



**U.S. NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314**

NSF 24-037

Dear Colleague Letter: NSF and Micron Foundation Partnership for the Robert Noyce Teacher Scholarship Program

December 18, 2023

Dear Colleague:

This Dear Colleague Letter (DCL) encourages submission of proposals to the Robert Noyce Teacher Scholarship (Noyce) program that will excite, motivate, and prepare students for participation in the microelectronics industry. The Noyce program plays a seminal role in supporting the development of K-12 teachers who are well-prepared to support learners in successful experiences focused on concepts key to careers in microelectronics.

BACKGROUND

Microchips (aka "microelectronic integrated circuits") are, in many ways, the lifeblood of the modern economy of the United States (US). The worldwide demand for microchips has increased exponentially since the COVID pandemic, causing supply-chain disruptions, and resulting in global shortages of everyday goods. Reasserting US leadership in microelectronics requires the nation to develop a well-prepared science, technology, engineering, and mathematics (STEM) workforce. K-12 STEM teachers are pivotal to inspiring and preparing the students who will become the future microelectronics workforce by providing them with successful learning experiences to develop foundational knowledge of key concepts and practices associated with understanding microelectronics.

To meet this need, this Dear Colleague Letter announces a cooperative activity between the National Science Foundation (NSF) and the Micron Foundation to stimulate transformative approaches and experiences that address the critical need for recruiting, preparing, placing, and retaining highly effective elementary and secondary mathematics and science teachers and teacher leaders who persist as classroom teachers in high-need Local Education Agencies (LEA), (a.k.a. high-need school district). The Directorate for STEM Education (EDU) encourages the education research community to respond to this challenge through the Noyce program.

This DCL encourages proposals that will inspire, study, and support learners' interest and motivation to pursue educational pathways and careers in STEM disciplines associated with microelectronics. Successful projects should support STEM teachers in developing the knowledge, skills, and dispositions to engage learners in activities that will build conceptual understandings and skills in STEM disciplines needed for the microelectronics workforce of the future. As microelectronics integrates several STEM disciplines, it is appropriate that STEM teachers of various disciplines be supported in developing the knowledge and skills necessary to support learners in accessing and contributing to careers in microelectronics.

It is imperative that the microelectronics industry of the future be founded on principles of inclusivity that ensure equitable access to new careers. Thus, this DCL encourages all proposals to include educational approaches designed to broaden participation in microelectronics and related careers. Proposals may build from the perspectives and strengths of talent pools that have not yet been fully tapped. Further, this DCL encourages participation from the full spectrum of diverse talents in STEM.

TYPES OF ACCEPTED PROJECTS

With this DCL, the Directorate for STEM Education invites the submission of standard research proposals to the Noyce program and supplemental funding requests to existing Noyce awards.

Standard Research Proposals: Research proposals should be submitted to the Noyce program by the program's annual submission due date. Please read the solicitation for the prospective program carefully. Proposers are strongly encouraged to contact a Noyce program officer to discuss the fit of ideas to funding opportunities. Note that these proposals must meet all the requirements of the Robert Noyce Teacher Scholarship program solicitation, including applicable deadlines and budget guidelines.

Supplemental Funding Requests to Active Awards: Supplemental funding requests must be for currently active Noyce awards and should not exceed 20% of the original award size or \$250,000, whichever is smaller. All supplemental funding requests must be discussed with the cognizant Noyce program officers for the current Noyce award, prior to submission. Additionally, supplemental funding requests must follow the guidance specified in PAPPG Chapter VI.E.5.

SUBMISSION AND REVIEW

Research proposals and supplemental funding requests submitted in response to this DCL must adhere to all the requirements expressed in the Noyce program solicitation. Neither Micron nor Micron Foundation will provide letters of support and/or letters of collaboration in response to this DCL.

Proposals should be submitted through the regular proposal submission process as outlined in the Noyce program solicitation.

Supplemental funding requests for current Noyce awards may be submitted after consultation with the Noyce cognizant Program Officer.

Proposals and supplemental funding requests will be reviewed consistent with NSF's merit review criteria of intellectual merit and broader impacts as delineated in the Noyce solicitation.

Proposals and supplements submitted in response to this DCL, and recommended for funding by NSF, will be shared with Micron Foundation.

For more information, please contact program officers in the Noyce program in the Directorate of STEM Education's Division of Undergraduate Education (See Noyce solicitation [NSF 23-586](#) for a listing).

Sincerely,

James L. Moore III
Assistant Director, Directorate for STEM Education