

Funding Bulletin

December 1st, 2017 (Vol. 5, No. 5)

Funding Information

To receive funding information, please contact funding@wichita.edu.

NOTICE – Notification for the current Funding Bulletin is sent via email. To be added to the electronic mailing list, send an email message to: funding@wichita.edu. Leave the subject line blank. In the message area, type: *sub funding bulletin*. To unsubscribe, type: *unsub funding bulletin*.

The selected compilation of funding opportunities is provided by RTT's Pre-Award Services as a resource for Wichita State University Researchers. We encourage you to utilize the campus subscription to PIVOT to find funding opportunities specifically tailored to your research area based on keywords you provide. PIVOT is easy to use and offers other valuable services that are helpful to researchers. Access is available at: <http://pivot.cos.com/home/index> or you may contact funding@wichita.edu to have a custom search ran.

Click on the links below to go directly to the named section included in this edition's bulletin

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How to Apply

Proposal development requests should be sent to proposals@wichita.edu. Please click on the following link for information regarding proposal submission at WSU:

<http://webs.wichita.edu/?u=WSURESEARCHADMIN&p=/Proposals/PreAwardServices/>

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OFFICE OF RESEARCH WORKSHOPS

For more information contact Kendra Nguyen at kendra.nguyen@wichita.edu or 978-3285.

For complete schedule go to: <http://webs.wichita.edu/?u=wsuresearchadmin&p=/researchworkshops/>

WORKSHOP TITLE	DATE	TIME	ROOM	DESCRIPTION
IRB Open Lab	Dec 11	10:00 – 11:30 a.m.	405 Jardine	The IRB Administrator will be holding Open Labs this fall for Faculty, Staff or Students who have questions about the new forms or about their study in general. <i>This is a come and go lab with no registration required.</i>
Research Compliance Open Lab	Dec 20	9:00 – 11:00 a.m.	Devlin Hall Innovation Hub	The Research Compliance Office will hold an open lab for questions regarding hiring foreign nationals; shipping or receiving items from outside the US; international travel; review of Research projects for export compliance; conflicts of interest & management plans. <i>This is a come and go lab with no registration required.</i>
Pivot Open Lab	Jan 25	2:30 – 4:00 p.m.	409E Jardine	PIVOT open labs are to assist faculty and staff who are interested in identifying external funding sources. <i>This is a come and go lab with no registration required.</i>

NOTICES

Funding Bulletin Survey – your feedback is appreciated!

The Office of Research has created a short survey to gauge user satisfaction for our Funding Bulletin; please take a couple minutes to tell us your thoughts about it. Participation is confidential and optional; results will be utilized to evaluate customer satisfaction with funding search support. Your feedback is appreciated! Please follow the link below to access the survey:

https://wichitastate.co1.qualtrics.com/jfe/form/SV_9AHfbwsfnD8Y6a1

Curious to see who's receiving external funding on campus?!? Check out the Office of Research's Monthly Awards

<http://webs.wichita.edu/?u=wsuresearchadmin&p=/researchmonthlyawards/jan17/>

State of Kansas Request for Proposal Distribution List

The Office of Research is developing an email list of PI's interested in receiving notifications on upcoming State of Kansas Request for Proposal opportunities. These opportunities are often limited to 1 submission per institution, and have quick turn-around deadlines. If you are interested in being added to our notification list, please email proposals@wichita.edu and include your areas of interest.



INTERNAL OPPORTUNITIES

The next available internal opportunity is: the Award for Research/Creative Projects (ARC) with a February 2, 2018 deadline.

Award for Research/Creative Projects (ARC)

Wichita State University

Due Date: 2/3/2018

Award for Research/Creative projects provide salary/fringes of \$3,000* for 2 months, plus \$1,000 for other operating expenses (total of \$4,000) to enable faculty to pursue research or creative projects during the summer.

- URL: <http://webs.wichita.edu/?u=wsuresearchadmin&p=/orainternalgrants/orainternalgrants/>

LIMITED SUBMISSIONS

Limited submission programs have sponsor restrictions on the number of proposals that may be submitted by a single institution and will require institutional screening to determine which applications will be submitted. Karen Davis, Director of Pre-Award Services, is the internal coordinator for limited submission programs. Please notify proposals@wichita.edu, by the internal Notice of Intent (NOI) due date listed in the Funding Bulletin if you wish to submit a limited submission program. **Because many limited submission programs often have short turnaround times, it is important that researchers also periodically check the Office of Research's [Limited Submission Opportunities](#) webpage for additional opportunities that may not have made it into the bulletin. There are currently *ten* open limited submission competitions:**

(1) FY 2018 TechGirls Program

United States Department of State (DOS) - Bureau of Educational and Cultural Affairs (ECA)

Due Date: Internal NOIs 12/8/2017; Applications 12/27/2017

The Office of Citizen Exchanges, Youth Programs Division, of the Bureau of Educational and Cultural Affairs (ECA) announces an open competition for the FY 2018 TechGirls program. U.S. public and private non-profit organizations meeting the provisions described in Internal Revenue Code section 26 USC

