

# NJIT Research Newsletter

Issue: ORN-2017-38

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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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## Special Announcements

**Limited Submissions Internal Competitions: NSF NRT and MRI Programs**  
(Please see next section)

## NJIT Research Events

### **Event: President's Forum and 2017 NJIT Research Centers and Laboratories Showcase**

**When:** November 16, 2017; 10.00 AM – 2.30 PM

**Where:** Ballroom A and B., Campus Center

**Brief Description:** The President's Forum and 2017 NJIT Research Centers and Laboratories Showcase will be held on November 16, 2017 to feature ongoing exciting research at NJIT. The showcase presents NJIT research enterprise to promote core and interdisciplinary collaborative research. This year, the showcase will feature 70 NJIT research institutes, centers and specialized laboratories. Dr. Steven Scachter, MD, Chief Academic Officer and Program Leader of NeuroTechnology at the Consortia for Improving Medicine with Innovation & Technology (CIMIT) and Professor of Neurology at Harvard Medical School will be the Keynote Speaker.

**Keynote Speaker Bio:** Dr. Steven Schachter is Chief Academic Officer and Program Leader of NeuroTechnology at the Consortia for Improving Medicine with Innovation & Technology (CIMIT) and a Professor of Neurology at Harvard Medical School (HMS). Dr. Schachter attended medical school at Case Western Reserve University in Cleveland, Ohio. He completed an internship in Chapel Hill, North Carolina, a neurological residency at the Harvard-Longwood Neurological Training Program, and an epilepsy fellowship at Beth Israel Hospital in Boston, Massachusetts. Dr. Schachter is Past President of the American Epilepsy Society. He is also past Chair of the Professional Advisory Board of the Epilepsy Foundation and serves on their Board of Directors. He has directed over 70 research projects involving antiepileptic therapies, and published over 200 articles and chapters. He compiled the 6-volume Brainstorms series, which has been distributed to over 150,000 patients and families worldwide in several languages, and

edited or written 26 other books on epilepsy and behavioral neurology. Dr. Schachter is the founding editor and editor-in-chief of the medical journals *Epilepsy & Behavior* and *Epilepsy & Behavior Case Reports*.

***This President's forum is a featured event in the Albert Dorman Honors College Colloquium Series and is made possible in part by the generous support of the DeCaprio Family.***

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### **Grant Opportunity Alerts**

Keywords and Areas Included in the Grant Opportunity Alert Section Below

**NSF:** Partnerships for Innovation (PFI); Research Coordination Networks in Undergraduate Biology Education (RCN-UBE); Campus Cyberinfrastructure (CC\*); NSF National Science Foundation Research Traineeship (NRT) Program; Major Research Instrumentation Program: (MRI); Enabling Discovery through GENomic Tools (EDGE); International Research Experiences for Students (IRES); Dynamics of Coupled Natural and Human Systems (CNH)

**NIH:** NIBIB Biomedical Technology Resource Centers (P41); NIH Exploratory/Developmental Research Grant Program (R21); BRAIN Initiative: Theories, Models and Methods for Analysis of Complex Data from the Brain (R01); Program: Fundamental Science Research on Mind and Body Approaches (R21); Innovation Corps (I-Corps™) at NIH Program for NIH and CDC Translational Research (Admin Supp)

**Department of Defense/US Army/DARPA/ONR:** Foundational Research for Autonomous, Unmanned, and Robotics Development of Medical Technologies (FORWARD) Award

**Department of Energy:** Solar Desalination; FY2018 Scientific Infrastructure Support for CINR Funding Opportunity Announcement; State Energy Program 2017 Competitive Awards

**NASA:** Use of the NASA Physical Sciences Informatics System

**National Endowment of Humanities:** Collaborative Research Grants; PhD Planning Grants; Summer Stipends; Research and Development Grants

**Rotary International:** Alzheimer Disease (AD) RFP

**Robert Wood Johnson Foundation:** Developing Solutions for Social Isolation in the United States: Learning From the World

**Streamlyne Update:** New How-to-do Videos

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### **Internal Competition: National Science Foundation**

#### **NSF Limited Submission and Internal Competition Through College/School Deans**

**Grant Program: Partnerships for Innovation (PFI)**

**Agency: National Science Foundation NSF 18-511**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18511/nsf18511.htm>

**Brief Description:** The NSF Partnerships for Innovation (PFI) Program within the Division of Industrial Innovation and Partnerships (IIP) offers researchers the opportunity to transform new knowledge into societal benefits through translational research and technology development efforts which catalyze partnerships to accelerate innovations that address significant societal needs.

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

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

The **Technology Translation (PFI-TT) track** offers an NSF-funded researcher the opportunity to advance his or her prior NSF-funded research results towards developing technological innovations with promising commercial potential and societal impact. Projects are supported to demonstrate proof-of-concept, prototype, or technology development and scale-up while exposing faculty and students (and engaging them in) in innovation and entrepreneurially-focused activities that could possibly lead to partnership opportunities, the creation of new intellectual property and technologically-driven commercialization outcomes that address societal needs. Potential pathways forward within the PFI-TT track could be broader collaborative activities and partnerships, technology licensing, technology spin-outs, and expanded entrepreneurial activity.

The **Research Partnerships (PFI-RP) track** provides an opportunity to support technology development activities through a multi-organization collaboration. NSF recognizes that interdisciplinary collaboration is often needed to achieve successful technology development. This proposal track supports a research consortium ecosystem focused on a clear project thrust. It allows for partnerships between academic researchers and a variety of third-party organizations (such as industry, non-academic research organizations, federal laboratories, public or non-profit technology transfer organizations, and/or other universities) to conduct applied research in highly collaborative, multidisciplinary teams, on problems typically beyond the reach of a single researcher. NSF currently supports numerous research consortia (e.g., Engineering Research Centers, Industry-University Cooperative Research Centers, Science and Technology Centers, Nanoscale Science and Engineering Centers, Materials Research Science and Engineering Centers, Centers for Chemical Innovation, and others). Such consortia could participate in PFI-RP proposals. The goal of the RP track is to catalyze robust and synergistic partnerships and collaborations between government, academia, and other public and private entities to drive and accelerate the translation of federally-funded fundamental research results into innovations that, through technology development and commercialization, will have a significant economic and societal impact.

**WEBINARS: Webinars will be held to answer questions about the solicitation. Registration will be available on the NSF Division of Industrial Innovation and Partnerships website (<https://www.nsf.gov/div/index.jsp?div=IIP>). Potential proposers and their partners are encouraged to attend.**

**Awards:** Standard Grants; **Anticipated Funding Amount:** \$16,750,000

**Letter of Intent:** Not Required

**Submission Deadline:** February 01, 2018

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

**Internal Competition Deadline to College Dean's Office: December 1, 2017:** Please submit up to 5 pages pre-proposal to your respective Dean by December 1, 2017 in the following format. College level reviews will be conducted by Deans to forward recommendations for up to 2 proposals to the Office of Research by December 7, 2017. The final selection will be announced by December 10, 2017. The pre-proposal should include title of the project, list of key investigators and collaborators with affiliations, Summary of the project with sections on Intellectual Merit and Broader Impact, budget summary. Please also include NSF style biographical sketch that is not included in the 5-page pre-proposal limit. The pre-proposals will be reviewed using the criterion mentioned in the RFP.

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### **Grant Program: NSF National Science Foundation Research Traineeship (NRT) Program**

**Agency: National Science Foundation NSF 18-507**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18507/nsf18507.htm>

**Brief Description:** The NSF Research Traineeship (NRT) program is designed to encourage the development and implementation of bold, new, and potentially transformative models for STEM graduate education training. The NRT program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers.

The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary research areas, through the use of a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. For FY2018, proposals are requested in any interdisciplinary research theme of national priority, with special emphasis on two high priority areas: (1) Harnessing the Data Revolution (HDR) and (2) Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS). HDR is expected to continue as a priority research area for FY2019 and FY2020 competitions, along with a new priority area to be announced in 2018.

The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners are encouraged. NRT especially welcomes proposals that will pair well with the efforts of NSF INCLUDES to develop STEM talent from all sectors and groups in our society ([https://www.nsf.gov/news/special\\_reports/nsfincludes/index.jsp](https://www.nsf.gov/news/special_reports/nsfincludes/index.jsp)). Collaborations are encouraged between NRT proposals and existing NSF INCLUDES projects, provided the collaboration strengthens both projects.

**Limited Number of Submission: 2:** An eligible organization may participate in two proposals per competition. **Participation includes serving as a lead organization, non-lead organization, or subawardee on any proposal.** Organizations participating solely as evaluators on projects are excluded from this limitation. Proposals that exceed the institutional eligibility limit (beyond the first two submissions based on timestamp) will be returned without review regardless of the institution's role (lead organization, non-lead collaborative, or subawardee) in the returned proposal.

**Limit on Number of Proposals per PI or Co-PI: 1:** An individual may serve as Lead Principal Investigator (PI) or Co-PI on only one proposal submitted to the NRT program per annual competition. Proposals that exceed the PI/Co-PI eligibility limit (beyond the first submission based on timestamp), will be returned without review regardless of the individual's role (PI or co-PI) in the returned proposal.

