NJIT Research Newsletter

Issue: ORN-2018-12

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NJIT Research Newsletter includes recent awards, and announcements of research related seminars, webinars, national and federal research news related to research funding, and *Grant Opportunity Alerts*. The Newsletter is posted on the NJIT Research Website http://www.njit.edu/research/ .

Grant Opportunity Alerts

Keywords and Areas Included in the Grant Opportunity Alert Section Below

NSF: Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII); Small Business Technology Transfer Program Phase I (STTR); Small Business Innovation Research Program Phase I (SBIR); Planning Grants for Engineering Research Centers (ERC); Future of Work at the Human - Technology Frontier: Advancing Cognitive and Physical Capabilities (FW-HTF); Cybersecurity Innovation for Cyberinfrastructure (CICI)

NIH: NIH Director's Early Independence Award (DP5); International Bioethics Research Training Program (D43); BRAIN Initiative: New Technologies and Novel Approaches for Large-Scale Recording and Modulation in the Nervous System (R01); NEI Translational Research Program (TRP) to Develop Novel Therapies and Devices for the Treatment of Visual System Disorders (R24); New Concepts and Early - Stage Research for Large - Scale Recording and Modulation in the Nervous System (R21); Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship; Ruth L. Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowship; Ruth L. Kirschstein National Research Service Award (NRSA)

Department of Defense/US Army/DARPA/ONR: 2019 Department of Defense Multidisciplinary Research Program of the University Research Initiative (MURI); 2019 DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM (DURIP); Next-Generation Non-Surgical Neurotechnology; Army Rapid Capability Office (RCO) Broad Agency Announcement; Air Force Fiscal Year 2019 Young Investigator Research Program (YIP); Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic Scientific Research (2018)

Department of Energy: Critical Water Issues Prize Competition RFI; Solid Oxide Fuel Cells Core Technology Research

EPA (Environmental Protection Agency): 2018 Healthy Communities Grant Program; FY 2019 Pollution Prevention Grant Program

NASA: Transformational Tools and Technologies (TTT); Astrophysics Data Analysis; Discovery Data Analysis; Advanced Information Systems Technology

National Endowment of Humanities: Fellowships; Fellowships for Advanced Social Science Research on Japan
Bill & Melinda Gates Foundation: Grand Challenges Exploration (GCE)
Whitehall Foundation: Research Grants in Neurobiology

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Streamlyne Question of the Week

Question: How do I search for a document in Streamlyne?
Answer: Streamlyne Research delivers multidimensional search features called Lookups. Lookups are accessible from the Menu Bar, from the Main Menu, and from within documents. (Page 19 of the New User Manual posted on the Research website http://www.njit.edu/research/sites/research/files/StreamlyneNewUserManualCommonElements.pdf).
Searching Across All Modules: In Streamlyne Research module, please click the magnifying glass on the Menu Bar to access the Document Lookup. This will open up a Lookup form to search for any document in any Streamlyne Research module, regardless of whether the document is delivered or customized.
Searching Within a Module: If you would like to search for a document specific to a given module, click the hyperlinked menu option from the Main Menu. Streamlyne Research will direct you to a Lookup form that searches specifically for documents within the module selected.
Searching at the Field Level: Whether you are looking for a data element within a document section or trying to narrow down search criteria in a Lookup, you may search for a specific value by clicking the magnifying glass next to any field. If a magnifying glass does not appear next to a field, it means that the entries for this field are not limited to a set of configured values, and therefore cannot be accessed using the Lookup function.

More FAQs on Streamlyne: Please visit http://www.njit.edu/research/streamlyne/

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Recent Research Grant and Contract Awards

Congratulations to faculty and staff on receiving research grant and contract awards!

PI: John Federici (PI)
Department: Physics
Grant/Contract Project Title: NJSGC Summer Bridge Programs - Research in Physics at NJIT
Funding Agency: NASA
Duration: 02/01/18-04/30/18

PI: Ravindra Nuggehalli (PI)
Department: Physics
Grant/Contract Project Title: Magnetic Augmented Rotational Systems (MARS) for Applications in Electric Vehicles
Funding Agency: Energy Technology & Development Inc.
Duration: 02/12/18-02/11/19

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In the News…

(National and Federal News Related to Research Funding and Grant Opportunities)

TECHNOLOGY ASSESSMENT: Artificial Intelligence: Emerging Opportunities, Challenges, and Implications: The Comptroller General convened the Forum on AI to consider the policy and research implications of AI's use in 4 areas with the potential to significantly affect daily life—cybersecurity, automated vehicles, criminal justice, and financial services. The forum highlighted the fact that AI will have far-reaching effects on society—even if AI capabilities stopped advancing today. We looked at the prospects for AI in the near future, and identified areas where changes in policy and research may be needed. Forum participants noted a range of opportunities and challenges related to artificial intelligence (AI), as well as areas needed for future research and for consideration by policymakers. Regarding opportunities, investment in automation through AI technologies could lead to improvements in productivity and economic outcomes, similar to that experienced during previous periods of automation, according to a forum participant. In cybersecurity, AI automated systems and algorithms can help identify and patch vulnerabilities and defend against attacks. Automotive and technology firms use AI tools in the pursuit of automated cars, trucks, and aerial drones. In criminal justice, algorithms are automating portions of analytical work to provide input to human decision makers in the areas of predictive policing, face recognition, and risk assessments. Many financial services firms use AI tools in areas like customer service operations, wealth management, consumer risk profiling, and internal controls. More information is posted on the website https://www.gao.gov/products/GAO-18-142SP#summary.

Defense Research Opportunities: Through the Office of Naval Research (ONR), the Pentagon recently released two broad agency announcements, or BAAs. One requests proposals under the Defense University Research Instrumentation Program (DURIP) for FY 2019. A second BAA requests proposals under the Multidisciplinary University Research Initiative (MURI) program for FY 2019. (Please see the Grant Opportunities section below).

Intelligence Advanced Research Projects Activity (IARPA) Report: Prior to 2012, unmanned aircraft systems (UAS) technology had been primarily used by the military and hobbyists, but it has more recently transitioned to broader application, including commercial and scientific applications, as well as to expanded military use. These new uses encroach on existing structures for managing the nation's airspace and present significant challenges to ensure that UASs are coordinated safely and suitably with existing manned aircraft and air traffic management systems, particularly with the National Airspace System (NAS). Of particular concern is the interaction between human pilots, operators, or controllers and increasingly automated systems. Enhanced understanding of these interactions is essential to avoid unintended consequences, especially as new technologies emerge.

There are multiple projects, entities, and stakeholders examining the integration of UASs into the NAS. Although there is some coordination among the actors, for the most part, there is still a lack of clarity as to whether and how a comprehensive approach to ensure safe integration across a diverse and evolving landscape exists or would be developed. The workshop documented here was designed to identify the key issues and have experts discuss the human factors research needed to have a smooth transition of UASs into the NAS. A full report by National Academies is

posted on the website_ https://www.nap.edu/catalog/25009/human-automation-interaction-considerations-for-unmanned-aerial-system-integration-into-the-national-airspace-system.

Global R&D 2018 Forecast: Ten years ago, the largest industrial R&D organizations were automotive and pharmaceutical /biotechnology companies, dominated by the likes of Volkswagen, General Motors, Pfizer, Roche, Johnson & Johnson and Novartis. Their annual R&D expenditures ranged between $1 and $8 billion. The life science companies are still responsible for more than $180 billion in R&D in 2018. But R&D in the life science industry is growing at about 4% per year, while the aggregate R&D in the Information & Communication Technology (ICT) industry is growing at more than 5% per year, with global R&D spending of more than $225 billion—nearly 30% more than that of the life science industry. The top five R&D spending organizations are also ICT companies—Amazon, Google/Alphabet, Microsoft, Facebook and Intel. ICT R&D annual expenditures now range between $10 and $24 billion and these "frightful five" collectively spent more than $60 billion on R&D in 2017—about the same as the U.S. Federal Government spent on non-defense R&D. These companies also have stock evaluations that dominate the overall stock market with annual growth valuations between 25% and 50% in 2017. ICT, in fact, has become a global driving force. With its artificial intelligence (AI), autonomous systems, robotics and virtual environment systems, ICT looks to change the overall technological environment within 10 to 15 years. It has been noted that about 60% of the children being born today will work in jobs in 20 years that don't even exist today.

Another continuing trend is that on a global level—not just in the U.S.—government support of R&D has declined by 2.4% since 2010, according to data collected by the Organization for Economic Cooperation and Development (OECD). Businesses during this same accounting period (2010 to 2014) also were noted as increasing their R&D spending by 2.5%, with most advanced economies providing preferential tax treatment to industrial R&D investments. This particular trend is expected to continue into the foreseeable future.

