

Appendix B

Request for Proposals

Council of Graduate Schools

REQUEST FOR PROPOSALS

Completion and Attrition in AGEP and non-AGEP Institutions

Funded by a grant from the National Science Foundation (Grant # 1138814)

Issue Date: November 18, 2011

**Proposal Deadline: Wednesday, February 15, 2012,
5:00 p.m. Eastern Time**

Number of Awards: 20

Funding Amount: \$30,000 per Awardee

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REQUEST FOR PROPOSALS

Council of Graduate Schools

Completion and Attrition in AGEP and non-AGEP Institutions

I. Introduction

The Council of Graduate Schools (CGS) invites proposals for grants to participate in a project on “Completion and Attrition in AGEP and non-AGEP Institutions.” Through this project, twenty CGS member institutions will be selected competitively and provided grant funds to: a) provide descriptions of the policies and practices that might affect completion and attrition; b) collect data on completion and attrition of underrepresented minority (URM) students in Ph.D. degree programs in STEM fields; c) administer surveys to URM students; and, d) host site visits in which CGS project staff will conduct focus groups with URM STEM doctoral students as well as interviews with faculty, graduate deans, and other university personnel to better understand factors that contribute to student success, and promising practices to improve completion.

II. Background

The underrepresentation of minority students in STEM fields is a national concern. Underrepresentation in doctoral enrollment is exacerbated by the fact that attrition rates from doctoral programs are high (40-50%), and minorities tend to complete at even lower rates than their counterparts. Such high rates of attrition impose significant economic, psychological, and social costs on individuals and society. Quite apart from these costs, we are faced with an aging STEM faculty and non-academic workforce that will need to be replaced. NSF’s Alliances for Graduate Education and the Professoriate (AGEP) program aims to address this problem of underrepresentation in doctoral education and the academic workforce. Evaluations of the AGEP program have indicated that the numbers of underrepresented minority students enrolling in STEM doctoral programs have increased over time at institutions that received funding through the AGEP program, but the research conducted to date has not tied the activities and initiatives of AGEP institutions to student success, particularly completion rates. Since the activities and initiatives of the AGEP grantees vary considerably across institutions, it is not clear which of these interventions have the most potential to positively impact doctoral completion rates for underrepresented minority students.

In September 2011, CGS received a grant from the National Science Foundation (Grant # 1138814) to examine patterns of completion and attrition among underrepresented minorities in STEM doctoral programs across a diverse set of AGEP and non-AGEP institutions with a view to understanding the factors that promote successful completion and the policies and practices that hold promise in this regard. The project builds on work already underway at CGS on Ph.D. completion and attrition and master’s completion and attrition and extends it to include a much more fine-grained investigation of underrepresented minorities’ experiences in STEM doctoral programs.

The project seeks to answer several major research questions using data from a purposive sample of universities that represent institutions that received funding from the AGEP program, the Ph.D. Completion Project, or neither project (as explained in more detail below). The research questions include:

1. What are the completion and attrition rates for underrepresented minority students in STEM doctoral programs at the participating institutions? (Underrepresented minority students are

defined as U.S. citizens and permanent residents who are Black/African American, American Indian/Alaska Native, and Hispanic/Latino.)

2. Do these completion and attrition rates vary by field of study, gender, or race/ethnicity (among underrepresented minority students)?
3. Are there differences in completion rates for underrepresented minority students in STEM doctoral programs in AGEP institutions versus non-AGEP institutions? In AGEP institutions versus Ph.D. Completion Project institutions? In AGEP or Ph.D. Completion Project institutions versus those that did not participate in either project?
4. How have completion and attrition rates changed over time?
5. What activities or initiatives have been implemented by AGEP and Ph.D. Completion Project institutions? What implementation challenges affected those activities and initiatives? Which students were impacted by these activities and initiatives?
6. What activities and initiatives enhance success, in terms of completion, for underrepresented minority students in STEM doctoral programs?

III. Eligibility to Apply

Proposals may be submitted by any U.S. college or university that is a 'Regular Member' of CGS and that offers a minimum of 15 Ph.D. programs in STEM fields. Associate members and international affiliates are not eligible to apply.

NOTE: A taxonomy of programs included and excluded from this project, along with a crosswalk between this taxonomy and CIP codes for included disciplines, can be found in Appendices A1 and A2 and online at www.cgsnet.org.

IV. P.I.s

Graduate deans (or primary institutional officials responsible for graduate education) must be the Principal Investigators and primary institutional contacts on these proposals. The graduate dean (or equivalent) may appoint a project director and/or other staff to assist with project activities and responsibilities such as data collection, site visit coordination, survey administration, and reporting.

V. Award Information

Proposals will be reviewed by an external selection committee. The committee will recommend 20 CGS member institutions to participate in the project, and each awardee will receive \$30,000. The project start date for awardees will be April 1, 2012, and the project end date for awardees will be July 31, 2013. Institutions selected for funding to participate in this project will reflect a cross-section of colleges and universities that produce the bulk of URM Ph.D. graduates in STEM fields.