**Awards Range:** Standard Grant; **Anticipated Funding Amount:** \$36,100,000

**Letter of Intent:** Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.

**Submission Deadline:**

- **Letter of Intent Due Date(s) (required)** (due by 5 p.m. submitter's local time):

November 27, 2017 - December 06, 2017

November 26, 2018 - December 06, 2018

November 25, 2019 - December 06, 2019

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

February 06, 2018

February 06, 2019

February 06, 2020

**Contact:** Laura B. Regassa, telephone: (703) 292-2343, email: [lregassa@nsf.gov](mailto:lregassa@nsf.gov)

- Tara L. Smith, telephone: (703) 292-7239, email: [tsmith@nsf.gov](mailto:tsmith@nsf.gov)

- Stephen Mulkey, telephone: (703) 292-8954, email: [smulkey@nsf.gov](mailto:smulkey@nsf.gov)

**Internal Competition Deadline to College Dean's Office: November 15, 2017:** Please submit a pre-proposal for internal competition in the following format to your Dean. Deans are requested to forward the pre-proposals with their recommendations to the Office of Research for institutional review by November 19, 2017. The pre-proposal should include:

**Section 1. Letter of Intent (NSF Format):** Submit a one-page LOI through FastLane during the open submission window with the following information:

- The name and departmental affiliation of the Principal Investigator (PI).
- The name(s) and departmental affiliation(s) of the Co-PI(s) and others composing the Core Participants (maximum 10).
- The names(s) of any other (non-lead) participating institutions or organizations. If the sole contribution of the partner is evaluation, then designate as "*Evaluation: institutional or organizational name*"; evaluators are exempt from institutional eligibility limits (see section IV). If there are partnering institutions, then the LOI MUST include the appropriate mandatory statement at the end of the project synopsis (see Project Synopsis below).
- Project Title: The title must begin with "NRT-HDR:" or "NRT-INFIEWS:" for projects targeting the Harnessing the Data Revolution or Nexus of Food, Energy, and Water Systems research areas, respectively. Titles for projects addressing another interdisciplinary theme of national importance must begin with "NRT:". Any collaborative project with proposals from multiple institutions should begin with "Collaborative Research:". For example, a collaborative proposal in INFIEWS would have a title beginning "Collaborative Research: NRT-INFIEWS:"
- Project Synopsis (up to 2500 text characters including required organizational statement): Provide a brief summary of the vision and goals of the proposed training program, including a brief description of the interdisciplinary research theme, the main training elements, the integration of the research and training, and the need for the program. Add the appropriate **required partner organization statement** at the end of the project synopsis. If the project has a partner institution that is not solely an evaluator, then the

following text must appear at the end of the project synopsis: *"The participating institutions and organizations have agreed to partner on this NRT project. The NRT-eligible institutions have been informed by the lead organization that serving as a non-lead organization or subawardee on a proposal where the institution appears in the budget will count toward their institutional eligibility limit of two NRT proposals per annual competition."* NRT-eligible institutions are universities and colleges accredited in and having a campus located in the U.S. that award a research-based master's degree and/or a doctoral degree in a STEM discipline supported by the National Science Foundation. If the project has no NRT-eligible partner institutions or if the only NRT-eligible institution solely has an evaluation role (and has been designated as such, see participating institution instructions above), then the following text is required at the end of the project synopsis: *"There are no NRT-eligible institutions partnering on this project outside of an evaluation role."*

- Target Disciplines: List up to 5 primary disciplinary areas contributing to the research focus.

**Section 2. Tentative Budget Summary:** Please provide itemized budget for the entire duration  
**Section 3. Biographical Sketch of the PI (NSF Format)**

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

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

**PI:** Philip Goode (PI) and Wenda Cao (Co-PI)

**Department:** Center for Solar-Terrestrial Research

**Grant/Contract Project Title:** Solar Multi-Conjugate Adaptive Optics: Testing and Commissioning on the 1.6 Meter Solar Telescope in Big Bear

**Funding Agency:** NSF

**Duration:** 11/01/17-10/31/19

**PI:** Deane Evans (PI)

**Department:** College of Architecture and Design

**Grant/Contract Project Title:** Clean Energy Learning Center

**Funding Agency:** State of New Jersey Board of Public Utilities

**Duration:** 07/01/16-06/30/18

**PI:** Michel Boufadel (PI)

**Department:** Center for Natural Resources Development and Protection

**Grant/Contract Project Title:** The Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE) II

**Funding Agency:** GMRI (Gulf of Mexico Research Initiative)

**Duration:** 12/01/16-11/30/18

Correction:

**PI:** Gale Spak (PI)

**Department:** CPE

**Grant/Contract Project Title:** Construction and Utilities Talent Development Center

**Funding Agency:** NJ Dept. Of Labor & Workforce Development

**Duration:** 11/01/17-10/31/18

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

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

**SOLAR DESALINATION:** The Department of Energy is inviting concept papers on developing "novel technologies or concepts using solar thermal energy to assist in creating freshwater from otherwise unusable waters. Thermal desalination is a potential solution to increase water supplies for municipal water and agriculture, and is an important technology to purify water produced from various industrial processes, including oil and gas production. Advancing state-of-the-art thermal technologies and energy-efficient desalination systems will reduce the levelized cost of water by reducing the levelized cost of heat, resulting in more efficient thermal desalination processes and lower overall capital and integration costs for solar thermal desalination." Funding opportunity for Solar Desalination is posted on the website <https://energy.gov/eere/solar/funding-opportunity-announcement-solar-desalination>

**BRAIN DATA CRUNCH:** A solicitation from the National Institutes of Health seeks "new theories, computational models, and statistical tools to derive understanding of brain function from complex neuroscience data. Proposed tools could include the creation of new theories, ideas, and conceptual frameworks to organize/unify data and infer general principles of brain function; new computational models to develop testable hypotheses and design/drive experiments; and new mathematical and statistical methods to support or refute a stated hypothesis about brain function, and/or assist in detecting dynamical features and patterns in complex brain data." See other recent funding opportunity on the website <https://grants.nih.gov/grants/guide/rfa-files/RFA-EB-17-005.html>

**DOT Launches Drone Program For Package Deliveries.** [The Hill](#) (11/2, Zanona) reports the Transportation Department "officially launched a pilot program" Thursday to "allow states to test new types of drone operations, including package deliveries." The move follows President Trump's directive last month that the FAA "create a pilot program to allow state and local governments to propose expanded drone operations that can include flights over people, nighttime operations and flying beyond the visual line of sight - all of which are currently prohibited." Transportation Secretary Elaine Chao said, "These partnerships will allow local communities to experiment with new technologies like package deliveries, emergency drone inspections, and more, on terms that work for them and in ways that support a unified and safe airspace." The pilot program, which is scheduled to last three years, encourages localities to "partner with the private sector to propose a wide range of drone operations, such as allowing package deliveries, and the FAA will determine whether to accept them into the pilot program on a case-by-case basis." The Hill mentions that "companies including Amazon and Google have been vying to use drones for commercial deliveries."

**Future OF NSF Engineering Research Centers (ERCs):** How to implement the National Academy of Engineering's [recommendations](#) for National Science Foundation-backed Engineering Research Centers is generating more questions than answers. On building the centers around grand challenges, one option proposed by NAE, members of NSF's Engineering Directorate [Advisory Committee](#) asked: Which ones – the NAE's? The United Nations' Sustainable Development Goals? NSF's? According to our partners at Lewis-Burke Associates, the committee debated a number of report recommendations, including whether ERC teams should be self-formed by researchers and industry or be pulled together by NSF. More discussion is expected next week when center reps assemble for their biennial meeting. NSF has time to digest various views: It won't issue its next ERC request for proposals until September, 2018. Full report is posted on the website <https://www.nap.edu/catalog/24767/a-new-vision-for-center-based-engineering-research>

**BRAINSTORMS:** NIH is looking for "new theories, computational models, and statistical tools to derive understanding of brain function from complex neuroscience data. Proposed tools could include the creation of new theories, ideas, and conceptual frameworks to organize/unify data and infer general principles of brain function; new computational models to develop testable hypotheses and design/drive experiments; and new mathematical and statistical methods to support or refute a stated hypothesis about brain function, and/or assist in detecting dynamical features and patterns in complex brain data." While the NIH BRAIN initiative anticipates providing \$6M per year to fund up to 15 awards each year, the number of awards "is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications." [Find out more](#). See as well NSF's Collaborative Research in Computational Neuroscience program, extended for three years. The RFP is posted on the website <https://www.nsf.gov/pubs/2018/nsf18501/nsf18501.htm?org=NSF>

**Intelligent Cognitive Machines:** Look for [Intelligent Cognitive Assistants](#) – “platforms which augment human capabilities” – to potentially become a major NSF Engineering-led initiative, based on discussions by the Advisory Committee. Participants at an earlier interdisciplinary workshop “reached a consensus around the concept of Intelligent Cognitive Assistants that complement, rather than replace, human capabilities. These must respond and change flexibly to changing environmental and usage conditions, consider the human life course in their application, facilitate ‘natural’ interactions involving ‘common sense’ toolkits and intuitive interfaces, and ultimately cultivate trust in relations between humans and machines.”

