

# NJIT Research Newsletter

Issue: ORN-2021-33

---

*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** (with links to sections). The Newsletter is posted on the NJIT Research Website <https://research.njit.edu/funding-opportunities>.

---

## Contents

**Special Announcements**: Page 1

**Grant Opportunity Alerts: Keyword Index**: Page 2

**Recent Awards**: Page 3

**In the News (Related to research funding)**: Page 4

**Webinars and Events**: Page 5

**Grant Opportunities**: Page 6

[National Science Foundation](#)

[National Institutes of Health](#)

[Department of Defense](#)

[Department of Transportation](#)

[Department of Agriculture](#)

[Department of Labor](#)

[Department of Commerce/EDA](#)

[Environmental Protection Agency](#)

[Department of Energy](#)

[NASA](#)

[National Endowment of Humanities](#)

[Private Foundations](#)

**Streamlyne Question of the Week**: Page 29

**Proposal Submission and Streamlyne Information**: Page 29

---

## Special Announcements

### **Spring 2022 Geothermal Collegiate Competition**

**National Renewable Energy Laboratory (NREL), Department of Energy**

<https://www.energy.gov/eere/geothermal/geothermal-collegiate-competition>

The U.S. Department of Energy's (DOE) Geothermal Technologies Office is excited to follow up previous years' student competitions with the Spring 2022 Geothermal Collegiate Competition, managed by the National Renewable Energy Laboratory (NREL), to engage young individuals, build skills, and promote new ideas to drive change. The Competition invites college and university teams to develop proposals to heat and cool buildings, campuses, districts, or entire communities. Students can gain real-world renewable energy industry experience developing, designing, and testing technologies

alongside community stakeholders, shaping the future of geothermal and the transition to a clean economy.

Registration opens on August 6, 2021, with core submissions due in November, elective modules due in February 2022, and final submissions due in April 2022. Winners will be announced in May 2022 and in-person stakeholder engagement events will be in June 2022. All teams must complete the core submission and two of the four elective modules. Final submissions will be scored by a panel of expert reviewers.

· Join us for an informational webinar on Sept. 14, 2021 at 11 a.m. MDT. Register for the webinar [here](#).

· Ready to confirm a team? Join the [Geothermal Collegiate Competition on HeroX](#). Create an account and submit a progress form on or before Nov. 4, 2021.

Team members must be enrolled in a collegiate institution, and team captains must be U.S. citizens. For more information, visit the [2022 Competition website](#).

---

## **Department of Defense Vannevar Bush Faculty Fellowship (VBFF) Program**

<https://www.grants.gov/web/grants/view-opportunity.html?oppId=335368>

The objectives of the program are to:

- Support unclassified basic scientific and engineering research that could be the foundation for future revolutionary new capabilities for DoD.
- Educate and train student and post-doctoral researchers for the defense workforce.
- Foster long-term relationships between university researchers and the DoD.
- Familiarize university researchers and their students with DoD's current and projected future challenges.
- Increase the number of talented technical experts that DoD can call upon.

This FOA is for single investigator grant proposals for basic research. All awardees will receive a research grant and the title of VBFF Fellow. VBFF Fellows and their students are provided with opportunities that are designed to enhance their understanding of DoD's critical research needs and interact with DoD senior Science and Technology (S&T) program leaders. Fellows and their students are expected to attend VBFF activities scheduled throughout the year. These activities may include an orientation meeting, site visits to DoD labs, technical workshops, and an annual meeting to report the progress of VBFF-sponsored research. VBFF Fellows may also be encouraged to serve as members of DoD advisory boards, panels, or groups. For a list of current and past VBFF or NSSEFF Fellows, refer to: <https://basicresearch.defense.gov/Programs/Vannevar-Bush-Faculty-Fellowship/>. Total amount of available funding is \$24 million to \$30 million. More information is posted in this newsletter under the Department of Defense section.

[Back to Contents](#)

---

### **[Grant Opportunity Alerts](#)**

Keywords and Areas Included in the Grant Opportunity Alert Section Below

**[NSF](#): NSF-Simons Collaboration on a National Institute for Theory and Mathematics in Biology (NITMB) Research Experiences for Teachers (RET) in Engineering and Computer Science; NSF**

Earth Sciences Postdoctoral Fellowships (EAR-PF)); Graduate Research Fellowship Program (GRFP); Division of Materials Research: Topical Materials Research Programs (DMR:TMRP); Advancing Informal STEM Learning (AISL)

**NIH: Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity (K99/R00);** Clinical and Translational Science Award (UM1); Investigator Initiated Research in Computational Genomics and Data Science (R01); BRAIN Initiative Cell Atlas Network (BICAN): Coordinating Unit for Biostatistics, Informatics, and Engagement (CUBIE) (U24)

**Department of Defense/US Army/DARPA/ONR: FY2022 Vannevar Bush Faculty Fellowship (VBFF) Program; Science, Innovation and Technology Partnership Intermediary Agreement;** DoD Traumatic Brain Injury and Psychological Health, Idea Development Award; National Defense Education Program (NDEP) Science, Technology, Engineering, and Mathematics (STEM) Consortia Request for Information (RFI); Defense Sciences Office Office-wide; Research Interests of the Air Force Office of Scientific Research

**Department of Transportation: DDETFP Transportation Fellowship Program;** High Priority Program – Innovative Technology Deployment (HP-ITD)

**Department of Agriculture: Farm of the Future**

**Department of Labor: State Apprenticeship Expansion, Equity and Innovation (SAEEI) Grant Program**

**Department of Commerce/EDA: FY 2021 STEM Talent Challenge Program;** American Rescue Plan Act (ARPA) Statewide Planning, Research, and Networks; Climate Program Office FY2022; FY2021 to FY2023 NOAA Broad Agency Announcement (BAA)

**EPA: Annual P3 Awards: A National Student Design Competition Focusing on People, Prosperity and the Planet;** FY22 Brownfields Job Training Grants; Water Innovation, Science, Engagement to Advance Water Reuse

**Department of Energy: FY 2022 SBIR/STTR Phase I;** FY2022 Research Opportunities in High Energy Physics; Advanced Manufacturing Office Multi-Topic FOA

**NASA: ROSES 2021: Terrestrial Ecology;** ROSES 2021: Heliophysics Living with a Star Infrastructure; ROSES 2021: Living With a Star Strategic Capability

**National Endowment of Humanities: Summer Stipends;** Humanities Connections

**Private Foundations: Sony Research Award Program**

[Back to Contents](#)

---

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

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

**PI:** Hyomin Kim (PI)

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

**Grant/Contract Project Title:** Collaborative Research: Studies of ULF Waves and Support for the Magnetic Induction Coil Array (MICA)

**Funding Agency:** NSF

**Duration:** 09/01/21-08/31/26

**PI:** Esra Buyuktahtakin Toy (PI)

**Department:** Mechanical and Industrial Engineering  
**Grant/Contract Project Title:** Optimizing Public-Private Partnership under Spatial Heterogeneity and Limited Budgets: A Game Theoretical Approach to EAB Management  
**Funding Agency:** United States Department of Agriculture  
**Duration:** 08/04/21-06/30/22

**PI:** Tara L. Alvarez (PI)  
**Department:** Biomedical Engineering  
**Grant/Contract Project Title:** Functional Mechanism of Neural Control in Post-Concussion Convergence Insufficiency  
**Funding Agency:** United States Department of Health and Human Services  
**Duration:** 04/01/14-08/31/26

**PI:** Christina Frederick (PI)  
**Department:** Center for Applied Mathematics  
**Grant/Contract Project Title:** Strategies, algorithms, and analysis for autonomous mobile sensor deployment  
**Funding Agency:** US Dept. Of Navy/ Office of Naval Research  
**Duration:** 08/20/21-08/19/24

**PI:** Alexander Haimovich (PI)  
**Department:** Electrical and Computer Engineering  
**Grant/Contract Project Title:** End-to-End Machine Learning (E2EML) Fuze Radar  
**Funding Agency:** DOTC (Advanced Technology International)  
**Duration:** 06/25/20-08/31/23

**PI:** Wenda Cao (PI)  
**Department:** Center for Solar Terrestrial Research  
**Grant/Contract Project Title:** International Collaborations to Optimize Scientific Output of the New Solar Telescope in Big Bear  
**Funding Agency:** NSF  
**Duration:** 01/01/14-12/31/24

[Back to Contents](#)

---

### **[In the News...](#)**

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

**Artificial Intelligence Research Resources:** The National Science Foundation and the White House's Office of Science and Technology Policy are developing a plan to make high-performance computing, machine-learning datasets and other resources more widely available to artificial intelligence researchers at every level. Developing artificial intelligence tools and technologies requires lots of data and even more computing resources. Gaining a national advantage in this area will require a significant concentration of work that is currently limited to agencies and organizations that have those resources. But the best, groundbreaking ideas aren't always centered in places with the most resources.

To address this issue, the 2021 National Defense Authorization Act charged NSF and OSTP with developing a plan to build up those resources and make sure they are available to people throughout the U.S. who can make good use of them. The NDAA included creation of the National AI Research Resource Task Force, which “has been directed by Congress to develop an implementation roadmap for a shared research infrastructure that would provide artificial intelligence researchers and students across scientific disciplines with access to computational resources, high-quality data, educational tools, and user support,” according to [a notice set to publish Wednesday in the Federal Register](#). As the team develops the plan for making this a reality, officials put out a request for information and opened a comment period to hear about the “options, models and priorities” that should be considered, “as well as how the NAIRR can reinforce principles and practices of ethical and responsible research and development of AI,” the notice states. More information is posted on the [NextGov website](#).

**NIST Prioritizes Development of AI Risk Management Framework**: National Institute of Standards and Technology officials are gleaning insights from a range of players as they work to draft Congressionally-directed guidance promoting the responsible use of artificial intelligence technologies. That in-the-making document—the Artificial Intelligence Risk Management Framework, or AI RMF—is aimed at building the public’s trust in the increasingly adopted technology, according to a recent [request for information](#). Responses to the RFI are due Aug. 19 and will inform the framework’s early days of production. “We want to make certain that the AI RMF reflects the diverse experiences and expertise of those who design, develop, use, and evaluate AI,” Elham Tabassi, NIST’s Information Technology Laboratory chief of staff, told *Nextgov* in an email Monday.

