

December 12, 2017



Engineering Research Transforming Our World



NSF (2)
DOD (1)
DOI (1)

Research Funding Opportunities

Organization: NSF RFP/Letter Name: EMERGING FRONTIERS IN RESEARCH AND INNOVATION (ERFI): Chromatin and Epigenetic Engineering (CEE) and Continuum, Compliant, and Configurable Soft Robotics Engineering (C3 SoRo) (EFRI-2018) 17-587 Due Date: February 23, 2018 Summary: The Emerging Frontiers in Research and Innovation (EFRI) program of the NSF Directorate for Engineering (ENG) serves a critical role in helping ENG focus on important emerging areas in a timely manner. This solicitation is a funding opportunity for interdisciplinary teams of researchers to embark on rapidly advancing frontiers of fundamental engineering research. For this solicitation, we will consider proposals that aim to investigate emerging frontiers in the following two research areas: Chromatin and Epigenetic Engineering (CEE) and Continuum, Compliant, and Configurable Soft Robotics Engineering (C3 SoRo). **Link:**

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13708&org=NSF&sel_org=NSF&from=fund

Organization: NSF RFP/Letter Name: National Robotics Initiative 2.0: Ubiquitous Collaborative Robots (NRI-2.0) 18-518 Due Date: February 20, 2018 Summary: The NRI-2.0 program builds upon the original National Robotics Initiative (NRI) program to support fundamental research in the United States that will accelerate the development and use of collaborative robots (co-robots) that work beside or cooperatively with people. The focus of the NRI-2.0 program is on ubiquity, which in this context means seamless integration of co-robots to assist humans in every aspect of life. The program supports four main research thrusts that are envisioned to advance the goal of ubiquitous co-robots: scalability, customizability, lowering barriers to entry, and societal impact. Topics addressing scalability include how robots can collaborate effectively with multiple humans or other robots; how robots can perceive, plan, act, and learn in uncertain, real-world environments, especially in a distributed fashion; and how to facilitate large-scale, safe, robust and reliable operation of robots in complex environments. Customizability includes how to enable co-robots to adapt to specific tasks, environments, or people, with minimal modification to hardware and software; how robots can personalize their interactions with people; and how robots can communicate naturally with humans, both verbally and non-verbally. Topics in lowering barriers to entry include development of open-source co-robot hardware and software, as well as widely-accessible testbeds.

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Topics in societal impact include fundamental research to establish and infuse robotics into educational curricula, advance the robotics workforce through education pathways, and explore the social, economic, ethical, and legal implications of our future with ubiquitous collaborative robots. **Link:**

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503641&org=NSF&sel_org=NSF&from=fund

NSF (3)

DOD (1)

DOI (1)

Organization: DoD RFP/Letter Name: Advanced Plant Technologies (APT)

HR001118S0005 Due Date: February 21, 2018 Summary: The goal of the DARPA Advanced Plant Technologies (APT) program is to create the foundations for engineering plant varieties able to receive a variety of stimuli and produce measurable signals as output (“stimulus-response”). APT will rigorously explore the feasibility of using engineered plant varieties as independent biosensors. **Link:**

<https://www.grants.gov/web/grants/view-opportunity.html?oppId=298953>

Organization: DOI RFP/Letter Name: WaterSMART: Reservoir Operations

Alternatives—Calculating Economic Effects BOR-DO-18-F004 Due Date: February 27, 2018 Summary: The objective of this Funding Opportunity Announcement (FOA) is to invite states, Indian tribes, irrigation districts, water districts, universities, nonprofit research institutions and organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation to develop a methodology for analyzing the economic effects of reservoir operating alternatives. Applicants under this FOA may request funding for projects that include both (i) a technical study that develops a methodology for analyzing the economic effects of reservoir operating alternatives and potential improvements and (ii) a transferable tool for reservoir operators to use to estimate the benefits of specific reservoir operating alternatives and potential improvements. **Link:** <https://www.grants.gov/web/grants/view-opportunity.html?oppId=299096>

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