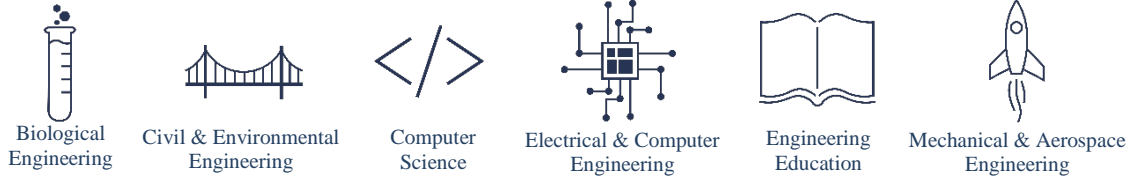


May 31, 2018



# Engineering Research Transforming Our World



NSF (4)  
DOD (2)

## Research Funding Opportunities

**Organization:** NSF RFP/Letter Name: **Engineering of Biomedical Systems (EBMS) PD-18-5345 Due Date: October 22, 2018 Summary:** The Engineering of Biomedical Systems (EBMS) program is part of the Engineering Biology and Health cluster, which also includes 1) Biophotonics; 2) Biosensing; 3) Cellular and Biochemical Engineering; and 4) Disability and Rehabilitation Engineering. The goal of the EBMS program is to provide research opportunities for creating discovery-level and transformative projects that integrate engineering and life sciences to solve biomedical problems and serve humanity in the long term. The EBMS program supports fundamental and transformative research in the following areas of biomedical engineering:

-Development of validated models (living or computational) of normal and pathological tissues and organ systems that can support improved fundamental understanding of these systems or development and testing of medical interventions,  
-Design and validation of systems that integrate living and non-living components for improved understanding, diagnosis, monitoring, and treatment of disease or injury,  
-Advanced biomanufacturing of three-dimensional tissues and organs, and  
-Design and subsequent application of technologies and tools to investigate fundamental physiological and pathophysiological processes.

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- Design and subsequent application of technologies and tools to investigate fundamental physiological and pathophysiological processes.

**Link:** [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=505546](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505546)

**Organization:** NSF RFP/Letter Name: **Expeditions in Computing 18-528 Due Date: January 16, 2019 Summary:** The far-reaching impact and rate of innovation in the computer and information science and engineering fields has been remarkable, generating economic prosperity and enhancing the quality of life for people throughout the world.

The Directorate for Computer and Information Science and Engineering (CISE) has established the Expeditions in Computing (Expeditions) program to provide the CISE research and education community with the opportunity to pursue ambitious, fundamental research agendas that promise to define the future of computing and information. I

**Link:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=299703>

**Organization:** NSF RFP/Letter Name: **Environmental Sustainability PD-18-7643 Due Date: October 22, 2018 Summary:** The goal of the Environmental Sustainability program is to promote sustainable engineered systems that support human well-being and that are also compatible with sustaining natural (environmental) systems. These systems provide ecological services vital for human survival. Research

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efforts supported by the program typically consider long time horizons and may incorporate contributions from the social sciences and ethics. The program supports engineering research that seeks to balance society's need to provide ecological protection and maintain stable economic conditions. **Link:**

[https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=505549](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505549)

NSF (4)

DOD (2)

**Organization: NSF RFP/Letter Name: Research Experiences for Teachers (RET) in Engineering and Computer Science 17-575 Due Date: September 19, 2018**

**Summary:** NSF's Directorate for Engineering (ENG) and the Directorate for Computer and Information Science and Engineering (CISE) have joined to support the Research Experiences for Teachers (RET) in Engineering and Computer Science program. This program supports active long-term collaborative partnerships between K-12 Science, Technology, Engineering, Computer and Information Science, and Mathematics (STEM) in-service and pre-service teachers, full-time community college faculty, and university faculty and students to enhance the scientific disciplinary knowledge and capacity of the STEM teachers and/or community college faculty through participation in authentic summer research experiences with engineering and computer science faculty researchers.

**Link:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=295306>

**Organization: DOD RFP/Letter Name: DARPA Biological Technologies (BTO)**

**HR001118S0041 Due Date: April 25, 2019 Summary:** The mission of BTO is to foster, demonstrate, and transition breakthrough fundamental research, discoveries, and applications that integrate biology, engineering, computer science, mathematics, and the physical sciences. BTO's investment portfolio goes far beyond life sciences applications in medicine to include areas of research such as human-machine interfaces, microbes as production platforms, and deep exploration of the impact of evolving ecologies and environments on U.S. readiness and capabilities. BTO's programs operate across a wide range of scales, from individual cells to the warfighter to global ecosystems. BTO responds to the urgent and long-term needs of the Department of Defense (DoD) and addresses national security priorities. **Link:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=305336>

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**Organization: DOD RFP/Letter Name: AFRL-NM Tech Transfer and Education Outreach (STEM) Partnership Intermediary Agreement (AFRL) FOA-RVKV-**

**2017-0001 Due Date: August 22, 2018 Summary:** The AFRL Directed Energy Directorate (RD) and Space Vehicles Directorate (RV) are interested in receiving proposals under this announcement for multiple funding opportunities in support of the RD and RV Office of Research and Technology Applications (ORTA), herein referred to as AFRL-NM. These opportunities are for Partnership Intermediary Agreement(s) (PIAs) for two topic areas; 1) Technology Transfer (T2) and 2) Education Outreach (STEM). Innovative approaches to accomplish the objectives for these topic areas are of particular interest. **Link:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=291718>