National Aeronautics and Space Administration

National Aeronautics and Space Administration - NASA Education Fellowship Activity, 2018

Proposal Due Date: March 20, 2018
Expected Number of Awards: 6
Estimated Total Program Funding: $1,500,000
Award Ceiling: $220,000
Award Floor:
Funding Opportunity Number: NNH18ZHA003N

Purpose: The purpose of the NASA Fellowship Activity 2018 is to support the vitality and diversity of the STEM workforce of NASA and the United States by training and funding graduate students during their STEM academic endeavors and providing access to NASA, its content, unique facilities, and STEM experts. Awards will be made as NASA Training Grants to institutions with Master and Doctoral programs in STEM fields. The period of performance for an award is up to three (3) years. Prospective proposers are requested to submit any questions in writing to NASA.Fellowships@nasaprs.com by February 28, 2018, so that NASA will have sufficient time to respond. Candidates eligible to receive a NASA Fellowship, the candidate shall meet the following requirements:

• Be a U.S. citizen or naturalized citizen (permanent residents are not eligible) at the time of proposal submission;
• Hold a Bachelor’s degree in a STEM field earned before August 31, 2018;
• Have a minimum 3.0 GPA on a 4.0 scale;
• Be enrolled in a full-time Master’s or Doctoral degree program no later than September 1, 2018;
• Intend to pursue a research-based Master’s or Doctoral program in a NASA STEM relevant field (see full solicitation at http://nspires.nasaprs.com);
• Have a projected degree plan for continuous full-time enrollment equal to or greater than May 2021;
• Have not completed credits exceeding what is listed in the Academic Eligibility Requirements chart.

Credit and Enrollment Eligibility Requirements Chart Degree Program - Number of graduate credits
earned by May 31, 2018 - The student’s degree plan is continuous and full-time for a minimum of 2 years after September 1, 2018.

https://www.grants.gov/web/grants/view-opportunity.html?oppId=300156

**National Science Foundation**

**National Science Foundation - Integrative Strategies for Understanding Neural and Cognitive Systems**

**Proposal Due Date:** April 17, 2018  
**Expected Number of Awards:** 25  
**Estimated Total Program Funding:** $15,000,000  
**Award Ceiling:** $1,000,000  
**Award Floor:** $150,000  
**Funding Opportunity Number:** 18-533

**Purpose:** The complexities of brain and behavior pose fundamental questions in many areas of science and engineering, drawing intense interest across a broad spectrum of disciplinary perspectives while eluding explanation by any one of them. Rapid advances within and across disciplines are leading to an increasingly interwoven fabric of theories, models, empirical methods and findings, and educational approaches, opening new opportunities to understand complex aspects of neural and cognitive systems through integrative multidisciplinary approaches. This program calls for innovative, convergent, boundary-crossing proposals that can best capture those opportunities and map out new research frontiers. NSF seeks proposals that are bold and risky, and transcend the perspectives and approaches typical of disciplinary research efforts. This cross-directorate program is one element of NSF’s broader effort directed at Understanding the Brain, a multi-year activity that includes NSF’s participation in the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative NSF envisions a connected portfolio of transformative, integrative projects that create synergistic links across investigators and communities, yielding novel ways of tackling the challenges of understanding the brain in action and in context. This solicitation extends the NCS program for three years, from FY2018 through FY2020, and offers the FRONTIERS proposal class, for larger projects, in FY2019. Integrative projects will be supported at scales reflecting increasing levels of collaboration and coordination toward strategic, potentially transformative research goals. The program focuses on four aspects of neural and cognitive systems that are current targets of converging interdisciplinary interests. NCS projects must advance the foundations of one or more of these focus areas, as described further within the solicitation:

- **Neuroengineering and Brain-Inspired Concepts and Designs**
- **Individuality and Variation**
- **Cognitive and Neural Processes in Realistic, Complex Environments**
- **Data-Intensive Neuroscience and Cognitive Science**

Proposals must address both risk and reward: high-risk, high-payoff approaches are expected.
Purpose: Cultivating Cultures for Ethical STEM (CCE STEM) funds research projects that identify (1) factors that are effective in the formation of ethical STEM researchers and (2) approaches to developing those factors in all the fields of science and engineering that NSF supports. CCE STEM solicits proposals for research that explores the following: “What constitutes responsible conduct for research (RCR), and which cultural and institutional contexts promote ethical STEM research and practice and why?” Factors one might consider include: honor codes, professional ethics codes and licensing requirements, an ethic of service and/or service learning, life-long learning requirements, curricular memberships in organizations (e.g. Engineers without Borders) that stress responsible conduct for research, institutions that serve under-represented groups, institutions where academic and research integrity are cultivated at multiple levels, institutions that cultivate ethics across the curriculum, or programs that promote group work, or do not grade. Do certain labs have a ‘culture of academic integrity’? What practices contribute to the establishment and maintenance of ethical cultures and how can these practices be transferred, extended to, and integrated into other research and learning settings? Successful proposals typically have a comparative dimension, either between or within institutional settings that differ along these or among other factors, and they specify plans for developing interventions that promote the effectiveness of identified factors. CCE STEM research projects will use basic research to produce knowledge about what constitutes or promotes responsible or irresponsible conduct of research, and how to best instill students with this knowledge. In some cases, projects will include the development of interventions to ensure responsible research conduct. Proposals for awards from minority-serving institutions (e.g. Tribal Colleges and Universities, Historically Black Colleges and Universities, Hispanic-Serving Institutions, Alaska Native or Native Hawaiian Serving Institutions), women's colleges, and institutions primarily serving persons with disabilities are strongly encouraged. Proposals including international collaborations are encouraged when those efforts enhance the merit of the proposed work by incorporating unique resources, expertise, facilities or sites of international partners. The U.S. team’s international counterparts generally should have support or obtain funding through other sources.
Proposal Due Date: April 18, 2018
Expected Number of Awards: 
Estimated Total Program Funding: $34,000,000
Award Ceiling: 
Award Floor: 
Funding Opportunity Number: 18-531

