

UNO FOCUS:

Fall 2021 Tech Challenge
The Water Council

On behalf of A. O. Smith, Badger Meter, Watts Water Technologies and Xylem, the following challenges are open for application for the fall competition: (1) Microbial Control in Distribution Systems and in Buildings; (2) IoT Enabled Water Quality Sensors; (3) Elimination of High OPEX in Aerobic Wastewater Treatment. Register to see complete topic details and apply!

The deadline is November 1. The prize is \$10,000, and it offers an opportunity to collaborate with industry R&D teams and jointly commercialize your solution.

LINKS: [Water Council](#)

ARTS, HUMANITIES, and INTERNATIONAL

Library of Congress - Of the People: Widening the Path: CCDI – Higher Education
Library of Congress (Library of Congress), Connecting Communities Digital Initiative (CCDI)

Notice seeking applications to support the creative and wide-ranging use of Library collections and the connective powers of technology to serve Black, Indigenous, Hispanic or Latino, Asian American and Pacific Islander or other racial and ethnic minority populations within the United States in sharing stories about America's past, present, and future.

Applications are due November 15, 2021. Up to \$60,000 is available.

Limited Submission: One application per applicant

LINKS: [Grants.gov](#), [Solicitation](#)

Library of Congress - Of the People: Widening the Path: CCDI – Libraries, Archives and Museums
Library of Congress (Library of Congress), Connecting Communities Digital Initiative (CCDI)

Notice seeking applications in support of libraries, archives or museums in creatively using technology to incorporate digital Library of Congress materials into new stories that center the lives, perspectives and experiences of Black, Indigenous and other communities of color in the United States.

Applications are due November 15, 2021. Up to \$60,000 is available.

Limited Submission: One application per applicant

LINKS: [Grants.gov](#), [Solicitation](#)

EDUCATION and ECONOMIC & COMMUNITY DEVELOPMENT

Emergency Rural Health Care (ERHC) Grant Program
United States Department of Agriculture (USDA), Rural Housing Service (RHS)

Notice seeking applications designed to help broaden access to COVID-19 testing and vaccines, rural health care services, and food assistance through food banks and food distribution facilities. This program offers two tracks of funding to eligible applicants. Track One: Recovery Grants provide immediate relief to address the economic conditions arising from the COVID-19 emergency; and Track Two: Impact Grants advance ideas and solutions to solve regional rural health care problems to support the long-term sustainability of rural health.

Applications are due October 12, 2021. Approximately \$500 million is available.

LINKS: [Grants.gov](#), [Solicitation](#)

Environmental Literacy Program: Increasing community resilience to extreme weather and climate change
National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (Commerce)

Notice seeking proposals for communities to have sufficient collective environmental literacy to take actions that build resilience to extreme weather and climate change in ways that contribute to community health, social cohesion, and socio-economic equity.

Required pre-applications are due November 1, 2021 for Priority 1. Applications are due March 17, 2022 for Priority 1. Applications are due January 25, 2022 for Priority 2. Approximately \$5 million is available to support 7 to 12 awards.

LINKS: [Grants.gov](#)

FY2022 AmeriCorps State and National Grants
Corporation for National and Community Service (CNCS)

Notice seeking proposals to engage AmeriCorps members in evidence-based or evidence-informed interventions/practices to strengthen communities in one or more of nine priority areas.

Applications are due January 5, 2022. Multiple awards are anticipated.

LINKS: [Grants.gov](#), [Solicitation](#)

Centers of Excellence at 1890 Institutions
National Institute of Food and Agriculture (NIFA), United States Department of Agriculture (USDA)

Notice seeking applications to address critical needs in protecting and managing domestic natural resources for current and future production of food and agricultural products; develop/apply emerging technologies to increase agricultural productivity; enhance small farm economic viability; improve rural communities by developing genetic and sensor technologies for food and agriculture; provide technology training to farmers; and enhance academic and career development activities for students pursuing careers in the food and agricultural sciences.

Applications are due November 17, 2021. Approximately \$10 million is available to support six awards.

LINKS: [Grants.gov](#), [Solicitation](#)

Human-Environment and Geographical Sciences Program
National Science Foundation (NSF)

Notice seeking proposals for basic scientific research about the nature, causes and/or consequences of the spatial distribution of human activity and/or environmental processes across a range of scales. Multiple award mechanisms are available.

Applications are due January 18, 2022. An estimated 30 to 40 awards with funding determined by mechanism are anticipated.

LINKS: [Grants.gov](#), [Solicitation](#)

HEALTH and MENTAL HEALTH

Global Brain and Nervous System Disorders Research Across the Lifespan (R01 R21 Clinical Trials Optional)

National Institutes of Health (NIH), Department of Health and Human Services (HHS)

Notice seeking applications for the conduct of innovative, collaborative research projects with low- and middle-income country (LMIC) institutions/ scientists on brain and other nervous system function and disorders throughout life, relevant to LMICs. Research on neuro-health and neurological, neuromuscular, sensory, neuropsychiatric, cognitive, behavioral and neurodevelopmental function and disorders may span the full range of science from basic to clinical to translation and implementation research.

