

NSF 20-046

Dear Colleague Letter: Supplemental Funding Requests to Conduct Experimental Research on the NSF-funded Platforms for Advanced Wireless Research (PAWR)

February 18, 2020

Dear Colleagues:

With this Dear Colleague Letter (DCL), the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) wishes to notify the community of its intention to support supplemental funding requests for active research awards to conduct experimental research on the NSF-funded Platforms for Advanced Wireless Research (PAWR). These supplemental funding requests are anticipated to be on the order of about \$50,000, with higher amounts (but strictly less than one-fifth of the original award) requiring additional justification. Funded supplements will provide support for periods of up to two years, but not exceed the existing award periods.

NSF's PAWR program (https://advancedwireless.org/) is currently supporting the deployment and initial operations of three advanced wireless research platforms conceived by the U.S. academic and industrial wireless research community. These platforms are in turn enabling experimental exploration of robust new wireless devices, communication techniques, networks, systems, and services that will revolutionize the Nation's wireless ecosystem, thereby enhancing broadband connectivity, leveraging the emerging Internet of Things (IoT), and sustaining U.S. leadership and economic competitiveness in advanced wireless networks and emerging applications and services for decades to come. The three platforms funded to date by NSF's PAWR program are: COSMOS (https://COSMOS-lab.org/), POWDER-RENEW (https://POWDERWireless.net/), and AERPAW (https://AERPAW.org/). The PAWR program website: https://advancedwireless.org will indicate the status on the availability of these platforms for experimenter use.

Active NSF-funded wireless researchers may propose, as part of their supplemental funding requests, experiments that utilize the PAWR platforms as these platforms become 'generally available' for experimenter use (as indicated on the PAWR program website

https://advancedwireless.org/ for each PAWR platform). Supplemental funding requests are anticipated from principal investigators (PIs) of active awards within NSF's Communications and Information Foundations, Computer and Network Systems Core, Cyber-Physical Systems, Secure and Trustworthy Cyberspace, Smart and Connected Communities, and Spectrum Efficiency, Energy Efficiency, and Security (SpecEES) programs, but PIs of projects funded by any NSF program are eligible. Supplemental funding awarded pursuant to this DCL may be used by the project team to support the time of the PI, co-PIs, other senior personnel, postdoctoral fellows, graduate students, or undergraduate students to design and conduct an experiment on a PAWR platform. Proposers are encouraged to become familiar with the experimentation process on the platform first prior to applying for supplements. No explicit collaboration letter or coordination is expected from the platform for which the supplement request is being sought.

All supplemental funding requests will be subject to NSF's merit review process, as described in the *NSF Proposal and Award Policies and Procedures Guide* (PAPPG). Each supplement funding request must follow the guidance specified in PAPPG Chapter VI.E.4 and must address the following items as part of the summary of the proposed work and the justification of the need for supplemental funds:

- Summary of the active wireless research (or closely related) award, including original research vision, goals, activities, and accomplishments, spanning Intellectual Merit and Broader Impacts;
- Summary of an extension of the active wireless research (or closely related) award to conduct an experiment on a specific PAWR platform, including a compelling justification for why there is a need for supplemental funding for conducting experimental wireless research on a PAWR platform and the corresponding potential impact;
- A work plan describing the proposed experimental research activities, along with the
 goals, milestones, and predicted outcomes; how the activities will expand the existing
 project's research and development activities; how these activities will address the
 needed capabilities and lead to potential impact; and the appropriateness of the
 supplemental funding request to the proposed scope and scale of the work; and
- An evaluation plan outlining tangible metrics to assess the outcomes of the proposed experimental research activities.

The suggested length for this description is four pages. The deadline for submission of supplemental funding requests for consideration in a fiscal year (FY) is March 15 of that year. This DCL will remain active until June 1, 2023.

Pls interested in submitting supplemental funding requests (or with other questions pertaining to this DCL) are strongly encouraged to contact one of the following NSF/CISE program directors prior to submitting:

This document has been archived and replaced by NSF 24-100.

- Deep Medhi, Program Director, CISE/CNS, telephone: (703) 292-2935, email: nets-pawr@nsf.gov; and
- Alex Sprintson, Program Director, CISE/CNS, telephone: (703) 292-2170, email: nets-pawr@nsf.gov

Sincerely,

Margaret Martonosi Assistant Director, CISE National Science Foundation