AI capabilities are transforming how humans operate in meaningful ways, but also present new technical and societal challenges—and confronting those can get sticky. NIST officials note in the RFI that “there is no objective standard for ethical values, as they are grounded in the norms and legal expectations of specific societies or cultures.” Still, they note that it is generally agreed that AI must be made, assessed and used in a manner that fosters public confidence. More information is posted on the [NextGov website](#).

**Senate Passes Bipartisan Infrastructure Bill and Partisan Budget Resolution**: Senate passing a \$1.2 trillion bipartisan infrastructure bill, which has been hailed as major legislative milestone following years of more talk than action; 19 Republicans joined all Democrats in supporting its passage. Immediately after, Senate Majority Leader Chuck Schumer (D-NY) pivoted to a budget resolution that advances a broader \$3.5 trillion “human infrastructure” package that only has the support of Senate Democrats. If enacted, the \$5 trillion in investments would represent the biggest increase in spending since World War II. Senate Budget Committee Chairman Bernie Sanders released the following documents to help guide the process:

- [Text of the FY22 Budget Resolution](#)
- [One Page Summary of the FY22 Budget Resolution](#)
- [A Detailed Summary of the Recommended Reconciliation Instructions for Committees Included in the FY22 Budget Resolution](#)

[Back to Contents](#)

---

## [Webinar and Events](#)

**Event: Summer 2021: IRES Virtual Office Hours**

**Sponsor: NSF**

**When: August 23, 2021 11:30 AM to 12:30 PM; August 30, 2021 11:30 AM to 12:30 PM; September 6, 2021 11:30 AM to 12:30 PM; September 13, 2021 11:30 AM to 12:30 PM**

**Website:** [https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=303056&org=NSF](https://www.nsf.gov/events/event_summ.jsp?cntn_id=303056&org=NSF)

**Brief Description:** The IRES Program Team is hosting a series of Virtual Office Hours aimed at giving potential PIs an opportunity to ask questions. We will be holding one session per week for 9 weeks, starting July 19 and ending on September 13, during which any questions about the program can be asked and discussed. Session dates and times are outlined below. Please feel free to attend the session which best fits your schedule.

**To Join the Webinar:** Session zoom link is the same for all session:  
<https://nsf.zoomgov.com/j/1609964836?pwd=VXpGRTBpZXlxY0hYNGdFWVlyUWp1Zz09>

### **Event: Industry-University Cooperative Research Centers Program Webinar**

**Sponsor: NSF**

**When: August 24, 2021 3:00 PM to 4.30 PM**

**Website:** [https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=303274&org=NSF](https://www.nsf.gov/events/event_summ.jsp?cntn_id=303274&org=NSF)

**Brief Description:** Join this informational webinar on Tuesday, August 24 at 3:00 PM Eastern to learn more about the NSF's [Industry-University Cooperative Research Centers \(IUCRC\) program](#). IUCRC catalyzes breakthrough pre-competitive research by enabling close and sustained engagement between industry innovators, world-class academic teams and government agencies.

**To Join the Webinar:** Register in advance at <https://nsf.zoomgov.com/meeting/register/vJIsd--qqDMsHvqKn0nhBHCokk7nFwRCnvs>

### **Event: EHR Townhall - Data Science in Education**

**Sponsor: NSF**

**When: October 8, 2021 310.00 AM to 3.45 PM**

**Website:** [https://www.nsf.gov/events/event\\_summ.jsp?cntn\\_id=303129&org=NSF](https://www.nsf.gov/events/event_summ.jsp?cntn_id=303129&org=NSF)

**Brief Description:** The National Science Foundation's Directorate for Education and Human Resources (EHR) invites you to participate in a town hall meeting to stimulate a national conversation on the topic of Data Science in Education. Each day, there is more accessible data than there was the day before, and a professional skillset is emerging to meet the needs of a dynamically growing industry. This town hall meeting will explore Data Science and its impact across all levels of education from K-12 through higher education, including community colleges, minority serving institutions, and graduate institutions.

With speakers and open discussions, we will explore:

- Data Science research across disciplines and fields
- Ethical practices and approaches to Data Science
- Teaching and Learning Data Science
- Justice, Equity, Diversity, and Inclusion in a 'Data Science for All' movement

The outcomes of this meeting will include a white paper that will capture the themes from these topics which can be used to inform future work in the field.

**To Join the Webinar:** Please pre-register at:

<https://ida-org.zoomgov.com/meeting/register/vJIsd--qqDMsHvqKn0nhBHCokk7nFwRCnvs>

[Back to Contents](#)

## Grant Opportunities

### National Science Foundation

#### **Grant Program: NSF-Simons Collaboration on a National Institute for Theory and Mathematics in Biology (NITMB)**

**Agency:** National Science Foundation NSF 21-607

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21607/nsf21607.htm>

**Brief Description:** The purpose of the NSF-Simons Collaboration on a National Institute for Theory and Mathematics in Biology (NITMB) is to support a research institute to enable innovative research at the intersection of mathematical and biological sciences to facilitate new developments of biology-inspired mathematical theories, methodologies, and innovative modeling approaches to advance the understanding of challenging biological problems. The institute should promote interdisciplinary education and workforce training between these two disciplines. The National Science Foundation Directorates for Mathematical and Physical Sciences (NSF/MPS) and for Biological Sciences (NSF/BIO) and the Simons Foundation Division of Mathematics and Physical Sciences (SF/MPS) shall jointly sponsor a new research institute to facilitate collaborations among groups of mathematicians (including statisticians and computational scientists) and biologists. Research activities conducted at the institute should be focused on emerging and important topics at the interface of the mathematical and biological sciences, with the expectation to develop new mathematical methodologies inspired by biological problems. The institute should primarily focus on advances in theory and mathematics that are motivated by and applicable to the analysis of complex biological systems. The institute will conduct interdisciplinary education and training through research involvement of doctoral degree recipients and graduate students from across this multi-disciplinary spectrum. The institute is also expected to conduct convening activities, including short-term and/or long-term visitor programs, workshops, and/or outreach activities. Diversity, equity, inclusion, and accessibility are expected to be core values of the institute and should be reflected in its research, education, outreach programs, and its leadership. The institute will serve as a national resource that aims to advance research in the mathematical and biological sciences through programs supporting discovery and knowledge dissemination in mathematical biology and enhancing connections to related fields.

**Awards:** Cooperative Agreement; Anticipated Funding Amount: \$50,000,000

**Letters of Intent:** Not required

**Preliminary Proposal Due Date(s) (required):** December 01, 2021

**Full Proposal Submission Deadline:** July 18, 2022

**Contacts:** Zhilan J. Feng, National Science Foundation, telephone: (703) 292-7523, email: [NITMB@nsf.gov](mailto:NITMB@nsf.gov)

- Jaroslaw Majewski, National Science Foundation, telephone: (703) 292-7278, email: [NITMB@nsf.gov](mailto:NITMB@nsf.gov)
- Sridhar Raghavachari, National Science Foundation, telephone: (703) 292-4845, email: [NITMB@nsf.gov](mailto:NITMB@nsf.gov)

---

#### **Grant Program: Research Experiences for Teachers (RET) in Engineering and Computer Science**

**Agency:** National Science Foundation NSF 21-606

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21606/nsf21606.htm>

**Brief Description:** The Research Experiences for Teachers (RET) in Engineering and Computer Science program supports authentic summer research experiences for K-14 educators to foster

long-term collaborations between universities, community colleges, school districts, and industry partners. With this solicitation, the Directorates for Engineering (ENG) and Computer and Information Science and Engineering (CISE) focus on a reciprocal exchange of expertise between K-14 educators and research faculty and (when applicable) industry mentors. K-14 educators will enhance their scientific disciplinary knowledge in engineering or computer science and translate their research experiences into classroom activities and curricula to broaden their students' awareness of and participation in computing and engineering pathways. At the same time, the hosting research faculty will deepen their understanding of classroom practices, current curricula, pedagogy, and K-14 educational environments.

**Awards:** Standard Grant or Continuing Grant; Anticipated Funding Amount: \$5,800,000

**Letters of Intent:** Not required

**Full Proposal Submission Deadline:** November 16, 2021; October 12, 2022

**Contacts:** Amelia S. Greer, ENG/EEC, telephone: (703) 292-2552, email: [agreer@nsf.gov](mailto:agreer@nsf.gov)

- Allyson Kennedy, CISE/CNS, telephone: (703) 292-8950, email: [aykenned@nsf.gov](mailto:aykenned@nsf.gov)
- 

### **Grant Program: NSF Earth Sciences Postdoctoral Fellowships (EAR-PF))**

**Agency: National Science Foundation NSF 21-605**

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21605/nsf21605.htm>

**Brief Description:** The Division of Earth Sciences (EAR) awards Postdoctoral Fellowships to recent recipients of doctoral degrees to conduct an integrated program of independent research and professional development. Fellowship proposals must address scientific questions within the scope of EAR disciplinary programs and must align with the overall theme for the postdoctoral program. Fellowship proposals that address questions at the intersections of several EAR disciplinary programs, such as interdisciplinary critical zone (CZ) science or topics related to Cooperative Studies of Earth's Deep Interior (CSEDI), are also appropriate. The program supports researchers for a period of up to two years with fellowships that can be taken to the institution of their choice (including institutions abroad). The program is intended to recognize beginning investigators of significant potential, and provide them with research experience, mentorship, and training that will establish them in leadership positions in the Earth Sciences community. Because the fellowships are offered only to postdoctoral scientists early in their career, doctoral advisors are encouraged to discuss the availability of EAR postdoctoral fellowships with their graduate students early in their doctoral programs. Fellowships are awards to individuals, not institutions, and are administered by the Fellows. EAR has made it a priority to address challenges in creating an inclusive geoscience discipline through activities that increase belonging, accessibility, justice, equity, diversity, and inclusion (BAJEDI). Proposers are encouraged to explicitly address this particular priority in their proposed activities. Applicants who are women, veterans, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM), or who have attended two-year colleges and minority-serving institutions for undergraduate or graduate school, or plan to conduct their fellowship activities at one of these institutions (e.g. Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, Alaska Native Serving Institutions, and Hawaiian Native and Pacific Islander Serving Institutions) are especially encouraged to apply.

