UNO FOCUS:

Class of 2024 Brooke Owens Fellowship

The Brooke Owens Fellowship provides paid internships and executive mentorship for exceptional undergraduate women and gender-minority students in aerospace. Fellows are selected for their talent, their experience to date, their commitment to service, and their creativity. Their experience in the program is designed to help them grow in each of those areas, turning promising students into thriving leaders.

The application for the class of 2024 will be available until October 7, 2023.

LINKS: Apply

Annual Open Call U.S. Department of Energy

The U.S. Department of Energy (DOE) announced up to \$500 million in funding for basic research in support of DOE's clean energy, economic, and national security goals. The funding will advance the priorities of DOE's Office of Science and its major programs, including Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, Nuclear Physics, Isotope R&D and Production, and Accelerator R&D and Production. This funding opportunity will help achieve the Biden Administration's plan to employ science and innovation to tackle our greatest challenges.

The FOA, titled "FY 2024 Continuation of Solicitation for the Office of Science Financial Assistance Program," can be found on the Office of Science <u>funding opportunities page</u>.

LINKS: Energy.gov

Virtual Space Radiation Curriculum NASA SHINE (Space Health Impacts for the NASA Experience) Training Program

Space Health Impacts for the NASA Experience (SHINE) is a designed as a virtual training program targeted to graduate students, postdocs, research scientists, early career investigators and potential new investigators to learn about the relevant scientific elements of the Human Research Program (HRP). Specifically, the SHINE Space Radiation Curriculum aims to educate participants not only in the scientific aspects of space radiation but also agency risk management strategies. The 6-month course will include formal didactic lectures covering essential learning material along with more informal interactive coffee hours to facilitate networking with space radiation thought leaders. The course culminates with oral and written presentations of mock beam-time proposals by the participants.

The second annual virtual SHINE Space Radiation Curriculum is scheduled from February 2024 - August 2024. This call solicits applications for the second cohort of the SHINE Training Program. The deadline to submit is October 16, 2023.

LINKS: NASA PRS

Space Radiation Practicum

NASA SHINE (Space Health Impacts for the NASA Experience) Training Program

The Space Health Impacts for the NASA Experience (SHINE) program aims to educate participants in the scientific aspects of spaceflight exposures relevant to human health as well as agency risk management strategies. The NASA Human Research Program Space Radiation Element (SRE) is initiating a short practicum session to support participants in gaining experience to conduct accelerator experiments at the NASA Space Radiation Laboratory (NSRL), NASA's premier space radiation analog facility in Brookhaven,

New York. In 2022, NASA held the inaugural SHINE Space Radiation Didactic Curriculum; a virtual training program held across 2023 that targeted to graduate students, postdocs, research scientists, early career investigators and potential new investigators.

The first in-person SHINE Space Radiation Practicum at the NSRL, Brookhaven National Laboratory is scheduled for the Fall of 2024. This call solicits applications for the first cohort of the SHINE Space Radiation Practicum. The deadline to submit responses is October 16, 2023.

LINKS: NASA PRS

Undergraduate Research Opportunities Program (UROP)

The Undergraduate Research Opportunities Program (UROP) is soliciting applications from faculty mentors of promising undergraduate students at all Louisiana universities and colleges. UROP, established in 1992 by the Louisiana Sea Grant College Program (LSG), offers the Louisiana undergraduate community funding to support hands-on research experiences in marine and coastal resource issues. Previously funded projects have dealt with topics such as coastal ecology, fisheries, aquaculture, environmental engineering and genetics. Approximately seven projects will be funded depending on funds available for the 2024 project period (March 2024 to December 2024); each faculty member will receive up to \$3,500 to cover student wages, supplies and necessary travel.

Applications will be accepted until Dec. 4, 2023, at 11:59pm CST. Apply via our online eSeaGrant system.

LINKS: LASeaGrant.org

ARTS, HUMANITIES, and INTERNATIONAL

DRC Rural and Peri Urban Market based Sanitation (MBS) Activity Agency for International Development

Notice seeking applications to fund programs that implement high impact interventions that strengthen sanitation markets to increase sustained access to and use of basic sanitation services. The activity will include support to sanitation sector governance, marketing, hygiene practices, including potential support to open defecation free (ODF) campaigns, in collaboration with other USAID and other donor funded programs operating in the same target geographies.

