Appendix

Interview Questions for Undergraduates

Characteristics of Undergraduate Research Experiences (UREs)

- 1. What was your undergraduate major?
- 2. In which year during your undergraduate degree program did you start your research experience with Carol?
- 3. Had you had any research experience prior to starting your URE with Carol?
- 4. What type of URE would best describe your experience: (*e.g.*, year-round research apprenticeship, summer only research apprenticeship, research as part of coursework, research as part of a career or retention program, *etc.*)?
- 5. How did you find out about the URE opportunities in Carol's group?
- 6. What was the selection process for obtaining your URE position?
- 7. How were you matched with a particular URE project?
- 8. What was the weekly time commitment of your URE? How was this decided?
- 9. How were you involved in decisions regarding the structure of your URE?

Motivations, expectations, and goals for URE

- 1. What motivated you to participate in a URE?
- 2. What did you expect to gain or accomplish?
- 3. Did the URE meet these expectations?

Impacts of URE

- 1. What gains did you make as a result of this URE?
- 2. How did the presence of postgraduates in the group impact your URE?

- 3. What were the best aspects of your URE?
- 4. What were the most challenging aspects of your URE?
- 5. (*If relevant*) How would you compare your URE experience in Carol's lab to your previous URE(s)?
- 6. How do you think Carol as a faculty head benefits from UREs?
- 7. What do you think are the most challenging aspects of hosting UREs from Carol's perspective?
- 8. How do you think the postgraduates benefit from UREs?
- 9. What do you think are the most challenging aspects of UREs from the postgraduates' perspectives?
- 10. How do you think UREs affect the overall lab dynamic

Mentorship structure

- 1. How would you describe the mentorship structure of your URE? (Who served as your mentor/s? What was their position and role in the lab? How much time did you spend with your mentor/s? How was your mentor assigned?)
- 2. How would you describe the mentorship style/s of your mentor/s?
- 3. In what way/s did their mentorship style suit or not suit your needs?

The 'ideal' URE

- 1. How would you describe the ideal URE?
- 2. What would research labs or institutions need to do to support the ideal URE?

Interview Questions for Postgraduates

Characteristics of UREs

- 1. For how long were you a postgraduate in this group?
- 2. At what point in your postgraduate training in this group did you start mentoring undergraduates?
- 3. In the course of your time in the group, how many undergraduates did you mentor?
- 4. What kind of UREs were you involved with as a mentor?
- 5. Did you complete a URE when you were an undergraduate?
- 6. How were the undergraduates typically recruited into this group?
- 7. How did you contribute to the structure of the URE?

Motivation and goals for mentoring UREs

- 1. What is/was your motivation for mentoring an undergraduate researcher?
- 2. What did you expect your undergraduate to gain or accomplish after completion of a URE with you?

Impacts of mentoring UREs

- 1. How did you, as a graduate or postdoctoral student, benefit from mentoring UREs? [Probe regarding research, education, career, and personal impacts.]
- 2. What were the negative aspects or difficulties of the URE for you as a mentor? [Probe regarding research, education, career, and personal impacts.]
- 3. How did the presence of undergraduate researchers in the group affect the overall group dynamic?

Interview Questions for Faculty Head

Characteristics of Undergraduate Research Experiences (UREs)

1. How long have you been a faculty member?

- 2. What kinds of UREs are in place in your group?
- 3. How do you typically recruit undergraduates in your group?
- 4. Who usually serves as mentor/s for undergraduates during their UREs?
- 5. How would you describe your role in mentoring undergraduates in your lab?

Motivation and goals for hosting UREs

- 1. What is your motivation for hosting UREs in your group?
- 2. What do you expect undergraduates to gain or accomplish after completion of a URE? *Impacts of UREs*

[For the following questions, the initial question is included verbatim and was followed with probing questions regarding research, education, career, and personal impacts.]

- 1. How do you as faculty benefit from mentoring UREs?
- 2. How do you think undergraduates benefit from working with postgraduates?
- 3. How do you think postgraduates benefit from working with undergraduates?
- 4. What were the negative aspects or difficulties of the URE for you as a mentor?
- 5. How did the presence of UREs in the your group affect the overall group dynamic?
- 6. What were the negative aspects or difficulties of the URE for you as a faculty head?
- 7. What do you think are the negative aspects and/or difficulties of UREs from the standpoint of the postgraduates?
- 8. What do you think are the negative aspects and/or difficulties of UREs from the standpoint of the undergraduates?

The 'ideal' URE

- 1. How would you describe the ideal UREs?
- 2. What would institutions need to do to support the ideal URE?