**Awards:** Fellowship; Anticipated Funding Amount: \$2,160,000

**Letters of Intent:** Not required

**Full Proposal Submission Deadline:** November 03, 2021; October 26, 2022

**Contacts:** Aisha R. Morris, telephone: (703) 292-7081, email: [earpf@nsf.gov](mailto:earpf@nsf.gov)

- Jennifer M. Wenner, telephone: (703) 292-8550, email: [earpf@nsf.gov](mailto:earpf@nsf.gov)



---

**Grant Program: Competition for the Management of Operations and Maintenance of the National Ecological Observatory Network (NEON)**

**Agency: National Science Foundation NSF 21-603**

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21603/nsf21603.htm>

**Brief Description:** NSF solicits proposals to manage the operations and maintenance of the National Ecological Observatory Network (NEON), an NSF-funded major facility project. NEON comprises terrestrial, aquatic, atmospheric, and remote sensing measurement infrastructure and cyberinfrastructure that deliver standardized, calibrated data to the scientific community through an openly accessible data portal. NEON infrastructure is geographically distributed across the United States, including Alaska, Hawaii and Puerto Rico, and will generate data for ecological research over a 30-year period. NEON is designed to enable the research community to ask and address their own questions on a regional to continental scale around the environmental challenges identified as relevant to understanding the drivers and impacts of climate change, land-use change and invasive species patterns on the biosphere. The NSF NEON program, which is part of the Centers, Facilities and Additional Research Infrastructure (CFARI) Cluster in the Division of Biological Infrastructure, manages the NEON award in collaboration with the NSF Large Facilities Office and the NSF Division of Acquisition and Cooperative Support.

**Awards:** Cooperative Agreement; Anticipated Funding Amount: \$69,000,000

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

**Letters of Intent:** Required by October 01, 2021

**Full Proposal Submission Deadline:** January 31, 2022

**Contacts:** Roland P. Roberts, Cognizant Program Officer, telephone: (703) 292-7884, email: [neon-bot@nsf.gov](mailto:neon-bot@nsf.gov)

- Montona Futrell-Griggs, Staff Associate, telephone: (703) 292-7162, email: [neon-bot@nsf.gov](mailto:neon-bot@nsf.gov)
- Charlotte Roehm, Program Officer, telephone: (703) 292-8470, email: [neon-bot@nsf.gov](mailto:neon-bot@nsf.gov)

---

**Grant Program: Graduate Research Fellowship Program (GRFP)**

**Agency: National Science Foundation NSF 21-602**

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21602/nsf21602.htm>

**Brief Description:** The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to help ensure the quality, vitality, and diversity of the scientific and engineering workforce of the United States. The program recognizes and supports outstanding graduate students who are pursuing full-time research-based master's and doctoral degrees in science, technology, engineering, and mathematics (STEM) or in STEM education. The GRFP provides three years of support over a five-year fellowship period for the graduate education of individuals who have demonstrated their potential for significant research achievements in STEM or STEM education. NSF actively encourages women, persons who are members of groups historically underrepresented in STEM, persons with disabilities, veterans, and undergraduate seniors to apply.

**Awards:** Fellowship; Anticipated Funding Amount: \$138,000

**Letters of Intent:** Not Required

**Full Proposal Submission Deadline:**

October 18, 2021: Life Sciences

October 19, 2021: Computer and Information Science and Engineering, Materials Research, Psychology, Social Sciences, STEM Education and Learning

October 21, 2021: Engineering

**Grant Program: Division of Materials Research: Topical Materials Research Programs (DMR:TMRP)**

**Agency:** National Science Foundation NSF 21-600

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21600/nsf21600.htm>

**Brief Description:** Materials Research is the field of science where physics, chemistry, materials science, and engineering naturally converge in the pursuit of the fundamental understanding of the properties of materials and the phenomena they host. Materials are abundant and pervasive, serving as critical building blocks in technology and innovation. Materials Research impacts life and society, as it shapes our understanding of the material world and enables significant advances spanning the range from nanoelectronics to health-related fields. The development and deployment of advanced materials are major drivers of U.S. economic growth.

Research supported by the Division of Materials Research (DMR) focuses on advancing the fundamental understanding of materials, materials discovery, design, synthesis, characterization, properties, and materials-related phenomena. DMR awards enable understanding of the electronic, atomic, and molecular structures, mechanisms, and processes that govern nanoscale to macroscale morphology and properties; manipulation and control of these properties; discovery of emerging phenomena of matter and materials; and creation of novel design, synthesis, and processing strategies that lead to new materials with unique characteristics. These discoveries and advancements transcend traditional scientific and engineering disciplines. DMR supports research and education activities in the United States through funding of individual investigators, teams, centers, facilities, and instrumentation. Projects supported by DMR are not only essential for the development of future technologies and industries that address societal needs, but also for the preparation of the next generation of materials researchers.

**Awards:** Standard or Continuing Grants; Anticipated Funding Amount: \$66,000,000

**Letters of Intent:** Not Required

**Full Proposal Submission Deadline:** Proposals Accepted Anytime; After October 15th, 2021

**Contacts:** Steve Smith, Program Director, DMR/BMAT, telephone: (703) 292-8158, email: [sjsmith@nsf.gov](mailto:sjsmith@nsf.gov)

- Lynnette D. Madsen, Program Director DMR/CER, telephone: (703) 292-4936, email: [lmadsen@nsf.gov](mailto:lmadsen@nsf.gov)
  - Tomasz Durakiewicz, Program Director, DMR/CMP, telephone: (703) 292-4892, email: [tdurakie@nsf.gov](mailto:tdurakie@nsf.gov)
- 

**Grant Program: Advancing Informal STEM Learning (AISL)**

**Agency:** National Science Foundation NSF 21-599

**RFP Website:** <https://www.nsf.gov/pubs/2021/nsf21599/nsf21599.htm>

**Brief Description:** The **Advancing Informal STEM Learning (AISL)** program seeks to advance new approaches to and evidence-based understanding of the design and development of STEM learning opportunities for the public in informal environments; provide multiple pathways for broadening access to and engagement in STEM learning experiences; advance innovative research on and assessment of STEM learning in informal environments; and engage the public of all ages in learning STEM in informal environments.

The AISL program supports six types of projects: (1) Pilots and Feasibility Studies, (2) Research in Service to Practice, (3) Innovations in Development, (4) Broad Implementation, (5) Literature Reviews, Syntheses, or Meta-Analyses, and (6) Conferences.

**Awards:** Standard Grant or Continuing Grant; Anticipated Funding Amount: \$32,000,000 to \$44,000,000

**Letters of Intent:** Not Required

**Full Proposal Submission Deadline:** January 18, 2022

**Contacts:** Address Questions to the Program, telephone: (703)292-8616, email: [DRLAISL@nsf.gov](mailto:DRLAISL@nsf.gov)

[Back to Contents](#)

---

## **National Institutes of Health**

**Grant Program: Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity (K99/R00 Independent Clinical Trial Not Allowed)**

**Agency:** National Institutes of Health PAR-21-271

**Website:** <https://grants.nih.gov/grants/guide/pa-files/PAR-21-271.html>

**Brief Description:** NIH supports individuals at this important transition point through the [K99/R00 program](#); however, the diversity of K99/R00 awardees not reflect the demographics of the available talent pool of well-trained Ph.D. biomedical scientists. For example, for the [Parent K99/R00 funding announcement](#), over 90% of NIGMS K99/R00 grantees have transitioned to independent faculty positions; however, only 7% of applicants have been from racial and ethnic groups historically underrepresented, and only 33% have been women.

NIH has undertaken a number of efforts to facilitate the [career transition of postdoctoral scientists from diverse groups](#) into the professoriate, including the [Institutional Research and Academic Career Development Awards \(IRACDA\)](#), research supplements to [promote diversity in health-related research](#) and [re-entry into biomedical research careers](#). Additionally, the NIH Common Fund supports the [National Research Mentoring Network \(NRMN\)](#), a nationwide consortium of biomedical professionals and institutions collaborating to provide biomedical trainees from all backgrounds and at all levels with evidence-informed mentorship and professional development programming. These efforts have supported the development of highly trained biomedical scientists from diverse backgrounds who have the necessary knowledge and skills to pursue independent careers in the biomedical research workforce. NIH also recognizes that efforts aimed at achieving scientific workforce diversity are hindered by organizational structures, systems, and policies that perpetuate exclusion and inequity based on race and gender. Organizational structures, policies, practices, and social norms that perpetuate bias, prejudice, discrimination, and racism also limit the pace of scientific progress. Therefore, there remains a compelling need to develop additional strategies to promote transitions to independent, research-intensive faculty positions for scientists from diverse backgrounds.

**Award:** Award budgets are composed of salary and other program-related expenses.

**Letter of Intent:** Not required.

**Proposal Deadline:** The first due date for New applications is October 27<sup>th</sup>, 2021 by 5:00 PM local time. The first due date for Resubmission applications is November 12, 2021 by 5:00 PM local time.

[Standard dates](#) apply, for all subsequent receipt dates, 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.

**Contact:** Kenneth D. Gibbs, Jr., Ph.D., MPH; National Institute of General Medical Sciences (NIGMS)  
Email: [kenneth.gibbs@nih.gov](mailto:kenneth.gibbs@nih.gov)

---

**Grant Program: Clinical and Translational Science Award (UM1 Clinical Trial Optional)**

**Agency: National Institutes of Health PAR-21-293**

**Website:** <https://grants.nih.gov/grants/guide/pa-files/PAR-21-293.html>

**Brief Description:** ‘Translation’ is defined by NCATS as the process of turning observations in the laboratory, clinic and community into interventions that improve the health of individuals and communities – from diagnostics, preventions, and treatments to medical procedures and behavioral changes. ‘Translational research’ (TR) is defined by NCATS as the endeavor to traverse a particular step of the translational process for a particular target or disease. ‘Translational science’ (TS) is the field of investigation focused on understanding the scientific and operational principles underlying each step of the translational process. Whereas translational research focuses on the specific case of a target or disease, translational science is focused on the general case that applies to any target or disease; advances in translational science are the focus of this FOA. A key tenet of translational science is to understand common causes of inefficiency and failure in translational research projects (e.g., incorrect predictions of the toxicity or efficacy of new drugs, lack of data interoperability, ineffective clinical trial recruitment). Many of these causes are the same across targets, diseases, and therapeutic areas; therefore, advances in translational science will increase the efficiency and effectiveness of translational research to enhance health, lengthen life, and reduce the burdens of illness and disability. Like any other science, translational science seeks to elucidate general operative principles to transform translation from an empirical, phenomenological process into a predictive science. The application of scientific and operational innovation and strategies to improve the efficiency and effectiveness of all research is at the heart of developing, demonstrating, and disseminating the science of translation.

