WICHITA STATE
UNIVERSITY
RESEARCH AND
TECHNOLOGY TRANSFER

Funding Bulletin
February 23rd, 2018 (Vol. 5, No. 10)

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

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/

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu.*

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
Conflicts of Interest & Time Commitments *(brown bag workshop)*	Feb 23	12:00 – 1:30 p.m.	405 Jardine	This workshop will provide an overview of WSU policy, the disclosure process, management plans and examples of conflicts of interest from academic settings that have made headlines. Please bring your lunch. Tea, water and dessert will be served. Registration is required through myTraining.
IRB Open Lab	Mar 15	9:30 – 11:00 a.m.	409E Jardine	The IRB Administrator will be holding Open Labs this spring for Faculty, Staff or Students who have questions about the new forms or about their study in general. ***This is a come and go lab with no registration required.***
SBIR Monthly Q&A	Mar 15	2:00 – 4:00 p.m.	Experiential Engineering Building 163	These monthly sessions allow students, faculty and staff to learn more about the U.S. government's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs or ask questions about specific topics.
Research Compliance Open Lab	Mar 21	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. ***This is a come and go lab with no registration required.***

NOTICES

Funding Bulletin Survey – your feedback is appreciated!

The Office of Research has created a short survey to gage 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/

INTERNAL OPPORTUNTIES

There are currently no open internal competitions. Upcoming opportunities will be posted as the next deadlines are announced. For information about internal opportunities previously offered, see the link below:

http://webs.wichita.edu/?u=wsuresearchadmin&p=/orainternalgrants/orainternalgrants/

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

3

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 *six* open limited submission competitions (please see our website for additional limited submissions whose internal deadlines that have passed but may still be accepted NOIs):**

(1) Vision Screening in Young Children
United States Department of Health and Human Services (HHS) - Health Resources and Services Administration (HRSA) - Maternal and Child Health Bureau (MCHB)
Due Date: Internal NOIs 2/23/2018; Application 3/26/2018

The Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau is accepting applications for fiscal year (FY) 2018 Vision Screening in Young Children Program. The purpose of this program is to fund a national entity to support state efforts to implement evidence-based and promising early childhood vision screening, follow-up, and surveillance protocols by providing technical assistance, tools, training, and opportunities for information sharing and learning. **HRSA-18-064 Multiple applications from an organization are not allowable.**

- **URL:** *https://www.grants.gov/custom/viewOppDetails.jsp?oppId=295200*

(2) SMART FY18 Sexual Violence Prevention Initiative
U.S. Department of Justice (DOJ) - Office of Justice Programs (OJP) – Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering and Tracking (SMART)
Due Date: Internal NOIs 3/9/2018; Application 4/16/2018

Notice seeking applications for the enhancement and advancement of the sexual violence prevention initiative and promote innovation and best practices in protecting the public from sexual violence. **SMART-2018-5202** *One application per institution.*

- *URL: https://www.grants.gov/web/grants/view-opportunity.html?oppId=300707*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

4

(3) Preservation Assistance Grants for Smaller Institutions
National Endowment for the Humanities (NEH)
Due Date: Internal NOIs 3/30/2018; Application 5/1/2018

Preservation Assistance Grants help small and mid-sized institutions - such as libraries, museums, historical societies, archival repositories, cultural organizations, town and county records offices, and colleges and universities - improve their ability to preserve and care for their significant humanities collections. These may include special collections of books and journals, archives and manuscripts, prints and photographs, moving images, sound recordings, architectural and cartographic records, decorative and fine art objects, textiles, archaeological and ethnographic artifacts, furniture, historical objects, and digital materials. Applicants must draw on the knowledge of consultants whose preservation skills and experience are related to the types of collections and the nature of the activities that are the focus of their projects. Within the conservation field, for example, conservators usually specialize in the care of specific types of collections, such as objects, paper, or paintings. Applicants should therefore choose a conservator whose specialty is appropriate for the nature of their collections. Similarly, when assessing the preservation needs of archival holdings, applicants must seek a consultant specifically knowledgeable about archives and preservation. Because the organization and the preservation of archival collections must be approached in tandem, an archival consultant should also provide advice about the management and processing needs of such holdings as part of a preservation assessment that includes long-term plans for the arrangement and description of archival collections. **20170502-PG** *Only one application for a Preservation Assistance Grant may be submitted annually by an institution, although distinct collecting entities of a larger organization may apply in the same year, such as the library and museum of a university or two historic sites within a historical society.*

- **URL:** *https://www.neh.gov/grants/preservation/preservation-assistance-grants-smaller-institutions*

(4) Henry Dreyfus Teacher-Scholar Awards Program
Camille and Henry Dreyfus Foundation, Inc.
Due Date: Internal NOIs 4/6/2018; Nomination 5/18/2018

