

NJIT Research Newsletter

Issue: ORN-2021-11

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> .

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Special Announcements

**2021 NJIT Integrated Research Virtual Showcase (WebEx)
Research Institutes, Centers and Labs
and
Introduction of FY20 and FY21 New Faculty
March 30, 2021; 9.00 AM -11.30 AM**

The Office of Research will host the **2021 NJIT Integrated Research Virtual Showcase** on March 30, 2021 via WebEx featuring 135 research institutes, centers and labs along with 32 new faculty who joined NJIT in FY20 and FY21. The integrated showcase will start at 9.00 AM with a Distinguished Keynote Talk on "Research, Innovation and Entrepreneurship in Bioscience" by Dr. Colin Brenan, Founder/CEO and Director of the single cell instrumentation company 1CellBio Inc. (www.1cell-bio.com). The keynote

talk will be followed by 3-minutes research pitch presentations by our new FY20 and FY21 faculty as their introductions to NJIT community.

NJIT will publish a booklet with summary descriptions of the NJIT research institutes, centers and labs similar to those published in the past and posted on the website <https://research.njit.edu/research-data-and-publications>. The 2021 booklet will be posted on the website and a link will be sent to Presidents, Provosts and Deans of the top 150 universities in the nation via NJIT Research eNewsletter.

The showcase will provide a unique opportunity to learn about NJIT research enterprise and resources including institutes, centers and labs and faculty expertise towards developing future research collaborations and synergy. Though we will not have individual presentations for the research institutes, centers and labs due to time constraint and virtual format, their summary descriptions will be published in the 2021 booklet, and their ppt slides will be available through a shared database folder on NJIT Google Drive.

NJIT 2021 Integrated Research Showcase: Research Institutes, Centers and Labs, and Introduction of FY20 and FY21 New Faculty

March 30, 2021; 9.00 AM -11.30 AM; Via WebEx

Agenda:

9.00 AM: Welcome Remarks

9.15 AM: Distinguished Keynote Talk

Colin Brenan, Founder/CEO at 1CellBio Inc.

<https://www.linkedin.com/in/colin-brenan-a524bb6/>

10.00 AM: Research Institutes Presentations (3 minutes each)

David Bader, Director, Institute of Data Science

Haimin Wang, Director, Institute of Space Weather Sciences

Michael Ehrlich, Director, Leir Research Institute for Business, Technology, and Society

Farzan Nadim, Director, Institute of Brain and Neuroscience Research

Som Mitra, Director, York Center: York-LSEC-MIC Material Characterization and Device Fabrication Research Resource

10.20 AM: New Faculty Research Pitch Presentations (3 minutes each)

NCE:

Fatemeh Ahmadpoor, Assistant Professor, MIE

Samaneh Farokhirad, Assistant Professor, MIE

Jon Grasman, Assistant Professor, BME

William Pennock, Assistant Professor, CEE

Joshua Young, Assistant Professor, CME

Lin (Aileen) Dong, Assistant Professor, MIE

Alex Dytso, Assistant Professor, ECE

Philip Pong, Associate Professor, ECE

Chang Yaramothu, Assistant Professor, SAET

Meng-Qiang (Mark) Zhou, Assistant Professor, CME

CSLA:

Omowunmi Sadik, Distinguished Professor and Chair, CES

Julie Ancis, Professor, HUM

Zuofeng Shang, Assistant Professor, MATH

Farnaz Shakib, Assistant Professor, CES

Xiaonan Tai, Assistant Professor, BIOL
Junjie Yang, Assistant Professor, PHY
Michael Eberhart, Assistant Professor, CES
Yelda Semizer, Assistant Professor, HUM
Amir Khashayar Varkouhi, Assistant Professor, CES

YWCC:

Cody Buntain, Assistant Professor, INF
Salam Daher, Assistant Professor, INF
Pan Xu, Assistant Professor, CS
Przemyslaw Musialski, Assistant Professor, CS
Mark Cartwright, Assistant Professor, INF

MTSM:

Aichih (Jasmine) Chang, Assistant Professor, MTSM
Alberto Martin-Utrera, Assistant Professor, MTSM

HCAD:

Hyojin Kim, Associate Professor, HCAD

12.30 PM: Closing Remarks.

Speaker Biographical Sketch: Colin J.H. Brenan is a serial life sciences entrepreneur and senior executive with over 30 years of experience in building high growth, early-stage life science companies based on in-licensed university research. Dr. Brenan is presently Founder/CEO and Director of the single cell instrumentation company 1CellBio Inc. (www.1cell-bio.com); formerly Founder/Chief Commercial Officer and Director of antibody drug developer HiFiBio Ltd (www.hifibio.com); and, a Managing Partner of the seed stage investment fund 7Pines Holding BV. Previously he was Managing Director of the Monsanto-Atlas Seed Fund Alliance at Atlas Venture (Cambridge, USA) where he identified and invested in seed and early-stage life science companies. Prior to Atlas, Dr. Brenan was Director of Strategic Relationships for the Center for Integration of Medicine and Innovative Technology (CIMIT) – a Partners Healthcare innovation center (Boston, MA).

Before joining CIMIT, Dr. Brenan was the Founder, Chief Technology Officer, SVP, Business Development and a Director of BioTrove Inc. (Woburn, USA), a life science nanofluidic tools company spun-out from the Massachusetts Institute of Technology (MIT) and acquired by Life Technologies Inc. (LIFE:NASDAQ); and a Founder of Biocius Inc., a drug discovery instrument and service provider spun-out from BioTrove and acquired by Agilent Inc. (A:NYSE).

Dr. Brenan is the inventor on 26 US patents, 27 non-US patents, +60 patent applications and published +50 peer-reviewed journal articles, book chapters and reports in the fields of bio-microsystems, confocal microscopy, spectroscopic imaging, drug discovery and microsurgical robotics. He has over a decade of experience in consulting for the US National Institutes of Health and is a reviewer for IEEE, IEE, and AIP journals. Dr. Brenan is an IEEE Senior Member, serves currently as the IEEE-EMBS VP of Technical Activities and is formerly Editor-in-Chief of IEEE PULSE Magazine. He received his B.Sc. (Honors Physics), M. Eng. (Electrical), and Ph.D. (Biomedical Engineering) from McGill University (Montreal, Canada) and completed postdoctoral training at MIT (Cambridge, USA).

2021 NJIT Integrated Research Showcase WebEx Event Log-In Information for Attendees:

CONNECT with COMPUTER:

Click this link:

<https://njit.webex.com/njit/onstage/g.php?MTID=ebf764c2768d547f59e4dbe5217c892a2>

OR (alternatively)
Go to: njit.webex.com
Enter meeting number: 120 297 0264 Hit Enter.
Enter your name, email, and Event password: Meeting password: **NJIT** (all uppercase)
Click "Join Now"

CONNECT with TELEPHONE:

Call: 1-650-479-3207; Enter meeting number: 120 297 0264 followed by #
Then, for Attendee ID number, hit #

U.S-Israel Binational Science Foundation (BSF)
NSF-BSF Joint Funding Research Grants
BSF Research Grants
Start-Up Research Grants

<https://www.bsf.org.il/funding-opportunities/>

In 2012, the BSF signed an umbrella Memorandum of Understanding with the U.S. National Science Foundation (NSF), for cooperation in joint funding of collaborative U.S.-Israeli scientific research. Consequently, the BSF signed a series of specific Memorandum of Understanding (MOU) and Letter of Intent (LOI) with a number of NSF units, for the joint funding of collaborative research programs. Presently, BSF has joint programs with all of the NSF grant making directorates and in each, with all or most divisions.

Financial support for the U.S. scientists in the joint NSF-BSF funding programs comes from the internal resources of the NSF, as part of its regular activity. The NSF does not set aside any money for these collaborations, and they are part of the core programs of the relevant divisions. Financial support for the Israeli scientists in these programs is from annual allocations from the Israeli Committee for Planning and Budgeting (CPB). CPB funds are specifically to support the Israeli researchers in the NSF-BSF programs, and they do not affect the traditional BSF programs. The latter are funded from an endowment that the two governments formed many years ago, and serves to fund both U.S. and Israeli scientists. Therefore, the BSF Research Grants program and the NSF-BSF programs cannot be unified, as is sometimes suggested.

- **Foundational Research in Robotics.** This program has no deadline. You can find more details in our call for proposals [here](#).
- **Cyber-Physical Systems-** This program has no deadline. You can find more details in our call for proposals [here](#).
- **Mathematical and Scientific Foundations of Deep Learning.** Deadline for application by the U.S. partner to the NSF is May 12, 2021 and by the Israeli partner to the BSF is May 18, 2021. You can find more details in our call for proposals [here](#).

More information on NSF-BSF grant funding opportunities in specific areas are listed at the Foundation subsection of the Grant Opportunities section in this Research Newsletter.

NIH Proposal Submission Changes to the Biographical Sketch and Other Support Format Pages

NOT-OD-21-073: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-073.html>

NIH has updated “Biosketch” and “Other Support” forms and instructions. The updated forms will be required for use for applications and Research Performance Progress Reports (RPPR) submitted for due dates on or after May 25, 2021. Please use the following links to access the updated forms and instructions.

New Biosketch Page Format: <https://grants.nih.gov/grants/forms/biosketch.htm>

Prepare biographical sketches for applications and progress reports for all applications and awards, except fellowships.

[Non-fellowship Biosketch \(blank format page, Word\)](#)

[Instructions for Biographical Sketch](#)

- [SAMPLE: Non-fellowship biosketch](#)
- [FAQs](#)

Try [SciENcv](#) to help you develop your biosketch and automatically format it according to NIH requirements. The updated biosketch format will be available in SciENcv March 2021.

[Fellowship Biosketch](#) (blank format page, Word)

[Instructions for Biographical Sketch](#)

- [Predoctoral Fellowship biosketch sample](#) (Word)
- [Postdoctoral Fellowship biosketch sample](#) (Word)

Try [SciENcv](#) to help you develop your biosketch and automatically format it according to NIH requirements.

New Other Support Page Format: <https://grants.nih.gov/grants/forms/othersupport.htm>

Unless otherwise stated in the funding opportunity announcement, Other Support information is requested as part of the Just-in-Time process in the post-submission, pre-award cycle.

[Other Support format page](#) (blank format page, Word)

See [NIH Other Support Instructions](#)

- [Other Support sample](#)
- [FAQs](#)

NIH is finalizing the SciENcv template for Other Support.

New Jersey Alliance for Clinical and Translational Science (NJ ACTS) Spring 2021 Professional Training Sessions

The New Jersey Alliance for Clinical and Translational Science (NJ ACTS: <https://njacts.rbhs.rutgers.edu/>) is committed to advancing clinical and translational science to develop new therapies and treatments and improve health and health care in New Jersey. The NJ ACTS Workforce Development Core provides a broad diversity of programs and initiatives in clinical and translational science for the spectrum of investigators, scientists, graduate students, and clinical research professionals working in these fields.