NCATS amended the CTSA Program goals in response to the recent feedback and the maturation of the existing CTSA Program and will use a variety of mechanisms to achieve these goals, including this UM1 FOA and other training and research opportunities.

1. Advance CTS: develop, demonstrate, and disseminate scientific and operational innovations that improve the efficiency and effectiveness of clinical translation from identification to first-in-human studies to medical practice implementation to community health dissemination
2. Promote partnerships and collaborations to facilitate and accelerate translational research projects locally, regionally, and nationally
3. Create, provide, and disseminate innovative research programs and partnerships across institutions and communities to address health disparities and deliver the benefits of translational science to all
4. Create and implement scientific and operational innovations that increase the quality, safety, efficiency, effectiveness, and informativeness of clinical research
5. Provide a national resource for the rapid response to urgent public health needs
6. Create, provide, and disseminate CTS training programs for clinical research professionals of all disciplines on the research team
7. Create, provide, and disseminate CTS training and career support programs for translational scientists
8. Foster the development of the emerging field of translational science

**Award:** The amount of funding that applicants can request depends on the amount of NIH funding they receive.

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

**Proposal Deadline:** January 26, 2022, May 13, 2022, September 16, 2022

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

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

**Contact:** Erica Rosemond, Ph.D., National Center for Advancing Translational Sciences (NCATS), Telephone: 301-594-8927, Email: [CTSAFOAQuestions@mail.nih.gov](mailto:CTSAFOAQuestions@mail.nih.gov)

---

**Grant Program: Investigator Initiated Research in Computational Genomics and Data Science (R01 Clinical Trial Not Allowed)**

**Agency:** National Institutes of Health PAR-21-254

**Website:** <https://grants.nih.gov/grants/guide/pa-files/PAR-21-254.html>

**Brief Description:** Through this FOA, NHGRI seeks to fund innovative research efforts in computational genomics, data science, statistics, and bioinformatics for basic and/or clinical genomic sciences that are broadly applicable to human health and disease. NHGRI also seeks to fund research leading to improvement of existing software or approaches that are in broad use by the genomics community.

The following are examples of the types of research studies that may be appropriate for this FOA; applicants are encouraged to propose creative and innovative research topics that go beyond the examples listed here. Research topics appropriate for this FOA may include development of novel computational, bioinformatics, statistical, or analytical approaches, tools, or software, for:

- Processing or analyzing new genomic data types
- Improving efficiency and scalability of compute-intensive genomic applications
- Interactively analyzing or visualizing large genomic data sets
- Causal statistical modeling related to genomic research
- Machine learning and AI methods for genomics, including creating interpretable models
- Supporting ‘plain language’ genomics queries of literature, data, and knowledge resources
- Integrating in vitro cellular data and model organism data with human genomic data
- Integrating and interpreting multiple genomic data types including sequence, functional, phenotypic, clinical, and single-cell or sub-cellular data
- Processing and integrating genome sequence data to enhance representation of population variation
- Identifying or prioritizing genetic variants that may be relevant to human disease
- Enhancing secure sharing and use of genomic data in combination with clinical data
- Integrating genomic based workflows and frameworks into Electronic Health Records to improve clinical decision support in health IT systems
- Genomic based computational models and workflows mitigating inherent and pervasive biases that interfere with the meaningful and beneficial use of genomics in clinical care
- Interfacing between Electronic Health Records, genomic data, and laboratory information systems

NHGRI also invites applications that improve, validate, make robust, or scale existing genomic software and tools (refinement and hardening) to enable reproducible use by the biomedical research community, including:

- Processing sequence data for sequence assembly, variant detection (SNPs and SVs), imputation, and resolution of haplotypes for both variant interpretation and clinical recommendations
- Enabling scalable and cost-effective curation of FAIR metadata for genomic and phenotypic data,
- Significantly improving visualization capabilities of existing software and tools
- Rigorous benchmarking of tools, methods, or algorithms for genomics

**Award:** Application budgets are limited to \$500,000 in direct costs and need to reflect the actual needs of the proposed project.

**Letter of Intent:** Not Applicable

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

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

**Contact:** Daniel Gilchrist, Ph.D., National Human Genome Research Institute (NHGRI), Email: [Daniel.Gilchrist@nih.gov](mailto:Daniel.Gilchrist@nih.gov)

---

**Grant Program: BRAIN Initiative Cell Atlas Network (BICAN): Coordinating Unit for Biostatistics, Informatics, and Engagement (CUBIE) (U24 Clinical Trial Not Allowed)**

**Agency: National Institutes of Health RFA-MH-21-237**

**Website:** <https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-21-237.html>

**Brief Description:** The [BRAIN 2025](#) Report envisioned a systematic census of neuronal and glial cell types in multiple mammalian species. The NIH BRAIN Initiative has implemented this vision by successfully completing a 3-year pilot phase (2014-2017), followed by launching a 5-year phase 2 (2017-2022) BRAIN Initiative Cell Census Network (BICCN) with an emphasis on the mouse brain. The BICCN has applied a set of advanced single-cell approaches to characterizing molecular signatures, anatomical phenotypes, and functional properties of brain cell types, and rapidly disseminated the cell census data to the public. The BICCN is on track to complete a comprehensive cell census spanning the entire adult mouse brain, as well as to set the stage for large-scale cell atlas research in human and non-human primate (NHP) brains. Advances in single-cell transcriptomic and epigenomic profiling, anatomical mapping at cellular resolution, and other approaches have proven to be powerful and scalable. At this time, the BRAIN Initiative Cell Census Program is looking to establish the BICAN to broaden and deepen the systematic cell census and atlas efforts with a new emphasis on human brain. This FOA and the companion announcements intend to establish a network of projects that will work cooperatively to:

- generate comprehensive and high-resolution brain cell atlases that encompass molecular, anatomical, and functional annotations of brain cell types (neurons, glia, and other non-neuronal cells) across the lifespan in human and other species, thereby providing a framework to enable both basic neuroscience and brain disorders-focused research;

- develop and use leading-edge scalable technologies and multi-modal assays to enhance the capability and capacity of large-scale brain cell atlas research;
- coordinate and collaborate across and beyond the BRAIN Initiative toward establishing a broadly accessible data ecosystem for brain cell types and circuits.

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

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

**Proposal Deadline:** November 09, 2021

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

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

**Contact:** Yong Yao, Ph.D.; National Institute of Mental Health (NIMH); Telephone: 301-443-6102

Email: [y Yao@mail.nih.gov](mailto:y Yao@mail.nih.gov)

[Back to Contents](#)

## [Department of Defense/US Army/DARPA/ONR/AFOSR](#)

### **Grant Program: FY2022 Vannevar Bush Faculty Fellowship (VBFF) Program**

**Agency:** Department of Defense N00014-21-S-F007

**RFP Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=335368>

**Brief Description:** The objectives of the program are to: • Support unclassified basic scientific and engineering research that could be the foundation for future revolutionary new capabilities for DoD. • Educate and train student and post-doctoral researchers for the defense workforce. • Foster long-term relationships between university researchers and the DoD. • Familiarize university researchers and their students with DoD's current and projected future challenges. • Increase the number of talented technical experts that DoD can call upon. This FOA is for single investigator grant proposals for basic research. All awardees will receive a research grant and the title of VBFF Fellow. VBFF Fellows and their students are provided with opportunities that are designed to enhance their understanding of DoD's critical research needs and interact with DoD senior Science and Technology (S&T) program leaders. Fellows and their students are expected to attend VBFF activities scheduled throughout the year. These activities may include an orientation meeting, site visits to DoD labs, technical workshops, and an annual meeting to report the progress of VBFF-sponsored research. VBFF Fellows may also be encouraged to serve as members of DoD advisory boards, panels, or groups. For a list of current and past VBFF or NSSEFF Fellows, refer to: <https://basicresearch.defense.gov/Programs/Vannevar-Bush-Faculty-Fellowship/>.

**Awards:** Grants up to \$ 3 million. Total Amount of Funding Available: \$24 million to \$30 million.

**Letter of Intent:** Please see below.

**Proposal Submission Deadline:** White Paper Inquiries and Questions 01 October 2021 White Papers must be received no later than 15 October 2021 (Friday) at 11:59 PM Eastern Time Full Proposal Inquiries and Questions 21 January 2022 Full Proposals must be received no later than 04 February 2022 (Friday) at 11:59 PM Eastern Time

**Contact:** Reginald G. Williams, PhD Point of Contact Occupation Title: Program Officer Division Title: Warfighter Performance Division Code: 34 Address: 875 North Randolph Street Email Address [Reginald.G.Williams@navy.mil](mailto:Reginald.G.Williams@navy.mil)

---

**Grant Program: Science, Innovation and Technology Partnership Intermediary Agreement****Agency: Department of Defense PIA-FOA-21-AFRL-0001****RFP Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=333566>**Brief Description:** The Department of Defense (DoD) Air Force Research Laboratory (AFRL) at Kirtland Air Force Base, New Mexico, is seeking innovative applications from interested Recipients to enter into five-year Partnership Intermediary Agreements (PIAs).