The Henry Dreyfus Teacher-Scholar Awards Program supports the research and teaching careers of talented young faculty in the chemical sciences at undergraduate institutions. Based on institutional nominations, the program provides discretionary funding to faculty at an early stage in their careers. The award is based on accomplishment in scholarly research with undergraduates, as well as a compelling commitment to teaching. The Foundation seeks Henry Dreyfus Teacher-Scholars who, as independent faculty members, have demonstrated leadership in original scholarly research of

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

5

outstanding quality, substantially with undergraduates, as well as excellence and dedication in undergraduate education. Recommendations for awards are based on evidence of outstanding educational efforts and the nominee's scholarly research achievements with undergraduates as an independent faculty member, as assessed by a panel of distinguished faculty in the chemical sciences. The three outside letters of support (see below for details) are of particular value to the reviewers. Other considered factors are: awards and honors, publication of research achievements in leading journals, and success in attracting research funding. ***Institutions may submit only one Henry Dreyfus nomination annually.***

- **URL:** *http://www.dreyfus.org/awards/henry_dryfus_teacher_award.shtml*

(5) Research Initiative for Scientific Enhancement (RISE) (R25)
National Institutes of Health (NIH) - National Institute of General Medical Sciences (NIGMS)
Due Date: Internal NOIs 4/6/2018; Application 5/25/2018

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIGMS R25 program is to support educational activities that enhance the diversity of the biomedical, behavioral and clinical research workforce. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on research experiences and courses for skills development. Applicants should directly address how the set of activities will enhance the diversity of the biomedical, behavioral and clinical research workforce by discussing 1) the rationale underlying the balance of effort and resources dedicated to each activity; 2) how the three activities integrate; and 3) objective indicators that can measure the effectiveness of the program. **PAR-16-361** *Only one application per institution is allowed*

- **URL:** *https://grants.nih.gov/grants/guide/pa-files/PAR-16-361.html*

(6) Shared Instrumentation for Animal Research (SIFAR) Grant Program (S10 Clinical Trial Not Allowed)
National Institutes of Health (NIH) - Office of Research Infrastructure Programs (ORIP)
Due Date: Internal NOIs 4/20/2018; Application 5/31/20108

The Shared Instrumentation for Animal Research (SIFAR) Grant Program encourages applications from groups of NIH-funded investigators to purchase or upgrade scientific instruments necessary to carry out animal experiments in all areas of biomedical research supported by the NIH. Applicants may request clusters of commercially available instruments configured as specialized integrated systems or

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

6

as series of instruments to support a thematic well-defined area of research using animals or related materials. Priority will be given to uniquely configured systems to support innovative and potentially transformative investigations. This FOA supports requests for state-of-the art commercially available technologies needed for NIH-funded research using any vertebrate and invertebrate animal species. This funding opportunity announcement (FOA) does not support requests for single instruments. **PAR-18-599** *Applicant organizations may submit only one application per institution.*

- **URL:** *https://grants.nih.gov/grants/guide/pa-files/PAR-18-599.html*

GENERAL

Sponsored Research Program
Project Management Institute, Inc. (PMI)
Due Date: 4/25/2018

Each year, the Academic Resources Department solicits proposals for research funding on any topic related to project, program or portfolio management. Proposed research must have direct application to some aspect of the project management body of knowledge or its practice.The institute invites proposals from scholars both within and outside the field of project management (e.g. management and/or its sub-fields, organizational psychology, sociology, education, linguistics, communications, etc.), whose themes and perspectives have direct application to some aspect of the project management body of knowledge or its practice.

- **URL:** *https://www.pmi.org/learning/academic-research/sponsored*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

7

Higher Education Program
Henry Luce Foundation
Due Date: Continuous

The Higher Education Program welcomes excellent, innovative proposals from all kinds of institutions and organizations and encourages inquiries from those that are less well-resourced and/or that seek to serve disadvantaged or marginalized communities.

Higher education program grants have several characteristics:
- They support projects in the humanities and qualitative social sciences (with one exception: projects that encourage diversity in certain STEM fields are also supported)
- In general, they will support team-based projects or institutional initiatives rather than purely individual research projects
- The projects they support will not only produce new knowledge but will also model new approaches to the production, dissemination and application of knowledge

- **URL:** *http://www.hluce.org/higheredapply.aspx*

ARTS & HUMANITIES

Summer Repository Research Fellowship
Indiana University (IU) - Indiana University (IU) Bloomington - Institute for Advanced Study (IAS)
Due Date: 3/23/2018

In partnership with Indiana University Bloomington repositories and with support from the Office of the Vice Provost for Research, the Institute for Advanced study offers a short-term Summer Research Fellowship to support immersive collections research. This initiative is intended to support research in the rich collections of the IU Bloomington campus and to build partnerships between scholars at and beyond IUB. Started in Summer 2015, this program funds a short-term Summer Research Fellowship for a visiting faculty member or community scholar researcher to conduct in-depth research in the collections of one or more of our partner repositories. Applications from faculty members at Minority Serving Institutions and community colleges and from source community scholars are welcome. While in residence, the visiting researcher or research team will be expected to conduct at least two weeks of research and make an informal presentation about the project in progress.Resulting analyses or conclusions should be disseminated online, in print, or through exhibition. Please note that this fellowship is intended to support research in IU Bloomington's unique collections, so research focus should be on materials that cannot be accessed elsewhere.