Interested in expanding your knowledge of clinical and translational science, please join us for the two sessions in four-part training series geared to the advancement of clinical and translational research within a diverse workforce:

- Standing Out with an Engaging LinkedIn Profile Tuesday, March 23, 2021
- Communicating Your Translational Science Monday, April 05, 2021.

TO REGISTER: CLICK <https://www.jotform.com/form/210397736756164>

For more information about the training series, please contact Yasheca Ebanks, NJACT Project Manager at Yasheca Ebanks yebanks@shp.rutgers.edu.

NJIT Pandemic Recovery Plan Research Continuity and Phased Recovery Plan

<https://research.njit.edu/njit-pandemic-recovery-plan>

NJIT faculty, staff, and students at research facilities must follow the specific social distancing and safety protocols including the use of personnel protective equipment (PPE) as required by the institutional, state and federal guidelines in the respective phase of the research continuity plan. Details on NJIT Research Continuity and Phased Recovery Plan and associated protocols are posted on the website <https://research.njit.edu/njit-pandemic-recovery-plan>

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Grant Opportunity Alerts

Keywords and Areas Included in the Grant Opportunity Alert Section Below

NSF: NSF Convergence Accelerator Program; Broadening Participation in Computing (BPC); Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS); Scholarships in STEM Network (S-STEM-Net); NSF Boosting Research Ideas for Transformative and Equitable Advances in Engineering (BRITE)

NIH: Support for Research Excellence – First Independent Research (SuRE-First) (R16); Exploratory Data Science Methods and Algorithm Development in Infectious and Immune-mediated Diseases (R21); BRAIN Initiative: Integration and Analysis of BRAIN Initiative Data (R01); NINDS Institutional Research Training Program (T32)

Department of Defense/US Army/DARPA/ONR: PRMRP Investigator Initiated Research Award; Defense University Research Instrumentation Program (DURIP); Waveform Agile RF Directed Energy (WARDEN); Science & Technology for Advanced Manufacturing Projects (STAMP)

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

Department of Agriculture: Data and Technical Assistance (DATA) Grants Program; Agriculture and Food Research Initiative - Foundational and Applied Science

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

Department of Commerce/EDA: NOAA Science Collaboration Program; 2021 Build to Scale Program; Measurement Science and Engineering (MSE) Research Grant Programs; FY2021 to FY2023 NOAA Broad Agency Announcement (BAA)

EPA: FY 2021 National Environmental Information Exchange Network Grant Program
Department of Energy: Data Science to Advance Chemical and Materials Sciences; Integrated Computational and Data Infrastructure (ICDI) for Scientific Discovery; ARPA-E OPEN 2021
NASA: ROSES 2021: Heliophysics Mission Concept Studies; ROSES 2021: Living With a Star Science; New (Early Career) Investigator Program in Earth Science; Earth Science Applications: Health and Air Quality; Advanced Information Systems Technology
National Endowment of Humanities: Digital Projects for the Public; Humanities Initiatives; Research and Development; Awards for Faculty
Private Foundations: U.S-Israel Binational Science Foundation (BSF); NSF-BSF Joint Funding Research Grants; BSF Research Grants; Start-Up Research Grants

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Recent Research Grant and Contract Awards

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

PI: Boris Khusid (PI)

Department: Chemical and Material Engineering

Grant/Contract Project Title: Stability of In-Space Cryogenic Systems

Funding Agency: NASA

Duration: 01/20/21-01/19/23

PI: Sergei Adamovich (PI)

Department: Center for Rehabilitation Robotics

Grant/Contract Project Title: Utilizing Gaming Mechanics to Optimize to Optimize Telerehabilitation Adherence in Persons with Stroke

Funding Agency: NIH

Duration: 04/01/19-03/31/22

PI: Hao Chen (PI)

Department: Chemistry and Environmental Sciences

Grant/Contract Project Title: Determination and Characterization of Sn(II), Sn(III) and Sn(IV) Species by Electrochemical Mass Spectrometry

Funding Agency: Colgate-Palmolive Company

Duration: 03/05/21-03/04/22

PI: Saikat Pal (PI)

Department: Biomedical Engineering

Grant/Contract Project Title: Evaluation of an Ankle Foot Orthosis to Minimize Drop Foot

Funding Agency: TurboMed Orthotics, Inc.

Duration: 09/01/21-08/31/22

PI: Hyomin Kim (PI) and Bin Chen (Co-PI)

Department: Institute of Space Weather Sciences

Grant/Contract Project Title: REU Site: Solar, Terrestrial, and Space Weather Sciences at New Jersey Institute of Technology

Funding Agency: NSF
Duration: 03/15/21-02/29/24

PI: Treena Arinzeh (PI)
Department: Biomedical Engineering
Grant/Contract Project Title: A Novel Glycosaminoglycan Mimetic Scaffold for Cartilage Repair
Funding Agency: NIH
Duration: 03/16/21-02/28/26

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[In the News...](#)

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

Pandemic Impact on Grants Management: EI Systems, the George Washington University, and the National Grants Management Association recently presented the results of their fifth annual grants management survey to an audience of more than 350 grant managers. Those survey results included some that could be easily foreseen, and some big surprises. All of the results have important implications for federal managers and policy-makers.

Among the easily foreseen results: COVID-19 has had a big impact on grant management and grant managers have a hard time measuring performance.

The surprises illustrate the challenges grantors face:

- Administrative costs for grant management spiked in 2020.
- Although compliance is still the biggest focus of grant manager time and effort, technology innovation holds promise for reducing that burden.
- A majority of respondents said COVID-19 significantly impacted performance.

More information is posted on the [GovExec website](#).

Energy Commits \$30 Million to Advance Quantum Tech: With strategic [aims](#) to drive new breakthroughs in quantum information science, the Energy Department recently launched a [funding opportunity](#) to award \$30 million across its Nanoscale Science Research Centers, or [NSRCs](#). Those five national user facilities host more than 3,700 researchers from academia, national laboratories and industry each year—supporting studies into matter at an extraordinarily small scale.

Through the [emerging field of QIS](#), scientists seek to harness intricate properties of extremely tiny particles to pave the way for game-changing new approaches to computing, sensing, communication, metrology and more. It [aligns well](#) with the overall mission of Energy’s BES program, which formally issued this funding opportunity. According to the announcement, BES’ aim “is to support fundamental research to understand, predict, and ultimately control matter and energy at the electronic, atomic, and molecular levels to provide the foundations for new energy technologies and to support DOE missions in energy, environment, and national security.” More information is posted on the [NextGov website](#).

DARPA Announces Microelectronics Program to Boost Domestic Manufacturing of Certain Chips:

The Defense Advanced Research Projects Agency announced a program for expanding the access to domestic manufacturing capabilities for secured microelectronics development for defense systems, according to Thursday press releases. The Structured Array Hardware for Automatically Realized Applications, or SAHARA, program will enable the automated and scalable conversion of field-

programmable gate array designs into Application Specific Integrated Circuit, or ASIC, platforms for defense needs, according to a [DARPA press release](#). Intel will work with researchers from the University of Florida, University of Maryland, and Texas A&M, in a three-year partnership under the SAHARA program, according to [an Intel press release](#).

FPGAs need to be converted to structured ASICs for performance reasons, according to the release. FPGAs are used in military applications, but ASICs work better and consume less power. But at present, conversion is costly, particularly for the number of Defense Department applications that would require custom chips, according to the release. SAHARA aims to solve this issue and add security benefits, all while manufacturing in the U.S. to maintain supply chain security.

The program supports DOD's microelectronics roadmap alongside other programs including the [Rapid Assured Microelectronics Prototypes-Commercial](#) and State-of-the-Art Heterogeneous Integration Prototype projects, according to the release. Microelectronics, along with other key technology areas like 5G, biotechnology, and cyber, is one of the undersecretary of defense for research and engineering's [modernization priorities](#). More information is posted on the [NextGov website](#).

Need for Ethics After Defense Commission Releases Final AI Report: Michèle Flournoy, former undersecretary of defense for policy, called the National Security Commission on Artificial Intelligence's final report "probably the most important commission report since the 9/11 Commission" days after commissioners testified on the report before Congress. "I think they nailed it in terms of analyzing the importance of the United States stepping up to compete in AI both for the commercial, economic applications and what that means for our competitiveness economically around the world, but also because of the potential military applications," Flournoy said during a Tuesday Center for New American Security webinar.

"While the United States has enjoyed technology leadership in other areas, we'll quickly fall behind if action is not taken to heed the call plainly made in [the] final report from the National Security Commission on Artificial Intelligence," Steve Escaravage, who leads Booz Allen's analytics practice and AI services business, said. "I was most struck by the report's sobering call that our military may lose 'military-technical superiority' in a relatively short time if we do not alter course."

Van Buren, who is executive director of Deloitte's [newly established Deloitte Artificial Intelligence Institute for Government](#), said it is critical to commit resources and talent to AI.

"The recommendations in this report, including the establishment of a National Technology Foundation, serve as guiding light for how to propel US innovation around leading-edge technologies," Van Buren said. More information is posted on the NextGov website.

FAA, Choctaw Nation to Conduct Drone Studies: The Federal Aviation Administration recently teamed up with the Choctaw Nation to investigate how drones can move goods at lower altitudes. A [three-year memorandum of understanding](#) was recently signed by FAA's Mike Monroney Aeronautical Center, or MMAC, and the Choctaw Nation of Oklahoma. Through it, the partners will conduct unique, drone-driven research and simultaneously support students looking to pursue careers in this arena. "A best-case outcome would be the demonstration of government-to-government collaboration, where a federal agency and tribal government can collaborate to promote technology," an FAA spokesperson told *Nextgov* over email Thursday. "We expect this collaboration to have real impacts on emerging aviation industries, including advanced aerial mobility." As part of the research, the two will virtually simulate an array of conditions. More than 44,000 acres of tribally-owned land make up the Choctaw Nation's emerging aviation test range, the agency official confirmed. The property encompasses flat land, hills and valleys—enabling those involved to stage operations on versatile landscapes. More information is posted on the [NextGov website](#).

DARPA Building Special Chips for Data Privacy Protection: The Defense Advanced Research Agency awarded four research teams multimillion-dollar contracts to figure out how to build hardware and software stacks capable of cutting down the amount of time and power required to perform computations on encrypted data. The four performers for DARPA's Data Protection in Virtual Environments program aim to build silicon chips capable of supporting Fully Homomorphic Encryption, which enables users to compute and analyze data without exposing it to compromise by decrypting it. More information is posted on the [NextGov website](#).