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501(c)(3) may submit proposals to conduct a three- to four-week exchange program in the United States in summer 2018 for approximately 28 high school girls from the Middle East and North Africa focused on promoting the high-level study of technology. Echoing the goals of the TechWomen program, TechGirls supports development in the field of technology and enables young women to reach their full potential in the technology industry. The program builds on the U.S. global commitment to advance the rights of women and girls around the world and promote science, technology, engineering and math (STEM) education. It also fosters connections and understanding among the youth of the United States and the countries and territories of the Middle East and North Africa. The program will provide an exchange of academic study of applied technology for girls who already have a demonstrated aptitude and strong interest in the subject, empowering them to pursue higher education and careers in technology through hands-on skill development, and supporting them in the implementation of their required follow-on service projects in their home communities that are designed to reinforce and support the skills and linkages acquired during the U.S. program. U.S. Embassies in the participating countries and territories will take the lead in recruiting eligible, English-speaking participants, with support of the award recipient which will create an online application and manage initial screening of applicants. U.S. Embassies will interview semi-finalists, proposed by the award recipient, and make participant selections, with final approval by the ECA Program Office. **ECA-ECAPEC-18-015 Applicants may only submit one proposal under this competition.**

- URL: <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=298154>

(2) Veterans Business Outreach Center Program (VBOC)

United States Small Business Administration (SBA)

Due Date: Internal NOIs 12/8/2017; Application 1/8/2018

Eligible organizations (as defined in Section 3.2) may apply for an Initial Phase VBOC Award of financial assistance under this Funding Opportunity to fund implementation of a Veterans Business Outreach Center in the geographic coverage areas defined in Appendix A. Applicants are limited to the defined coverage areas and can apply for all, or part, of a defined coverage area. As a major component of the VBOC program Applicants are expected to provide entrepreneurship training through the Boots to Business (B2B) and Reboot Training programs to transitioning military personnel and veteran small business owners and entrepreneurs. VBOCs will be expected to cover 100% of the Boots to Business classes within their coverage area. Additionally, funds will be used to offer traditional business counseling and technical assistance to veterans, service-members, military spouses, and others interested in starting or growing a small business. **VBOC-2018-01 Eligible organizations and institutions of higher learning may submit one (1) proposal in response to the Opportunity.**

- URL: <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=298820>

(3) Regional Public Health Training Centers (PHTC) Program

Health Resources and Services Administration (HRSA)

Due Date: Internal NOIs 12/15/2017; Application 1/19/2018

The Regional PHTC Program seeks to increase the number of individuals in the public health workforce, enhance the quality of this workforce, and improve the ability of this workforce to meet national, state, and local health care needs. Specifically this program aims to strengthen the public health workforce through tailored training and technical assistance involving collaborative, community-based projects. Training curricula will provide skill-based, interactive instruction and quality education using multiple modalities (i.e., synchronous, asynchronous, distance-based, bi-directional video), underscoring the following eight cross-cutting core public health competency domains in the primary areas of (1) systems thinking, (2) change management, and (3) persuasive communication; and secondary areas of (4) data analytics, (5) problem solving, (6) training a "health work force [sic] that reflects and responds to the cultural diversity of populations served" as supported by section 766(b)(1),(7) resource management, and (8) policy engagement. Each PHTC must develop trainings in the three primary areas and may develop trainings in the secondary areas and beyond based on the results from local health needs assessments. Among the local health needs, recipients are encouraged to consider addressing the clinical priorities of the HHS including mental health, opioid abuse, and childhood obesity. Moreover, the program aims to establish and enhance collaborative partnerships among state and local health departments, primary care providers, and related organizations (to include non-traditional partners) as they work together to address critical local public health needs. **HRSA-18-017 Multiple applications from an organization are not allowable.**

Program Requirements:

Regional PHTCs are required to fulfill the following statutory requirements:

1. Designate a geographic area or medically underserved population to be served by the Center, located apart from the teaching facility of the school that is participating in the program with this Center;
2. Involve faculty members and students in collaborative projects to enhance public health services to medically underserved communities to better address issues related to the social determinants of health;
3. Assess the health personnel needs of the area to be served by the center by assessing the real-time public health issues, health personnel needs, and training gaps of the area to be served by the Center and assist in the planning and development of training programs to meet these needs. Again, applicants are encouraged to consider addressing the clinical priorities of HHS including mental health, opioid abuse, and childhood obesity; and
4. Establish or strengthen field placements for students at public or nonprofit health agencies or organizations, including hospitals, community-based health care facilities, and non-traditional health care settings

- **URL:** <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=298666>

(4) Partnerships for Research and Education in Materials (PREM)

National Science Foundation (NSF)

Due Date: Internal NOIs 12/15/2017; Full Proposal 1/29/2018

The DMR Partnerships for Research and Education in Materials Research (PREM) program aims to enable, build, and grow partnerships between minority-serving institutions and DMR-supported centers and/or facilities to increase recruitment, retention and degree attainment (which defines the PREM pathway) by members of those groups most underrepresented in materials research, and at the same time support excellent research and education endeavors that strengthen such partnerships. **NSF 17-599 Limit one proposal per organization.**

- URL: <https://www.nsf.gov/pubs/2017/nsf17599/nsf17599.htm>

(5) Nurse Education, Practice, Quality and Retention (NEPQR) – Registered Nurses in Primary Care (RNPC) Training Program

Health Resources and Services Administration (HRSA)

Due Date: Internal NOIs: 12/22/2017; Application 1/29/2018

Notice supporting efforts to provide a four-year training program to recruit and train nursing students and current registered nurses to practice at the full scope of their license in community-based primary care teams. Funds support efforts to achieve a sustainable primary care nursing workforce equipped with the competencies necessary to address pressing national public health issues, even the distribution of the nursing workforce, improve access to care and improve population health outcomes by strengthening the capacity for basic nurse education and practice and addressing national nursing needs under three priority areas: education, practice and retention. Applicants must be accredited schools of nursing. The FY 2018 President's Budget does not request funding for this program. This notice is a contingency action taken to ensure that, should funds become available for this purpose, applications can be processed, and funds awarded in a timely manner. **HRSA-18-012 Eligible applicants may submit only one application in response to this NOFO**

