

NSF 18-056

Dear Colleague Letter: Improving Graduate Student Preparedness for the Chemistry Workforce

March 20, 2018

Dear Colleague:

The Division of Chemistry (CHE) supports masters and doctoral students to acquire the knowledge, experience, and skills needed for highly productive careers. This Dear Colleague Letter describes opportunities for supplemental funding to enhance the training experience of graduate students supported by active CHE research grants who are considering careers outside of academe.

## SUMMARY OF OPPORTUNITY

Examples of experiences targeted by this opportunity include, but are not limited to, one to three month internships or similar experiences in industry (including start-up companies), state or federal government laboratories, policy organizations, and non-profit foundations. Consideration would also be given to professional development courses on, for example, innovation and technology commercialization, business and entrepreneurship training, and communicating science to the public. (Note: Such courses should be outside the student's dissertation coursework.) Activities that include an international component are encouraged. It is expected that student participation in these activities will enhance their competitive position in the job market outside of academe. Note: Funding requests for conference attendance will not be considered for this supplemental funding opportunity.

## **ELIGIBILITY**

This opportunity is open for M.S. and Ph.D. graduate students currently supported on NSF CHE individual investigator or small group research grants (Centers for Chemical Innovation are excluded from this supplemental funding opportunity). Graduate students must have completed at least one academic year as a full-time student and be in good academic standing within their Department. The academic and industry/government laboratory partners must agree in advance how intellectual property rights will be handled. A statement to this effect should be included in the request (see Preparation Instructions and Allowable Costs).

Supplemental funding requests should be submitted no later than **May 15, 2018**. The NSF Proposal & Award Policies & Procedures Guide (PAPPG) Chapter VI.E.4, provides specific guidance on preparing a request for supplemental funding.

# PREPARATION INSTRUCTIONS AND ALLOWABLE COSTS

It is expected that the student, graduate research advisor, and internship host/course coordinator will work together to identify innovative experiences that add value to the student's graduate school training. Supplemental requests must satisfy all the following requirements and must include:

- A one-page (maximum) statement from the student describing how the activity will better prepare him/her to enter the workforce. The statement should identify the skills and experiences that are sought and highlight how the activity will enhance the student's graduate school training in relation to her/his career goals outside of academe.
- 2. A one-page (maximum) statement from the graduate research advisor indicating concurrence with the student's plans and including a summary statement that this activity is not expected to adversely affect the student's progress in dissertation research.
- 3. A two-page (maximum) resume from the graduate student, including year in the graduate school program.
- 4. If an industrial or other laboratory partner is involved, the academic and industry partners must agree in advance as to how intellectual property rights will be handled. A statement to this effect should be included in both the graduate research advisor's and the sponsor's letters.
- 5. In the case of a laboratory internship, a letter of commitment from the host institution, briefly outlining the student's role in the project and indicating how the student will be mentored.

The resume and letters are to be placed in Other Supplementary Documents.

Supplement requests for Grant Opportunities for Academic Liaisons with Industry (GOALI, see PAPPG, Chapter II.E.4) awards should not request the addition of new graduate students to the same industrial collaboration. CHE Graduate Education Supplements for collaboration with another academic partner are not accepted.

Principal Investigators (PIs) are encouraged to discuss with their cognizant CHE program director the proposed activities that would be part of a supplemental funding request. The supplemental funding request limit is \$12,000 for a maximum of three months. Eligible costs can include student stipends (if not paid by host institution), travel, temporary relocation, and course fees. Spouse and dependent travel are not permitted.

#### SUBMISSION AND REVIEW

The Chemistry Division expects to fund 10 supplements in Fiscal Year (FY) 2018, depending on the availability of funds.

Investigators are strongly encouraged to contact their cognizant program directors for more information. For full consideration, requests should be submitted no later than May 15, 2018 for FY 2018.

Cognizant CHE Program Directors:

- Chemical Catalysis (CAT) Ken Moloy (kmoloy@nsf.gov)
- Chemistry of Life Processes (CLP) Max Funk (mfunk@nsf.gov)
- Chemical Structure, Dynamics and Mechanisms (CSDM-A) Colby Foss (cfoss@nsf.gov)
- Chemical Structure, Dynamics and Mechanisms (CSDM-B) Tingyu Li (tli@nsf.gov)

# This document has been archived.

Chemical Theory, Models and Computational Methods (CTMC) - Evelyn Goldfield (egoldfie@nsf.gov)

- Chemical Synthesis (SYN) Kevin Moeller (kmoeller@nsf.gov)
- Macromolecular, Supramolecular and Nanochemistry (MSN) Suk-Wah Tam-Chang (stamchan@nsf.gov)
- Chemical Measurement and Imaging (CMI) Kelsey Cook (kcook@nsf.gov)
- Environmental Chemical Sciences (ECS) Anne-Marie Schmoltner (aschmolt@nsf.gov)

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