Defense Task Force to Focus on Legislative Solutions for Supply Chain Chokepoints: A new task force will look for legislative tools that could be included in the next National Defense Authorization Act to ensure the Defense Department is protected from vulnerabilities created by unstable supply chains. House Armed Services Committee leaders last week announced the formation of the Defense Critical Supply Chain Task Force, which will operate for three months and create a concise report pulling together ideas for legislative fixes to shore up the defense supply chain. Reps. Elissa Slotkin, D-Mich., and Mike Gallagher, R-Wisc., who head the task force, outlined their vision for the task force during a Wednesday press call. The task force functions as a sort of legislative companion to executive branch efforts covering the same topic. President Joe Biden [recently signed an executive order](#) requiring reviews of critical supply chains, including for the defense industrial base and information and communications technologies sectors. More information is posted on the [NextGov website](#).

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Webinar and Events

Event: DMS Virtual Office Hours

Sponsor: NSF

When: March 22, 2021 3:00 PM to 4:00 PM

Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=302227&org=NSF

Brief Description: The Division of Mathematical Sciences (DMS) is hosting virtual office hours to share information about NSF's current operations and to provide guidance to the mathematical sciences community. All members of the mathematical sciences research community interested in the work of DMS are welcome to attend. Virtual office hours are held at roughly monthly intervals; topics vary. The event will be in the form of a webinar, starting with a brief presentation of selected current topics, with DMS program directors available to answer questions from the community.

To Join the Webinar: Participants should register (and may do so in advance) at the web page https://nsf.zoomgov.com/webinar/register/WN_xltqtjhmRt6RnFg3ehMshA

Event: Predictive Intelligence for Pandemic Prevention (PIPP) Webinars

Sponsor: NSF

When: March 22, 2021 12:00 PM to March 23, 2021 5:00 PM

Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=302023&org=NSF

Brief Description: The Directorates for Biological Sciences (BIO); Computer Information Science and Engineering (CISE); Engineering (ENG); Social, Behavioral and Economic Sciences (SBE); and the Office of International Science and Engineering (OISE) at the National Science Foundation (NSF) are jointly supporting a series of interdisciplinary workshops to engage research communities around the topic of **Predictive Intelligence for Pandemic Prevention**. This topic arises both from fundamental scientific questions and pressing societal needs. Consequently, NSF is holding a series of virtual

workshops that bring together interdisciplinary experts in the **biological, engineering, computer, and social and behavioral sciences** to start conversations and catalyze ideas on how to advance scientific understanding beyond state-of-the-art in pre-emergence and emergence forecasting, real-time monitoring, and detection of inflection point events in order to prevent and mitigate the occurrence of future pandemics. These goals will be met through integration of fundamental science and engineering advances related but not limited to: synergistic biological interactions spanning molecular, organismal, and epidemiological scales; computational algorithms and frameworks for intelligent processing, analyzing and modeling of data; multiscale smart bio-sensing technologies, networked sensors, in-situ computation; understanding disease transmission due to human social behavior and attitudes and the drivers underlying both. As per our mission, these NSF supported workshops will focus on the foundational knowledge and capabilities needed to inform future infectious disease outbreak prediction and pandemic prevention.

To Join the Webinar: Please register using the above URL.

Event: NSF Electronic Research Administration (ERA) Forum Webinar

Sponsor: NSF

When: March 31, 2021 1:30 PM to 3:00 PM

Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=302272&org=NSF

Brief Description: The purpose of the ERA Forum is to gather individual opinions and perspectives around NSF ERA activities. This open Forum is also used to present proposed solutions, collect feedback, understand how solutions may impact the research community, and solicit volunteers for testing.

The topics for this Forum will cover *Research.gov Modernization Updates and Proposal Preparation Demo Site: Available Functionalities for Proposers, Federal Awardee Performance and Integrity Information System (FAPIS), and Unique Entity Identifier (UEI)*.

We encourage you to send questions ahead of the March 31, 2021 event. Questions may be submitted to nsferaforum@nsf.gov.

To Join the Webinar: To participate in this event, please [Register Now](#).

Event: 2021 NSF Engineering CAREER Proposal Writing Workshop

Junior faculty must apply by February 19, 2021, to participate in the mock panel review session

Sponsor: NSF

When: April 21, 2021; 1:00 PM - 5:00 PM

April 22, 2021; 1:00 PM - 5:00 PM

April 23, 2021; 1:00 PM - 5:00 PM

Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=302095&org=NSF

Brief Description: The 2021 NSF Engineering CAREER Proposal Writing Workshop will be held VIRTUALLY April 21-23, 2021, from 1:00PM to 5:00PM ET each day. The workshop aims to provide junior faculty who plan to submit a CAREER proposal to a program in the NSF [Directorate for Engineering \(ENG\)](#) with a CAREER proposal review experience and a forum in which they can interact with NSF Program Directors and recent NSF CAREER awardees.

Attendees of the 2021 NSF ENG CAREER Proposal Writing Workshop will benefit from:

- Mock proposal reviews by panels
- Interactions with ENG Directorate Program Directors
- Focus sessions with recent CAREER awardees
- Interaction across disciplines and engineering schools nationwide

All activities for the 2021 NSF ENG CAREER Proposal Writing Workshop will be conducted virtually. The Mock Panel Review session is limited to 300 participants; however, all other sessions will

be open. Mock Panel participants will be selected from those who submit completed applications. **The deadline for applications is February 19, 2021.**

To Join the Webinar: Visit <https://apply.hub.ki/career/> for details.

Event: Robotics Program Webinar for CAREER Principal Investigators

Sponsor: NSF

When: April 26, 2021, 3.00 PM – 4.30 PM

Website: https://www.nsf.gov/events/event_summ.jsp?cntn_id=302318&org=NSF

Brief Description: The [Foundational Research in Robotics program](#) is holding a webinar for prospective [CAREER](#) principal investigators on April 26, 2021, starting at 3:00 PM Eastern Time.

To Join the Webinar: Please register in advance and submit your questions at: https://nsf.zoomgov.com/webinar/register/WN_Js6oOXw9RweqvK5u4b47_g

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[Grant Opportunities](#)

[National Science Foundation](#)

Grant Program: NSF Convergence Accelerator Phases I and II for the 2021 Cohort

Agency: National Science Foundation NSF 21-572

RFP Website: <https://www.nsf.gov/pubs/2021/nsf21572/nsf21572.htm>

Brief Description: The NSF Convergence Accelerator program addresses national-scale societal challenges through use-inspired [convergence research](#). Using a convergence approach and innovation processes like human-centered design, user discovery, and team science and integration of multidisciplinary research, the Convergence Accelerator program seeks to transition basic research and discovery into practice—to solve high-impact societal challenges aligned with specific research themes (tracks).

NSF Convergence Accelerator tracks are chosen in concordance with the themes identified during the program’s ideation process that have the potential for significant national impact. The NSF Convergence Accelerator implements a two-phase program. Both phases are described in this solicitation and are covered by this single solicitation and corresponding Broad Agency Announcement. The link to the Broad Agency Announcement can be found [here](#). The purpose of this parallel activity is to provide increased opportunities for proposals that are led by non-academic entities. Proposals that are led by Institutions of Higher Education (IHEs), non-profits, independent museums, observatories, research labs, professional societies and similar organizations should respond to this solicitation. Proposals led by for-profit or similar organizations should respond to the BAA. Phase I awardees receive significant resources to further develop their convergence research ideas and to identify important partnerships and resources to accelerate their projects, leading to deliverable research prototypes in Phase II.

This solicitation for FY 2021 invites proposals for the following Track Topics:

Networked Blue Economy (Track E): The overarching goal of Track E is to interconnect the Blue Economy and accelerate convergence across ocean sectors. This track aims to create a smart, integrated, connected, and open ecosystem for ocean innovation, exploration, and sustainable utilization.

Trust & Authenticity in Communications Systems (Track F): The overarching goal of Track F is to develop prototype(s) of novel research platforms forming integrated collection(s) of tools, techniques, and educational materials and programs to support increased citizen trust in public information of all sorts

(health, climate, news, etc.), through more effectively preventing, mitigating, and adapting to critical threats in our communications systems.

Letters of Intent should identify a team with the appropriate mix of disciplinary and cross-sector expertise required to build a convergence research effort. Letters of Intent must identify one or more deliverables, how those research outputs could impact society at scale, and the team that will be formed to carry this out. Phase I proposals must describe the deliverables, a research plan, and the process of team formation that will help lead to a proof-of-concept during Phase I.

If selected, Phase I awards may receive funding up to \$750,000 for 12 months duration, of which nine months includes intense hands-on activities, centering around the Program's innovation curriculum (for additional details regarding the innovation curriculum refer to section V.A.), and three months of other activities such as participation in the NSF Convergence Accelerator Pitch Presentations and Expo.

Only awardees of Phase I awards under this solicitation may submit a Phase II proposal. Phase II proposals must outline a 24-month research and development plan that transitions research into practice through convergence activities, multi-sector partnerships, and collaboration with other partners and end-users. Phase II awards may be up to \$5 million for 24 months.

Awards: Standard Grant or Cooperative Agreement; Anticipated Funding Amount: \$22,000,000

Letters of Intent: Proposers are required to submit a Letter of Intent by May 05, 2021 in order to submit a Phase I Full Proposal.

Proposal Submission Deadline: June 14, 2021 for Phase I Full Proposals

May 25, 2022 for Phase II Full Proposals, only Phase I awardees are eligible to apply

Contacts: Chaitanya K. Baru, telephone: (703) 292-2473, email: cbaru@nsf.gov

- Lara A. Campbell, telephone: (703) 292-7049, email: lcampbel@nsf.gov
- Pradeep P. Fulay, telephone: (703) 292-2445, email: pfulay@nsf.gov

Grant Program: Broadening Participation in Computing (BPC)

Agency: National Science Foundation NSF 21-571

RFP Website: <https://www.nsf.gov/pubs/2021/nsf21571/nsf21571.htm>

Brief Description: The Broadening Participation in Computing program (BPC) aims to significantly increase the number of U.S. citizens and permanent residents receiving post-secondary degrees in the computing disciplines, and to encourage participation of other underrepresented groups in the discipline. These groups may include women, persons with disabilities, Blacks and African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, and Pacific Islanders. With this solicitation, the BPC program seeks to engage the computing community to develop and implement innovative methods, frameworks, and strategies to improve recruitment and retention of these students through undergraduate and graduate degrees. Projects that target stages of the academic pipeline through faculty ranks are encouraged. All BPC projects must have the potential for widespread, national impact. That is, they should either develop an effective practice that could be widely deployed, or they should deploy existing effective practices to reach larger audiences.

