

NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

NSF 22-049

Dear Colleague Letter: Research Experiences for Undergraduates (REU) and Research Experiences for Teachers (RET) Supplemental Funding in Computer and Information Science and Engineering

February 18, 2022

Dear Colleagues:

The National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) invites grantees with active CISE awards to submit requests for **Research Experiences for Undergraduates (REU) Supplements**, following the guidelines in the REU Sites and Supplements solicitation (NSF 19-582). CISE also invites grantees with active CISE awards to submit requests for **Research Experiences for Teachers (RET) Supplements**, following the guidelines in the RET in Engineering and Computer Science: Supplements and Sites solicitation (NSF 21-606). Requests will be considered as they are received. CISE strongly encourages the submission of requests before May 31, 2022; the potential for funding requests after this date may be limited.

The participation of students and teachers from groups underrepresented in CISE fields – underrepresented minorities, women, and persons with disabilities – is strongly encouraged.

REU SUPPLEMENTS

REU supplements help undergraduate students engage in meaningful research experiences in pursuit of their educational and career goals. To be eligible for this opportunity, a student must be a US citizen, US national or permanent resident of the US. CISE encourages submission of REU supplemental funding requests that specifically afford US veterans an opportunity to engage in meaningful research experiences.

RET SUPPLEMENTS

RET supplements help K-12 science, technology, engineering, and mathematics (STEM) teachers engage in meaningful research experiences and translate the knowledge gained

into their teaching practices. The focus of their research should be in CISE disciplines rather than on education or curriculum development. Teachers who receive funding from an RET supplement must be currently teaching a STEM subject at their schools. CISE is particularly interested in RET supplements that target K-12 computer science teachers. Since a major goal of a RET activity is to create a bond between the K-12 schools and the host college or university, recruitment of RET teachers should focus on schools or school districts reasonably close to the host institutions.

NATURE OF SUPPORT

For single-investigator projects, CISE REU and RET supplemental funding requests should be for no more than two students or two teachers, respectively, for one year. Research teams funded through multi-investigator projects may request support for a larger number of students or teachers, commensurate with the size and nature of their projects.

As the impact of disruptions and uncertainties caused by the ongoing coronavirus disease (COVID-19) pandemic on undergraduate employment and education may persist, CISE will continue to consider supplemental funding requests for an additional number of students per active project beyond two if appropriately justified on these grounds. In all cases, requests for larger numbers of students and teachers beyond two should be accompanied by detailed justifications including an explanation of how the students will be mentored if the awardee organization is closed, for instance, through virtual mentorship experiences.

CISE provides up to \$8,000 per student per year through an REU supplement. This amount usually covers the student's stipend, but a small portion of the funds can be used for other related purposes, e.g., student travel to a conference. As described in the REU program solicitation (NSF 19-582), indirect costs (F&A) are not allowed on participant support costs in REU Site or Supplement budgets.

CISE provides up to \$10,000 per K-12 STEM teacher per year through a RET supplement. RET teachers normally spend 6-7 weeks in the summer conducting research activities in the lab of the host PI. As part of these activities, a RET teacher should develop one or more related classroom modules to share the research with his/her K-12 classroom. The budget includes a weekly summer stipend for the teacher (normally around \$1,000 per week); up to \$2,000 for materials, equipment, and other supplies for the teacher to develop and implement related modules in the K-12 classroom; and possible funding to attend a related disciplinary conference. These costs are listed as participant support costs, and indirect costs (F&A) are not allowed on participant support costs in RET Site or Supplement budgets.

CISE REU and RET supplemental funding requests must describe results of any previous such support, such as students and teachers supported, papers published, K-12 classroom modules developed, and student placements. Other factors influencing supplemental funding

decisions include the number of REU and RET supplement requests received by CISE programs, and in the case of multiple submissions by a single PI, the ability to provide adequate mentoring.

Existing REU/RET supplemental funding for an award must be exhausted before additional funding can be requested as a supplement on that award. Please note that REU supplemental funding can be used to support students anytime during the academic year as well as summer, while RET supplements should be used only for summer programs. Annual and final project reports for an award that receives an REU or RET supplement should provide brief descriptions of activities, impacts, and outcomes (including the number of support-months for each student or teacher) associated with the REU or RET supplemental support.

HOW TO APPLY

PIs are encouraged to refer to the REU program solicitation (NSF 19-582) and the RET program solicitation (NSF 21-606) for detailed information concerning submission requirements. As described above and in those solicitations, each REU or RET supplemental funding request must include the following information:

- 1. A description of the research to be performed by the student or K-12 teacher, and how the student or teacher will benefit from the overall REU or RET experience;
- 2. The PI's prior experience, if any, supervising REU students or working with K-12 teachers, including papers published and student placements, along with the status of prior REU or RET supplements received on the corresponding award;
- 3. A description of the mentoring that the student or teacher will receive as part of the REU or RET experience. In addition, proposers should note how the student/teacher would be mentored should virtual REU/RET experience be required;
- 4. The relationship of the REU or RET supplemental funding request to the original award;
- 5. A description of the process for recruiting the students and/or teachers (including those from underrepresented groups) and the criteria for selecting the students and/or teachers; or if a student or teacher has been pre-selected, a brief bio-sketch of the student or teacher;
- 6. A statement acknowledging that all students to be funded will be US citizens or permanent residents; and
- 7. Specifics about the REU or RET request -- duration, stipend rates, period of REU or RET experience, and travel justification (if any).

No particular format is required for presenting the above information, but numbered sections that address items 1 through 6 in the Summary of Proposed Work section are preferred, with item 7 addressed in the Budget Justification

Since a supplemental funding request is handled by the cognizant NSF program officer who oversees the active award for which the request is submitted, grantees should contact the cognizant NSF program officers of their awards if they have questions or need additional information.

Sincerely,

Margaret Martonosi Assistant Director Computer and Information Science and Engineering