- **URL:** *https://ias.indiana.edu/fellows/summer-research-fellowship*

Preservation and Access Education and Training Grants
National Endowment for the Humanities (NEH)
Due Date: 5/1/2018

The Preservation and Access Education and Training program is central to NEH's efforts to preserve and establish access to cultural heritage collections. Thousands of libraries, archives, museums, and historical organizations across the country maintain important collections of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art and material culture collections, electronic records, and digital objects. The challenge of preserving and making accessible such large and diverse holdings is enormous, and the need for knowledgeable staff is significant and ongoing. Preservation and Access Education and Training grants are awarded to organizations that offer national or regional (multistate) education and training programs. Grants aim to help the staff of cultural institutions, large and small, obtain the knowledge and skills needed to serve as effective stewards of humanities collections. Grants also support educational programs that prepare the next generation of conservators and preservation professionals, as well as projects that

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

9

introduce the staff of cultural institutions to new information and advances in preservation and access practices. **20170502-PE**

Preservation and Access Education and Training grants support activities such as these:
1. preservation field services that provide a wide range of education and training programs (for example, surveys, workshops, consultations, reference services, and preparation of informational materials about the care of humanities collections), especially for staff at smaller libraries, museums, archives, and other cultural organizations;
2. master's degree programs in preservation and conservation; and
3. workshops that address preservation and access topics of national significance and broad impact, such as
- preventive conservation and sustainable preservation strategies;
- the preservation of and provision of access to recorded sound and moving image collections;
- digital preservation;
- collections care training for staff members who are responsible for the day-to-day care and management of humanities collections;
- disaster preparedness, response, and recovery; and
- best practices for enhancing and integrating access to collections in libraries, archives, and museums.

- **URL:** *https://www.neh.gov/grants/preservation/preservation-and-access-education-and-training*

VCCA Residency
Virginia Center for the Creative Arts (VCCA)
Due Date: 5/15/2018 (October – January Residencies), 9/15/2018 (February – May Residencies)

VCCA offers residencies to individuals working in various art forms. Admission to VCCA is highly selective, based on a review of applications by panels of professional artists. There are separate panels for each category (poets, fiction writers, nonfiction writers, playwrights, performance, film and video artists, painters, sculptors, photographers, installation artists, composers and cross-disciplinary artists) with over fifty panelists serving at any one time. These panelists undergo periodic review to ensure that selection to VCCA is being made by the highest caliber artists in each discipline. Panelists are also rotated regularly to ensure that particular styles or tastes are not continuously represented. The basis for admission by an application is professional achievement or promise of achievement.

- **URL:** *http://www.vcca.com/main/apply*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

10

Common Heritage
National Endowment for the Humanities (NEH)
Due Date: 5/31/2018

The Common Heritage program aims to capture this vitally important part of our country's heritage and preserve it for future generations. Common Heritage will support both the digitization of cultural heritage materials and the organization of public programming at community events that explore these materials as a window on a community's history and culture. The Common Heritage program recognizes that members of the public, in partnership with libraries, museums, archives, and historical organizations, have much to contribute to the understanding of our cultural mosaic. Together, such institutions and the public can be effective partners in the appreciation and stewardship of our common heritage. The program supports day-long events organized by community cultural institutions, which members of the public will be invited to attend. At these events experienced staff will digitize the community historical materials brought in by the public. Project staff will also record descriptive information, provided by community attendees, about the historical materials. Contributors will be given a free digital copy of their items to take home, along with the original materials. With the owner's permission, digital copies of these materials would be included in the institutions' collections. Historical photographs, artifacts, documents, family letters, art works, and audiovisual recordings are among the many items eligible for digitization and public commemoration. Projects must also present public programming that would expand knowledge of the community's history. Public programs could include lectures, panels, reading and discussion, special gallery tours, screening and discussion of relevant films, presentations by a historian, special initiatives for families and children, or comments by curators about items brought in by the public. These public programs should provide a framework for a deeper understanding of the community members' shared or divergent histories. The programs may take place before, during, and/or after the day of the digitization event. Applicants may but need not include in their proposals a topic around which the event and the public programming would be organized. Topics proposed for the public programming may also be proposed for the digitization event. The applicant institution must plan, promote, and organize the event and ensure that a wide range of historical materials can be digitized and also contextualized through public programming. Since the help of additional institutions and organizations in the community may be needed to accomplish this work, the applicant must take responsibility for enlisting appropriate organizations or institutions, such as local libraries and museums, to contribute to the project, as needed. NEH especially welcomes applications from small and medium-sized institutions that have not previously received NEH support. **20170601-PY**

