

Working with Undergraduate Student Research Partners

This document distills insights from two workshops on Working with Students, held on December 3 and 7, 2015. Many thanks to our panelists: Miranda Brown, Paul Conway, Elaine Gazda, Matthew Solomon, Michael Solomon, and Arthur Verhoogt.

Advice from our panelists:

- Some undergraduate researchers are just as competent and effective as graduate students.
- 1-2 undergraduate partners may be ideal; 3-4 starts to involve a lot of management and makes it hard to coordinate group meetings.
- It can be hard to identify how well students will work in teams; interviewing potential student research partners in groups can sometimes give a sense of their interpersonal skills.
- Students should have an understanding of the project and the roles of the research team; involve students in research team meetings.
- Give students specific instructions; show them how to use printers, photocopiers, etc.
- Undergraduate students need regular supervision; they're juggling lots of priorities and they may shift focus away from project responsibilities.
- Tailor research responsibilities to the student's needs and interests; identify ways for the student to develop expertise.
- If possible, give students ownership over some aspect of the research.

Where to find student research partners?

- UROP students (usually first- and second-year students); these students will probably need to develop research skills and it is likely that they would be research assistants rather than research partners.
- Former UROP students recommended by faculty mentors; these students already have some research skills and may be ready to contribute to the research project.
- Recruit students you've worked with in class; working with students you already know often leads to successful collaborations.
- For students with specific skill sets (foreign language fluency, for example), perhaps recruit from department majors.

Challenges:

- Undergraduate students often need to develop skills; they may need to start the project as research assistants, and then move to more responsible roles. A two-year commitment would make such a progression easier, but it may be hard for students to commit to a long-term project.
- If students can't work together, the faculty mentor has to spend more time supervising and mentoring individuals.
- The biggest challenge can be to build interest in the project and commitment to its completion.