

#### NSF 24-062

# Dear Colleague Letter: NSF INCLUDES Research Experience and Mentoring (REM) Supplemental Funding Opportunities

February 22, 2024

## Dear Colleague:

The National Science Foundation continually seeks to advance scientific progress in research and innovation by broadening the participation and inclusion of the full spectrum of diverse talents in science, technology, engineering, and mathematics (STEM) fields. Through this Dear Colleague Letter (DCL), the NSF Eddie Bernice Johnson Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) Initiative seeks to inform the community about an opportunity to pursue supplemental funding for Research Experience and Mentoring (REM) activities for active NSF projects focused on microelectronics, in response to the CHIPS and Science Act of 2022.

The NSF INCLUDES Initiative, in collaboration with the REM program, will support costs associated with bringing a cohort of high school students, STEM middle school and high school teachers, undergraduate students, faculty from non-research intensive institutions, and/or veterans to be engaged as Research Participants in a microelectronics research environment, in alignment with REM program guidance (NSF 23-012). Research experiences and mentorship have been positively correlated with academic and professional success in STEM (click here for a list of related references). Research Participants shall participate in research activities aligned with the parent project's microelectronics research goals and receive structured mentoring throughout the 2024-2025 academic year. The INCLUDES-REM program welcomes submission of proposals to this funding opportunity that include the participation of the full spectrum of diverse talent to include underrepresented and underserved populations in microelectronics-related STEM fields. (see https://ncses.nsf.gov/pubs/nsf23315 for statistical information about underrepresentation in STEM). Partnerships with K-12 schools, community colleges, technical schools, and/or minority-serving four-year institutions are especially encouraged.

#### PREPARATION AND SUBMISSION OF SUPPLEMENTAL FUNDING REQUESTS

Information about requesting supplemental support is contained in the NSF *Proposal and Award Policies and Procedures Guide* (PAPPG), Chapter VI.E.5, available online at PAPPG. In addition to the PAPPG requirements for supplemental support, the following materials must be included.

Summary of Proposed Work: (Combine the plans listed below into a single document.)

- Recruitment Plan, describing how an at least six-member cohort of research participants will be established. Letters of collaboration demonstrating credible relationships with campus or community organizations must be included. The REM program strongly recommends utilizing the NSF Education & Training Application (ETAP) mechanism to manage the recruitment, application, and selection processes. (2 pages maximum, not including the letters)
- 2. Participant Research Plan, describing types of research activities to which the Research Participants will contribute. The plan must include the significance of the research area, expected outcomes of research activities, and example projects that describe the types of tasks Research Participants will complete. The plan should be specific to the local setting, resources, and skills of the PI/Research Team. The plan should include Research Participants' attendance at the Emerging Researchers National Conference (ERN) in STEM in Washington, DC in 2025. Conference details can be found at https://emerging-researchers.org/. (3 pages maximum)
- 3. **Research Participant Mentoring Plan**, describing the mentoring activities that will be provided to the Research Participants supported by a supplement, if awarded. Mentoring plans should include a list of the individual(s) who will serve as mentors and describe their mentoring experience and the proposed mentoring activities. (3 pages maximum)
- 4. **Mentorship Training Plan**, describing the formal mentorship training that individuals responsible for mentoring Research Participants will receive. (2 pages maximum)
- 5. **Evaluation Plan**, describing expected outcomes of the activities undertaken and methods for measuring outcomes. (2 pages maximum)

Justification for Supplemental Funding:

Provide a brief project summary that describes how the proposed research and mentoring activities will broaden participation in microelectronics fields. (1/2 page maximum)

Biographical Sketches:

Standard NSF biographical sketches must be provided for the individuals who will serve as mentors, submitted as a supplementary document.

Budget and Budget Justification:

The supplemental funding request must include a budget and budget justification for the funds requested and their proposed use. The maximum annual amount that may be requested (including any associated indirect costs) is \$250,000. The budget must include expenses related to providing Research Participants with appropriate mentoring, materials, and laboratory access, as well as travel/registration expenses for Research Participants and mentors to participate in the Emerging Researcher National Conference to be held in Washington, DC. It must not include tuition at the supported organization(s). NSF INCLUDES-REM Research Participants must be provided with a stipend for their participation in research and mentoring activities.

For additional information on preparation of supplemental funding requests, see https://www.nsf.gov/edu/Pubs/2024INCLUDESREMInfo.pdf.

Organizations with active awards leading microelectronics research projects may apply for NSF INCLUDES-REM supplemental funding. The request for supplemental funding should be submitted to NSF via Research.gov. Recipients may request NSF INCLUDES-REM supplements for up to 12 months, but the period of support must cover at least the full 2024-2025 academic year.

Specific questions related to this DCL should be referred to the NSF program staff contact(s) listed below.

An informational video for those interested in applying for NSF INCLUDES-REM supplemental funding is available at <a href="https://www.nsf.gov/edu/Videos/2024INCLUDESREMWebinar.jsp">https://www.nsf.gov/edu/Videos/2024INCLUDESREMWebinar.jsp</a>.

For Fiscal Year 2024, the deadline for submission of an NSF INCLUDES-REM supplemental funding request is 5:00 p.m., submitter's local time, on **April 10, 2024.** 

#### **ELIGIBILITY**

A request for supplemental funding may be submitted by the AOR on behalf of the PI or co-PI of any currently active NSF research award or cooperative agreement that has a microelectronics focus. These supplemental funding requests may include collaboration with and/or placement of Research Participants in other laboratories if the research activities are in the field of microelectronics. Research Participant candidates must be United States citizens, nationals, or permanent residents. It is the responsibility of the submitting organization to verify the eligibility of Research Participant candidates.

## **REVIEW PROCESS**

Decisions to provide supplemental funding will be based on internal review and/or external review by experts from academia and industry and pending the availability of funds. We

anticipate recommending awards by August 2024.

### OTHER FUNDING OPPORTUNITIES

In addition to supplemental funding requests, the NSF INCLUDES Initiative also encourages submission of EArly-concept Grants for Exploratory Research (EAGERs) or conference proposals, as described in the PAPPG, that focus on activities that broaden participation and develop the workforce in microelectronics through research experiences and structured mentoring. Interested principal investigators must contact the NSF program staff contact(s) listed below prior to submission.

#### CONTACTS FOR ADDITIONAL INFORMATION

For questions or information on submissions in response to this DCL, contact Alias Smith, alismith@nsf.gov, or Tori Smith, tosmith@nsf.gov.

We hope that you are inspired by this opportunity to design and implement a program that serves your research needs while simultaneously working to develop the microelectronics workforce of the future. We look forward to reading your innovative supplemental funding requests.

Sincerely,

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

Susan Margulies, PhD Assistant Director Directorate for Engineering