Applications are due November 30, 2023. Estimated \$50 million is available. Cost share of five percent is required.

LINKS: Grants.gov

Protecting and Conserving African Elephant Priority Populations Interior

Notice seeking applications to ensure healthy African elephant populations in the wild, while improving pathways for human-elephant coexistence.

Applications are due November 27, 2023. Estimated \$8 million is available to fund 15 awards.

LINKS: Grants.gov

EDUCATION and ECONOMIC & COMMUNITY DEVELOPMENT

FY24 Guidelines for Brownfield Grants (Community-wide Assessment Grants; Assessment Coalition Grants; Cleanup Grants; Multipurpose Grants)
Environmental Protection Agency

Notice seeking proposals for various brownfield cleanup projects. Mechanisms include: <u>Brownfield cleanup grants</u>; <u>Brownfield multipurpose grants</u>; <u>Community-wide assessment grants</u>; and <u>Assessment coalition grants</u>.

Applications are due November 13, 2023. Award numbers and amounts vary by type.

LINKS: Agency Site

Community Facilities Technical Assistance and Training Grant - Disaster Relief Supplemental Appropriations Act 2023 Grant Funds U.S. Department of Agriculture

Notice seeking applications to provide technical assistance and training with respect to essential community facilities programs. To meet this purpose, the Agency will make grants to public bodies and private nonprofit corporations to provide assistance and/or training with respect to repairing essential community facilities.

Applications are due November 24, 2023. Estimated \$2.5 million is available.

LINKS: Grants.gov; Agency Site

Innovative Water Infrastructure Workforce Development Grant Program Environmental Protection Agency

Notice seeking applications to assist in the development and utilization of innovative activities relating to workforce development and career opportunities in the water utility sector.

Applications are due November 17, 2023. Estimated \$20.8 million is available to fund up to 22 awards.

LINKS: Grants.gov

National Park Service 21st Century Conservation Service Corps and Civilian Climate Corps Program - National Youth Cooperative Agreements Interior

Notice seeking applications to put America's youth and veterans to work protecting, restoring and enhancing America's great outdoors. Through the 21CSC/CCC, young people and veterans will accomplish meaningful work, and gain important personal and professional skills while building a lifelong connection to the outdoors.

Applications are due September 30, 2028. 80 awards are anticipated. Twenty-five percent cost share is required.

LINKS: Grants.gov

HEALTH and MENTAL HEALTH

HEAL Initiative: Research to Increase Implementation of Substance Use Preventive Services (R01 OR R61-R33 Clinical Trial Optional)

U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking proposals for investigator-initiated research that will address priorities in the dissemination and implementation of opioid crisis prevention services, and the creation of a prevention infrastructure. Available mechanisms include R01 Clinical Trial Optional awards and R61/R33 Clinical Trial Optional awards.

Applications are due January 17, 2024. Estimated \$4.65 million is available to fund multiple awards.

LINKS: Grants.gov (R61/R33 Clinical Trial Optional); Grants.gov (R01 Clinical Trial Optional)

Healthy Start Initiative: Eliminating Disparities in Perinatal Health U.S. Department of Health and Human Services, Health Resources and Services Administration

Notice seeking proposals to improve health outcomes before, during, and after pregnancy and reduce the well-documented racial/ethnic differences in rates of infant death and adverse perinatal outcomes in communities and populations experiencing the greatest disparities in maternal and infant health outcomes.

Applications are due December 15, 2023. Estimated \$113.65 million is available to fund up to 103 awards.

LINKS: Grants.gov

Single Cell Opioid Responses in the Context of HIV (SCORCH) Program: Data Mining and Functional Validation (R01 or R21 Clinical Trial Not Allowed)

U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking proposals for three activities: mine SCORCH data to identify cell types, transcripts, enhancers, or transcriptional networks that play a role in HIV/ART or SUD molecular responses; functional validation studies (e.g. epigenomic or transcriptomic manipulation, high throughput secondary screening, etc.) to confirm or deny a biological role for data-mined cell types, transcripts, enhancers, or transcriptional networks in HIV/ART or SUD molecular responses; develop foundational knowledge for understanding SUD and/or HIV/ART molecular mechanisms and to generate validated targets that could serve as a foundation for new SUD or HIV therapeutics. Available mechanisms include R01 grants and R21 grants.