VI. Selection Criteria

Applicants must demonstrate:

- The capacity to collect and report completion and attrition data, at the individual student-level, for URM students entering STEM Ph.D. programs in academic years 1992-93 through 2011-12.

Note: Proposals from institutions that are unable to provide these data for the first four years (1992-93;1995-96) will not be excluded from the competition provided an explanation for the reasons are

included in the narrative. However, institutions that can provide data for the entire period of time will be more competitive.

- The ability to describe the policies and practices in place prior to 1992-93 that might affect completion and attrition, including details on implementation and scope, as well as an overview of the policies and practices implemented by the university between 1992-93 and present (including dates of implementation to the extent possible) that may have affected the recruitment, persistence, and completion of all students in STEM doctoral programs, in particular underrepresented minority students.
- The ability to administer a web-based survey to all underrepresented minority students enrolled in STEM Ph.D. programs and guarantee a minimum of a 75% response rate.
- A willingness to host a site visit for CGS project staff, arrange URM student focus groups to be conducted during this site visit, and set up interviews for CGS staff with faculty, graduate deans and other university personnel.
- Approval from their Institutional Review Board (IRB) for the different data collection activities proposed by CGS and the various data elements encompassed by those activities.
- An institutional commitment to completion and attrition in Ph.D. programs through the endorsement of the project by a senior administrative official.

VII. Awardees' Project Activities and Responsibilities

As outlined in Section XI, a limited set of data is required to respond to the RFP. However, along with other project responsibilities, awardees will be asked to use standardized data collection templates to provide more detailed data as part of their project participation, as described below. The data collection templates are subject to change. ***Institutions that wish to respond to this RFP must offer assurance that providing the full set of data and data elements has been approved by their IRB.***

If selected to participate in this project, awardees must agree to:

- Collect and report completion and attrition data for all URM students entering STEM doctoral programs in academic years 1992-93 through 2011-12 using a standardized student-level data collection template developed by CGS. Data will be collected on student demographics and other variables. For a list of variables, see Template B-1 online at www.cgsnet.org.
- Complete and submit data on program policies, practices and interventions that might impact completion and attrition for all STEM Ph.D. programs offered by the institution. For a list of variables awardees will be required to provide to CGS, see Template B-2, online at www.cgsnet.org. See the link in the lower left hand corner of the main CGS webpage.
- Field a web-based student survey, developed by CGS, covering the set of topics shown in Template B-3, online at www.cgsnet.org. The survey will be administered to URM students enrolled in STEM doctoral programs in fall 2012 using SurveyMonkey. Institutions must put into place sufficient email strategy to follow-up with non-respondents to guarantee the minimum required response rate.
- Host a two-day site visit for CGS project staff between January 15, 2013 and June 30, 2013. In preparation for this site visit, awardees must arrange for student focus groups and set up interviews with faculty, graduate deans, and other university personnel. For a list of topics to be covered in the student focus groups, see Template B-4; for a list of topics to be covered in the interviews with graduate deans, graduate program directors, and other university personnel, see Template B-5.

These templates are online at www.cgsnet.org. See the link in the lower left hand corner of the main CGS webpage.

- Submit interim narrative and financial reports by October 31, 2012 and April 30, 2013. Final narrative and financial reports will be due on September 30, 2013.
- Highlight the institution's participation in this national effort by taking the lead in national discussions on the topic of Ph.D. completion (e.g., at CGS Annual Meetings and/or Summer Workshop sessions).

VIII. Review by the IRB

To assist institutions with the IRB process, please note the following:

- CGS has posted online at www.cgsnet.org templates that encompass all the proposed data collection activities which includes a "Protection of Human Participants Overview." (See Appendix B)
- Although awardees are being asked to provide student-level data, these will be de-identified data. Institutions will be asked to assign a scrambled ID number to each student simply for purposes of data checking. If there are discrepancies, CGS will use the scrambled ID number to ask institutions to review and correct the data.
- In terms of the student survey, institutions will field the survey so CGS will not have access to contact information. No identifying information will be asked on the surveys in terms of names or contact information.
- Students participating in focus groups will be promised confidentiality, and CGS will obtain oral informed consent at the beginning of each focus group.
- CGS has developed a data safeguarding plan to ensure that all data are password-protected, only project staff have access to these data, notes from interviews and focus groups are not identified by name but by a code (with the crosswalk between the code and the institution name being kept separately) and maintained in a locked filing cabinet in the co-project director's office.

IX. Payment of Subawards

Awardees will receive payment in two equal installments of \$15,000 each. The first payment will be issued within one month of selection to participate in the project (April 2012). The second payment will be issued after the receipt of valid completion and attrition data and policies and interventions information (October or November 2012).

X. Project Timeline

For planning purposes, the timeline for the project is shown below.

