



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 18-102

Dear Colleague Letter: Non-Academic Research Internships for Graduate Students (INTERN) Supplemental Funding Opportunity

August 27, 2018

Dear Colleagues:

Fostering the growth of a globally competitive and diverse research workforce and advancing the scientific and innovation skills of the Nation is a [strategic objective of the National Science Foundation](#) (NSF). The Nation's global competitiveness depends critically on the readiness of the Nation's Science, Technology, Engineering and Mathematics (STEM) workforce and NSF seeks to continue to invest in programs that directly advance this workforce. As part of this effort, a supplemental funding opportunity is available in fiscal years FY 2019 and FY 2020 to provide support for non-academic research internships for graduate students to support career opportunities in any sector of the U.S. economy. NSF currently invests in a number of graduate student preparedness activities and has historically encouraged principal investigators (PIs) to include such activities in research proposals to NSF. This Dear Colleague Letter (DCL) describes new funding opportunities at NSF to ensure graduate students are well prepared for the 21st-century STEM workforce.

BACKGROUND

With rapidly accelerating changes in technology-driven global and national economies, today's graduate students will have a wide choice of career paths to pursue over their professional lives. Graduate students have the potential to make important contributions in careers outside academia, in organizations including: startup businesses, small and large corporations, government agencies, and non-profit organizations. NSF's [2018 Science and Engineering Indicators](#) report reveals 79 percent of master's level STEM graduates and 57 percent of doctoral degree holders work in industry or government. It is therefore important that graduate students supported by NSF grants be provided opportunities to develop skills that prepare them to be successful for a broad range of academic and non-academic career paths. In addition to deep and broad preparation in their technical areas of expertise, skills and knowledge regarding communication, innovation and entrepreneurship, leadership and

management, and policy and outreach are becoming increasingly valuable to enter any sector of the workforce.

SUPPLEMENTAL FUNDING OPPORTUNITY

NSF will consider supplemental funding requests that enable PIs to request up to six months of additional support for graduate students supported on active NSF grants with the following goals:

1. To provide graduate students with the opportunity to augment their research assistantships with non-academic research internship activities and training opportunities that will complement their academic research training;
2. To allow graduate students to pursue new activities aimed at acquiring professional development experience that will enhance their preparation for multiple career pathways after graduation; and
3. To encourage the participation of graduate students from groups that have traditionally been underrepresented and underserved in the STEM enterprise: women, persons with disabilities, African Americans/Blacks, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, Native Pacific Islanders, veterans, and persons from economically disadvantaged backgrounds.

DESCRIPTION OF THE ACTIVITIES SUPPORTED

The PI of an active NSF award may request supplemental funding for one or more graduate students to gain knowledge, skills and experiences that will augment their preparation for a successful long-term career through an internship in a non-academic setting, including the following:

- For-profit industry laboratories or industry research and development groups;
- Start-up businesses, such as (but not limited to) those funded through the NSF's Small Business Innovation Research (SBIR) program and Small Business Technology Transfer (STTR) program;
- Government agencies (all levels) and National Laboratories;
- Policy think-tanks; and
- Non-profit organizations.

PIs are encouraged to discuss with the cognizant NSF program director activities that are synergistic with the project scope. It is expected that the graduate student and the PI on the NSF grant will work together to identify innovative experiences that add the most educational value for the graduate student on activities that are not already available at the student's academic institution. Further, it is expected that the internship will be on-site at the host organization and will be research-focused in a STEM field or in STEM education research.

ELIGIBILITY

To be eligible, graduate students must have completed at least one academic year in their graduate programs (master's or doctoral) and be making satisfactory progress towards the completion of their degrees.

This opportunity is open to PIs who are supporting graduate students through any active NSF award, except in the Directorate for Computer and Information Science and Engineering (CISE), the Directorate for Mathematical and Physical Sciences (MPS), and the Office of Integrative Activities (OIA). Please see the table below for the participating divisions or programs within these organizations and any special conditions for the supplemental funding requests.

