

# NJIT Research Newsletter

Issue: ORN-2017-17

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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/>.

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## **14th Annual Conference on Frontiers in Applied and Computational Mathematics (FACM '17) at NJIT**

The 14th Annual Conference on Frontiers in Applied and Computational Mathematics (FACM '17) will be held at the New Jersey Institute of Technology (NJIT) in Newark, New Jersey on June 24 - 25, 2017. This year's conference will be broadly focused on mathematics in industry, and is scheduled to follow the 33rd Mathematical Problems in Industry Workshop (MPI) which will be held at NJIT immediately prior to the FACM conference. The minisymposia will focus on a variety of topics involving physical and biological modeling, as well as data science, with applications in a number of different fields.

The conference will consist of plenary presentations, minisymposia, and contributed oral presentations and posters. The plenary talks will be given by

- Jon Chapman, Oxford University
- Jianying Hu, IBM T. J. Watson Research Center
- Greg Luther, Adaptive Optics Associates and Northrop Grumman
- Cleve Moler, MathWorks

Applications for contributed presentations by postdoctoral fellows and students are due by May 15, 2017. Applications by members of underrepresented groups, minorities and women are particularly encouraged. Limited travel support, typically on the level of covering the cost of registration and local accommodation is available. For more information, please see the [conference web page \(https://m.njit.edu/Events/FACM17/\)](https://m.njit.edu/Events/FACM17/).

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## **QED Proof-of-Concept Program**

The University City Science Center is announcing its tenth application cycle of the QED Proof-of-Concept Program. The QED Program is open to academic investigators developing **medical technologies with commercial potential**. Funding of up to \$200K is available.

This program provides key areas of support, including business guidance, and access to industry and investment communities. Selected investigators receive guidance from members of the region's entrepreneurial community and industry experts, working with them to develop project proposals that answer critical market questions. Feedback is offered by potential investors and industry licensees. Technologies may include but are not limited to therapeutics, medical devices, *in vitro* diagnostics, imaging agents, biomaterials, and research or software-enabled tools such as bioinformatics, mobile applications, electronic records, imaging platforms, educational tools, diagnostic tools and software-embedded devices.

An information session with a representative of the Science Center will be held on THURSDAY MAY 11th 10am - NOON in ballroom B. For additional details on the QED program please see - Additional information can be found on the QED website - <https://www.sciencecenter.org/discover/qed>

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### **Streamlyne Update**

Research proposals are being successfully submitted through Streamlyne. 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](#)

In addition, most Frequently Asked Question (FAQs) from PIs are posted with answers on the same website as [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](mailto:justin.m.samolewicz@njit.edu); and **Eric Hetherington, Director, Sponsored Research Programs Administration** 973-596-3631; [eric.d.hetherington@njit.edu](mailto: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](mailto:john.p.mccarthy@njit.edu)

**Cristo Leon**, CSLA Director of Research  
(973) 596-6426; [cristo.e.yanezleon@njit.edu](mailto:cristo.e.yanezleon@njit.edu)

**Nancy Henderson**, CCS Project Manager  
973-596-5687; [nancy.henderson@njit.edu](mailto:nancy.henderson@njit.edu)

**Iris Pantoja**, CoAD and SOM Project Manager  
973-596-4483; [irp3@njit.edu](mailto:irp3@njit.edu)

## **Grant Opportunity Alerts**

Keywords and Areas Included in the Grant Opportunity Alert Section Below

**NSF:** Innovation Corps - National Innovation Network Teams Program (I-Corps™ Teams); Towards a Leadership-Class Computing Facility - Phase 1; Semiconductor Synthetic Biology for Information Processing and Storage Technologies (SemiSynBio); CyberCorps(R) Scholarship for Service (SFS)

**NIH:** NIH StrokeNet Regional Coordinating Stroke Centers (U24); Revision Applications for Regenerative Medicine Innovation Projects (RMIP) (R01); NIH Director's Transformative Research Awards (R01); NIH Director's Pioneer Award Program (DP1); NIH Director's New Innovator Award Program (DP2); NIH Director's Early Independence Awards (DP5)

**Department of Defense/US Army/DARPA/ONR:** Navy and Marine Corps Science, Technology, Engineering & Mathematics Education, Outreach and Workforce Program; Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology; Department of Defense (DoD) Explosive Ordnance Disposal (EOD) Applied Research Program; Missile Defense Agency STEM Outreach BEST Robotics Grant; Communications and Networking Discovery and Invention

**Department of Energy:** Solar Decathlon 2019 Future Planning - Request for Information

**NASA:** ROSES 2017: New (Early Career) Investigator Program; ROSES 2017: Early Stage Innovation

**National Endowment of Humanities:** Research and Development Grants

**Robert Wood Johnson Foundation:** Research in Transforming Health & Health Care Systems

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## **Recent Research Grant and Contract Awards**

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

**PI:** Bipin Ranjendran (PI)

**Department:** Electrical & Computer Engineering

**Grant/Contract Project Title:** IBM PhD Fellowship

**Funding Agency:** IBM

**Duration:** 06/01/17-05/31/18

**PI:** Wenbo Cai (PI)

**Department:** Mechanical and Industrial Engineering

**Grant/Contract Project Title:** REU Supplement (Collaborative Research: Optimizing Incentives for Carbon Capture and Storage Systems)

**Funding Agency:** NSF

**Duration:** 09/01/15-08/31/18

**PI:** Namas Chandra (PI)

**Department:** Center for Brain Injury, Biomechanics, Materials and Medicine, IBNR

**Grant/Contract Project Title:** Brain Injury Pilot Project

**Funding Agency:** NJDOH (NJCIBIR)

**Duration:** 07/01/17-06/30/19

**PI:** Arijit Sengupta (PI)

**Department:** Engineering Technology

**Grant/Contract Project Title:** NIOSH (Region II) Education Resources Center

**Funding Agency:** NIH

**Duration:** 07/01/16-06/30/17

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### **In the News...**

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

#### **President Signs Omnibus Appropriations Bill Into Law; Federal Agencies Funded Through**

**Sept. 30:** On May 5, 2017, President Trump signed into law a \$1.07 trillion omnibus appropriations bill providing funds for federal government operations through Sept. 30, the end of the 2017 fiscal year (FY). The Consolidated Appropriations Act ([H.R. 244](#)) received largely bipartisan support and became law with hours to go before a stopgap funding measure expired at midnight on May 5. The House approved the bill by a vote of 309 to 118 on May 3; the Senate vote was 79 to 18 on May 4. Title III covers funding for the National Science Foundation (NSF) and other science agencies. The measure provides \$7.472 billion for NSF, an increase of \$8.73 million, or 0.1 percent above the FY 2016 enacted level. It provides \$6.034 million for the Research and Related Activities (RRA) account; \$209 million for the Major Research Equipment and Facilities Construction (MREFC) account; \$880 million for the Education and Human Resources (EHR) account; \$330 million for the Agency Operations and Award Management (AOAM) account; \$4.37 million for the National Science Board (NSB) account, and \$15.2 million for the Office of Inspector General (OIG) account. The MREFC account includes funds to support the construction of three Regional Class Research Vessels; the NSF request was for the construction of two vessels. The [text of H.R. 244](#) can be found on the White House website. More information on <https://www.whitehouse.gov/legislation/hr-244-consolidated-appropriations-act-2017>

**Overarching Trends:** Steven Walker, acting director of the Defense Advanced Research Projects Agency, identified artificial intelligence and the "human-machine interface" as "two powerful, overarching technology trends (that) are fueling many of DARPA's fastest-advancing programs." In recent [Senate testimony](#), he said AI and machine learning "are serving as an accelerator and force multiplier in diverse areas of research, from information processing to electronics to neuroscience," helping researchers overcome the problem of an overabundance of data." Meanwhile, "a blend of biocompatible electrode arrays and sophisticated software . . . is making the human-machine interface ever more seamless," introducing "a mix of novel opportunities . . ." More information is posted on <https://www.appropriations.senate.gov/hearings/a-review-defense-innovation-and-research-funding>