- URL: <https://www.grants.gov/web/grants/view-opportunity.html?oppld=298592>

(6) Partnerships for Innovation (PFI)

National Science Foundation (NSF)

Due Date: Internal NOIs 12/15/2017; Applications 2/1/2018

The NSF Partnerships for Innovation (PFI) Program within the Division of Industrial Innovation and Partnerships (IIP) offers researchers the opportunity to transform new knowledge into societal benefits

through translational research and technology development efforts which catalyze partnerships to accelerate innovations that address significant societal needs. **NSF 18-511**

PFI has six broad goals:

- (1) identifying and supporting Foundation-sponsored research and technologies that have the potential for accelerated commercialization;
- (2) supporting prior or current Foundation-sponsored researchers, institutions of higher education, and non-profit organizations that partner with an institution of higher education to undertake proof-of-concept work, including the development of technology prototypes that are derived from NSF-funded research and have potential market value;
- (3) promoting sustainable partnerships between Foundation-funded institutions, industry, and other organizations within academia and the private sector with the purpose of accelerating the transfer of technology;
- (4) developing multi-disciplinary innovation ecosystems which involve and are responsive to the specific needs of academia and industry;
- (5) catalyzing professional development activities, mentoring, and best practices in entrepreneurship and technology translation for faculty, students and researchers; and
- (6) expanding the participation of women and individuals from underrepresented groups in innovation, technology translation, and entrepreneurship.

This solicitation offers two broad tracks for proposals in pursuit of the six aforementioned goals:

The Technology Translation (PFI-TT) track

The Research Partnerships (PFI-RP) track

An organization may submit no more than two (2) proposals to this solicitation. This eligibility constraint will be strictly enforced. In the event that an organization exceeds this limit, the first two proposals received will be accepted, and the remainder will be returned without review. An organization will not receive more than one (1) award from this solicitation.

- URL: <https://www.nsf.gov/pubs/2018/nsf18511/nsf18511.htm>

(7) Grants

Honda Corporate - American Honda Foundation

Due Date: Internal NOIs 12/15/2017; Application 2/1/2018

The American Honda Foundation engages in grant making that reflects the basic tenets, beliefs and philosophies of Honda companies, which are characterized by the following qualities: imaginative, creative, youthful, forward-thinking, scientific, humanistic and innovative. We support youth education

with a specific focus on the STEM (science, technology, engineering and mathematics) subjects in addition to the environment.

Funding Priorities:

Youth education, specifically in the areas of science, technology, engineering, mathematics, the environment, job training and literacy.

Organizations may only submit one request in a 12-month period. This includes colleges and universities with several departments/outreach programs.

- URL: <https://www.honda.com/community/applying-for-a-grant>

(8) Camille Dreyfus Teacher-Scholar Award

Camille and Henry Dreyfus Foundation, Inc.

Due Date: Internal NOIs 12/8/2017; Nomination 2/8/2018

The awards program supports the research and teaching careers of talented young faculty in the chemical sciences. The program provides discretionary funding to faculty at an early stage in their careers. Criteria for selection include an independent body of scholarship attained within the first five years of their appointment as independent researchers, and a demonstrated commitment to education, signaling the promise of continuing outstanding contributions to both research and teaching. *Institutions may submit only one Dreyfus nomination annually.*

- URL: http://www.dreyfus.org/awards/camille_dreyfus_teacher_award.shtml

(9) Grants to Organizations

Graham Foundation for Advanced Studies in the Fine Arts

Due Date: Internal NOIs 1/19/2018; Applications 2/25/2018

For organizations, the foundation's priorities are to:

- assist with the production and presentation of significant programs about architecture and the designed environment in order to promote dialogue, raise awareness, and develop new and wider audiences;
- support them in their effort to take risks in programming and create opportunities for experimentation;



- recognize the vital role they play in providing individuals with a public forum in which to present their work; and
- help them to realize projects that would otherwise not be possible without the foundation's support.

Overall the foundation is most interested in opportunities that enable it to provide critical support at key points in the development of a project or career. The foundation offers Production and Presentation Grants to organizations. These grants assist organizations with the production-related expenses that are necessary to take a project from conceptualization to realization and public presentation. These projects include, but are not limited to, publications, exhibitions, installations, films, new media projects, conferences/lectures, and other public programs. Projects must have clearly defined goals, work plans, budgets, and production and dissemination plans. ***An organization or academic department/unit may only apply for one grant per year. (In the case of large institutions with multiple departments, a subsidiary department/unit may apply for one grant per year. For example, an academic department/unit at a university may apply for one grant per year.)***

- URL: http://www.grahamfoundation.org/grant_programs/?mode=organization

(10) American National Election Studies (ANES) Competition

National Science Foundation (NSF)

Due Date: Internal NOIs 1/19/2018; Letter of Intent 2/21/2018; Full Proposal 4/20/2018