The BPC program will support three categories of awards: Alliances, Demonstration Projects, and Supplements.

Alliances are broad coalitions of academic institutions of higher learning, K-12 schools, government, industry, professional societies, and other not-for-profit organizations that design and carry out comprehensive programs addressing underrepresentation in the computing disciplines. They have a large regional or national scope. Alliances operate across multiple stages of the academic pipeline and address one or several intended groups that are underrepresented. Collectively, Alliances serve as a national resource for achieving the transformation of computing education.

Demonstration Projects (DPs) are more focused than Alliance projects. Typical DPs pilot innovative programs that, once fully developed, could be incorporated into the activities of an existing or new Alliance, or otherwise scaled up for widespread impact. Examples include projects proposed by a single institution or those that focus on a single underrepresented community, a single point in the academic pathway, or a single impediment to full participation in computing. Demonstration projects should contribute knowledge to our understanding of effective teaching and learning of computing for students from groups underrepresented in computing.

Both Alliances and Demonstration Projects have significant evaluation efforts with both formative and summative components. Competitive projects will have significant impact both in the quality of opportunities afforded to participants and in the number of participants potentially served.

Awards: Standard Grant or Cooperative Agreement; Anticipated Funding Amount: \$12,750,000

Letters of Intent: Not Required

Proposal Submission Deadline: June 14, 2021

Contacts: Jeffrey Forbes, Program Director, CISE/CNS, telephone: (703) 292-8950, email: jforbes@nsf.gov

- Fay Cobb Payton, Program Director, CISE/CNS, telephone: (703) 292-7939, email: fpayton@nsf.gov
- Allyson Kennedy, Program Director, CISE/CNS, telephone: (703) 292-8950, email: aykenned@nsf.gov

Grant Program: Launching Early-Career Academic Pathways in the Mathematical and Physical Sciences (LEAPS-MPS)

Agency: National Science Foundation NSF 21-569

RFP Website: <https://www.nsf.gov/pubs/2021/nsf21569/nsf21569.htm>

Brief Description: With emphasis in helping to launch the careers of pre-tenure faculty in Mathematical and Physical Sciences (MPS) fields at minority-serving institutions (MSIs), predominantly undergraduate institutions (PUIs), and Carnegie Research 2 (R2) universities, and with the goal of achieving excellence through diversity, the Directorate for Mathematical and Physical Sciences hereby announces a call for Launching Early-Career Academic Pathways (LEAPS-MPS) proposals. This LEAPS-MPS call also aims to broaden participation to include members from groups underrepresented in the Mathematical and Physical Sciences, including Blacks and African Americans, Hispanics, Native Americans, Alaska Natives, and Native Hawaiians, and other Pacific Islanders.

These grants are intended to support MPS principal investigators in initiating their research programs early in their careers, particularly at the aforementioned institutions. By providing this funding opportunity, MPS intends to help initiate viable independent research programs for researchers attempting to launch their research careers such that LEAPS-MPS awards are followed by competitive CAREER or individual-investigator grant submissions that build upon the research launched through this mechanism. This LEAPS-MPS solicitation welcomes proposals from principal investigators who share NSF's commitment to diversity.

Awards: Standard Grant or Cooperative Agreement; Anticipated Funding Amount: \$5,000,000

Letters of Intent: Not Required

Proposal Submission Deadline: June 14, 2021

Contacts: Sarah Higdon (AST), telephone: (703) 292-2541, email: shigdon@nsf.gov

- Rebecca Peebles (CHE), telephone: (703) 292-8809, email: rpeebles@nsf.gov

Grant Program: Scholarships in STEM Network (S-STEM-Net) — S-STEM Resource and Evaluation Center and S-STEM Research Hubs

Agency: National Science Foundation NSF 21-569

RFP Website: <https://www.nsf.gov/pubs/2021/nsf21569/nsf21569.htm>

Brief Description: Through this solicitation, NSF seeks to foster a network of S-STEM stakeholders and further develop the infrastructure needed to generate and disseminate new knowledge, successful practices and effective design principles arising from NSF S-STEM projects nationwide. The ultimate vision of the legislation governing the S-STEM parent program¹ (and of the current S-STEM-Net solicitation) is that all Americans, regardless of economic status, should be able to contribute to the American innovation economy if they so desire.

To support collaboration within the S-STEM network, NSF will fund two types of investments: An S-STEM Resource and Evaluation Center (S-STEM-REC) and several S-STEM Research Hubs (S-STEM-Hub). The S-STEM Network (S-STEM-Net) will collaborate to create synergies and sustain a robust national ecosystem consisting of multi-sector partners supporting domestic low-income STEM students in achieving their career goals, while also ensuring access, inclusion, and adaptability to changing learning needs. This network will also synthesize current achievements and investigate evolving barriers to the success of this student population. It will also disseminate the context and circumstances by which interventions and practices that support graduation of domestic low-income students pursuing careers in STEM are successful.

The target audience for this dissemination effort is the community of higher education institutions, faculty, scholars, researchers and evaluators, local and regional organizations, industry, and other nonprofit, federal, state, and local agencies concerned with the success of domestic low-income STEM students in the United States.

Awards: Standard Grant or Cooperative Agreement; Anticipated Funding Amount: \$45,000,000

S-STEM-REC – one award, as a cooperative agreement.

S-STEM-Hub – up to 10 awards, as standard grants.

Letters of Intent: Required by April 16, 2021

Proposal Submission Deadline: June 16, 2021

Contacts: Alexandra Medina-Borja, Lead, telephone: (703) 292-7557, email: amedinab@nsf.gov

- Thomas D. Kim, Co-Lead, telephone: (703) 292-4458, email: tkim@nsf.gov
- Michael J. Ferrara, Co-Lead, telephone: (703) 292-2635, email: mferrara@nsf.gov

Grant Program: NSF Boosting Research Ideas for Transformative and Equitable Advances in Engineering (BRITE)

Agency: National Science Foundation NSF 21-568

RFP Website: <https://www.nsf.gov/pubs/2021/nsf21568/nsf21568.htm>

Brief Description: The National Science Foundation's strategic goals are to expand knowledge and build capacity for a diverse science and engineering workforce [1,2]. The goal of this solicitation is to enable and create opportunities to advance scientific discoveries and new research using a variety of approaches that harness the national talent ecosystem of experienced faculty. Recognizing that a successful faculty research career is neither linear nor continuous, this BRITE solicitation seeks proposals that enable experienced researchers and scholars (tenured or equivalent) to forge new directions or to enter new fields by capitalizing or branching out of their established knowledge domains.

All BRITE proposals are expected to address fundamental research that creates new knowledge in one or more CMMI program areas. BRITE proposals must identify key research outcomes and describe the research plans for the period of funding sought. Although collaborative proposals are not permitted and will be returned without review, the PI can include a collaborator in a limited role as senior personnel.

Awards: Standard Grant; Anticipated Funding Amount: \$10,000,000

Letters of Intent: Not Required

Proposal Submission Deadline: May 25, 2021

Contacts: Nakhiah C. Goulbourne, telephone: (703) 292-7715, email: brite@nsf.gov

- Laurel C. Kuxhaus, telephone: (703) 292-4465, email: brite@nsf.gov
- Siddiq M. Qidwai, telephone: (703) 292-2211, email: brite@nsf.gov

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National Institutes of Health

Grant Program: Support for Research Excellence – First Independent Research (SuRE-First) Award (R16 - Clinical Trial Not Allowed)

Agency: National Institutes of Health PAR-21-173

RFP Website: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-173.html>

Brief Description: The SuRE program supports research capacity building at institutions that enroll significant numbers of students from backgrounds nationally underrepresented in biomedical research (see [NOT-OD-20-031](#)), award baccalaureate and/or graduate degrees in biomedical sciences, and receive limited NIH [Research Project Grant](#) funding. It seeks to develop and sustain research excellence of faculty investigators and provide students with research opportunities while catalyzing institutional research and enriching the research environment. The SuRE program will support investigator-initiated research in the biomedical, clinical, behavioral and social sciences (collectively termed "biomedical" sciences) that falls in the mission areas of NIH Institutes, Centers, and Offices. Research activities funded by the SuRE program require participation by students. Two distinct funding opportunity announcements will be utilized to support research projects led by faculty investigators at different career stages. A third SuRE funding opportunity announcement will support a national resource center to provide infrastructure development to SuRE-eligible institutions and application services to faculty investigators.

Awards: Applications may request up to \$125,000 direct costs/year.

Letter of Intent: Not required

Proposal Submission Deadline: September 28, 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.

Contact: Lawrence Agodoa, M.D., FACP; National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); Phone: (301) 594-9650; Email: AgodoaL@extra.niddk.nih.gov

Grant Program: Exploratory Data Science Methods and Algorithm Development in Infectious and Immune-mediated Diseases (R21 Clinical Trial Not Allowed)

Agency: National Institutes of Health RFA-AI-21-035

RFP Website: <https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-21-135.html>

Brief Description: This R21 FOA will support applications focused on the development of novel computational, mathematical, and statistical algorithms and methods, including artificial intelligence and machine learning approaches, that can considerably improve acquisition, management, analysis, visualization, and dissemination of relevant data and/or knowledge in infectious or immune-mediated

diseases. The proposed data science method or algorithm must be novel and benefit [NIAID's](#) overall research mission.

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

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

Proposal Submission Deadline: July 02, 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.

Contact: Steve Tsang, PhD; National Institute of Allergy and Infectious Diseases ([NIAID](#)); Telephone: 240-627-3330; Email: AI-DSFOAinquiries@nih.gov

Grant Program: BRAIN Initiative: Integration and Analysis of BRAIN Initiative Data (R01 Clinical Trial Not Allowed)

Agency: National Institutes of Health RFA-MH-21-135

RFP Website: <https://grants.nih.gov/grants/guide/rfa-files/RFA-MH-21-135.html>

Brief Description: This FOA supports the development of software to visualize and analyze the data as part of programs of building the informatics infrastructure for the BRAIN Initiative. Other informatics programs include developing data standards that are needed to describe the new experiments that are being created by or used in the BRAIN Initiative ([RFA-MH-20-128](#)), and creating the data infrastructures that will house the data from multiple experimental groups ([RFA-MH-20-600](#)). Each of the programs is aimed at building an infrastructure that is used by a particular sub-domain of experimentalists rather than building a single all-encompassing informatics infrastructure now. Building the infrastructure one experimental area at a time will ensure that the infrastructure is immediately useful to components of the research community. As our understanding of the brain improves, it may be possible to create linkages between these various sub-domain specific informatics programs. Investigators of the informatics programs should keep that goal in mind and build for the future even though the current efforts are more limited in scope.

