

Funding Bulletin

August 26th, 2016 (Vol. 3, No. 23)

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.

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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/>

OFFICE OF RESEARCH WORKSHOPS

For more information contact Jana Henderson at jana.henderson@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	Sept. 12	9:30 – 11:00 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>
Award Management: Keeping Your Award on Track to the Final Report	Sept. 21	2:30 – 4:00 p.m.	405 Jardine	This workshop will cover grant set-up, reporting requirements, research payroll, internal and external grant period extensions, and making budget changes. Presenter: Amy Delgado, Associate Director of Post-Award. RSVP through WSU My Training Portal.
Research Compliance Open Lab	Sept. 21	9:00 – 11:00 a.m.	2015 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	Sept. 22	2:30 – 4:00 p.m.	409E Jardine	The Office of Research will be holding Open Labs this fall for Faculty interested in using PIVOT as well as answering questions regarding their existing account. <i>This is a come and go lab with no registration required.</i>
Compliance: Export, Conflict of Interest	Oct. 5	2:30 – 4:00 p.m.	409E Jardine	Conflict of Interest Policies, Export 101 RSVP through WSU My Training Portal.
Technology Transfer & Intellectual Property: WSU Ventures	Oct. 14	1:00 – 2:30 p.m.	405 Jardine	Everyone has intellectual property – what do I own, what does the University own, how can I protect it? RSVP through WSU My Training Portal.
Resources for Researchers	Oct. 26	2:30 – 4:00 p.m.	405 Jardine	Come hear about the WSU resources available to you as a researcher: T3, Ennovar and many others! RSVP through WSU My Training Portal.

NOTICES

National Aeronautics and Space Administration (NASA) and the Air Force Office of Scientific Research (AFOSR)

National Aeronautics and Space Administration (NASA) and the Air Force Office of Scientific Research (AFOSR) NASA and AFOSR are launching a pilot program whereby grant proposers can partner with one or more NASA researchers and/or propose to use a specific NASA wind tunnel. The use of the wind tunnels would represent minimal extra cost to the proposal as normal test operations will be conducted at no charge. The grant proposers would engage NASA during proposal development to obtain a cost estimate for the test activity envisioned. If awarded, the grant proposer would enter into a Space Act Agreement with NASA as the partnering mechanism. The specific wind tunnels available for this partnership are the Langley Research Center Aerothermodynamics Laboratory. Information on the wind tunnel facilities can be found on the following website: <http://researchdirectoratelarc.nasa.gov/langleyaerothermodynamic-laboratory-lal/>

For more details email both ivett.leyva@us.af.mil and kenneth.e.rock@nasa.gov.

INTERNAL OPPORTUNITIES

Multidisciplinary Research Project Awards (MURPA)

Wichita State University

Due Date: 10/7/2016

Applications for Multidisciplinary Research Project Awards (MURPA) are due to the Office of Research and Technology Transfer by Oct. 7 at 5:00 p.m. for grant period, choice of Jan 1 – June 15, 2017 OR May 1 – Aug 31, 2017. Multidisciplinary Research Projects are projects that involve two or more investigators from different disciplines that focus different perspectives and capabilities on complex problems that intersect established areas of study. They are intended as seed money to develop pilot data for proposals to be submitted to governmental agencies, foundations or industries. Application and instructions are available on the research website and may be submitted electronically to proposals@wichita.edu or Campus Box 7.

For more information, visit

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

University Research/Creative Projects (URCA) – Round Two

Wichita State University

Due Date: 10/7/2016

Applications for Round 2 of the University Research/Creative Projects (URCA) are due to the Office of Research and Technology Transfer by Oct. 7 at 5:00 p.m. for grant period Dec 1, 2016 – Dec 31, 2017. URCA's are to retool or reestablish productive research/creative projects agenda. In areas where external funding is available, the URCA may be used as seed money to develop pilot data. Areas where access to external sources is limited may receive special consideration. Grants may be for up to \$4,500 awarded in two separate competitions: New - tenure-eligible faculty in their first or second year of probation to initiate research/creative projects, and Established - tenured faculty or probationary faculty in their 3rd (or more) year of probation to retool or re-establish productive research/creative agenda. Application and instructions are available on the research website and may be submitted electronically to proposals@wichita.edu or Campus Box 7.

For more information, visit

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

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 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 *eight* open limited submission competitions:**

(1) National Action Partnership to Promote Safe Sleep Program

Health Resources and Services Administration (HRSA)

Due Date: Internal 9/16/2016; Application 10/27/2016

This announcement solicits applications for the National Action Partnership to Promote Safe Sleep (NAPSS) Program. The goal of this program is to make safe infant sleep and breastfeeding a national norm. To reduce the risk of sudden unexpected infant death (SUID), the American Academy of

Pediatrics (AAP)¹ has issued a Policy Statement describing a safe infant sleep environment, including a recommendation for room-sharing without bed-sharing. The AAP also recommends breastfeeding for the first six months of life as additionally protective against SUID. Researchers have studied the dynamics involved in the decision making of mothers regarding how they chose to feed their babies and where their babies sleep. A recent study concluded that women with a strong motivation to breastfeed frequently bed share with their infants. To determine the prevalence of breastfeeding and sleep location practices among mothers in the U.S., researchers conducted surveys and an analysis of factors associated with these behaviors. The investigators concluded that many mothers have not adopted the AAP recommendations, and that providing advice to room share without bed sharing did not negatively affect the likelihood of breastfeeding among these mothers. NAPPSS aims to increase the adoption of safe infant sleep behavior including breastfeeding among infant caregivers by activating champions of these protective behaviors within systems that intersect with families at risk. Examples of systems that serve infant caregivers include, but are not limited to, home visiting programs, food and nutrition programs, community-based organizations such as Healthy Start, housing assistance authorities, child care, hospitals, community health clinics, as well as health care provider networks such as pediatricians, family physicians and obstetricians. This program endeavors to change individual behavior on a national scale with a multifaceted approach that ensures common messaging through engagement of multiple stakeholders, and support of organizations within service delivery systems that intersect with infant caregivers. **HRSA-17-094 Multiple applications from an organization are not allowable.**

The NAPPSS program strives to achieve the following impacts:

- An increase in the proportion of infants placed to sleep on their backs in a safe sleep environment that follows the AAP recommendations
- An increase in the proportion of infants who are ever breastfed
- An increase in the proportion of infants who continue to be breastfed at six months
- An increase in conversations between providers and infant caregivers about evidence-based feeding and sleeping practices, thereby increasing informed infant care decision-making by families
- URL: <http://www.grants.gov/view-opportunity.html?oppld=287720>

(2) Advancing Digitization of Biodiversity Collections (ADBC)

National Science Foundation (NSF)

Due Date: Internal 9/16/2016; Full Proposal 10/14/2016

This program seeks to enhance and expand the national resource of digital data documenting existing vouchered biological and paleontological collections and to advance scientific knowledge by improving access to digitized information (including images) residing in vouchered scientific collections across the

United States. The information associated with various collections of organisms, such as geographic, paleogeographic and stratigraphic distribution, environmental habitat data, phenology, information about associated organisms, collector field notes, and tissues and molecular data extracted from the specimens, is a rich resource providing the baseline from which to further biodiversity research and provide critical information about existing gaps in our knowledge of life on earth. The national resource is structured at three levels: a central coordinating organization, a series of thematic networks based on an important research theme, and the physical collections. The national resource builds upon a sizable existing national investment in curation of the physical objects in scientific collections and contributes vitally to scientific research and technology interests in the United States. It will become an invaluable tool in understanding contemporary biological issues and challenges. **Only one TCN proposal may be submitted by any one organization as the lead organization. Organizations may be involved in more than one collaborative effort as a non-lead proposal. NSF 15-576**

- URL: <http://www.nsf.gov/pubs/2015/nsf15576/nsf15576.htm>

(3) Family Leadership in Language and Learning (FL3)

Health Resources and Services Administration (HRSA)

Due Date: Internal 9/16/2016; Application 10/14/2016

This announcement solicits applications for the Family Leadership in Language and Learning Program (FL3) for the Universal Newborn Hearing Screening and Intervention Program. The purpose of this program is to support the development of statewide newborn and infant hearing screening, evaluation, diagnosis, and intervention programs and systems by promoting the inclusion of families, parents, and caregivers of deaf or hard of hearing infants/children identified through the Universal Newborn Hearing Screening Program as leaders in the statewide Early Hearing Detection and Intervention (EHDI) system and thereby to support such children's language, literacy, and social-emotional development. This purpose will be achieved by focusing efforts on: 1) supporting state/territory organizations that provide support to families of deaf or hard of hearing children; 2) coordinating with the HRSA-supported National Technical Resource Center for Newborn Hearing Screening and Intervention and state/territory EHDI programs in improving family engagement, partnership, and leadership within the EHDI system, and 3) collaborating with established Deaf Mentor programs for families. The goal of the program is to ensure that statewide EHDI systems incorporate certain elements that support the families, parents and caregivers of deaf or hard of hearing infants/children identified through newborn hearing screening in optimizing language, literacy, and social-emotional development. **HRSA-17-061**
Multiple applications from an organization are not allowable.