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### **Webinar and Events**

**Event:** NSF/Intel Partnership on Foundational Microarchitecture Research (FoMR) Webinar

**Sponsor:** NSF

**When:** November 7, 2017 from 2:00 PM to 3:00 PM

**Website:** <http://www.bio-itworld.com/applied-biomath/quantitative-modeling-and-simulation-approaches/>

**Brief Description:** NSF, in partnership with Intel, has released a new solicitation entitled "NSF/Intel Partnership on Foundational Microarchitecture Research (FoMR)" ([NSF 17-597](#)). This solicitation calls for proposals to be awarded in FY 2018. It will support transformative microarchitecture research



targeting improvements in instructions per cycle (IPC). It seeks microarchitecture technique innovations beyond simplistic, incremental scaling of existing microarchitectural structures.

**To join the webinar:** please register at: <https://nsf.webex.com/nsf/j.php?RGID=r9907679bf92ed7ce1c9d1dd12532425a> by **midnight Monday November 6th**. After your registration is accepted, you will receive an email with a URL to join the meeting.

**Event: BioIT Webinar: Quantitative Modeling and Simulation Approaches: Driving Critical Decisions from Research through Clinical Trials**

**Sponsor: Applied BioMath**

**When: November 7, 2017 from 1:00 PM to 2:00 PM**

**Website:** <http://www.bio-itworld.com/applied-biomath/quantitative-modeling-and-simulation-approaches/>

**Brief Description:** Quantitative Systems Pharmacology (QSP) is a mathematical modeling and engineering approach to translational medicine that aims to quantitatively integrate knowledge about therapeutics with an understanding of its mechanism of action in the context of human disease mechanisms. QSP approaches de-risk projects, accelerate the development of best in class therapeutics, and reduce late stage attrition rates. This results in helping industry save money, accelerate timelines, and make better therapeutics, ultimately improving patients' lives.

In this webinar, two case studies will be discussed to highlight how QSP efforts in rheumatoid arthritis have accelerated the discovery and development of best-in-class therapeutics, and impacted critical decisions, in the continuum from preclinical exploration to clinical research. Specifically, we will show how QSP impacts:

- Biological understanding
- Lead generation
- Clinical candidate selection
- IND support
- Clinical trial go/no go decisions from industry

This webinar is ideal for scientists and decision makers in R&D who want to learn more about how to leverage QSP to provide quantitative guidance for their drug discovery and development.

**To join the webinar:** Please register at the above URL.

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## **Grant Opportunities**

### **National Science Foundation**

**Grant Program: Partnerships for Innovation (PFI)**

**Agency: National Science Foundation NSF 18-511**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18511/nsf18511.htm>

**Brief Description:** The NSF Partnerships for Innovation (PFI) Program within the Division of Industrial Innovation and Partnerships (IIP) offers researchers the opportunity to transform new knowledge into societal benefits through translational research and technology development efforts which catalyze partnerships to accelerate innovations that address significant societal needs.

PFI has six broad goals: (1) identifying and supporting Foundation-sponsored research and technologies that have the potential for accelerated commercialization; (2) supporting prior or current Foundation-sponsored researchers, institutions of higher education, and non-profit

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

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

The **Technology Translation (PFI-TT) track** offers an NSF-funded researcher the opportunity to advance his or her prior NSF-funded research results towards developing technological innovations with promising commercial potential and societal impact. Projects are supported to demonstrate proof-of-concept, prototype, or technology development and scale-up while exposing faculty and students (and engaging them in) in innovation and entrepreneurially-focused activities that could possibly lead to partnership opportunities, the creation of new intellectual property and technologically-driven commercialization outcomes that address societal needs. Potential pathways forward within the PFI-TT track could be broader collaborative activities and partnerships, technology licensing, technology spin-outs, and expanded entrepreneurial activity.

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**WEBINARS: Webinars will be held to answer questions about the solicitation. Registration will be available on the NSF Division of Industrial Innovation and Partnerships website (<https://www.nsf.gov/div/index.jsp?div=IIP>). Potential proposers and their partners are encouraged to attend.**

**Awards:** Standard Grants; **Anticipated Funding Amount:** \$16,750,000

**Letter of Intent:** Not Required

**Submission Deadline:** February 01, 2018

**Limit on Number of Proposals per Organization: 2.** An organization may submit no more than two (2) proposals to this solicitation. This eligibility constraint will be strictly enforced. In the event that an organization exceeds this limit, the first two proposals received will be accepted,

and the remainder will be returned without review. An organization will not receive more than one (1) award from this solicitation.

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**Contacts:** Prakash G. Balan, telephone: (703) 292-5341, email: [pbalan@nsf.gov](mailto:pbalan@nsf.gov)

- Jesus V. Soriano, telephone: (703) 292-7795, email: [jsoriano@nsf.gov](mailto:jsoriano@nsf.gov)
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### **Grant Program: Research Coordination Networks in Undergraduate Biology Education (RCN-UBE)**

**Agency: National Science Foundation NSF 18-510**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18510/nsf18510.htm>

**Brief Description:** The goal of the RCN program is to advance a field or create new directions in research or education by supporting groups of investigators to communicate and coordinate their research, training, and educational activities across disciplinary, organizational, geographic, and international boundaries. The RCN-UBE program originated as a unique RCN track to “catalyze positive changes in biology undergraduate education” ([NSF 08-035](#)) and is now supported by the collaborative efforts of the Directorate for Biological Sciences (BIO) and the Directorate for Education and Human Resources (EHR). It has been responsive to the national movement to revolutionize undergraduate learning and teaching in the biological sciences as described in the “Vision and Change in Undergraduate Biology Education” report. The RCN-UBE program seeks to improve undergraduate biology in different areas by leveraging the power of a collaborative network. The theme or focus of an RCN-UBE proposal can be on any topic likely to advance the goal of enhancing undergraduate biology education. Collectively, the program has contributed to developing and disseminating educational research resources and modules, to forging of new collaborations, and to sharing of best practices and ideas for scalability and sustainability of activities. These efforts have involved a large cadre of faculty, students, and other stakeholders. Proposed networking activities directed to the RCN-UBE program should focus on a theme to give coherence to the collaboration.

In accord with other RCNs, the RCN-UBE provides opportunities to foster new collaborations (including international partnerships), to address interdisciplinary topics, to explore innovative ideas for implementing novel networking strategies, to explore collaborative technologies, and to develop community standards. RCN-UBE awards do not support existing networks or the activities of established collaborations. RCN awards do not support primary research.

Note: Because it addresses undergraduate biology education, the RCN-UBE track is offered in alignment with the NSF-wide undergraduate STEM education initiative, Improving Undergraduate STEM Education (IUSE). More information about IUSE can be found in the Program Description section of this solicitation. Depending on the scope and nature of the project, investigators should consider applying to IUSE or RCN-UBE.

**Awards:** Standard Grants; **Anticipated Funding Amount:** \$2,500,000

**Letter of Intent:** Not Required

**Submission Deadline:** January 30, 2018

**Contacts:** William J. Hoese, telephone: (703) 292-8638, email: [whoese@nsf.gov](mailto:whoese@nsf.gov)

- Charles Sullivan, telephone: (703) 292-2260, email: [csulliva@nsf.gov](mailto:csulliva@nsf.gov)
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**Grant Program: Campus Cyberinfrastructure (CC\*)**

**Agency: National Science Foundation NSF 18-508**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18508/nsf18508.htm>

**Brief Description:** The Campus Cyberinfrastructure (CC\*) program invests in coordinated campus-level networking improvements, innovation, integration, and engineering for science applications and distributed research projects. Learning and workforce development (LWD) in cyberinfrastructure is explicitly addressed in the program. Science-driven requirements are the primary motivation for any proposed activity.

CC\* awards will be supported in four program areas:

1. Data Driven Networking Infrastructure for the Campus and Researcher awards will be supported at up to \$500,000 total for up to 2 years;
2. Network Design and Implementation for Small Institutions awards will be supported at up to \$750,000 total for up to 2 years;
3. Network Integration and Applied Innovation awards will be supported at up to \$1,000,000 total for up to 2 years; and
4. Network Performance Engineering and Outreach awards will be supported at up to \$3,500,000 total for up to 4 years.

**Awards:** Standard Grants; **Anticipated Funding Amount:** \$17,000,000

Funding will span the following four areas:

1. Data Driven Networking Infrastructure for the Campus and Researcher awards will be supported at up to \$500,000 total for up to 2 years;
2. Network Design and Implementation for Small Institutions awards will be supported at up to \$750,000 total for up to 2 years;
3. Network Integration and Applied Innovation awards will be supported at up to \$1,000,000 total for up to 2 years; and
4. Network Performance Engineering and Outreach awards will be supported at up to \$3,500,000 total for up to 4 years.

