GRANT OPPORTUNITIES

Gupta College of Science

General

FY 2020 NASA Established Program to Stimulate Cooperative Agreement Notice
National Aeronautics and Space Administration
Due Date: 03/06/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=323064
Based on the availability of funding, proposals from eligible EPSCoR jurisdictions will be accepted and awards selected through a merit-based, peer-review competition for a cooperative agreement of up to $750,000 over 36 months. The following are the specific objectives of NASA EPSCoR: Contribute to and promote the development of research capability in NASA EPSCoR jurisdictions in areas of strategic importance to the NASA mission; Improve the capabilities of the NASA EPSCoR jurisdictions to gain support from sources outside the NASA EPSCoR program; Develop partnerships among NASA research assets, academic institutions, and industry; Contribute to the overall research infrastructure, science and technology capabilities of higher education, and economic development of the jurisdiction. Per Public Law 102-588, proposals will be accepted only from the 28 NASA EPSCoR Directors at the lead institutions for which they are currently serving. The NASA EPSCoR Directors from the following jurisdictions are eligible to submit one proposal to this NASA EPSCoR solicitation: Alabama, Alaska, Arkansas, Delaware, Idaho, Iowa, Guam, Hawaii, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, US Virgin Islands, Vermont, West Virginia, and Wyoming.

Early Career Research Program
Department of Energy – Office of Science
Due Date: 03/16/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=322675
SC hereby invites grant applications for support under the Early Career Research Program in the following program areas: Advanced Scientific Computing Research (ASCR); Biological and Environmental Research (BER); Basic Energy Sciences (BES), Fusion Energy Sciences (FES); High Energy Physics (HEP), and Nuclear Physics (NP). The purpose of this program is to support the development of individual research programs of outstanding scientists early in their careers and to stimulate research careers in the areas supported by SC.

Higher Education Challenge (HEC) Grants Program
Department of Agriculture – National Institute of Food and Agriculture
Due Date: 03/23/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=320953
Projects supported by the Higher Education Challenge Grants Program will: (1) address a state, regional, national, or international educational need; (2) involve a creative or non-traditional approach toward addressing that need that can serve as a model to others; (3) encourage and facilitate better working relationships in the university science and education community, as well as between universities and the private sector, to enhance program quality and supplement available resources; and (4) result in benefits that will likely transcend the project duration and USDA support.
FY 2020 Day of Service Grants
Corporation for National and Community Service
Due Date: 3/25/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=323858
The Day of Service grant competition includes funding for both September 11th Day of Service and Remembrance (September 11th) and Martin Luther King Jr. Day of Service (MLK). Applicant organizations may apply for either September 11th, MLK, or both. Applicants may not submit more than one application for each Day of Service. The purpose of the September 11th National Day of Service and Remembrance grant funding is to mobilize more Americans to engage in service activities that meet vital community needs and honor the sacrifice of those who lost their lives on September 11, 2001, or who rose in service as a result of that tragedy. The purpose of the Martin Luther King Jr. Day of Service grant funding is to mobilize more Americans to observe the Martin Luther King Jr. federal holiday as a day of service in communities, to encourage those who serve on this holiday to make a long-term commitment to community service, and to bring people together to focus on service to others.

NSF Scholarships in Science, Technology, Engineering, and Mathematics Program
National Science Foundation
Due Date: 03/25/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=322907
A well-educated science, technology, engineering, and mathematics (STEM) workforce is a significant contributor to maintaining the competitiveness of the U.S. in the global economy. The National Science Foundation (NSF) Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program addresses the need for a high quality STEM workforce in STEM disciplines supported by the program and for the increased success of low-income academically talented students with demonstrated financial need who are pursuing associate, baccalaureate, or graduate degrees in science, technology, engineering, and mathematics (STEM)[6], [16]. Recognizing that financial aid alone cannot increase retention and graduation in STEM, the program provides awards to Institutions of Higher Education (IHEs) to fund scholarships and to advance the adaptation, implementation, and study of effective evidence-based curricular and co-curricular activities that support recruitment, retention, transfer (if appropriate), student success, academic/career pathways, and graduation in STEM. The S-STEM program encourages collaborations among different types of participating groups, including but not limited to partnerships among different types of institutions; collaborations of STEM faculty and institutional, educational, and social science researchers; and partnerships among institutions of higher education and business, industry, local community organizations, national labs, or other federal or state government organizations, if appropriate. The program seeks to 1) increase the number of low-income academically talented students with demonstrated financial need obtaining degrees in S-STEM eligible disciplines and entering the workforce or graduate programs in STEM; 2) improve the education of future scientists, engineers, and technicians, with a focus on low-income academically talented students with demonstrated financial need; and 3) generate knowledge to advance understanding of how interventions or evidence-based curricular and co-curricular activities affect the success, retention, transfer, academic/career pathways, and graduation of low-income students in STEM. Scholars must be low-income, academically talented students with unmet financial need who are enrolled in an associate, baccalaureate or graduate degree program, with a major in an S-STEM eligible discipline. S-STEM Eligible Disciplines: Biological sciences (except medicine and other clinical fields) Physical sciences (including physics, chemistry, astronomy, and materials science) Mathematical sciences Computer and information sciences Geosciences Engineering Technology fields associated with the disciplines above (e.g. biotechnology, chemical technology, engineering technology, information technology).