- URL: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=287498>

(4) Partnerships for Innovation: Building Innovation Capacity (PFI: BIC)

National Science Foundation (NSF)

Due Date: Internal 9/16/2016; Letters of Intent 10/14/2016; Full Proposals 11/16/2016

The Partnerships for Innovation: Building Innovation Capacity (PFI:BIC) program supports academe-industry partnerships which are led by an interdisciplinary academic research team collaborating with a least one industry partner. In this program, there is a heavy emphasis on the quality, composition, and participation of the partners, including their appropriate contributions. These partnerships focus on the integration of technologies into a specified human-centered service system with the potential to achieve transformational benefits, satisfying a real need by making an existing service system smart(er) or by spurring the creation of an entirely new smart service system. The selected service system should function as a test bed. **Service systems** are socio-technical configurations of people, technologies, organizations, and information [1] designed to create value by fulfilling the needs of those participating in the system. A **"smart" service system** is a system that amplifies or augments human capabilities [2] to identify, learn, adapt, monitor and make decisions. The system utilizes data received, transmitted, or processed in a timely manner, thus improving its response to future situations. These capabilities are the result of the incorporation of technologies for sensing, actuation, coordination, communication, control, etc. PFI:BIC funds research partnerships working on projects that operate in the post-fundamental/translational space; the proposers must be mindful of the state of the art and the competitive landscape. However, a clear path to commercialization does not need to be a central part of this proposal. These projects require additional effort to integrate the technology into a real service system, incorporating human factors considerations to assure the system's efficacy. The research tasks in turn might spawn additional discoveries inspired by this interaction of humans with the technology. Examples of partnership activities that drive sustained innovation include the targeted allocation of resources such as capital, time, and facilities; and sharing of knowledge in a cross-organizational and interdisciplinary context. The research tasks of the project must demonstrate a highly collaborative research plan involving participation of the primary industrial partner(s) as well as of any other primary partners with the academic researcher during the life of the award. NSF recognizes that interdisciplinary collaboration (involving many areas of expertise beyond just those related to the technology) is needed to achieve successful integration into a smart service system. The research components to be included in this project are: 1) engineered system design and integration; 2) computing, sensing, and information technologies; and 3) human factors, behavioral sciences, and cognitive engineering. The proposer must show how these components will be integrated in the context of the project as part of the research plan in the Project Description. **NSF 16-591 Up to two letters of intent (LOIs) per institution can be submitted. Academic institutions are limited to participation on two (2) proposals as a lead institution preferably involving distinct application areas.**

- URL: <http://www.nsf.gov/pubs/2016/nsf16591/nsf16591.htm>

(5) Faculty Grants - Course and Program Grants

Lemelson Foundation - VentureWell

Due Date: Internal 9/30/2016; Applications 11/9/2016

VentureWell awards faculty grants to colleges and universities for the purpose of strengthening existing curricular programs and/or building new programs in invention, innovation, and entrepreneurship. Through these grant funds, VentureWell supports creative pedagogical approaches that generate student teams (E-Teams) working on technology solutions to real-world problems. Proposals may include plans for creating or improving an individual course, course sequence, minor, major, certificate program, incubator, accelerator, and other co- and extra-curricular programs. Course & Program grants support courses or programs at the intersection of invention, innovation, and entrepreneurship that lead to the creation and support of E-Teams. **Focus areas include but are not limited to:**

- General (technology-based) entrepreneurship
- New materials/clean tech/green energy
- Biomedical and healthcare
- Information technology

Innovation is a skill that can and should be taught in universities. With their faculty grants, VentureWell challenges faculty to pioneer new ways to engage their students in the entrepreneurial process. The grants:

- Support new (or help modify existing) courses and programs that lead to the formation of E-Teams - multidisciplinary groups of students, faculty, and mentors working together to bring inventions to market.
- Help students learn by doing-gaining the entrepreneurial skills they need by actually forming a team and trying to make both the technology and business model work.
- Have a strong likelihood of continuing beyond the grant period and becoming part of a campus culture of innovation. To date, 92% of Faculty Grants funded courses and programs report that they are ongoing.

Limit 2 proposals per institution. If more than two are received, only the two received earliest will be reviewed.

- URL: <http://venturewell.org/facultygrants/>

(6) Major Research Instrumentation Program (MRI): Instrument Acquisition or Development

National Science Foundation (NSF)

Due Date: Internal 9/30/2016; Full Proposals 1/11/2017

The Major Research Instrumentation Program (MRI) serves to increase access to shared scientific and engineering instruments for research and research training in our Nation's institutions of higher education, not-for-profit museums, science centers and scientific/engineering research organizations. The program provides organizations with opportunities to acquire major instrumentation that supports the research and research training goals of the organization and that may be used by other researchers regionally or nationally. Each MRI proposal may request support for the acquisition (Track 1) or development (Track 2) of a single research instrument for shared inter- and/or intra-organizational use. Development efforts that leverage the strengths of private sector partners to build instrument development capacity at MRI submission-eligible organizations are encouraged. The MRI program assists with the acquisition or development of a shared research instrument that is, in general, too costly and/or not appropriate for support through other NSF programs. The program does not fund research projects or provide ongoing support for operating or maintaining facilities or centers. The instrument acquired or developed is expected to be operational for regular research use by the end of the award period. For the purposes of the MRI program, a proposal must be for either acquisition (Track 1) or development (Track 2) of a single, well-integrated instrument. The MRI program does not support the acquisition or development of a suite of instruments to outfit research laboratories or facilities, or that can be used to conduct independent research activities simultaneously. **NSF 15-504 *The limit on number of proposals per organization is three as described below. If three proposals are submitted, at least one of the proposals must be for instrument development (i.e., no more than two proposals may be for instrument acquisition).***

- URL: <http://www.nsf.gov/pubs/2015/nsf15504/nsf15504.htm>

(7) BD2K Research Education Curriculum Development: Data Science Overview for Biomedical Scientists (R25)

National Institutes of Health (NIH)

Due Date: Internal 9/30/2016; Application 12/7/2016

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this BD2K R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nations biomedical, behavioral and clinical research needs. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on ***Curriculum or Methods Development*** in Big Data Science to augment current institutional curricula for the training of predoctoral level biomedical scientists and provide concentrated instruction in the tools, approaches and quantitative analysis

concepts in data science. To facilitate the integration of data science into biomedical curricula nationally, this FOA seeks to support a cohort of institutions that will work collaboratively and collectively to produce curricular materials that are findable, accessible, interoperable, and reusable (FAIR). **RFA-ES-16-011 Only one application per institution is allowed.**

- URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-16-011.html>

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

National Science Foundation (NSF)

Due Date: Internal 1/13/2017; Full Proposals 4/20/2017

A well-educated science, technology, engineering, and mathematics (STEM) workforce is a significant contributor to maintaining the competitiveness of the U.S. in the global economy. The National Science Foundation (NSF) Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program addresses the need for a high quality STEM workforce in STEM disciplines supported by the program and for the increased success of low-income academically talented students with demonstrated financial need who are pursuing associate, baccalaureate, or graduate degrees in science, technology, engineering, and mathematics (STEM) [6], [16]. Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to Institutions of Higher Education (IHEs) to fund scholarships and to advance the adaptation, implementation, and study of effective evidence-based curricular and co-curricular activities that support recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. The S-STEM program encourages collaborations among different types of partners: Partnerships among different types of institutions; collaborations of STEM faculty and institutional, educational, and social science researchers; and partnerships among institutions of higher education and local business and industry, if appropriate. The program seeks: 1) to increase the number of low-income academically talented students with demonstrated financial need obtaining degrees in STEM and entering the workforce or graduate programs in STEM; 2) to improve the education of future scientists, engineers, and technicians, with a focus on academically talented low-income students; and 3) to generate knowledge to advance understanding of how factors or evidence-based curricular and co-curricular activities affect the success, retention, transfer, academic/career pathways, and graduation in STEM of low-income students. ***An Institution may submit one proposal (either as a single institution or as subawardee or a member of a Collaborative Research project) from each constituent school or college that awards degrees in an eligible field.*** NSF 16-540

- URL: <http://www.nsf.gov/pubs/2016/nsf16540/nsf16540.htm>

GENERAL

Franklin Research Grants

American Philosophical Society (APS)

Due Date: 10/1/2016 (for a January 2017 decision), 12/1/2016 (for a March 2017 decision)

Since 1933 the APS has awarded small grants to scholars in order to support the cost of research leading to publication in all areas of knowledge. The Franklin program is particularly designed to help meet the costs of travel to libraries and archives for research purposes; the purchase of microfilm, photocopies, or equivalent research materials; the costs associated with fieldwork; or laboratory research expenses. Franklin grants are made for noncommercial research. They are not intended to meet the expenses of attending conferences or the costs of publication.

- URL: <https://amphilsoc.org/grants/franklin>

AAAS Science & Technology Policy Fellowships

American Association for the Advancement of Science (AAAS)

Due Date: 11/1/2016

The AAAS Science & Technology Policy Fellowships (STPF) provide opportunities for professional development and public service. AAAS, as part of its mandate to advance science and serve society, operates the S&T Policy Fellowship Program. The aim is to foster scientifically informed, evidence-based policy and practice by involving scientists and engineers from a broad range of disciplines, backgrounds and career stages, and to build leadership for a strong S&T enterprise that benefits all people. Fellows use their knowledge and analytical skills while learning first-hand about policymaking and implementation at the federal level.

AAAS offers fellowships in seven programmatic areas. Specific host offices and assignments vary from year to year.

1. Congressional
2. Diplomacy, Security & Development Program
3. Energy, Environment, Agriculture Program
4. Health, Education, & Human Services Program
5. Big Data & Analytics
6. Judicial Branch
7. Roger Revelle Fellowship in Global Stewardship

- URL: <https://www.aaas.org/program/science-technology-policy-fellowships>

American Fellowships: Summer/Short-Term Research Publication Grants

American Association of University Women (AAUW)

Due Date: 11/15/2016

These grants provide support to women college and university faculty to prepare research manuscripts for publication and to women independent researchers to prepare research for publication. Preference will be given to applicants whose work supports the vision of AAUW: to break through educational and economic barriers so that all women have a fair chance. Time must be available for eight consecutive weeks of final writing and editing in response to issues raised in critical reviews. The grants are designed to assist the candidate in obtaining tenure and other promotions. The grants are not for preliminary research. Activities undertaken during the grant period can include drafting, editing, or modifying manuscripts; replicating research components; responding to issues raised through critical review; and other initiatives to increase the likelihood of publication. The publication must be original and cannot be co-authored. Distance learning/online programs: American Fellowships support traditional classroom-based courses of study. This fellowship program does not provide funding for distance learning programs or for degrees heavily dependent on distance learning components.

- URL: <http://www.aauw.org/what-we-do/educational-funding-and-awards/american-fellowships/af-research-publication-grants-application/>

Core Funding Areas

John Templeton Foundation

Due Date: Online Funding Inquiry 11/30/2016 (Small Grant Cycle 4)

The Foundation is currently accepting Online Funding Inquiries for its Core Funding Areas. In the charter establishing his Foundation, the late Sir John Templeton set out his philanthropic intentions under several broad headings. These Core Funding Areas continue to guide the Foundation's grantmaking as it works to find world-class researchers and project leaders to share in its pursuit of Sir John's dynamic, contrarian, forward-looking vision. A number of topics - including creativity, freedom, gratitude, love, and purpose - can be found under more than one Core Funding Area. The Foundation welcomes proposals that bring together these overlapping elements, especially by combining the tools and approaches of different disciplines. **Core Funding Areas:**

1. Science & the Big Questions
2. Character Development
3. Freedom & Free Enterprise
4. Exceptional Cognitive Talent & Genius
5. Genetics

- URL: <https://www.templeton.org/what-we-fund/our-grantmaking-process>

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.