**Letter of Intent:** Not Required

**Submission Deadline:** January 30, 2018

**Contacts:** Kevin Thompson, OAC Program Director, telephone: (703) 292-4220, email: [kthompso@nsf.gov](mailto:kthompso@nsf.gov)

- Anita Nikolich, OAC Program Director, telephone: (703) 292-4551, email: [anikolic@nsf.gov](mailto:anikolic@nsf.gov)
  - Jack Brassil, CNS Program Director, telephone: (703) 292-8950, email: [jbrassil@nsf.gov](mailto:jbrassil@nsf.gov)
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**Grant Program: NSF National Science Foundation Research Traineeship (NRT) Program**

**Agency: National Science Foundation NSF 18-507**

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18507/nsf18507.htm>

**Brief Description:** The NSF Research Traineeship (NRT) program is designed to encourage the development and implementation of bold, new, and potentially transformative models for STEM graduate education training. The NRT program seeks proposals that explore ways for graduate students in research-based master's and doctoral degree programs to develop the skills, knowledge, and competencies needed to pursue a range of STEM careers.

The program is dedicated to effective training of STEM graduate students in high priority interdisciplinary research areas, through the use of a comprehensive traineeship model that is innovative, evidence-based, and aligned with changing workforce and research needs. For FY2018, proposals are requested in any interdisciplinary research theme of national priority, with special emphasis on two high priority areas: (1) Harnessing the Data Revolution (HDR) and (2) Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS). HDR is expected to continue as a priority research area for FY2019 and FY2020 competitions, along with a new priority area to be announced in 2018.

The NRT program addresses workforce development, emphasizing broad participation, and institutional capacity building needs in graduate education. Strategic collaborations with the private sector, non-governmental organizations (NGOs), government agencies, national laboratories, field stations, teaching and learning centers, informal science centers, and academic partners are encouraged. NRT especially welcomes proposals that will pair well with the efforts of NSF INCLUDES to develop STEM talent from all sectors and groups in our society ([https://www.nsf.gov/news/special\\_reports/nsfincludes/index.jsp](https://www.nsf.gov/news/special_reports/nsfincludes/index.jsp)). Collaborations are encouraged between NRT proposals and existing NSF INCLUDES projects, provided the collaboration strengthens both projects.

**Limited Number of Submission: 2:** An eligible organization may participate in two proposals per competition. **Participation includes serving as a lead organization, non-lead organization, or subawardee on any proposal.** Organizations participating solely as evaluators on projects are excluded from this limitation. Proposals that exceed the institutional eligibility limit (beyond the first two submissions based on timestamp) will be returned without review regardless of the institution's role (lead organization, non-lead collaborative, or subawardee) in the returned proposal.

**Limit on Number of Proposals per PI or Co-PI: 1:** An individual may serve as Lead Principal Investigator (PI) or Co-PI on only one proposal submitted to the NRT program per annual competition. Proposals that exceed the PI/Co-PI eligibility limit (beyond the first submission based on timestamp), will be returned without review regardless of the individual's role (PI or co-PI) in the returned proposal.

**Awards Range:** Standard Grant; **Anticipated Funding Amount:** \$36,100,000

**Letter of Intent:** Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.

**Submission Deadline: Letter of Intent Due Date(s) (required)** (due by 5 p.m. submitter's local time): November 27, 2017 - December 06, 2017

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time): February 06, 2018

**Contact:** Laura B. Regassa, telephone: (703) 292-2343, email: [lregassa@nsf.gov](mailto:lregassa@nsf.gov)

- Tara L. Smith, telephone: (703) 292-7239, email: [tsmith@nsf.gov](mailto:tsmith@nsf.gov)
- Stephen Mulkey, telephone: (703) 292-8954, email: [smulkey@nsf.gov](mailto:smulkey@nsf.gov)

**Internal Competition Deadline to College Dean's Office: November 15, 2017:** Please see above section for details.

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**Grant Program: NSF Major Research Instrumentation Program: (MRI)**

**Agency: National Science Foundation NSF 15-504**

**RFP Website:** [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5260](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5260)

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

**Brief Description:** The Major Research Instrumentation Program (MRI) serves to increase access to shared scientific and engineering instruments for research and research training in our

Nation's institutions of higher education, not-for-profit museums, science centers and scientific/engineering research organizations. The program provides organizations with opportunities to acquire major instrumentation that supports the research and research training goals of the organization and that may be used by other researchers regionally or nationally. Each MRI proposal may request support for the acquisition (Track 1) or development (Track 2) of a single research instrument for shared inter- and/or intra-organizational use. Development efforts that leverage the strengths of private sector partners to build instrument development capacity at MRI submission-eligible organizations are encouraged.

The MRI program assists with the acquisition or development of a shared research instrument that is, in general, too costly and/or not appropriate for support through other NSF programs. The program does not fund research projects or provide ongoing support for operating or maintaining facilities or centers.

The instrument acquired or developed is expected to be operational for regular research use by the end of the award period. For the purposes of the MRI program, a proposal must be for *either* acquisition (Track 1) *or* development (Track 2) of a single, well-integrated instrument. The MRI program does not support the acquisition or development of a suite of instruments to outfit research laboratories or facilities, or that can be used to conduct independent research activities simultaneously.

Instrument acquisition or development proposals that request funds from NSF in the range \$100,000-\$4 million may be accepted from any MRI-eligible organization. Proposals that request funds from NSF less than \$100,000 may also be accepted from any MRI-eligible organization for the disciplines of mathematics or social, behavioral and economic sciences and from non-Ph.D.-granting institutions of higher education for all NSF-supported disciplines.

Cost-sharing of precisely 30% of the total project cost is required for Ph.D.-granting institutions of higher education and for non-degree-granting organizations. Non-Ph.D.-granting institutions of higher education are exempt from cost-sharing and cannot include it. National Science Board policy is that voluntary committed cost sharing is prohibited.

**Limited Number of Submission:** Three (3) as described below. (Expected from the previous solicitation NSF 15-504)

If three proposals are submitted, at least one of the proposals must be for instrument development (i.e., no more than two proposals may be for instrument acquisition).

**Awards Range:** \$100,000-\$4 million

**Letter of Intent:** Not Required

**Submission Deadline:** January 10, 2018

**Internal Competition Deadline to College Dean's Office:** November 7, 2017: Please submit up to 5 pages pre-proposal white paper to your respective Dean by November 7, 2017 (please see page 4 of the Newsletter issue ORN-37 for details about the internal submission).

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**Grant Program: Enabling Discovery through GENomic Tools (EDGE)**

**Agency:** National Science Foundation NSF 18-506

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18506/nsf18506.htm>

**Brief Description:** The Division of Integrative Organismal Systems (IOS) continues to support the Enabling Discovery through GENomic Tools (EDGE) program, previously a component of the IOS Core Programs solicitation ([NSF 16-505](#)). EDGE is designed to provide support for research addressing current impediments to research progress in organismal biology. In particular, the ability to directly test gene function is essential to improve understanding of the genomes-to-phenomes relationship, an area relevant to Understanding the Rules of Life, one of 10 Big Ideas for

future NSF investment ([https://www.nsf.gov/about/congress/reports/nsf\\_big\\_ideas.pdf](https://www.nsf.gov/about/congress/reports/nsf_big_ideas.pdf)). EDGE projects should focus on development of functional genomic tools, approaches, and associated infrastructure to enable direct tests of hypotheses about gene function in diverse organisms for which such tools and infrastructure are presently unavailable.

EDGE proposals must include training and rapid dissemination plans enabling larger communities of investigators to utilize the newly-developed tools, thereby catalyzing an increase in the capacity of research communities to test cause-and-effect hypotheses about genes and phenotypes in organisms for which such tools and infrastructure are presently lacking.

**Awards:** Standard Grant; **Anticipated Funding Amount:** \$6,000,000

**Letter of Intent:** Not Required

**Proposal Submission Due Date:** February 01, 2018

**Contacts:** Michelle Elekonich, telephone: (703) 292-7202, email: [melekoni@nsf.gov](mailto:melekoni@nsf.gov)

- Diane J. Okamuro, telephone: (703) 292-8420, email: [dokamuro@nsf.gov](mailto:dokamuro@nsf.gov)
- Edda Thiels, telephone: (703) 292-8421, email: [ethiels@nsf.gov](mailto:ethiels@nsf.gov)

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### **Grant Program: International Research Experiences for Students (IRES)**

**Agency:** National Science Foundation NSF 18-505

**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18505/nsf18505.htm>

**Brief Description:** The International Research Experiences for Students (IRES) program supports international research and research-related activities for U.S. science and engineering students. The IRES program contributes to development of a diverse, globally-engaged workforce with world-class skills. IRES focuses on active research participation by undergraduate or graduate students in high quality international research, education and professional development experiences in NSF-funded research areas.

The overarching, long-term goal of the IRES program is to enhance U.S. leadership in research and education and to strengthen economic competitiveness through training the next generation of research leaders.

This solicitation features three mechanisms; proposers are required to select one of the following tracks to submit their proposal.

Track I focuses on the development of world-class research skills in international cohort experiences. Track II is dedicated to targeted, intensive learning and training opportunities that leverage international knowledge at the frontiers of research. Track III calls for U.S. institutional partnerships and coalitions to develop and evaluate innovative models for high-impact, large-scale international research and professional development experiences for graduate students, as individuals or groups.