**New Vision For ERCs:** A National Academies committee "proposes a strategic new direction" for the National Science Foundation's Engineering Research Centers program "focused on tackling larger, grand-challenge-like problems" and "addressing a high-impact societal or technological need." How? By "adhering to the use of team-research and value-creation best practices, fewer administrative burdens, and greater investment and prestige to attract the superb, diverse talent required." Bold bets "on a small number of well-funded, prestigious centers focused on engineering solutions to society's greatest challenges . . . will create excitement in the engineering community

that will attract the best students, faculty, and industry partners." More information on <https://www.nap.edu/catalog/24767/a-new-vision-for-center-based-engineering-research>

**Innovation through Research and Development in Manufacturing:** The Government Accountability Office (GAO) identified 58 programs in 11 federal agencies that reported providing support to U.S. manufacturing by fostering innovation through research and development, assisting with trade in the global marketplace, helping job seekers enhance skills and obtain employment, and providing general financing or business assistance. Twenty-one of these programs reported using all of their obligations in fiscal year 2015 to support U.S. manufacturing. For these 21 programs, obligations of each program ranged from \$750,000 to \$204 million in fiscal year 2015, the most recent full year of data. Twenty-six other programs reported using funding to support manufacturing—in addition to other sectors—and provided ranges of estimates for the obligations directly supporting manufacturing. The remaining 11 programs either did not provide an estimate of their support to manufacturing or reported no program obligations in fiscal year 2015. GAO also identified nine tax expenditures that can provide benefits to manufacturers, amounting to billions of dollars in incentives for both the manufacturing sector and other sectors of the economy. More information is posted on <http://www.gao.gov/products/GAO-17-240>

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### **Webinar and Events**

**Event: NSF EHR CAREER Webinar**

**When: May 15, 2017; 11.00 AM – 1.00 PM**

**May 26, 2017; 11.00 AM – 1.00 PM**

**June 1, 2017; 11.00 AM – 1.00 PM**

**Website:**

[https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=241927&WT.mc\\_id=USNSF\\_13&WT.mc\\_e v=click](https://www.nsf.gov/events/event_summ.jsp?cntn_id=241927&WT.mc_id=USNSF_13&WT.mc_e v=click)

**Brief Description:** The NSF/EHR CAREER Working Group is hosting a webinar to answer participants' questions about developing and submitting proposals to the NSF Faculty Early Career Development Program (CAREER) in the Directorate for Education and Human Resources (EHR). The webinar will provide information specific to CAREER submissions to EHR and will give participants the opportunity to interact with members of the EHR CAREER Working Group in a question-and-answer format. This webinar provides information specific to submitting a CAREER proposal to EHR. For comprehensive information about this NSF-wide program, participants should consult the CAREER Program Solicitation ([NSF 17-537](#)). This webinar will be offered at 3 alternative times: (Eastern Daylight Time, New York, GMT-04:00)

**EHR CAREER Webinar #1, Monday, May 15, 2017 11:00 AM to 1:00 PM**

<https://nsf.webex.com/nsf/onstage/g.php?MTID=e8ce437335651f92c80061a2541df9a5c>

(Event number: 745 712 118; event confirmation number for captions: #3240428)

**EHR CAREER Webinar #2, Friday, May 26, 2017 1:00 PM to 3:00 PM**

<https://nsf.webex.com/nsf/onstage/g.php?MTID=e167b5cf6d02ad7f2d80f05dda2fbf8cd>

(Event number: 746 775 807; event confirmation number for captions: #3263700)

**EHR CAREER Webinar #3, Thursday, June 1, 2017 1:00 PM to 3:00 PM**

<https://nsf.webex.com/nsf/onstage/g.php?MTID=e4c29fda5794547489d54c97885104f76>

(Event number: 740 752 666; event confirmation number for captions: #3263705)

**How to Access the Webinar:** Click on the link by the date you wish to attend. You will be asked to register; after you register, you will be able to enter the webinar (no password required).

If you wish to view real-time captions during the live event, also open a separate browser to [www.fedrcc.us/](http://www.fedrcc.us/) and enter the event confirmation number.

**Contacts:** Dawn Rickey (DUE), [drickey@nsf.gov](mailto:drickey@nsf.gov) ; John Haddock (DUE), [jhaddock@nsf.gov](mailto:jhaddock@nsf.gov) ; Susan Brennan (DGE), [SBRENNAN@nsf.gov](mailto:SBRENNAN@nsf.gov)

**Event: NSF Webinar: Understanding SBIR & STTR Phase I Application Process**

**When: May 19, 2017; 2.00 PM – 4.00 PM**

**Website:** [https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=191448&org=NSF](https://www.nsf.gov/events/event_summ.jsp?cntn_id=191448&org=NSF)

**Abstract:** Join this webinar to learn more about what you need to submit an application for NSF Small Business Innovation Research / Small Business Technology Transfer (SBIR/STTR) funding. SBIR Program Director Ruth Shuman will walk you through the process and answer questions. **Advance registration is required; to register visit:** <http://bit.ly/2nYgTij>

Prior to the webinar, feel free to browse our [YouTube channel](#) and [our website](#) to see if you're a good fit.

§ [SBIR Solicitation](#) (Due June 14, 2017)

§ [STTR Solicitation](#) (Due June 14, 2017)

*The National Science Foundation (NSF) awards nearly \$190 million annually to startups and small businesses through the Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) program, transforming scientific discovery into products and services with commercial and societal impact. The equity-free funds support research and development (R&D) across almost all areas of science and technology helping companies de-risk technology for commercial success. The NSF is an independent federal agency with a budget of about \$7 billion that supports fundamental research and education across all fields of science and engineering. For more information, visit [www.nsf.gov/SBIR](http://www.nsf.gov/SBIR).*

**Contact:** Rajesh Mehta, [rmehta@nsf.gov](mailto:rmehta@nsf.gov)

**Event: NSF CAREER Program Webinar**

**When: May 22, 2017; 1.00 PM – 3.00 PM**

**Website:**

[https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=191332&WT.mc\\_id=USNSF\\_13&WT.mc\\_e v=click](https://www.nsf.gov/events/event_summ.jsp?cntn_id=191332&WT.mc_id=USNSF_13&WT.mc_e v=click)

**Abstract:** The NSF CAREER Coordinating Committee hosts a webinar to answer participants' questions about development and submission of proposals to the NSF Faculty Early Career Development Program ([CAREER](#)). The webinar will give participants the opportunity to interact with members of the NSF CAREER Coordinating Committee in a question-and-answer format. In preparation for the webinar, participants are strongly encouraged to consult material available on-line concerning the CAREER program. In particular, the CAREER program [web page](#) has a wealth of current information about the program, including:

- the CAREER program solicitation [NSF 17-537](#);
- [frequently asked questions](#) about the CAREER program; and
- [slides](#) from a CAREER program overview.

Additionally, there is a video of a live presentation about the CAREER program accessible through the library of videos from a recent [NSF Grants Conference](#).

**How to Submit Questions**

Participants may submit questions about CAREER proposal development and submission in advance of and during the webinar by sending e-mail to: [careerwebinarqs@nsf.gov](mailto:careerwebinarqs@nsf.gov)

Please note that questions requiring determinations of eligibility for the CAREER program will not be addressed during the webinar. Other questions about the CAREER program should be directed

to the appropriate NSF Divisional contact shown on the web page <http://www.nsf.gov/crssprgm/career/contacts.jsp>.  
**Please register:** <https://nsf.webex.com/nsf/onstage/g.php?MTID=e8fb20f0a3f8d98b103b1e32160faee28>.