Community Grant Program

Walmart Foundation

Due Date: 12/31/2016

Walmart believes in operating globally and giving back locally - creating impact in the neighborhoods where its associates live and work. Through the Community Grant Program, the associates are proud to support the needs of their communities by providing grants to local organizations. Funds must benefit the facility's service area: potential grantees should be nonprofit organizations with programs that benefit communities within the service area of the Walmart store, Sam's Club or Logistics facility from which they are requesting funds. **Walmart and the Walmart Foundation have identified four core areas of giving:**

- Hunger Relief & Healthy Eating
- Sustainability
- Women's Economic Empowerment and Opportunity

The proposed use of the grant should fit within one of these areas of giving. Primary consideration for the Community Grant program is to support local organizations with programs that align with Walmart and the Foundation's areas of giving. However, programs that do not align with these areas may also be given consideration. These include programs that are geared toward strengthening the local communities, for example: local organizations providing health and dental screenings, support for local police and fire departments and local school-based initiatives.

- URL: <http://giving.walmart.com/apply-for-grants/local-giving-guidelines>

ARTS & HUMANITIES

ACLS Collaborative Research Fellowships

American Council of Learned Societies (ACLS)

Due Date: 9/28/2016

ACLS invites applications for the ninth annual competition for ACLS Collaborative Research Fellowships, which support small teams of two or more scholars collaborating intensively on a single, substantive project in the humanities and related social sciences. The goal of the project should be a tangible research product (such as joint print or web publications) for which at least two collaborators will take

credit. The program is funded by a generous grant from The Andrew W. Mellon Foundation. For the purpose of these competitions, the humanities and related social sciences include but are not limited to American studies; anthropology; archaeology; art and architectural history; classics; economics; film; geography; history; languages and literatures; legal studies; linguistics; musicology; philosophy; political science; psychology (excluding clinical or counseling psychology); religious studies; rhetoric, communication, and media studies; sociology; and theater, dance, and performance studies. Proposals in the social science fields listed above are eligible only if they employ predominantly humanistic approaches (e.g., economic history, law and literature, political philosophy, history of psychology). Proposals in interdisciplinary and cross-disciplinary studies are welcome, as are proposals focused on any geographic region or on any cultural or linguistic group.

- URL: <http://www.acls.org/programs/collaborative/>

ACLS Fellowship Program

American Council of Learned Societies (ACLS)

Due Date: 9/28/2016

The ACLS Fellowship program invites research applications in all disciplines of the humanities and related social sciences. The ultimate goal of the project should be a major piece of scholarly work by the applicant. ACLS does not fund creative work (e.g., novels or films), textbooks, straightforward translation, or pedagogical projects. Institutions and individuals contribute to the ACLS Fellowship program and its endowment, including The Andrew W. Mellon Foundation, the National Endowment for the Humanities, the Council's Research University Consortium and college and university Associates, former fellows, and individual friends of ACLS. ACLS is fortunate to have special funds available to support research in particular areas, with fellows designated from among successful applicants: the Oscar Handlin Fund supports archival research in US history; the Frederic Wakeman Fund aids research in modern Chinese history; and the Donald Munro Fund is dedicated to work that exhibits high quality in sinology and in critical analysis of Chinese philosophical traditions and ethical systems. For the purpose of these competitions, the humanities and related social sciences include but are not limited to American studies; anthropology; archaeology; art and architectural history; classics; economics; film; geography; history; languages and literatures; legal studies; linguistics; musicology; philosophy; political science; psychology (excluding clinical or counseling psychology); religious studies; rhetoric, communication, and media studies; sociology; and theater, dance, and performance studies. Proposals in the social science fields listed above are eligible only if they employ predominantly humanistic approaches (e.g., economic history, law and literature, political philosophy, history of psychology). Proposals in interdisciplinary and cross-disciplinary studies are welcome, as are proposals focused on any geographic region or on any cultural or linguistic group.

- URL: <http://www.acls.org/programs/acls/>

ACLS/Frederick Burkhardt Residential Fellowships for Recently Tenured Scholars

Newberry Library

Due Date: 9/28/2016

These fellowships support long-term, unusually ambitious projects in the humanities and related social sciences. The ultimate goal of the project should be a major piece of scholarly work by the applicant. ACLS does not fund creative work (e.g., novels or films), textbooks, straightforward translation, or pedagogical projects. The Burkhardt program offers two sets of opportunities for recently tenured humanists.

a. Fellowships designated specifically for liberal arts college faculty

One of the strengths of American higher education is the diversity of institutions that interact but remain distinct. In this educational ecosystem, liberal arts colleges serve as strongholds of the humanities by placing those fields at the core of their curricula. To support recently tenured faculty at these institutions, ACLS has designated a set of Burkhardt Fellowships specifically for them, with awards designed to support ambitious research in the humanities and encourage intellectual networks across types of institutions. **Objectives are:**

1. To encourage more adventurous, more wide-ranging, and longer-term patterns of research than are current in the humanities and related social sciences;
2. To provide a small number of outstanding scholars at liberal arts colleges time away from other responsibilities to pursue their research and a choice as to what communities of scholars and resources will best advance their scholarship;
3. To help create sustained scholarly conversations and durable networks among faculty at diverse types of institutions;
4. To sustain the scholarly momentum of emerging intellectual leaders in fields of the humanities and related social sciences.

b. Fellowships at a participating research center

These Burkhardt Fellowships are intended to support an academic year (nine months) of residence at any one of the 13 residential research centers participating in the program. Such an environment, beyond providing free time, encourages exchanges across disciplinary lines that can be especially helpful to deepening and expanding the significance of projects in the humanities and related social sciences. **Objectives are:**

1. To encourage more adventurous, more wide-ranging, and longer-term patterns of research than are current in the humanities and related social sciences;
2. To link a small number of outstanding scholars and their projects to one of a limited number of residential study centers with an established record of advancing multidisciplinary scholarship;
3. To sustain the scholarly momentum of the emerging intellectual leaders in fields of the humanities and related social sciences.

- URL: <http://www.newberry.org/long-term-fellowships>

History of Art Grants Program

Kress Foundation, Samuel H.

Due Date: 10/1/2016, 1/15/2017, 4/1/2017

The History of Art program supports scholarly projects that will enhance the appreciation and understanding of European art and architecture. Grants are awarded to projects that create and disseminate specialized knowledge, including archival projects, development and dissemination of scholarly databases, documentation projects, museum exhibitions and publications, photographic campaigns, scholarly catalogues and publications, and technical and scientific studies. Grants are also awarded for activities that permit art historians to share their expertise through international exchanges, professional meetings, conferences, symposia, consultations, the presentation of research, and other professional events.

- URL: http://www.kressfoundation.org/grants/history_of_art/

Getty Scholar Grants

Getty Foundation

Due Date: 10/3/2016

Getty Scholar Grants are for established scholars, artists, or writers who have attained distinction in their fields. Recipients are in residence at the Getty Research Institute or Getty Villa, where they pursue their own projects free from academic obligations, make use of Getty collections, join their colleagues in a weekly meeting devoted to an annual research theme, and participate in the intellectual life of the Getty. Applications are accepted in the arts, humanities, or social sciences. Projects connect to the Getty Research Institute's annual theme.

The 2017-2018 Themes are Iconoclasm and Vandalism (Research Institute) and the Classical World in Context: Persia (Getty Villa). Iconoclasm and Vandalism (Research Institute) 2017/2018

Iconoclasm raises contentious questions that transcend cultural and temporal boundaries. It can be understood as vandalism, destruction, or a means of repression, all of which fundamentally put culture at risk. However, iconoclasm can also be a form of protest or a vehicle for creative expression. Iconoclasm is transformative, creating entirely new objects or meanings through alterations to existing artworks. Charged with symbolism, these remains testify to a history of reception, offering clues about the life and afterlife of an object. To a certain extent, all radical changes in cultural production can be described as iconoclastic. Applicants are encouraged to adopt a broad approach to the theme by addressing topics such as religious and political iconoclasm, protection of cultural heritage, use of spolia, damnatio memoriae, street art, graffiti, performance art, or activism.

The Classical World in Context: Persia (Villa) 2017/2018

The Getty Scholars Program at the Villa for the 2017/2018 and 2018/2019 terms will address the political, intellectual, religious, and artistic relations between Persia, Greece, and Rome from the ninth century BC to AD 651. The Greeks regarded Media in western Iran as one of the great kingdoms of the East, but it was the Persian Empire, forged by the Achaemenid Dynasty (sixth to fourth century BC), that became their principal adversary. Reaching from the borders of Greece to India, the Persian Empire was viewed by the Greeks as a vastly wealthy and powerful rival and often as an existential threat. When the Macedonian king Alexander the Great finally defeated the Persians in 331 BC, Greek culture spread throughout the Near East, but native dynasties - first the Parthian (247 BC-AD 224) and then the Sasanian (AD 224-651) - soon reestablished themselves. The rise of the Roman Empire as a world power quickly brought it, too, into conflict with Persia, despite the common trade that flowed through their territories. The 2017/2018 scholar year is the first of two that will be devoted to this theme. Priority will be given to research projects that are cross-cultural and interdisciplinary, and that utilize a wide range of archaeological, textual, and other evidence.

- URL: http://www.getty.edu/foundation/initiatives/residential/getty_scholars.html

ArtsLink Residencies

CEC ArtsLink

Due Date: 10/15/2016 (Performing Arts & Literature)

The program is designed to create opportunities for artists and communities across the US to share artistic practices with artists and arts managers from abroad and engage in dialogue that advances understanding across cultures.