1. **IRES - Track I: IRES Sites (IS)** projects engage a group of undergraduate and/or graduate students in active high quality collaborative research at an international site with mentorship from researchers at a host lab. IRES Sites must be organized around a coherent intellectual theme that may involve a single discipline or multiple disciplines funded by NSF.
2. **IRES - Track II: Advanced Studies Institutes (ASI)** are intensive short courses with related activities that engage advanced graduate students in active learning and research at the frontiers of knowledge. ASIs typically range in length from ten to twenty-one days and must be held outside the United States. ASIs must have a compelling rationale for their international location and should involve distinguished active researchers in the target field from the U.S. and abroad. ASIs should enable students to develop skills and broaden

professional networks, leveraging international participation and complementary resources (expertise, facilities, data, field site, etc.) for mutual benefit.

3. **IRES - Track III: New Concepts in International Graduate Experience (IGE)** projects propose, implement, and evaluate creative ideas for catalyzing the development of globally engaged U.S. scientists and engineers at the graduate student level. The IGE IRES track invites professional societies and organizations in the U.S. directly associated with science and engineering education or research activities to propose innovative large-scale programs to provide high-quality international research and/or research-related professional development experiences for U.S. graduate students as individuals or groups. The proposed experiences should enhance transferable skills and expand professional networks. Graduate students recruited from a broad, diverse applicant pool should travel to non-U.S. locations for periods of several weeks to a semester for immersive experiences under the mentorship of appropriate collaborators in the U.S. and foreign locations. The proposed international professional development model may focus on research or research-related activities in any NSF-funded area(s). Proposals that utilize, leverage and potentially expand existing global networks and infrastructure are encouraged.

Student participants supported by IRES funds must be citizens, nationals, or permanent residents of the United States.

Students do not apply directly to NSF to participate in IRES activities. Students apply to NSF-funded investigators who receive IRES awards. To identify appropriate IRES projects, students should consult the directory of active [IRES awards](#).

**Awards:** Standard Grant; **Anticipated Funding Amount:** \$11,000,000

**Letter of Intent:** Not Required

**Proposal Submission Due Date:**

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

January 30, 2018

Track - I: IRES Sites

February 06, 2018

Track-II: Advanced Studies Institutes

September 11, 2018

Second Tuesday in September, Annually Thereafter

Track - I: IRES Sites

September 18, 2018

Third Tuesday in September, Annually Thereafter

Track-II: Advanced Studies Institutes

- **Full Proposal Target Date(s):**

February 13, 2018

Track - III: New Concepts in International Graduate Experience

September 25, 2018

Fourth Tuesday in September, Annually Thereafter

Track - III: New Concepts in International Graduate Experience

**Contacts:** Maija M. Kukla, telephone: (703) 292-4940, email: [mkukla@nsf.gov](mailto:mkukla@nsf.gov)

- Fahmida N. Chowdhury, telephone: (703) 292-4672, email: [fchowdhu@nsf.gov](mailto:fchowdhu@nsf.gov)
- Simona L. Gilbert, W 17162, telephone: (703) 292-7216, email: [sgilbert@nsf.g](mailto:sgilbert@nsf.g)

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**Grant Program: Dynamics of Coupled Natural and Human Systems (CNH)**

**Agency: National Science Foundation NSF 18-503**



**RFP Website:** <https://www.nsf.gov/pubs/2018/nsf18503/nsf18503.htm>

**Brief Description:** The Dynamics of Coupled Natural and Human Systems (CNH) Program supports interdisciplinary research that examines human and natural system processes and the complex interactions among human and natural systems at diverse scales. Research projects to be supported by CNH must include analyses of four different components: (1) the dynamics of a natural system; (2) the dynamics of a human system; (3) the processes through which the natural system affects the human system; and (4) the processes through which the human system affects the natural system. CNH also supports research coordination networks (CNH-RCNs) designed to facilitate activities that promote future research by broad research communities that will include all four components necessary for CNH funding.

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

**Letter of Intent:** Not Required

**Proposal Submission Due Date:** January 23, 2018

**Contacts:** Richard F. Yuretich, Lead Program Officer 2018, telephone: (703) 292-4744, email: [cnh@nsf.gov](mailto:cnh@nsf.gov)

- Elizabeth R. Blood, telephone: (703) 292-4349, email: [cnh@nsf.gov](mailto:cnh@nsf.gov)
- Thomas J. Baerwald, telephone: (703) 292-7301, email: [cnh@nsf.gov](mailto:cnh@nsf.gov)

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## **National Institutes of Health**

**Grant Program: NIBIB Biomedical Technology Resource Centers (P41 Clinical Trials Optional)**

**Agency: National Institutes of Health PAR-18-205**

**RFP Website:** <https://grants.nih.gov/grants/guide/pa-files/PAR-18-205.html>

**Brief Description:** The National Institute of Biomedical Imaging and Bioengineering (NIBIB) uses the P41 mechanism to support Biomedical Technology Resource Centers (BTRCs) that accelerate the development and dissemination of new biomedical technology. It is expected that BTRCs would have a nationwide impact. BTRCs create critical and unique technologies that are at the forefront of their respective fields, and apply these technologies to a broad range of basic, translational, and/or clinical research. Details concerning current NIBIB BTRCs can be found at <https://www.nibib.nih.gov/research-funding/biomedical-technology-resource-centers>.

A BTRC assembles a critical mass of both technological and other intellectual resources with the intent of advancing the development of instrumentation and methodology for biomedical research. NIBIB BTRCs may develop new technologies for use in biomedical research or clinical application(s). This is accomplished through a synergistic interaction of technical and biomedical expertise, both within the BTRC and with other laboratories outside of the BTRC.

The central components of any BTRC are the Technology Research and Development (TR&D) projects. These projects serve as the foundation of all the activities within the BTRC. TR&D projects should be at the cutting edge of the technological field and respond to the emerging needs of the biomedical research community. TR&D projects are scientifically distinct, but are not stand-alone projects, thus they should build on and strengthen the synergistic interactions within the BTRC.

The BTRC application must include Collaborative Projects (CPs) that serve as technology test-beds for the cutting-edge technology developed in TR&D projects. Working in a push-pull, interactive relationship with CPs, a TR&D project should develop and optimize new tools and methods to address specific biomedical research problems that are otherwise difficult to tackle

using existing tools and methods. It is expected that the CPs driving the science of each TR&D project would present important challenges to the TR&D.

The BTRC application must include Service Projects (SPs) that serve as users of the well-developed and stable technologies of the BTRC. SPs make use of the technology and expertise of the BTRC, but are not intended to serve as primary drivers for technology development.

Unless there are technological and/or clinical limitations to distributing the TR&D technology, the CPs and SPs should each have a national geographic distribution. The national geographic distribution of the CPs and SPs in new applications may be somewhat limited, but, as BTRCs mature, it is expected that there will be a broad national distribution.

A BTRC also must provide training to outside investigators and disseminate the technology and methods it has developed. These efforts require the commitment of far greater financial and personnel resources to non-science activities than is expected for other types of research efforts. The goal of these efforts is to export the technology and expertise of the BTRC into the broader community, achieving a wider impact on biomedical research. Industrial partnerships are not required, but they are welcome when appropriate. An illustration of the interactions among the required components of a BTRC can be found at NIBIB's BTRC website: (<https://www.nibib.nih.gov/research-funding/biomedical-technology-resource-centers>.)

This combination of TR&D projects, the intense push-pull relationship between technology development and biomedical problem-solving CPs, and the deployment of technologies through biomedical problem-solving SPs, together with training and dissemination, are what set apart BTRCs from other investigator-initiated research that generally have more narrowly defined goals (such as R01s).

As extensive planning is required in preparing the BTRC applications, prospective new applicants should discuss their plans with the relevant NIBIB Program Directors (refer to <http://www.nibib.nih.gov/research/scientificprogramareas>) to determine the appropriateness of their applications to the P41 mechanism and the NIBIB mission. It is recommended that these discussions occur at least 4-6 months prior to application.

**Awards:** Direct costs (excluding equipment) are not limited and are expected to vary among applications. Typical direct costs for BTRCs range between \$600,000 and \$750,000. In addition, up to \$500,000 can be requested for special-purpose equipment for the duration of a five-year project period.

**Letter of Intent:** Six weeks prior to the application due date

**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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## **Grant Program: NIH Exploratory/Developmental Research Grant Program (Parent R21 Clinical Trial Required)**

**Agency:** National Institutes of Health PA-18-344

**RFP Website:** <https://grants.nih.gov/grants/guide/pa-files/PA-18-344.html>

**Brief Description:** The evolution and vitality of the biomedical, behavioral, and clinical sciences require a constant infusion of new ideas, techniques, and points of view. These may differ substantially from current thinking or practice and may not yet be supported by substantial preliminary data. Through the NIH Exploratory/Developmental Research Grant Program, the NIH seeks to foster the introduction of novel scientific ideas, model systems, tools, agents, targets, and

technologies that have the potential to substantially advance biomedical, behavioral, and clinical research.

This program is intended to encourage new exploratory and developmental research projects. For example, such projects could assess the feasibility of a novel area of investigation or a new experimental system that has the potential to enhance health-related research. Another example could include the unique and innovative use of an existing methodology to explore a new scientific area. These studies may involve considerable risk but may lead to a breakthrough in a particular area, or to the development of novel techniques, agents, methodologies, models, or applications that could have a major impact on a field of biomedical, behavioral, or clinical research.