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## **Grant Opportunities**

### **National Science Foundation**

#### **Grant Program: Innovation Corps - National Innovation Network Teams Program (I-Corps™ Teams)**

**Agency:** National Science Foundation NSF 17-559

**RFP Website:** <https://www.nsf.gov/pubs/2017/nsf17559/nsf17559.htm>

**Brief Description:** The National Science Foundation (NSF) seeks to develop and nurture a national innovation ecosystem that builds upon fundamental research to guide the output to facilitate the application of scientific discoveries closer to the development of technologies, products and processes that benefit society.

In order to maintain, strengthen and grow a national innovation ecosystem, NSF has established the Innovation Corps - National Innovation Network Teams Program (I-Corps Teams). The NSF I-Corps Teams Program purpose is to identify NSF-funded researchers who will receive additional support in the form of entrepreneurial education, mentoring and funding to accelerate innovation that can attract subsequent third-party funding.

The purpose of the NSF I-Corps Teams grant is to give the project team access to resources to help determine the readiness to transition technology developed by previously-funded or currently funded NSF projects. The outcomes of I-Corps Teams projects will be threefold: 1) a clear go /or no go decision regarding viability of products and services, 2) should the decision be to move the effort forward, a transition plan for those projects to move forward, and 3) a definition of a compelling technology demonstration for potential partners.

#### **WEBINAR**

A webinar will be held monthly to answer questions about this program. Details will be posted on the I-Corps website (see [https://www.nsf.gov/news/special\\_reports/i-corps/program.jsp](https://www.nsf.gov/news/special_reports/i-corps/program.jsp)) as they become available.

**Awards:** Standard Grants. **Anticipated Funding Amount:** \$12,750,000.

**Letter of Intent:** Not Required

**Full Proposal Submission Due Date:** Proposals Accepted Anytime

**Contacts:** Steven Konsek, telephone: (703) 292-7021, email: [skonsek@nsf.gov](mailto:skonsek@nsf.gov)

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#### **Grant Program: Towards a Leadership-Class Computing Facility - Phase 1**

**Agency:** National Science Foundation NSF 17-558

**RFP Website:** <https://www.nsf.gov/pubs/2017/nsf17558/nsf17558.htm>

**Brief Description:** NSF invites proposals for the acquisition and deployment of a High Performance Computing (HPC) system, called the Phase 1 system, with the option of a possible future upgrade to a leadership-class computing facility. The Phase 1 system will serve two important and complementary purposes:

1. It will serve as a robust, well-balanced, and forward-looking computational asset for a broad range of research topics for which advances in fundamental understanding require the most extreme computational and data analysis capabilities; and

2. It will serve as an evaluation platform for testing and demonstrating the feasibility of an upgrade to a leadership-class facility five years following deployment.

A competitive proposal in response to this solicitation will have the following five characteristics:

1. A detailed acquisition plan for deploying a reliable and well-balanced HPC system with at least two- to three-fold time-to-solution performance improvement over the current state of the art, the University of Illinois at Urbana-Champaign's (UIUC) [Blue Waters](#) system, for a broad range of existing and emerging computational and data intensive applications;
2. A thorough operations plan for the Phase 1 system to ensure that it will serve as an effective computational tool for the broad scientific and engineering community, and for the Nation at large;
3. A detailed three- to five-year project plan for scientific and technical evaluation of the Phase 1 system that will lead to an upgrade design of a leadership-class system, called the Phase 2 system, as well as the physical facility that will host it: the Phase 2 system is expected to have a ten-fold or more time-to-solution performance improvement over the Phase 1 system;
4. Clear and compelling science and engineering use cases, as well as detailed strategic project goals for a leadership-class computing facility; and
5. A persuasive articulation of educational and industry outreach, and the achievement of other broader societal impact goals, in the long-term strategic plan for the leadership-class computing facility.

Note that the award of a Phase 1 system does not imply any commitment beyond support for beginning the initial planning process for a leadership-class computing facility. The facility planning process may be terminated at any time if satisfactory progress is not demonstrated through annual reviews.

**Awards:** A total of \$60,000,000 in FY 2018 will be used to fund one award, subject to the availability of funds. At least 95% of the proposal amount should be for the system acquisition cost.

**Limit on Number of Proposals per Organization: 1**

Only one integrated proposal may be submitted from NJIT. Any interest in the submission of a proposal should be submitted to Vice Provost of Research at [dhawan@njit.edu](mailto:dhawan@njit.edu) with a copy to David Ullman at [david.ullman@njit.edu](mailto:david.ullman@njit.edu) as soon as possible but no later than June 1, 2017.

**Letter of Intent:** Required by July 14, 2017

**Full Proposal Submission Due Date:** November 20, 2017

**Contacts:** Edward Walker, Program Director, CISE/ACI, 1160, telephone: (703) 292-4863, email: [edwalker@nsf.gov](mailto:edwalker@nsf.gov)

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**Grant Program: Semiconductor Synthetic Biology for Information Processing and Storage Technologies (SemiSynBio)**

**Agency: National Science Foundation NSF 17-557**

**RFP Website:** <https://www.nsf.gov/pubs/2017/nsf17557/nsf17557.htm>

**Brief Description:** The National Science Foundation (NSF), through its Division of Electrical, Communications and Cyber Systems (ECCS) in the Directorate for Engineering (ENG), Division of Computing and Communication Foundations (CCF) in the Directorate for Computer and Information Science and Engineering (CISE), and Division of Molecular and Cellular Biosciences (MCB) in the Directorate for Biological Sciences (BIO), has established a partnership with the Semiconductor Research Corporation (SRC), through its Global Research Collaboration (GRC) program, and the Intelligence Advanced Research Projects Activity (IARPA) to announce a

solicitation on the "Semiconductor Synthetic Biology for Information Processing and Storage Technologies (SemiSynBio)". Future ultra-low-energy computing, storage and signal-processing systems can be built on principles derived from organic systems that are at the intersection of chemistry, biology, and engineering. New information technologies can be envisioned that are based on biological principles and that use biomaterials in the fabrication of devices and components; it is anticipated that these information technologies could enable stored data to be retained for more than 100 years and storage capacity to be 1,000 times greater than current capabilities. These could also facilitate compact computers that will operate with substantially lower power than today's computers. Research in support of these goals can have a significant impact on advanced information processing and storage technologies. This focused solicitation seeks high-risk/high-return interdisciplinary research on novel concepts and enabling technologies that will address the scientific issues and technological challenges associated with the underpinnings of synthetic biology integrated with semiconductor technology. This research will foster interactions among various disciplines including biology, engineering, physics, chemistry, materials science, computer science, and information science that will enable heretofore-unanticipated breakthroughs as well as meet educational goals.

**Awards:** Continuing Grants. Approximately, 8 to 10 multidisciplinary awards will be made in FY 2018, subject to the availability of funds and quality of proposals. Individual projects will be funded at up to \$500,000 per year for three years depending on the availability of funds.