The Government seeks to fund the most creative, comprehensive, and impactful innovation-accelerating Recipients that support the DoD mission and can engage with other innovative-accelerating and entrepreneurially-focused organizations (both public and private). These organizations are critical to the growth of an innovation economy and help accelerate the launch, growth, and scale of businesses, ultimately resulting in the commercialization of new technologies and business models, and development of specialized skills, industries, and technology sectors of jobs in the United States. The Government encourage applicants to create programs and/or projects that bolster Research and Development (R&D) innovation, increase the maturity and market readiness of DoD relevant technologies to prepare them for transfer and commercialization that support DoD needs, through regional engagement, including with other private actors—both for- and non-profit—as well as with educational institutions, small business firms, state and local entities that may provide additional resources.

**Awards:** PIA up to \$55 million. Total Amount of Funding Available: \$75 million.**Letter of Intent:** Please contact the program director to discuss.**Proposal Submission Deadline:** 21 September 2021, 02:00 PM MST**Contact:** Sara Telano, AFRL/RVKE, Contracting Specialist [sara.telano@us.af.mil](mailto:sara.telano@us.af.mil) Karina Zubiarte, AFRL/RVKE, Contracting Specialist [karina.zubiarte@spaceforce.mil](mailto:karina.zubiarte@spaceforce.mil)

---

**Grant Program: DoD Traumatic Brain Injury and Psychological Health, Idea Development Award****Agency: Department of Defense W81XWH-21-TBIPHRP-IDA****RFP Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=335163>**Brief Description:** The TBIPHRP vision is to optimize psychological health and reduce or eliminate the effects of TBI and traumatic stress. The program seeks to fund research to understand, prevent, and treat TBI and psychological health conditions that accelerates solutions to improve the health, wellbeing, and healthcare of Service Members, Veterans, military beneficiaries, and the American public. In April 2021, the TBIPHRP held a Stakeholders Meeting to engage TBI and psychological health academic, clinical, lived experience (consumers), and government subject matter experts in an open dialogue forum to identify critical issues and underfunded areas in TBI and psychological health research and care. This meeting was attended by representatives from nonprofit organizations, academia, government agencies, and the public. Outcomes from this meeting were considered by the TBIPHRP Programmatic Panel in developing the FY21 program. The FY21 Stakeholders Booklet and Meeting Summary, including presentation materials, can be found at <https://cdmnp.army.mil/tbiphrrp/>.**Awards:** The intent of the FY21 TBIPHRP IDA is to support innovative, non-incremental, high-risk/high-reward research that will provide new insights, paradigms, technologies, or clinical applications.**Letter of Intent:** Please see below.**Proposal Submission Deadline:** Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), September 8, 2021 · Application Submission Deadline: 11:59 p.m. ET, September 30, 2021



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

---

**Grant Program: National Defense Education Program (NDEP) Science, Technology, Engineering, and Mathematics (STEM) Consortia Request for Information (RFI) for the Office of the Under Secretary of Defense (Research & Engineering)**

**Agency: Department of Defense RANDENDEPSTEMFY22RFI**

**RFP Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=33490>

**Brief Description:** The Department of Defense (DoD) may use responses to this request for information (RFI) to inform future solicitation / funding opportunity announcement. The purpose of this RFI is to survey industry (to include non-profits, academia, large, and small businesses (e.g., 8(a), service-disabled Veteran-owned small business, HUBZone small business, small disadvantaged business, Veteran-owned small business, and woman-owned small business)) for relevant information. Hence, submitted responses should not be worded as proposals. In accordance with FAR 15.201(e), responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. The Government will not reimburse respondents for any costs associated with submissions of the RFI being requested or reimburse expenses incurred to interested parties for responses. Background/Overview: This RFI consists of two focuses, which are outlined below: (1) Transitioning students from 2-year Community College science, technology, engineering, and mathematics (STEM) programs to a STEM degree at a 4-year institution through a consortium based approach (2) Preparing an agile and diverse workforce through technical training and certificate programs and supporting these programs through collaborative partnerships and consortia.

The Department of Defense (DoD) STEM mission is to inspire, cultivate, and develop exceptional STEM talent through a continuum of opportunities to enrich the current and future DoD workforce poised to tackle evolving defense technological challenges. Towards this end, DoD invests in the future and current STEM talent pools by fostering pathways that connect to a continuum of enriching DoD programs to meet the unique mission needs of the Department.

**Awards:** N/A

**Letter of Intent:** Please see below.

**Proposal Submission Deadline:** Submission Requirements: All responses to the RFI should be submitted via e-mail to [osd.dodstem@mail.mil](mailto:osd.dodstem@mail.mil) following the Schedule of Events below. The government is contemplating holding an informational workshop/webinar after the close of the RFI. If you would like to participate, RSVP to the email address provided and state I, II, and/or III from the areas of interest on page 1.

Schedule of Events: Questions Regarding RFI: 23 August, 2021 17:00 EST

FAQ Posting 27 August, 2021

RFI Responses Due 10 September, 2021 17:00 EST

**Contact:** [osd.dodstem@mail.mil](mailto:osd.dodstem@mail.mil)

---

**Grant Program: Defense Sciences Office Office-wide**

**Agency: Department of Defense DARPA HR001121S0032**

**RFP Website:** <https://sam.gov/opp/f08ce40db929467ab7a8cdac02345b70/view>

**Brief Description:** The mission of the Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office (DSO) is to identify and create the next generation of scientific discovery by pursuing high-risk, high-payoff research initiatives across a broad spectrum of science and engineering disciplines and transforming these initiatives into disruptive technologies for U.S. national security. In

support of this mission, the DSO Office-wide BAA invites proposers to submit innovative basic or applied research concepts or studies and analysis proposals that address one or more of the following technical thrust areas: (1) Frontiers in Math, Computation and Design, (2) Limits of Sensing and Sensors, (3) Complex Social Systems, and (4) Anticipating Surprise. Each of these thrust areas is described below and includes a list of example research topics that highlight several (but not all) potential areas of interest. Proposals must investigate innovative approaches that enable revolutionary advances. DSO is explicitly not interested in approaches or technologies that primarily result in evolutionary improvements.

**Awards:** DARPA anticipates multiple awards.

**Letter of Intent:** Please see below.

**Proposal Submission Deadline:** Executive Summary Due Date and Time: Executive Summaries may be submitted on a rolling basis until Executive Summary Due Date: June 10, 2022, 4:00 p.m. o Proposal Abstract Due Date and Time: Abstracts may be submitted on a rolling basis until June 10, 2022, 4:00 p.m. o FAQ Submission Deadline: June 2, 2022, 4:00 p.m. See Section VIII.A. o Full Proposal Due Date and Time: Proposals may be submitted on a rolling basis until June 10, 2022, 4:00 p.m.

**Contact:** Technical POC: Phil Root, Deputy Director, DARPA/DSO o BAA Email: [HR001121S0032@darpa.mil](mailto:HR001121S0032@darpa.mil)

---

### **Grant Program: Research Interests of the Air Force Office of Scientific Research**

**Agency:** Department of Defense Air Force Office of Scientific Research FA9550-21-S-0001

**RFP Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=334084>  
<https://www.afrl.af.mil/AFOSR/>

**Brief Description:** The objective of this portfolio is to develop the fundamental scientific knowledge required to understand the dynamics of complex, heterogeneous and reactive materials for game-changing advancements in munitions and propulsion. The research areas supported by this portfolio therefore seek to discover, characterize, and reliably predict the fundamental chemistry, physics, hydrodynamics and materials science associated with the high energetics of explosives, solid propellant burning, and structural dynamics of materials subject to shock loading. The overall scope of the research in the portfolio will be accomplished through a balanced mixture of experimental, numerical, and theoretical efforts. The fundamental science of interest to this portfolio is necessary for revolutionary advances in future Air Force and Space Force weapon systems and their propulsion capabilities, including increased energy density, operational efficiency, effect-based optimization, and survivability in harsh environments.

**Awards:** Multiple awards. Available Funding: \$100,000,000

**Letter of Intent:** Please contact the program director.

**Proposal Submission Deadline:** Open until new BAA is posted.

**Contact:** DR. MARTIN J. SCHMIDT, AFOSR/RTA1 Email: [dynamicmaterials@us.af.mil](mailto:dynamicmaterials@us.af.mil) (703) 588-8436; CALVIN D. SCOTT, AFOSR/RBKC Senior Procurement Analyst Email: [afosr.baa@us.af.mil](mailto:afosr.baa@us.af.mil)

[Back to Contents](#)

---

[Department of Transportation](#)

**Grant Program: Dwight David Eisenhower Transportation Fellowship Program (DDETFP) Graduate Fellowship**

**Agency: Department of Transportation 693JJ318NF5229-2021**

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=335125>

**Brief Description:** The goals of these Grants are to provide DDETFP Graduate Fellowships to 1) attract the Nation's brightest minds to the field of transportation, 2) enhance the careers of transportation professionals by encouraging them to seek advanced degrees, and 3) bring and retain top talent in the transportation industry of the U.S.

Individual students apply for the DDETFP Graduate Fellowship. The FHWA makes awards to the Institution of Higher Education (IHE) (“Recipient”) on behalf of the student (“Student Designee”). The IHE must be accredited by a federally-recognized accrediting agency and must be located within the United States or its Territories. If a student is selected to receive a fellowship, the student, their faculty advisor, and the IHE will be responsible for completing and submitting all required paperwork to execute the Agreement. Students must be prepared to submit a copy of their application package and this Notice of Funding Opportunity (NOFO) to their IHE.

**Award:** The FHWA expects approximately \$1 million to be made available for the DDETFP.

**Letter of Intent:** Not Required

**Proposal Deadline:** September 17, 2021 at 5:00pm Eastern Time.

**Contact Information:** Latoya Jones Program Manager Phone 404-562-3641

[latoya.jones@dot.gov](mailto:latoya.jones@dot.gov)

[Back to Contents](#)

---

**[Department of Agriculture:](#)**

**Grant Program: Farm of the Future**

**Agency: Department of Agriculture USDA-NIFA-OP-008501**

**Website:** <https://nifa.usda.gov/funding-opportunity/farm-future>

**Brief Description:** Farm of the Future is a competitive grant program that will be implemented by USDA NIFA to establish an agricultural test bed and demonstration site. It seeks to launch this rural test bed for precision agriculture, smart automation, data connectivity and transfer, and to demonstrate best practices in climate-smart agriculture, forestry, and animal production systems that enhance sustainability and farm profitability. The test bed will evaluate digital and smart technologies to provide accessible, data-driven solutions that support resilient agricultural and value-added practices.

