Engineering Research Transforming Our World

Research Funding Opportunities

Organization: NSF/ Letter Name: Louis Stokes Alliance for Minority Participation (LSAMP) 17-579
Full Proposal Due Date: Nov 2, 2018 (Bridge to Doctorate) Nov 16, 2018 (STEM Pathways and LSAMP Pre-Alliance Planning) Jan 25, 2019 (Louis Stokes Regional Centers of Excellence) Summary: The Louis Stokes Alliances for Minority Participation (LSAMP) program is an alliance-based program. The program's theory is based on the Tinto model for student retention. The overall goal of the program is to assist universities and colleges in diversifying the nation's science, technology, engineering and mathematics (STEM) workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to populations historically underrepresented in these disciplines: African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders. The LSAMP program takes a comprehensive approach to student development and retention. Particular emphasis is placed on transforming undergraduate STEM education through innovative, evidence-based recruitment and retention strategies, and relevant educational experiences in support of racial and ethnic groups historically underrepresented in STEM disciplines. The program also supports knowledge generation, knowledge utilization, program impact and dissemination type activities. The program seeks new learning and immediate diffusion of scholarly research into the field. Under this program, funding for STEM educational and broadening participation research activities could include research to develop new models in STEM engagement, recruitment and retention practices for all critical pathways to STEM careers or research on interventions such as mentoring, successful learning practices and environments, STEM efficacy studies, and technology use. Overall, the LSAMP program provides funding to alliances that implement comprehensive, evidence-based, innovative, and sustained strategies that ultimately result in the graduation of well-prepared, highly-qualified students from underrepresented minority groups who pursue graduate studies or careers in STEM. Project types under this program include:

1. Alliances of Degree-granting institutions
2. Bridge to Doctorate Activities
3. Louis Stokes Regional Centers of Excellence in Broadening Participation (LSRCE).
4. Pre-Alliance Planning
5. Conferences and other supplemental funding opportunities are supported for existing LSAMP alliances or LSAMP institutions


NSF (3)
AFRL (1)

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Organization: NSF/ Letter Name: Discovery Research PreK-12 Due Date: Nov 14, 2018, November 13, 2019 Summary: The Discovery Research PreK-12 program (DRK-12) seeks to significantly enhance the learning and teaching of science, technology, engineering, mathematics and computer science (STEM) by preK-12 students and teachers, through research and development of STEM education innovations and approaches. Projects in the DRK-12 program build on fundamental research in STEM education and prior research and development efforts that provide theoretical and empirical justification for proposed projects. Projects should result in research-informed and field-tested outcomes and products that inform teaching and learning. Teachers and students who participate in DRK-12 studies are expected to enhance their understanding and use of STEM content, practices and skills.

The DRK-12 program invites proposals that address immediate challenges that are facing preK-12 STEM education as well as those that anticipate radically different structures and functions of preK-12 teaching and learning. The DRK-12 program has three major research and development strands: (1) Assessment; (2) Learning; and (3) Teaching. The program recognizes the synergy among the three strands and that there are some overlap and interdependence among them. However, proposals should identify a clear focus of the proposed research efforts (i.e., assessment, learning, or teaching) consistent with the proposal’s main objectives and research questions. The program supports six types of projects: (1) Exploratory, (2) Design and Development, (3) Impact, (4) Implementation and Improvement, (5) Syntheses, and (6) Conferences. All six types of projects apply to each of the three DRK-12 program strands.


Organization: NSF/CASIS/ Letter Name: Collaboration on Tissue Engineering and Mechanobiology on the International Space Station to Benefit Life on Earth DE-19-509 Due Date: November 14, 2018, November 13, 2019 Summary: The Divisions of Chemical, Bioengineering and Environmental Transport (CBET) and Civil, Mechanical, and Manufacturing Infrastructure (CMMI) in the Engineering Directorate of the National Science Foundation (NSF) are partnering with The Center for the Advancement of Science in Space (CASIS) to solicit research projects in the general fields of tissue engineering and mechanobiology that can utilize the International Space Station (ISS) National Lab to conduct research that will benefit life on Earth. U.S. entities including academic investigators, non-profit independent research laboratories and academic-commercial teams are eligible to apply.

Link: [https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505490](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505490)

Organization: AFRL /Letter Name: Structural Integrity Research Collaborations for Aircraft (SIRCA) FA8650-19-S-2002 Due Date: October 23, 2023 Summary: The objective of the Structural Integrity Research Collaborations for Aircraft (SIRCA) program is to enable collaborative research partnerships between AFRL, Academia, and Industry, in areas relevant to aircraft to, structural integrity including, but not limited to, risk and reliability, metal fatigue and fracture, and composite damage modeling. These technical areas are necessary for developing critical war-fighting technologies for the nation’s air, space and cyberspace forces, as well as commercial derivatives. Link: [https://www.grants.gov/web/grants/search-grants.html](https://www.grants.gov/web/grants/search-grants.html)