Applications are due December 9, 2021, November 15, 2022, and November 15, 2023. Program expires December 12, 2023. Optional letters of intent are due 30 days prior to the application due date.

LINKS: [Grants.gov \(R01\)](#), [Grants.gov \(R21\)](#), [Solicitation](#)

Mental Health Research Dissertation Grant to Enhance Workforce Diversity (R36 Independent Clinical Trial Not Allowed)

National Institutes of Health (NIH), Department of Health and Human Services (HHS), National Institute of Mental Health (NIMH)

Notice seeking applications to enhance the diversity of the mental health research workforce by providing dissertation awards in all research areas within the strategic priorities of the NIMH to individuals from groups underrepresented in biomedical, behavioral, clinical and social sciences research.

Applications are due annually on October 16, February 16, and June 16. Program expires September 8, 2024.

LINKS: [Grants.gov](#), [Solicitation](#)

Tissue Mapping Centers for the Human BioMolecular Atlas Program (U54 Clinical Trial Not Allowed)

National Institutes of Health (NIH), Department of Health and Human Services (HHS), National Heart, Lung, and Blood Institute (NHLBI)

Notice seeking proposals for state-of-the-art Tissue Mapping Centers that will serve as the core data generators for the Human BioMolecular Atlas Program Consortium by generating a high-resolution, multi-parameter, 3D atlas of a non-diseased human organ. Successful centers will build, benchmark, and standardize pipelines for generating, validating and analyzing data from multiplexed, high-throughput imaging and omics technologies.

Applications are due November 19, 2021. An estimated \$33.5 million is available through FY25 to fund five to seven awards.

LINKS: [Grants.gov](#), [Solicitation](#)

National Biodefense Science Board

Department of Health and Human Services (HHS)

Notice announcing a meeting of the National Biodefense Science Board to discuss high priority issues related to national public health emergency preparedness and response.

The meeting will be held virtually on September 28, 2021 from 11:00 a.m. to 1:00 p.m. ET.

LINKS: [Federal Register](#), [Agency Site](#)

Pancreatic Cancer Detection Consortium: Management and Data Coordination Unit (U24 Clinical Trial Not Allowed)

National Institutes of Health (NIH), Department of Health and Human Services (HHS), National Cancer Institute (NCI)

Notice seeking applications to provide support toward collaborative efforts such as: study design, protocol development, statistical analysis, coordination and data management. Other PCDC-MDCU activities include: coordination and support toward biorepository building; and organizational and logistics support for PCDC activities.

The next due date for application is November 15, 2021. Optional letters of intent are due October 15, 2021. Approximately \$825,000 is available.

LINKS: [Grants.gov](#), [Solicitation](#)

Pancreatic Cancer Detection Consortium: Research Units (U01 Clinical Trial Optional)

National Institutes of Health (NIH), Department of Health and Human Services (HHS), National Cancer Institute (NCI)

Notice seeking proposals to join the Pancreatic Cancer Detection Consortium and conduct research on early detection of pancreatic ductal adenocarcinoma and characterization of its precursor lesions to identify those patients who are at high risk of progression to cancer.

The next due date for applications is November 15, 2021. Multiple awards of up to \$600,000 per year are anticipated.

LINKS: [Grants.gov](#), [Solicitation](#)

SCIENCE, TECHNOLOGY, ENGINEERING, and MATHEMATICS

AI-assisted Climate Tipping-point Modeling (ACTM)

Defense Advanced Research Projects Agency (DARPA), Department of Defense (Defense)

Notice seeking proposals to explore AI-assisted modeling of complex processes related to climate.

Proposals are due October 14, 2021. Multiple awards are anticipated.

LINKS: [Contract Opportunities](#)

Biology Integration Institutes

Directorate for Biological Sciences (BIO), National Science Foundation (NSF)

Notice seeking proposals to bring researchers together around the common goal of understanding how the processes that sustain life and enable biological innovation operate and interact within and across different scales of organization, from molecules to cells, tissues to organisms, species, ecosystems, biomes and the entire Earth. The Biology Integration Institutes (BII) program supports collaborative teams of researchers investigating questions that span multiple disciplines within and beyond biology.

Proposals are due January 12, 2022. Approximately \$15 million is available to support four to six awards.

LINKS: [Grants.gov](#), [Solicitation](#)

Cumulative Health Impacts at the Intersection of Climate Change, Environmental Justice, and Vulnerable Populations-Lifestages: Community-Based Research for Solutions

Environmental Protection Agency (EPA), Office of Research and Development (ORD)

Notice seeking applications proposing transdisciplinary research with approaches that explore and analyze environmental problems at the intersection of climate change, environmental justice (EJ), and vulnerable populations/lifestages.

Applications are due November 16, 2021. Approximately \$8.1 million is available to support six awards.

LINKS: [Grants.gov](https://www.grants.gov)

ECosystem for Leading Innovation in Plasma Science and Engineering
National Science Foundation (NSF)

Notice seeking proposals to identify and capitalize on opportunities for bringing fundamental plasma science investigations to bear on problems of societal and technological need within the scope of science and engineering supported by the participating NSF programs.