- **URL:** *https://www.neh.gov/grants/preservation/common-heritage*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

11

EDUCATION

Computer Science for All
National Science Foundation (NSF)
Due Date: 5/9/2018, 2/12/2019

This program aims to provide all U.S. students the opportunity to participate in computer science (CS) and computational thinking (CT) education in their schools at the preK-12 levels. With this solicitation, the National Science Foundation (NSF) focuses on researcher-practitioner partnerships (RPPs) that foster the research and development needed to bring CS and CT to all schools. Specifically, this solicitation aims to provide high school teachers with the preparation, professional development (PD) and ongoing support that they need to teach rigorous computer science courses; preK-8 teachers with the instructional materials and preparation they need to integrate CS and CT into their teaching; and schools and districts the resources needed to define and evaluate multi-grade pathways in CS and CT. **NSF 18-537**

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18537/nsf18537.htm*

Learning and Leadership Grants
National Education Association (NEA) - NEA Foundation for the Improvement of Education
Due Date: 6/1/2018, 10/15/2018

Educators frequently need outside resources to engage in meaningful professional development due to limited district funding. Through our Learning & Leadership grants, the NEA Foundation supports the professional development of NEA members by providing grants to:
- Individuals to participate in high-quality professional development like summer institutes, conferences, seminars, travel abroad programs, or action research.
- Groups to fund collegial study, including study groups, action research, lesson plan development, or mentoring experiences for faculty or staff.

- **URL:** *https://www.neafoundation.org/for-educators/learning-and-leadership-grants/*

NEA Foundation Grants to Educators

National Education Association (NEA) - NEA Foundation for the Improvement of Education

Due Date: 6/1/2018, 10/15/2018

Learning & Leadership grants support NEA members who are public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education for one of the following two purposes: Educational grants to individuals fund participation in high-quality professional development experiences, such as summer institutes or action research; or grants to groups fund collegial study, including study groups, action research, lesson study, or mentoring experiences for faculty or staff new to an assignment. Student Achievement Grants from the NEA Foundation provides NEA members with grants to improve the academic achievement of students in U.S. public schools and public higher education institutions in any subject area(s). The proposed work should engage students in critical thinking and problem solving that deepen their knowledge of standards-based subject matter. The work should also improve students' habits of inquiry, self-directed learning, and critical reflection.

- **URL:** *https://www.neafoundation.org/for-educators/*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

13

ENGINEERING, MATHEMATICS & PHYSICAL SCIENCES

Research Opportunities in Accelerator Stewardship
United States Department of Energy (DOE) - Office of Science (OS)
Due Date: Pre-Applications 3/13/2018; Applications 4/26/2018

The mission of the Accelerator Stewardship program is to support fundamental accelerator science and technology development of relevance to many fields beyond High Energy Physics, and to disseminate accelerator knowledge and training to the broad community of accelerator users and providers. **DE-FOA-0001879**

Central goals of Accelerator R&D Stewardship are to:
- Engage the expertise and facilities of the existing U.S. accelerator R&D ecosystem in a manner that enhances the ability of the DOE Office of Science specifically, and other federal agencies generally, to conduct their missions;
- Enhance the accelerator technology capabilities of U.S. industry;
- Facilitate access to the accelerator R&D capabilities at the DOE Office of Science National Laboratories
- Drive a limited number of specific accelerator applications towards practical, testable prototypes in a 5-7 year timeframe;
- Foster collaboration between developers of accelerator technology and experts who apply accelerator technology;
- Provide the basic R&D foundation necessary for sustained innovation across a broad range of accelerator applications.

This call for applications is focused on three distinct activities:
(1) applied research1 that is focused on developing a prototype in response to a specific technical challenge,
(2) basic research that broadly impacts many accelerator applications, and
(3) facilitating access to accelerator R&D capabilities at the Office of Science National Laboratories for academic research.