ArtsLink Residencies allows artists and arts managers from eligible countries to:

- Pursue artistic and/or professional collaborations that will enrich and enhance their work
- Share ideas and expertise with US artists and organizations, with residents of the broader host community, and with colleagues from the region who participate in the program
- Expand knowledge of arts practice and deepen understanding of cultural life in the United States
- Create new work that draws inspiration from interaction with artists and arts professionals within the United States host community
- Expand professional arts management skills through work with United States organizations

- URL: http://www.cecartslink.org/grants/artslink_residencies/

Senior Fellowship Program

National Gallery of Art (NGA) - Center for Advanced Study in the Visual Arts (CASVA)

Due Date: 10/15/2016

These fellowships are for full-time research, and scholars are expected to reside in Washington and to participate in the activities of the Center throughout the fellowship period. Lectures, colloquia, and informal discussions complement the fellowship program. Fellows have access to the notable resources represented by the art collections, the library, and the image collections of the National Gallery of Art, as well as to the Library of Congress and other specialized research libraries and collections in the Washington area.

Fields of Study

The Paul Mellon and Ailsa Mellon Bruce Senior Fellowships are intended to support research in the history, theory, and criticism of the visual arts (painting, sculpture, architecture, landscape architecture, urbanism, prints and drawings, film, photography, decorative arts, industrial design, and other arts) of any geographical area and of any period. The Samuel H. Kress Senior Fellowships are intended to support research on European art before the early 19th century. The William C. Seitz Senior Fellowship is primarily intended to support research on modern and contemporary art.

Senior fellowship applications are also solicited from scholars in other disciplines whose work examines artifacts or has implications for the analysis and criticism of form.

- URL: <http://www.nga.gov/content/ngaweb/research/casva/fellowships/senior-fellowships.html>

Fellowships

National Humanities Center

Due Date: 10/18/2016

The Center offers residential fellowships for advanced study in the humanities. Most of the Center's fellowships are unrestricted. Several, however, are designated for particular areas of research. These include a fellowship for a young woman in philosophy and fellowships for environmental studies, English literature, art history, Asian Studies, and theology. The Center also invites applicants from scholars in interdisciplinary fields, including African-American studies, area studies, bioethics, cultural studies, history of science and technology, film and media studies.

- URL: <http://nationalhumanitiescenter.org/become-a-fellow/>

Katrin H. Lamon Fellowship

School for Advanced Research (SAR)

Due Date: 11/7/2016

This resident fellowship is for a Native scholar working in the humanities or the social sciences. This fellowship is made possible through the generous support of the Katrin H. Lamon Endowment for Native American Art and Education.

- URL: http://sarweb.org/index.php?resident_scholar_lamon_fellowship

Weatherhead Fellowships

School for Advanced Research (SAR)

Due Date: 11/7/2016

These residential fellowships are available for scholars working in the humanities or social sciences. This fellowship is made possible through the generous support of the Weatherhead Foundation.

- URL: http://sarweb.org/index.php?resident_scholar_weatherhead_fellowship

Access to Historical Records - Archival Projects

National Archives and Records Administration (NARA)

Due Date: 12/6/2016

The National Historical Publications and Records Commission seeks projects that ensure online public discovery and use of historical records collections. All types of historical records are eligible, including documents, photographs, born-digital records, and analog audio and moving images. Projects may preserve and process historical records to:

- * Create new online Finding Aids to collections
- * Digitize historical records collections and make them freely available online

The NHPRC encourages organizations to actively engage the public in the work of the project.

ARCHIVAL-201612

- URL: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=286450>

EDUCATION

National Academy of Education/Spencer Postdoctoral Fellowship Program

National Academy of Education (NAEd)

Due Date: 11/3/2016

The program supports early career scholars working in critical areas of education research. This non-residential postdoctoral fellowship funds proposals that make significant scholarly contributions to the field of education. The program also develops the careers of its recipients through professional development activities involving NAEd members. Fellows attend three professional development retreats with other fellows and NAEd members. Proposed project must be an education research project. NAEd funds studies that examine the efficacy of curriculum and teaching methods, however, NAEd does not fund the initial development of curriculum or instructional programs. Applications will be judged on the applicant's past research record, career trajectory in education research, and the quality of the project described in the application. Applicants must have received their PhD, EdD, or equivalent research degree between January 1, 2011, and December 31, 2015.

- URL: http://www.naeducation.org/NAED_080201.htm

ENGINEERING, MATHEMATICS & PHYSICAL SCIENCES

Algebra and Number Theory

National Science Foundation (NSF)

Due Date: 10/4/2016

The Algebra and Number Theory program supports research in algebra, algebraic and arithmetic geometry, number theory, and representation theory. **PD 10-1264**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5431&org=NSF&sel_org=NSF&from=fund

Analysis

National Science Foundation (NSF)

Due Date: 10/4/2016

The Analysis Program supports basic research in that area of mathematics whose roots can be traced to the calculus of Newton and Leibniz. Given its centuries-old ties to physics, analysis has influenced developments from Newton's mechanics to quantum mechanics and from Fourier's study of heat conduction to Maxwell's equations of electromagnetism to Witten's theory of supersymmetry. More generally, research supported by Analysis provides the theoretical underpinning for the majority of applications of the mathematical sciences to other scientific disciplines. Current areas of significant activity include: nonlinear partial differential equations; dynamical systems and ergodic theory; real, complex and harmonic analysis; operator theory and algebras of operators on Hilbert space; mathematical physics; and representation theory of Lie groups/algebras. Emerging areas include random matrix theory and its ties to classical analysis, number theory, quantum mechanics, and coding theory; and development of noncommutative geometry with its applications to modeling physical phenomena. It should be stressed, however, that the underlying role of the Analysis Program is to provide support for research in mathematics at the most fundamental level. Although this is often done with the expectation that the research will generate a payoff in applications at some point down the road, the principal mission of the Program is to tend and replenish an important reservoir of mathematical knowledge, maintaining it as a dependable resource to be drawn upon by engineers, life and physical scientists, and other mathematical scientists, as need arises. **PD 16-1281**

- **URL:**http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5434&org=NSF&sel_org=NSF&from=fund

Combinatorics

National Science Foundation (NSF)

Due Date: 10/4/2016

The Combinatorics program supports research on discrete structures and includes algebraic, enumerative, existential, extremal, geometric, and probabilistic combinatorics, including graph theory. **PD 10-7970**

- **URL:**http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503570&org=NSF&sel_org=NSF&from=fund

Foundations

National Science Foundation (NSF)

Due Date: 10/4/2016

The program in Foundations supports research in mathematical logic and the foundations of mathematics, including proof theory, recursion theory, model theory, set theory, and infinitary combinatorics. **PD 10-1268**

- **URL:**http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5548&org=NSF&sel_org=NSF&from=fund

Naval Engineering Education Consortium (NEEC)

United States Department of Defense (DOD) - Department of the Navy (U.S. Navy) - Naval Sea Systems Command (NAVSEA) - Naval Surface Warfare Center (NSWC) - NSWC Indian Head

Due Date: 10/10/2016

This BAA is open only to colleges and universities. On behalf of the Naval Sea Systems Command (NAVSEA) Warfare Centers, NSWC IHEODTD is soliciting research of interest in support of the NEEC. **N00174160004**

The topics of interest are listed below:

Naval Surface Warfare Center Carderock Division (CD)

CD1. Ship Integration and Design Research and Development: Advanced early stage ship design methodologies including set-based design, multi-disciplined optimization, high fidelity physics, and novel model based systems engineering.

CD2. Unmanned Vehicles/Autonomous Systems Research and Development: Increase unmanned system's reliability, reduce life-cycle cost, incorporate platform commonality and modularity, advance warfighting effectiveness, improve maintainability, and promote operational flexibility.

CD3. Additive Manufacturing Research and Development: Investigate, identify & execute 21st Century design, rapid prototyping, manufacturing, maintenance, and repair technologies. Initiatives should address additive manufacturing and associated printed material qualification techniques.

CD4. Signatures and Silencing Research and Development: Sound pressure level measurements of a sound source in high background noise; turbulence induced noise propagation; and noise and thermal signature management of naval systems.

CD5. Hydrodynamics/Hydromechanics Research and Development: Flow measurements for model maneuvers; multi-hull propulsion & hull form design modeling and simulation; effects of surface roughness on friction drag along plates and hulls; quantification of extreme ocean events on naval vessels; and planing craft performance research, predictions, design and analysis.

Naval Surface Warfare Center Corona Division (CO)

CO1 Metrology & Calibration (METCAL) for High Energy Lasers (HEL): Identify and define METCAL technical requirements/parameters (e.g., power, beam quality, jitter, etc.) to measure performance of HEL systems and sub-systems; innovative methodologies and related technologies for developing measurement standards (and traceability to such standards) in support of such systems' performance.

CO1. Metrology & Calibration (METCAL) for Additive Manufacturing (AM)/3D printing technologies: Low-cost, low SWaP (Size, Weight and Power-consuming), deployable, metallic or non-metallic 3D printers with in-situ performance (measurement accuracy and calibration) monitoring sensors; standardization, qualification, and certification of AM processes and parts produced/printed thereof; inspection methods applicable to AM technologies.

CO3. Metrology of Sensors/Detectors: State-of-the-art, compact, portable bio-detectors capable of detecting and measuring trace amount of most chemical and biological agents in various relevant environments; sensor-family designed for Built-In-Calibration of Micro-Electro- Mechanical Systems/Sensors (BIC MEMS) for Navy Platform Integration.

CO4. Big Data Analytics for assessment purposes: Applications of big data analytics methodologies such as machine learning, recommendation engine, sampling, collision statistics, k-segment means, factor graph models, confusion matrices, ROC (receiving operating characteristic) curves. Ability to search for performance anomalies by querying for unique patterns within large data sets.

Naval Surface Warfare Center Dahlgren Division (DD)

DD1. Emerging software development including: Scalable Linux and real-time virtualization support for multicore hardware, automated testing, cyber security, model based development, software certification, software verification, data analytics, computational science, big data exploitation techniques.

DD2. Laser systems development for lasers as weapons in a marine environment including: laser propagation, energy density, manufacturing, control and beam forming for lasers as weapons in a marine environment.

DD3. Electronic Warfare and Radar system development and unitization in a marine environment to include component development, power density, advanced signal processing and track processing for surface vessel applications.

DD4. Human Systems Interface research topics including: Human-device interaction, workload assessment, human performance modeling, anthropometry and biomechanics, cognitive engineering, decision making under uncertainty, function allocation, wearable computing, and work-rest cycles.