Environmental Literacy Grants: Supporting the education of K-12 students and the public for community resilience
Department of Commerce
Due Date: 03/26/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=321575
The goal of this funding opportunity is to build environmental literacy of K-12 students and the public so they are knowledgeable of the ways in which their community can become more resilient to extreme weather and/or other environmental hazards, and become involved in achieving that resilience. Projects should build the collective environmental literacy necessary for communities to become more resilient to the extreme weather and other environmental hazards they face in the short- and long-term. Building sufficient environmental literacy in a community means that these communities are composed of individuals who are supported by formal and informal education that develop their knowledge, skills, and confidence to: (1) reason about the ways that human and natural systems interact globally and where they live, including the acknowledgement of disproportionately distributed vulnerabilities; (2) participate in scientific and/or civic processes; and (3) consider scientific uncertainty, cultural knowledge, and diverse community values in decision making.
International Research and Education Network Connections
National Science Foundation
Due Date: 04/01/2020
The International Research and Education Network Connections (IRNC) Base program supports high-performance network connectivity required by international science and engineering research and education collaborations involving the NSF research community. High-performance network connections and infrastructure funded by this program are intended to support science and engineering research and education applications, and preference will be given to solutions that provide the best economy of scale and demonstrate the ability to support the largest communities of interest with the broadest services. Funded projects will assist the U.S. research and education community by enabling state-of-the-art international network services and access to increased collaboration and data services. NSF expects to make 3 to 10 awards in production R&E network infrastructure; 1 to 3 awards in international testbeds; and 1 award in Engagement.

2020 BREP (Bycatch Reduction Engineering Program)
Department of Commerce
Due Date: 04/02/2020
The mission of the National Bycatch Reduction Engineering Program (BREP) is to support the development of technological solutions and changes in fishing practices designed to minimize bycatch of fish and protected species (including Endangered Species Act-listed fish, marine mammals, seabirds, and sea turtles) and to reduce impacts to invertebrates (including sponges, deep-sea corals, and shallow (tropical) corals.) In addition, BREP may support projects that quantify post-release mortality and identify ways to minimize mortality and injury of bycaught species (including post-release injury and mortality). Projects should produce outcomes that can directly influence management needs of federally managed living marine resources.

NSF Innovation Corps Hubs Program
National Science Foundation
Due Date: 4/14/2020
The National Science Foundation (NSF) seeks to further develop and nurture a national innovation ecosystem that guides the output of scientific discoveries closer to the development of technologies, products, and services that benefit society. The goal of the NSF Innovation Corps (I-Corps) Program, created in 2011 by NSF, has been and will continue to be to reduce the time and risk associated with translating promising ideas and technologies from the laboratory to the marketplace. The I-Corps Program utilizes experiential learning of customer and industry discovery, coupled with first-hand investigation of industrial processes, to quickly assess the translational potential of inventions. The I-Corps Program is designed to support the commercialization of so-called “deep technologies,” or those revolving around fundamental discoveries in science and engineering. The I-Corps program addresses the skill and knowledge gap associated with the transformation of basic research into deep technology ventures (DTVs).
Environmental Convergence Opportunities in Chemical, Bioengineering, Environmental, and Transport Systems
National Science Foundation
Due Date: 04/30/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=322461