From the *2018 Global R&D Forecast Repor*t posted on the website http://digital.rdmag.com/researchanddevelopment/2018_global_r_d_funding_forecast?pg=1#pg1

NSF Opens Prep Competition for Next-Gen ERCs: The National Science Foundation's venerable Engineering Research Centers program "is placing greater emphasis on research that leads to societal impact, including convergent approaches, engaging stakeholder communities, and strengthening team formation," NSF says in announcing a **planning grant competition**. It "is designed to foster and facilitate the engineering community's thinking about how to form convergent research collaborations. To participate in the upcoming ERC competition, one is not required to submit a planning grant proposal nor to receive a planning grant." The solicitation follows an NSF-commissioned study by the National Academies, "**A New Vision for Center-based Engineering Research**," and response to the study by the Engineering Directorate's advisory committee and by current ERC grantees at a meeting late last fall. NSF's announcement cites the Academies' call for "a deliberate, early-stage process for the development and formation of the best research teams to tackle complex, high-impact societal problems using the Team Science best practices. The RFP is included in the Grant Opportunity section in this newsletter. https://www.nsf.gov/pubs/2018/nsf18549/nsf18549.htm

NIH Big Data Strategy: The National Institutes of Health is seeking reaction to its draft **Strategic Plan for Data Science**, which NIH describes as "the interdisciplinary field of inquiry in which quantitative and analytical approaches, processes, and systems are developed and used to extract knowledge and insights from increasingly large and/or complex sets of data." The agency seeks

responses on the "appropriateness of the goals of the plan and of the strategies and implementation tactics proposed to achieve them; opportunities for NIH to partner in achieving these goals; additional concepts that should be included in the plan; performance measures and milestones that could be used to gauge the success of elements of the plan and inform course corrections"; or another relevant topic. More information is posted in the NIH notice NOT-OD-18-134 posted on the website https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-134.html

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Webinar and Events

Event: Hitting the Nail on the Head: Interdisciplinary Research in Computer Networking
Sponsor: NSF
When: April 4, 2018 from 2.00 PM to 3.00 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=244917&org=NSF
Brief Description: This is an exciting time in computer networking. The Internet is one of the most influential inventions of all time--a research experiment that, within our own lifetimes, escaped from the lab to become a global communications infrastructure. We see seemingly non-stop innovation in compelling services delivered over the Internet, end-host devices connected to the Internet, and communication media underlying the Internet, constantly giving our networks new challenges to address. In turn, computer networks arise in increasingly diverse settings, including data-center networks, cellular networks, vehicular networks, ad hoc networks, overlay networks, and more. Designing and operating computer networks that offer good performance, reliability, security, and more lead to a wealth of fascinating and important research problems--- "nails" in search of a good hammer. Yet, to *solve* these big, hairy problems we often need to look beyond the field of computer networking to other established disciplines---sources of good "hammers". In this talk, I share my experiences conducting interdisciplinary research in computer networking, through example collaborative projects with great colleagues and a few hard-won lessons along the way.
To attend the webinar, please register at: http://www.tvworldwide.com/events/nsf/180404

Event: CISE CAREER Proposal Writing Workshop
Sponsor: NSF
When: April 9, 2018 from 8.30 AM to 5.15 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=244552&org=NSF
Brief Description: The NSF Directorate for Computer & Information Science & Engineering (CISE) will host a one-day workshop on CAREER Proposal Writing on April 9, 2018. This workshop will be held at the new headquarters of the National Science Foundation in Alexandria, VA. The goal of this workshop is to introduce junior CAREER-eligible faculty to the NSF CAREER program and help them to prepare their CAREER proposals to target CISE programs. Attendees will have the opportunity to improve their skills in proposal writing, as well as to interact with NSF program directors from different CISE divisions (CCF, CNS, IIS and OAC) and recent NSF CAREER awardees. The workshop is also open to multidisciplinary researchers with a CISE-specific focus, including cyber-infrastructure. The workshop includes presentations and discussions on proposal preparation, experience sharing, a mock panel, and meetings with Program Directors from various research programs within CISE. In order to attend this event, registration is required on or before March 10, 2018.

For more information and to register, please visit: https://cisecareerworkshop.web.unc.edu/

Event: Engineering Research Center Planning Grants Webinar
Sponsor: NSF
When: April 16, 2018 from 1.00 PM to 3.00 PM
Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=244916&org=NSF
Brief Description: n conjunction with the release of the Planning Grants for Engineering Research Centers (ERC) solicitation (NSF 18-549), and to keep interested parties informed about new developments in the ERC program, program directors in the NSF Division of Engineering Education and Centers will conduct a live Q&A webinar focused on topics specific to this solicitation.
To register for the online event:
  1. Go to
   https://nsf.webex.com/nsf/onstage/g.php?MTID=e6be95025d47230ef93174084cf8d05d9
  2. Click "Register"
  3. On the registration form, enter your information and then click "Submit"
Once the host approves your registration, you will receive a confirmation email message with instructions on how to join the event.

Event: Math Frontiers Monthly Webinar Series
Sponsor: National Academies
When: April 10, 2018 from 2.00 PM
Website: http://sites.nationalacademies.org/deps/bmsa/deps_183972
Brief Description: Join the National Academies of Sciences, Engineering, and Medicine for a webinar series on exciting and upcoming mathematics research across an array of topics. Webinars will take place on the **second Tuesday of each month from 2-3 p.m. ET,** with two speakers and live Q&A. See below for the list of dates and themes for each webinar. ***When registering, please make sure you select all the webinars you would like to attend.*** You will only receive reminder emails and login instructions for webinars you have registered for.
As each webinar approaches, we will post more information about the speakers on the webinar series page at nas.edu/mathfrontiers.
April 10, 2018: *Social and Biological Networks*
Professor Alessandro Vespignani and others will discuss the mathematics of social and biological networks and how the analysis of these networks can lead to new and exciting discoveries.
May 8, 2018: *Mathematics of Redistricting*
Professors Jonathan Mattingly and Karen Saxe will discuss the mathematics of political redistricting—the process of redrawing congressional and state legislative electoral districts.
June 12, 2018: *Number Theory: The Riemann Hypothesis*
Professors Ken Ono and Terence Tao will speak on the importance and recent advances on the Riemann Hypothesis, one of the most famous unsolved problems in algebra and number theory.
July 10, 2018: *Topology*
Professors Jeffrey F. Brock and John Morgan will discuss applications of topology—the mathematical study of how object properties are impacted by deformations—to fields such as data analytics, tumor identification, and robotics.
August 14, 2018: *Algorithms for Threat Detection*
Professor Andrea Bertozzi and others will discuss applications of mathematics to spatiotemporal data analytics as a way to discover and mitigate national security threats.

September 11, 2018: *Mathematical Analysis*
Professor [Dimitri Shlyakhtenko](#) and others will discuss mathematical analysis—the study of functions and their limits. Application areas include computational fluid dynamics and astronomy.
October 9, 2018: *Combinatorics*
Invited speakers will discuss the mathematical study of discrete structures and their properties focusing on some of the modern techniques in the area including the probabilistic method. Application areas include information theory, statistical physics, molecular biology and computer science.
November 13, 2018: *Why Machine Learning Works*
Invited speakers will discuss the mathematics behind machine learning and how they enable predictive analyses.
December 11, 2018: *Mathematics of Epidemics*
Professors [Calistus Ngonghala](#) and [Folashade B. Agusto](#) will discuss mathematical approaches to studying biology, including ecology and infectious disease.
To join the webinar: Please register at
http://sites.nationalacademies.org/deps/bmsa/deps_183972

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Grant Opportunities

National Science Foundation

Grant Program: Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII)
Agency: National Science Foundation NSF 18-554
RFP Website: https://www.nsf.gov/pubs/2018/nsf18554/nsf18554.htm
Brief Description: With the goal of encouraging research independence immediately upon obtaining one's first academic position after receipt of the PhD, the Directorate for Computer and Information Science and Engineering (CISE) will award grants to initiate the course of one's independent research. Understanding the critical role of establishing that independence early in one's career, it is expected that funds will be used to support untenured faculty or research scientists (or equivalent) in their first three years in a primary academic position after the PhD, but not more than a total of five years after completion of their PhD. One may not yet have received any other grants or contracts in the Principal Investigator (PI) role from any department, agency, or institution of the federal government, including from the CAREER program or any other program, post-PhD, regardless of the size of the grant or contract, with certain exceptions noted below. Serving as co-PI, Senior Personnel, Postdoctoral Fellow, or other Fellow does not count against this eligibility rule. Grants, contracts, or gifts from private companies or foundations; state, local, or tribal governments; or universities do not count against this eligibility rule.

It is expected that these funds will allow the new CISE Research Initiation Initiative PI to support one or more graduate students for up to two years. Faculty at undergraduate and two-year institutions may use funds to support undergraduate students, and may use the additional RUI designation (which requires inclusion of a RUI Impact Statement) -- see https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5518 for additional information. In addition, submissions from all institutions may use funds for postdoctoral scholars, travel, and/or research equipment.