**Letter of Intent:** Not Required

**Full Proposal Submission Due Date:** October 02, 2017 - October 30, 2017

- **Contacts:** Usha Varshney, Program Director, ENG/ECCS, telephone: (703) 292-8339, email: [uvarshne@nsf.gov](mailto:uvarshne@nsf.gov)
- Mitra Basu, Program Director, CISE/CCF, telephone: (703) 292-8910, email: [mbasu@nsf.gov](mailto:mbasu@nsf.gov)
- Arcady Mushegian, Program Director, BIO/MCB, telephone: (703) 292-8528, email: [amushegi@nsf.gov](mailto:amushegi@nsf.gov)

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### **Grant Program: CyberCorps(R) Scholarship for Service (SFS)**

**Agency: National Science Foundation NSF 17-556**

**RFP Website:** <https://www.nsf.gov/pubs/2017/nsf17556/nsf17556.htm>

**Brief Description:** The CyberCorps(R): Scholarship for Service (SFS) program seeks proposals that address cybersecurity education and workforce development. The *Scholarship Track* provides funding to award scholarships to students in cybersecurity. All scholarship recipients must work after graduation for a Federal, State, Local, or Tribal Government organization in a position related to cybersecurity for a period equal to the length of the scholarship. A proposing institution must provide clearly documented evidence of a strong existing academic program in cybersecurity. Such evidence can include: designation by the National Security Agency and the Department of Homeland Security as a Center of Academic Excellence in Information Assurance Education/Cyber Defense (CAE IA/CD), in Cyber Operations or in Research (CAE-R); a specialized designation by a nationally recognized organization (for example, in forensics); or equivalent evidence documenting a strong program in cybersecurity.

The *Capacity Track* seeks innovative proposals leading to an increase in the ability of the United States higher education enterprise to produce cybersecurity professionals. Proposals are encouraged that contribute to the expansion of existing educational opportunities and resources in cybersecurity and focus on efforts such as research on the teaching and learning of cybersecurity, including research on materials, methods and interventions; curricula

recommendations for new courses, degree programs, and educational pathways with plans for wide adoption nationally; teaching and learning effectiveness of cybersecurity curricular programs and courses; integration of cybersecurity topics into computer science, data science, information technology, engineering and other existing degree programs with plans for pervasive adoption; and partnerships between institutions of higher education, government, and relevant employment sectors leading to improved models for the integration of applied research experiences into cybersecurity degree programs.

**Awards:** Standard Grants. **Anticipated Funding Amount:** \$25,000,000

**Letter of Intent:** Not Required

**Full Proposal Submission Due Date:**

July 10, 2017 - July 31, 2017; Scholarship Track

November 17, 2017 - December 05, 2017; Capacity Track

**Contacts:** Victor P. Piotrowski, Lead Program Director, telephone: (703) 292-5141, email: [vp Piotrow@nsf.gov](mailto:vp Piotrow@nsf.gov)

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## **National Institutes of Health**

**Grant Program: NIH StrokeNet Regional Coordinating Stroke Centers (U24)**

**Agency: National Institutes of Health PAR-17-276**

**RFP Website:** <https://grants.nih.gov/grants/guide/pa-files/PAR-17-276.html>

**Brief Description:** Stroke is a disabling, often fatal and expensive disorder that is a major public health burden. Globally it is the second leading cause of death, but in North America stroke has fallen to the fourth most common cause of mortality as the result of ongoing successes in prevention and acute care. Vascular disease of the brain can manifest not only as overt stroke but also as silent infarction and diffuse white matter disease with cognitive and functional decline. Stroke is a syndrome, with two broad types (ischemic and hemorrhagic) and with multiple possible underlying causes. Although stroke impacts all age groups (including children and especially neonates), the incidence is strongly linked to aging. Stroke will become increasingly prominent in the next 30 years with the projected rise in the proportion of elderly in the US, and it will impose an even more significant toll on individuals, families, and society.

NIH-funded basic, translational and clinical research offers the promise to reduce the burden of stroke.

The Stroke Progress Review Group and NINDS stroke planning efforts identified a need for stroke trial network infrastructure to effectively pursue a number of scientific opportunities and to accelerate translation (see [http://www.ninds.nih.gov/find\\_people/ninds/OSPP/Stroke-Research-Priorities-Meeting-2012.htm](http://www.ninds.nih.gov/find_people/ninds/OSPP/Stroke-Research-Priorities-Meeting-2012.htm)). The unbiased evaluation of newly-developed and existing interventions—drugs, devices and systems of care—in randomized, controlled clinical trials are necessary to establish efficacy of interventions for improving important clinical outcomes. Phase 1/2 trials explore safety, target engagement, proof of biological concept, and dose response to inform Phase 3 efficacy trials. Phase 3 efficacy trials are designed to demonstrate clinical benefit that patients consider meaningful. Comparative effectiveness trials examine how to best apply established efficacious treatments.

In 2013, the NIH StrokeNet was established to conduct clinical trials in a centrally coordinated network that includes 25 regional centers that are linked to over 350 stroke hospitals across the United States. The NIH StrokeNet was designed to rapidly initiate and efficiently implement small and large multi-site exploratory and confirmatory clinical trials focused on promising interventions for stroke prevention, treatment and recovery, as well as validation studies of

biomarkers or outcome measures. The network includes an education platform designed to train the next generation of stroke clinical researchers and collaborations from a variety of health professionals across multiple disciplines. The interdisciplinary nature of the NIH StrokeNet is expected to build research capabilities that match the scientific opportunities across the spectrum of stroke research. Additional information on the current structure of the network can be found at: [www.nihstrokenet.org](http://www.nihstrokenet.org).

### **Research Objectives**

The aims of the network are to harness multidisciplinary stroke expertise to collaboratively and efficiently conduct exploratory NINDS-sponsored Phase 1/2 clinical trials for stroke interventions with the goal to quickly move potential treatments into larger, confirmatory Phase 3 trials. In addition, the network may perform biomarker validation studies that are immediately preparatory to clinical trial(s). Collaboration with international consortia will facilitate the execution of the larger, Phase 3 definitive trials. Together with the larger U.S. and the international stroke research community, stroke patients, and stroke-related nonprofit associations, the investigators at the RCC's will work to design and execute the most clinically impactful stroke research. Study execution and performance will be monitored by the NINDS and the National Clinical Coordinating (NCC) and National Data Management (NDMC) Centers to ensure that all eligible stroke patients are considered for NINDS-funded trials. The NINDS intends that the NIH StrokeNet will be the primary and first-line infrastructure involved in implementing all multi-site stroke trials submitted to the NINDS.

### **Network Organization**

The NIH StrokeNet currently includes: one NCC, one NDMC and 25 RCC's that have the capacity of coordinating activities in a large number of Stroke Centers across the United States. This FOA encourages both currently awarded network centers and new center applications for funding of infrastructure for RCC's in the NIH StrokeNet. The additional project-specific funds to support the implementation of protocols conducted in the network will be from separate awards. Projects can come from academic investigators, from small business or industry through a CRADA or from the NINDS through a specific funding opportunity announcement. Collaborative projects developed by site investigators in the network will be strongly encouraged. These funds will be distributed to the RCC's via the NCC on a per-patient basis protocol budgets via master trial agreements with the RCC's.

**Awards:** NIH intends to fund an up to 25 awards, corresponding to a total of \$8,700,000, for fiscal year 2018. Future year amounts will depend on annual appropriations. The Maximum allowable direct cost per year for a NIH StrokeNet RCC will be \$200,000 per year up to 5 years.

**Letter of Intent:** 30 days prior to application due Date

**Deadline:** September 25, 2017, 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: Revision Applications for Regenerative Medicine Innovation Projects (RMIP) (R01)**

**Agency:** National Institutes of Health RFA-HL-17-029

**RFP Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-HL-17-029.html>

**Brief Description:** Research projects responsive to this FOA are expected to involve both of the following: (1) human subjects or material of human origin, such as cells, tissues, and specimens; and (2) human stem cells that are not of embryonic or fetal origin. Research projects involving

induced pluripotent stem (iPS) cells may be supported, as long as the cells used to generate iPS cells were not of fetal or embryonic origin. Applicable research on adult human stem cells may encompass, for example, research on biologics (e.g., growth factors, cytokines) and biomaterials (e.g., ECM, scaffolds) that stimulate host adult stem cell growth, differentiation, and function or otherwise directly act upon adult stem cells to support innate host healing mechanisms, treat disease, and/or restore function. Funding could be used, for example, for the appropriate chemistry, manufacturing, and controls development to support the production of such products for clinical trials using good manufacturing practices (GMP). Funds may not be used for research involving human cells of embryonic or fetal origin.