Creating solutions to pressing environmental and sustainability challenges will require input and imaginative approaches from various fields, perspectives, and disciplines. The National Academies of Sciences, Engineering and Medicine (NASEM), in their report "Environmental Engineering for the 21st Century: Addressing Grand Challenges," identified five critical challenges we must address as a society: Sustainably supply food, water, and energy, Curb climate change and adapt to its impacts, Design a future without pollution and waste, Create efficient, healthy, and resilient cities, Foster informed decisions and actions. The report further states, "The challenges provide focal points for evolving environmental engineering education, research, and practice toward increased contributions and a greater impact. Implementing this new model will require modifications in educational curriculum and creative approaches to foster interdisciplinary research on complex social and environmental problems." This solicitation aims to address these grand challenges by supporting a collaborative research model that seamlessly integrates sustainability, environmental engineering, and process science and engineering. Accordingly, the Environmental Convergence Opportunities in Chemical, Bioengineering, Environmental, and Transport Systems (ECO-CBET) solicitation will support activities that confront vexing environmental engineering and sustainability problems by uncovering and incorporating fundamental knowledge to design new processes, materials, and devices from a systems-level perspective. Projects should be compelling and reflect sustained, coordinated efforts from interdisciplinary research teams. A key objective of the solicitation is to encourage conversations and robust collaborations amongst the chemical process, transport phenomena, bioengineering, and environmental and sustainability research communities such that unanticipated solutions may arise. Furthermore, training the future workforce to actively engage and be successful in interdisciplinary research will be necessary to continually innovate given the scope of the environmental problems faced by our global community.

Mid-Scale Innovations Program in Astronomical Sciences
National Science Foundation
Due date: 05/06/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=320837

A vigorous Mid-Scale Innovations Program (MSIP) was recommended by the 2010 Astronomy and Astrophysics Decadal Survey, citing "many highly promising projects for achieving diverse and timely science." As described in this solicitation, the Division of Astronomical Sciences conducts a mid-scale program to support a variety of astronomical activities within a cost range up to $30M. This program is formally divided into four subcategories: 1) limited term, self-contained science projects; 2) longer term mid-scale facilities; 3) development investments for future mid-scale and large-scale projects; and 4) community open access capabilities. MSIP will emphasize both strong scientific merit and a well-developed plan for student training and involvement of a diverse workforce in instrumentation, facility development, or data management.

U.S. Consulate General Naha Annual Program
Department of State – U.S. Mission to Japan
Due Date: 08/01/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=323093

PAS Naha invites Statement of Interest (SOI) for projects that strengthen cultural ties between the U.S. and Japan with an emphasis on Okinawa through cultural and exchange programming that highlights shared values and promotes bilateral cooperation. All programs must include an American cultural element, or connection with American expert/s, organization/s, or institution/s in a specific field that will promote increased understanding of U.S. policy and perspectives. All programs must take place on Okinawa or creates opportunities for residents of Okinawa. Examples of PAS Small Grants Program projects include, but are not limited to: Academic and professional lectures, seminars and speaker programs; Artistic and cultural workshops, joint performances and exhibitions; or Professional and academic exchanges and projects.
**NRL Long Range Broad Agency (BAA) for Basic and Applied Research**
Department of Defense – Naval Research Laboratory
Due Date: 09/05/2020

The NRL’s Broad Agency Announcement (BAA) issued under the provisions of paragraphs 35.016 and 6.102(d)(2) of the Federal Acquisition Regulations (FAR). Proposals may range from theoretical studies to proof-of-concept to include fabrication and delivery of a prototype. However, this is limited to research procurements for which it would be impossible to draft an adequate RFP in sufficient detail without restraining the technical response and thus hindering competition rather than expanding it. BAA topics include all NRL sites located in the Washington, DC area, the Stennis Space Center, MS, and Monterey, CA. Proposals submitted in response to a BAA announcement that are selected for award are considered to be the result of full and open competition and are in full compliance with the provisions of Public Law 98-369, "The Competition in Contracting Act of 1984."

**Youth Engagement, Education, and Employment**
Department of the Interior – Fish and Wildlife Service
Due Date: 09/15/2020

The U.S. Fish and Wildlife Service’s (USFWS or Service) National Wildlife Refuge System (NWRS) is accepting proposals from non-profit, state, and local government youth and veteran serving organizations with the interest and capacity to work cooperatively with the USFWS to develop introductory educational experiences in natural resource careers to young people and veterans, including culturally, ethnically and economically diverse students, and underserved communities that traditionally have low participation in outdoor recreation activities through hands-on experience and mentoring at a variety of USFWS programs including but not limited to, national wildlife refuges, fish hatcheries, and ecological services offices. Under this program, individuals and/or groups of youth, young adults, and veterans: Will be introduced to natural resource careers through hands-on work with, and training by, natural resource professionals employed by the USFWS may be given the opportunity to serve both seasonal and or year-round assignments. Will enhance conservation stewardship; increase outdoor recreation opportunities for all Americans and improve the management of game species and their habitats for this generation and beyond. Will be introduced to various real-world conservation and rehabilitation activities such as invasive species management, habitat restoration, wildlife management, public education and interpretation, disaster response and mitigation, and communications, mixed with informal and formal training sessions directed by USFWS employees during assignments. Will enhance and expand public access to lands and waters. Will be provided feedback for their future growth and may receive consideration for future employment with the USFWS.

