

## Frequently Asked Questions Concerning the UofSC Bridge to the Doctorate (BD) Program

### 1. What is the goal of the National Science Foundation's Bridge to the Doctorate program?

For more information see NSF: [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=13646](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13646) Quoting:

“The overall goal of the (Louis Stokes Alliance for Minority Participation) program is to assist universities and colleges in diversifying the nation's science, technology, engineering and mathematics (STEM) workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to populations historically underrepresented in these disciplines: African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders. ... (UofSC BD) projects are focused on providing post-baccalaureate fellowship support (see Q#2 below) to a cohort of 12 LSAMP students for the first two years of their STEM graduate studies (see Q#5 below) and providing the necessary academic and research skills that will enable them to successfully earn STEM doctoral degrees and transition into the STEM workforce.”

### 2. What is the potential benefit to me, as a faculty member?

Qualified faculty members who are successful in matching with a UofSC BD Fellow will have financial support for a top-quality, PhD students who are U.S. citizens. The first two years of funding are provided by NSF (\$34,000/12 month stipend + \$12,000 tuition per year.) The fact that these are domestic students, and that they come from the URM populations described above, should allow them to be highly competitive for additional national fellowships. Numerous studies have shown that increasing diversity in STEM fields leads to innovation. Faculty may be able to leverage the university's BD program for other potential sponsors.

### 3. Must my program maintain the stipend of \$34,000/year for every year of the doctoral program?

No. However, if the stipend will decrease, BD Fellows must be informed of the new stipend level. NSF strongly advises that BD Fellows receive training in personal finance as it affects their graduate studies. Programs are encouraged to leverage the grant to generate additional stipend support for BD Fellows. BD Fellows will receive support to apply for additional national fellowships.

### 4. What is a “qualified faculty member”?

Faculty mentors must have a record of successfully funding and graduating PhD students. Junior faculty must provide a record of successful mentoring and teaching, as well as a plan for a stimulating research environment. All faculty must complete the “Entering Mentoring” program offered through the Center for Teaching Excellence. Faculty must agree to support and allow time for BD scholars to participate in required mentoring and support activities. Please see Appendix 1 for more details.

### 5. Are new faculty without external funding eligible to mentor a BD fellow?

Yes. Junior faculty may use startup funding to support BD Fellows. New faculty may be asked to co-mentor with a more experienced faculty member. While extramural funding is critical, Graduate Instructional or Teaching Assistantships may also be used to support BD students, particularly in some fields where doctoral support is rarely provided, and when there are temporary gaps in extramural funding.

### 6. What are the eligible STEM departments and programs?

Participating STEM programs from CAS include Mathematics, Physics and Astronomy, Chemistry and Biochemistry, Geological Sciences, Marine Sciences, Biological Sciences, Statistics, and Geography. From the CEC, participating programs are Computer Science, Computer Engineering, Biomedical

Engineering, Chemical Engineering, Civil and Environmental Engineering, Electrical Engineering, Mechanical Engineering, and Nuclear Engineering.

### 7. How can faculty from non-BD departments benefit from this grant?

Prospective BD faculty members can promote their inter-disciplinary research programs to prospective BD fellows; these students may find interdisciplinarity an attractive feature of research at UofSC. While the BD student will receive their doctoral degree from a BD program, non-BD faculty may be part of the research and professional development environment, dissertation committee, or possibly doctoral co-advisor.

### 8. What are the eligibility requirements for prospective students?

- Baccalaureate or Masters degree and an academic record that supports admission to graduate studies in the doctoral program of interest;
- Baccalaureate or Masters degree must be from a college or university that is part of an LS-AMP alliance nationwide. There are over 40 active alliances, and over 300 eligible colleges and universities (please confirm with UofSC BD administrators if there are questions);
- Must have received their degree in 1991 or subsequent year (students who have worked in industry or otherwise been out of school for many years may apply for the BD);
- Student must have been involved with a formal activity within their LS AMP program. The BD team will verify involvement with the LS AMP program at the baccalaureate/Masters institution if applicants don't know or cannot provide verification. Note that involvement is loosely defined and could include: a travel grant of any size; participation in an LS AMP-organized poster session, workshop, peer-support group; financial support for research, etc. Note that NSF will require all BD Fellows to provide LS-AMP verification/documentation; the BD team will assist with this as needed.
- Member of one of the NSF-designated URM groups listed above.
- U.S. citizen. NSF does not allow holders of green cards, or DACA (Deferred Action for Childhood Arrivals) students to receive BD funding.