Applications are due August 13, 2024. Estimated \$3 million is available to fund six to seven awards of all types.

LINKS: Grants.gov (R21); Grants.gov (R01)

Specialized Programs of Research Excellence (SPOREs) in Human Cancers for Years 2024, 2025, and 2026 (P50 Clinical Trial Required)

U.S. Department of Health and Human Services, National Institutes of Health, National Institutes of Health

Notice seeking proposals for translational research that will contribute to improved prevention, early detection, diagnosis, and treatment of an organ-specific cancer or a highly related group of cancers.

Applications are due annually on January 25, May 25, and September 25. Program expires September 26, 2026. An estimated 6 to 10 awards with a per-year ceiling of \$1.4 million are anticipated.

LINKS: Grants.gov; Solicitation

Meeting of the Secretary's Advisory Committee on Human Research Protections U.S. Department of Health and Human Services

Notice announcing a meeting of the Secretary's Advisory Committee on Human Research Protections. The purpose is to provide expert advice and recommendations to the Secretary of Health and Human Services, through the Assistant Secretary for Health, on issues and topics pertaining to or associated with the protection of human research subjects.

The meeting will be held on October 18, 2023, from 9:00 a.m. until 5:00 p.m., and October 19, 2023, from 9:00 a.m. until 4:00 p.m. ET (times are tentative and subject to change).

LINKS: Federal Register; Agency Site

Biomedical Advanced Research and Development Authority (BARDA) Broad Agency Announcement (BAA) U.S. Department of Health and Human Services

Notice seeking applications to catalyze innovation in advanced research and development (R&D), manufacturing, and procurement of Medical Countermeasures (MCMs). These lifesaving MCMs are needed to protect people during public health emergencies from threats such as chemical, biological, radiological, and nuclear (CBRN) incidents (whether accidental or intentional), pandemic influenza, COVID-19, and other emerging infectious diseases.

Required abstracts and proposals are due any time until September 25, 2028. Multiple awards are anticipated.

LINKS: Contract Opportunities

Developing novel theory and methods for understanding the genetic architecture of complex human traits (R21 or R01 Clinical Trial Not Allowed)

U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking proposals for novel theory and methods development that better delineate how genetic and non-genetic factors contribute to complex trait variation across individuals, families, and populations. Available mechanisms include R01 grants and R21 grants.

R01 applications are due February 5, 2024. R21 applications are due February 16, 2024. Multiple awards are anticipated.

LINKS: Grants.gov (R21 Clinical Trial Not Allowed); Grants.gov (R01 Clinical Trial Not Allowed)

Health and Health Care Disparities Among Persons Living with Disabilities (R01 - Clinical Trials Optional) U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking proposals for novel and innovative research that examines and/or intervenes upon the underlying and multilevel causes, pathways, and factors adversely impacting the health and well-being of persons living with one or more disabilities among populations experiencing health disparities.

Applications are due February 5, 2024. Multiple awards are anticipated.

LINKS: Grants.gov; Solicitation

Interventions to Address HIV-Related Comorbidities among Highly Affected Populations Experiencing Health Disparities (R01 - Clinical Trial Required)

U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking applications to support multilevel and multidisciplinary intervention research to improve quality of life and promote successful aging among people with HIV with HIV associated non-AIDS comorbidities across the life course from racial and ethnic minority populations and from lower socioeconomic status backgrounds, who are disproportionately affected.

Applications are due annually on December 11. Program expires December 12, 2026. Estimated \$5-6 million is available to fund five to six awards.

LINKS: Grants.gov; Solicitation

Mechanistic Studies of the Effects of Psychosocial Stress on Complex Morbidity Involving SUD, Psychiatric Disorders, and HIV (R01 Clinical Trials Optional, or R01 Basic Experimental Studies with Humans (BESH) Required)

U.S. Department of Health and Human Services, National Institutes of Health

Notice seeking proposals for research aimed at elucidating neurocognitive and other neurobiological mechanisms underlying the influence of psychosocial stress on the risk or impact of substance use disorders (SUDs) and co-occurring psychiatric disorders in people living with HIV (PLWH). Available grant mechanisms include R01 Clinical Trials Optional and R01 Basic Experimental Studies with Humans (BESH) Required.

Applications are due February 15, 2024. Estimated \$3 million is available to fund up to six awards.