**Letter of Intent:** Not required

**Awards:** Single grant. Anticipated available funding: \$3,936,000

**Proposal Deadline:** October 15, 2021

**Contact Information:** Contact [grantapplicationquestions@usda.gov](mailto:grantapplicationquestions@usda.gov)

[Back to Contents](#)

---

**[Department of Labor](#)**

**Grant Program: State Apprenticeship Expansion, Equity and Innovation (SAEEI) Grant Program**

**Agency: Department of Labor FOA-ETA-21-07**

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331689>

**Brief Description:** The SAEI Funding Opportunity Announcement FOA will provide up to \$87.5 million in grant awards to support the expansion and diversification of Registered Apprenticeship Programs (RAPs). Grant funds will be awarded to Governor-led, state initiatives that are expanding, diversifying and transforming registered apprenticeship. Funding will provide states with the flexibility to meet specific industry needs and demands. Collectively, these efforts will aim to achieve the following goals:

- 1) System expansion to support the development, modernization, and diversification of RAPs;
- 2) Equity in apprenticeship by increasing the number of apprentices enrolled in RAPs, including underrepresented populations; and
- 3) Partnership and alignment to support workforce system integration;
- 4) Innovation in program development and recruitment strategies.

Allowable activities under this grant include activities related to establishing or expanding existing RAPs for adults and/or youth, pre-apprenticeship leading to a RAP, and wrap-around/supportive services.

**Awards:** FOA will provide up to \$87.5 million in grant awards.

**Proposal Deadline:** This advance notice is to encourage potential applicants to begin forming partnerships and other early preparations to improve readiness for when the Funding Opportunity Announcement (FOA) is published. This is not a grant solicitation, and is for informational purposes only.

**Contact Information:** Matthew Carls Grants Management Specialist, [Carls.Matthew.L@dol.gov](mailto:Carls.Matthew.L@dol.gov)

[Back to Contents](#)

---

## [Department of Commerce/EDA](#)

### **Grant Program: FY 2021 STEM Talent Challenge Program**

**Agency: U.S. Department of Commerce EDA-HDQ-OIE-2021-2007015**

**Website:** <https://www.eda.gov/OIE/STEM/>

**Brief Description:** The U.S Economic Development Administration's STEM Talent Challenge **aims to build STEM talent training systems to strengthen regional innovation economies.** The FY21 STEM Talent Challenge will award a total of \$2 million in grants to organizations that are creating and implementing STEM talent development strategies that complement their region's innovation economy. [View the FY20 STEM Challenge grantees here.](#)

Projects should aim to identify opportunities in high-growth potential sectors, and to expand and empower the innovation economy workforce, including by:

- Engaging regional entrepreneurs, innovators, and the organizations that support them to assess and forecast current and future talent needs and to develop collaborative solutions with work-based programs;
- Building highly skilled talent and connecting it to highly technical opportunities that foster professional development and provide continuing advanced skills training to develop the technical and scientific workforce that regional innovation initiatives need;
- Strengthening collaboration among entrepreneurs, industry leaders and employers, educational organizations, established corporations, economic and/or workforce development organizations,

and the public sector to enable better access to skilled workers and to develop demand-driven workforce pipelines for the innovation economy; and

- Placing new employees into immediate job openings with regional employers in need of STEM talent.

**Awards:** Competition applicants may request up to \$250,000 for implementation of a 24-month program. A 1:1 funding match is required.

**Letter of Intent:** Contact the program director.

**Proposal Deadline:** October 12, 2021

**Contact Information:** [ois@eda.gov](mailto:ois@eda.gov)

---

### **Grant Program: FY 2021 American Rescue Plan Act (ARPA) Statewide Planning, Research, and Networks**

**Agency:** U.S. Department of Commerce EDA-HDQ-ARPRN-2021-2006986

**Website:** <https://www.eda.gov/>

<https://www.grants.gov/web/grants/view-opportunity.html?oppId=334728>

**Brief Description:** The ARPA Statewide Planning, Research, and Networks NOFO is part of EDA's multi-phase effort to respond to the coronavirus pandemic as directed by the American Rescue Plan Act of 2021. Specifically, this NOFO seeks to build regional economies for the future through two primary avenues: a) Statewide Planning and b) Research and Networks.

For Research awards, EDA solicits applications for investments that support research and evaluation projects related to economic recovery from the coronavirus pandemic. EDA will support the development of tools, recommendations, and resources that shape Federal economic development policies and inform economic development decision-making. Awards will provide critical, cutting-edge research and best practices to regional, state, and local practitioners in the economic development field, thereby enhancing understanding and implementation of economic development concepts throughout the country. EDA is specifically interested in research projects that will enable real-time research into EDA's ARPA programs, especially those related to the new Jobs Challenge, Build Back Better Regional Challenge, Indigenous Communities NOFO, and travel and tourism programs. See also section D.2 for more detail on the evaluation parameters EDA seeks.

**Awards:** Under the American Rescue Plan Act of 2021 (Public Law 117-2), Congress provided EDA with \$3,000,000,000, to remain available until September 30, 2022, to "prevent, prepare for, and respond to coronavirus and for necessary expenses for responding to economic injury as a result of coronavirus." Of the funds provided, EDA anticipates awarding \$90,000,000 under this NOFO: \$59,000,000 for Statewide Planning grants and \$31,000,000 for Research and Communities of Practice Challenge awards.

**Letter of Intent:** Contact the program director.

**Proposal Deadline:** While EDA encourages eligible applicants to submit their applications as soon as possible, EDA strongly advises eligible applicants to submit complete applications no later than October 31, 2021 so that EDA can review and process the application in time to achieve the objectives of the grant program.

**Contact Information:** For applicants interested in the Research component: [research@eda.gov](mailto:research@eda.gov)

---

### **Grant Program: Climate Program Office FY2022**

**Agency:** U.S. Department of Commerce NOAA-OAR-CPO-2022-2006799

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=334633>

**Brief Description:** Climate variability and change present society with significant economic, health, safety, and security challenges. As part of the National Oceanic and Atmospheric Administration (NOAA) climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) addresses these climate challenges by managing competitive research programs through which high-priority climate science, assessments, decision-support research, outreach, education, and capacity-building activities are funded to advance our understanding of the Earth's climate system, and to foster the application and use of this knowledge to improve the resilience of our Nation and its partners. Through this announcement, CPO is seeking applications for eight individual competitions in FY22. Several of these competitions are relevant to four high-priority climate risk areas CPO is focusing on to improve science understanding and/or capabilities that result in user-driven outcomes: Coastal Inundation, Marine Ecosystems, Water Resources, and Extreme Heat. NOAA, OAR, and CPO encourage applicants and awardees to support the principles of diversity and inclusion when writing their proposals and performing their work. Diversity is defined as a collection of individual attributes that together help organizations achieve objectives.

**Awards:** In FY22, approximately \$15 million will be available for approximately 90 new awards. Funding level between \$50,000 and \$300,000 per year with exceptions for larger awards.

**Letter of Intent:** Letters of intent (LOIs) for all competitions should be received by email by 5:00 p.m. Eastern Time on 08/09/21.

**Proposal Deadline:** Full applications must be received by 5:00 p.m. Eastern Time, on 10/18/21.

**Contact Information:** Diane Brown at [diane.brown@noaa.gov](mailto:diane.brown@noaa.gov).

---

### **Grant Program: FY2021 to FY2023 NOAA Broad Agency Announcement (BAA)**

**Agency:** U.S. Department of Commerce NOAA-NFA-NFAPO-2021-2006626

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=329261>

**Brief Description:** This Broad Agency Announcement is a mechanism to encourage research, education and outreach, innovative projects, or sponsorships that are not addressed through NOAA's competitive discretionary programs. This announcement is not soliciting goods or services for the direct benefit of NOAA. Funding for activities described in this notice is contingent upon the availability of Fiscal Year 2021, Fiscal Year 2022, and Fiscal Year 2023 appropriations. Applicants are hereby given notice that funds have not yet been appropriated for any activities described in this notice. Publication of this announcement does not oblige NOAA to review an application beyond an initial administrative review, or to award any specific project, or to obligate any available funds. As an agency with responsibilities for maintaining and improving the viability of marine and coastal ecosystems, for delivering valuable weather, climate, and water information and services, for understanding the science and consequences of climate change, and for supporting the global commerce and transportation upon which we all depend, NOAA must remain current and responsive in an ever-changing world.

**Awards:** Contingent to the availability of funds.

**Letter of Intent:** Contact the program director.

**Proposal Deadline:** September 30, 2023.

**Contact Information:** Mr. Lamar Dwayne Revis, 301-628-1308, [lamar.revis@noaa.gov](mailto:lamar.revis@noaa.gov)

[Back to Contents](#)

---

[EPA](#)

**Grant Program: 19th Annual P3 Awards: A National Student Design Competition Focusing on People, Prosperity and the Planet**

**Agency: Environmental Protection Agency**

**Funding Opportunity Numbers (FONs) and Associated Research Areas: EPA-G2022-P3-Q1 – Air Quality EPA-G2022-P3-Q2 – Safe and Sustainable Water Resources EPA-G2022-P3-Q3 – Sustainable and Healthy Communities EPA-G2022-P3-Q4 – Chemical Safety**

**Website:** <https://www.epa.gov/P3>

**Brief Description:** The U.S. Environmental Protection Agency (EPA), as part of its People, Prosperity and the Planet (P3) Award Program – is seeking applications proposing to research, develop, design, and demonstrate solutions to real world challenges. The P3 competition highlights the use of scientific principles in creating innovative technology-based projects that achieve the mutual goals of improved quality of life, economic prosperity and environmental protection. The EPA offers the P3 competition in response to the environmental and public health challenges in the United States, including those in small, rural, tribal and/or underserved communities. Please see the [P3 Student Design Competition website](#) for more details about this program. Proposed projects must embody the P3 approach, which is that they have the intention and capability to simultaneously improve the quality of people’s lives, provide economic benefits and protect the environment.