- **URL:** *https://www.grants.gov/web/grants/view-opportunity.html?oppId=294249*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

14

Special Program Announcement for 2018 Office of Naval Research Basic Research Opportunity: "Advancing Intelligence for the Naval Domain"
U.S. Department of Defense (DoD) – Office of Naval Research (ONR)
Due Date: White Papers 3/22/2018; Applications 5/11/2018

Notice seeking applications supporting efforts to advance artificial intelligence for future naval applications. Topic areas include: Integration of Domain Knowledge and Machine Learning; Artificial Intelligence in support of Collaborative Complex Decision-Making; and Decentralized Perception and Planning in Dynamic Environments. **N00014-18-R-SN05**

- **URL:** *https://www.grants.gov/web/grants/view-opportunity.html?oppId=300565*

Innovative Technology Development to Enhance Fossil Power System Operability, Reliability, and Economic Performance
United States Department of Energy (DOE) - National Energy Technology Laboratory (NETL)
Due Date: 4/5/2018

Innovations in the solicited areas are supported by the National Energy Technology Laboratory's Crosscutting Research Program, which aims to bridge the gap between the basic sciences and applied research as it relates to advanced energy systems that utilize domestic resources. Long-range transitional research is needed to support the identification and growth of novel concepts that will lead to scientific breakthroughs and early adoption of innovative concepts for power generation. Goals for this research include enabling, improving, and protecting power systems through the application of applied novel concepts of the key technologies identified under the Crosscutting Research Program. **DE-FOA-0001854**

The FOA has two Areas of Interest (AOI) as follows:
AOI 1: Sensors & Controls Technology Development for Cybersecure Fossil Power
AOI 2: Computational Tools to Support Advanced Manufacturing of Fossil Energy Technologies

- **URL:** *https://www.grants.gov/custom/viewOppDetails.jsp?oppId=300475*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

15

Cyber-Physical Systems (CPS)
National Science Foundation (NSF)
Due Date: 5/8/2018

The goal of the CPS program is to develop the core system science needed to engineer complex cyber-physical systems that people can use or interact with and depend upon. Some of these may require high-confidence or provable behaviors. The program aims to foster a research community committed to advancing research and education in CPS and to transitioning CPS science and technology into engineering practice. By abstracting from the particulars of specific systems and application domains, the CPS program seeks to reveal cross-cutting fundamental scientific and engineering principles that underpin the integration of cyber and physical elements across all application sectors. To expedite and accelerate the realization of cyber-physical systems in a wide range of applications, the CPS program also supports the development of methods, tools, and hardware and software components based upon these cross-cutting principles, along with validation of the principles via prototypes and testbeds. We have also seen a convergence of CPS technologies and research thrusts that underpin Smart & Connected Communities (S&CC) and the Internet of Things (IoT). These domains offer new and exciting challenges for foundational research and provide opportunities for maturation at multiple time horizons. **NSF 18-538**

Three classes of research and education projects -- differing in scope and goals -- will be considered through this solicitation:
- Breakthrough projects must offer a significant advance in fundamental CPS science, engineering and/or technology that has the potential to change the field. This category focuses on new approaches to bridge computing, communication, and control.
- Synergy projects must demonstrate innovation at the intersection of multiple disciplines, to accomplish a clear goal that requires an integrated perspective spanning the disciplines.
- Frontier projects must address clearly identified critical CPS challenges that cannot be achieved by a set of smaller projects.

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18538/nsf18538.htm*

Formal Methods in the Field (FMitF)
National Science Foundation (NSF)
Due Date: 5/8/2018

The Formal Methods in the Field (FMitF) program aims to bring together researchers in formal methods with researchers in other areas of computer and information science and engineering to jointly develop rigorous and reproducible methodologies for designing and implementing correct-by-construction systems and applications with provable guarantees. FMitF encourages close collaboration between two

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

16

groups of researchers. The first group consists of researchers in the area of formal methods, which, for the purposes of this solicitation, is broadly defined as principled approaches based on mathematics and logic, including modeling, specification, design, program analysis, verification, synthesis, and programming language-based approaches. The second group consists of researchers in the field; which, for the purposes of this solicitation, is defined as a subset of areas within computer and information science and engineering that currently do not benefit from having established communities already developing and applying formal methods in their research. Initially the program will limit the field to these four areas that stand to directly benefit from a grounding in formal methods: computer networks, cyber-human systems, machine learning, and operating/distributed systems. However other field(s) may emerge as priority areas for the program in future years, subject to the availability of funds. Each proposal must have at least one Principal Investigator (PI) or co-PI with expertise in formal methods and at least one with expertise in one or more of these fields: computer networks, cyber-human systems, machine learning, and operating/distributed systems. Proposals are expected to address the fundamental contributions to both formal methods and the respective field(s), and should include a proof of concept in the field along with a detailed evaluation plan that discusses intended scope of applicability, trade-offs and limitations. All proposals are expected to contain a detailed collaboration plan that clearly highlights and justifies the complementary expertise of the PIs in the designated areas, and describes the mechanisms for continuous bi-directional interaction. **NSF 18-536**

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18536/nsf18536.htm*

Critical Techniques, Technologies and Methodologies for Advancing Foundations and Applications of Big Data Sciences and Engineering (BIGDATA)
National Science Foundation (NSF)
Due Date: 5/14/2018

The BIGDATA program seeks novel approaches in computer science, statistics, computational science, and mathematics leading towards the further development of the interdisciplinary field of data science. The program also seeks innovative applications in domain science, including social and behavioral sciences, education, physical sciences, and engineering, where data science and the availability of big data are creating new opportunities for research and insights not previously possible.