Awards: Standard grants; **Anticipated Funding Amount:** $10,000,000
Letter of Intent: Not Required
Full Proposal Submission Deadline: August 4, 2018
Contacts: Almadena Y. Chtchelkanova, Program Director, CCF, 1115, telephone: (703) 292-8910, email: achtchel@nsf.gov
- Mimi McClure, Associate Program Director, CNS, 1175, telephone: (703) 292-8950, email: mmcclure@nsf.gov
- Ephraim P. Glinert, Program Director, IIS, 1125, telephone: (703) 292-8930, email: eglinert@nsf.gov

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Grant Program: Small Business Technology Transfer Program Phase I (STTR)
Agency: National Science Foundation NSF 18-551
RFP Website: https://www.nsf.gov/pubs/2018/nsf18551/nsf18551.htm
Brief Description: The NSF STTR program focuses on transforming scientific discovery into products and services with commercial potential and/or societal benefit. Unlike fundamental research, the NSF STTR program supports startups and small businesses in the creation of innovative, disruptive technologies, getting discoveries out of the lab and into the market.
The NSF STTR Program funds early or "seed" stage research and development. The program is designed to provide equity-free funding and entrepreneurial support at the earliest stages of company and technology development.
        The STTR program is Congressionally mandated and intended to support scientific excellence and technological innovation through the investment of federal research funds to build a strong national economy by stimulating technological innovation in the private sector; strengthening the role of small business in meeting federal research and development needs; increasing the commercial application of federally supported research results; and fostering and encouraging participation by socially and economically disadvantaged and women-owned small businesses. The STTR program at NSF solicits proposals from the small business sector consistent with NSF's mission to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense.
Awards: Fixed award grants; **Anticipated Funding Amount:** $9,000,000
Letter of Intent: Not Required
Full Proposal Submission Deadline: June 14, 2018
Contacts: Henry Ahn, Biomedical (BM) Technologies, telephone: (703) 292-7069, email: hahn@nsf.gov
- Peter Atherton, Information Technologies (IT), telephone: (703) 292-8772, email: patherto@nsf.gov
- Anna Brady-Estevez, Chemical and Environmental Technologies (CT), telephone: (703) 292-7077, email: abrady@nsf.gov

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Grant Program: Small Business Innovation Research Program Phase I (SBIR)
Agency: National Science Foundation NSF 18-550
RFP Website: https://www.nsf.gov/pubs/2018/nsf18550/nsf18550.htm
Brief Description: The NSF SBIR program focuses on transforming scientific discovery into products and services with commercial potential and/or societal benefit. Unlike fundamental research, the NSF SBIR program supports startups and small businesses in the creation of innovative, disruptive technologies, getting discoveries out of the lab and into the market.

The NSF SBIR Program funds early or "seed" stage research and development. The program is designed to provide equity-free funding and entrepreneurial support at the earliest stages of company and technology development.

The SBIR program is Congressionally mandated and intended to support scientific excellence and technological innovation through the investment of federal research funds to build a strong national economy by stimulating technological innovation in the private sector; strengthening the role of small business in meeting federal research and development needs; increasing the commercial application of federally supported research results; and fostering and encouraging participation by socially and economically disadvantaged and women-owned small businesses. The SBIR program at NSF solicits proposals from the small business sector consistent with NSF's mission to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense.

Awards: Fixed award grants; **Anticipated Funding Amount:** $33,750,000
Letter of Intent: Not Required
Full Proposal Submission Deadline: June 14, 2018
Contacts: Henry Ahn, Biomedical (BM) Technologies, telephone: (703) 292-7069,
email: hahn@nsf.gov
- Peter Atherton, Information Technologies (IT), telephone: (703) 292-8772,
  email: patherto@nsf.gov
- Anna Brady-Estevez, Chemical and Environmental Technologies (CT), telephone: (703) 292-7077, email: abrady@nsf.gov

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Grant Program: Planning Grants for Engineering Research Centers (ERC)
Agency: National Science Foundation NSF 18-549
RFP Website: https://www.nsf.gov/pubs/2018/nsf18549/nsf18549.htm
Brief Description: The ERC program is placing greater emphasis on research that leads to societal impact, including convergent approaches, engaging stakeholder communities, and strengthening team formation, in response to the NASEM study recommendations. The ERC program intends to support planning activities leading to convergent research team formation and capacity-building within the engineering community. This planning grant pilot initiative is designed to foster and facilitate the engineering community's thinking about how to form convergent research collaborations. To participate in the upcoming ERC competition, one is not required to submit a planning grant proposal nor to receive a planning grant.
Awards: Standard grants; **Anticipated Funding Amount:** $4,000,000
Letter of Intent: Not Required
Full Proposal Submission Deadline: June 06, 2018
Contacts: Junhong Chen, telephone: (703) 292-4623, email: junchen@nsf.gov
- Dana L. Denick, telephone: (703) 292-8866, email: ddenick@nsf.gov
- Deborah J. Jackson, telephone: (703) 292-7499, email: djackson@nsf.gov

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Grant Program: Future of Work at the Human - Technology Frontier: Advancing Cognitive and Physical Capabilities (FW-HTF)
Agency: National Science Foundation NSF 18-548
RFP Website: https://www.nsf.gov/pubs/2018/nsf18548/nsf18548.htm
Brief Description: The landscape of jobs and work is changing at unprecedented speed, driven by the development of new technologies that have moved from the factory floor to an expanding

array of knowledge and service occupations. These changes promise benefits to the Nation in the creation of new industries and occupations, increased productivity, opportunity for innovation, and sustained global leadership. But there are risks as well. Technological advances scale back the need for some workers, and in some cases, eliminate job sectors, with consequences to displaced workers who must adapt to emerging new technologies and the changing economy through retraining and reskilling.

The Future of Work at the Human-Technology Frontier (FW-HTF) is one of 10 new and far-sighted Big Ideas for Future Investments announced by NSF in 2016. NSF aims to respond to the challenges and opportunities of the changing landscape of jobs and work by supporting convergent research to: understand and develop the human-technology partnership; design new technologies to augment human performance; illuminate the emerging socio-technological landscape and understand the risks and benefits of new technologies; and foster lifelong and pervasive learning with technology. In order to be nimble and responsive to new opportunities and challenges as they are recognized, focus areas for the FW-HTF solicitation, the centerpiece of the FW-HTF Big Idea, may change from year to year.

This solicitation focuses on advancing cognitive and physical capabilities in the context of human-technology interactions. The solicitation will support two themes: Theme 1 will focus on **Foundations for Augmenting Human Cognition** and Theme 2 will focus on **Embodied Intelligent Cognitive Assistants**. In shaping projects responsive to these two themes, PIs consider the importance of understanding, anticipating, and shaping the larger implications at the individual, institutional, corporate, and national levels, including issues arising from the needs or consequences for training and education. In addition, projects should be framed in terms of their focus on the potential contribution toward (a) transforming the frontiers of science and technology for human performance augmentation and workplace skill acquisition; (b) improving both worker quality of life and employer financial metrics; (c) enhancing the economic and social well-being of the country; and (d) addressing societal needs through research on learning and instruction in the context of augmentation. Projects must include a Collaboration Plan which outlines the way in which the project will leverage and integrate multiple disciplinary perspectives.

Two classes of proposals — differing in scope, duration, and team size — will be considered through this solicitation:

- Small projects may be requested for a total budget ranging from $750,000-1,500,000 for a period of 3 to 5 years; and
- Large projects may be requested for a total budget ranging from $1,500,001-3,000,000 for a period of 3 to 5 years.

Awards: Standard grants; **Anticipated Funding Amount:** $27,000,000
Letter of Intent: Required by April 16, 2018
Full Proposal Submission Deadline: June 04, 2018
Contacts: Jie Yang - CISE, telephone: (703) 292-4768, email: jyang@nsf.gov
- David Corman - CISE, telephone: (703) 292-8754, email: dcorman@nsf.gov
- Alexandra Medina-Borja - EHR, telephone: (703) 292-7557, email: amedinab@nsf.gov

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Grant Program: Cybersecurity Innovation for Cyberinfrastructure (CICI)
Agency: National Science Foundation NSF 18-547
RFP Website: https://www.nsf.gov/pubs/2018/nsf18547/nsf18547.htm

Brief Description: The objective of the Cybersecurity Innovation for Cyberinfrastructure (CICI) program is to develop, deploy and integrate security solutions that benefit the scientific community by ensuring the integrity, resilience and reliability of the end-to-end scientific workflow. CICI seeks three categories of projects:

1. **Secure Scientific Cyberinfrastructure:** These awards seek to secure the scientific workflow by encouraging novel and trustworthy architectural and design approaches, models and frameworks for the creation of a holistic, integrated security environment that spans the entire scientific CI ecosystem;
2. **Collaborative Security Response Center**: This single award targets the development of a community resource to provide security monitoring, analysis, expertise, and resources Research & Education (R&E) cyberinfrastructure staff, regardless of physical location or organization; and
3. **Research Data Protection:** These awards provide solutions that both ensure the provenance of research data and reduce the complexity of protecting research data sets regardless of funding source.

Awards: Standard grants; **Anticipated Funding Amount:** $12,000,000

Limit on Number of Proposals per Organization: Organizations are limited to 2 CICI proposals. These eligibility constraints will be strictly enforced in order to treat everyone fairly and consistently. In the event that an organization exceeds this limit, proposals received within the limit will be accepted based on earliest date and time of proposal submission (i.e., the first two proposals received will be accepted and the remainder will be returned without review). No exceptions will be made.

Limit on Number of Proposals per PI or Co-PI: An individual can participate as PI, co-PI or senior personnel on no more than two CICI proposals. Note that any individual whose biographical sketch is provided as part of the proposal will be considered as Senior Personnel in the proposed activity, irrespective of whether that individual will receive financial support from the project.

Internal Competition: Please inform Atam Dhawan, Senior Vice Provost for Research at dhawan@njit.edu by April 2, 2018, if you intend to submit a proposal as PI or Co-PI. In case there are more than two intents of submissions are received, there will be an internal competition set for submission of pre-proposals. Please note that no intent of proposal submission will be accepted after April 2, 2018 for selection of proposals for submission to NSF.