Wednesday, February 15, 2012, 5:00 p.m. Eastern Time

- Deadline for completed proposals

March 15, 2012 (tentative)

- Award announcements after proposal review by external selection committee

April 1, 2012

- Project start date for awardees

July 2012

- PI Meeting at CGS Summer Workshop

August 31, 2012

- Awardees submit student-level data (Template B-1)

August - December 2012

- Awardees administer student survey (Template B-3)

October 31, 2012

- Awardees submit data on program policies, practices and interventions (Template B-2)
- Interim financial and narrative reports due

December 2012

- Session on project at CGS Annual Meeting

January-June 2013

- Site visits by CGS project personnel

May 31, 2013

- Interim financial and narrative reports due

July 2013

- Session on project at CGS Summer Workshop

July 31, 2013

- Project end date for awardees

September 30, 2013

- Final financial and narrative reports due

December 2013

- Session on project at CGS Annual Meeting

XI. RFP Requirements

This section outlines in detail the requirements for preparing and submitting the proposal, including the data that must be submitted with the proposal, the required sections of the proposal, and other information pertaining to the budget and submission of the proposal.

1. Data

Institutions submitting proposals in response to this RFP must complete and submit two templates:

- *Template A-1: Institutional Characteristics* (online at www.cgsnet.org – see the link in the lower left hand corner of the main CGS webpage)

On this template, applicants should provide general information about their institution, data on doctoral students enrolled at their institution as of fall 2011, and a list of institution level policies, practices and interventions that have, or have the potential to have, an impact on completion and attrition.

- *Template A-2: Program Characteristics* (online at www.cgsnet.org – see the link in the lower left hand corner of the main CGS webpage)

NOTE: A taxonomy of programs included and excluded from this project, along with crosswalk between this taxonomy and CIP codes for included disciplines, can be found in Appendices A1 and A2 and online at www.cgsnet.org.

2. Proposal Preparation

Proposals should be no longer than 10 pages (not counting the budget, budget narrative, data templates and supplementary materials), in 12 point font, double-spaced, with 1 inch margins. Proposals should include the following information, in the exact order listed below (page limits for each section are noted in parentheses):

1. A list of all key project personnel (P.I., Co-P.I., Project Director, Data Coordinator, etc.), including name, title, phone number, and e-mail (1/2-1 page). This section may be single-spaced.
2. Proposal narrative including the following sections:
 - Description of the institution. (1/2 page)
 - Show evidence of prior institutionalization of a reform effort in graduate education. [A non-inclusive list of reform efforts includes: NSF's Alliance for Graduate Education and the Professoriate (AGEP), Integrative Graduate Education and Research Traineeship (IGERT), Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE); CGS's Ph.D. Completion Project, Project for Scholarly Integrity, STEM Master's Completion Project; the Carnegie Initiative on the Doctorate (CID); the Woodrow Wilson National Fellowship Foundation's Responsive Ph.D.; Mellon Foundation's Graduate Education Initiative] (2-3 pages)
 - Institutional commitment to success of URM students in STEM Ph.D. programs, including any research done on doctoral completion and attrition, institutional or departmental efforts to improve completion of URM students in STEM Ph.D. programs or to hold programs accountable for results, and efforts to recruit a diverse student body in STEM Ph.D. programs and to support these students in their academic program. (3-4 pages)
 - The institution's ability to provide the data needed at the student and program levels. This includes a description, among others, of graduate student information management systems and data elements; where the data reside, e.g., institutional research, the graduate school, etc.; a detailed description of the format and availability of data from 1992-93 to present; the graduate school's experience with and ability to administer web-based student surveys and follow up with nonrespondents to guarantee a high response rate. (3-4 pages)
3. Budget (see below) (1 page)
4. Budget Narrative (see below) (1 page)
5. Template A-1
6. Template A-2
7. Supplementary materials: These include: (a) a letter of support for the project from a senior university administrator; (b) a letter from the IRB providing assurance that they have reviewed the proposed data collection activities and required data elements and do not see any potential

conflicts in providing these data to CGS. No other supplementary materials should be submitted with the proposal.

The budget; budget narrative; data templates A-1, and A-2; and supplementary materials do not count toward the page limit. Proposals that do not adhere strictly to the page limits and the proposal format or do not provide the required data will not be accepted.

3. Budget and Budget Narrative

Proposals must include a project budget detailing how the \$30,000 subaward will be allocated. It is the expectation of CGS that the majority of the budget will be used to cover personnel costs incurred through activities related to data collection, site visit coordination, survey administration, and reporting. Because the online surveys must be fielded using SurveyMonkey, institutions can include the cost of establishing a Gold Premium SurveyMonkey account. Other budgetary items may be included as appropriate. Subawards may not be used to fund travel. Budget should not exceed one page. Proposals should also include a brief budget narrative (one page maximum) explaining each of the budget line items.

4. Deadline and Submission Instructions

****Deadline for completed proposals: Wednesday, February 15, 2012, 5:00 p.m. Eastern Time ****

All proposals and templates must be submitted electronically, preferably as one PDF file. Please send completed proposals via e-mail to Leontyne Goodwin at lgoodwin@cgs.nche.edu. If you do not receive confirmation of receipt, please contact Leontyne Goodwin at lgoodwin@cgs.nche.edu or (202) 461-3878.

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