The data visualization and analysis tools supported under this FOA will make use of relevant data standards and will be built so that they can be integrated into the data repositories, both of which are created in awards under the other FOAs of the BRAIN initiative informatics program. Similarly, the data repositories will have the needed infrastructure to implement the software developed under this FOA. Awardees under all the BRAIN Initiative informatics FOAs are expected to work together. The awardees should budget for hackathons and other collaborative efforts that will be necessary to integrate the products produced by all awardees. Collaborations with neuro-informatics efforts outside of the BRAIN Initiative are both welcome and are encouraged.

Awards: Application budgets should reflect the actual needs of the proposed project.

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

Proposal Submission Deadline: October 15, 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.

Contact: Ming Zhan, Ph.D., National Institute of Mental Health ([NIMH](#)), Telephone: 301-827-3678
Email: ming.zhan@nih.gov

Grant Program: NINDS Institutional Research Training Program (T32 Clinical Trial Not Allowed)
Agency: National Institutes of Health PAR-21-149

RFP Website: <https://grants.nih.gov/grants/guide/pa-files/PAR-21-149.html>

Brief Description: The objective of the NINDS Institutional Research Training Program is to support outstanding training with the breadth and depth to prepare advanced predoctoral and postdoctoral trainees to become successful scientists in a rapidly evolving research enterprise that is increasingly complex and multidisciplinary. Neuroscience research requires investigators who can draw on knowledge and approaches from multiple disciplines and levels of analysis, and apply this broad knowledge in novel ways to yield new discoveries about the nervous system. Moreover, impactful neuroscience research requires investigators with strong foundational skills in experimental design, statistical methodology and quantitative reasoning.

Summary of key points. It is expected that the programs supported under this funding opportunity announcement will provide:

- training and activities with a defined goal and within a thematic area that will add depth and breadth to the trainees' scientific development
- an emphasis on sound experimental design, the proper use of statistical methodology and a theoretical understanding by each trainee of the quantitative limits and capabilities of his or her experimental system (quantitative literacy)
- effective oversight of trainee mentoring and progression to the next career stage
- an environment that promotes the success of individuals with a wide variety of backgrounds and perspectives
- direct access to an appropriate diversity of role models, both within the institution and through activities such as invited seminars.
- activities for trainees to develop oral and written skills for communicating their science to a wide variety of audiences
- access to structured career development advising and opportunities to learn about career options in various sectors

Awards: Application budgets should reflect the actual needs of the proposed project.

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

Proposal Submission Deadline: May 25, 2021; May 25, 2022; May 25, 2023

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.

Contact: Stephen Korn, Ph.D., National Institute of Neurological Disorders and Stroke (NINDS)
Email: korns@ninds.nih.gov

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

Grant Program: CDMRP PRMRP Investigator Initiated Research Award

Agency: Department of Defense Dept. of the Army -- USAMRAA W81XWH-21-PRMRP-IIRA

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=332102>

Brief Description: The PRMRP Investigator-Initiated Research Award is intended to support studies that will make an important contribution toward research and/or patient care for a disease or condition related to at least one of the FY21 PRMRP Topic Areas. The rationale for a research idea may be derived from a laboratory discovery, population-based studies, a clinician's first-hand knowledge of patients, or anecdotal data. Applications must include relevant data that support the rationale for the proposed study. These data may be unpublished or from the published literature.

Impact: The Investigator-Initiated Research Award is designed to support research with the potential to yield highly impactful data that could lead to critical discoveries or major advancements. The application must clearly demonstrate the project's potential short-term and long-term outcome(s)/product(s) (knowledge and/or material) and how they will impact a critical problem or question in the field of research and/or patient care in the FY21 PRMRP Topic Area(s) addressed.

Research projects may focus on any phase of research from basic laboratory research through translational research, including preclinical studies in animal models and human subjects, as well as correlative studies associated with an existing clinical trial. Research involving human subjects and human anatomical substances is permitted; however, this award may not be used to conduct clinical trials.

Awards: Various; Anticipated Available Funding: \$83,000,000

Letter of Intent: Please see below.

Proposal Deadline: Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), April 28, 2021

• Invitation to Submit an Application: July 2021 • Application Submission Deadline: 11:59 p.m. ET, September 2, 2021

Contact Information: CDMRP Help Desk Phone: 301-682-5507 Email: help@eBRAP.org

Grant Program: 2022 Defense University Research Instrumentation Program (DURIP)

Agency: Department of Defense DARPA

DURIP - ARMY SUBMISSION Dept of the Army -- Materiel Command W911NF-21-S-0004

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331862>

Other Related DURIP Opportunities:

Air Force Office of Scientific Research FOA-AFRL-AFOSR-2021-0002

Office of Naval Research N00014-21-S-F002

Brief Description: The Department of Defense (DoD) announces the Fiscal Year 2020 Defense University Research Instrumentation Program (DURIP). DURIP is designed to improve the capabilities of accredited United States (U.S.) institutions of higher education to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment or instrumentation. For-profit organizations are not eligible for DURIP funding. We refer to eligible institutions of higher education as universities in the rest of this announcement. DURIP is part of the University Research Initiative (URI).

Awards: Amount of Requested DoD Funding – \$50,000 to \$1,500,000

Letter of Intent: Please see below.

Proposal Deadline: May 14, 2021 at 11:59 PM

Pre-proposal inquiries and questions must be submitted not later than Friday, April 23, 2021.

Contact Information: Anastasia Lenfest, Grants Officer, Phone 7035882866

anastasia.lenfest@navy.mil

Grant Program: Waveform Agile RF Directed Energy (WARDEN)

Agency: Department of Defense DARPA - Microsystems Technology Office HR001121S0017

Website: <https://beta.sam.gov/opp/20104a5bdcb74ede858ea45a82345ae4/view>

Brief Description: DARPA is soliciting innovative research and development on extreme power, broadband amplifiers and agile waveform techniques that combine frequency, amplitude, and pulse-width modulations to improve electromagnetic coupling and disruptive effects on targeted electronics. The goal of the Waveform Agile Radio-frequency Directed Energy (WARDEN) program is to extend the range of high power microwave (HPM) back-door attack by a factor of 10 beyond the current state of the art.

Awards: Total awarded funding is expected to be \$51M over four years.

Letter of Intent: Please see below.

Proposal Deadline: Proposers' Day: March 5, 2021 o Requests for Security Classification Guide (SGC) and Classified WARDEN BAA Addendum: Must be made by March 25, 2021 at 5:00 PM (ET) o FAQ Submission Deadline: April 07, 2021 o Deadline to Notify Security of Intent to Submit Classified Proposals: April 9, 2021 at 5:00 PM (ET) o Proposal Due Date: April 16, 2021 at 2:00 PM (ET)

Contact Information: BAA Coordinator HR001121S0017@darpa.mil

Grant Program: Science & Technology for Advanced Manufacturing Projects (STAMP)

Agency: Department of Defense Office of Naval Research N00014-21-S-B002

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=329699>

Brief Description: The Department of Defense Manufacturing Technology Program (ManTech) is the Defense Department's investment mechanism for staying at the forefront of defense-essential manufacturing capability. The Program develops technologies and processes for the affordable and timely production and sustainment of defense systems. The Program impacts all phases of acquisition. It aids in achieving reduced acquisition and total ownership costs by developing, maturing, and transitioning key manufacturing technologies. ONR will focus investments on those that have the most benefit to the warfighter and include quick-hitting, rapid response projects to address immediate manufacturing needs. The ManTech Program targets the needs of our warfighters and weapon system programs by helping to find and implement affordable low-risk solutions. The ManTech Program:

- Provides the crucial link between technology invention and development and industrial applications;
- Matures and validates emerging manufacturing technologies to support low-risk implementation in industry and DoD facilities, for example depots and shipyards;
- Addresses production issues from system development through transition to production and sustainment;
- Disseminates information concerning improved manufacturing improvement concepts, including information on such matters as best manufacturing practices, product data exchange specifications, computer-aided acquisition and logistics support, and rapid acquisition of manufactured parts; and
- Sustains and enhances the skills and capabilities of the manufacturing work force.

Awards: Multiple awards are anticipated.

Letter of Intent: Not required.

Proposal Deadline: This announcement will remain open until 30 October 2021 or until replaced by a successor BAA, whichever comes first.

Contact Information: Lynn Christian Contracting Officer [For questions regarding this posting.](#)

Questions of a technical nature should be submitted to: Point of Contact Name: Dr. William Mullins Point of Contact Occupation Title: Program Officer Email Address: william.m.mullins@navy.mil

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[Department of Transportation](#)

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

Agency: Department of Transportation 693JJ318NF5227-2021

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331800>

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. The Recipient will be responsible for allocating funds to the Student Designee as outlined in the Budget of the Agreement. The IHE will also be responsible for submitting all required Federal financial reports to FHWA.

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

Letter of Intent: Not Required

Proposal Deadline: Apr 30, 2021 Application deadline is 4/30/2021 at 5:00pm Eastern Time.

Contact Information: Ewa Flom, ewa.flom@dot.gov, 202-924-1125

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[Department of Agriculture:](#)

Grant Program: Data and Technical Assistance (DATA) Grants Program

Agency: Department of Agriculture Food and Nutrition Service USDA-FNS-SNAP-21-DATA

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331666>

Brief Description: The purpose of the SNAP E&T Data and Technical Assistance (DATA) Grants is to support the development of State SNAP E&T data collection and reporting systems. FNS is interested in funding projects that improve States' ability to use administrative data, such as Quarterly Wage Record (QWR) information, as the source for employment and earnings of E&T participants and former participants, because it is the preferred and most reliable and efficient method to meet reporting requirements. States using random sampling to gather information are doing so as an interim approach until systems to use administrative data are in place. Therefore, proposals that include random sampling of participants or former participants as a long term strategy will not be considered.

Awards: Up to \$1,000,000; Anticipated Available Funding: \$3,000,000.

Proposal Deadline: April 29, 2021

Contact Information: Anna J Arrowsmith Grants Officer [Anna Arrowsmith](#)

Grant Program: Agriculture and Food Research Initiative - Foundational and Applied Science

Agency: Department of Agriculture USDA-NIFA-AFRI-007692

Website: <https://nifa.usda.gov/funding-opportunity/agriculture-and-food-research-initiative-foundational-applied-science-program>

Brief Description: The AFRI Foundational and Applied Science Program supports grants in six AFRI priority areas to advance knowledge in both fundamental and applied sciences important to agriculture. The six priority areas are: Plant Health and Production and Plant Products; Animal Health and Production and Animal Products; Food Safety, Nutrition, and Health; Bioenergy, Natural Resources, and Environment; Agriculture Systems and Technology; and Agriculture Economics and Rural Communities. Research-only, extension-only, and integrated research, education and/or extension projects are solicited in this Request for Applications (RFA). See Foundational and Applied Science RFA for specific details.