**NSF Dynamic Language Infrastructure – NEH Documenting Endangered Languages**
National Science Foundation
Due Date: 09/15/2020

This funding partnership between the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH) supports projects to develop and advance knowledge concerning dynamic language infrastructure in the context of endangered human languages—languages that are both understudied and at risk of falling out of use. Made urgent by the imminent loss of roughly half of the approximately 7000 currently used languages, this effort aims to exploit advances in information technology to build computational infrastructure for endangered language research. The program supports projects that contribute to data management and archiving, and to the development of the next generation of researchers. Funding can support fieldwork and other activities relevant to the digital recording, documentation and analysis, and archiving of endangered language data, including the preparation of lexicons, grammars, text samples, and databases. Funding will be available in the form of one- to three-year senior research grants, fellowships from six to twelve months, and conference proposals.
The Office of Naval Research (ONR), ONR Global, and the Marine Corps Warfighting Lab (MCWL) are interested in receiving proposals for Long-Range Science and Technology (S&T) Projects which offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines.

Annual Program Statement, Public Affairs, U.S. Embassy Harare
Department of State – U.S. Mission to Zimbabwe
Due Date 09/30/2020

The U.S. Embassy Zimbabwe, Public Affairs Section is seeking proposals for projects throughout the fiscal year that; promote educational and cultural exchange, build the rule of law and fiscal transparency, encourage civic discourse and action against violence and corruption, support professionalization of the media, promote freedom of expression and information encourage entrepreneurship, economic growth, innovation and sound business practices, empower women and youth with specific knowledge of women’s rights and skills to enhance economic advancement, promote social inclusion and tolerance of underserved communities such as disabled persons, minority ethnic groups, LGBTQI, and those in remote rural areas, promote greater health awareness and livelihoods in HIV prevention and AIDS treatment, promote natural resource management and sustainable environmental practices including mitigation against climate change, combat the trafficking of animals, humans, and illicit materials and substances.

Women and Minorities in STEM Fields
Department of Agriculture
National Institute of Food and Agriculture
Due Date: 1/21/2021

The purpose of this program is to support research, education/teaching, and extension projects that increase participation by women and underrepresented minorities from rural areas in STEM. NIFA intends this program to address educational needs within broadly defined areas of food, agriculture, natural resources, and human (FANH) sciences. Applications recommended for funding must highlight and emphasize the development of a competent and qualified workforce in the FAHN sciences. WAMS-funded projects improve the economic health and viability of rural communities by developing research and extension initiatives that focus on new and emerging employment opportunities in STEM occupations. Projects that contribute to the economic viability of rural communities are also encouraged.

Environmental Engineering
National Science Foundation
Due Date: Ongoing

The Environmental Engineering program is part of the Environmental Engineering and Sustainability cluster, which also includes 1) the Nanoscale Interactions program; and 2) the Environmental Sustainability program. Environmental engineering is an interdisciplinary field that applies chemical, biological, and physical scientific principles to protect human and ecological health. The goal of the Environmental Engineering program is to support potentially transformative fundamental research that applies scientific and engineering principles to 1) prevent, minimize, or re-use solid, liquid, and gaseous discharges of pollution to soil, water, and air by closing resource loops or through other measures; 2) mitigate the ecological and human-health impacts of such releases by smart/adaptive/reactive amendments or manipulation of the environment, and 3) remediate polluted environments through engineered chemical, biological, and/or geo-physical processes. Integral to achieving these goals is a fundamental understanding of the transport and biogeochemical reactivity of pollutants in the environment. Therefore, research on environmental micro/biology, environmental chemistry, and environmental geophysics may be relevant providing the research has a clear objective of protecting human and ecological health.
Support of Competitive Research (SCORE) Research Continuance Award  
Department of Health and Human Services – National Institutes of Health  
Due Date: Ongoing  
https://www.grants.gov/web/grants/view-opportunity.html?oppId=321893  
The SCORE Program is a developmental program designed to increase the research competitiveness of faculty and the research base at institutions with an explicitly stated historical mission and/or a demonstrated track record within the previous 10 years of training and graduating students from backgrounds underrepresented in biomedical research. Eligible institutions must award science degrees to undergraduate (B.S. or B.A.) and/or graduate students (M.S. or Ph.D.) and have received less than 6 million dollars per year of NIH R01 support (total costs) in each of the last 2 fiscal years.