The solicitation invites two categories of proposals:
1. Foundations (BIGDATA: F): those developing or studying fundamental theories, techniques, methodologies, and technologies of broad applicability to big data problems, motivated by specific data challenges and requirements; and
2. Innovative Applications (BIGDATA: IA): those engaged in translational activities that employ new big data techniques, methodologies, and technologies to address and solve problems in specific application domains. Projects in this category must be collaborative, involving researchers from domain

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

17

disciplines and one or more methodological disciplines, e.g., computer science, statistics, mathematics, simulation and modeling, etc.

Proposals are expected to be well motivated by specific big data problems in one or more science and engineering research domains. All proposals are expected to clearly articulate the big data aspect(s) that motivate the research. Innovative Applications proposals must provide clear examples of the impacts of the big data techniques, technologies and methodologies on applications in one or more domains. In FY 2018, the BIGDATA program continues the cloud option that was introduced in FY 2017, in partnership with Amazon Web Services (AWS), Google Cloud, and Microsoft Azure (see Use of Cloud Resources, at the end of Section II, Program Description). Before preparing a proposal in response to this BIGDATA solicitation, applicants are strongly urged to review other related programs and solicitations and contact the respective NSF program officers to identify whether those solicitations are more appropriate. **NSF 18-539**

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18539/nsf18539.htm*

NSF/VMware Partnership on Edge Computing Data Infrastructure (ECDI)
National Science Foundation (NSF)
Due Date: 5/22/2018

The proliferation of mobile and Internet-of-Things (IoT) devices, and their pervasiveness across nearly every sphere of our society, continues to raise questions about the architectures that organize tomorrow's compute infrastructure. At the heart of this trend is the data that will be generated as myriad devices and application services operate simultaneously to digitize a complex domain like a smart building or smart industrial facility. A key shift is from edge devices consuming data produced in the cloud to edge devices being a voluminous producer of data. This shift reopens a broad variety of system-level research questions concerning data placement, movement, processing and sharing. Importantly, the shift also opens the door to compelling new applications with significant industrial and societal impact in domains such as healthcare, manufacturing, transportation, public safety, energy, buildings, and telecommunications. Edge computing is broadly defined as a networked systems architectural approach in which compute and storage resources are placed at the network edge, in proximity to the mobile and IoT devices. The approach offers advantages, such as improved scalability as local computation reduces the volume of data transported, reduced network latency and faster compute response times as data is processed on local compute nodes, and arguably improved security and privacy where data requirements preclude access and exchanges beyond the edge. Edge computing infrastructure may consist of IoT gateways, telephone central offices, cloudlets, micro data centers, or any number of schemes that support the provisioning of communication, compute and storage resources near edge devices. This solicitation seeks to advance the state of the art in end-to-end networked systems architecture that includes edge infrastructures. The central challenge is to

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

18

design and develop data-centric edge architectures, programming paradigms, runtime environments, and data sharing frameworks that will enable compelling new applications and fully realize the opportunity of big data in tomorrow's mobile and IoT device environments. Researchers are expected to carefully consider the implications of edge computing's multi-stakeholder context, and the need for security and privacy as first order design and operational considerations. **NSF 18-540**

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18540/nsf18540.htm?org=NSF*

Office of Naval Research (ONR) Navy and Marine Corps Science, Technology, Engineering & Mathematics (STEM), Education and Workforce Program
United States Department of Defense (DOD) - Department of the Navy (U.S. Navy) - Office of Naval Research (ONR)
Due Date: White Papers 7/31/2018; Applications 9/28/2018

As the capacity of the DoN Science and Technology (S&T) workforce is interconnected with the basic research enterprise and STEM education system, ONR recognizes the need to support efforts that can jointly improve STEM student outcomes and align educational efforts with Naval S&T current and future workforce needs. This announcement explicitly encourages projects that improve the capacity of education systems and communities to create impactful STEM educational experiences for students and workers. Submissions are encouraged to consider including active learning approaches and incorporating 21st century skill development. Projects must aim to increase student and worker engagement in STEM and enhance people with needed Naval STEM capabilities. ONR encourages applications to utilize current STEM educational research for informing project design and advancing our understanding of how and why people choose STEM careers and opportunities of naval relevance. **N00014-18-S-F003**

While this announcement is relevant for any stage of the STEM educational system, funding efforts will be targeted primarily toward projects addressing the below communities or any combination of these communities:
- Secondary education communities;
- Post-Secondary communities;
- Informal science communities;
- Current naval STEM workforce communities.

Project scope may range in size and complexity. **Projects that are already established with prior funding sources or have established stakeholders are especially encouraged to consider the following scope areas:**
- Develop and implement exploratory pilot projects that seek to create new educational experiences within educational and training communities.