Letter of Intent: Not Required

Full Proposal Submission Deadline: June 04, 2018

Contacts: Kevin Thompson, Program Director, CISE/OAC, telephone: (703) 292-4220, email: kthompso@nsf.gov

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National Institutes of Health

Grant Program: NIH Director's Early Independence Award (DP5 - Clinical Trial Optional)
Agency: National Institutes of Health RFA-RM-18-010
RFP Website: https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-18-010.html
Brief Description: The NIH Director's Early Independence Award provides an opportunity for exceptional junior scientists to accelerate their entry into an independent research career by forgoing the traditional post-doctoral training period. Though most newly graduated doctoral-level researchers would benefit from post-doctoral training, a small number of outstanding junior investigators would benefit from skipping such training and launching essentially directly into an

independent research career. For those select junior investigators who already have established a record of scientific innovation and research productivity and who have demonstrated unusual scientific vision and maturity, typical post-doctoral training would unnecessarily delay their entry into independent research. Also, importantly, the NIH Director's Early Independence Award provides an opportunity for institutions to invigorate their research programs by bringing in the fresh scientific perspectives of the awardees that they host.

To be eligible, the investigator, at the time of application, must have received the most recent doctoral degree or completed clinical training within the previous fifteen months or expect to do so within the following twelve months. **To be consistent with the updated [NIH definition of Early Stage Investigators](#), eligible clinical training includes clinical residency and clinical fellowship**. For full eligibility requirements, see [Section III. Eligibility Information.](#) By the end of the award period, the Early Independence Award investigator is expected to be competitive for continued funding of his/her research program through other NIH funding activities and for a permanent research-oriented position.

The NIH recognizes a compelling need to promote diversity in the biomedical, behavioral, clinical and social sciences research workforce. The NIH expects its efforts towards diversifying the workforce to lead to the recruitment of the most talented researchers from all groups; to improve the quality of the educational and training environment; to balance and broaden the perspective in setting research priorities; to improve the ability to recruit subjects from diverse backgrounds into clinical research protocols; and to improve the Nation's capacity to address and eliminate health disparities. Applicant institutions are always encouraged to consider talented researchers from diverse backgrounds underrepresented in biomedical research, including underrepresented racial and ethnic groups, persons with disabilities, and women for participation in all NIH-funded research opportunities.

Awards: Awards will be for up to $250,000 in direct costs per year, plus applicable Facilities and Administrative (F&A) costs.

Letter of Intent: August 27, 2018

Deadline: September 27, 2018, by 5:00 PM local time of applicant organization. All [types of non-AIDS applications](#) allowed for this funding opportunity announcement are due on this date.

 Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Grant Program: International Bioethics Research Training Program (D43 Clinical Trial Optional)

Agency: National Institutes of Health PAR-18-716

RFP Website: https://grants.nih.gov/grants/guide/pa-files/PAR-18-716.html

Brief Description: he primary objective of proposed International Bioethics Research Training programs should be to support individuals with ethics expertise from a LMIC research intensive institution to develop the capabilities to conduct original empirical or conceptual research on critical ethical issues in health research in their countries. The proposed doctoral and/or long term postdoctoral training program should provide:

- o A strong foundation in research design, methods, and analytic techniques appropriate for the proposed bioethics research area;
- o The enhancement of the trainees' ability to conceptualize, analyze and solve bioethics research problems with increasing independence;
- o Experience conducting bioethics research using state-of-the-art methods as well as presenting and publishing their research findings;

- o The opportunity to interact with members of the international bioethics academic community at appropriate conferences and workshops; and
- o The enhancement of the trainees' understanding of the bioethics theory and ethical practice related to global health research.

A secondary objective of proposed programs should be to provide training in the competencies necessary to sustain scholarly careers in leadership positions at institutions in the LMIC as well as teaching bioethics, leading ethical review of research and providing research ethics consultation.

The overall goal of this initiative is to contribute to the development of a sustainable critical mass of bioethics leaders at the LMIC research intensive institution to meet the needs for research ethics capacity in this country. Applicants should describe the specific needs for research ethics capacity, scholarship and leadership in the LMIC and how the results of the proposed doctoral and postdoctoral training will meet these needs at the end of the proposed award period. Applicants are encouraged to develop plans for post-training interaction and activities among the doctoral and postdoctoral trainees specifically to create a sustainable critical mass for bioethics leadership at LMIC institutions.

Awards: Applicants may request up to $230,000 direct costs per year

Letter of Intent: 30 days prior to the application due date

Deadline: May 17, 2018, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Grant Program: BRAIN Initiative: New Technologies and Novel Approaches for Large-Scale Recording and Modulation in the Nervous System (R01 Clinical Trial Not Allowed)
Agency: National Institutes of Health RFA-NS-18-020
RFP Website: https://grants.nih.gov/grants/guide/rfa-files/RFA-NS-18-020.html
Brief Description: This FOA is related to the recommendations in section III of the BRAIN 2025 Report, with the goal to 'produce a dynamic picture of the functioning brain by developing and applying improved methods for large-scale monitoring of neural activity'. Towards this end, the report calls for accelerated development of new and improved electrodes for large-scale recording, new and improved electrical and chemical optical sensors of neural activity, and new and improved instruments for optical monitoring of neural activity. These new technologies and approaches will provide unprecedented opportunities for exploring how the nervous system encodes, processes, utilizes, stores, and retrieves vast quantities of information. A better understanding of this dynamic neural activity will enable researchers to seek new ways to diagnose, treat, and prevent brain disorders. Moreover, this FOA is intended to support the core principles of technology validation and dissemination highlighted in the BRAIN 2025 Report.

This FOA seeks applications to conduct proof-of-concept development and testing of new technologies and novel approaches for large-scale recording and manipulation of neural activity, to enable transformative understanding of dynamic signaling in the nervous system.

An additional BRAIN FOA (RFA-NS-18-019) solicits applications for iterative refinement and validation of existing and emerging technologies for large-scale recording and manipulation of neural activity.

Applications are expected to address any or all of the following three general goals for the FOA:

1. Develop New Large-Scale Network Recording Capabilities
Recording dynamic neural activity from complete neural networks, over long periods, in any area of the brain is a challenging but essential goal. Advances in the exploration and development of

new technologies for neural cell recording, including methods based on electrodes, microelectronics/microchips, imaging, molecular genetics, and nanoscience are encouraged. It is expected that progress will initially be tractable in non-human animals (invertebrate or vertebrate), but extrapolation to human circuits is an ultimate goal.

2. Develop Tools for Circuit Manipulation

The ability to activate and inhibit specific populations of neurons is key to understanding functional circuits, which will advance the scope of our knowledge from observation of neural phenomena to a mechanistic understanding of neural causation. A new generation of tools for optogenetics, pharmacogenetics, biochemical, electromagnetic and/or acoustic modulation needs to be developed for use in animals, and eventually in humans, to enable the immense potential of circuit manipulation.

3. Link Neural Activity to Behavior

The goal of this FOA is to produce technologies with potential to elucidate nervous system function, in health and disease, in the context of complex behaviors. Proposed technologies should be compatible with experiments in behaving animals and should be validated under in vivo experimental conditions. In addition, novel approaches for enabling large-scale neural recording or manipulation during complex behaviors are encouraged along with the computational and statistical tools necessary to link neural activity to behavior. In combination with concurrent measurement and manipulation of neuronal activity, applications may propose methods to enhance the ability to quantify and interpret animal behavior, at high temporal and spatial resolution, reliably and objectively, over long periods of time and under a broad set of conditions.

Awards: Application budgets are not limited but need to reflect the actual needs of the proposed project.

Letter of Intent: 30 days prior to the application due date

Deadline: May 15, 2018, October 29, 2018, May 1, 2019, October 29, 2019, May 1, 2020, and October 29, 2020 , by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Grant Program: NEI Translational Research Program (TRP) to Develop Novel Therapies and Devices for the Treatment of Visual System Disorders (R24 Clinical Trial Optional)
Agency: National Institutes of Health PAR-18-707
RFP Website: https://grants.nih.gov/grants/guide/pa-files/PAR-18-707.html
Brief Description: The objective of this FOA is to encourage collaborative research that facilitates the translation of focused laboratory and animal studies into novel resources for the treatment of ocular diseases. Translational research may target new or previously identified genes, molecules, and/or pathways that are appropriate for therapeutic intervention. The broad scope of this program intended to cover all visual system diseases and disorders that are relevant to the mission of the NEI. The concept is to bring teams of experts together to create a pipeline for therapy and/or medical device development. The scope of the proposed research should be beyond the capabilities and resources of one research laboratory. For example, development of gene therapy may require research teams with expertise in the pathophysiology of the disease, clinical experience in the manifestations and treatments currently available, cell biologists able to contribute resources such as therapeutic genes and vectors capable of appropriate tissue targeting and gene expression, and with animal models appropriate for toxicology and efficacy

testing. Rational drug design may require different scientific disciplines to identify and validate appropriate therapeutic targets, devise suitable delivery systems, and test the efficacy and safety of such agents in animal models.

Examples

The following are presented as general examples and are not intended to be exclusive nor to limit creativity and innovation.