Directorate	Participating Divisions or Programs	Special Conditions
Directorate for Computer and Information Science and Engineering (CISE)	Office of Advanced Cyberinfrastructure (OAC)	Only doctoral candidates may apply. Internships will involve multi-disciplinary activities that pursue development of innovative cyberinfrastructure approaches specific to advancing science and engineering research.
Directorate for Mathematical and Physical Sciences (MPS)	All Divisions	Only doctoral candidates may apply through the Division of Astronomical Sciences (AST).
Office of Integrative Activities (OIA)	Established Program to Stimulate Competitive Research (EPSCoR)	PIs of EPSCoR Research Infrastructure Improvement (RII) awards are not eligible to apply. Supplement requests are encouraged from any NSF-funded PIs located in EPSCoR-eligible jurisdictions . Requests should be submitted to the original funding directorate for potential support through the EPSCoR program.

SUPPLEMENTAL FUNDING REQUEST PREPARATION INSTRUCTIONS

Each supplemental funding request must include the INTERN DCL title and number in the summary section of the proposal and include the following components:

1. A two-page summary that describes the internship. The request must include a concise statement from the graduate student describing how the activity will better prepare her/him to enter the workforce.
2. A resume of the graduate student (up to 2 pages) that contains (but not limited to) the following information:
 - a. Educational Preparation
 - i. Institution
 - ii. Major
 - iii. Year of study (1st year, 2nd year, etc.)
 - b. Summary of graduate coursework completed
 - c. Professional employment history
 - d. Publications
 - e. Other information relevant to the proposed internship
3. A letter of collaboration from an authorized official at the organization which will host the student that describes the internship opportunity and the mentoring that will be provided to the student during the internship. This letter should include a statement confirming that neither the graduate student nor the PI has a financial interest in the organization hosting the internship.
4. A letter from the PI that confirms that the student meets the eligibility requirements specified in this DCL. The letter must describe how the proposed internship activity will contribute to the student's graduate education experience and how it may impact time to degree.
5. The NSF awardee and the organization hosting the graduate student must agree in advance as to how intellectual property (IP) rights will be handled. A signed agreement on IP (including publication and patent rights) must be submitted prior to the award of the supplemental funding. NSF will examine this document to ensure that the graduation of students will not be unduly impacted. NSF is responsible neither for the agreement reached nor the IP information exchanged between the NSF awardee and the host organization.
6. A budget and budget justification.

SUPPLEMENTAL FUNDING AMOUNT

The total amount of funding requested must not exceed \$55,000 per student per six-month period. NSF plans to fund up to approximately 200 supplements in fiscal years FY 2019 and

FY 2020, depending on the availability of funds.

ALLOWABLE COSTS UNDER THIS DCL

Funds may be used to support travel, tuition and fees, health insurance, additional stipend and temporary relocation costs for the graduate student. Up to \$2,500 may be used for PI travel to work with the host organization in co-mentoring the student during the internship. Up to \$2,500 may be used for materials and supplies to support the student during the internship. The grantee is permitted to request indirect costs in accordance with their approved/negotiated indirect cost rate. The total requested budget cannot exceed the limits listed under the "Supplement funding amount" section above. Note: Spousal and dependent travel are not supported.

PERIOD OF SUPPORT

The supplement funding will provide up to six months of support for an internship. Up to two supplemental funding requests may be submitted on a grant per student. This would allow the student up to two internship periods up to six months each (i.e., a maximum of 12 months per student).

DUE DATES

Supplemental funding requests may be submitted at any time but no later than May 1, 2019 (for available FY 2019 funds) and May 1, 2020 (for available FY 2020 funds).

SUBMISSION & REVIEW

Requests for supplemental funding must be submitted electronically via FastLane. A PI on an NSF grant should contact his/her cognizant program director prior to submission. Requests for supplemental funding submitted in response to this DCL will be reviewed internally by NSF Program Officers. All supplements are subject to (a) the availability of funds, and (b) review of the quality of the supplemental funding request.

For further information, please contact:

- BIO: Dr. Eric Lyons (erlyons@nsf.gov) or Dr. Jennifer Weller (jweller@nsf.gov)
- CISE/OAC: Dr. Alan Sussman (alassussm@nsf.gov)
- EHR: Dr. Earnestine Easter (eeaster@nsf.gov) or Dr. Christopher Hill (chill@nsf.gov)
- ENG: Dr. Prakash Balan (pbalan@nsf.gov)
- GEO: Dr. M. Brandon Jones (jwelkom@nsf.gov)
- MPS: The cognizant program officer on the NSF grant.
- SBE: Dr. Josie Welkom (jwelkom@nsf.gov)
- OIA/EPSCoR: Dr. Timothy VanReken (tvanreke@nsf.gov)

Sincerely,

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