DD5. CBR Defense research and development: Protection, detection and hazard mitigation development: Development and characterization of novel materials (i.e. sorbant, hydrophobic, oleophobic, and omniphobic surfaces or coatings) for interacting with contaminants of interest. Technologies in this area that facilitate the development of sensing, sequestering, identifying, repelling, self-cleaning or self-decontaminating material are of interest. This may include the exploration of energies associated with binding of molecules/organisms with surfaces.

DD6. Biodefense research and development: Mitigation technologies against toxins, bacteria, viruses and/or their respective stimulants/surrogates are of interest. Technologies may span all aspects of biodefense, e.g, environmental fate, decontamination, detection, protection and host response, but the following areas will be given highest priority: 1) Simulant selection, characterization and production; 2) Environmental fate and decontamination, with a focus on Navy-relevant surfaces and sensitive equipment; 3) Warfighter risk assessment following different exposure routes; 4) Agent detection, with a focus on using state-of-art molecular and chemical detection methods from environmental matrices; and 5) Protection, both advanced individual protection (barrier) and collective protection (filtration) research.

DD7. Viscoelastic polymer research: Optimization of strength and energy absorbing properties for improving survivability of Surface and USMC structures from blast and fragment impact.

Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division (IH)

IH1. Development of novel energetic materials, formulations and applications to include predictive methods to include energy storage, enhanced safety and reduced sensitivities in applications, processing characteristics and energy release for enhanced performance or lethality. Highly desired are focuses on higher energy density and new energy storage and release concepts that also reduce sensitivities.

IH2. Advanced manufacturing methods and processes for energetic and explosive ordnance disposal (EOD) applications to include but not limited to additive manufacturing of co layered materials and sensitive materials and resonance mixing.

IH3. Enhanced surface autonomous vehicle maneuver and navigation concepts, tools and methods

IH4. Improved chemical processing and formulation scale up methods, tools and processes for energetic materials
IH5. Improved Explosive Ordnance Disposal (EOD) analytical tools and methods for remote detection and characterization of unexploded ordnance (UXO) and home-made explosives (HME) in order to render them safe.

IH6. Development of computational modeling methodologies for energetic materials and weapon effects, properties and processing calculations. Example topics could include but are not limited to: multiphase flows, material interface tracking, explicit and implicit numerical methods for computational fluid and solid dynamics, Eulerian-Lagrangian coupling techniques, turbulence modeling, detonation and post-detonation combustion models, and reactive material models

Naval Surface Warfare Center Panama City Division (PC)

PC1. Communications-constrained path planning in littoral environments: Development of technologies to determine best path for unmanned vehicles to properly balance the need to maintain a communications network in communications-constrained (e.g. underwater) environments while simultaneously accomplishing mission objectives such as coverage.

PC2. Multi-vehicle Autonomy, Sensing and Collaboration: Development of technologies for unmanned maritime or ground systems using autonomous cooperating sensor platforms, for improved sensing in challenging ocean and littoral (including for example, beach zone and surf zone) environments.

PC3. Communications and Processing for Mobile Distributed Sensor Networks: Development of technologies for mobile distributed sensing undersea networks, focusing on the challenge of producing sufficient and reliable communications and processing to successfully complete key tasks.

Naval Surface Warfare Center Philadelphia Division (PD)

PD1. Resilient and Cybersecure Shipboard Control Systems: Hardware and software security for embedded systems and industrial control systems which provide resilience and cybersecurity for shipboard cyber-physical systems such as machinery control systems, propulsion systems, cooling systems and electrical generation and distribution systems.

PD2. Condition Assessment and Prognostics for Shipboard Machinery Systems: Condition assessment and prognostics that enable the determination of the condition of the shipboard electrical and mechanical systems including rotating machinery and power electronics systems.

PD3. Advanced Technologies for Shipboard Superconducting Systems: Research in advanced technologies associated with naval superconducting systems, including superconductors, cryo-refrigerators and components, cryogenic dielectrics, cooling with gaseous or multi-phase cryogenes, superconducting transformers, and cryogenic power electronics.

PD4. Shipboard Energy Storage Systems: Design and analysis if intermediate energy storage systems with the capability to buffer highly transient in a medium voltage direct current (MVDC) architecture.

Naval Surface Warfare Center Port Hueneme Division (PH)

PH1. Non-chemical coatings removal: Methods for safely removing coatings from the following antenna radar substrates: ferrous and nonferrous metals, composites, and ceramics. Coatings include silicon alkyd, polysiloxane, epoxy, RTV silicone, and polyurethane systems. Composites include glass, carbon, and aramid fiber reinforcing materials in polyester, epoxy, and vinyl ester matrices.

PH2. Cybersecurity: Statistical analysis of cybersecurity vulnerabilities and their correlation to the programming languages, development methodologies, and use of open source software.

PH3. Laser methods for imparting surface morphology characteristics to metal and composite substrates. Adhesion promotion as an alternate to dry abrasive blasting methods and imparting hydrophobic properties are of particular interest.

PH4. Cybersecurity: Frameworks for threat attack analysis, prediction, countermeasures, and visualization

Naval Undersea Warfare Center Keyport Division (KP)

KP1. Testing and Evaluations techniques for the establishment of trust in autonomous systems, with an emphasis on autonomous underwater vehicles and methods/metrics for testing autonomy software.

KP2. Robust testbed development to enable autonomous system testing across multiple domains including underwater, surface and in-air systems with various communication and networking capabilities. KP3. 3D Printing for the Foundry Industry: Expand the use of Additive Manufacturing (AM) technology for three dimensional printing of sand molds with emphasis on foundry coatings, 8 sand additives and other mold techniques to broaden application to higher temperature and more complex castings.



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KP4. Analysis of Polymer Additive Manufactured Materials: Perform mechanical analysis and physical testing of AM polymer materials to evaluate the effects of a variety of printing techniques.

KP5. Obsolescence, lifecycle, and supportability forecasting to include data visualization, mathematical models, and analysis tools with emphasis in the following areas: software obsolescence prediction and mitigation, management of mechanical subsystem obsolescence, and technology life-cycle forecasting.

KP6. In-Service Engineering research, development, analysis, modeling, and related topics with an emphasis in the following areas: Human Performance support and training technologies, mixed reality training and support applications, and computing environment prototyping.

KP7. Cyber-warfare, to include information assurance tools, visualization and cyber-warfare system testing with an emphasis on tools for testing and evaluating cyber-warfare software and systems, and counterfeit detection systems.

Naval Undersea Warfare Center Newport Division (NP):

NP1. Autonomy for Undersea Vehicles: Develop and test algorithms to support autonomy for undersea vehicles in an environment where communications are not available. Examples of autonomous behavior of interest include (but are not limited to) vehicle decisions re: sensing, navigation, obstacle avoidance, and other mission aspects without the aid of an operator. Autonomy for a single vehicle and cooperative behavior between multiple vehicles are both of interest.

NP2. Sparse Sampling Algorithms: Sparse Sensor Techniques, to include co-prime arrays, compressive sensing and other sparse sampling techniques, all seek to provide techniques for optimizing the tradeoff between aperture and the number of sensors required to meet desired performance in sensing for the traditional detection, classification, localization and tracking problem. The Navy has many applications where total ownership cost would benefit from this research. Research areas would include new algorithms and signal processing routines to extract maximum information from subsets of available sensor outputs. While undersea acoustic arrays are a focus area, approaches more generic in scope are also of interest.

NP3. Underwater Chemical Sensing: A non-selective underwater chemical sensor that adapts to constantly changing environments would be a unique and valuable capability for underwater systems. Aquatic animals have successfully adapted to their complex chemical environments and are an ideal model for man-made chemical detection and tracking sensors. Research on this topic would focus on exploiting the knowledge of how animals detect trace chemical signatures and then utilize this information to develop chemical sensor prototypes and associated detection and classification algorithms.

- URL: <http://www.grants.gov/web/grants/view-opportunity.html?opId=287157>

Information and Intelligent Systems (IIS): Core Programs

National Science Foundation (NSF)

Due Date: 10/16/2016 (LARGE & MEDIUM Projects), 11/16/2016 (SMALL Projects)

IIS studies the inter-related roles of people, computers, and information. IIS supports research and education activities that (1) develop new knowledge about the role of people in the design and use of information technology; (2) increase our capability to create, manage, and understand data and information in circumstances ranging from personal computers to globally-distributed systems; and (3) advance our understanding of how computational systems can exhibit the hallmarks of intelligence.

NSF 16-581

CISE's Division of Information and Intelligent Systems (IIS) supports research and education projects that develop new knowledge in three core programs:

- The Cyber-Human Systems (CHS) program;
- The Information Integration and Informatics (III) program; and
- The Robust Intelligence (RI) program.

Proposals in the area of computer graphics and visualization may be submitted to any of the three core programs described above.

Proposers are invited to submit proposals in three project classes, which are defined as follows:

- Small Projects - up to \$500,000 total budget with durations up to three years;
- Medium Projects - \$500,001 to \$1,200,000 total budget with durations up to four years; and
- Large Projects - \$1,200,001 to \$3,000,000 total budget with durations up to five years.

- URL: <http://www.nsf.gov/pubs/2016/nsf16581/nsf16581.htm>

Biological and Environmental Interactions of Nanoscale Materials

National Science Foundation (NSF)

Due Date: 10/20/2016

The goal of the Biological and Environmental Interactions of Nanoscale Materials program is to support research to advance fundamental and quantitative understanding of the interactions of biological and environmental media with nanomaterials and nanosystems. Materials of interest include one- to three-dimensional nanostructures, heterogeneous nano-bio hybrid assemblies, and other nanoparticles. Such nanomaterials and systems frequently exhibit novel physical, chemical and biological behavior in living systems and environmental matrices as compared to the bulk scale. This program supports research that explores the interaction of nanomaterials in biological and environmental media.

Research areas supported by the program include:

- Characterization of interactions at the interfaces between nanomaterials and nanosystems with surrounding biological and environmental media, including both simple nanoparticles and complex and/or heterogeneous composites;
- Development of predictive tools based on the fundamental behavior of nanostructures within biological and ecological matrices to advance cost-effective and environmentally benign processing and engineering solutions over full life material cycles;
- Examining the transport, interaction, and impact of nanostructured materials and nanosystems on biological systems;
- Simulations of nanoparticle behavior at interfaces, in conjunction with experimental comparisons, and new theories and simulation approaches for determining the transport and transformation of nanoparticles in various media.