- o Gene Therapy: Including vector design and therapeutic strategies where the replacement of one mutated gene may be curative or in pathological conditions where temporary expression of a transferred gene could result a beneficial clinical effect.
- o Cell-based therapies: transplantation of cells expressing various angiostatic or neurotrophic factors might represent another approach. Autologous grafts of such cells alone or after transfection to express a desirable gene product. Expression of trophic factors might achieve generic rescue effects on selected cell populations, possibly circumventing the need to target specific gene defects.
- o Stem cell therapy: human adult bone-marrow-derived stem cells and Induced Pluripotent Stem (iPS) cells aimed at rescuing or replacing degenerating cells.
- o Rational drug design: characterization of pathways leading to cell degeneration and death in order to identify novel targets for therapeutic intervention in retinal diseases or the identification of neuroprotection strategies that might halt or slow the degenerative process.
- o Small molecules: development of compounds that show promise for treating visual disorders, but are not yet suitable for clinical testing for ocular diseases.
- o Prosthesis and other devices: Medical Devices may include sensory substitution, disease treatment, and assistive technologies. For example, retinal prosthetics that transform light to electrical signals that stimulate the remaining retinal neurons to produce visual percepts. Devices to deliver therapeutic agents to eye tissue as well as assistive technologies that aid people with low-vision or blindness with their everyday activities of life.

Awards: Applicants may request up to $1.5 million per year direct costs

Letter of Intent: Not Required

Deadline: April 10, 2018; April 10, 2019; April 10, 2020), by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Grant Program: BRAIN Initiative: New Concepts and Early - Stage Research for Large - Scale Recording and Modulation in the Nervous System (R21 Clinical Trial Not Allowed)
Agency: National Institutes of Health RFA-EY-18-001
RFP Website: https://grants.nih.gov/grants/guide/rfa-files/RFA-EY-18-001.html
Brief Description: This FOA is related to the recommendations in sections II.2, II.3, and II.4 from the BRAIN 2025 Report. These three recommendations call for accelerated development of new large-scale recording technologies and tools for neural circuit manipulation. These new technologies and approaches will provide unprecedented opportunities for exploring how the nervous system encodes, processes, utilizes, stores, and retrieves vast quantities of information. A

better understanding of this dynamic neural activity will enable researchers to seek new ways to diagnose, treat, and prevent brain disorders.

Achieving these goals requires the ability to record simultaneously from thousands or tens-of- thousands of neurons contributing to the dynamic activity in a neural circuit. The relevant activity may be in clusters of cells packed closely together or may be in widely distributed circuits. Current microelectrode and imaging technologies are limited in the number of cells from which activity can be isolated and sampled simultaneously, by the size or location of the area to be sampled, by the depth of penetration, and by the invasiveness of the technique that might prohibit their use in human experimentation. Non-invasive technologies suitable for use in humans are currently limited in spatial resolution and temporal dynamics, as well as in their reflection of on-going electrical activity in circuit elements. This FOA seeks entirely new ideas, concepts and/or approaches from physics and engineering, and biology, for how these limitations might be overcome to enable increased recording capabilities on the scale of one or more orders of magnitude beyond that of current technology.

This FOA also seeks novel ideas for technology capable of manipulating activity in circuits that overcome the limitations of current invasive and non-invasive approaches. Dissecting the function of neural circuits requires the ability to manipulate neural activity in order to investigate underlying mechanisms and demonstrate causality. Current technologies such as microstimulation and optogenetic approaches are limited in specificity, temporal dynamics, and by the invasiveness of the technique.

Applications are expected to propose the development of ideas in the earliest stages for entirely new approaches for large-scale neural recording and/or manipulation of neural activity. Such ideas could encompass unique and innovative combinations of existing technology that create a synergistic result. An important goal is to stimulate new thinking and concepts for accelerating development of novel technologies that break current barriers to neural recording and/or manipulation. In addition to experimental approaches, this FOA may support early-stage testing using calculations, simulations, computational models, or other mathematical techniques for demonstrating that the signal sources and/or measurement technologies are theoretically capable of meeting the demands of large-scale recording or manipulation of circuit activity in humans or animal models. The support might also be used for building and testing phantoms, prototypes, in-vitro or other bench-top models in order to validate underlying theoretical assumptions in preparation for future FOAs aimed at proof-of concept testing in animal models.

Awards: The combined direct cost budget for the two-year project period may not exceed $300,000. No more than $200,000 may be requested in any single year.

Letter of Intent: Not Required

Deadline: May 1, 2018, October 29, 2018, May 1, 2019 October 29, 2019, May 1, 2020 October 29, 2020, by 5:00 PM local time of applicant organization. All types of non-AIDS applications allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Grant Program: Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31)
Agency: National Institutes of Health PA-18-671
RFP Website: https://grants.nih.gov/grants/guide/pa-files/PA-18-671.html
Brief Description: The overall goal of the NIH Ruth L. Kirschstein National Research Service Award (NRSA) program is to help ensure that a diverse pool of highly trained scientists is

available in appropriate scientific disciplines to address the Nation's biomedical, behavioral, and clinical research needs. NRSA fellowships support the training of pre-and postdoctoral scientists, dual-degree investigators, and senior researchers. More information about NRSA programs may be found at the [Ruth L. Kirschstein National Research Service Award (NRSA)](#) website.

The purpose of the Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31) is to enable promising predoctoral students to obtain individualized, mentored research training from outstanding faculty sponsors while conducting dissertation research. Applicants for this F31 program are expected to propose a dissertation research project and training plan in scientific health-related fields relevant to the mission of the participating Institutes and Centers. This training plan should reflect the applicant's dissertation research project, and facilitate and clearly enhance the individual's potential to develop into a productive, independent research scientist. The training plan should document the need for, and the anticipated value of, the proposed mentored research and training in relationship to the individual's research career goals. The training plan should also facilitate the fellow's transition to the next stage of his/her research career.

Awards: Award budgets are composed of stipends, tuition and fees, and institutional allowance. Individuals may receive up to 5 years of aggregate Kirschstein-NRSA support at the predoctoral level (up to 6 years for dual degree training, e.g., MD/PhD), and up to 3 years of aggregate Kirschstein-NRSA support at the postdoctoral level, including any combination of support from institutional training grants (e.g., T32) and an individual fellowship award. This F31 award program only supports dissertation research training.

Letter of Intent: Not Required

Deadline: [Standard dates](#) apply, by 5:00 PM local time of applicant organization. All [types of non-AIDS applications](#) allowed for this funding opportunity announcement are due on these dates.

Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

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Department of Defense/US Army/DARPA/ONR

Grant Program: 2019 Department of Defense Multidisciplinary Research Program of the University Research Initiative (MURI) - ARMY SUBMISSION
Agency: Department of Defense ONR, ARO, Air Force Office of Scientific Research
ONR # N00014-18-S-F006
ARO # W911NF18S0003
AFOSR # FOA-AFRL-AFOSR-2018-0001
Website: https://www.arl.army.mil/www/default.cfm?page=8
Brief Description: The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation: Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress (DoD 7000.14-R, vol. 2B, chap. 5, para. 050201.B).

DoD's basic research program invests broadly in many fields to ensure that it has early cognizance of new scientific knowledge.

White papers and proposals addressing the following topics should be submitted to the Office of Naval Research (ONR):

Topic 1: Fundamental Limits on Information Latency

Topic 2: Molecularly Programmable Graphene Architecture (MPGA)

Topic 3: Identifying invariances for improved modeling and prediction of oceanographic phenomena

Awards: Various

White Paper Submission: White papers may be submitted via e-mail directly to a Research Topic Chief, via the United States Postal Service (USPS), or via a commercial carrier to the agency specified for the topic. For hard copy submissions, use the addresses provided in Section II. D. 2. a, entitled, "Address for Submission of Hard Copy White Papers." The due date and time for receipt of white papers is no later than 29 June 2018 (Friday) at 11:59 PM Eastern Time.

Proposal Deadline: Proposals must be submitted and received electronically through Grants.gov not later than 16 October 2018 (Tuesday) at 11:59 PM Eastern Time to be considered for selection. This is the final due date.

Contact Information: Kia McCormick Procurement Analyst Phone (919)549-4281

Dr. Ellen Livingston MURI Program Manager Office of Naval Research Email: ellen.s.livingston@navy.mil

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Grant Program: 2019 DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM (DURIP)

Agency: Department of Defense Office of Naval Research AFOSR ARO

AFOSR: FOA-AFRL-AFOSR-2018-0002

ARO: W911NF18S0002

ONR: N00014-18-S-F007

Website: https://www.onr.navy.mil/en/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements

Brief Description: As the capacity of the DoN Science and Technology (S&T) workforce is interconnected with the basic research enterprise and STEM education system, ONR recognizes the need to support efforts that can jointly improve STEM student outcomes and align educational efforts with Naval S&T current and future workforce needs. This announcement explicitly encourages projects that improve the capacity of education systems and communities to create impactful STEM educational experiences for students and workers. Submissions are encouraged to consider including active learning approaches and incorporating 21st century skill development. Projects must aim to increase student and worker engagement in STEM and enhance people with needed Naval STEM capabilities. ONR encourages applications to utilize current STEM educational research for informing project design and advancing our understanding of how and why people choose STEM careers and opportunities of naval relevance. While this announcement is relevant for any stage of the STEM educational system, funding efforts will be targeted primarily toward projects addressing the below communities or any combination of these communities: • Secondary education communities; • Post-Secondary communities; • Informal science communities; • Current naval STEM workforce communities. Project scope may range in size and complexity. Projects that are already established with prior funding sources or have established stakeholders are especially encouraged to consider the following scope areas: • Develop and implement exploratory pilot projects that seek to create new

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

Awards: Various

Submission of White Papers: As mentioned prior, white papers are a MANDATORY component of a two-part submission process. White papers must NOT be submitted through the Grants.gov application process. Instead, white papers are to be submitted via email to the attention of Dr. Michael Simpson at onr_stem@navy.mil as either a PDF or Microsoft Word 2010 compatible file. The subject line of the email shall read "N00014-18-S-F003 White Paper Submission." The due date and time for receipt of white papers begins on 2 April 2018 and ends on 31 July 2018 (Tuesday) at 5:00 PM Eastern Time.