Applications for Exploratory/Developmental Research Grant awards should include projects distinct from those supported through the traditional R01 activity code. For example, long-term projects, or projects designed to increase knowledge in a well-established area, are not appropriate for this FOA. Applications submitted to this FOA should be exploratory and novel. These studies should break new ground or extend previous discoveries toward new directions or applications. Projects of limited cost or scope that use widely accepted approaches and methods within well-established fields are better suited for the [NIH Small Research Grant Program](#).

**Awards:** The combined budget for direct costs for the two-year project period may not exceed \$275,000. No more than \$200,000 may be requested in any single year.

**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.

The first standard application due date for this FOA is February 16, 2018.

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: Theories, Models and Methods for Analysis of Complex Data from the Brain (R01 Clinical Trial Not Allowed)**

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

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

**Brief Description:** The broad goal of The BRAIN Initiative<sup>SM</sup> is to understand the circuits and patterns of neural activity that give rise to mental experience and behavior. As stated in the BRAIN 2025 Report (II.5), "Theory, Modeling, and Statistics Will Be Essential to Understanding the Brain." As advances in neurotechnologies are producing large, complex datasets at an unprecedented rate, novel theoretical and analytical approaches are needed to realize the potential of these rich datasets. Understanding neural circuitry requires an understanding of the algorithms and mechanisms that govern information processing within and between interacting circuits in the brain as a whole. Informed by rich observations, formalized theoretical frameworks allow researchers to infer general principles of brain function and the algorithms underlying functioning neural circuitry. Theory coupled with mathematical modeling and simulations are needed to identify gaps in knowledge, to drive the systematic collection of the future data (e.g., collected data should address model parameters that are currently unknown), and to formulate testable hypotheses on neural circuit mechanisms and how they affect behavioral and cognitive processes. Statistical approaches are needed to conduct formal inference to support or refute a stated theory or hypothesis. Finally, new data analysis methods are needed to detect dynamical features and patterns in complex data, often spanning multiple modalities and scales, are needed to reveal underlying mechanisms of brain function.

The following reports have inspired ideas and concepts for this FOA (but do not represent or replace its specific goals):

<http://www.braininitiative.nih.gov/2025/BRAIN2025.pdf>

<https://www.simonsfoundation.org/life-sciences/simons-collaboration-on-the-global-brain/>, [http://www.amstat.org/policy/pdfs/StatisticsBRAIN\\_April2014.pdf](http://www.amstat.org/policy/pdfs/StatisticsBRAIN_April2014.pdf), [https://www.imagwiki.nibib.nih.gov/sites/default/files/ComputationalmodelingforUSBRAINinitiative\\_2.pdf](https://www.imagwiki.nibib.nih.gov/sites/default/files/ComputationalmodelingforUSBRAINinitiative_2.pdf).

This FOA is designed to solicit new theories, ideas, and conceptual frameworks; computational models; and mathematical and statistical methods for driving experimental data collection and analyzing complex data from the nervous system. It is expected that this next generation of analytical tools will be developed such that the neuroscience research community can easily share and use them. This reissue is specifically promoting the development of analytical tools for analyzing behavioral and functional brain circuits that include cellular and sub-second temporal resolution. For example, projects using fMRI are required to include other data types and methods that include cellular and sub-second temporal resolution. **Applications to this FOA must focus on tool building and dissemination in the domain of theories about neural circuit mechanisms, models of circuit structure and function, and/or computational methods of analysis spanning the scale of neurons and firing rates (or proxies thereof) or finer. Investigative studies should be limited to validity testing of the tools being delivered.**

**Awards:** Application budgets not limited, but are expected to range between \$150,000 to \$250,000 direct costs per year.

**Letter of Intent:** November 15, 2017

**Deadline:** December 15, 2017; October 17, 2018; October 17, 2019, 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. 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: Fundamental Science Research on Mind and Body Approaches (R21 Clinical Trial Optional)**

**Agency:** National Institutes of Health PA-18-322

**RFP Website:** <https://grants.nih.gov/grants/guide/pa-files/PA-18-322.html>

**Brief Description:** The goal of this FOA is to support fundamental science research projects that address at least one of these three aspects. The FOA can support research to deconstruct the components of mind and body approaches and analyze their effects on both biological systems and subjective experience. It can also support the development and optimization of mind and body interventions but will not support efficacy or effectiveness trials. Studies carried out for this FOA should use the most appropriate model systems for the mechanism being investigated. Processes and mechanisms may be analyzed and studied at many levels, including biochemical, molecular, cellular, genetic, epigenetic, genomic and epigenomic, systems, network, physiological, neurobiological, behavioral, and social interaction analysis.

There should be adequate justification for applicants' choice of the mind and body approach that they propose to study including the following: the prevalence of use, the strength of the evidence supporting its value and safety, gaps in knowledge, and opportunities to advance the relevant science.

The mechanisms and processes by which mind and body approaches act on targeted biological systems may be very broad. This FOA encourages interdisciplinary collaborations by experts from multiple fields—neuroscientists, psychologists, endocrinologists, immunologists, geneticists, pharmacologists, chemists, physicists, behavioral scientists, and others in relevant fields of inquiry, including scientists based at either research-intensive institutions or those who train complementary practitioners.

Examples of types of investigations appropriate for this FOA include, but are not limited to, the following:

- Determine the perceptual, neurocognitive, and/or behavioral mechanisms underlying a mind and body approach.
- Analyze the neural mechanisms of emotional regulation, affective function, or social interaction affected by a mind and body approach.
- Examine the arousal and regulatory systems for sleep and wake cycles and the default mode network influenced by a mind and body approach.
- Elucidate the neural mechanisms underlying cortical or higher order neural control of brain regions primarily responsible for autonomic neural function relevant to a mind and body approach.
- Assess the mechanistic effects of mind and body approaches on local musculoskeletal systems and connective tissues and/or neuromuscular interactions.
- Study mechanisms by which mind and body approaches regulate neuroinflammatory processes or the functioning of the immune, endocrine, or vascular systems.
- Determine the molecular mechanisms and neural pathways by which mind and body approaches affect the ascending and/or descending process to regulate pain or pain-related functions.
- Conduct imaging studies of central nervous system structure and function to elucidate underlying mechanisms.
- Assess whether multiple biological mechanism may simultaneously contribute to the effects of a mind and body approach.
- Compare the mechanisms and processes by which mind and body approaches affect symptom management or well-being.
- Develop or validate novel psychological, behavioral, or imaging instruments or analytic tools to deconstruct the complexity of mind and body approaches in healthy human subjects or clinical populations.
- Develop and validate biomarkers for chronic pain or other key symptoms to be used in studies of mind and body approaches.
- Where appropriate, develop animal models or in vitro systems that can be used to study cellular effects, neuromuscular interactions, changes in inflammatory processes, or other biological mechanisms underlying mind and body approaches.

**Awards:** The combined budget for direct costs for the two-year project period may not exceed \$275,000. No more than \$200,000 may be requested in any single year.

**Letter of Intent:** Not applicable

**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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**Grant Program: Innovation Corps (I-Corps™) at NIH Program for NIH and CDC Translational Research (Admin Supp)**

**Agency: National Institutes of Health PA-18-314**

**RFP Website:** <https://grants.nih.gov/grants/guide/pa-files/PA-18-314.html>

**Brief Description:** The goal of the I-Corps™ Program is to accelerate the translation of biomedical research to the marketplace by providing training to SBIR and STTR grantees in the areas of innovation and entrepreneurship. Under this program, the NIH and CDC foster the development of early-stage biomedical technologies, focus on teaching researchers how to gain a clearer understanding of the value of their inventions in the marketplace, and ultimately how to advance their technologies from the research lab into the commercial world. This program is designed to complement activities within the scope of the parent SBIR Phase I (R43) or STTR Phase I (R41) grant or the Phase I portion of an SBIR/STTR Fast-Track grant (R44/R42, respectively), to help accelerate the commercialization of new products and services derived from NIH- and CDC-funded technical feasibility studies.

Through this program, I-Corps™ teams will participate in an entrepreneurial immersion course. The I-Corps™ curriculum uses a hypothesis-driven method of customer discovery in order to gain insights into the issues associated with technology commercialization. As part of this program, participants are required to get "out of the lab" and gather information by conducting a large number of interviews (i.e., 100+) with potential customers, strategic partners, and other third-party stakeholders. During the course, I-Corps™ teams share what they learn with instructors and other teams, gaining new insights into the prospective impact of the technology being developed under the SBIR or STTR grant. It is anticipated that the feedback and learning gained during the I-Corps™ program will help inform future Phase II SBIR/STTR projects and commercialization strategies.

The I-Corps™ program will be supported through administrative supplement awards to active NIH or CDC SBIR and STTR Phase I grantees. Administrative supplement awards are intended only to support travel and other costs associated with the training program. A cohort (up to 24 teams per cohort) will be selected to participate in the I-Corps™ at NIH program, which is expected to last approximately eight weeks. **The NIH anticipates that applicants receiving administrative supplements under this FOA will be enrolled in the I-Corps™ at NIH Program in the first of two cohorts in 2018. Only one cohort is invited through this FOA.**

**Awards:** Application budgets are limited to no more than \$50,000 in total direct costs, and must reflect the actual needs of the proposed project. Note in Section IV.2 that proposed budgets should also include \$20,000 per team to cover workshop registration fees (\$20,000 out of the total budget allowed of \$50,000).