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

19

- Develop larger cohesive STEM education and training activities that strengthen the capacity of regional communities and stakeholders to improve STEM education and training.
- Establish meetings of stakeholders that must seek to connect relevant people and organizations to explicitly develop broader projects for impacting entire communities.

The technical content of any idea must establish naval relevance within the priority areas as outlined in the "Naval Research and Development Framework and Addendum", https://www.onr.navy.mil/our-research/naval-research-framework.

Broad priority areas are as follows:
- Augmented Warfighter
- Integrated & Distributed Forces
- Operational Endurance
- Sensing & Sense-Making
- Scalable Lethality

- **URL:** *https://www.grants.gov/custom/viewOppDetails.jsp?oppId=298739*

HEALTH, LIFE & EARTH SCIENCES

Interdisciplinary Research Leaders (IRL)
Robert Wood Johnson Foundation (RWJF)
Due Date: Applications 3/14/2018; Finalists Supplemental Applications 7/12/2018

The Program
This call for applications (CFA) seeks teams of researchers and community members who are committed to working together to produce community-relevant, action-oriented research to improve health and well-being. Funding to support the work of the team will go to one organization. This applicant organization will identify the team members on its application.

Program Goals
The broad goal of the Interdisciplinary Research Leaders program is to produce diverse interdisciplinary leaders who conduct and apply high-quality, community-engaged, action-oriented, equity-focused

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

20

health research in order to drive improvements in the health of communities. Accordingly, the program will recruit and select applicant organizations represented by teams of three people ("IRL team"): two mid-career researchers and one community member to become IRL program fellows. IRL teams will join together as a diverse cohort of fellows that will participate in a three-year program. During this time, fellows will receive: leadership training; opportunities to learn and apply cutting-edge research methods; expert mentoring; networking opportunities; and both fellowship and research funds. With these experiences, IRL fellows will be better-equipped to effect change and become the next generation of leaders in population health and health equity research.

- **URL:** *https://www.rwjf.org/en/how-we-work/grants-explorer/funding-opportunities.html*

NIH Support for Conferences and Scientific Meetings (Parent R13 Clinical Trial Not Allowed)
National Institutes of Health (NIH)
Due Date: 4/12/2018, 8/12/2018, 12/12/2018 (Standard NIH due dates apply)

The purpose of the NIH Research Conference Grant (R13) is to support high quality conferences that are relevant to the public health and to the scientific mission of the participating Institutes and Centers. **PA-18-648**

- **URL:** *https://grants.nih.gov/grants/guide/pa-files/PA-18-648.html*

Alternatives Research Grant Program
Alternatives Research and Development Foundation (ARDF)
Due Date: 5/1/2018

The mission of the Alternatives Research & Development Foundation (ARDF) is to fund and promote the development, validation, and adoption of non-animal methods in biomedical research, product testing, and education. The Foundation, a U.S. leader in the funding and promotion of alternatives to the use of laboratory animals in research, testing, and education, is currently soliciting research proposals for its 2016 Alternatives Research Grant Program. For over 20 years, this innovative program has created opportunities for scientists who have interest and expertise in alternatives research.

- **URL:** *http://www.ardf-online.org/*

Shared Instrumentation Grant (SIG) Program (S10 Clinical Trial Not Allowed)
National Institutes of Health (NIH) - Office of Research Infrastructure Programs (ORIP)
Due Date: 5/31/2018

The Shared Instrument Grant (SIG) Program encourages applications from groups of NIH-supported investigators to purchase or upgrade a single item of expensive, specialized, commercially available instruments or integrated systems. Types of instruments supported include, but are not limited to: X-ray diffractometers, mass and nuclear magnetic resonance (NMR) spectrometers, DNA and protein sequencers, biosensors, electron and light microscopes, cell sorters, and biomedical imagers. **PAR-18-600**

- **URL:** *https://grants.nih.gov/grants/guide/pa-files/PAR-18-600.html*

MULTIPLE DISCIPLINES

Smart and Connected Health (SCH)
National Science Foundation (NSF)
Due Date: 5/22/2018, 12/11/2018

The goal of the interagency Smart and Connected Health (SCH): Connecting Data, People and Systems program is to accelerate the development and integration of innovative computer and information science and engineering approaches to support the transformation of health and medicine. Approaches that partner technology-based solutions with biomedical and biobehavioral research are supported by multiple agencies of the federal government including the National Science Foundation (NSF) and the National Institutes of Health (NIH). The purpose of this program is to develop next-generation multidisciplinary science that encourages existing and new research communities to focus on breakthrough ideas in a variety of areas of value to health, such as networking, pervasive computing, advanced analytics, sensor integration, privacy and security, modeling of socio-behavioral and

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

22

cognitive processes and system and process modeling. Effective solutions must satisfy a multitude of constraints arising from clinical/medical needs, barriers to change, heterogeneity of data, semantic mismatch and limitations of current cyberphysical systems and an aging population. Such solutions demand multidisciplinary teams ready to address issues ranging from fundamental science and engineering to medical and public health practice.