LINKS: <u>Grants.gov</u> (R01 Basic Experimental Studies with Humans (BESH) Required); <u>Grants.gov</u> (R01 Clinical Trials Optional)

World Trade Center Health Program; Notices of Funding Opportunities Public Information Sessions U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

Notice announcing two public information sessions to provide information on current research funding opportunities published by the World Trade Center (WTC) Health Program.

Public information sessions will be held on October 17 and 18, 2023, 2 p.m. to 3:30 p.m. ET via Zoom.

LINKS: Federal Register

SCIENCE, TECHNOLOGY, ENGINEERING, and MATHEMATICS

2024 Effects of Sea Level Rise Commerce

Notice seeking proposals to contribute to increased coastal resiliency and improve adaptation and mitigation capabilities through the production of informational reports and tools to provide guidance to scientists, managers, and communities.

Required Letters of Intent are due November 13, 2023 to nccos.grant.awards@noaa.gov. Applications are due January 24, 2024. An estimated six awards with a ceiling of \$500,000 are anticipated.

LINKS: Grants.gov

Intensity-Squeezed Photonic Integration for Revolutionary Detectors (INSPIRED) Defense

Notice seeking innovative research proposals to develop compact optical detectors with sensitivity below the quantum shot noise limit.

Applications are due December 13, 2023. Abstracts are strongly encouraged and due October 20, 2023. Multiple awards are anticipated.

LINKS: Grants.gov; Contract Opportunities

Promoting Readiness and Enhancing Proficiency to Advance Reporting and Data Environmental Protection Agency

Notice seeking proposals for cooperative agreements to support the data, reporting, and evidence-building capacity of program beneficiaries, which include, recipients of grant funding from EPA as direct recipients of EPA funding and subrecipients who can participate in the Clean Water and Safe Drinking Water programs, particularly for those representing small, underserved, and/or tribal communities that are applying for or receiving EPA grant funding, including but not limited to funding under the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58 [also known as the Bipartisan Infrastructure Law (BIL)] funding and the Inflation Reduction Act (IRA), Public Law 117-169.

Applications are due November 30, 2023. Estimated \$4 million is available to fund up to eight awards.

LINKS: Grants.gov

Solar-thermal Fuels and Thermal Energy Storage via Concentrated Solar-thermal Energy Energy

Notice seeking proposals to implement one of two approaches to energy storage in concentrated solar-thermal (CST) systems: thermochemical storage via solar fuel production; and local thermal energy storage (TES) for dispatchable energy.

Required concept papers are due November 3, 2023. Estimated \$30 million is available to fund up to 15 awards. Cost share is required.

LINKS: Grants.gov; Solicitation

Public Meeting of the National Geospatial Advisory Committee Interior

Notice announcing a meeting of the National Geospatial Advisory Committee. The purpose is to provide advice and recommendations related to management of Federal and national geospatial programs, the development of the National Spatial Data Infrastructure (NSDI), and the implementation of the Geospatial Data Act of 2018 (GDA) and the Office of Management and Budget Circular A–16.

The meeting will be held October 11, 2023, from 9:00 a.m. to 5:00 p.m. and October 12, 2023, from 9:00 a.m. to 5:00 p.m. ET at the Department of the Interior Building, 1849 C Street NW, Washington, DC in the South Penthouse Conference Room.

LINKS: Federal Register

Advancing Research Capacity at HBCUs through Exploration and Innovation National Science Foundation

Notice seeking proposals to bring together HBCU faculty, staff, research administrators, and academic leadership to stimulate the generation and execution of innovative and transformative approaches for enhancing opportunities for HBCUs to finance and conduct STEM research.

Required preliminary proposals are due December 19, 2023. Estimated \$9 million is available to fund up to four awards.

LINKS: Grants.gov; Solicitation

Defense Sciences Office (DSO) Office-wide BAA Defense

Notice seeking proposals for innovative basic or applied research concepts or studies and analysis proposals that address one or more of the following technical thrust areas: (1) Novel Materials & Structures,

(2) Sensing & Measurement, (3) Computation & Processing, (4) Enabling Operations, (5) Collective Intelligence, and (6) Emerging Threats.

Proposals are due on a rolling basis until September 26, 2024. Multiple awards are anticipated.