Letter of Intent: Required.

Awards: Up to \$15,000,000; Anticipated available funding: \$290,000,000

Proposal Deadline: Thursday, July 29, 2021

Contact Information: [AFRI Coordination Team](#)

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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 SAEEI 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), as described in 29 C.F.R. 29. 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 that enable participants to succeed in a RAP or pre-apprenticeship programs that directly lead to grant-funded RAPs.

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. Eligibility, scoring criteria, and other requirements for application will be outlined in full in the upcoming FOA in the spring of 2021.

Contact Information: Matthew Carls Grants Management Specialist, Carls.Matthew.L@dol.gov

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[Department of Commerce/EDA](#)

Grant Program: NOAA Science Collaboration Program

Agency: U.S. Department of Commerce National Oceanic and Atmospheric Administration (NOAA) NOAA-OAR-CPO-2021-2006797

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=332046>

Brief Description: The NOAA Science Collaboration Program (NSCP) supports research, programs, projects and other activities related to NOAA's mission, primarily through collaborations among scientists and professionals in areas of mutual interest across the full spectrum of NOAA sciences. This includes the support of undergraduate, graduate, and postdoctoral researchers and scientists with expertise in NOAA-related sciences. It is expected that some of the scientists will collaborate onsite at NOAA facilities and laboratories. Through this funding opportunity, NOAA is also interested in supporting complementary Earth systems research and modeling efforts, social science and interdisciplinary research efforts which can serve as a catalyst for collaborations between NOAA professionals and scientists supported through this program.

Awards: The total NOAA funding amount available for the NSCP is anticipated to be approximately \$10,000,000 to \$15,000,000 per year or a total of \$50,000,000 to \$75,000,000 for the five-year period.

Letter of Intent: Contact the program director.

Proposal Deadline: May 10, 2021

Contact Information: Ms. Kendra R. Hammond 301-734-1223 [Work](#)

Grant Program: 2021 Build to Scale Program

Agency: U.S. Department of Commerce EDA-HDQ-OIE-2021-2006827

Website: <https://www.eda.gov/oie/buildtoscale/>

Brief Description: EDA is committed to furthering technology-based economic development initiatives that accelerate high quality job growth, create more economic opportunities, and support the future of the next generation of industry leading companies. To advance these goals, EDA's Office of Innovation & Entrepreneurship awards grants through the Build to Scale Program for activities designed to develop and support regional innovation initiatives.¹ EDA thereby advances the growth of connected, innovation-centric economies that increase job growth, enable the workforce of tomorrow, enhance global competitiveness, and foster global competitiveness through technology commercialization and entrepreneurship

i. Venture Challenge

The Venture Challenge invites organizations to submit competitive proposals that seek to support entrepreneurship and accelerate company growth in their community, region, or combination of regions. Competitive proposals will outline how the project will strengthen economic competitiveness through new product innovation or new technology adoption, enhancing research commercialization processes and outcomes, remediating structural barriers that inhibit regional innovation capacity and resilience, and/or leveraging regional competitive strengths to stimulate innovation and job creation. Companies served by the applicant organization should be challenging the status quo of established markets, commercializing technologies, and furthering job creation within their businesses. Applicants should provide evidence that illustrates how funds leveraged through this competition will not only launch new programming and/or scale existing programming, but also generate sustainable added value for the region's entrepreneurial ecosystem by augmenting existing regional assets for innovation and entrepreneurship.

The Venture Challenge is a single competition but is comprised of two funding levels: Build and Scale. Venture Challenge Build applicants may not request in excess of \$750,000 over the three-year period of performance. Venture Challenge Scale applicants must request more than \$750,000 and may not request in excess of \$1,500,000 over the three-year period of performance.

Venture Challenge Build applicants:

- May be piloting a solution to a demonstrated need
- May be implementing a proven solution for a new region or community
- Demonstrate a commitment and ability to collect agreed upon impacts
- Request may not exceed \$750,000 over a 3-year project period
- Provide a 1:1 match

Venture Challenge Scale applicants:

- May be scaling an existing initiative that has established and achieved impacts
- Have a proven track record of successful deployment of programs
- Demonstrate a commitment and ability to collect agreed upon impacts
- Request must be greater than \$750,000 and may not exceed \$1,500,000 over a 3-year project period
- Provide a 1:1 match

ii. Capital Challenge

The Capital Challenge provides operational support for the formation, launch, or scale of investment funds that seek to invest their capital in scalable startups (i.e., venture funds, seed funds, angel funds) or to organizations with a goal to expand capital deployment within a community, region, or regional industry (i.e., angel networks or investor training programs). Funding will primarily support operational and programmatic costs and may not be used as investment capital.

Capital Challenge applicants should:

- Practice equity-based investing, whether through traditional or hybrid models, or be supporting an initiative whose participants practice equity-based investing (in contrast to debt-based investing, which is not supported under the Capital Challenge)
- Evaluate companies for high-growth potential as a central factor of their investment strategy
- Utilize grant funds to catalyze the deployment of capital within their region and/or related regions • Demonstrate a commitment and ability to collect agreed upon impacts
- Request may not exceed \$400,000 over a 3-year project period
- Provide a 1:1 match

Awards: Please see above for individual award information. EDA has been appropriated \$38 million for grants authorized by Section 27 pursuant to the Consolidated Appropriations Act, 2021.

Letter of Intent: Not required.

Proposal Deadline: 11:59 P.M. EASTERN TIME ON THURSDAY, APRIL 29, 2021.

Contact Information: Office of Innovation and Entrepreneurship oi@eda.gov (202) 482-8001
NJ State Agency Contact: Edward Hummel ehummel@eda.gov (215) 316-2124

Grant Program: Measurement Science and Engineering (MSE) Research Grant Programs

Agency: U.S. Department of Commerce NIST 2021-NIST-MSE-01

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331121>

Brief Description: NIST is soliciting applications for financial assistance for Fiscal Year 2021 (FY21) within the following NIST grant programs:

- (1) the Associate Director for Innovation and Industry Services (ADIIS);
- (2) the Associate Director for Laboratory Programs (ADLP);
- (3) the Communications Technology Laboratory (CTL);
- (4) the Engineering Laboratory (EL);

- (5) Fire Research (FR);
- (6) the Information Technology Laboratory (ITL);
- (7) the International and Academic Affairs Office (IAAO);
- (8) the Material Measurement Laboratory (MML);
- (9) the NIST Center for Neutron Research (NCNR);
- (10) the Physical Measurement Laboratory (PML);
- (11) the Special Programs Office (SPO); and
- (12) the Standards Coordination Office (SCO).

Awards: Various; Grants or cooperative agreements

Letter of Intent: Contact the program director.

Proposal Deadline: Applications will be accepted and considered on a rolling basis as they are received.

Contact Information: Misty L Roosa Management Analyst Phone 301-975-3007

[Agency Contact](#)

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: Applications can be submitted on a rolling basis starting from the publication date of this Broad Agency Announcement up to 11:59:59 p.m., Eastern Daylight Time on September 30, 2023.

Contact Information: Mr. Lamar Dwayne Revis, 301-628-1308, lamar.revis@noaa.gov

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EPA

Grant Program: FY 2021 National Environmental Information Exchange Network Grant Program

Agency: Environmental Protection Agency EPA-OMS-21-01

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331293>

Brief Description: The EPA Exchange Network Grant Program is soliciting project applications using the Environmental Information Exchange Network (EN) to:

- Facilitate sharing of environmental data, especially through shared and reusable services.
- Reduce burden and avoid costs for co-regulators and the regulated community.

- Streamline data collection and exchanges to improve its timeliness for decision making.
- Increase the quality and access to environmental data through discovery, publishing, outbound and analytical services so it is more useful to environmental managers.
- Increase data and IT management capabilities needed to fully participate in the EN.

Award: In FY21, EPA expects to award about \$8,000,000 in 20-30 assistance agreements of up to \$400,000 each.

Submission Deadline: March 31, 2021; 11:59 PM Eastern.

Contact: Erika Beasley Office of Information Management Information Exchange Partnership Branch
Phone: (202) 566-2530 Fax: (202) 566-1684 beasley.erika@epa.gov

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[Department of Energy](#)

Grant Program: Data Science to Advance Chemical and Materials Sciences

Agency: Department of Energy DE-FOA-0002474

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=332227>

Brief Description: The DOE SC program in Basic Energy Sciences (BES) announces its interest in receiving new applications from teams of investigators expanding the integration of data science methods with BES research disciplines, to accelerate scientific discovery and overcome difficult challenges in these fields. This FOA is focused on new applications that will take advantage of the rapid growth of data science, including artificial intelligence (AI) and machine learning (ML) methodologies. The FOA will support teams of investigators for synergistic computational, experimental, and theoretical research covered by the research areas in the BES divisions of Chemical Sciences, Geosciences, and Biosciences (CSGB) and Materials Sciences and Engineering (MSE). The focus of the proposed research must be on science-based, data-driven approaches enabling solutions for fundamental basic energy sciences challenges not possible otherwise. The goal of the application should be to integrate novel data science, uncertainty quantification, and other AI and ML approaches with domain sciences to uniquely advance the understanding of fundamental properties and processes relevant to chemical and materials systems and achieve predictability of functions and behavior under dynamic conditions.

Awards: Various; Anticipated Available Funding: \$23,000,000

Letter of Intent: Please see below.

Submission Deadline: Submission Deadline for Pre-Applications: April 14, 2021 at 5:00 PM Eastern Time
A Pre-Application is required Pre-Application Response Date: May 5, 2021
Submission Deadline for Applications: June 1, 2021 at 11:59 PM Eastern Time

Contact: Dr. Raul Miranda Program Manager raul.miranda@science.doe.gov

Grant Program: Integrated Computational and Data Infrastructure (ICDI) for Scientific Discovery

Agency: Department of Energy DE-FOA-0002482

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=332201>

Brief Description: The DOE SC program in Advanced Scientific Computing Research (ASCR) hereby announces its interest in funding research and development projects to create an advanced Integrated Computational and Data Infrastructure (ICDI) program. This FOA is composed of two topics. Topic A “Experimental/Computational/Computer Science collaborations” addresses the challenge of creating collaborative teams of scientists to accelerate science discoveries supported by the SC programs. Applications to this topic must be submitted by multi-investigator teams. Topic B: “Intelligent Distributed

Infrastructure Simulation Capabilities” addresses the challenge of modeling, simulating, and validating the performance of geographically distributed science infrastructures. Both single and multiple investigator applications may be submitted.

Awards: Various; Anticipated Available Funding: \$13,500,000

Letter of Intent: Please see below.