This FOA will support highly meritorious clinical research projects proposing to explore and enable the development of safe and effective RM interventions. Specifically, for FY 2017 funds, in addition to being subject to the standard NIH review criteria, clinical research projects for this FOA will also be assessed according to the following criteria:

- Contributes to breadth/diversity of RM science;
- Addresses critical issues relevant to clinical research and regulatory submissions including those related to product development. Areas of focus may include improved tools, methods, standards, or applied science that support a better understanding and improved evaluation of product manufacturing, quality, safety, or effectiveness; and
- Helps to significantly build or advance the field of RM by contributing to foundational knowledge while addressing a well-recognized challenge in clinical development including the development and evaluation of safe and effective RM products.

### **Research Examples**

Applications that demonstrate potential to catalyze sustained and accelerated development of the RM field through contributing to the knowledge critical for product development, clinical testing, and data standards and sharing, are strongly encouraged. For example, such projects may:

- Further development of standards and GMP for adult stem cell-based RM products;
- Leverage extant cell production facilities for product preparation and qualification;
- Promote and enhance mechanisms for data standardization, curation, integration, and sharing;
- Utilize clinical trial network(s) to leverage infrastructure and facilitate subject recruitment and follow up as well as data sharing; and/or
- Contribute to a better and shared understanding of current technical and operational barriers as well as the regulatory science issues.

**Awards:** Application budgets should not exceed \$324,500 per year in direct costs. See details in [R&R or Modular Budget](#)

**Letter of Intent:** May 26, 2017

**Deadline:** June 26, 2017, 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.

No late applications will be accepted for this Funding Opportunity Announcement.

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: NIH Director's Transformative Research Awards (R01)**

**Agency: National Institutes of Health RFA-RM-17-007**

**RFP Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-17-007.html>

**Brief Description:** The goal of the NIH Director's Transformative Research Award is to provide support for collaborative investigative teams or individual scientists who propose unusually

innovative research projects, which, if successful, would have a major impact in a broad area of biomedical or behavioral research. To be considered transformative, projects must have the potential to create or overturn fundamental scientific paradigms through the use of novel approaches, to transform the way research is conducted through the development of novel tools or technologies, or to lead to major improvements in health through the development of highly innovative therapies, diagnostic tools, or preventive strategies. Consistent with this focus, applications supported under the Transformative Research Award will reflect ideas substantially different from mainstream concepts.

Several key features of this FOA have been designed to emphasize to applicants and peer reviewers that these applications are very different from conventional, investigator-initiated research awards. The application format, through its requirements for explicitly addressing specific issues, focuses attention on the importance of the problem, the novelty of the hypothesis and/or the proposed methodology, and the magnitude of the potential impact rather than on preliminary data or experimental details. Reviewers will be instructed to emphasize significance and innovation in their evaluations, and these criteria will be the primary basis for funding decisions. These features are intended to steer applicants and reviewers, at each step of the process, toward the goal of this initiative, which is to solicit and fund unusually bold and potentially transformative research.

Projects in any area of NIH interest, including basic, clinical, translational and behavioral studies, are encouraged and will be considered responsive to this FOA. Though technical and conceptual risks are expected in highly innovative projects, clinical research also must address potential risk to human subjects. Clinical researchers are encouraged to submit applications as long as rigorous assessment of participant risk/benefit ratios compellingly indicates the ratio to be in favor of the potential benefit. Many of the advances in public health have been achieved through clinical trials, which necessarily involve some risk to participating human subjects. NIH acknowledges the presence of such risk and has established a set of [clinical research ethics principles](#) that provides guidance regarding the risk/benefit ratio in clinical research. **Applicants proposing clinical research should contact Program staff at the [appropriate NIH Institute or Center \(IC\)](#) to ensure that their applications conform to IC-specific policies for clinical research.**

The NIH Director's [Transformative Research Award](#) is part of the [High-Risk, High-Reward Research program](#), which also includes the [NIH Director's Pioneer Award](#), the [NIH Director's New Innovator Award](#), and the [NIH Director's Early Independence Award](#). The program is part of the [NIH Common Fund](#), which supports cross-cutting efforts that are expected to have exceptionally high impact. All Common Fund initiatives invite investigators to develop bold, innovative, and often risky approaches to address problems that may seem intractable or to seize new opportunities that offer the potential for rapid progress.

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

**Letter of Intent:** Not required.

**Deadline:** September 15, 2017, 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.

No late applications will be accepted for this Funding Opportunity Announcement.

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**Grant Program: NIH Director's Pioneer Award Program (DP1)**

**Agency: National Institutes of Health RFA-RM-17-005**

**RFP Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-17-005.html>

**Brief Description:** The [NIH Director's Pioneer Award](#) is part of the [High-Risk, High-Reward Research program](#), which also includes the [NIH Director's New Innovator Award](#), the [NIH Director's Transformative Research Award](#), and the [NIH Director's Early Independence Award](#). The program is part of the [NIH Common Fund](#), which supports cross-cutting programs that are expected to have exceptionally high impact. All Common Fund initiatives invite investigators to develop bold, innovative, and often risky approaches to address significant problems with no clear solution or to seize new opportunities that offer the potential for rapid progress. To be considered pioneering, the proposed research must reflect ideas substantially different from those being pursued in the investigator's research program or being pursued elsewhere. The Pioneer Award is not intended to expand a current research program's funding in the area of the proposed project. While the research direction may have as its foundation the applicant's prior work and expertise, it cannot be an obvious extension or scale up of a current research enterprise which could be anticipated to be competitive as a new or renewal R01 application. Rather, the proposed project must reflect a fundamental new insight into the potential solution of a problem, which may derive from the development of exceptionally innovative approaches and/or from the posing of radically unconventional hypotheses. Applications for projects that are extensions of ongoing research should not be submitted.

Pioneer awardees are required to commit the major portion (at least 51%) of their research effort to activities supported by the Pioneer Award research project in the first three years of the project period. Effort expended toward teaching, administrative, or clinical duties should not be included in this calculation. Awardees will be allowed to reduce effort to 33% and 25% in the fourth and fifth years, respectively, to help them transition to other sources of support since Pioneer Awards cannot be renewed. Applicants with current research commitments exceeding 49% must provide a detailed explanation describing how their effort on existing grants will be adjusted to permit them to devote the required minimum effort to the Pioneer Award project. Applicants who will not be able to meet this requirement should not submit applications.

**Awards:** Awards will be for \$700,000 Direct Costs per year for up to 5 years.

**Letter of Intent:** Not required.

**Deadline:** September 1, 2017, 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. No late applications will be accepted for this Funding Opportunity Announcement.

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## **Grant Program: NIH Director's New Innovator Award Program (DP2)**

**Agency:** National Institutes of Health RFA-RM-17-006

**RFP Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-17-006.html>

**Brief Description:** The NIH Director's New Innovator Award addresses two important goals: stimulating highly innovative research and supporting promising new investigators. New investigators may have exceptionally innovative research ideas, but not the preliminary data required to fare well in the traditional NIH peer review system. As part of NIH's commitment to increasing opportunities for new scientists, it has created the NIH Director's New Innovator Award to support exceptionally creative new investigators who propose highly innovative research projects that have the potential for unusually high impact. This award complements ongoing efforts by NIH and its Institutes and Centers to fund new investigators through R01 grants and other mechanisms.

The NIH Director's New Innovator Award is different from traditional NIH grants in several ways. It is designed specifically to support unusually creative investigators with highly innovative research ideas at an early stage of their career when they may lack the preliminary data required

for an R01 grant application. The emphasis is on innovation and creativity; preliminary data are not required, but may be included. No detailed, annual budget is requested in the application. The review process emphasizes the individual's creativity, the innovativeness of the research approaches, and the potential of the project, if successful, to have a significant impact on an important biomedical or behavioral research problem.