Research in these areas will enable the design of nanostructured materials and heterogeneous nanosystems with optimal chemical, electronic, photonic, biological, and mechanical properties for their safe handling, management, and utilization. **PD 16-1179**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501030

Biomedical Engineering (BME) Program

National Science Foundation (NSF)

Due Date: 10/20/2016

The goal of the BME program is to provide opportunities to develop novel ideas into discovery-level and transformative projects that integrate engineering and life sciences in solving biomedical problems that serve humanity in the long-term. BME projects must be at the interface of engineering and life sciences, and advance both engineering and life sciences. The projects should focus on high impact transformative methods and technologies. Projects should include methods, models and enabling tools of understanding and controlling living systems; fundamental improvements in deriving information from cells, tissues, organs, and organ systems; new approaches to the design of structures and materials for eventual medical use in the long-term; and novel methods for reducing health care costs through new technologies. The projects should emphasize the advancement of fundamental engineering knowledge, possibly leading to the development of new methods and technologies in the long-term; and highlight the multi-disciplinary nature of the research, integrating engineering and life sciences. The long-term impact of the projects can be related to fundamental understanding of cell and tissue function, disease diagnosis and/or treatment, improved health care delivery, or product development. The BME program does not support clinical studies, or proposals having as their central theme drug design and delivery or the development of biomedical devices that do not include a living

biological component. Furthermore, although research on biomaterials or on cellular biomechanics may constitute a part of the proposed studies, such research cannot be the central theme or key focus area of the proposed work. **PD 16-5345**

The BME program supports fundamental and transformative research in the following BME themes:

1. Molecular, cellular and tissue approaches for advanced biomanufacturing: Three-dimensional structures of biomolecules, cells, scaffolds/matrices by bioprinting or other technologies for fundamental studies on cells, disease modeling and drug testing, and for tissue engineering and regenerative medicine applications; fundamental studies of cell-cell, cell-matrix interactions, self-assembly, stereochemistry/chirality; systems integration between biological components and electromechanical assemblies; stem cell engineering and biomanufacturing, cell reprogramming technologies.

2. Neural engineering and human brain mapping: Technologies and tools to interrogate and monitor neuron activity at high spatiotemporal resolution; new theories and computational models to integrate neuroscience data across different scales and levels; new experimental methodologies and computational approaches to investigate human brain structure and function, especially at the sub-cellular, cellular, and tissue levels, and to repair and renew deteriorated, damaged, or diseased neurons and neural circuits.

- **URL:**http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501023&org=NSF&sel_org=NSF&form=fund

Chemical and Biological Separations (CBS)

National Science Foundation (NSF)

Due Date: 10/20/2016

The goal of the Chemical and Biological Separations (CBS) program is to generate novel methods and materials for separation processes. These processes are central to the chemical, biochemical, materials, energy, and pharmaceutical industries. A fundamental understanding of the interfacial, transport, and thermodynamic behavior of multiphase chemical systems as well as quantitative descriptions of processing characteristics in the process-oriented industries is critical for efficient resource management and effective environmental protection. The program encourages proposals that address emerging research areas and technologies, have a high degree of interdisciplinary thought coupled with the generation of fundamental knowledge, and the integration of education and research.

Research topics of particular interest include fundamental molecular-level work on:

- Nanostructured materials for separations
- Biorenewable resource separation processes
- Purification of drinking water

- Field (flow, magnetic, electrical) induced separations
- Separation of molecular constituents from blood

For separations proposals involving aspects of sustainable chemistry, consider making proposal submissions to this program (1417). Innovative proposals outside of these specific interest areas can be considered. However, prior to submission, it is recommended that the PI contact the Program Director to avoid the possibility of the proposal being returned without review. **PD 16-1417**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13363

Fluid Dynamics

National Science Foundation (NSF)

Due Date: 10/20/2016

The Fluid Dynamics program supports fundamental engineering research on mechanisms and phenomena governing fluid flow from the molecular to the macroscopic scale. Proposed research should contribute to basic understanding of fluid flow phenomena, thus enabling the better design, predictability, efficiency, and control of systems that involve fluids. Areas of emphasis are proposals that address the behavior of new fluid materials and innovative uses of fluids in manufacturing, energy and the environment, materials development, biotechnology, nanotechnology, sensor development, clinical diagnostics and drug delivery. While the research should focus on fundamentals, a clear connection to potential applications with significant societal/technological impact should be outlined.

Major areas of interest include:

1. Bio-inspired Fluid Mechanics and Bio-flows: biomimetics; intracellular flows; fluid-structure interactions; hemodynamics; swimmers; insect flight; fins; biological flow processes; flows in biomedical devices; drug delivery.
2. Flow of Complex Fluids: non-Newtonian fluid mechanics; viscoelasticity; flow of polymer solutions and melts; gelation; flow-induced structuring; DNA dynamics; new fluid materials.
3. Micro- and Nano-fluidics: micro-and nano-scale flow phenomena; biomedical microdevices; effects of nano-inclusions on rheological properties; molecular dynamics simulations; optofluidics.
4. Turbulence and Transition: theory; high Reynolds number experiments; large eddy simulation; direct numerical simulation; transition to turbulence; 3-D boundary layers; multi-phase turbulent flows; flow control and drag reduction.
5. Interfacial Interactions and Instabilities: hydrodynamic stability; gas-liquid interfaces; splashing; jetting; droplet interactions; atomization; wetting.
6. Instrumentation and Flow Diagnostics: Instrument development; MEMS; shear stress sensors; novel flow imaging; velocimetry.

Proposals on wind and ocean energy harvesting and on environmental flows could be submitted to the program when the proposed research is focused on fundamental fluid dynamics phenomena or on the development of novel computational fluid dynamics approaches, rather than applications or devices and materials. **PD 16-1443**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13365

Nano-Biosensing

National Science Foundation (NSF)

Due Date: 10/20/2016

The Program supports fundamental engineering research on devices and methods for measurement and quantification of biological analytes. Proposals that incorporate emerging nanotechnology methods are especially encouraged. **Areas of interest include:**

- Proposals on multi-purpose sensor platforms that exceed the performance of current state-of-the-art measurement methods.
- Projects on novel transduction mechanisms and sensor designs suitable for measurement in practical matrix and sample-preparation free approaches. These include error-free detection of pathogens and toxins in food matrices, waterborne pathogens, parasites, toxins, biomarkers in body fluids, and others.
- Proposals that address highly selective bio-recognition elements which exhibit zero false negative responses.
- Nano-biosensors that enable measurement of kinetics and thermodynamics of biomolecular interactions in their native states, transmembrane transport, intracellular transport, and other biological phenomena.
- Fundamental studies on surface functionalization and immobilization of bio-recognition molecules, orientation, activity, stability and effectiveness at biosensor interfaces.

It is important to address why the proposed work is important, and project the potential impact on society and/or industry. The novelty or potentially transformative nature of the research should be included in the Project Summary. The program does not support applications with incremental improvements of existing approaches and technologies. Projects that do not include experimental characterization of sensor responses to biological analytes are discouraged. Innovative proposals outside of these specific interest areas may be considered. However, prior to submission, it is recommended that the PI contact the Program Director to avoid the possibility of the proposal being returned without review. **PD 15-7909**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503353&org=NSF&sel_org=NSF&form=fund

Particulate and Multiphase Processes

National Science Foundation (NSF)

Due Date: 10/20/2016

The goal of the Particulate and Multiphase Processes (PMP) program is to support fundamental engineering research on physicochemical phenomena that govern particulate and multiphase systems, including flow of suspensions, drops and bubbles, granular and granular-fluid flows, behavior of micro- and nanostructured fluids, and self-assembly and directed assembly processes that involve particulates. The program encourages transformative research to improve our basic understanding of particulate and multiphase processes with emphasis on research that demonstrates how particle-scale phenomena affect the behavior and dynamics of larger-scale systems. Although proposed research should focus on fundamentals, a clear vision is required that anticipates how results could benefit important applications in advanced manufacturing, energy harvesting, transport in biological systems, biotechnology, or environmental sustainability. Collaborative and interdisciplinary proposals are encouraged, especially those that involve a combination of experiment and theory or modeling. **PD 16-1415**

Major research areas of interest in the program include:

- **Multiphase flow phenomena:** Dynamics of suspensions, emulsions, granular materials, and structured fluids (colloids/ferro-fluids), and novel approaches that relate micro- and nanoscale phenomena to macroscale properties and process-level variables
- **Multiphase transport in biological systems:** Analysis of physiological processes, applications of functionalized nanostructures in clinical diagnostics and therapeutics.
- **Particle science and technology:** Aerosols, production of particles and polymer-particle complexes with engineered properties, self-assembly, directed assembly, and template-directed assembly of particles into functional materials and devices.
- **Interfacial transport:** Dynamics of particles and macromolecules at interfaces, kinetics of adsorption and desorption of nanoparticles and surfactants and their spatial distributions at interfaces, complex molecular interactions at interfaces, formation of interfacial complexes that affect the dynamics of particles.

- **URL:** http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505330

University Innovation Fellows Program

Stanford University Hasso Plattner Institute of Design

Due Date: 10/24/2016

The University Innovation Fellows program offers undergraduate students in engineering and other field the training and support to become leaders who catalyze change on their home campuses. The

fellows, nominated by their deans and faculty, help students learn about the entrepreneurial mindset, innovation, creativity, design thinking and venture creation at their schools. There are currently 607 Fellows at 143 schools who are founding clubs, hosting events and workshops, collaborating with faculty on new classes, creating student maker spaces, and providing opportunities for interdisciplinary collaboration.

- URL: <http://universityinnovationfellows.org/apply/application/>

Office of Cross-Cutting Activities in Materials Research (XC)

National Science Foundation (NSF)

Due Date: Submissions accepted at any time

The Office of Crosscutting Programs in Materials Research (XC) coordinates and supports crosscutting activities within the Division of Materials Research (DMR) and more broadly across NSF. Many XC activities are co-funded with other NSF units. **PD 16-7222**

- URL: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505350&WT.mc_id=USNSF_25&WT.mc_ev=click

HEALTH, LIFE & EARTH SCIENCES

Cancer Research Grants

Elsa U. Pardee Foundation

Due Date: 10/1/2016, 2/1/2017, 6/1/2017

The Elsa U. Pardee Foundation funds investigators proposing research directed toward identifying new treatments or cures for cancer. The foundation particularly encourages grant applications for a one-year period which will allow establishment of capabilities of new cancer researchers, or new cancer approaches by established cancer researchers. It is anticipated that this early stage funding by the foundation may lead to subsequent and expanded support using government agency funding. Project relevance to cancer detection, treatment, or cure should be clearly identified.

