



**National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230**

NSF 10-035

Dear Colleague Letter: Graduate Research Supplements (GRS) to Current ENG Awards to Broaden Participation

February 20th, 2010

PLEASE NOTE RECENT CHANGES TO THIS LETTER:

This GRS DCL has been revised to remove instructions to add GRS to the coversheet since this is not possible for a supplement request. Also note the differences between the request preparation procedures for the REU and the GRS are clarified.

Dear Colleague:

This letter is to call your attention to an opportunity to broaden participation particularly of underrepresented students in Ph.D. programs in engineering through supplements to current research grants funded by the divisions in the Directorate for Engineering (ENG) at the National Science Foundation.

Introduction: The establishment of Graduate Research Supplements (GRS) reflects the continuing effort by ENG to promote increased participation of new Ph.D. students in all fields of engineering research with particular emphasis on individuals from underrepresented groups. The long-term goal of GRS is to increase the number of persons from underrepresented groups in advanced academic and professional careers. According to the NSF 2008 Survey of Doctorate Recipients (SDR), among teaching faculty in engineering, there are 10.9 percent women, 4.5 percent African American, 3.1 percent Hispanic, 0.8 percent American Indian/Alaskan Native and 6.3 percent persons with disabilities. With such exceedingly low levels of faculty from underrepresented groups, ENG recognizes that these underrepresented groups represent a significant untapped technical resource for the nation.

Recognizing the importance and impact of the program, the Directorate for Engineering at this time is continuing GRS for its Divisions of Electrical, Communications and Cyber Systems; Chemical, Bioengineering, Environmental and Transport Systems; Civil, Mechanical and Manufacturing Innovation; Engineering Education and Centers; and Industrial Innovation and Partnerships. It is anticipated that GRS will help in the development of intellectual synergy between faculty and students, will provide faculty with the opportunity to involve additional graduate students in on-going research programs, will foster a learning and career advancement environment that supports students, and will lead to greater retention of students in the underrepresented populations.

Anticipated Type of Award: Supplements to currently active Directorate for Engineering (ENG) research awards.

Eligibility: A request for funding of a GRS should be made by the Principal Investigator (PI) of a currently active ENG research award. Only one new Ph.D. student for GRS may be supported under each research award. The exception is for Engineering Research Centers (ERCs) (or other center-type awards), which are multi-campus and usually multi-state awards. PIs for Center awards can request a GRS for more than one student associated with more than one PI. The request must be submitted by the PI of the lead university and there is a limitation of **two** students per award. Each of the students must be located on two different campuses funded by the Center. Sub award budget requests should be included for any students not located on the campus of the lead university.

GRS candidates must be United States citizens, nationals, or permanent residents of the United States. The graduate students must be newly enrolled in, or planning to pursue the Ph.D. degree in engineering disciplines. **Newly enrolled students' means that the student started in the spring 2010 semester or will be starting in the fall 2010 semester.**

For a renewal for a second or third year supplement, the currently supported GRS student must be in good

academic standing. The GRS request must include a report on the progress of the student working toward the Ph.D degree. GRS renewals are subject to availability of funds in the program.

Preparation of GRS Request: Information about requesting supplemental support is contained in Part II of the NSF Proposal and Award Policies and Procedures Guide (PAPPG) available at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=papp. Requests for supplemental funding should be submitted via FastLane (<http://www.fastlane.nsf.gov/fastlane.htm>) and should be prepared in accordance with the following the instructions. The FastLane Frequently Asked Questions (FAQs) document provides additional information and can be found at: http://www.fastlane.nsf.gov/NSFHELP/fastlane/FASTLANE_Help/fastlane_help.htm#fastlane_faq_introduction.htm

Follow the procedures described in the Research Experiences for Undergraduates (REU) solicitation under the sections for REU supplements for investigators holding an existing NSF research award. However, for GRS your description of the proposed GRS activity should have a title which starts with "GRS:" and be placed in the "Summary of Proposed Work" (Project Summary) section of your request in the FastLane supplement module and NOT in the "Justification for Supplement" section, as is the case for the REU supplements. The REU solicitation can be found at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517.

In the Summary of the proposed work section of the supplemental funding request, the Principal Investigator must enter a description of the proposed GRS activity (limited to three pages) in support of broadening participation. The supplemental funding request should articulate the form and nature of the involvement of the identified graduate student majoring in an engineering discipline in the Principal Investigator's on-going research program. The Directorate for Engineering expects that the GRS student will contribute to activities that comprise the intellectual core of the funded research effort. Since it is anticipated that GRS will promote increased participation of underrepresented graduate students in engineering, the proposal for a GRS should indicate the follow-up mechanism that will be used to encourage career advancement of the GRS student beyond participation in the Ph.D. research program.

The GRS request must include a supporting budget and a budget justification of the funds being requested.

In addition, a brief biographical sketch of the candidate student must be included in the Supplementary Documents section of the supplemental funding request. The biographical sketch should incorporate the student's long-range career goals and commitment to diversity as a resource for enriching education in engineering disciplines. The GRS is intended to increase the diversity of researchers in engineering disciplines including those from underrepresented groups, students at minority serving institutions, women and persons with disabilities.

For further guidance concerning the GRS, the Principal Investigator should consult with the program director of the ENG award under which the GRS is to be supported. Inquiries regarding possible conflict-of-interest situations and other questions should be addressed to the GRS coordinators. (see list below)

Review Process: An award decision will be based on internal review by the managing program director of the award, and availability of funds in a particular program.

Award Size and Duration: The Principal Investigator may request a GRS for twelve months, renewable annually through additional GRS requests for the duration of the research grant. An individual student may receive a GRS award for a maximum period of three years. GRS awards are nontransferable. The GRS request may only include graduate student stipend (line F1.) and tuition support (Line F4.) consistent with academic institutional practices. The maximum annual amount of a GRS award is \$41,000. Indirect costs are not permitted; however, an administration allowance (line I.) of up to 25% of the stipend amount (Line F1.) may be included within the total amount requested (Line J. Total Direct and Indirect Costs).

Award Information: Anticipated funding for GRS in FY 2010 is \$2,700,000, subject to the availability of funds and the merit of proposals received. The estimated number of supplements to be awarded will be 60-65.

Submission Deadline: The deadline for submission of a GRS request is 5:00 p.m., submitter's local time, on May 14, 2010.

Broadening Participation: The annual and final reports must indicate the impact of the supplement award on increasing the participation of women and underrepresented groups in engineering. Quantitative measures of impact by race, gender, and disability are expected.

The Directorate for Engineering encourages its grantees to disseminate information on GRS to students planning

to pursue the Ph.D. degree in engineering disciplines who share a commitment to diversity as a resource for enriching education. ENG anticipates that GRS will open and facilitate new avenues for increasing the participation of underrepresented students in engineering disciplines, and in turn, enhance the development of the U.S. engineering workforce in accordance with the America COMPETES Act and the Engineer of 2020 report of the National Academy of Engineering that foresees an engineering profession, that remains underrepresented with respect to women and minorities in the year 2020.

CONTACTS FOR ADDITIONAL INFORMATION

For additional information and clarification concerning a GRS request, please view the Frequently Asked Questions at: <http://www.nsf.gov/pubs/2010/nsf10038/nsf10038.pdf>.

For further guidance or questions concerning the GRS Program, the Principal Investigator should first consult with the program director for the ENG award under which the GRS is being requested.

Inquiries regarding the ENG Graduate Research Supplements should be directed to one of the following GRS Coordinators:

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