The American National Election Studies (ANES) produce high quality data from its own surveys on voting, public opinion, and political participation. The mission of the ANES is to inform explanations of election outcomes by providing data that support rich hypothesis testing, maximize methodological excellence, measure many variables, and promote comparisons across people, contexts, and time. The ANES serves this mission by providing researchers with a view of the political world through the eyes of ordinary citizens. The Political Science Program in the Directorate for Social, Behavioral and Economic Sciences expects to make two awards for the 2020 Presidential election cycle with the award to run from fiscal years 2018 to 2021. We anticipate that NSF will make two awards totaling no more than \$11.5 million over four years. One will be for the traditional face-to-face survey. The second will be for a web-based survey. While these will be independent awards, the two awardees will be expected to work closely together. The expected start date is July 2018. ANES started in 1948. Since then, the project has conducted a survey during each presidential election. One of the unique attributes of ANES is that for each election respondents have been surveyed prior to the Presidential election and then after the election. These pre and post surveys provide a unique look at how Americans participate in politics and why. These cross-sectional surveys have been conducted using random sampling with the sampling scheme being relatively stable over time. The content of the survey has also stayed relatively stable over time though there has been the introduction of new topics, the deletion of old topics, and changes in question wording. To insure the integrity of the survey, it was decided in 1977 that the principal investigator(s) would be advised by a national Board of Overseers that would be

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representative of the community of scholars interested in American national elections. The National Science Foundation has helped to support this enterprise since 1970. During this period, the survey has been conducted primarily using a face to face design where trained interviewers go into households to conduct their interviews. In addition to face to face surveys, ANES has conducted mode comparisons using random digit dialing (RDD) and, in recent years, web-based platforms. ANES has also conducted several other enhancements. For instance, several panel studies have been conducted including a 29-wave panel study conducted around the 2008 election. Other innovations have included oversamples of African Americans, oversamples of Hispanics with the instrument translated into Spanish and surveys conducted by bi-lingual interviewers, experimentation with new instrumentation, recruitment of respondents, etc. **NSF 18-519 Institutions are restricted to submitting only one proposal for this solicitation.**

- URL: <https://www.nsf.gov/pubs/2018/nsf18519/nsf18519.htm>

GENERAL

Innovation Corps - National Innovation Network Teams Program (I-Corps™ Teams)

National Science Foundation (NSF)

Due Date: Continuous – Proposals accepted anytime with an I-Corps Cognizant Program Officer Invitation

The National Science Foundation (NSF) seeks to develop and nurture a national innovation ecosystem that builds upon fundamental research to guide the output to facilitate the application of scientific discoveries closer to the development of technologies, products and processes that benefit society. In order to maintain, strengthen and grow a national innovation ecosystem, NSF has established the Innovation Corps - National Innovation Network Teams Program (I-Corps Teams). The NSF I-Corps Teams Program purpose is to identify NSF-funded researchers who will receive additional support in the form of entrepreneurial education, mentoring and funding to accelerate innovation that can attract subsequent third-party funding. The purpose of the NSF I-Corps Teams grant is to give the project team access to resources to help determine the readiness to transition technology developed by previously-funded or currently funded NSF projects. The outcomes of I-Corps Teams projects will be threefold: 1) a clear go /or no go decision regarding viability of products and services, 2) should the decision be to move the effort forward, a transition plan for those projects to move forward, and 3) a definition of a compelling technology demonstration for potential partners. **NSF 18-515**

- URL: <https://www.nsf.gov/pubs/2018/nsf18515/nsf18515.htm>

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Smart and Connected Communities

National Science Foundation (NSF)

Due Date: Letters of Intent 1/30/2018; Full Proposals 2/28/2018

Communities in the United States (US) and around the world are entering a new era of transformation in which residents and their surrounding environments are increasingly connected through rapidly-changing intelligent technologies. This transformation offers great promise for improved wellbeing and prosperity, but poses significant challenges at the complex intersection of technology and society. The goal of the NSF Smart and Connected Communities (S&CC) program solicitation is to accelerate the creation of the scientific and engineering foundations that will enable smart and connected communities to bring about new levels of economic opportunity and growth, safety and security, health and wellness, and overall quality of life. This goal will be achieved through integrative research projects that pair advances in technological and social dimensions with meaningful community engagement. For the purposes of this solicitation, communities are defined as having geographically-delineated boundaries--such as towns, cities, counties, neighborhoods, community districts, rural areas, and tribal regions--consisting of various populations, with the structure and ability to engage in meaningful ways with proposed research activities. A "smart and connected community" is, in turn, a community that synergistically integrates intelligent technologies with the natural and built environments, including infrastructure, to improve the social, economic, and environmental well-being of those who live, work, or travel within it.

A proposal for an S&CC Integrative Research Grants must include the following:

- Integrative research that addresses the technological and social dimensions of smart and connected communities;
- Meaningful community engagement that integrates community stakeholders within the project;
- A management plan that summarizes how the project will be managed across disciplines, institutions, and community entities; and
- An evaluation plan for assessing short-, medium-, and long-term impacts of the proposed activities.

S&CC is a cross-directorate program supported by NSF's Directorates for Computer and Information Science and Engineering (CISE), Education and Human Resources (EHR), Engineering (ENG), Geosciences (GEO), and Social, Behavioral, and Economic Sciences (SBE). **NSF 18-520**

- **URL:** <https://www.nsf.gov/pubs/2018/nsf18520/nsf18520.htm>

ARTS & HUMANITIES

NEA Literature Fellowships: Translation Projects, FY2019

National Foundation for the Arts and the Humanities - National Endowment for the Arts (NEA)

Due Date: 1/11/2018

Through fellowships to published translators, the National Endowment for the Arts supports projects for the translation of specific works of prose, poetry, or drama from other languages into English. We encourage translations of writers and of work that are not well represented in English translation. All proposed projects must be for creative translations of literary material into English. The work to be translated should be of interest for its literary excellence and value. Priority will be given to projects that involve work that has not previously been translated into English. The NEH makes no representations as to who may own copyrights, if any, arising from translations funded under this program. **2018NEA03LFTP**