- URL: <http://www.pardeefoundation.org/grants.aspx>

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.

NIH Big Data to Knowledge (BD2K) Enhancing Diversity in Biomedical Data Science (R25)

National Institutes of Health (NIH)

Due Date: Suggested Letters of Intent 10/14/2016; Applications 11/14/2016

The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIH Big Data to Knowledge (BD2K) Enhancing Diversity in Biomedical Data Science (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 curriculum or methods development. **RFA-MD-16-002**

- URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MD-16-002.html>

MacroSystems Biology and Early NEON Science

National Science Foundation (NSF)

Due Date: 10/17/2016

The MacroSystems Biology and Early NEON Science: Research on Biological Systems at Regional to Continental Scales program will support quantitative, interdisciplinary, systems-oriented research on biosphere processes and their complex interactions with climate, land use, and invasive species at regional to continental scales as well as planning, training, and development activities to enable groups to conduct MacroSystems Biology and Early NEON Science research. **NSF 16-521**

- URL: <http://www.nsf.gov/pubs/2016/nsf16521/nsf16521.htm>

Paleo Perspectives on Climate Change (P2C2)

National Science Foundation (NSF)

Due Date: 10/17/2016

The goal of the interdisciplinary P2C2 solicitation is to utilize key geological, chemical, atmospheric (gas in ice cores), and biological records of climate system variability to provide insights into the mechanisms and rate of change that characterized Earth's past climate variability, the sensitivity of Earth's climate system to changes in forcing, and the response of key components of the Earth system to these changes.

Important scientific objectives of P2C2 are to:

- 1) provide comprehensive paleoclimate data sets that can serve as model test data sets analogous to instrumental observations; and

2) enable transformative syntheses of paleoclimate data and modeling outcomes to understand the response of the longer-term and higher magnitude variability of the climate system that is observed in the geological and cryospheric records. **NSF 13-576**

- URL: <http://www.nsf.gov/pubs/2013/nsf13576/nsf13576.htm>

Big Data to Knowledge (BD2K) Community-Based Data and Metadata Standards Efforts (R24)
National Institutes of Health (NIH)

Due Date: 10/19/2016 (Optional Letters of Intent due 30 days before application due date)

This FOA is to provide time-limited, catalytic support for activities necessary to develop or extend/refine data and metadata standards and/or related tools in areas relevant to the NIH basic, translational, and clinical research mission. Projects can support activities at any point in the data standards lifecycle and should build on existing partnerships, infrastructure, and resources whenever possible. Projects must demonstrate a compelling science community interest and need for standards efforts in the specific domain(s) of interest, as well as a plan for meaningful engagement of the end-user communities and relevant stakeholders in the process. The data standard and any associated tools or products developed should be made freely available to the scientific research community via a curated, searchable portal. Projects should address long-term maintenance and sustainability of the data standard after the period of the NIH award; issues to be considered include approaches for dissemination, evaluation, and updating/refinement. Both short-term and longer-term projects are eligible. **RFA-ES-16-010**

- URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-16-010.html>

Emerging Research Grants

Hearing Health Foundation (HHF)

Due Date: Letters of Intent 10/28/2016, Applications 12/2/2016

The primary purpose of this award is to enable the investigator to become established or produce quality research that will allow him/her to successfully compete for NIH Grants or grants from other sources. Applications will be considered for research directed to investigation of specified research topic areas of the auditory and vestibular systems to be listed in the Request for Application; both fundamental and clinical research proposals are welcome. Priority is given to new investigators in the field of hearing and balance and to projects that are likely to open new lines of inquiry. New and innovative projects developed by established scientists will also be considered.

- URL: <http://hearinghealthfoundation.org/policy-on-grants>

Integrated Earth Systems (IES)

National Science Foundation (NSF)

Due Date: 11/14/2016

Integrated Earth Systems (IES) is a program in the Division of Earth Sciences (EAR) that focuses on the continental, terrestrial and deep Earth subsystems of the whole Earth system. The overall goal of the program is to provide opportunity for collaborative, multidisciplinary research into the operation, dynamics and complexity of Earth systems at a budgetary scale between that of a typical project in the EAR Division's disciplinary programs and larger scale initiatives at the Directorate or Foundation level. Specifically, IES will provide research opportunities for the study of Earth systems from the core of the Earth to the top of the critical zone with a specific focus on subsystems that include continental, terrestrial and deep Earth subsystems at all temporal and spatial scales (NROES, 2012). IES will provide opportunities to focus on Earth systems connected to topics which include (but are not limited to) the continents; the terrestrial, surficial Earth systems including physical, chemical and biotic dimensions; linkages among tectonics, climate, landscape change, topography and geochemical cycles including core and mantle processes. **NSF 16-589**

- URL: <http://www.nsf.gov/pubs/2016/nsf16589/nsf16589.htm>

Section Health Policy and Administration Grant Program (HPA Grant Program)

American Physical Therapy Association (APTA)

Due Date: 12/31/2016

The purpose of the Section Health Policy and Administration Grant Program is to stimulate, encourage and support research activities that enhance the body of knowledge related to health policy, clinical administration, global health, and the use of technology in physical therapy. The grants provide funding to assist new physical therapist investigators, or established investigators who are embarking on a new research agenda in these areas of physical therapist practice, leadership, administration, or education. Through this grant program, the Section hopes to encourage the development of proposals that will seek financial support from external agencies. Research grant awards are available to Section members to assist with a one-year research study that investigates a question or questions of importance to health policy or clinical administration.

Types of grants

Although two types of grant proposals will be considered, a priority will be given to Research grants (Type a)

a. Research grant - A grant to support a stand-alone research project or a part of a larger series of projects

b. Development grant - A research development award to assist in the development of research projects that will be submitted to an institution or public or private agency for funding. The purpose of the award is to provide seed money to fund the development of a competitive grant proposal. (Money can be used for faculty release time to do pilot work, hiring of consultants or purchasing supplies.)

Funding Focus

Priority will be given to studies that are consistent with the identified HPA research agenda, that have a sound research design, and that have a strong likelihood of contributing to the existing knowledge base of health policy, administration, global health and technology in physical therapy. It is expected that research results will be disseminated through appropriate channels such as Physical Therapy or PTJ-PAL / HPA Resource and American Physical Therapy Association sponsored continuing education programs.

- URL: <http://www.aptahpa.org/?page=34>

Biological Technologies

United States Department of Defense (DOD) - Defense Advanced Research Projects Agency (DARPA) - Biological Technologies Office (BTO)

Due Date: Abstracts accepted on a rolling basis until 4/28/2017

The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative research proposals of interest to the Biological Technologies Office (BTO). Proposed research should investigate leading edge approaches that enable revolutionary advances in science, technologies, or systems at the intersection of biology with engineering and the physical and computer sciences. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of the art. BTO seeks unconventional approaches that are outside the mainstream, challenge assumptions, and have the potential to radically change established practice, lead to extraordinary outcomes, and create entirely new fields. The mission of BTO is to foster, demonstrate, and transition breakthrough fundamental research, discoveries, and applications that integrate biology, engineering, computer science, mathematics, and the physical sciences. BTO's investment portfolio goes far beyond life sciences applications in medicine to include areas of research such as human-machine interfaces, microbes as production platforms, and deep exploration of the impact of evolving ecologies and environments on U.S. readiness and capabilities. BTO's programs operate across a wide range of scales, from individual cells to the warfighter to global ecosystems. BTO responds to the urgent and long-term needs of the Department of Defense (DoD) and addresses national security priorities. **DARPA-BAA-16-33**

BTO is interested in submissions related to the following areas:

- Discovering and leveraging novel findings from neuroscience, psychology, cognitive science, and related disciplines to advance treatment and resilience in neurological health and optimize human aptitude and performance.
 - Understanding and improving interfaces between the biological and physical world to enable seamless hybrid systems.
 - Developing and leveraging fundamental understanding of the underlying design rules that govern biological system behavior.
 - Developing new tools and capabilities for forward engineering of biological systems (cells, tissues, organs, organisms, and complex communities) to both develop new products and functional systems as well as to gain new insights into underlying mechanisms.
 - Developing and validating new theories and computational models that identify factors and principles underlying collective and interactive behaviors of biological organisms at all scales from individual cells to global ecosystems.
 - Understanding the dynamics of population and ecosystem behavior in order to preserve equilibrium, provide strategic opportunity, or avoid catastrophe.
 - Developing and leveraging new technologies that can be applied to agricultural ecosystems for production stabilization by improving quality or reducing losses from pathogens or pests.
 - Developing and leveraging new insights into non-human biology across and between populations of microbes, insects, plants, marine life, and other non-human biologic entities.
 - Developing new technologies and approaches that ensure biosafety, biosecurity, and protection of the bioeconomy.
 - Understanding emerging threats to global food and water supplies and developing countermeasures that can be implemented on a global scale.
 - Developing new technologies to treat, prevent, and predict the emergent and spread of infectious diseases that have the potential to cause significant health, economic, and social burden.
 - Other biological technology topic areas that fit the scope of BTO's mission
- URL: <http://www.grants.gov/web/grants/view-opportunity.html?opId=283365>

MULTIPLE DISCIPLINES

Ecology and Evolution of Infectious Diseases (EEID)

National Science Foundation (NSF)