Proposals are accepted anytime.

LINKS: [Grants.gov](https://www.grants.gov)

FY2022 Marine Debris Prevention
National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (Commerce)

Notice seeking proposals to supports the development and implementation of locally-driven, marine debris assessment, removal and prevention projects that benefit coastal habitat, waterways, and marine and Great Lake resources.

Required letters of intent are due October 29, 2021. Proposals are due February 11, 2022. Up to \$5 million is available to support 8 to 15 awards. A minimum of one to one cost share is required.

LINKS: [Grants.gov](https://www.grants.gov)

FY22 Naval Engineering Education Consortium (NEEC) BAA
Navy (Navy), Department of Defense (Defense), Naval Surface Warfare Center (NSWC); Indian Head Division (IHD)

Notice seeking proposals to solicit research of interest in support of the Naval Engineering Education Consortium (NEEC).

Proposals are due November 1, 2021. Multiple awards are anticipated.

LINKS: [Grants.gov](https://www.grants.gov)

Human-Environment and Geographical Sciences Program - Doctoral Dissertation Research Improvement Awards

Directorate for Social, Behavioral & Economic Sciences (SBE), National Science Foundation (NSF), Division of Behavioral and Cognitive Sciences

Notice seeking proposals to support basic scientific research about the nature, causes and/or consequences of the spatial distribution of human activity and/or environmental processes across a range of scales. Contemporary geographical research is an arena in which diverse research traditions and methodologies are valid.

Proposals are accepted anytime. Approximately \$250,000 to \$375,000 is available to support 10 to 15 awards.

LINKS: [Grants.gov](#), [Solicitation](#)

Partnerships for Research and Education in Chemistry
Directorate for Mathematical & Physical Sciences (MPS), National Science Foundation (NSF)

Notice seeking proposals to enable, build, and grow partnerships between minority-serving institutions (MSIs) and CHE-supported Centers for Chemical Innovation, NSF's ChemMatCARS, the Molecular Sciences Software Institute (MoSSI), or the Molecule Maker Lab Institute (MMLI) to increase recruitment, retention and degree attainment (which defines the PREC pathway) by members of those groups most underrepresented in chemistry research, and at the same time support excellent research and education endeavors that strengthen such partnerships.

Proposals are due January 21, 2022. Approximately \$2 million is available to support two to four awards. Colleges and universities are eligible to partner with MSIs.

Limited Submission: One proposal per lead institution

LINKS: [Grants.gov](#), [Solicitation](#)

ROSES 2021: Physical Sciences Informatics
National Aeronautics and Space Administration (NASA), Science Mission Directorate (SMD)

Notice seeking proposals to: a) promote investigations making use of currently available experimental data resulting in more scientists participating in reduced-gravity research; b) allow new areas of research and discovery to occur more quickly through open access; and c) accelerate the "research to product or publication" timeline through the rapid sharing of data.

Proposals are due January 10, 2022. Requested notices of intent are due October 29, 2021. Approximately \$500,000 is available to support five awards per year.

LINKS: [Grants.gov](#), [Solicitation](#)

7th Annual HBCU-MSI Partnerships Virtual Meeting and NSF EPSCoR Summit
National Aeronautics and Space Administration (NASA), Marshall Space Flight Center (MSFC)

Notice announcing NASA/MSFC 7th Annual NASA Historically Black Colleges and Universities (HBCUs)/Minority Serving Institutions (MSIs) Virtual Partnerships Meeting. This year, we are excited to be working in collaboration with The Catalyst Center for Business & Entrepreneurship as well as the National Science Foundation (NSF) Established Program to Stimulate Competitive Research (EPSCoR) to bring you a two-day virtual event.

The meeting will be held October 26-27, 2021 from 9 a.m. to 4 p.m. CST.

LINKS: [Contract Opportunities](#)

Industrial Decarbonization through Concentrating Solar Thermal
Department of Energy (Energy)

Notice requesting information on pathways to use solar energy to decarbonize industries that produce key building blocks of our national economy, including high-priority products like iron, steel, cement, and ammonia. Hydrogen is also of interest—as a fuel in its own right and as an important feed chemical for synthesis of liquid fuels and other products.

Responses are due October 13, 2021.

LINKS: [Grants.gov](#), [Solicitation](#)

Solar Impacts on Wildlife and Ecosystems Request for Information
Department of Energy (Energy)

Notice requesting information on the current practices related to siting large-scale solar energy plants and how stakeholders evaluate the impacts these plants may have on the surrounding environment, especially on wildlife.

Responses are due September 30, 2021.

LINKS: [Grants.gov](#), [Solicitation](#)

Japan-U.S. Network Opportunity
Directorate for Computer & Information Science & Engineering (CISE), National Science Foundation (NSF)

Notice seeking proposals for US-Japanese collaborative research for enabling flexible and scalable programmable networks for next generation core and beyond 5G/6G networks.

Applications are due December 13, 2021. An estimated five awards of up to \$450,000 for three years are anticipated.

LINKS: [Grants.gov](#), [Solicitation](#)