- URL: <https://www.arts.gov/grants-individuals/translation-projects>

EDUCATION

Pre-K-8 Preservice Teacher Action Research Grants

National Council of Teachers of Mathematics (NCTM)

Due Date: 5/4/2018

The [National Council of Teachers of Mathematics](http://www.nctm.org) is inviting proposals from collaborative action research projects seeking to improve classroom teachers' understanding and teaching of mathematics in pre-K–8 classrooms. Priority will be given to collaborations consisting of university, elementary/middle school teachers, and pre-service teachers from the undergraduate ranks. The research should be designed and implemented with a focus on enhancing the teaching and/or learning of math from pre-K to grade 8. A single grant of up to \$3,000 will be awarded. Grant funds should be used to support expenses incurred in planning and carrying out the research. Applicants must be a current full individual or e-member of NCTM or teach at a school with a current NCTM pre-K–8 school membership. The participating pre-service teacher(s) must be in an initial licensure/certification program at the undergraduate level and at some point during the term of the grant must be engaged in some form of practicum experience or student teaching.

- URL: <http://www.nctm.org/Grants-and-Awards/Grants/Pre-K%E2%80%938-Preservice-Teacher-Action-Research-Grants/>

ENGINEERING, MATHEMATICS & PHYSICAL SCIENCES

Leading Engineering for America's Prosperity, Health, and Infrastructure (LEAP HI) *National Science Foundation (NSF)*

Due Date: Letters of Intent 12/15/2017; Full Proposals 2/20/2018

The LEAP HI program challenges the engineering research community to take a leadership role in addressing demanding, urgent, and consequential challenges for advancing America's prosperity, health and infrastructure. LEAP HI proposals confront engineering problems that are too complex to yield to the efforts of a single investigator problems that require sustained and coordinated effort from interdisciplinary research teams, with goals that are not achievable through a series of smaller, short-term projects. LEAP HI projects perform fundamental research that may lead to disruptive technologies and methods, lay the foundation for new and strengthened industries, enable notable improvements in quality of life, or reimagine and revitalize the built environment. **NSF 17-602**

- LEAP HI proposals must articulate a fundamental research problem with compelling intellectual challenge and significant societal impact, particularly on economic competitiveness, quality of life, public health, or essential infrastructure. One or more CMMI core topics must lie at the heart of the proposal, and integration of disciplinary expertise not typically engaged in CMMI-funded projects is encouraged.
- LEAP HI proposals must highlight engineering research in a leadership role.
- LEAP HI proposals must demonstrate the need for a sustained research effort by an integrated, interdisciplinary team, and should include a research integration plan and timeline for research activities, with convincing mechanisms for frequent and effective communication.

- URL: <https://www.nsf.gov/pubs/2017/nsf17602/nsf17602.htm>

Environmental System Science

United States Department of Energy (DOE) - Office of Science (OS) - Office of Biological and Environmental Research (BER)

Due Date: Pre-Applications 12/20/2017; Applications 3/1/2018

The Biological and Environmental Research (BER) program within the Office of Science (SC), U.S. Department of Energy (DOE) hereby announces its interest in receiving research applications for Environmental System Science (ESS). As part of the ESS program, the Terrestrial Ecosystem Science activity seeks to improve the understanding and representation of terrestrial ecosystems in ways that advance Earth system model parameterizations and capabilities. This FOA will consider applications

that utilize and couple measurements, experiments, modeling and/or synthesis of terrestrial ecosystem across a continuum from the subsurface to the top of the vegetated canopy and from molecular to global scales. ESS hereby announces its interest in grant applications for improved quantitative and predictive understanding of critical terrestrial ecosystems processes and feedbacks preferentially within high latitude (i.e., Arctic and Boreal) and coastal ecosystems in the following areas: Interactions between above and below-ground processes and traits, impacts of disturbances on ecosystems, and coupled biogeochemical and energy fluxes at the terrestrial-aquatic interface. Applicants are required to pose their research applications in the context of representing terrestrial ecosystem processes appropriate for improving the predictability of Earth system models. **DE-FOA-0001855**

- URL: https://science.energy.gov/~media/grants/pdf/foas/2018/SC_FOA_0001855.pdf

Precision Measurement Grant Program (PMGP)

U.S. Department of Commerce (DOC) - National Institute of Standards and Technology (NIST)

Due Date: Abbreviated Applications 2/2/2018; Full Applications 5/18/2018

Since 1970, NIST, as part of its research program, has provided funding under the Precision Measurement Grant Program (PMGP) primarily to universities and colleges so that faculty may conduct significant research in the field of fundamental measurement or the determination of fundamental constants. NIST sponsors these research projects primarily to encourage basic, measurement-related research in universities and colleges and other research laboratories and to foster contacts between NIST scientists and those faculty members of academic institutions and other researchers who are actively engaged in such work. The PMGP also is intended to make it possible for researchers to pursue new ideas for which other sources of support may be difficult to find. There is some latitude in research topics that will be considered under the PMGP. The key requirement is that the proposed project is consistent with NIST's ongoing work in the field of basic measurement science. **2018-NIST-PMGP-01**

- URL: <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=298752>

Summer Undergraduate Research Fellowship (SURF) Program

U.S. Department of Commerce (DOC) - National Institute of Standards and Technology (NIST)