**Award:** Grants. Approximately 16 awards for Phase I; Approximately four awards for Phase II. Phase I serves as a “proof of concept,” where teams are awarded a one-year grant of up to \$25,000 to develop their idea and showcase their research in the spring at EPA's National Student Design Expo (NSDE). These teams are then eligible to compete for a Phase II grant of up to \$100,000 to implement their design in a real world setting. Anticipated Funding Amount: \$800,000

**Letter of Intent:** Not required.

**Submission Deadline:** October 27, 2021

**Contact:** Technical Contact: Kyle Spatz; phone: 202-564-3201; email: [spatz.kyle@epa.gov](mailto:spatz.kyle@epa.gov); Eligibility Contact: Ron Josephson; phone: 202-564-7823; email: [josephson.ron@epa.gov](mailto:josephson.ron@epa.gov); Electronic Submissions Contact: Debra M. Jones; phone: 202-564-7839; email: [jones.debram@epa.gov](mailto:jones.debram@epa.gov)

**Grant Program: FY22 BROWNFIELDS JOB TRAINING GRANTS**

**Agency: Environmental Protection Agency EPA-OLEM-OBLR-21-03**

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=335038>

**Brief Description:** This notice announces the availability of funds and solicits applications from eligible entities, including nonprofit organizations, to deliver Brownfields Job Training programs that recruit, train, and place local, unemployed and under-employed residents with the skills needed to secure full-time employment in the environmental field. While Brownfields Job Training Grants require training in brownfield assessment and/or cleanup activities, these grants also require that Hazardous Waste Operations and Emergency Response (HAZWOPER) training be provided to all individuals being trained. EPA encourages applicants to develop their curricula based on local labor market assessments and employers’ hiring needs, while also delivering comprehensive training that results in graduates securing multiple certifications.

**Award:** Up to \$200,000. Anticipated Funding Amount: \$3,000,000

**Letter of Intent:** Contact the program director.

**Submission Deadline:** OCTOBER 5, 2021, 11:59 p.m. ET.

**Contact:** Channing Shepherd 1200 Pennsylvania Ave. N.W. Mail Code: 5105T Washington, D.C. 20460 Phone: (202) 566-1238 [shepherd.channing@epa.gov](mailto:shepherd.channing@epa.gov)

**Grant Program: National Priorities: Water Innovation, Science, Engagement to Advance Water Reuse**

**Agency: Environmental Protection Agency EPA-G2021-ORD-E1**

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=334795>

**Brief Description:** The U.S. Environmental Protection Agency (EPA), is seeking applications proposing to accelerate water innovation, information availability, and engagement to advance clean and safe water reuse goals, promote better understanding of the Nation's water and wastewater treatment and infrastructure, and enhance the availability and efficient use of water resources through water reuse. This request for applications (RFA) is intended to address multiple water reuse sources and applications to support national efforts to reduce technological and institutional barriers for expanded water reuse.

**Award:** Up to \$3,246,000. Anticipated Funding Amount: \$6,492,000

**Letter of Intent:** Contact the program director.

**Submission Deadline:** September 29, 2021: 11:59:59 pm Eastern Time

**Contact:** Sarah Ludwig-Monty, Phone: 202-566-1072 [Sarah Ludwig-Monty, Technical Contact](#)

[Back to Contents](#)

---

**[Department of Energy](#)**

**Grant Program: FY 2022 SBIR/STTR Phase I**

**Agency: Department of Energy DE-FOA-0002554**

**Website:** <https://science.osti.gov/sbir/Funding-Opportunities>

**Brief Description:** Phase I grants resulting from this competition will be made during FY 2022 to small businesses with maximum award sizes of \$200,000 or \$250,000. Refer to the individual topic for its respective maximum award size (a proposal submitted that exceeds the maximum award size for the respective topic will be declined without review). The period of performance will depend on the scope of the effort but will not exceed 12 months. Please note that the Phase II grant application will be due approximately 9.5 months after the grant start date. This will be the only opportunity to submit a Phase II application for Phase I awards made under this FOA. Grantees that select a Phase I period of performance of 9 months or less will be able to complete their Phase I project prior to submission of their Phase II grant application.

Phase I is to evaluate, insofar as possible, the scientific or technical merit and feasibility of ideas that appear to have commercial potential and/or substantial application in support of DOE mission research. The grant application should concentrate on research that will contribute to proving scientific or technical feasibility of the approach or concept. Success in a DOE Phase I is a prerequisite to further DOE support in Phase II.

**Awards:** Ceiling (i.e., the maximum amount for an individual award made under this FOA): \$200,000 or \$250,000 for SBIR and STTR grants. Approximately \$40,000,000 is expected to be available for new awards under this FOA.

**Letter of Intent:** August 30, 2021; 5:00 PM Eastern

**Submission Deadline:** October 12, 2021 11:59 PM Eastern

**Contact:** [sc.hepfoa@science.doe.gov](mailto:sc.hepfoa@science.doe.gov)

---

**Grant Program: FY2022 Research Opportunities in High Energy Physics**



**Agency: Department of Energy DE-FOA-0002546**

**Website:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=335061>  
<https://science.osti.gov/hep/>

**Brief Description:** The field of high energy physics is guided by intertwined [science drivers](#) to explore the elementary constituents of matter and energy, the interactions between them, and the nature of space and time. The Office of High Energy Physics (HEP) executes its [mission](#) through a program that advances [three frontiers](#) of experimental scientific discovery and related efforts in theory and computing. HEP develops new accelerator, detector and computational tools to enable the science, and through [Accelerator Stewardship](#) works to make accelerator technology widely available to science and industry. The HEP program focuses on three (3) experimental scientific frontiers:

[The Energy Frontier](#) - where powerful accelerators are used to create new particles, reveal their interactions, and investigate fundamental forces using highly sensitive experimental detectors;

[The Intensity Frontier](#) - where intense particle beams and highly sensitive detectors are used to pursue alternate pathways to investigate fundamental forces and particle interactions by studying events that occur rarely in nature, and to provide precision measurements of these phenomena; and

[The Cosmic Frontier](#) - where non-accelerator-based experiments use measurements of naturally occurring cosmic particles and observations of the universe to probe fundamental physics questions and offer new insight about the nature of dark matter, cosmic acceleration in the forms of dark energy and inflation in the early universe, neutrino properties, and other phenomena.

Together, these three interrelated and complementary discovery frontiers offer the opportunity to answer some of the most basic questions about the world around us. Also integral to the mission of HEP are crosscutting research areas that enable new scientific opportunities by developing the necessary tools and methods for discoveries:

[Theoretical High Energy Physics](#), where the vision and mathematical framework for understanding and extending the knowledge of particles, forces, space-time, and the universe are developed;

[Accelerator Science and Technology Research and Development](#), where the technologies and basic science needed to design, build, and operate the accelerator facilities essential for making new discoveries are developed; and

[Detector Research and Development](#), where the basic science and technologies needed to design and build high energy physics detectors essential for making new discoveries are developed.

**Awards:** Award Ceiling: \$5,000,000 per year. Anticipated Available funding: \$100 million.

**Letter of Intent:** August 31, 2021 at 5:00 PM

**Submission Deadline:** October 5, 2021 at 11:59 PM

**Contact:** [sc.hepfoa@science.doe.gov](mailto:sc.hepfoa@science.doe.gov)

---

**Grant Program: FY21 Advanced Manufacturing Office Multi-Topic FOA**

**Agency: Department of Energy DE-FOA-0002553**

**Website:**

<https://eere-exchange.energy.gov/Default.aspx#FoaIdc231b0d9-2c92-4010-a822-77abecf0dc82>

**Brief Description:** To drive manufacturing innovation, spur job creation, and enhance manufacturing competitiveness, the Advanced Manufacturing Office (AMO) supports applied research, development, and demonstration in crosscutting, platform technologies to decarbonize the industrial sector and promote the development and growth of a resilient manufacturing sector for multiple emerging clean energy fields.

Building a clean energy and equitable economy and addressing the climate crisis is a top priority of the Biden Administration. This Funding Opportunity Announcement (FOA) will advance the Biden Administration's goal to achieve carbon pollution-free electricity by 2035 and to "deliver an equitable, clean energy future, and put the United States on a path to achieve net-zero emissions, economy-wide, by no later than 2050" to the benefit of all Americans. The Department of Energy is committed to pushing the frontiers of science and engineering, catalyzing clean energy jobs through research, development, demonstration, and deployment (RDD&D), and ensuring environmental justice and inclusion of disadvantaged communities.

The research and development (R&D) activities to be funded under this FOA will support the government-wide approach to the climate crisis by driving the innovation that can lead to the deployment of clean energy technologies, which are critical for climate protection. This FOA will support activities to advance efficiency improvements and enhance manufacturing competitiveness through technological innovation by focusing on three main areas, as described below, with subtopics in each area:

**Topic Area 1: Manufacturing Process Innovation**

Topic Area 1a: Efficiency Improvements to Drying Processes

Topic Area 1b: Advanced Tooling for Lightweight Automotive Components

Topic Area 1c: Sustainable Chemistry Practices in Manufacturing

**Topic Area 2: Advanced Materials Manufacturing**

Topic Area 2a: Materials for Harsh Service Conditions

Topic Area 2b: Development of Aluminum-Cerium (Al-Ce) Alloys and Processing to Enable Increased Energy Efficiency in Aerospace Applications

**Topic Area 3: Energy Systems**

Topic Area 3a: Structured Electrode Manufacturing for Lithium-ion Batteries

**Awards:** EERE expects to make a total of approximately \$42,300,000 of federal funding available for new awards under this FOA, subject to the availability of appropriated funds. EERE anticipates making approximately 17 to 30 awards under this FOA. EERE may issue one, multiple, or no awards. Individual awards may vary between \$500,000 and \$4,000,000 depending on topic area.

