

NSF 22-041

Dear Colleague Letter: High School Student Research Assistantships (MPS-High) Funding to Broaden Participation in the Mathematical and Physical Sciences

February 7, 2022

Dear Colleague:

The mission of Mathematical and Physical Sciences (MPS) Directorate is to empower the collective efforts of the mathematical and physical sciences communities to address the most compelling scientific questions, educate the future advanced high-tech workforce, and promote discoveries to meet the needs of the Nation. Comprised of the Divisions of Astronomical Sciences (AST), Chemistry (CHE), Materials Research (DMR), Mathematical Sciences (DMS), and Physics (PHY), as well as the Office of Multidisciplinary Activities (OMA), MPS takes the position that diversity is an indispensable component of achieving research excellence.

Strategies to successfully broaden participation during pre-college years will help to ensure that the future MPS workforce will be a diverse pool of future students, faculty, and researchers. As part of a supplemental funding request to an existing NSF award, the five Divisions that comprise the Directorate for the Mathematical and Physical Sciences will consider requests that:

- Foster interest in the pursuit of studies in the Mathematical and Physical Sciences; and
- Broaden participation of high school students with particular emphasis for those who are in groups that have been traditionally underrepresented and under-served in the science, technology, engineering and mathematics (STEM enterprise, such as members of racial and ethnic groups (including Blacks and African Americans, Hispanics and Latinos, Native Americans including Alaska Natives, Native Hawaiians and other Native Pacific Islanders), persons with disabilities, those identifying as LGBTQ+, persons with low socio-economic status, high schoolers who would be first generation college students, and women in sub-disciplines where they are underrepresented.

SUPPLEMENTAL FUNDING REQUESTS

Supplemental funding requests to an active MPS award must be prepared and submitted through FastLane in accordance with the instructions in Chapter VI.E.5 of the NSF Proposal and Award Policies and Procedures Guide (PAPPG).

Reminder: Any supplemental funding awarded by NSF must be expended by the end date of the original award.

The request must include the following components:

- A specific statement in the Summary of Proposed Work section that this is a request for an MPS-High supplement.
- In the Justification for Supplement section, include a description (not to exceed 3 pages, single spaced) of the proposed MPS-High that includes:
 - A clear description of the meaningful and challenging activities in which the student(s) will be involved and how the student(s) will be mentored;
 - A brief biographical sketch of candidate student(s);
 - A brief plan for encouraging the advancement of the MPS-High student(s) beyond participation in the research program; and
 - A brief description of the PI's experience with involving high school students in research, if applicable.
- Year-1 and summary budget pages. Budgets for MPS-High activities are generally under \$6,000 per student. Student expenses associated with MPS-High should be entered in "Participant Support Costs" in the budget, and non-student expenses, such as materials and supplies, should be in other sections of the budget. All expenses should be explained in the budget justification. Support for up to two students can be included in one request.
- Desired start date and duration of the supplement (normally a summer experience).
- As a supplementary document: A document from the place of performance confirming that child protection training and laboratory policies are practiced to ensure the wellbeing and laboratory safety of the high school student(s). The document should also state that the place of performance supports the work and should be signed by a dean or director.

The decision to award a supplement will be based on internal review by the program director and availability of funds.

CONTACT PERSONNEL

If you have questions about this Dear Colleague Letter we strongly encourage the principal investigator to initiate a conversation via email or phone with the program director of his/her

particular NSF award, or the cognizant program director for the program to which s/he is submitting a proposal.

Sean Liam Jones, Ph.D. Assistant Director Directorate for Mathematical and Physical Sciences