The SCH program:
- takes a coordinated approach that balances theory with evidenced-based analysis and systematic advances with revolutionary breakthroughs;
- seeks cross-disciplinary collaborative research that will lead to new fundamental insights; and
- encourages empirical validation of new concepts through research prototypes, ranging from specific components to entire systems.

The purpose of this interagency program solicitation is to support the development of technologies, analytics and models supporting next generation health and medical research through high-risk, high-reward advances in computer and information science, engineering and technology, behavior and cognition. Collaborations between academic, industry, and other organizations are strongly encouraged to establish better linkages between fundamental science, medicine and healthcare practice and technology development, deployment and use. This solicitation is aligned with national reports calling for new partnerships to facilitate major changes in health and medicine, as well as healthcare delivery and is aimed at the fundamental research to enable these changes. Realizing the promise of disruptive transformation in health, medicine and/or healthcare will require well-coordinated, multi-disciplinary approaches that draw from the computer and information sciences, engineering, social, behavioral, cognitive and economic sciences, biomedical and health research. Only Integrative proposals (INT) spanning ;up to 4 years with multi-disciplinary teams will be considered in response to this solicitation. **NSF 18-541**

- **URL:** *https://www.nsf.gov/pubs/2018/nsf18541/nsf18541.htm*

A bi-weekly publication of the Office of Research and Technology Transfer. For additional information or to request a customized funding opportunity search, please contact *funding@wichita.edu*.

23

NEW FACULTY/INVESTIGATOR

Early Career Faculty (ECF)
National Aeronautics and Space Administration (NASA) - Space Technology Mission Directorate
Due Date: Notice of Intent 2/28/2018; Applications 3/28/2018

ECF is focused on supporting outstanding faculty researchers early in their careers as they conduct space technology research of high priority to NASA's Mission Directorates. This specific Appendix is titled Early Career Faculty (ECF) and is one of three calls for proposals from STMD's Space Technology Research Grants (STRG) Program. Early Stage Innovations (ESI) appears as Appendix B2 under the SpaceTech-REDDI NRA, and the NASA Space Technology Research Fellowships (NSTRF) is a separate solicitation. This Appendix seeks proposals on specific space technologies that are currently at low Technology Readiness Levels (TRL). Investment in innovative low-TRL research increases knowledge and capabilities in response to new questions and requirements, stimulates innovation, and allows more creative solutions to problems constrained by schedule and budget. Moreover, it is investment in fundamental research activities that has historically benefited the Nation on a broader basis, generating new industries and spin-off applications. **80HQTR18NOA01-18ECF-B1**

- **URL:** *https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId={9924F083-213D-6F27-D07C-7CE49399F5FD}&path=open*

SOCIAL & BEHAVIORAL SCIENCES

Research and Evaluation on Drugs and Crime
U.S. Dept. of Justice (DOJ) - Office of Justice Programs (OJP) - National Institute of Justice (NIJ)
Due Date: 4/25/2018

NIJ's drugs and crime research portfolio promotes cost-efficient law enforcement, court, and corrections responses to illegal drug markets (including diversion of legal drugs) and criminal behavior related to illicit drug use. This FY2018 solicitation seeks investigator-initiated proposals to conduct applied research on evidence-based tools, protocols, and policies for State, local and tribal jurisdictions. The two drug priorities are: 1) opioid-related criminal investigation, prosecution, drug intelligence, and community surveillance; and 2) illegal marijuana markets and drug-related violent crime. Opioid research proposals should address narcotics law enforcement, forensic science, and/or medicolegal death investigations; and opioids include heroin, fentanyl, diverted pharmaceuticals, synthetic drugs, and analogues. **NIJ-2018-13682**

- **URL:** *https://www.grants.gov/custom/viewOppDetails.jsp?oppId=300613*

Research Grants
William T. Grant Foundation
Due Date: Letters of Inquiry 5/2/2018, 8/1/2018

The William T. Grant Foundation supports high-quality research that is relevant to policies and practices that affect the lives of young people ages 5 to 25 in the United States.

We fund research that increases understanding in one of our two focus areas:
- programs, policies, and practices that reduce inequality in youth outcomes, and
- strategies to improve the use of research evidence in ways that benefit youth.

We seek research that builds stronger theory and empirical evidence in these two areas. We intend for the research we support to inform change. While we do not expect that any one study will create that change, the research should contribute to a body of useful knowledge to improve the lives of young people.

- **URL:** *http://wtgrantfoundation.org/grants/research-grants*