Five Years and Counting

Logistical Lessons from Columbia’s Bridge to the Ph.D. Program

Summer Ash
Assistant Director
Program Goals

- provide intensive research, coursework, and mentoring experience to talented post-baccalaureate scholars from ethnic groups historically underrepresented in sciences

- enhance participants' candidacy for Ph.D. programs

N.B. Bridge Program housed in the Office of the Vice Provost for Academic Planning
Bridge Participants

- full-time, salaried RAs for up to two years
- exposed to laboratory-based science under supervision/mentorship of faculty members, post-docs, and grad students
- provided with $1500/yr to support professional and educational expenses
- eligible for University benefits (e.g., medical insurance and retirement benefits)
Program to Date

- 1st cohort entered in fall 2008
- 4th cohort finishing this summer
- 6th cohort starting this fall
- 20 out of 25 scholars in Ph.D. programs
- Only one scholar did not complete the program
A Year in the Life

- May 1st - application deadline
- June 1st - decision day
- June - Scholar/PI matching
- July/August - move to NYC, begin research
- August - program orientation
- September - begin coursework
- September through May - various program events
- June - annual research symposium, evaluations
Scholar/PI Matching

To apply, please submit the following:

- cover letter introducing the candidate and the application;
- current curriculum vitae;
- official undergraduate transcript;
- two-page statement of intent (double-spaced). The statement should outline the candidate's qualifications (including prior research experience), scholarly interests, and long-term education and career goals. Statements should also identify several labs the applicant is interested in working in;
- two letters of recommendation, preferably from research mentors or academic instructors.

- 25 faculty mentors to date
- Most faculty unaware of program
- Still expanding into new departments
- Iterative process
Scholar/PI Matching

- Subject breakdown to date by department*

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*now in six of the nine natural science departments
Scholar/PI Matching

- Shared risk: 70% program, 30% PI
- Main campus v Uptown campus issue
  - support staff v non-degree student
Orientation

• Welcome with Vice Provost
• Program Overview
• Scholar Roles and Responsibilities
• Continuing Ed Course Registration
• Departmental Administration
• Q&A with Bridge Alumni
• Lunch w/ PIs, friends of the program
Orientation

- Can be information overload
- Most important to **identify resources**
- Emphasize **open communication**
- Characterize program as **supportive & collaborative** rather than authoritative
The research in my lab is aligned with my long-term research interests. My responsibilities in the lab are well-defined. I know whom to ask if I have questions or concerns about my work. My lab has made me feel integrated and valued from the beginning. I am intellectually challenged by my lab work. The PI of my lab has been attentive to my work. I know the expectations my PI has of me. I have received regular feedback from my PI about my work in the lab. The research experience I have gained this year in a lab as a graduate student. When I join a lab in graduate school, I expect responsibilities to those in my current lab.

I have received regular feedback from my principal investigator about my work in the lab.
Research Challenges

“...the largest challenge was not the science itself but rather...to persevere in times of setback.”

“Balancing, my research responsibilities, with administrative responsibilities for the lab.”

“Learning to deal with my post-doc.”

“Having to get up to pace with all the equipment and theory that goes into our research.”
Dealing with Criticism

“One of the most difficult concepts to learn was criticism in academia. Criticism is essentially how academia flourishes. Research is driven (or eliminated) on the basis of criticism. In the non-academic world, critical analysis is personal and comes infrequently. In academia,...critical evaluations are necessary to evolve thoughts from mundane ideas to potentially influential publications. In this environment, critiques flush out concepts, actions, manners that may not be fruitful in order to make room for productive, profound work. It is necessary to remove your personal thoughts/reactions when being criticized as this is common in academia.”
Course Selection

- Scholars take 1-2 courses per semester
- Limited by tuition exemption benefit for university employees
- Highly individualized
  - fill in gaps on transcripts
  - exposure to more rigorous coursework
  - demonstrate ability to balance lab/classroom responsibilities
Coursework Issues

- Transition to Columbia level coursework is difficult
- Grade inflation
- Difficulties w/ scholars
  - inability to self-asses
  - poor study habits
  - fear of speaking up when struggling
- Difficulties w/ PIs
  - wrong course choice
The academic advisors in the Bridge to the PhD Program helped me select classes that were useful for my graduate school plans.
Coursework Challenges

“The adaptation coming from a small school and class has been challenging.”

“Juggling entry level graduate course classwork while researching full time.”

“The first class I took was very large. I don’t care for large classes.”

“The most challenging was adapting to a class with few exams and so it was difficult for me to understand what kind of questions to expect for the midterms and finals.”
Progress Monitoring

- Scholars submit monthly progress reports
  - updates on: research, coursework, professional development, travel, etc.
  - includes running description of research project
- Scholars meet monthly with Assistant Director to discuss progress reports
Progress Monitoring

How helpful were the monthly one-on-one meetings with the Assistant Director?

How helpful were the monthly progress reports?
Mentoring

- Additional mentoring needs identified through progress reports and monthly meetings
- Encouraged to form relationships with other scholars, lab members, etc.
- Tutoring support
- Continuing Ed/GSAS offerings
Program Activities

- **Scholarly Dinners**
  - Invite scientists at various stages in their careers to share experiences/advice

- **Professional Development Workshops**
  - Time management
  - Personal statements
  - Abstract writing
  - Presentation skills
  - Impostor syndrome
Research Symposium

Bridge to the Ph.D. Program in the Natural Sciences

End-of-Year Research Symposium

Thursday, June 6, 2013
9:00 am – 2:30 pm

Columbia University Faculty House
Seminar Room 1
“I really enjoyed the end of the year symposium. It was great opportunity to hear about everyone's research, which I felt rarely occurred otherwise. It was quite refreshing to present my research to people outside of the lab.”
Annual Evaluations

- Written evaluation for each scholar
- In person meeting with Director and Assistant Director to discuss

![Survey Results]

**How helpful was your annual performance evaluation meeting with the Director and Assistant Director?**

- 0.0% Not at all helpful
- 5.0% A little helpful
- 10.0% Somewhat helpful
- 15.0% Helpful
- 20.0% Very Helpful
1st Cohort
2nd/3rd Cohorts
Best thing about this year’s program?

“Having an ‘as close to the real thing’ graduate school experience without actually being in a graduate program.”

“The support and personal statement workshops were excellent.”

“Interacting with the fellow scholars.”

“Being afforded the opportunity to work with Columbia's best and brightest. In addition to meeting and learning from my cohort.”

“The symposium.”
Office of the Vice Provost for Academic Planning

Bridge to Ph.D. Program in the Natural Sciences

Program Overview

The goal of the Bridge to the Ph.D. Program is to enhance the participation of students from underrepresented groups in Ph.D. programs in the natural sciences. To achieve this, the Bridge Program provides an intensive research, coursework, and mentoring experience to post-baccalaureates seeking to strengthen their graduate school applications and to prepare for the transition into Ph.D. programs.

Current Participant Biographies
Alumni Biographies

http://tinyurl.com/cubridge