Due Date: 2/12/2018

SURF students will have the opportunity to work one-on-one with NIST scientists and engineers. In addition, SURF students may have opportunities to voluntarily participate as subjects in minimal-risk NIST research experiments, for example, an evaluation of the quality, whiteness, and color rendering

of different correlated color temperatures of solid-state lamps in the NIST Spectrally Tunable Light Facility. It is anticipated that successful SURF students will move from a position of reliance on guidance from their NIST research advisors to one of research independence during the program period. One goal of the SURF Program is to provide opportunities for our nation's next generation of scientists and engineers to engage in scientific research of the highest caliber at NIST, especially in ground-breaking areas of emerging technologies. This carries with it the hope of motivating individuals to pursue Ph.D.s in biology, chemistry, computer science, engineering, materials science, mathematics, nanoscale science, neutron research, and/or physics, and to consider research careers. **2018-NIST-SURF-01 Due to the size of SURF Boulder, applicants that apply to SURF Boulder are limited to nominating no more than eight (8) undergraduate students for participation. SURF Gaithersburg does not have an applicant limit at this time.**

- URL: <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=299040>

Training-Based Workforce Development for Advanced Cyberinfrastructure

National Science Foundation (NSF)

Due Date: 2/14/2018

The overarching goals of this program are to (i) prepare, nurture, and grow the national scientific research workforce for creating, utilizing, and supporting advanced cyberinfrastructure (CI) that enables potentially transformative fundamental science and engineering research and contributes to the Nation's overall economic competitiveness and security; (ii) ensure broad adoption of CI tools, methods, and resources by the fundamental science and engineering research community to enable new modes of discovery; and (iii) integrate core literacy and discipline-appropriate advanced skills in advanced CI as well as computational and data science and engineering into the Nation's educational curriculum/instructional material fabric spanning undergraduate and graduate courses. For the purpose of this solicitation, advanced CI is broadly defined as the set of resources, tools, and services for advanced computation, data handling, networking, and security that collectively enable potentially transformative fundamental research. This solicitation calls for developing innovative, scalable training and education programs to address the emerging needs and unresolved bottlenecks in scientific and engineering research workforce development, from the postsecondary level to active researchers. The resultant training and education programs, spanning targeted, multidisciplinary communities, will lead to transformative changes in the state of workforce preparedness for advanced CI-enabled research in the short and long terms. As part of this investment, this solicitation seeks to broaden CI access and adoption by (i) increasing or deepening accessibility of methods and resources of advanced CI and of computational and data science and engineering by a wide range of scientific disciplines and institutions with lower levels of CI adoption to date; and (ii) harnessing the capabilities of larger segments of diverse underrepresented groups. Proposals from, and in partnership with, the aforementioned communities are especially encouraged.

Prospective principal investigators (PIs) are strongly encouraged to engage all relevant stakeholders, to the extent possible within the budget, by forging alliances and forming backbones for collective impact; this is particularly necessary in order to inform forward-looking curriculum/instructional material development for the Nation's science and engineering workforce. At a minimum, each project shall have a board of expert advisors or a network of funded/unfunded collaborators representative of stakeholder communities to periodically scrutinize and help refine the curriculum/instructional material and project methods, and to inform professional associations and non-governmental organizations responsible for curriculum, accreditation, and professional examination. The CyberTraining program is led by the Office of Advanced Cyberinfrastructure (OAC) in the Directorate for Computer and Information Science and Engineering (CISE) and has participation from several directorates and divisions as described in Section II - Program Description, Programmatic Areas of Interest. Not all directorates/divisions are participating at the same level and some have specific research and education priorities. The appropriate contact for the CyberTraining program in any directorate/division is the Cognizant Program Officer (PO) for the respective directorate/division/office/program listed. All projects must advance CI training and education goals for CI-enabled fundamental research as described in the full text of this solicitation, in addition to addressing specific domain needs. Prospective PIs are strongly encouraged to contact the Cognizant Program Officers in CISE/OAC and in the participating directorate/division(s) relevant to the proposal to ascertain whether the focus and budget of the proposed activities are appropriate for this solicitation. Such consultations should be completed at least one month in advance of the submission deadline. PIs should include the names of the Cognizant Program Officers consulted in their Project Summaries as described in Section V.A - Proposal Preparation Instructions. The intent of the CyberTraining program is to stimulate co-funding between OAC and one or more domain directorates/divisions. (For this purpose, divisions of CISE other than OAC are considered "domain divisions.") To ensure relevance to community needs and to facilitate adoption, those proposals of interest to one or more domain divisions must include at least one PI/co-PI with expertise relevant to the targeted research discipline. All proposals shall include at least one PI/co-PI with expertise relevant to OAC. Prospective PIs contemplating submissions that primarily target communities relevant to those directorates/divisions that are not participating in this solicitation are directed to instead explore the education and workforce development programs of the respective directorates/divisions. **NSF 18-516**

- URL: <https://www.nsf.gov/pubs/2018/nsf18516/nsf18516.htm>

National Robotics Initiative 2.0: Ubiquitous Collaborative Robots (NRI-2.0)

National Science Foundation (NSF)