Proposal Deadline: Applications may only be submitted by invitation and received electronically through https://www.grants.gov/ no later than 28 September 2018 (Friday) at 11:59 PM Eastern Time.

Contact Information: Dr. Michael Simpson Director of Education and Workforce Office of Naval Research 875 North Randolph Street Arlington VA 22203-1995 Email: onr_stem@navy.mil

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Grant Program: Next-Generation Non-Surgical Neurotechnology
Agency: Department of Defense DARPA HR001118S0029
Website:
https://www.fbo.gov/index?s=opportunity&mode=form&id=767054e365fc2ac4cd05a338a6d35a1d&tab=core&_cview=0
Brief Description: DARPA seeks proposals to design, build, demonstrate, and validate a nonsurgical neural interface system to broaden the applicability of neural interfaces to the able-bodied warfighter. The final technology aims to enable neural recording and stimulation with sub-millimeter spatial resolution.
Awards: Various
Proposal Deadline: June 5, 2018
Contact Information: BAA Coordinator N3@darpa.mil

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Grant Program: Army Rapid Capability Office (RCO) Broad Agency Announcement
Agency: Department of Defense W56JSR-18-S-0001
Website: https://www.grants.gov/web/grants/search-grants.html
Brief Description: This Broad Agency Announcement (BAA), W56JSR-18-S-0001, is sponsored by the Army Rapid Capabilities Office (RCO). The RCO serves to expedite critical capabilities to the field to meet Combatant Commanders' needs. The Office enables the Army to experiment, evolve, and deliver technologies in real time to address both urgent and emerging threats while supporting acquisition reform efforts. The RCO executes rapid prototyping and initial equipping of capabilities, particularly in the areas of cyber, electronic warfare, survivability and positioning, navigation and timing (PNT), as well as other priority projects that will enable Soldiers to operate and win in contested environments decisively. This BAA is an expression of interest only and does not commit the Government to make an award or pay proposal preparation costs generated in response to this announcement.

Technical questions will be sent to the appropriate Technical Points of Contact (TPOC), topic authors, and/or Subject Matter Experts (SMEs) to request clarification of their areas of interest. No discussions are to be held with offerors by the technical staff after proposal submission without permission of the Army Contracting Command-Aberdeen Proving Ground (ACC-APG) Contracting Officer.
Awards: Various
Proposal Deadline: March 23, 2023
Contact Information: Megan Grigas, Contracting Officer
megan.c.grigas.civ@mail.mil
Phone: (443)395-1606

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Grant Program: Air Force Fiscal Year 2019 Young Investigator Research Program (YIP)
Agency: Department of Defense Air Force Office of Scientific Research FA9550-18-S-0002
Website: https://www.grants.gov/web/grants/search-grants.html
Brief Description: The Fiscal Year 2019 Air Force Young Investigator Research Program (YIP) intends support young in career scientists and engineers who have received Ph.D. or equivalent degrees by 1 April 2012 or later showing exceptional ability and promise for conducting basic research. The program objective is to foster creative basic research in science and engineering; enhance early career development of outstanding young investigators; and increase opportunities for the young investigator to recognize the Air Force mission and related challenges in science and engineering. Individual awards are made to U.S. institutions of higher education, industrial laboratories, or non-profit research organizations where the principal investigator (PI) is employed on a full-time basis and holds a regular position. YIP PIs must be a U.S. citizen, national, or permanent resident. Researchers working at a Federally Funded Research and Development Center or DoD Laboratory are not eligible for this competition. Most YIP awards are funded up to $150,000 per year for three years, for a total of $450,000. Exceptional proposals will be considered individually for higher funding levels and/or longer duration. Please review the remainder of this announcement for additional information. We anticipate approximately thirty-six (36) awards under this competition if funds are available.
Please see the eligibility requirements in the solicitation: Doctorate no earlier than 01 Apr 2012
Awards: Most YIP awards are three (3) years in duration, funded up to $150,000 per year for a total of approximately $450,000. Proposals should be submitted in adherence to these guidelines.
Proposal Deadline: Proposals must be received electronically through Grants.gov by Friday, 01 Jun 2018 at 11:59 PM Eastern time to be considered. Technical or general pre-proposal inquiries and questions must be received in writing by electronic mail not later than Friday, 27 April 2018 to be considered.
Contact Information: MS. ELLEN M. ROBINSON, AFOSR/RTB Program Coordinator Telephone: (703) 588-8527 Email: afosryip@us.af.mil
General Inquires: MS. BRITTANY TURNER, AFOSR/PKC Procurement Analyst Email: brittany.turner.5@us.af.mil

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Grant Program: Army Research Institute for the Behavioral and Social Sciences Broad Agency Announcement for Basic Scientific Research (2018)
Agency: Department of Defense Dept of the Army -- Materiel Command W911NF-18-S-0001
Website: https://www.grants.gov/web/grants/view-opportunity.html?oppId=301433

Brief Description: The basic research program supports research projects that are designed to expand fundamental knowledge and discover general principles in the behavioral and social sciences. In addition to looking for proposals that provide for programmatic efforts to develop and evaluate psychological and behavioral theory, ARI strongly encourages Applicants to propose novel, state-of-the-art, and multidisciplinary approaches that address difficult problems. A key consideration in the decision to support a research proposal is that its findings are likely to stimulate new, basic behavioral research which, in turn, will lead to improved performance of Army personnel and their units.

Proposals may address both traditional behavioral issues as well as psychophysiological (to include neuroscience) and network science approaches to social phenomena, memory, cognition, and personality.

ARI will not support proposals through this BAA that are primarily applied research projects (e.g., human factors studies or training program evaluations) or purely focused on physiology, psychopathology, or behavioral health. Collaboration is encouraged among institutions of higher education (IHE's), non-profit organizations and commercial organizations.

A proposal should describe its contribution to theory and how its results might lead to basic behavioral research that would be meaningful to the Army. Those contemplating submission of a proposal are encouraged to submit a White Paper before submitting a full proposal. Submission of a White Paper before a full proposal allows earliest determination of the potential for funding and minimizes the labor and cost associated with the submission of a full proposal that may have minimal probability of being selected for funding.

While all proposals will be considered, ARI has identified the following five (5) domains as particularly germane to its basic research needs. This list is neither comprehensive nor exclusive and ARI is especially open to proposals that combine or cut across these domains. Furthermore, proposals that adopt multi- or interdisciplinary approaches to research questions are encouraged. These domains include:

1. Personnel Testing and Performance
2. Leader Development
3. Organizational Effectiveness
4. Learning in Formal and Informal Environments
5. Culture.

Early Career Proposals. To foster the development of innovative and creative researchers, ARI also solicits proposals from Applicants with individuals who are early in their research careers and have never received ARI funding as a Principal Investigator.

Awards: Various Funding Programs

Proposal Deadline:
White Paper submissions must be received by: 11:59 PM/2359 Hours Eastern Daylight Time (EDT) on 4 April 2018
Proposal submissions must be received by: 5:00 PM/1700 Hours Eastern Daylight Time (EDT) on 15 June 2018

Contact Information: Questions regarding White Papers must be submitted in writing to gregory.a.ruark.civ@mail.mil by: 5:00 PM/1700 Eastern Daylight Time (EDT) on 30 March 2018
Questions regarding Proposals must be submitted in writing to
brandon.s.hill24.civ@mail.mil by: 5:00 PM/1700 Eastern Daylight Time (EDT) on 8 June 2018

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Grant Program: 2018 ERDC Broad Agency Announcement
Agency: Department of Defense W912HZ-18-BAA-01
Website:
https://www.fbo.gov/index?s=opportunity&mode=form&id=26ed7ee8e4a65aa2487a81ebdf0ca239&tab=core&_cview=0

Brief Description: The U.S. Army Engineer Research and Development Center (ERDC) has issued a Broad Agency Announcement (BAA) for various research and development topic areas. The ERDC consists of the Coastal and Hydraulics Lab (CHL), the Geotechnical and Structures Lab (GSL), the Reachback Operations Center (UROC), the Environmental Lab (EL) and the Information Technology Lab (ITL) in Vicksburg, Mississippi, the Cold Regions Research and Engineering Lab (CRREL) in Hanover, New Hampshire, the Construction Engineering Research Lab (CERL) in Champaign, Illinois, and the Geospatial Research Laboratory (GRL) in Alexandria, Virginia. The ERDC is responsible for conducting research in the broad fields of hydraulics, dredging, coastal engineering, instrumentation, oceanography, remote sensing, geotechnical engineering, earthquake engineering, soil effects, vehicle mobility, self-contained munitions, military engineering, geophysics, pavements, protective structures, aquatic plants, water quality, dredged material, treatment of hazardous waste, wetlands, physical/mechanical/ chemical properties of snow and other frozen precipitation, infrastructure and environmental issues for installations, computer science, telecommunications management, energy, facilities maintenance, materials and structures, engineering processes, environmental processes, land and heritage conservation, and ecological processes. The BAA is available as an attachment to this posting and is also available at http://erdc.usace.army.mil. The BAA is open until superseded. Proposals may be accepted at any time.