LINKS: Grants.gov; Contract Opportunities

Enabling Partnerships to Increase Innovation Capacity National Science Foundation

Notice seeking proposals to broaden participation in innovation ecosystems that advance key technologies (e.g., advanced manufacturing, advanced wireless, artificial intelligence, biotechnology, quantum information science, semiconductors, novel materials, and microelectronics) by supporting capacity-building efforts at institutions of higher education (IHEs) interested in growing external partnerships.

Required preliminary proposals are due December 15, 2023 and June 27, 2024. Estimated \$20 million is available to fund up to 50 awards.

LINKS: Grants.gov; Solicitation

Fueling Aviation's Sustainable Transition via Sustainable Aviation Fuels (FAST-SAF) and Low-Emission Aviation Technologies (FAST-Tech) Grant Program U.S. Department of Transportation

Notice seeking applications to make investments that accelerate the production and use of SAF, supporting both the SAF Grand Challenge and United States aviation climate goals to reduce aviation carbon emissions and to accelerate the development and demonstration of low-emission aviation technologies to meet U.S. aviation climate goals and reduce aviation carbon emissions.

Applications are due November 27, 2023. Estimated \$244.53 million for FAST-SAF and \$46.53 million for FAST-Tech is available. Cost share is required.

LINKS: Grants.gov

Ideas Lab: Personalized Engineering Learning

National Science Foundation

Notice seeking proposals to extend engineering education research to enable advanced personalization in pedagogy and assessment in a K-12 or higher education context. The following broad areas have been identified as possible avenues to advance knowledge: personalized engineering education, multimodal sensing for personalized learning systems and team-based personalized learning.

Required preliminary proposals are due November 29, 2023. Estimated \$3 million is available to fund three awards over two years.

LINKS: Grants.gov; Solicitation

Research on Innovative Technologies for Enhanced Learning National Science Foundation

Notice seeking proposals to support early-stage research in emerging technologies for teaching and learning that respond to pressing needs in authentic (real-world) educational environments. RITEL supports future-oriented exploratory and synergistic research in emerging technologies (including, but not limited to. artificial intelligence (AI), robotics, and immersive or augmenting technologies) for teaching and learning.

Proposals are due January 24, 2024. Estimated \$25 million is available to fund 20 to 25 awards.

LINKS: Grants.gov; Solicitation

ROSES 2023: Heliophysics Citizen Science Investigations

National Aeronautics and Space Administration

Notice seeking proposals for medium-scale citizen science projects during the Heliophysics Big Year and beyond, enabling science during the concurrence of multiple solar and heliophysics events.

Required Step-1 proposals are due November 15, 2023. An estimated five awards with an estimated first-year budget of \$700,000 are anticipated.

LINKS: <u>Grants.gov</u>; <u>Solicitation</u>

Signals Intelligence (SIGINT) Solutions for Evolving Scenarios (SESS) Defense

Notice seeking proposals for innovative research to develop emerging Cyber and SIGINT real-time processing solutions to improve tactical information collection, geolocation, extraction, identification, analysis, simulation and reporting in support of the Intelligence Community. Overall program goals include providing situational awareness for worldwide signals and network intelligence sources; provide sensor data collection and processing with a network-centric approach; understand the adversarial battlespace; provide multi-platform/multi-intelligence support to both protect and increase the blue coalition warfighting capabilities.

Required white papers are due November 15, 2023. Estimated \$750,000 is available to fund multiple awards in FY 24.

LINKS: Contract Opportunities

Transfer from Imprecise and Abstract Models to Autonomous Technologies (TIAMAT) Defense

Notice seeking proposals for breakthrough innovation for rapid transfer learning techniques to enable same-day autonomy that is (i) robust to the quick and inevitable changes in dynamic environments and (ii) adaptable to a variety of platforms and domains.

Proposals are December 20, 2023. Abstracts are requested and due October 17, 2023. Multiple awards are anticipated.

LINKS: Contract Opportunities

High Energy Physics Advisory Panel Energy

Notice announcing an open virtual meeting of the High Energy Physics Advisory Panel. The purpose of the meeting is to discuss the International Benchmarking report.

The meeting will be held Thursday, November 2, 2023, 12:00 p.m. to 2:30 p.m. (ET). This meeting will be held virtually via Zoom.

LINKS: Federal Register; Agency Site