AHRQ Mentored Research Scientist Career Development Award  
Department of Health and Human Services – Agency for Health Care Research and Quality  
Due Date: Ongoing  
https://www.grants.gov/web/grants/view-opportunity.html?oppId=322822  
The primary purpose of the AHRQ Mentored Research Scientist Career Development Awards (K01) program is to help ensure that a diverse pool of highly trained scientists is available in appropriate scientific disciplines to address the Nation's health services research needs. This AHRQ program provides support and protected time to individuals with a research doctoral degree for an intensive, supervised research career development experience in health services research. The K01 award can be used both by individuals who propose to newly embark in health services research training and those who had a hiatus in their research careers because of illness or family circumstances.
Scholarships for Disadvantaged Students
Department of Health and Human Services, Health Resources and Services Administration
Due Date: 03/03/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=323433
This program promotes diversity among the health professions by providing awards to eligible health professions and nursing schools, for schools to provide scholarships to students from disadvantaged backgrounds who have a demonstrated financial need and are enrolled full-time in a health profession program or nursing program. Participating schools are responsible for selecting scholarship recipients, making reasonable determinations of need, and providing scholarships that do not exceed the allowable costs (i.e., tuition, reasonable educational expenses and reasonable living expenses with a cap for the total scholarship award of $40,000).

Children’s Healthy Weight State Capacity Building Program
Department of Health and Human Services – Health Resources and Services Administration
Due Date: 04/16/2020
To develop and implement a Children’s Healthy Weight CoIIN, with the goal of increasing the proportion of children and young adults ages birth to 21 years who fall within a healthy weight range by supporting states to adopt evidence-based or evidence-informed policies and practices related to nutrition, physical activity, and breastfeeding.

The Physiology of the Weight Reduced State Data Coordinating Center
Department of Health and Human Services – National Institutes of Health
Due Date: 06/11/2020
https://www.grants.gov/web/grants/view-opportunity.html?oppId=322679
This Funding Opportunity Announcement (FOA) invites U24 cooperative agreement applications for a Data Coordinating Center to participate in a clinical trial focused on elucidation of the physiological mechanisms underlying individual variability in maintenance of reduced weight over time. A companion FOA (RFA DK-19-017, The Physiology of the Weight Reduced State Clinical Trial Consortium (UG3/UH3 Clinical Trial Required) invites Clinical Centers (CC) to recruit and study participants before and after a behavioral/lifestyle weight loss intervention to determine the extent, durability and mechanisms for physiologic adaptations to weight loss, including metabolic and biobehavioral mechanisms. It is expected that tissue biospecimens will be collected that can be used to identify potential metabolic pathways that are altered after weight loss and may render it more difficult to maintain the reduced weight. An award made under the current FOA will support a planning/preparation phase for approximately one year, followed by a study phase of up to four additional years once planning milestones are met. Applications submitted in response to this FOA must propose activities for both phases and are expected to include plans for project management and performance milestones for each phase.

Complex Integrated Multi-Component Projects in Aging Research
Department of Health and Human Services – National Institutes of Health
Due Date 09/25/2022
https://www.grants.gov/web/grants/view-opportunity.html?oppId=320593
This FOA allows for applications that propose large-scale, complex research projects with multiple highly integrated components focused on a common research question relevant to aging. Such projects will likely involve an integrated multidisciplinary team of investigators within a single institution or a consortium of institutions.
The Disability and Rehabilitation Engineering program is part of the Engineering Biology and Health cluster, which also includes: 1) the Biophotonics program; 2) the Biosensing program; 3) the Cellular and Biochemical Engineering program; and 4) the Engineering of Biomedical Systems program. The Disability and Rehabilitation Engineering program supports fundamental engineering research that will improve the quality of life of persons with disabilities through: development of new technologies, devices, or software; advancement of knowledge regarding healthy or pathological human motion; or understanding of injury mechanisms. Research may be supported that is directed toward the characterization, restoration, rehabilitation, and/or substitution of human functional ability or cognition, or to the interaction between persons with disabilities and their environment. Areas of particular interest are neuroengineering and rehabilitation robotics. The program will also consider research in the areas of: new engineering approaches to understand healthy or pathological motion, both as a target for rehabilitation and as a means to characterize motion related to disability or injury; understanding injury at the tissue- or system-level such that interventions may be developed to reduce the impact of trauma and subsequent disability; or understanding the role of gut microbiota in modulating disability in the context of rehabilitation. Emphasis is placed on significant advancement of fundamental engineering knowledge that facilitates transformative outcomes.