Submission Deadline: Submission Deadline for Letters of Intent: April 2, 2021 at 5:00 PM EST A Letter of Intent is required Letter of Intent Response Date: April 9, 2021 at 5:00 PM EST Submission Deadline for Applications: May 14, 2021 at 5:00 PM EST

Contact: Richard Carlson Program Manager Phone 301-903-9486 [Program Manager Email](#)

Grant Program: OPEN 2021

Agency: Department of Energy Advanced Research Projects Agency Energy DE-FOA-0002459

Website: <https://www.grants.gov/web/grants/view-opportunity.html?oppId=331457>

<https://arpa-e-foa.energy.gov/>

Brief Description: ARPA-E’s focused programs target specific areas of technology that the agency has identified, through extensive interaction with the appropriate external stakeholders, as having significant potential impact on one or more of the Mission Areas described in Section I.A of the FOA. Awards made in response to the solicitation for focused programs support the aggressive technical targets established in that solicitation. Taken in total, ARPA-E’s focused technology programs cover a significant portion of the spectrum of energy technologies and applications.

ARPA-E’s OPEN FOAs ensure that the agency does not miss opportunities to support innovative energy R&D that falls outside of the topics of the focused technology programs or that develop after focused solicitations have closed. OPEN FOAs provide the agency with a broad sampling of new and emerging opportunities across the complete spectrum of energy applications and allow the agency to “take the pulse” of the energy R&D community. OPEN FOAs have been and will continue to be the complement to the agency’s focused technology programs – a unique combination of approaches for supporting the most innovative and current energy technology R&D. For instance, one-third of the sixty examples of most successful ARPA-E projects featured in ARPA-E Impact volumes (<https://arpa-e.energy.gov/about/our-impact>) resulted from OPEN solicitations. Potential applicants to this FOA are strongly encouraged to examine the OPEN projects in these volumes and all of the projects supported in the previous four OPEN solicitations (<https://arpa-e.energy.gov/technologies/open-programs>) for examples of the creative and innovative R&D ARPA-E seeks in its OPEN solicitations.

Awards: Approximately \$100 million, subject to the availability of appropriated funds. Awards may vary between \$250,000 and \$10 million.

Letter of Intent: Please see below.

Submission Deadline: First Deadline for Questions to ARPA-E-CO@hq.doe.gov: 5 PM ET, March 26, 2021 Submission Deadline for Concept Papers: 9:30 AM ET, April 6, 2021 Second Deadline for Questions to ARPA-E-CO@hq.doe.gov: 5 PM ET, TBD Submission Deadline for Full Applications: 9:30 AM ET, TBD

Contact: ARPA-E-CO@hq.doe.gov Please contact the email address above for questions regarding Funding Opportunity Announcements. ARPA-E will post responses on a weekly basis to any questions that are received. ARPA-E may re-phrase questions or consolidate similar questions for administrative purposes.

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[NASA](#)

Grant Program: ROSES 2021: Heliophysics Mission Concept Studies

Agency: NASA NNH21ZDA001N-HMCS

Website: <https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B39554337-ED9A-7C4F-EC92-DCB9DC510DDE%7D&path=&method=init>

Brief Description: The Heliophysics Mission Concept Studies (HMCS) program will fund six-month-long mission concept studies that are part of community preparation for the next Solar and Space Physics Decadal Survey. These studies will be conducted by the proposal team, using mission design capabilities included in the proposal, and will result in a final mission concept report delivered to NASA. Additionally, NASA will support awardees submitting and briefing the mission concept to the Decadal Survey Committee ("the Committee" see Section 2.2). Should NASA choose to develop a mission that flows from any selected mission concept study, the responsibility for that mission will be assigned by NASA; there is no expectation that the mission concept study team or participating organizations will necessarily participate in the eventual mission development.

Awards: It is expected that there will be approximately \$2.5 M available to support new mission concept studies selected through this program element.

Notice of Intent: Notices of intent are due April 23, 2021

Proposal Deadline: May 28, 2021

Contact: Jared Leisner Heliophysics Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: (202) 358-2016 Email: jared.s.leisner@nasa.gov

Grant Program: ROSES 2021: Living With a Star Science

Agency: NASA NNH21ZDA001N-LWS

Website: <https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7BDD29C108-980F-6F1A-AEC7-CE7375E35007%7D&path=&method=init>

Brief Description: The Living With a Star (LWS) Program emphasizes the science necessary to understand those aspects of the Sun and Earth's space environment that affect life and society. The ultimate goal of the LWS Program is to provide a scientific understanding of the system that leads to predictive capability of the space environment conditions at Earth, other planetary systems, and in the interplanetary medium. Every year the LWS Program solicits Focused Science Topics (FSTs) that address some part of this goal.

This goal poses two great challenges for the LWS program. First, the program seeks to address large-scale problems that cross discipline and technique boundaries (e.g., data analysis, theory, modeling, etc.); and second, the program will identify how this new understanding has a direct impact on life and society. Over time, the Targeted Investigations have provided advances in scientific understanding that address these challenges.

Awards: TBD

Notice of Intent: Please see below

Proposal Deadline: Step-1 proposals are due September 8, 2021, and Step-2 proposals are due November 18, 2021.

Contact: Simon Plunkett Telephone: (202) 358-2034 Email: simon.p.plunkett@nasa.gov

Jeff Morrill Telephone: (202) 358-3744 Email: jeff.s.morrill@nasa.gov

Grant Program: New (Early Career) Investigator Program in Earth Science: not solicited in ROSES-21

Agency: NASA NNH21ZDA001N-NIP

Website: <https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7BC31820ED-A589-B008-7448-1014FCA16C49%7D&path=&method=init>

Brief Description: The New (Early Career) Investigator Program in Earth science is designed to support outstanding scientific research and career development of scientists and engineers at the early stage of their professional careers. The program welcomes innovative research initiatives and seeks to cultivate diverse scientific leadership in Earth system science. The Earth Science Division (ESD) places particular emphasis on the investigators' ability to promote and increase the use of space-based remote sensing through the proposed research. Proposals with objectives connected to needs identified in most recent Decadal Survey Thriving on our Changing Planet: A Decadal Strategy for Earth Observation from Space are welcomed. The program supports all aspects of scientific and technological research aimed to advance NASA's mission in Earth system science (See the Science Plan at <http://science.nasa.gov/about-us/science-strategy/>). In research and analysis, the focus areas are: • Carbon Cycle and Ecosystems, • Climate Variability and Change, • Water and Energy Cycle, • Atmospheric Composition, • Weather, and • Earth Surface and Interior

Awards: TBD

Notice of Intent: Please see below

Proposal Deadline: This program is NOT soliciting proposals this year. The 'close date' of 02/14/2022 advertised above is not a proposal due date; NSPIRES requires that a specific close date be given. Please see the program element document above for details.

Contact: Allison Leidner Earth Science Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: 202-358-0855 Email: Allison.K.Leidner@nasa.gov

Grant Program: Earth Science Applications: Health and Air Quality

Agency: NASA NNH21ZDA001N-HAQ

Website: <https://nspires.nasaprs.com/external/solicitations/summary.do?solId=%7B78D66990-C241-F2F9-5A15-BC02AD87C40D%7D&path=&method=init>

Brief Description: The ESD Applied Sciences Program promotes efforts to discover and demonstrate innovative and practical uses of Earth observations. The Program funds applied science research and applications projects to enable near-term uses of Earth observations, formulate new applications, integrate Earth observations and related products in practitioners' decision-making, and transition the applications. The projects are carried out in partnership with public- and private-sector organizations to achieve sustained use and sustained benefits from the Earth observations. For more information visit the Applied Sciences Program website at <http://AppliedSciences.NASA.gov/>. The Program supports projects that develop and demonstrate improvements to decision-making from the use of an array of Earth observations and related products. The Program considers that Earth observations broadly include a range of products and capabilities, including Earth-observing satellite measurements (NASA in-orbit and planned satellites, as well as foreign, commercial, and other U.S. Government satellites), outputs and predictive capabilities from Earth science models, algorithms, visualizations, knowledge about the Earth system, and other geospatial products. Hereinafter, this set is referred to collectively as "Earth observations".

Awards: \$3M total per year; Expected Range of Award per project: \$250-350K per year

Notice of Intent: Please see below

Proposal Deadline: June 18, 2021

Contact: John Haynes Applied Sciences Program Earth Science Division Science Mission Directorate NASA Headquarters Washington, DC 20546-0001 Telephone: (202) 358-4665 Email: jhaynes@nasa.gov

National Endowment of Humanities

Grant Program: Digital Projects for the Public

Agency: National Endowment for the Humanities 20210609-MD-MN-MT

Website: <https://www.neh.gov/grants/public/digital-projects-the-public>

Brief Description: The Digital Projects for the Public program supports projects that interpret and analyze humanities content in primarily digital platforms and formats, such as websites, mobile applications and tours, interactive touch screens and kiosks, games, and virtual environments. All projects should demonstrate the potential to attract a broad, general, nonspecialist audience, either online or in person at venues such as museums, libraries, or other cultural institutions. Applicants may also choose to identify particular communities and groups, including students, to whom a project may have particular appeal. A recorded webinar for prospective applicants will be posted on this page by April 16, 2021.

Award: Maximum award amount \$30,000 (Discovery grants); \$100,000 (Prototyping grants); \$400,000 (Production grants)

Proposal Deadline: Optional Draft due May 5, 2021; Application due June 9, 2021

Contact: Contact the Division of Public Programs Team; 202-606-8269; publicpgms@neh.gov

Grant Program: Humanities Initiatives

Agency: National Endowment for the Humanities 20210520-AA-AB-AC-AD-AE

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

Brief Description: The National Endowment for the Humanities (NEH) Division of Education Programs is accepting applications for the five Humanities Initiatives programs: Humanities Initiatives at Colleges and Universities, Humanities Initiatives at Hispanic-Serving Institutions, Humanities Initiatives at Historically Black Colleges and Universities, Humanities Initiatives at Tribal Colleges and Universities, and Humanities Initiatives at Community Colleges. The purpose of these programs is to strengthen the teaching and study of the humanities at institutions of higher education by developing new humanities programs, resources (including those in digital format), or courses, or by enhancing existing ones.

Award: Maximum award amount: \$150,000 per award; Available funding: \$3,000,000

Proposal Deadline: May 21, 2021

Contact: Division of Education Programs National Endowment for the Humanities 400 Seventh Street, SW Washington, DC 20506 202-606-2324 hi@neh.gov

Grant Program: Research and Development

Agency: National Endowment for the Humanities 20210518-PR

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

Brief Description: The Research and Development program supports projects that address major challenges in preserving or providing access to humanities collections and resources. These challenges include the need to find better ways to preserve materials of critical importance to the nation's cultural heritage—from fragile artifacts and manuscripts to analog recordings and digital assets subject to technological obsolescence—and to develop advanced modes of organizing, searching, discovering, and using such materials.