**Letter of Intent:** N/A

**Submission Deadline:** Concept Paper Submission Deadline: 9/10/2021 5:00 PM ET

- Full Application Submission Deadline: 11/5/2021 5:00 PM ET

**Contact:** [AMOMultitopicFOA@ee.doe.gov](mailto:AMOMultitopicFOA@ee.doe.gov) For questions regarding this FOA .

[Back to Contents](#)

---

[NASA](#)

**Grant Program: ROSES 2021: Terrestrial Ecology**

**Agency:** NASA NNH21ZDA001N-TE

**Website:**

<https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B17422C0A-C2D6-8926-0555-80C6903F583E%7D&path=&method=init>

**Brief Description:** The program addresses the spatial and temporal variability of terrestrial ecosystem states and processes, how terrestrial ecosystems and biogeochemical cycles respond to and affect global environmental change, and what future changes might be expected in carbon cycle dynamics and ecosystems. The research approach combines (i) use of remote sensing to observe and analyze changes

in terrestrial ecosystems; (ii) field campaigns and related process studies to elucidate ecosystem functions at multiple scales; and (iii) data assimilation and modeling to analyze and predict ecosystem and biogeochemical cycle responses to environmental change. The program seeks to strengthen the theoretical and scientific basis for measuring the properties of Earth's vegetation using reflected, emitted, and scattered electromagnetic radiation and develop the methodologies and technical approaches required to analyze and interpret such measurements. These activities will ultimately provide a foundation for the new remote sensing capabilities needed to understand and monitor terrestrial ecosystems at regional to global scales.

**Awards:** Funding available for this entire program element is approximately \$4.5M/year for a three-year period, nominally from October 2022 to September 2025.

**Notice of Intent:** Please contact the program director.

**Proposal Deadline:** November 17, 2021

**Contact:** Hank Margolis Earth Science Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 (202) 295-7075 [hank.a.margolis@nasa.gov](mailto:hank.a.margolis@nasa.gov)

---

**Grant Program: ROSES 2021: Heliophysics Living with a Star Infrastructure**

**Agency:** NASA NNH21ZDA001N-LWSIS

**Website:**

<https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B018BECDA-10D2-748E-12C4-608F75AE5A03%7D&path=&method=init>

**Brief Description:** The Heliophysics Living with a Star Infrastructure (H-LWSIS) program solicits proposals to train and develop the next generation of heliophysicists to address complex crossdiscipline system-wide problems that are central to understanding and modeling the Sun-Solar System connection. This element specifically covers the administration of the Jack Eddy Postdoctoral Fellowship (JEPF) Program over a period of 4 years and the management of the LWS Heliophysics Summer School (HSS). Descriptions of these two infrastructure-building programs are found below. Proposals to this element must address the administration and management of one or both of these programs. One of the great challenges for the LWS science program is to achieve the "systems" science required for enhancing our understanding that leads to predicting the Sun-Solar-System connection, phenomena that span the whole Sun-Earth domain and beyond over many temporal and spatial scales. As such, these two programs are central to the LWS Program.

**Awards:** Expected program budget for new awards: ~\$2 million

**Notice of Intent:** Contact program director

**Proposal Deadline:** November 10, 2021

**Contact:** Lika Guhathakurta Heliophysics Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: (202) 358-1992 Email: [madhulika.guhathakurta@nasa.gov](mailto:madhulika.guhathakurta@nasa.gov)

---

**Grant Program: ROSES 2021: Living With a Star Strategic Capability**

**Agency:** NASA NNH21ZDA001N-LWSSC

**Website:**

<https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7BE390079C-4F6E-5F2B-6BD9-38568142AAF5%7D&path=&method=init>

**Brief Description:** The Living With a Star Strategic Capability (LWSSC) program solicits proposals for the development of models for the coupled Sun-Earth and Sun-Solar System. Such models can act as tools for science investigations, as prototypes and test beds for prediction and specification capabilities,

as frameworks for linking disparate data sets at vantage points throughout the Sun-Solar System, and as strategic planning aids for enabling exploration of outer space and testing new mission concepts. LWS Strategic Capability (LWSSC) is a component of the Heliophysics Research Program and proposers interested in this program element should read B.1, the Heliophysics Research Program Overview for Heliophysics-specific requirements. Defaults for all ROSES elements are found in the ROSES Summary of Solicitation and the Proposer's Guidebook and the order of precedence is the following: This document (B.6) followed by B.1, followed by the ROSES Summary of Solicitation, and the Proposer's Guidebook. Proposers should review all of these resources to ensure compliance with Program requirements.

**Awards:** The total funding available in Fiscal Year (FY) 2021 for new proposals submitted in response to this solicitation is expected to be about \$4M.

**Notice of Intent:** Contact program director

**Proposal Deadline:** Oct 13, 2021

**Contact:** Jacqueline Jeff Morrill Telephone: (202) 358-3744 Email: [jeff.s.morrill@nasa.gov](mailto:jeff.s.morrill@nasa.gov)

[Back to Contents](#)

---

## **[National Endowment of Humanities](#)**

### **Grant Program: Summer Stipends**

**Agency:** National Endowment for the Humanities 20200923-FT

**Website:** <https://www.neh.gov/grants/research/summer-stipends>

**Brief Description:** The National Endowment for the Humanities' Summer Stipends program aims to stimulate new research in the humanities and its publication. The program works to accomplish this goal by:

- Providing small awards to individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both
- Supporting projects at any stage of development, but especially early-stage research and late-stage writing in which small awards are most effective
- Furthering the NEH's commitment to diversity and inclusion in the humanities by encouraging applications from independent scholars and faculty at Hispanic Serving Institutions, Historically Black Colleges and Universities, Tribal Colleges and Universities, and community colleges

Summer Stipends support continuous full-time work on a humanities project for a period of two consecutive months. NEH funds may support recipients' compensation, travel, and other costs related to the proposed scholarly research.

A second recorded webinar focused on application writing tips can be viewed [here](#) and a [PDF version](#) of the presentation slides is also available.

**Award:** Maximum award amount: \$6,000

**Letter of Intent:** Not required

**Proposal Deadline:** Application due September 22, 2021

**Contact:** Contact the Division of Research Programs Team; 202-606-8200; [stipends@neh.gov](mailto:stipends@neh.gov)

---

### **Grant Program: Humanities Connections**

**Agency:** National Endowment for the Humanities 20210914-AKA-AKB

**Website:** <https://www.neh.gov/grants/education/humanities-connections>

**Brief Description:** The Humanities Connections program seeks to expand the role of the humanities in undergraduate education at two- and four-year institutions. Awards support innovative curricular approaches that foster partnerships among humanities faculty and their counterparts in the social and natural sciences and in pre-service or professional programs (such as business, engineering, health sciences, law, computer science, and other technology-driven fields), in order to encourage and develop new integrative learning opportunities for students.

Humanities Connections projects must include:

- substantive and purposeful integration of the subject matter, perspectives, and pedagogical approaches of two or more disciplines (with a minimum of one in and one outside of the humanities)
- collaboration between faculty from two or more departments or schools at one or more institutions
- experiential learning as an intrinsic part of the proposed curriculum
- long-term institutional support for the proposed curriculum innovation(s)

Competitive applications will demonstrate:

- that the proposed curricular project expands the role of the humanities in addressing significant and compelling topics or issues in undergraduate education at the applicant institution(s)
- that these projects develop the intellectual skills and habits of mind cultivated by the study of the humanities
- that faculty and students will benefit from meaningful collaborations in teaching and learning across disciplines as a result of the project

The Humanities Connections program includes two funding levels: **Planning** and **Implementation**

A [pre-application webinar](#) will be hosted on June 30, 2021 at 2:00 p.m. Eastern Time.

**Award:** Maximum award amount up to \$35,000 for Planning; up to \$150,000 for Implementation

**Letter of Intent:** Optional Draft due August 3, 2021

**Proposal Deadline:** Application due September 14, 2021

**Contact:** Contact the Division of Education Programs Team [humanitiesconnections@neh.gov](mailto:humanitiesconnections@neh.gov)

[Back to Contents](#)

---

## [Private Foundations](#)

### **Sony Research Award Program**

#### **Grant Program: Sony Research Award Program**

**Agency:** Sony

**Website:** <https://www.sony.com/en/SonyInfo/research-award-program/#Overview>

**Brief Description:** As part of one of the world's most innovative and recognizable brands, we are committed to support university research and innovation in the U.S., Canada, India, and select European countries, while also fostering partnerships with university faculty and researchers. The Sony Research Award Program provides funding for cutting-edge academic research and helps build a collaborative relationship between faculty and Sony researchers. With awards up to \$150,000 USD\* per year for each accepted proposal, both the Faculty Innovation Award and Focused Research Award create new opportunities for university faculties to engage in pioneering research that could drive new technologies, industries and the future.

**Award:** Focused Research Award: up to \$150K USD; Faculty Innovation Award: up to \$100K USD

**Letter of Intent:** Not required.

**Proposal Deadline:** 11:59 pm PDT (Pacific Daylight Time; UTC-7) on September 15, 2021

**Contact:** C.C. Lee, Ph.D., Senior Vice President, R&D Center U.S. Laboratory,

[ResearchAwardProgram2021@sony.com](mailto:ResearchAwardProgram2021@sony.com)

[Back to Contents](#)

---

### **[Streamlyne Question of the Week](#)**

Question: How can I update my eRA Commons ID for all future NIH proposals?

Answer: Go to Main Menu>Setting>Person Extended Attributes, click "Edit", enter it under "eRA Commons User Name" and submit the change/update.

More FAQs on Streamlyne: Please visit <https://research.njit.edu/streamlyne>

[Back to Contents](#)

---

### **[Proposal Submission and Streamlyne Information](#)** **[Internal Timeline for Successful and Timely Proposal Submission](#)**

Due to the COVID-19 outbreak, PIs are strongly advised to prepare proposals well in advance of agency deadlines. Every effort will be made to meet agency deadlines following the NJIT Research Continuity Plan (<https://research.njit.edu/njit-research-continuity-plan>).

The NJIT Proposal Submission Guidelines and Policy posted on the website <https://research.njit.edu/proposal-submission-guidelines> provides the expected institutional timeline for proposal submission. Streamlyne User Manuals are posted on <https://research.njit.edu/streamlyne>. For contact information on proposal submission, pre-award services and post-award grant management, please visit research website <https://research.njit.edu/researchers> and <https://research.njit.edu/contact>.

[Back to Contents](#)

---