Awards: Various
Proposal Deadline: January 31, 2019
Contact Information: For questions regarding proposals to CHL, GSL, EL, ITL, CRREL, and UROC submit your question to the following e-mail address: ERDC-BAA@usace.army.mil. You may also contact Frank Spears at 601-634-3908 or via email at Frank.Spears@usace.army.mil.

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Department of Energy

Grant Program: Critical Water Issues Prize Competition RFI
Agency: Department of Energy   DE-FOA-0001899
Website: https://eere-exchange.energy.gov/#FoaId45c72943-674f-484c-8592-1b95b0906387

Brief Description: The U.S. Department of Energy seeks to understand the key technical and other barriers that may prevent long-term access to low-cost water supplies that could be best addressed through challenges and prize competitions. For the purposes of this Request for Information (RFI), challenges and prize competitions are tools and approaches the Federal government and others can use to engage a broad range of stakeholders, including the general public, in developing solutions to difficult problems. Challenges and prize competitions rely on competitive structures to drive innovation among participants and usually offer rewards (financial and/or other) to winners and/or finalists. DOE may use the information provided through this RFI to develop challenges and prize competitions to address key water issues. This RFI is not designed to solicit input on DOE's broader R&D efforts on affordable water.

Submission Deadline: Responses to this RFI must be submitted electronically to WaterPrizeRFI@ee.doe.gov no later than 5:00pm (ET) on May 14, 2018. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding

25MB be compressed (i.e., zipped) to ensure message delivery. Responses must be provided as a Microsoft Word (.docx) attachment to the email, and no more than 5 pages in length per category of questions, 12 point font, 1 inch margins. Only electronic responses will be accepted.
Contact Information: EERE-ExchangeSupport@hq.doe.gov
This email address is for EERE Exchange Technical Support.
- waterprizerfi@ee.doe.gov
This email address is for submission of RFI responses.

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Grant Program: Solid Oxide Fuel Cells Core Technology Research
Agency: Department of Energy   DE-FOA-0001853
Website: https://www.netl.doe.gov/business/solicitations/details?title=4bff5699-c11b-4230-b25e-ba5c79c4ad89
Brief Description: The goal of this Funding Opportunity Announcement (FOA) is to seek innovative research and development projects to support fuel cells system manufacturers in addressing issues related to cost and reliability of fuel cells systems. Applications are sought in two areas of interest (AOI) that include AOI 1 – Solid Oxide Fuel Cells (SOFC) Core Technology Research and AOI 2 – Core Technology Research and Development (R&D) in Support of Near-Term SOFC Power Systems Prototype Tests. visit FedConnect for more.
Awards; Up to $2,000,000; Available Funding: $9,500,000
Submission Deadline: April 30, 2018
Contact Information: Charles C. Tomasiak Charles.Tomasiak@NETL.DOE.GOV

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EPA (Environmental Protection Agency)

Grant Program: 2018 Healthy Communities Grant Program
Agency: EPA EPA-R1-HC-2018
Website: https://www.grants.gov/web/grants/search-grants.html
Brief Description: The Healthy Communities Grant Program is EPA New England's main competitive grant program to work directly with communities to support EPA's "Back-to- Basics" agenda to reduce environmental risks, protect and improve human health and improve the quality of life. The Healthy Communities Grant Program will achieve this through identifying and funding projects that: • *Target resources to benefit communities at risk [areas needing to create community resilience, environmental justice areas of potential concern, sensitive populations (e.g. children, elderly, tribes, urban and rural residents, and others at increased risk)]. • *Assess, understand, and reduce environmental and human health risks. • *Increase collaboration through partnerships and community-based projects. • *Build institutional and community capacity to understand and solve environmental and human health problems. • *Advance emergency preparedness and ecosystem resilience. • *Achieve measurable environmental and human health benefits.
Awards: Up to $25,000
Estimated Total Program Funding: $250,000
Notice of Intent: Not Required
Proposal Deadline: April 13, 2018
Contact: Katie Marrese EPA New England 5 Post Office Square, Suite 100 (OEP06-2) E-mail: Boston, MA 02109-3912 Phone: 617-918-1658 Fax: 617-918-0658 Marrese.Katie@epa.gov

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Grant Program: FY 2019 Pollution Prevention Grant Program
Agency: EPA EPA-HQ-OPPT-2018-001
Website: https://www.epa.gov/sites/production/files/2018-03/documents/2018rfpp2grant.pdf
Brief Description: EPA is announcing a grant competition to fund two-year Pollution Prevention assistance agreements for projects expected to be performed in each EPA region that provide technical assistance and/or training to businesses/facilities to help them adopt source reduction approaches (also known as "pollution prevention" or "P2"). P2 means reducing or eliminating pollutants from entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal. In keeping with the Pollution Prevention Act of 1990, EPA is encouraging P2 because implementing these approaches can result in reductions in toxic pollutants, the use of water, energy and other raw materials, while also lowering business costs. For this current round of grants, EPA is putting additional emphasis on documenting and sharing the P2 best practices and innovations identified and developed through these grants so that others can replicate these approaches and outcomes. Therefore, in general, grant recipients must document and report on the P2 recommendations where they are provided to businesses/facilities as part of the technical assistance, and at a later date, report on P2 actions adopted by the businesses/facilities that received the technical assistance and training (alternative reporting provisions are available if technical assistance is broadly provided to businesses/facilities – see Section VI.C.3.b.). If necessary, awardee budgets and workplans may allot time and/or set-aside funds from the potential two years of federal funding provided for an optional third-year to collect and report on the P2 approaches adopted. States, state entities and federally-recognized tribes and intertribal consortia are eligible to apply.

If Congress appropriates Fiscal Year (FY) 2018 and 2019 funds for the P2 Program at levels comparable to FY 2017 funding levels, the EPA may award a total of approximately $9.38 million in federal P2 grant funding for these two-year assistance agreements (approximately $4.69 million in FY 2018 funds and approximately $4.69 million in FY 2019 funds). P2 awards are expected to be performed in each EPA region and will be funded in the form of grants or cooperative agreements. Please note that notwithstanding the potential amounts stated above, these amounts are estimates only and the amount of grant funding awarded will be dependent on Congressional appropriations, funding availability, the quality of proposals received, satisfactory performance and other applicable considerations.
Awards: NY, NJ: Region 2 – Federal awards may be in the range of $40,000 – $300,000, issued over a two-year funding period (between $20,000 - $150,000 incrementally funded per year).
Estimated Total Program Funding: $9,380,000
Notice of Intent: Not Required
Proposal Deadline: April 26, 2018
Contact: EPA Region 2 NJ, NY, PR, VI Alex Peck U.S. EPA Region 2 290 Broadway, 25th Floor (PSPMMB) New York, NY 10007-1866 Phone: 212-637-3758 Email address: peck.alex@epa.gov

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NASA

Grant Program: Transformational Tools and Technologies (TTT)
Agency: NASA NNH18ZEA001N-TTT

Website:
https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B4770A320-3997-5B8F-4A4B-B0D67C98ADD9%7D&path=open&method=init

Brief Description: The Transformational Tools and Technologies (TTT) Project advances state-of-the-art computational and experimental tools and technologies that are vital to aviation applications in the six strategic thrusts. The project develops new computer-based tools, computational fluid dynamics models, and associated scientific knowledge that will provide first-of-a-kind capabilities to analyze, understand, and predict aviation concept performance. These revolutionary tools will be applied to accelerate NASA's research and the community's design and introduction of advanced concepts. The Project also explores technologies that are broadly critical to advancing ARMD strategic outcomes. Such technologies include the understanding of new types of strong and lightweight materials, innovative controls techniques, and experimental methods. TTT also develops improved Multi-Disciplinary Design, Analysis, & Optimization (MDAO) and systems analysis tools to enable multi-disciplinary integration. All of these technologies will support and enable concept development and benefits assessment across multiple ARMD programs and disciplines. The TTT Project is organized into three sub-projects. The Revolutionary Tools and Methods (RTM) Sub-project is responsible for the development of revolutionary comprehensive physics-based aeronautics analysis and design capability. It includes work in computational aerosciences, MDAO and systems analysis, and tools for modeling both combustion and aircraft structures and materials. The Critical Aeronautics Technologies (CAT) Sub-project is responsible for the development of critical aeronautics technologies that can enable revolutionary improvement in aircraft system design. Innovative ideas developed in CAT often lead to patentable results. Currently, technologies are under development in the areas of aircraft structures and materials, innovative measurement techniques, propulsion controls, flight controls, and combustion. The Autonomous Systems (AS) Sub-Project advances fundamental research in autonomous systems. The tools and technologies of interest span many disciplines. The Fluid Mechanics Discipline encompasses advanced turbulence modeling, boundary layer transition prediction and modeling, numerical methods, and flow control development and prediction for a wide range of airframe and propulsion system flow problems of interest. Canonical data is developed and used to validate the modeling improvements developed in this discipline. Development of more accurate physics-based methods such as large eddy simulation (LES) is emphasized.