**Letter of Intent:** Not Applicable

**Deadline:** December 18, 2017, by 5:00 PM local time of applicant organization.

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: DoD Medical Simulation and Information Sciences, Toward A Next-Generation Trauma Care Capability: Foundational Research for Autonomous, Unmanned, and Robotics Development of Medical Technologies (FORWARD) Award**

**Agency: Department of Defense Dept. of the Army – USAMRAA W81XWH-17-MSISRP-FOR**

**Website:** <http://cdmrp.army.mil/>

**Brief Description:** The MSISRP FORwARD Award mechanism is being offered for the first time in FY17. This mechanism supports basic research to increase knowledge/understanding through discovery and hypothesis generation, and should focus on providing basic fundamental knowledge that will inform and enable the future development of novel autonomous and/or robotic medical systems to care for wounded soldiers/patients through breakthrough, exploratory research. The objective of the FY17 MSISRP FORwARD Award is focused on addressing the following Topic Areas: 1. Autonomous and Unmanned Medical Capability – Identify novel ideas, approaches and research towards the conceptualization of autonomous and unmanned technologies for next-generation, high-quality medical capabilities with limited or absent medical care personnel, or personnel with limited skills. Research novel concepts, plausible approaches and advanced concept designs using biologically inspired cognitive computing models, machine learning, artificial intelligence, soft robotic semi-autonomous/autonomous resuscitation concepts and advanced applications of information sciences among other innovative, exploratory research towards advancing the state-of-the-art in delivery of forward resuscitative care at the point of injury. 2. Medical Robotics Research – Identify novel ideas, approaches and research towards the conceptualization of medical robotics and real-time tele-presence capabilities exploring the limits of machine perception for tele-robotic semi-autonomous and autonomous trauma care within remote and dispersed geographic settings. This could include exploratory research in semi-autonomous robotic surgery to improve the safety profile and efficacy of tele-surgical procedures and outcomes using hard robotics in challenging situations (e.g., combat casualties on the multi-domain battlefield or mass casualty situations) and remote or austere geographic locations, among other innovative, exploratory research aims and novel concepts.

**Awards:** Funding available: \$2,600,000

**Proposal Deadline:** February 05, 2018

**Contact Information:** CDMRP Help Desk: 301-682-5507 Email: [help@eBRAP.org](mailto:help@eBRAP.org)

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## **Department of Energy**

### **Grant Program: Solar Desalination**

**Agency:** Department of Energy [DE-FOA-0001778](#)

**Website:** <https://eere-exchange.energy.gov/Default.aspx?Search=DE-FOA-0001778&SearchType=>

**Brief Description:** The U.S. Department of Energy (DOE) seeks to fund applied scientific research that develops novel technologies or concepts using solar thermal energy to assist in the desalination process, which will reduce the levelized cost of water (LCOW) through reducing the levelized cost of heat (LCOH), increasing the energy efficiency for thermal desalination processes, and reducing the overall capital and integration costs for solar thermal desalination. Applications for thermal desalination include municipality water production, agriculture, industrial processes, and produced waters from the oil and gas industry. This funding opportunity announcement (FOA), intends to support the research, development, and demonstration (RD&D) of technologies that have the potential to integrate solar thermal technologies into desalination processes, develop novel low temperature solar concentrators and storage, consider novel and innovative thermal desalination technologies, or show how solar thermal energy can be implemented into current or upcoming desalination methods. As part of the SunShot Initiative, this applied research and development program is intended to demonstrate new concepts in either solar thermal or

thermal desalination technologies, or the combination therein. These developments should lead to subsequent system integration, engineering scale-up, and eventual commercial production for water purification applications.

The eXCHANGE system is currently designed to enforce hard deadlines for Concept Paper and Full Application submissions. The APPLY and SUBMIT buttons automatically disable at the defined submission deadlines. The intention of this design is to consistently enforce a standard deadline for all applicants.

Applicants that experience issues with submissions PRIOR to the FOA Deadline: In the event that an Applicant experiences technical difficulties with a submission, the Applicant should contact the eXCHANGE helpdesk for assistance ([exchangehelp@hq.doe.gov](mailto:exchangehelp@hq.doe.gov)). The eXCHANGE helpdesk and/or the EERE eXCHANGE System Administrators will assist the Applicant in resolving all issues.

Applicants that experience issues with submissions that result in a late submission: In the event that an Applicant experiences technical difficulties with a submission that results in a late submission, the Applicant should contact the eXCHANGE helpdesk for assistance ([exchangehelp@hq.doe.gov](mailto:exchangehelp@hq.doe.gov)). The eXCHANGE helpdesk and/or EERE eXCHANGE System Administrators will assist the Applicant in resolving all issues (including finalizing the submission on behalf of and with the Applicant's concurrence). DOE will only accept late applications when the Applicant has a) encountered technical difficulties beyond their control; b) has contacted the helpdesk for assistance; and c) has submitted the application through eXCHANGE within 24 hours of the FOA's posted deadline.

**Submission Deadline:**

- Concept Paper Submission Deadline: 12/4/2017 5:00 PM ET
- Full Application Submission Deadline: 3/16/2018 5:00 PM ET

**Contact Information:** [EERE-ExchangeSupport@Hq.Doe.Gov](mailto:EERE-ExchangeSupport@Hq.Doe.Gov)

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**Grant Program: FY2018 Scientific Infrastructure Support for CINR Funding Opportunity Announcement**

**Agency: Department of Energy DE-FOA-0001773**

**Website:** [https://nsuf.inl.gov/File/FOA-NEGTON02-225847-v2-FY18\\_CSIS\\_SOLICITATION\\_DE-FOA-0001773.pdf](https://nsuf.inl.gov/File/FOA-NEGTON02-225847-v2-FY18_CSIS_SOLICITATION_DE-FOA-0001773.pdf)

**Brief Description:** The Department of Energy's (DOE) Office of Nuclear Energy (NE) conducts crosscutting nuclear energy research and development (R&D) and associated infrastructure support activities to develop innovative technologies that offer the promise of dramatically improved performance for advanced reactors and fuel cycle concepts while maximizing the impact of DOE resources. The development of nuclear energy-related infrastructure and basic capabilities in the research community is necessary to promote R&D that supports nuclear science and engineering (NS&E), DOE-NE's mission, and the Nation's nuclear energy challenges. Accordingly, DOE intends to enable the education and training of nuclear scientists, engineers, and policy-makers in graduate and undergraduate study and two-year programs, as well as R&D that is relevant to the Department and the nuclear energy industry in general. The Nuclear Energy University Program (NEUP) utilizes up to 20 percent of funds appropriated to NE's R&D program for university-based infrastructure support and R&D in key NE program-related areas: • Fuel Cycle Research and Development (FC R&D) • Reactor Concepts Research, Development and Demonstration (RC RD&D) • Nuclear Energy Advanced Modeling and Simulation (NEAMS) The infrastructure requested should be individual, discrete, and definable items or capabilities that will: • Support, maintain, or enhance the institutions' capacities to attract and teach high quality



students interested in nuclear energy-related studies; • Build the institutions' research or education capabilities; or • Enhance the institutions' capabilities to perform R&D that is relevant to DOE-NE's mission. NE reserves the right to respond to potential shifts in priorities during FY 2018 that may be driven by events, policy developments, or Congressional/budget direction. NE will factor such considerations into decisions related to the timing and scale of award announcements associated with this FOA.

**Submission Deadline:** Nov 30, 2017 Applicants are encouraged to transmit applications well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE CONSIDERED FOR AWARD. (Please read the FOA instructions for information on how to apply.)

**Contact Information:** [EERE-ExchangeSupport@Hq.Doe.Gov](mailto:EERE-ExchangeSupport@Hq.Doe.Gov)

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### **Grant Program: FOA: State Energy Program 2017 Competitive Awards**

**Agency:** Department of Energy DE-FOA-0001644

**Website:** <https://eere-exchange.energy.gov/#Foald039aab9e-c42b-4a8a-bf67-85af26b0f2f6>

**Brief Description:** Limited to State Energy Offices (defined as the 50 states, the District of Columbia and five territories). The Office of Energy Efficiency and Renewable Energy's (EERE) State Energy Program (SEP) seeks applications to advance policies, programs, and market strategies that advance affordable and reliable energy to promote economic growth and energy security for the nation. This competitive Funding Opportunity Announcement (FOA) allows States (which includes the District of Columbia and five territories) to compete for funding designed to meet SEP's goals to enhance energy security, advance state-led energy initiatives, and maximize the benefits of decreasing energy waste. Specifically, this FOA includes three Areas of Interest: State Energy Planning, Innovative Opportunities for Energy Efficiency and Renewable Energy (EE/RE) Practices, and Technical Assistance to Advance SEP Formula Grant EE/RE Activities.

**Submission Deadline:** January 11, 2018. Applicants are encouraged to transmit applications well before the deadline. APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE CONSIDERED FOR AWARD. (Please read the FOA instructions for information on how to apply.)

