/15/2018
Estimated Maximum Total Value: $2,500,000
Maximum Total Direct Costs Per Award: $450,000
Estimated Contract Duration: 2 years
Expected Number of Awards: 10

Summary
This opportunity solicits applications that offer a limited scope of aims and an approach that will establish feasibility, validity, or other technically qualifying results that, if successful, would support, enable, and/or lay
the groundwork for a potential, subsequent Targeted Brain Circuits Projects - TargetedBCP R01, as described in the companion FOA (RFA-NS-18-009). Applications should be exploratory research projects that use innovative, methodologically-integrated approaches to understand how circuit activity gives rise to mental experience and behavior.

Link: RFA-NS-18-014

International

U.S. Agency for International Development/Lebanon USAID-Beirut
Higher Education Scholarships (HES) Program
Funding Opportunity Number: 72026818RFA00003
Application Deadline: 2/2/2018
Estimated Maximum Total Value: $46,000,000
Maximum Average Value Per Award: $23,000,000
Estimated Contract Duration: 9 years
Expected Number of Awards: 2

Summary
The overarching goal of the Higher Education Scholarships (HES) is to increase the private sector competitiveness through increased workforce readiness linked to job opportunities. The project aims specifically at increasing access to quality education, and equipping the beneficiary scholars with the necessary technical, soft and leadership skills needed to excel in the labor market. The HES consists of two components: Component 1: The University Scholarship Program: which aims at enabling meritorious and financially disadvantaged Lebanese public and private school graduates to access quality higher education to increase their job readiness and maximize their potential in supporting Lebanon’s democratic and economic development. Component 2: Refugee Scholarship Support: HES will offer scholarships to non-Lebanese, having refugee status and are legally residing in Lebanon, to complete undergraduate studies or post-secondary certificate programs at universities that have requirements similar to American accreditation.

Link: 72026818RFA00003

Department of State/U.S. Mission to Russia
U.S. Embassy Moscow Public Affairs Section FY 2018 Annual Program Statement (APS)
Funding Opportunity Number: DOSRUS-18-GR-001
Application Deadline: 6/30/2018
Estimated Maximum Total Value: Unspecified
Range of Maximum Total Values Per Award: $2,500 - $50,000
Range of Contract Durations: 3 – 12 months
Expected Number of Awards: Unspecified

Summary
Applications for programs are accepted on a rolling basis until the deadline (June 30, 2018). PAS Moscow invites proposals for projects that strengthen ties between the United States and Russia by highlighting shared values and promoting bilateral cooperation. All grant proposals must convey an American cultural element, support a priority program area or include a connection with American expert/s, organization/s, or institution/s in a specific field that will promote increased understanding of the United States.

Link: DOSRUS-18-GR-001

NOTICES

National Science Foundation

Dear Colleague Letter: RAISE on Enabling Quantum Leap: Transformational Advances in Quantum Systems. This DCL aims to encourage researchers to submit interdisciplinary research projects that must include at least three
complementary components represented by researchers with expertise in the areas of physics, chemistry, mathematics, materials science, engineering, and computer/computational science, which are more broadly represented by the NSF Directorates for Mathematical and Physical Sciences (MPS), Engineering (ENG), and Computer and Information Science and Engineering (CISE). The innovative proposals must focus on quantum functionality by assessing aspects relevant to both fundamental and application concepts, and must result in experimental demonstrations of transformative advances towards quantum systems and/or proof-of-concept validations.

**Dear Colleague Letter: Delay in Issuance of Revised Program Solicitations for CEDAR, GEM, and SHINE.**

On July 3, 2017 NSF announced their intention to eliminate deadlines for three program solicitations in the Geospace Section. During the revision process NSF determined that additional modifications to the solicitations are required and in this DCL informs the community that the anticipated release date for the revised CEDAR and GEM solicitations is March 1, 2018. NSF does not plan to release a solicitation for the SHINE program during fiscal year 2018.

**Dear Colleague Letter: Rules of Life (RoL): Forecasting and Emergence in Living Systems (FELS)**

NSF seeks to highlight the importance of research that forecasts the direction and dynamics of change in living systems. The robustness and reproducibility of processes associated with the emergence of complex properties in biological systems suggests the existence of underlying general principles ("rules") across the spectrum of biological phenomena. This Dear Colleague Letter (DCL) describes an initial opportunity to identify areas where such rules may exist, to catalyze approaches toward their discovery, and to focus efforts on using these rules for prediction and design of useful biological systems.