The research proposed for a NIH Director's New Innovator Award may be in any scientific area relevant to the mission of NIH (biological, behavioral, clinical, social, physical, chemical, computational, engineering, and mathematical sciences). Investigators who were not selected for an award in prior years may submit applications this year as long as they retain their ESI (early stage investigator) eligibility; however, all applications must be submitted as "new" applications regardless of any previous submission to the program.

The [NIH Director's New Innovator Award](#) is part of the [High-Risk, High-Reward Research program](#), which also includes the [NIH Director's Pioneer Award](#), the [NIH Director's Transformative Research Award](#), and the [NIH Director's Early Independence Award](#). The program is part of the [NIH Common Fund](#), which supports cross-cutting programs that are expected to have exceptionally high impact. All Common Fund initiatives invite investigators to develop bold, innovative, and often risky approaches to address problems that may seem intractable or to seize new opportunities that offer the potential for rapid progress.

**Awards:** Awards are multi-year funded, with all funds being disbursed in the first year of the award. Awards will be up to \$1,500,000 in direct costs (the equivalent of \$300,000 in Direct Costs each year for five years) plus applicable Facilities and Administrative (F&A) costs to be determined at the time of award.

**Letter of Intent:** Not required.

**Deadline:** September 8, 2017, 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.

No late applications will be accepted for this Funding Opportunity Announcement.

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### **Grant Program: NIH Director's Early Independence Awards (DP5)**

**Agency: National Institutes of Health RFA-RM-17-008**

**RFP Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-17-008.html>

**Brief Description:** The [NIH Director's Early Independence Awards](#) initiative is funded through the NIH Common Fund, which supports cross-cutting programs that are expected to have exceptionally high impact. All Common Fund initiatives invite investigators to develop bold, innovative, and often risky approaches to address major problems that are especially daunting or to seize new opportunities that offer the potential for rapid progress.

The NIH Director's Early Independence Awards provide 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 by post-doctoral training, a small number of outstanding junior investigators would benefit instead by launching directly into an independent research career. For these select investigators, who have established a record of scientific innovation and research productivity and who have demonstrated unusual leadership, drive, and maturity, post-doctoral training would unnecessarily delay their entry into performing independent research. By the end of the award period, the Early Independence investigator is expected to be competitive for continued funding of his/her research program and for a permanent research-oriented position. The NIH Director's Early Independence Awards also provide an opportunity for institutions to

invigorate their research programs by bringing in the fresh perspectives of the awardees that they host.

The NIH recognizes a unique and compelling need to promote diversity in the biomedical, behavioral, clinical and social sciences research workforce. The NIH expects all of its efforts to diversify 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 22, 2017

**Deadline:** September 22, 2017, 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.

No late applications will be accepted for this Funding Opportunity Announcement.

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## **Department of Defense/US Army/DARPA/ONR**

### **Grant Program: FY17 Funding Opportunity Announcement for Navy and Marine Corps Science, Technology, Engineering & Mathematics Education, Outreach and Workforce Program**

**Agency: Department of Defense ONR N00014-17-S-F002**

**Website:** <https://www.onr.navy.mil/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 necessity to support efforts that can jointly improve STEM student outcomes and align 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 including active learning approaches and incorporating 21st century skills. Projects must aim to increase student engagement in STEM and persistence of students in STEM degrees, while improving student technical capacity. ONR encourages proposals to utilize current STEM educational research for informing project design and advancing our understanding of how and why students 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 the future and current DoN (naval) STEM workforce in High School, all categories of Post-Secondary institutions, the STEM research enterprise, and efforts that enhance the current naval STEM workforce and its mission readiness. Efforts may encompass a spectrum of project scales: • Develop and implement exploratory pilot projects that seek to create new educational experiences within educational systems. Projects must engage STEM topics that are applicable to anticipated naval S&T workforce needs. Implementation scale may vary from small to moderate in design but must have an evident plan to impact the proposed audience target. • Develop cohesive STEM educational activities that strengthen the capacity of communities and stakeholders to improve STEM education. Projects

seeking to address this scale are expected to involve multiple stakeholders within a defined community and have evidence supporting the proposed work. Anticipated results and naval relevance must be clearly articulated and indicate a major change within the targeted educational community. • Establish meeting of stakeholders that must seek to connect relevant people and organizations across sectors (e.g., educational entities, government (federal, state, and local as appropriate), private industry, nonprofits, and others) to explicitly develop broader projects for impacting entire communities. Any proposed meeting is expected to produce an actionable project as a result. The technical content of any idea must establish naval relevance within the broad scope of key engineering and scientific areas as outlined in the Naval S&T Strategy, or such as our National Naval Responsibilities (see ONR website), or any identified gaps in workforce needs such as data analysts and scientists, among others.

**White Paper:** Required

**Awards:** Various

**White Paper Deadline:** August 31, 2017

Proposal Received by ONR

Period of Performance Start

April-June 2017

September 2017

July-September 2017

January 2018

October-December 2017

March 2018

**Contact Information:** Dr. Michael Simpson Director of Education and Workforce Office of Naval Research 875 North Randolph Street Arlington VA 22203-1995 [onr\\_stem@navy.mil](mailto:onr_stem@navy.mil)

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## **Grant Program: Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology**

**Agency:** Department of Defense ONR N00014-17-S-B001

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

**Brief Description:** The Office of Naval Research (ONR) is interested in receiving proposals for Long-Range Science and Technology (S&T) Projects which offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines. A brief description of the ONR Program Codes and the science and technology thrusts that ONR is pursuing is provided below. Additional information can be found at the ONR website at <http://www.onr.navy.mil/Science-Technology/Departments.aspx>.

Code 30 develops and transitions technologies to enable the Navy-Marine Corps team to win and survive on the battlefield. The department invests primarily in asymmetric and irregular warfare, distributed operations, information dominance, and survivability and self-defense. To achieve the goals of the department, the expertise of a number of technical communities are needed. The department supports applied physics efforts ranging from electromagnetics for C4 to condensed matter physics. The department engages chemistry and materials science to improve structures and efficiencies of our platforms and systems and is interested in emerging opportunities from the computer science community to efficiently control and protect our information and hardware systems. Given the applied nature of some of the department's work, we frequently support ideas and opportunities from the engineering community including electrical, mechanical, and software engineering.

Code 31 invests in areas of science and their applications such as data science, mathematical and computational science, computer and information sciences, quantum information sciences, cyber security, electronics, command and control and combat systems, communications, cyber operations, electronic warfare, sensing and surveillance, and precision timing and navigation. Specific thrusts and focused research areas are: 1) Mathematics, Computers and Information Sciences, which sponsors basic and applied research, and advanced technology development efforts in mathematics, computer and information sciences that address Navy and Department of Defense needs in computation, information processing, information operation, information assurance and cybersecurity, decision tools, and command and control with specific focus on enabling rapid, accurate decision making (<http://www.onr.navy.mil/Science-Technology/Departments/Code-31/AllPrograms/311-Mathematics-Computers-Research.aspx>) .

**White Paper:** Required

**Awards:** Various

**White Paper Deadline:** August 31, 2017

Proposal Received by ONR

Period of Performance Start

April-June 2017

September 2017

July-September 2017

January 2018

**Contact Information:** Questions of a Technical nature should be submitted to the ONR POC whose program best matches the offeror's field of interest. Explore ONR's website at <http://www.onr.navy.mil/Science-Technology/Contacts.aspx> , where you can navigate the various directorates and departments within the ONR umbrella. Embedded within the specific exploratory threads should be the relevant POC information for the cognizant ONR Program Office that you seek.