Purpose: The Cyberinfrastructure for Sustained Scientific Innovation (CSSI) umbrella program encompasses the long-running Data Infrastructure Building Blocks (DIBBs) and Software Infrastructure for Sustained Innovation (SI2) programs, as NSF seeks to enable funding opportunities that are flexible and responsive to the evolving and emerging needs in data and software cyberinfrastructure. The CSSI umbrella program anticipates four classes of awards:
Elements (either Data Elements or Software Elements): These awards target small groups that will create and deploy robust capabilities for which there is a demonstrated need that will advance one or more significant areas of science and engineering.
Framework Implementations (either Data Frameworks or Software Frameworks): These awards target larger, interdisciplinary teams organized around the development and application of common infrastructure aimed at solving common research problems faced by NSF researchers in one or more areas of science and engineering, resulting in a sustainable community framework serving a diverse community or communities.
Planning Grants for Community Cyberinfrastructure (either Community Data Cyberinfrastructure Planning Grants or Community Software Cyberinfrastructure Planning Grants): Planning awards focus on the establishment of long-term capabilities in cyberinfrastructure, which would serve a research community of substantial size and disciplinary breadth.
Community Cyber Infrastructure Implementations (either Community Data Cyberinfrastructure Implementations or Community Software Cyberinfrastructure Implementations): These Community Software Cyberinfrastructure Implementations focus on the establishment of long-term hubs of excellence in cyberinfrastructure and technologies, which will serve a research community of substantial size and disciplinary breadth.

https://www.grants.gov/web/grants/view-opportunity.html?oppId=300153

National Science Foundation - Operator Selection for Two Regional Class Research Vessels (RCRV 2 and RCRV 3)
Proposal Due Date: April 19, 2018
Expected Number of Awards: 
Estimated Total Program Funding: $8,600,000
Award Ceiling: 
Award Floor: 
Funding Opportunity Number: 18-534
Purpose: The Division of Ocean Sciences (OCE) Integrative Programs Section (IPS) is soliciting proposals from eligible organizations to serve as Operating Institutions (OIs) for two (2) Regional Class Research Vessels (RCRVs). Planning for construction of new RCRVs for the U.S. Academic Research Fleet (ARF) has been ongoing at the National Science Foundation for more than a decade. In early 2012 a Solicitation (NSF-12-558) was issued for the design and construction of up to three RCRVs. The solicitation provided that the Awardee would serve as Lead Institution (LI) for the Design and Construction of all vessels in the Class with the option to serve as Operator of the Lead Ship. The solicitation further indicated that selection of OIs for any additional vessels would be conducted by means of a separate competition that would be completed prior to delivery of the first RCRV. In early 2013, a resulting Cooperative Agreement was awarded to Oregon State University (OSU). As the LI, OSU is responsible for managing each phase of the design, construction and trials of each vessel in the Class. The Design Phase has been completed and NSF’s 2017 budget included a provision that supported construction of three (3) ships. A construction contract for up to three Regional Class Research Vessels was awarded to Gulf Island Shipyards, LLC. This solicitation seeks to select qualified institutions to operate the additional RCRV Class vessels. These institutions shall either have current membership in the University-National Oceanographic Laboratory System (UNOLS) or be capable of becoming UNOLS members prior to taking over responsibility for full vessel operations. Separate proposals are required for each vessel. The solicitation requires prospective Awardees to perform the following, separately-funded activities:

- Provide Operating Institution representation on-site at the shipyard from the start of the Design Verification and Transfer (DVT) for their respective vessel
- Provide one representative to a Transition Core Team formed at the start of the Transition to Operations Phase of RCRV #1 (estimated to be October 2019).
- Provide appropriate levels of phased personnel resources in support of the two-year Transition to Operations periods for RCRV #2 and RCRV #3, which start one year prior to vessel delivery and end one year following vessel delivery.

The requirement to provide one year of Full Operations after completing the Transition to Operations Phase for each vessel will be funded directly under this solicitation. The staggered schedule for the Construction Phase of the RCRV program is based on one-year increments for RCRV #1, #2 and #3, such that Design Verification Start, Transition Start, Vessel Delivery, Transition End and year of post-Transition operations for RCRV #1 precedes comparable milestones for RCRV #2 by one year, which precedes RCRV #3 by one year.

[link](https://www.grants.gov/web/grants/view-opportunity.html?oppId=300202)