Due Date: 11/16/2016

The Ecology and Evolution of Infectious Diseases program supports research on the ecological, evolutionary, and socio-ecological principles and processes that influence the transmission dynamics of infectious diseases. The central theme of submitted projects must be quantitative or computational understanding of pathogen transmission dynamics. The intent is discovery of principles of infectious disease transmission and testing mathematical or computational models that elucidate infectious disease systems. Projects should be broad, interdisciplinary efforts that go beyond the scope of typical studies. They should focus on the determinants and interactions of transmission among humans, non-human animals, and/or plants. This includes, for example, the spread of pathogens; the influence of environmental factors such as climate; the population dynamics and genetics of reservoir species or hosts; the cultural, social, behavioral, and economic dimensions of disease transmission. Research may be on zoonotic, environmentally-borne, vector-borne, or enteric diseases of either terrestrial or freshwater systems and organisms, including diseases of animals and plants, at any scale from specific pathogens to inclusive environmental systems. Proposals for research on disease systems of public health concern to developing countries are strongly encouraged, as are disease systems of concern in agricultural systems. Investigators are encouraged to develop the appropriate multidisciplinary team, including for example, modelers, bioinformaticians, genomics researchers, social scientists, economists, epidemiologists, entomologists, parasitologists, microbiologists, bacteriologists, virologists, pathologists or veterinarians, with the goal of integrating knowledge across disciplines to enhance our ability to predict and control infectious diseases. **NSF 16-592**

- URL: <http://www.nsf.gov/pubs/2016/nsf16592/nsf16592.htm>

NEW FACULTY / INVESTIGATOR

NIBIB Trailblazer Award for New and Early Stage Investigators (R21)

National Institutes of Health (NIH)

Due Date: 10/16/2016, 2/16/2017, 6/16/2017 (standard NIH due dates apply)

This Trailblazer Award is an opportunity for New and Early Stage Investigators to pursue research programs of high interest to the NIBIB that integrate engineering and the physical sciences with the life and behavioral sciences. This FOA invites applications from researchers who are at the early stage of their independent careers or those who have not had substantial prior NIH funding. A Trailblazer project may be exploratory, developmental, proof of concept, or high risk-high impact, and may be technology design-directed, discovery-driven, or hypothesis-driven. Importantly, applicants are expected to propose research approaches for which there are minimal or no preliminary data. **PAR-16-390**

- URL: <http://grants.nih.gov/grants/guide/pa-files/PAR-16-390.html>

Maximizing Investigators' Research Award for New and Early Stage Investigators (R35)

National Institutes of Health (NIH)

Due Date: 11/4/2016 (Optional Letter of Intent due 30 days prior to application due date)

The Maximizing Investigators' Research Award (MIRA) is a grant to provide support for the program of research in an investigator's laboratory that falls within the mission of NIGMS. For the purpose of this FOA, a program of research is the collection of projects in the investigator's lab that are relevant to the mission of NIGMS. The goal of MIRA is to increase the efficiency and efficacy of NIGMS funding. The purpose of this FOA is to continue to test the feasibility of this grant mechanism for Early Stage Investigators (ESI). **RFA-GM-17-004 It is anticipated that the new mechanism will:**

1. Increase the stability of funding for NIGMS-supported investigators, which could enhance their ability to take on ambitious scientific projects and approach problems more creatively.
2. Increase flexibility for investigators to follow important new research directions as opportunities arise, rather than being bound to specific aims proposed in advance of the studies.
3. More widely distribute funding among the nation's highly talented and promising investigators to increase overall scientific productivity and the chances for important breakthroughs.
4. Reduce the time spent by researchers writing and reviewing grant applications, allowing them to spend more time conducting research.
5. Enable investigators to devote more time and energy to mentoring trainees in a more stable research environment.

- URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-GM-17-004.html>

National Academy of Education/Spencer Postdoctoral Fellowship Program

National Academy of Education (NAEd)

Due Date: 11/3/2016

The program supports early career scholars working in critical areas of education research. This non-residential postdoctoral fellowship funds proposals that make significant scholarly contributions to the field of education. The program also develops the careers of its recipients through professional development activities involving NAEd members. Fellows attend three professional development retreats with other fellows and NAEd members. Proposed project must be an education research project. NAEd funds studies that examine the efficacy of curriculum and teaching methods, however, NAEd does not fund the initial development of curriculum or instructional programs. Applications will be judged on the applicant's past research record, career trajectory in education research, and the quality of the project described in the application. Applicants must have received their PhD, EdD, or equivalent research degree between January 1, 2011, and December 31, 2015.

- URL: http://www.naeducation.org/NAED_080201.htm

Young Investigator Program (YIP)

United States Department of Defense (DOD) - Department of the Navy (U.S. Navy) - Office of Naval Research (ONR) - University Research Initiative (URI)

Due Date: 11/4/2016

The Office of Naval Research announces its Young Investigator Program to identify and support academic scientists and engineers who have recently received Ph.D. or equivalent degrees and who show exceptional promise for doing creative research. The objectives of this program are to attract outstanding faculty members of institutions of higher education to the Navy's research program, to support their research, and to encourage their teaching and research careers. **N00014-16-S-FO15**

- URL: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=286980>

American Fellowships: Postdoctoral Research Leave Fellowships

American Association of University Women (AAUW)

Due Date: 11/15/2016

The primary purpose of the fellowship is to increase the number of women in tenure-track faculty positions and to promote equality for women in higher education. This fellowship is designed to assist the candidate in obtaining tenure and further promotions by enabling her to spend a year pursuing

independent research. Distance learning/online programs: American Fellowships support traditional classroom-based courses of study. This fellowship program does not provide funding for distance learning programs or for degrees heavily dependent on distance learning components. Final decisions about what constitutes distance learning under these fellowships will be made by AAUW.

- URL: <http://www.aauw.org/what-we-do/educational-funding-and-awards/american-fellowships/>

Pearson Early Career Grant

American Psychological Association (APA) - American Psychological Foundation (APF)

Due Date: 12/31/2016

The grant encourages early career clinicians to work in an area of critical societal need. Pearson partnered with APF to ensure psychology addresses critical needs in society. APF supports original, innovative research and projects. Although APF favors unique, independent work, the Foundation does fund derivative projects that are part of larger studies. The goals of the grant are to support psychology's efforts to improve areas of critical need in society, including but not limited to innovative scientifically based clinical work with serious mental illness, serious emotional disturbance, incarcerated or homeless individuals, children with serious emotional disturbance (SED), and adults with serious mental illness (SMI); and to encourage early career psychologists to devote their careers to under-served populations.

- URL: <http://www.apa.org/apf/funding/pearson.aspx>

SOCIAL & BEHAVIORAL SCIENCES

Future of Work

Russell Sage Foundation

Due Date: Letters of Inquiry 9/9/2016

The foundation's program on the Future of Work supports research on the causes and consequences of changes in the quality of jobs for less- and moderately-skilled workers in the United States. The foundation seeks research proposals related to the role of changes in employer practices; the nature of the labor market; and public policies on the employment, earnings, and quality of jobs of American workers. Examples of the kinds of topics and questions that are of interest include but are not limited to changing economies, changing family structure and policy responses (or lack thereof); the economics of productivity and the role of managerial practices in improving job quality; the causes and consequences of job polarization; and the effects of long-term unemployment and strategies to prevent long-term disadvantage. Priority will be given to analyses of original qualitative and quantitative data sources and novel uses of existing sources of data to address important questions related to the interplay of market and non-market forces in shaping the well-being of workers, today and in the future. The foundation encourages methodological variety, but all proposals should have well-developed conceptual frameworks and research designs. Analytical models should be specified and research questions and hypotheses should be clearly stated. Awards are available for research assistance, data acquisition, data analysis, and investigator time for conducting research and writing up results.

- URL: <http://www.russellsage.org/research/funding/future-work>

ACLS Fellowship Program

American Council of Learned Societies (ACLS)

Due Date: 9/28/2016

The ACLS Fellowship program invites research applications in all disciplines of the humanities and related social sciences. The ultimate goal of the project should be a major piece of scholarly work by the applicant. ACLS does not fund creative work (e.g., novels or films), textbooks, straightforward translation, or pedagogical projects. Institutions and individuals contribute to the ACLS Fellowship program and its endowment, including The Andrew W. Mellon Foundation, the National Endowment for the Humanities, the Council's Research University Consortium and college and university Associates, former fellows, and individual friends of ACLS. ACLS is fortunate to have special funds available to support research in particular areas, with fellows designated from among successful applicants: the Oscar Handlin Fund supports archival research in US history; the Frederic Wakeman Fund aids research in modern Chinese history; and the Donald Munro Fund is dedicated to work that exhibits high quality

in sinology and in critical analysis of Chinese philosophical traditions and ethical systems. For the purpose of these competitions, the humanities and related social sciences include but are not limited to American studies; anthropology; archaeology; art and architectural history; classics; economics; film; geography; history; languages and literatures; legal studies; linguistics; musicology; philosophy; political science; psychology (excluding clinical or counseling psychology); religious studies; rhetoric, communication, and media studies; sociology; and theater, dance, and performance studies. Proposals in the social science fields listed above are eligible only if they employ predominantly humanistic approaches (e.g., economic history, law and literature, political philosophy, history of psychology). Proposals in interdisciplinary and cross-disciplinary studies are welcome, as are proposals focused on any geographic region or on any cultural or linguistic group.

- URL: <http://www.acls.org/programs/acls/>

Katrin H. Lamon Fellowship

School for Advanced Research (SAR)

Due Date: 11/7/2016

This resident fellowship is for a Native scholar working in the humanities or the social sciences. This fellowship is made possible through the generous support of the Katrin H. Lamon Endowment for Native American Art and Education.

- URL: http://sarweb.org/index.php?resident_scholar_lamon_fellowship

Weatherhead Fellowships

School for Advanced Research (SAR)

Due Date: 11/7/2016

These residential fellowships are available for scholars working in the humanities or social sciences. This fellowship is made possible through the generous support of the Weatherhead Foundation.

- URL: http://sarweb.org/index.php?resident_scholar_weatherhead_fellowship

STUDENTS

Career Development Grants

American Association of University Women (AAUW)

Due Date: 12/15/2016

These grants provide assistance to women who, through additional higher education, technical training, or participation in professional development institutes, are making career changes, seeking to advance in current careers, or reentering the workforce. Grants provide support for course work beyond a bachelor's degree, including a master's degree, second bachelor's degree, certification program, or specialized training in technical or professional fields. All courses of study must occur at a regionally accredited two- or four-year college or university in the United States or at a technical school that is fully licensed and/or accredited by the U.S. Department of Education. Distance or online learning programs will be funded only if they are conducted through an accredited institution appearing on the U.S. Department of Education's list of approved online/distance learning programs. Final decisions about what constitutes distance learning under these grants will be made by AAUW.

- URL: <http://www.aauw.org/what-we-do/educational-funding-and-awards/career-development-grants/cdq-application/>