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### **Grant Program: Department of Defense (DoD) Explosive Ordnance Disposal (EOD) Applied Research Program**

**Agency:** Department of Defense ONR N00014-17-S-B011

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

**Brief Description:** ONR is interested in receiving white papers and full proposals for the Department of Defense (DoD) Explosive Ordnance Disposal (EOD) Science and Technology Program. ONR develops and demonstrates emerging technologies for DoD EOD functional areas. The DoD EOD functional area include the ability to detect/locate, access, diagnose/identify, render safe/neutralize, and dispose of explosive hazards. It includes land and underwater environments. The EOD mission is unique from the role of other forces, such as combat engineers that support movement of U.S. and allied forces. Explosive hazards include conventional and unconventional foreign and domestic ordnance, Improvised Explosive Devices (IEDs), and Weapons of Mass Destruction (WMD). An IED is a device placed in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals to destroy, incapacitate, harass, or distract. It can include military stores, but normally is devised from non-military components. An IED can be emplaced on the surface, above ground, buried, or underwater.

**Awards:** Various

**Proposal Deadline:** August 18, 2017

**Contact Information:** Russelle Dunson Contracting Officer Phone 703-696-8375

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**Grant Program: Communications and Networking Discovery and Invention****Agency: Department of Defense ONR [N00014-17-S-B012](#)****Website:** <https://www.onr.navy.mil/Contracts-Grants/Funding-Opportunities/Broad-Agency-Announcements>

**Brief Description:** Communications technology that can provide seamless, robust, connectivity is at the foundation of the Sea Power 21 and FORCEnet Vision "... to have the right information, at the right place, at the right time ..." The performance of Command and Control (C2) systems and decision making at all levels of command depend critically on reliable, interoperable, survivable, secure, and timely communications and networking, and the availability of high capacity multimedia (voice, data, imagery) communication networks is fundamental to nearly all Department of Navy missions. The current evolution of naval warfighting from a platform-centric to a network-centric paradigm depends on successfully meeting the implied need for significantly enhanced communications and networking capabilities of C2, sensor and weapon systems. These systems are deployed on a variety of platforms and users, both manned and unmanned, operating under challenging battlefield conditions (lack of infrastructure, mobility, spectrum, interference, multipath, atmospheric, size/weight/power constraint, etc.) in different environments (space, terrestrial and undersea).

**Awards:** Various.**Proposal Deadline:**

White Papers: 26 June 2017

Full Proposals: 25 September 2017

**Contact Information:** AnShawn Lewis Contract Specialist Phone 7036962025**Grant Program: Biological Technologies****Agency: Department of Defense DARPA HR001117S0030****Website:**[https://www.fbo.gov/index?s=opportunity&mode=form&id=91b94156bbad11c1cb1b8a8873510ed3&tab=core&\\_cvview=0](https://www.fbo.gov/index?s=opportunity&mode=form&id=91b94156bbad11c1cb1b8a8873510ed3&tab=core&_cvview=0)

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

**Awards:** Various.

**Proposal Deadline:** Proposal Abstracts and Full Proposals will be submitted on a rolling basis until April 26, 2018, 4:00pm ET

**Contact Information:** The BAA Coordinator for this effort may be reached at: [BTOBAA2017@darpa.mil](mailto:BTOBAA2017@darpa.mil)

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## **Department of Energy**

**Grant Program: Solar Decathlon 2019 Future Planning - Request for Information**

**Agency: Department of Energy DE-FOA-0001753**

**Website:** <https://eere-exchange.energy.gov/#Foaid72d17068-b4e5-4694-b1f7-ac3269743b1e>

**Brief Description:** This is a Request for Information (RFI) only.

The Solar Decathlon is a program for collegiate teams to design, build, and operate solar-powered houses that are innovative, energy-efficient, and attractive. It provides participating students with hands-on experience and training. The Solar Decathlon, is open to the public and the next Solar Decathlon will take place October 5-15, 2017, in Denver, Colorado. Since Solar Decathlon's inception in 2002, DOE has continuously sought to refine and improve both the application process and event execution. This RFI seeks information to inform designing, planning and implementing Solar Decathlon 2019 that is planned to also take place in the Denver area. The goals of this Request for Information (RFI) are twofold:

1. Gather feedback on changes being considered by the Department of Energy to increase the opportunities for team participation and innovation, and
2. Gather feedback on ways DOE can reduce the barriers to entry for participation for university teams.

DOE is specifically interested in feedback regarding changes that would make it easier for universities to compete in the Solar Decathlon while maintaining the ability to hold a large public event that enables the public to experience the innovation in the houses. This is an RFI only.

**Document:** [Request for Information DE-FOA-0001753 - Solar Decathlon 2019 Future Planning - Full Text](#)

**Contact Information:** [solar.decathlon@ee.doe.gov](mailto:solar.decathlon@ee.doe.gov) For responses to this Request for Information. Include the RFI number DE-FOA-0001753 in the email Subject line.

- [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov) For technical assistance with EERE Exchange.
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## **NASA**

**Grant Program: ROSES 2017: New (Early Career) Investigator Program**

**Agency: NASA NNH17ZDA001N-NIP**

**Website:**

<https://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={344D6EF1-D56F-60FD-505E-A31035E2B19C}&path=open>

**Brief Description:** The New (Early Career) Investigator Program (NIP) in Earth Science is designed to support outstanding scientific research and career development of scientists and engineers at the early stage of their professional careers. The program aims to encourage innovative research initiatives and cultivate scientific leadership in Earth system science. The Earth Science Division (ESD) places particular emphasis on the investigators' ability to promote and increase the use of space-based remote sensing through the proposed research. The NIP supports all aspects of scientific and technological research aimed to advance NASA's mission in

Earth system science (<http://science.nasa.gov/about-us/sciencestrategy/>). In research and analysis, the focus areas are: • Carbon Cycle and Ecosystems, • Climate Variability and Change, • Water and Energy Cycle, • Atmospheric Composition, • Weather, and • Earth Surface and Interior. In Applied Sciences, the ESD encourages efforts to discover and demonstrate practical uses of NASA Earth science data, knowledge, and technology (see <http://appliedsciences.nasa.gov>). In technological research, the ESD aims to foster the creation and infusion of new technologies into space missions in order to enable new scientific observations of the Earth system or reduce the cost of current observations (see <http://esto.nasa.gov>). The ESD also promotes innovative development in computing and information science and engineering of direct relevance to ESD. See Appendix A.1 for more detailed descriptions of the Focus Areas, themes in applied sciences, and related research topics of high priority to the ESD.

The proposed research project must be led by a single, eligible (see further description below for eligibility) investigator serving as the Principal Investigator (PI). Indeed, this individual must be the only essential team member; no Co-Investigators (Co-Is), paid or unpaid, are permitted. The NIP does not accept proposals with Co-PIs nor two types of PIs, such as Science PI and Institutional PI. Students and postdoctoral fellows may participate as paid team members. The proposed research may include collaborations. See the Guidebook for Proposers at <http://www.hq.nasa.gov/office/procurement/nraguidebook/> for the definitions of Collaborator vs. Co-Investigator and descriptions of China-related restrictions.

