Sept. 26, 2016

EVENT

NSF SBIR/STTR Fall Webinar Series: Small Business Innovation Research

NSF is hosting 7 webinars before the National Science Foundation's SBIR/STTR December 6th deadline. Feel free to browse our website, YouTube channel and proposal submission guide prior to joining a webinar.

What is NSF SBIR and Am I A Good Fit? Friday, **Sept. 30**
Noon-1:00 p.m. ET, Peter Atherton

FUNDING OPPORTUNITIES

Limited Submission

The Dana Foundation's David Mahoney Neuroimaging Program 2017

http://www.dana.org/grants/brain-and-immuno-imaging/howtoapply/

Deadline: Internal October 7, 2016

Funding: $200,000 over 3 years

Synopsis: Topic/Discipline: Neurology, Brain and Cognitive, Biomedical Engineering, Center for Neural Development and Disease, Center for Translational Neuromedicine, Neurosurgery, Neuroscience, Center for Vision Science, Optics, Imaging Science. Funds support pilot-testing by investigators, who are early in their research careers, to enable the pursuit of promising, high-risk, and innovative ideas that **have a direct clinical application**.

Assistant professors or those in the first few years of their associate professor appointments not yet been awarded more than one independent research grant (R01 from the NIH or equivalent from another Federal agency).

*Although Associate Professors are eligible, a majority of those funded are Assistant Professors.

·Demonstrated the potential for an independent research career.

·Post-doctoral fellows are *not eligible* to apply.

·Applications from junior investigators that are an extension of the work of a senior mentor are *not eligible*.

·Research that can be supported through clinical income is *not eligible*.

Go to http://www.rochester.edu/orpa/funding/limitedsub.html for forms and send internal package to Cindy Gary (Hajim) cindy.gary@rochester.edu for consideration.

External Funding

Defense Threat Reduction Agency (DTRA)

Chemical/Biological Technologies FY2017 Program Build DTRA BAA

HDTRA1-17-S-0001

https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=c10130fb20f09bf89f8218b7da7997b1&_cview=0

Deadline: Phase I proposal – October 14, 2016 required

Funding: Funding profile varies based on topic, some ~ $500,000 per year

Synopsis: This solicitation is an extramural endeavor focused on seeking optimum approaches to meet technology objectives within the following areas: Detection - Chemical and Biological, Information Systems Capability Development, Protection - Individual and Collective, Hazard Mitigation, Threat Agent Science, Medical Pretreatments, Medical Diagnostics, Medical Therapeutics, and Threat Surveillance - Chemical and Biological. All proposals must be submitted electronically through the DTRA proposal submission website: http://www.dtrasubmission.net. Any proposal submitted by any means other than the DTRA proposal submission website will not be considered.

National Science Foundation

Dear Colleague Letter: Directorate of Materials Research Proposal Deadline Window Changes

http://www.nsf.gov/pubs/2016/nsf16135/nsf16135.pdf?WT.mc_id=USNSF_25&WT.mc_ev=click

The proposal submission window for the eight Topical Materials Research Programs in the Division of Materials Research (DMR) has changed recently. The following two programs now accept **proposals at any time**:

Ceramics (CER)

Condensed Matter and Materials Theory (CMMT)

The window for the following six programs has changed to **October 1-31 each year**:

Biomaterials (BMAT)

Condensed Matter Physics (CMP)

Electronic and Photonic Materials (EPM)

Metals and Metallic Nanostructures (MMN)

Polymers (POL)

Solid State and Materials Chemistry (SSMC)

NSF/NIH

Collaborative Research in Computational Neuroscience (CRCNS) 16-607

http://www.nsf.gov/pubs/2016/nsf16607/nsf16607.htm

Deadline: December 19, 2016

Funding: $500,000-$800,000

Synopsis: Computational neuroscience provides a theoretical foundation and a rich set of technical approaches for understanding complex neurobiological systems, building on the theory, methods, and findings of computer science, neuroscience, and numerous other disciplines. Through the CRCNS program, the National Science Foundation (NSF), the National Institutes of Health (NIH), the German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF), the French National Research Agency (Agence Nationale de la Recherche, ANR), and the United States-Israel Binational Science Foundation (BSF) support collaborative activities that will advance the understanding of nervous system structure and function, mechanisms underlying nervous system disorders, and computational strategies used by the nervous system. Two classes of proposals will be considered in response to this solicitation: **Research Proposals** describing collaborative research projects; and **Data Sharing Proposals** to enable sharing of data and other resources**. Domestic and international projects will be considered - additional instructions for International Proposals Seeking Parallel Funding apply**

National Science Foundation

Smart and Connected Communities (S&CC) 16-610

http://www.nsf.gov/pubs/2016/nsf16610/nsf16610.pdf

Preliminary Proposal Due Date: November 30, 2016

Funding & Synopsis: This Smart & Connected Communities (S&CC) solicitation is to support strongly interdisciplinary, integrative research and research capacity-building activities that will improve understanding of smart and connected communities and lead to discoveries that enable sustainable change to enhance community functioning. Unless stated otherwise, for the purposes of this year's solicitation, communities are physical, geographically-defined entities, such as towns, cities, or incorporated rural areas, consisting of various populations, with a governance structure and the ability to engage in meaningful ways with the proposed research.