Due Date: 2/20/2018, 2/5/2019

The NRI-2.0 program builds upon the original National Robotics Initiative (NRI) program to support fundamental research in the United States that will accelerate the development and use of collaborative robots (co-robots) that work beside or cooperatively with people. The focus of the NRI-2.0 program is on ubiquity, which in this context means seamless integration of co-robots to assist humans in every aspect of life. The program supports four main research thrusts that are envisioned to advance the goal of ubiquitous co-robots: scalability, customizability, lowering barriers to entry, and societal impact. Topics addressing scalability include how robots can collaborate effectively with multiple humans or other robots; how robots can perceive, plan, act, and learn in uncertain, real-world environments, especially in a distributed fashion; and how to facilitate large-scale, safe, robust and reliable operation of robots in complex environments. Customizability includes how to enable co-robots to adapt to specific tasks, environments, or people, with minimal modification to hardware and software; how robots can personalize their interactions with people; and how robots can communicate naturally with humans, both verbally and non-verbally. Topics in lowering barriers to entry include development of open-source co-robot hardware and software, as well as widely-accessible testbeds. Topics in societal impact include fundamental research to establish and infuse robotics into educational curricula, advance the robotics workforce through education pathways, and explore the social, economic, ethical, and legal implications of our future with ubiquitous collaborative robots. Collaboration between academic, industry, non-profit, and other organizations is encouraged to establish better linkages between fundamental science and engineering and technology development, deployment, and use. The NRI-2.0 program is supported by multiple agencies of the federal government including the National Science Foundation (NSF), the U.S. Department of Agriculture (USDA), the U.S. Department of Energy (DOE), and the U.S. Department of Defense (DOD). Questions concerning a particular project's focus, direction and relevance to a participating funding organization should be addressed to that agency's point of contact, listed in section VIII of this solicitation. **NSF 18-518**

- URL: <https://www.nsf.gov/pubs/2018/nsf18518/nsf18518.htm>

Innovative Cross-Domain Cyber Reactive Information Sharing (ICCyRIS)

U.S. Dept. of Defense (DOD) - Department of the Air Force (USAF) - Air Force Materiel Command

Due Date: White Papers accepted through 9/30/2018

The Cross Domain Innovation & Science (CDIS) group of the Air Force Research Laboratory's Information Directorate is interested in new innovative technologies and capabilities, within the Multi-Level Security (MLS) and Cyber Security environments, that promote the state of the art for secure, accreditable resilient and reactive capabilities to enhance the sharing of information between multiple security domains within both enterprise and mobile/tactical environments. This BAA focuses on developing new technologies to allow secure data sharing; trusted computing; smart routing; cyber defense; Multi-Level Security (MLS) trust at the tactical edge; and a comprehensive, multi-security domain, user-defined operational picture to effectively and efficiently improve the state-of-the-art for defense enterprise, cloud, and mobile/tactical computing/operations. **BAA-RIK-14-02**

The goals of this BAA are to improve cross-domain information sharing in five distinct technology areas:

- 1. Multi-Enclave/Multi-Domain Cyber User Defined Operational Picture (UDOP)**
- 2. High Risk Data Type Mitigation**
- 3. Fine-Grained Grammar for Orchestration**
- 4. Content and Label Based Routing**
- 5. MLS Trust at the Edge**

General Focus Areas Applicable to all FYs:

- **Incorporate Enterprise Security Features into Mobile/Tactical Systems.**
- **Automatically Evaluate Video Streams for Cross-Domain Releasability.**
- **Improved Security Through Virtualization.**
- **Novel, Trustworthy Filtration.**
- **Improved Machine-to-Machine Automation.**
- **Improved Commodity Multi-Level Security (MLS) Networking.**

Focus Areas for FY 18:

Imagery to Text-

- **URL:**

<https://www.fbo.gov/?s=opportunity&mode=form&id=cf0285f4d2760a70518c9c91522c7705&ab=core&cvview=1>

HEALTH, LIFE & EARTH SCIENCES

Bioengineering Research Grants (BRG) (R01 Clinical Trial Optional)

National Institutes of Health (NIH)

Due Date: 2/5/2018, 6/5/2018, 10/5/2018 (Standard NIH due dates apply)

The purpose of this funding opportunity announcement is to encourage collaborations between the life and physical sciences that: 1) apply a multidisciplinary bioengineering approach to the solution of a biomedical problem; and 2) integrate, optimize, validate, translate or otherwise accelerate the adoption of promising tools, methods and techniques for a specific research or clinical problem in basic, translational, or clinical science and practice. An application may propose design-directed, developmental, discovery-driven, or hypothesis-driven research and is appropriate for small teams applying an integrative approach to increase our understanding of and solve problems in biological, clinical or translational science. **PAR-18-206**

- URL: <https://grants.nih.gov/grants/guide/pa-files/PAR-18-206.html>

Diet and Physical Activity Assessment Methodology (R01)

National Institutes of Health (NIH)

Due Date: 2/5/2018, 6/5/2018, 10/5/2018 (Standard NIH due dates apply)

This Funding Opportunity Announcement (FOA) encourages innovative research to enhance the quality of measurements of dietary intake and physical activity. Applications submitted under this FOA are encouraged to include development of: novel assessment approaches; better methods to evaluate instruments; assessment tools for culturally diverse populations or various age groups, including children and older adults; improved technology or applications of existing technology; statistical methods/modeling to improve assessment and/or to correct for measurement errors or biases; methods to investigate the multidimensionality of diet and physical activity behavior through pattern analysis; or integrated measurement of diet and physical activity along with the environmental context of such behaviors. **PAR-18-010**

- URL: <https://grants.nih.gov/grants/guide/pa-files/PA-18-010.html>

Independent Scientist Award (Parent K02 - Independent Clinical Trial Not Allowed)

National Institutes of Health (NIH)

Due Date: 2/12/2018, 6/12/2018, 10/12/2018 (Standard NIH due dates apply)

The purpose of the NIH Independent Scientist Award (K02) is to foster the development of outstanding scientists and enable them to expand their potential to make significant contributions to their field of research. The K02 award provides three to five years of salary support and "protected time" for newly independent scientists who can demonstrate the need for a period of intensive research focus as a means of enhancing their research careers. Each independent scientist career award program must be tailored to meet the individual needs of the candidate. This Funding Opportunity Announcement (FOA) is designed specifically for applicants proposing research that does not involve leading an independent clinical trial, a clinical trial feasibility study, or an ancillary study to a clinical trial. Applicants to this FOA are permitted to propose research experience in a clinical trial led by another investigator. Applicants proposing a clinical trial or an ancillary study to an ongoing clinical trial as lead investigator, should apply to the companion FOA (PA-18-370). **PA-18-371**