To be eligible for an NIP award, proposed PIs must meet the following requirements:

1. Be employed at an institution in the U.S., its territories, or possessions, or the Commonwealth of Puerto Rico, which awards a baccalaureate or advanced degree in a field supporting the objectives of NASA Earth system studies, or be employed at any nonprofit research institution or other nonprofit organization that performs a significant amount of work in fields of research supporting the objectives of NASA's Earth Science Program. Such organizations could include museums, observatories, Government or nonprofit research laboratories, as well as nonprofit entities in the private sector.
2. Be in tenure- or nontenure-track positions in either teaching or research or both, as long as the employing institution assumes the responsibility of submitting the proposal with the individual as the proposed PI.
3. Despite being more than five years beyond the receipt of their Ph.D. degrees, individuals who have interrupted their careers for reasons such as family leave or serious health problems may also be eligible. These applicants should make a written request for prior concurrence from NASA before the due date for Notices of Intent to propose. NASA will provide a written response within three weeks. Such exception is not intended for individuals who have had successful employment in technical fields in science and engineering, even though the employment is not a direct continuation of their Ph.D. research, nor is it intended for individuals with a recent Ph.D. degree after having already established a successful career in Earth system science and related disciplines.
4. Not hold or have held tenure (or equivalent) on or before the submission deadline of this program.
5. Not be a current or former recipient of the NIP or Presidential Early Career Award for Scientists and Engineers (PECASE) (see further below) award.

**Awards:** Proposals to the NIP are openly solicited approximately every two years. The anticipated average award is \$80-90K per year for a period of up to three years, subject to satisfactory progress and availability of funds.

**Proposal Deadline:** NIP17 NOIs Due: July 31, 2017

NIP17 Proposals Due: August 31, 2017

**Contact:** Lin Chambers  
Earth Science Division  
Science Mission Directorate  
NASA Headquarters  
Washington, DC 20546-0001  
Telephone: 202-358-1667  
E-mail: [lin.h.chambers@nasa.gov](mailto:lin.h.chambers@nasa.gov)

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**Grant Program: ROSES 2017: Early Stage Innovation**

**Agency: NASA NNH17ZOA001N-17ESI\_B2**

**Website:**

<https://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId=%7B68935F1B-9778-91FC-CB89-D49868D3FC94%7D&path=init>

**Brief Description:** The STRG Program within STMD is fostering the development of innovative, low-TRL technologies for advanced space systems and space technology. The goal of this lowTRL endeavor is to accelerate the development of groundbreaking, high-risk/high-payoff space technologies, not necessarily directed at a specific mission, to support the future space science and exploration needs of NASA, other government agencies, and the commercial space sector. Such efforts complement the other NASA Mission Directorates' focused technology activities which typically begin at TRL 3 or higher. The starting TRL of the efforts to be funded as a result of this Appendix will be TRL 1 or TRL 2; typical end TRLs will be TRL 2 or TRL 3. See Attachment 2 of the NRA for TRL descriptions.

This Appendix seeks proposals to develop unique, disruptive, or transformational space technologies that have the potential to lead to dramatic improvements at the system level — performance, weight, cost, reliability, operational simplicity, or other figures of merit associated with space flight hardware or missions. Although progress under an award may be incremental, the projected impact at the system level must be substantial and clearly defined. This Appendix does not seek literature searches, survey activities or incremental enhancements to the current state of the art (SOA).

This Appendix exclusively seeks proposals that are responsive to one of the seven topics described in 1.3. Proposals that are not responsive to any of these topics, as specifically described, will be considered non-compliant and will not be submitted for peer review. NASA anticipates addressing other topics in future Appendix releases. The topics described in 1.3 are aligned with NASA's Technology Roadmaps (<http://www.nasa.gov/offices/oct/home/roadmaps/index.html>)..

**Awards:** Various

**Proposal Deadline:** ESI17 NOIs Due: June 2, 2017

ESI17 Proposals Due: June 30, 2017

**Contact:** Claudia Meyer

Space Technology Research Grants Program Executive

Space Technology Mission Directorate, NASA Headquarters

[hq-esi-call@mail.nasa.gov](mailto:hq-esi-call@mail.nasa.gov)

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**National Endowment of Humanities**

**Grant Program: Research and Development Grants**

**Agency: National Endowment of Humanities**

**Website:** <https://www.neh.gov/grants/preservation/research-and-development>

**Brief Description:** The Research and Development program supports projects that address major challenges in preserving or providing access to humanities collections and resources. These challenges include the need to find better ways to preserve materials of critical importance to the nation's cultural heritage—from fragile artifacts and manuscripts to analog recordings and digital assets subject to technological obsolescence—and to develop advanced modes of organizing, searching, discovering, and using such materials. This program recognizes that finding solutions to complex problems often requires forming interdisciplinary project teams, bringing together participants with expertise in the humanities; in preservation; and in information, computer, and natural science.

**All projects must demonstrate how advances in preservation and access would benefit the cultural heritage community in supporting humanities research, teaching, or public programming.**

Research and Development offers two funding tiers in order to address projects at all stages of development and implementation.

**Tier I: Planning and Basic Research**

Tier I grants support the following activities:

- planning and preliminary work for large-scale research and development projects; and
- stand-alone basic research projects, such as case studies, experiments, or the development of methods, models, and tools.

**Tier II: Advanced Implementation**

Tier II grants support projects at a more advanced stage of implementation for the following activities:

- the development of standards, practices, methodologies, or workflows for preserving and creating access to humanities collections; and
- applied research addressing preservation and access issues concerning humanities collections.

**Awards:** For Planning and Basic Research (Tier I) projects, the maximum award is \$75,000 for up to two years. For Advanced Implementation (Tier II) projects, the maximum award is \$350,000 for up to three years. Successful applicants will be awarded a grant in outright funds, federal matching funds, or a combination of the two, depending on the applicant's preference and the availability of NEH funds.

**Proposal Deadline:** June 8, 2017

**Contact:** Contact the staff of NEH's Division of Preservation and Access at [preservation@neh.gov](mailto:preservation@neh.gov) and 202-606-8570. Applicants who are deaf or hard of hearing can contact NEH via Federal Relay (TTY users) at 800-877-8399.

**Robert Wood Johnson Research Foundation**

**Grant Program: Research in Transforming Health & Health Care Systems**

**Agency: Robert Wood Johnson Foundation**

**Website:** [http://www.rwjf.org/en/library/funding-opportunities/2017/research-in-transforming-health---health-care.html?rid=CvZnilg375hy72Mwi\\_xTGLdpRptPSbRP&et\\_cid=880575](http://www.rwjf.org/en/library/funding-opportunities/2017/research-in-transforming-health---health-care.html?rid=CvZnilg375hy72Mwi_xTGLdpRptPSbRP&et_cid=880575)

**Brief Description:** The Foundation's new Research in Transforming Health and Health Care Systems (RTHS) call for proposals (CFP) seeks to fund rigorous, empirical studies that evaluate or predict the potential effects of policies or policy changes intended to transform health and health

care systems. The 2017 RTHS CFP will focus on empirical and policy-relevant analyses that can inform strategies to ensure access to high-quality, affordable health care and insurance coverage.

#### Eligibility and Selection Criteria

Researchers, as well as practitioners in the public and private sector working with researchers, are eligible to submit proposals through their organizations. Projects may be generated from disciplines including health services research, economics, sociology, program evaluation, political science, public policy, public health, public administration, law, business administration, or other related fields. The Foundation may give preference to applicants that are either public entities or nonprofit organizations that are tax-exempt under Section 501(c)(3) of the Internal Revenue Code and are not private foundations or Type III supporting organizations. The Foundation may require additional documentation. Applicant organizations must be based in the United States or its territories.

**Awards:** Up to \$600,000 will be available under this CFP.

- Project funding will range from \$50,000 to \$150,000 to accommodate studies of 6 to 12 months. Preference may be given to rapid-turnaround projects that can be completed within six months, although the study timeline should be appropriate for the proposed objectives.
- Up to six studies will be funded.

**Proposal Deadline:** June 23, 2017

**Contact:** Contact the staff of NEH's Division of Preservation and Access at [preservation@neh.gov](mailto:preservation@neh.gov) and 202-606-8570. Applicants who are deaf or hard of hearing can contact NEH via Federal Relay (TTY users) at 800-877-8399.

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