This program supports projects at all stages of development, from early planning and stand-alone studies, to advanced implementation. Research and Development projects contribute to the evolving and

expanding body of knowledge for heritage practitioners, and for that reason, outcomes may take many forms. Projects may produce any combination of laboratory datasets, guidelines for standards, open access software tools, workflow and equipment specifications, widely used metadata schema, or other products.

Research and Development supports work on the entire range of humanities collection types including, but not limited to, moving image and sound recordings, archaeological artifacts, born digital and time-based media, rare books and manuscripts, archival records, material culture, and art. Applicants must demonstrate how advances in preservation and access through a Research and Development project would benefit the cultural heritage community by supporting humanities research, teaching, or public programming.

Research and Development projects are encouraged to address one or more of the following areas of special interest:

- **Preserving our audiovisual and digital heritage**
- **Conserving our material past**
- **Protecting our cultural heritage**
- **Serving under-represented communities**

For more information about the program, you may refer to the pre-recorded [webinar](#). Please note, the webinar was recorded in 2020 and therefore deadlines are outdated. An updated pre-recorded webinar for 2021 will be posted by March 4, 2021.

Award: Maximum award amount Tier I provides awards up to \$75,000; Tier II provides awards up to \$350,000

Proposal Deadline: Application due May 18, 2021

Contact: Division of Preservation and Access Team 202-606-8570; preservation@neh.gov

Grant Program: Awards for Faculty

Agency: National Endowment for the Humanities 20210414-HB

Website: <https://www.neh.gov/divisions/research>

Brief Description: The Division of Research supports scholarly research that advances knowledge and understanding of the humanities. Through twelve annual funding opportunities, awards are made to scholars—individuals, collaborative teams, or institutions—working on research projects of significance to specific humanities fields and to the humanities as a whole. The projects that the division supports are as diverse as America itself: editions of the Dead Sea Scrolls, the history of “The Star Spangled Banner,” and the autobiography of Mark Twain.

While Research Programs is the only NEH division to make awards to individuals, institutional grants are also available. **Collaborative Research** supports projects by teams of scholars. **Scholarly Editions and Scholarly Translations** provides funding for time-intensive editing projects such as the [Papers of George Washington](#), and **Fellowship Programs at Independent Research Institutions** provides American scholars access to unique collections at American centers for humanities research around the world.

Award: Various

Proposal Deadline: Application due April 18, 2021

Contact: Division of Research Programs: (202) 606-8200 research@neh.gov

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[Private Foundations](#)

U.S-Israel Binational Science Foundation (BSF)

Grant Program: NSF-BSF Joint Funding Research Grants; BSF Research Grants; Start-Up Research Grants

Agency: U.S-Israel Binational Science Foundation (BSF)

Website: <https://www.bsf.org.il/funding-opportunities/>

Brief Description: In 2012, the BSF signed an umbrella Memorandum of Understanding with the U.S. National Science Foundation (NSF), for cooperation in joint funding of collaborative U.S.-Israeli scientific research. Consequently, the BSF signed a series of specific Memorandum of Understanding (MOU) and Letter of Intent (LOI) with a number of NSF units, for the joint funding of collaborative research programs. Presently, BSF has joint programs with all of the NSF grant making directorates and in each, with all or most divisions.

- **Foundational Research in Robotics.** This program has no deadline. You can find more details in our call for proposals [here](#).
- **Cyber-Physical Systems-** This program has no deadline. You can find more details in our call for proposals [here](#).
- **Mathematical and Scientific Foundations of Deep Learning.** Deadline for application by the U.S. partner to the NSF is May 12, 2021 and by the Israeli partner to the BSF is May 18, 2021. You can find more details in our call for proposals [here](#).

These following NSF-BSF programs have deadlines as specified:

Directorate of Mathematical and Physical Sciences:

- NSF-BSF program in **Mathematical Biology**. Deadline for application by the U.S. partner to the NSF is September 6, 2021 and by the Israeli partner to the BSF is September 12, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Probability**. Deadline for application by the U.S. partner to the NSF is September 27, 2021 and by the Israeli partner to the BSF is October 3, 2021. Call for Proposals can be found [here](#)
- NSF-BSF programs in **Combinatorics; Foundations**. Deadline for application by the U.S. partner to the NSF is September 28, 2021 and by the Israeli partner to the BSF is October 4, 2021. Call for Proposals can be found [here](#)
- NSF-BSF program in **Analysis**. Deadline for application by the U.S. partner to the NSF is September 30, 2021 and by the Israeli partner to the BSF is October 6, 2021. Call for Proposals can be found [here](#)
- NSF-BSF program in **Algebra and Number Theory**. Deadline for application by the U.S. partner to the NSF is October 8, 2021 and by the Israeli partner to the BSF is October 15, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Physics of Living Systems**. Deadline for application by the U.S. partner to the NSF is October 18, 2021 and by the Israeli partner to the BSF is October 24, 2021. Call for Proposals can be found [here](#)
- NSF-BSF programs in **Biomaterials; Condensed Matter Physics; Metals and Metallic Nanostructures and Polymers** within the Materials division. Deadline for application by the U.S. partner to the NSF is November 1, 2021 and by the Israeli partner to the BSF is November 7, 2021. Call for Proposals can be found [here](#).

- NSF-BSF program in **Geometric Analysis; Topology**. Deadline for application by the U.S. partner to the NSF is November 2, 2021 and by the Israeli partner to the BSF is November 8, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Basic Plasma Sciences and Engineering**. Deadline for application by the U.S. partner to the NSF is November 15, 2021 and by the Israeli partner to the BSF is November 21, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Applied Mathematics**. Deadline for application by the U.S. partner to the NSF is November 15, 2021 and by the Israeli partner to the BSF is November 23, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Astronomy and Astrophysics**. Deadline for application by the U.S. partner to the NSF is November 15, 2021 and by the Israeli partner to the BSF is November 21, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Atomic Molecular and Optical Physics – Experiment and Theory; Gravitational Physics – Experiment and Theory; Integrative Activities in Physics; LIGO Research Support**. Deadline for application by the U.S. partner to the NSF is November 24, 2021 and by the Israeli partner to the BSF is November 30, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Nuclear Physics – Experiment and Theory; Elementary Particle Physics – Experiment; Particle Astrophysics – Experiment**. Deadline for application by the U.S. partner to the NSF is December 7, 2021 and by the Israeli partner to the BSF is December 13, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Computational Mathematics**. Deadline for application by the U.S. partner to the NSF is December 1, 2021 and by the Israeli partner to the BSF is December 7, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Elementary Particle Physics – Theory; Particle Astrophysics and Cosmology – Theory; Quantum Information Science**. Deadline for application by the U.S. partner to the NSF is December 14, 2021 and by the Israeli partner to the BSF is December 20, 2021. Call for Proposals can be found [here](#).
- NSF-BSF program in **Statistics**. Deadline for application by the U.S. partner to the NSF is December 15, 2021 and by the Israeli partner to the BSF is December 21, 2021. Call for Proposals can be found [here](#).

Directorate of Geosciences:

- NSF-BSF programs in **Physical Oceanography; Chemical Oceanography**. Deadline for applications by the U.S. partner to the NSF is August 16, 2021 and by the Israeli Partner to the BSF is August 22, 2021. Call for proposals can be found [here](#).

Directorate of Biological Sciences:

- NSF-BSF program in **Ecology and Evolution of Infectious Diseases**. Deadline for application by the U.S. partner to the NSF is November 17, 2021 and by the Israeli partner to the BSF is November 23, 2021. Call for Proposals can be found [here](#).

Directorate of Social, Behavioral and Economics Sciences:

- NSF-BSF programs in **Social Psychology**. Deadline for applications by the U.S. partner to the NSF is July 15, 2021 and by the Israeli Partner to the BSF is July 21, 2021. Call for proposals can be found [here](#).

- NSF-BSF programs in **Developmental Sciences**. Deadline for applications by the U.S. partner to the NSF is July 15, 2021 and by the Israeli Partner to the BSF is July 21, 2021. Call for proposals can be found [here](#).
- NSF-BSF programs in **Economics and Decision Sciences**. Deadline for applications by the U.S. partner to the NSF is August 18, 2021 and by the Israeli Partner to the BSF is August 24, 2021. Call for proposals can be found [here](#).
- NSF-BSF programs in **Science of Learning and Augmented Intelligence Program**. Deadline for applications by the U.S. partner to the NSF is July 14, 2021 and by the Israeli Partner to the BSF is July 20, 2021. Call for proposals can be found [here](#).
- NSF-BSF programs in **Perception, Action and Cognition**. Deadline for applications by the U.S. partner to the NSF is August 2, 2021 and by the Israeli Partner to the BSF is August 8, 2021. Call for proposals can be found [here](#).
- NSF-BSF programs in **Cognitive Neuroscience**. Deadline for applications by the U.S. partner to the NSF is August 13, 2021 and by the Israeli Partner to the BSF is August 19, 2021. Call for proposals can be found [here](#).

The following NSF-BSF programs have no deadlines and are open for submission throughout the year:

- NSF-BSF programs in Computing and Communication Foundations (CCF) are open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF programs in Computer and Network Systems (CNS) are open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF programs in Information and Intelligent Systems (IIS) are open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF programs in Chemical, Bioengineering, Environmental, and Transport Systems are open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF programs in Ceramic; Condensed Matter and Materials Theory; Electronic and Photonic Materials and the Solid State and Materials Chemistry programs in the Materials division are open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Electrical, Communications and Cyber Systems is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in the Civil, Mechanical and Manufacturing Innovation (CMMI) division is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Earth Sciences is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Atmospheric and Geospace Sciences is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Cyber Security is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Marine Geology and Geophysics is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Biological Oceanography is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Molecular and Cellular Biosciences is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).
- NSF-BSF program in Integrative Organismal Systems (IOS) is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).

- NSF-BSF program in Environmental Biology (DEB) is open to receive applications anytime throughout the year. Call for Proposals can be found [here](#).

Awards: Various

Letter of Intent: Not required

Proposal Deadline: Please see the CFPs above.

Contact: Anton Post, PhD, Executive Director, U.S. – Israel Binational Science Foundation; bsf.org.il@responder.co.il

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[Streamlyne Question of the Week](#)

Question: How do I enter a cost share? For my salary? For other personnel and expenses?

Answer: Cost Share for personnel other than faculty is very similar to release time –

- add the person under Key personnel
- select the period (start and end dates) that the staff/admin will be devoted to the project
- select percentage.

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

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[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>.

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