Awards: Between $1.1M and $1.4M will be invested annually in these NRAs over the next 3 years.

Notice of Intent: April 16, 2018

Proposal Deadline: May 14, 2018

Contact: NRA Manager: Tracey M. Frisby
 tracey.m.frisby@nasa.gov

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Grant Program: Astrophysics Data Analysis
Agency: NASA NNH18ZDA001N-ADAP
Website:
https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B3E84A8DB-8B71-2451-EB02-2111D9EEA891%7D&path=open&method=init

Brief Description: The Astrophysics Data Analysis Program (ADAP; program element D.2) supports research with a primary emphasis on the analysis of archival data from current and past NASA space astrophysics missions. The magnitude and scope of the archival data from those missions enables science that transcends traditional wavelength regimes and allows researchers

to answer questions that would be difficult, if not impossible, to address through an individual observing program. The program now also supports the analysis of publicly available data from the Neutron star Interior Composition Explorer (NICER) and some approved Guest Observer (GO) programs using Spitzer, even if those observations have yet to be executed, or the data are still within their proprietary period.

Awards: Standard Grants, Available Funds: $7,000,000

Notice of Intent: Not Required

Proposal Deadline: May 17, 2018

Contact: Douglas M. Hudgins Astrophysics Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: (202) 358-0988 Email: Douglas.M.Hudgins@nasa.gov

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Grant Program: Discovery Data Analysis
Agency: NASA NNH18ZDA001N-DDAP
Website:
https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7BE17AD920-C9F2-600D-5913-6951AB56F31F%7D&path=open&method=init

Brief Description: The objective of the Discovery Data Analysis Program (DDAP) is to enhance the scientific return of Discovery Program missions and broaden the scientific participation in the analysis of data, both recent and archived, collected by Discovery missions. Spacecraft data used in DDAP investigations must be available in the Planetary Data System (PDS; https://pds.nasa.gov/), or equivalent publicly accessible archive(s), at least 30 days prior to the Step-2 submission deadline for DDAP proposals. Spacecraft data that have not been placed in such archives are not eligible for use in DDAP investigations. In all cases, it is the responsibility of the DDAP investigator to acquire any necessary data. Investigators are encouraged to contact the archive for assistance in identifying specifics of available datasets. Datasets to be used in the proposed work must be clearly and specifically identified in the proposal. NASA puts no other restriction on the status or condition of the data. However, regardless of the archive(s) used, if the data to be analyzed have known issues that might represent an obstacle to analysis, the proposers must demonstrate clearly and satisfactorily how such potential difficulties will be overcome. In other words, it is the proposer's responsibility to demonstrate clearly that the public data are of sufficient quantity and quality to achieve the project's science goals.

Awards: Standard Grants

Step-1 Proposal: August 30, 2018

Step-2 Proposal Deadline: November 01, 2018

Contact: Thomas S. Statler Planetary Science Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Email: thomas.s.statler@nasa.gov Telephone: 202-358-0272

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Grant Program: Advanced Information Systems Technology
Agency: NASA NNH18ZDA001N-AIST
Website:
https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7BC0D379E0-B4A8-6B97-7B0C-7F5409CD2442%7D&path=open&method=init

Brief Description: Advanced information systems play a critical role in the collection, handling, and management of the vast amounts of Earth science data, both in space and on the ground. Advanced computational systems and technology concepts that enable the capture, transmission, and dissemination of terabytes of data are essential to NASA's vision of a distributed observational network. ESTO's Advanced Information Systems Technology (AIST) program employs an end-to-end approach to develop these critical technologies—from the space segment, where the information pipeline begins, to the end user, where knowledge is advanced. Two major AIST thrusts are in progress: (1) support to a new observing strategy involving the integration of observations from orbital, airborne and in situ instruments along with models into a sensor web to advance the state of the art understanding of physical processes and natural phenomena, and (2) Analytic Centers focusing on a scientific investigation, where data from many sources, computational resources and tools are harmonized to improve the ability of the investigator to discover new knowledge.
Awards: Standard Grants
Notice of Intent: TBD
Proposal Deadline: TBD
Contact: Michael M. Little Earth Science Technology Office Telephone: (301) 286-7404 Email: Michael.M.Little@nasa.gov

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National Endowment of Humanities

Grant Program: Fellowships
Agency: National Endowment of Humanities
Website: https://www.neh.gov/grants/research/fellowships
Brief Description: Fellowships support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Recipients usually produce articles, monographs, books, digital materials, archaeological site reports, translations, editions, or other scholarly resources in the humanities.

Applicants interested in research projects that require digital expression and digital publication are encouraged to apply for NEH-Mellon Fellowships for Digital Publication.
Awards: NEH has increased the Fellowships monthly stipend from $4,200 to $5,000. As a result, the minimum award is now $30,000 (for six months of full-time work). The maximum award is now $60,000 (for twelve months of full-time work).
Proposal Deadline: April 11, 2018
Contact: Contact NEH's Division of Research Programs at 202-606-8200 or fellowships@neh.gov.

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Bill & Melinda Gates Foundation

Grant Program: Grand Challenges Exploration (GCE)
Agency: Bill & Melinda Gates Foundation
Website: https://gcgh.grandchallenges.org/about
Brief Description: The Bill & Melinda Gates Foundation is inviting proposals for the next round of Grand Challenges Explorations (GCE) for the following three challenges

- Innovations in Immunization Data Management, Use, and Improved Process Efficiency;
- Affordable, Accessible, and Appealing: The Next Generation of Nutrition;

- [Tools and Technologies for Broad-Scale Disease Surveillance of Crop Plants in Low-Income Countries](#)

Awards: Phase 1 grants are $100,000 for 18 months.
Proposal Deadline: May 2, 2018
Contact: FAQ: https://gcgh.grandchallenges.org/grant-opportunities/faq/gce#t17n37099 .

Whitehall Foundation

Grant Program: Research Grant Program
Agency: Whitehall Foundation
 Website: http://www.whitehall.org/about/
Brief Description: Research grants are available to established scientists of all ages working at accredited institutions in the United States. Applications will be judged on the scientific merit and the innovative aspects of the proposal as well as on the competence of the applicant. Research grants of up to three years will be provided. A renewal grant with a maximum of two years is possible, but it will be awarded on a competitive basis. Research grants will not be awarded to investigators who have already received, or expect to receive, substantial support from other sources, even if it is for an unrelated purpose.

The Foundation is currently interested in basic research in neurobiology, defined as follows: ***Invertebrate and vertebrate (excluding clinical) neurobiology, specifically investigations of neural mechanisms involved in sensory, motor, and other complex functions of the whole organism as these relate to behavior. The overall goal should be to better understand behavioral output or brain mechanisms of behavior.***

Awards: Research grants normally range from $30,000 to $75,000 per year.
Proposal Deadline:

	Summer Session	*Fall Session*	*Spring Session*
Letter of Intent deadline	*January 15*	*April 15*	*October 1*
Issuance of Application materials	*April 1*	*July 1*	*December 15*
Application deadline	*June 1*	*September 1*	*February 15*

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Streamlyne Contacts

Two user manuals on Streamlyne have been added on the Streamlyne website http://www.njit.edu/research/streamlyne/

Steamlyne_NewUserManual_CommonElements.docx : This manual provides a reference to all the common elements of Streamlyne Research. This user manual is a good document to review each module's functionality.

Steamlyne_NewUserManual_PD&PDBudget.docx: This is a user manual on proposal and budget development in Streamlyne. The content herein explain the use and functionality of this module. This is the most useful Streamlyne document for PIs and users new to Streamlyne.

How-to-do-Videos

New "How to Do" videos have been posted on the research website http://www5.njit.edu/research/streamlyne/. These videos show step-by-step process on the following tasks:

♦ How to Begin Proposal Submission in Streamlyne
♦ How to Input Proposal Budget
♦ How to Process Approvals
♦ How to Upload Proposal Attachments
♦ How to Search for a Proposal that is in Route
♦ Difference Between "Prime Sponsor Code" and "Sponsor Code"
♦ How to Select an RR Budget, RR Sub-award or Modular Budget
♦ How to Add a Student/Summary
♦ Participant Support Categories
♦ Supplies Specific Category Materials
♦ How to Create a Modular Budget

Also, the following links may be helpful:
♦ Streamlyne Benefits for Proposal Submission and Grant Management
♦ Grants.gov Presentation on Online Proposal Submission Systems
♦ Streamlyne Newsletter V2017.1
♦ Streamlyne FAQs

Faculty and staff having any questions on proposal submission, may contact their college representatives, and also follow up with **Justin Samolewicz, Associate Director (Pre Award)** 973-596-3145; justin.m.samolewicz@njit.edu; and **Eric Hetherington,** Director, Sponsored Research Programs Administration 973-596-3631; eric.d.hetherington@njit.edu. The college representatives to help PIs on proposal submissions are

> **John McCarthy**, NCE Director of Research; (973) 596-3247; john.p.mccarthy@njit.edu
> **Cristo Leon**, CSLA Director of Research; (973) 596-6426; cristo.e.yanezleon@njit.edu
> **Sean Andrews**, YWCC Director of Research; (973) 596-5352; sean.t.andrews@njit.edu
> **Iris Pantoja**, NCE, CoAD and MTSM Project Manager; 973-596-4483; irp3@njit.edu

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