S&CC Integrative Research Grants (IRGs) Track 1. Awards in this category will support the conduct of fundamental, multidisciplinary, integrative research and the building of research capacity. Track 1 awards will provide three to five years of support for projects at a level not to exceed $5,000,000 for the total budget.

S&CC Integrative Research Grants Track 2. Awards in this category will support the conduct of fundamental, multidisciplinary, integrative research and the building of research capacity. Track 2 awards will provide three or four years of support for projects at a level not to exceed $1,000,000 for the total budget. It is anticipated that Track 1 and 2 proposals will be distinguished by the sizes of the teams, as well as, the scope and duration of the proposed activities.

S&CC Research Coordination Networks (RCNs). Awards in this category support the establishment of a network of multidisciplinary researchers and others who will collectively and significantly advance S&CC research through active exchange of ideas, development of fundamental research directions, and other approaches. Each of these awards will

provide four or five years of support for projects at a level not to exceed $500,000 for the total budget.

S&CC Planning Grants. Awards in this category will provide one year of support to stimulate research capacity through 5 multidisciplinary team-building and the development of high-impact, fundamental research concepts. Each of these awards will be at a level not to exceed $100,000 for the total budget.

National Science Foundation

Smart and Autonomous Systems (S&AS) 16-608

http://www.nsf.gov/pubs/2016/nsf16608/nsf16608.pdf

Deadline: December 19, 2016

Funding: Foundational projects are anticipated to range from $350,000 to $700,000 in total costs for up to three years. **Integrative** projects are anticipated to range from $500,000 to $1,400,000 in total costs for up to four years

Synopsis: two categories, which differ in scope and goals:

Foundational (FND) projects focus on research into algorithms and technologies that directly support a specific characteristic or component of IPS. While foundational investigations are not required to utilize a physical testbed, they must engage in an evaluation designed to demonstrate relevance to an IPS specified in that project plan. **Integrative (INT)** projects focus on integrating two or more components of IPS into increasingly smart and autonomous systems. Integrative projects should have longer-term vision, with objectives that could not be attained simply by a collection of smaller projects provided with similar resources. Integrative projects must include evaluation of physical systems, preferably in real-world

settings. Integrative projects are encouraged to have multiple PIs, preferably from different disciplines.

National Institutes of Health

BRAIN Initiative: New Concepts and Early-Stage Research for Large-Scale Recording and Modulation in the Nervous System (R21)

http://grants.nih.gov/grants/guide/rfa-files/RFA-EY-17-001.html

Deadline: December 7, 2016

Funding: $300,000

Synopsis: A central goal of the BRAIN Initiative is to understand how electrical and chemical signals code information in neural circuits and give rise to sensations, thoughts, emotions and actions. While currently available technologies can provide some understanding, they may not be sufficient to accomplish this goal. For example, non-invasive technologies are low resolution and/or provide indirect measures such as blood flow, which are imprecise; invasive technologies can provide information at the level of single neurons producing the fundamental biophysical signals, but they can only be applied to tens or hundreds of neurons, out of a total number in the human brain estimated at 85 billion. Other BRAIN FOAs seek to develop novel technology (RFA-NS-16-006) or to optimize existing technology ready for in-vivo proof-of-concept testing and collection of preliminary data (RFA-NS-16-007) for recording or manipulating neural activity on a scale that is beyond what is currently possible. This FOA seeks applications for unique and innovative technologies that are in an even earlier stage of development than that sought in other FOAs, including new and untested ideas that are in the initial stages of conceptualization. In addition to experimental approaches, the support provided under this FOA might enable calculations, simulations, computational models, or other mathematical techniques for demonstrating that the signal sources and/or measurement technologies are theoretically capable of meeting the demands of large-scale recording or manipulation of circuit activity in humans or in animal models.

BRAIN Initiative: Data Archives for the BRAIN Initiative (R24)

http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-17-255.html

Deadline: January 17, 2017

Funding: estimated total of $3 million to fund 3-5 awards

Synopsis: solicits applications to develop web-accessible data archives to capture, store, and curate data related to BRAIN Initiative activities. The data archives will work with the research community to incorporate tools that allow users to analyze and visualize the data, but the creation of such tools is not part of this FOA. The data archives will use appropriate standards to describe the data, but the creation of such standards is not part of this FOA. A goal of this program is to advance research by creating a community resource data archive with appropriate standards and summary information that is broadly available and accessible to the research community for furthering research. This FOA is one of three related FOAs aimed at building the informatics infrastructure for the BRAIN Initiative. Each of these FOAs is aimed at building an infrastructure that will be used by a particular sub-domain of experimentalists rather than building a single all-encompassing informatics infrastructure now. Building the infrastructure one experimental area at a time will ensure that the infrastructure is immediately useful to components of the

research community.

National Science Foundation

Civil, Mechanical and Manufacturing Innovation (CMMI)

Operations, Design, and Dynamic Systems (ODDS) Cluster

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13473&org=CMMI&from=home

*Note that several programs have January 13, 2017 deadlines, others have February 15, 2017

Dynamics, Control and Systems Diagnostics PD 15-7569 February 15, 2017
Engineering and Systems Design PD 17-1464 January 13, 2017

Systems Science PD 17-8085 January 13, 2017
Civil Infrastructure Systems PD 15-1631 February 15, 2017
Design of Engineering Material Systems to PD 12-8086 February 15, 2017