- URL: <https://grants.nih.gov/grants/guide/pa-files/PA-18-371.html>

The Role of the Microbiome in the Developmental Origins of Health and Disease (DOHaD) (R01 Clinical Trial Not Allowed)

National Institutes of Health (NIH) - National Institute of Environmental Health Sciences (NIEHS)

Due Date: Letters of Intent 2/14/2018; Applications 3/14/2018

This Funding Opportunity Announcement (FOA) seeks innovative research proposals that use animal models to investigate the potential role of the microbiome in mediating the latent effects of early life exposure. Applicants should propose innovative studies that seek to establish a causal link between early life exposures and later onset disease through changes in the microbiome. The Developmental Origins of Health and Disease (DOHaD) hypothesis arose following Dr. David Barker's observations that low birthweight - believed to be a marker of adverse environmental influences encountered in the womb - was associated with an elevated risk of cardiovascular disease in adults. Now, several decades later, there is significant evidence linking early life exposure to a wide variety of environmental factors to a number of chronic disease outcomes later in life, in both animal and epidemiological studies. It has proven more challenging to uncover the mechanism that underlies these latent effects of exposure. Researchers have largely focused on a potential role for epigenetics in mediating these effects, but as yet, relatively few examples have been identified that establish clear, causal relationships between exposure-induced epigenetic changes and later onset disease. This suggests that alternative, as yet undiscovered mechanisms might underlie the persistence of the effects of early life exposures. With the help of the Human Microbiome Project, we are beginning to understand the microbiome and the important role it plays in health and wellness. A growing number of studies have shown an association

between changes in the microbiome and a variety of adverse health outcomes, affecting a broad range of organ systems. The microbiome begins to colonize at birth, and becomes established during infancy and early childhood. It is highly dynamic and responds to external factors, like changes in diet or exposure to xenobiotics, including a growing list of environmental chemicals. Although the more stable adult microbiome generally reverts back to its baseline state after these perturbations, recent work has shown that early life exposure to antibiotics can have more persistent effects on the function of the microbiome. Taken together, these observations suggest that the microbiome should be considered within the context of the DOHaD paradigm. **RFA-ES-18-005**

- URL: <https://grants.nih.gov/grants/guide/rfa-files/RFA-ES-18-005.html>

The Health of Sexual and Gender Minority (SGM) Populations (R15 Clinical Trial Optional) *National Institutes of Health (NIH)*

Due Date: 2/25/2018, 6/25/2018 (Standard NIH due dates apply)

The National Institutes of Health (NIH) is committed to supporting research that will increase scientific understanding of the health status of diverse population groups and thereby improve the effectiveness of health interventions and services for individuals within those groups. Priority is placed on understudied populations with distinctive health risk profiles. This funding opportunity announcement (FOA) focuses on sexual and gender minority (SGM) populations, including lesbian, gay, bisexual, transgender, and intersex populations. Basic, social, behavioral, clinical, and services research relevant to the missions of the sponsoring Institutes and Centers may be proposed. **PA-18-210**

- URL: <https://grants.nih.gov/grants/guide/pa-files/PA-18-210.html>

Office of Biomedical Advanced Research and Development Authority (BARDA) Broad Agency Announcement (BAA)

U.S. Dept. of Health and Human Services (HHS) - Office of the Assistant Secretary for Preparedness and Response - Office of Biomedical Advanced Research and Development Authority (BARDA)

Due Date: 10/31/2019

The Office of Acquisitions Management, Contracts, and Grants (AMCG) on behalf of the Office of Biomedical Advanced Research and Development Authority (BARDA) solicits proposals for the advanced research and development of medical countermeasures (MCM) for chemical, biological, radiological and nuclear (CBRN) agents, pandemic influenza, and emerging infectious diseases that threaten the U.S. civilian population. BARDA anticipates that R&D activities awarded under this BAA



will serve to advance candidate medical countermeasures towards licensure or approval by the U.S. Food and Drug Administration (FDA). This BAA will also serve to advance the knowledge and scientific understanding of candidates' platform technologies, modeling and forecasting, and visual analytics. The purpose of this BAA is to solicit proposals that focus on research and development in the following solicited AOI as listed here and further described in Part I of this announcement. The BAA does not support the acquisition of products or the construction of facilities. **BAA-18-100-SOL-00003**

- URL: <https://www.grants.gov/custom/viewOppDetails.jsp?oppld=298749>

SOCIAL & BEHAVIORAL SCIENCES

Resource Implementations for Data Intensive Research in the Social Behavioral and Economic Sciences (RIDIR)

National Science Foundation (NSF)

Due Date: 2/28/2018, 2/25/2019

As part of NSF's Harnessing the Data Revolution (HDR), the Directorate for Social, Behavioral and Economic Sciences (SBE) seeks to develop user-friendly large-scale next-generation data resources and relevant analytic techniques to advance fundamental research in SBE areas of study. Successful proposals will, within the financial resources provided by the award, construct such databases and/or relevant analytic techniques and produce a finished product that will enable new types of data-intensive research. The databases or techniques should have significant impacts, either across multiple fields or within broad disciplinary areas, by enabling new types of data-intensive research in the SBE sciences. **NSF 18-517**

- URL: <https://www.nsf.gov/pubs/2018/nsf18517/nsf18517.htm>