### 9. How will the selection of BD Scholars and matching with faculty advisors be accomplished?

A committee consisting of BD PIs and selected faculty members will select Fellows in consultation with the Graduate Directors from each Academic Program. Note that BD Fellows MUST be accepted by the graduate program of interest in order to receive the award. We are consulting other BD programs for best practices.

### 10. What can faculty and departments do to assist the BD program?

Please feel free to advertise the program with your colleagues at other LS AMP institutions. We are in the process of recruiting applicants for an incoming cohort of 12 students for **Fall 2020**. We are developing informational flyers and updating the USC BD [website](#). In addition:

- Please encourage your Faculty to participate in the Entering Mentoring program through the [Center for Teaching Excellence](#).
- Consider increasing faculty participation in the Center for Teaching Excellence, [Teaching Towards Inclusive Excellence](#) Program.
- Consider participation in national training programs to increase diversity in STEM with support from your College. For example, <https://sites.google.com/wisc.edu/facilitatingenteringresearch/home>
- Begin departmental discussions regarding how to increase recruitment of diverse students. For example, are there discipline specific societies that could be used to advertise specific doctoral programs and research activities?

- Begin departmental discussions about how to provide funding or other incentives in years 3 and beyond.
- Request graduate application fee waivers from BD PIs.
- Are there discipline specific training that could be conducted that facilitates graduate student success, i.e., writing seminars, national fellowship workshops, etc.

#### 11. What is the lifetime of the NSF Bridge to the Doctorate grant?

The BD grant officially ends in 2021. If successful, the UofSC can submit a competitive renewal and support a new cohort of 12 students every two years.

## **Appendix 1. 1-page Pairing and Training Plan from the UofSC BD Proposal**

### **Pairing students with research mentors**

Academic units within the College of Arts and Sciences (CAS) and the College of Engineering and Computing (CEC) have a variety of mechanisms by which they recruit graduate students to their various academic programs. We have therefore established a recruitment plan that encompasses these various academic cultural differences while also establishing a set of guidelines for the selection and pairing of mentors with Bridge to Doctorate (BD) students.

- All prospective mentors must have a record of extramural funding and a record of mentoring doctoral students. New faculty who can use start-up funds in lieu of established funding to support student research, are also eligible. However junior faculty must have more established mentors serve as co-advisors. All prospective mentors must: 1) Receive periodic training (see below), 2) Sign a standard commitment letter, acknowledging the goals of the program and their responsibilities in supporting the BD student, and 3) Allow BD students to participate in professional development activities, travel to and from meetings, and adhere to student progress reporting.

- Prospective mentors will prepare a brief (1 - 2 page) prospectus of current projects each year. Each prospectus will be reviewed by the BD Committee - CAS and CEC co-directors and STEM Graduate Directors to ensure consistency and quality across Departments. We anticipate a minimum of 10 prospectuses per academic department (35% participation).

- The BD Committee will use these prospectuses to recruit potential BD scholars and facilitate direct interactions between faculty and students, first via email and skype, and subsequently via in person meetings during graduate recruitment weekends or at regional or national conferences (e.g. National Society of Black Engineers). While not all departments recruit doctoral students at the same time, we anticipate bringing a cohort of ~ 20 students to campus to interview. Many departments require a commitment of the Faculty member to prior to acceptance of doctoral students into their academic units. In some academic units, however, students are accepted prior to identifying a specific advisor. In these academic units, each BD student will indicate their top 3 choices and meet faculty during graduate recruitment. Upon acceptance to the doctoral program, BD Scholars will submit their top choice of project and pick an advisor at the end of first semester (if not earlier).

### **Training of research mentors and BD students**

All BD faculty mentors must complete diversity and inclusion training. The University of South Carolina's Diversity and Inclusion Committee and Center for Teaching Excellence has developed a series of workshops for both faculty and students that focus on implicit bias, communication, and cultural awareness based on best practices as defined by the National Council for Faculty Diversity and Development. Drs. Weldon and Farkas will develop specific diversity and inclusion modules for prospective mentors by modifying existing workshops and lectures. BD students will be required to attend similar workshops once they arrive on campus and as well as participate in professional activities developed by the Graduate School and the Center for Teaching Excellence's (CTE) Preparing Future Faculty program. Faculty and graduate students will be required to together attend several events throughout that academic year that build upon diversity and inclusion and professional development activities, such as those hosted by the CTE's Teaching Towards Inclusive Excellence (TTIE) program. Successful completion of these activities results in continued funding in subsequent years.