**Contact Information:** [SEPCompetitive2017@ee.doe.gov](mailto:SEPCompetitive2017@ee.doe.gov)

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## **NASA**

### **Grant Program: Use of the NASA Physical Sciences Informatics System - Appendix D**

**Agency:** NASA NNH17ZTT001N-17PSI-D

**Website:**

<https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=a3086df0e6b38ec720476107b522fd90>

**Brief Description:** This National Aeronautics and Space Administration (NASA) Research Announcement (NRA) solicits ground-based research proposals from established researchers and graduate students to generate new scientific insights by utilizing experimental data residing in NASA's Physical Sciences Informatics (PSI) system (<http://psi.nasa.gov>), an online database of completed physical science reduced-gravity flight experiments conducted on the International Space Station (ISS), Space Shuttle flights, and Free-flyers, or from related ground-based studies. The solicitation (NNH17ZTT001N-17PSI-D), entitled "Use of the NASA Physical Sciences Informatics System - Appendix D," will be available on or about September 15, 2017. Upon

release, the solicitation will be found via the following steps: 1. Open the NSPIRES homepage at <http://nspires.nasaprs.com/> 2. Select "Solicitations" 3. Select "Open Solicitations" 4. Select "Use of the NASA Physical Sciences Informatics System NNH17ZTT001N" 5. Select List of Open Program Elements 6. Select "Use of the NASA Physical Sciences Informatics System - Appendix D" 7. Select "Appendix D NNH17ZTT001N-17PSI-D" under Announcement Documents. NASA plans to host a proposers' conference via WebEx shortly after the release of the Appendix to provide more information and to answer questions about the NRA and the PSI system. NASA's Physical Sciences Research Program conducts fundamental and applied physical sciences research, with the objective of enabling exploration and pioneering scientific discovery. NASA's experiments in the various disciplines of physical science reveal how physical systems respond to the near absence of gravity. They also reveal how other phenomena which have a small influence on physical systems in earth's gravity, can dominate system behavior in space. The PSI system (<http://psi.nasa.gov>) is an online, publicly accessible database of completed physical science reduced-gravity flight experiments conducted on the ISS, Space Shuttle flights, or Free Flyers and related ground-based studies. It is a tool designed for researchers to data mine information from reduced-gravity physical sciences experiments and use it to further science in accordance with the open science approach, while also meeting the requirements of the nation's Open Data Policy. This NRA solicits ground-based research proposals that present a compelling case on how the experimental data from the PSI system will be used to promote the advancement of further research. Proposers must show a clear path from the scientific data obtained from the PSI system to the proposed investigation. In addition, the project must address an important problem in the proposed area of research and advance scientific knowledge or technology. This NRA will remain open for five years. There will be annual call for proposals through a series of appendices which are planned to be released yearly. In general, the NRA solicits research in the following six research areas: 1) Biophysics, 2) Combustion Science, 3) Complex Fluids, 4) Fluid Physics, 5) Fundamental Physics, and 6) Materials Science. This announcement includes Appendix D, which will solicit proposals in several research areas identified above. See the full Appendix D for the list of the research areas solicited and eligible PSI investigations. Proposals for Appendix D are due on or about December 15, 2017. This solicitation is applicable to researchers in all categories of U.S. and non-U.S. organizations, including educational institutions, industry, nonprofit organizations, NASA Centers and other U.S. Government agencies. This NRA is soliciting proposals from two types of investigators: 1) established researchers, including postdoctoral scholars; 2) graduate students (with academic advisors) from accredited U.S. postsecondary institutions and programs. Proposals from graduate students must be submitted by their advisor. Principal Investigators (PIs) may collaborate with investigators from universities, Federal Government laboratories, the private sector, state and local government laboratories, and other countries. Proposals including international participation are eligible, provided NASA policies regarding the conduct of research with non-U.S. organizations are met. Proposals must be submitted by an authorized official of the proposing organization. Proposals must be submitted electronically. Proposers may use either NSPIRES (<http://nspires.nasaprs.com/> ) or Grants.gov (<http://www.grants.gov> ) for proposal submission. Every organization that intends to submit a proposal in response to this NRA must be registered with NSPIRES, and such registration must identify the authorized organization representative(s) who will submit the electronic proposal. Instructions on how to register in NSPIRES are provided in the NRA. Each electronic proposal system places requirements on the registration of principal investigators and other participants (e.g., co-investigators). Potential proposers and proposing organizations are urged to access the system(s) well in advance of the proposal due date(s) to familiarize themselves with its structure and enter the requested information. Questions with regard to responding to this NRA may be addressed to the contacts

referenced in the full solicitation document. This is a broad agency announcement as specified in FAR 6.102 (d)(2).

**Awards:** TBA

**Response Deadline:** December 15, 2017

**Contact:** Dr. Francis Chiamonte, Program Scientist for Physical Sciences  
[francis.p.chiamonte@nasa.gov](mailto:francis.p.chiamonte@nasa.gov) Phone: 202-358-0693

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## **National Endowment of Humanities**

**Grant Program: Next Generation Humanities PhD Planning Grants**

**Agency: National Endowment of Humanities**

**Website:** <https://www.neh.gov/grants/education/next-generation-humanities-phd-planning-grants>

**Brief Description:** Next Generation Humanities PhD Planning Grants support universities in preparing to institute wide-ranging changes in humanities doctoral programs. Humanities knowledge and methods can make an even more substantial impact on society if students are able to translate what they learn in doctoral programs into a multitude of careers. Next Generation PhD Planning Grants are designed to bring together various important constituencies to discuss and strategize, and then to produce plans that will transform scholarly preparation in the humanities at the doctoral level. Students will be prepared to undertake various kinds of careers, and humanities PhD programs will increase their relevance for the twenty-first century.

**Grantee institutions must provide funds raised from nonfederal third parties equal to the grant funds released by NEH.**

**Awards:** NEH will offer successful applicants a 1:1 matching grant of up to \$25,000 for as long as twelve months. Thus the total grant will come to a maximum of \$50,000: up to \$25,000 raised by the grantee institution from nonfederal third parties, and up to \$25,000 provided by NEH..

**Proposal Deadline:**

November 1, 2017: Create or verify your institution's Entity record at the System for Award Management by this date

November 15, 2017: Register your institution (or verify its registration) with Grants.gov by this date

November 29, 2017: Submit application through Grants.gov by this date

**Contact:** Contact the staff of NEH's Division of Education Programs at 202-606-8500 or [nextgen@neh.gov](mailto:nextgen@neh.gov). Applicants who are deaf or hard of hearing can contact NEH via Federal Relay (TTY users) at 800-877-8399.

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## **Rotary International**

**Grant Program: Alzheimer's RFP**

**Agency: Rotary International**

**Website:** <http://www.cartfund.org/cart/applying-for-a-grant/>

**Brief Description:** [Rotary International](#) is accepting applications for its [CART Fund](#), to encourage Alzheimer's disease research projects in the United States.

The fund will award grants of up to \$250,000 in support of early and conceptual plans for projects that might not yet be supported by extensive preliminary data

but that have potential to substantially advance biomedical research.

**Awards:** \$500,000 Lemelson-MIT Prize

**Proposal Deadline:** Applications may encompass a project period of up to two years with a combined budget for direct cost up to \$250,000.

**Contact:** For more information, please also contact Eric Blitz, Associate Director for Development Corporate and Foundation Relations, [eric.blitz@njit.edu](mailto:eric.blitz@njit.edu)

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## **Robert Wood Johnson Foundation**

**Grant Program: Developing Solutions for Social Isolation in the United States: Learning From the World**

**Agency: Robert Wood Johnson Foundation**

**Website:** <https://anr.rwjf.org/viewCfp.do?cfpId=1371&cfpOverviewId>

**Brief Description:** This Global Ideas for U.S. Solutions call for proposals will support projects that promote approaches developed outside the United States to address social isolation, across all stages and ages in life, in U.S. individuals, groups, and communities... preference will be given to projects focused on children, adolescents, young adults, mothers, and families at risk. Projects may be up to three years in duration.

Projects might include, but are not limited to:

- Pilot or demonstration trial of an intervention to address social isolation developed outside the United States, and, with a U.S. partner, is adapted, piloted and evaluated with a U.S. group or community;
- Learning exchanges between U.S. and global investigators and/or communities to explore approaches to social isolation that may be implemented in the future;
- Evaluate a promising approach to social isolation developed abroad to learn how it might be adapted and implemented in the United States.

**Award:** Project funding will likely range from \$250,000 to \$750,000.

**Proposal Deadline:** December 21, 2017

**Contact:** For more information, please also contact Eric Blitz, Associate Director for Development Corporate and Foundation Relations, [eric.blitz@njit.edu](mailto:eric.blitz@njit.edu)

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## **Streamlyne Update**

It has been very exciting to introduce Streamlyne as the new tool for Grant Management. Streamlyne is simplifying the pre-award proposal submission processes promoting shared information technology (IT), and improving the timeliness of grant close out. Currently Streamlyne system has been customized in the following areas:

- Download the package with all forms – there are still some exceptions to this as the federal government continues to change some of the standard forms.
- Validation error prior to submission – this allows to review the package for errors
- Work Flow approval transparent to all users
- Budget forms customized to NSF and/or S2S
- Sub-award budgets easily download – this will allow better management of the award

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](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)

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