

# Supplemental Material

*CBE—Life Sciences Education*

Limeri *et al.*

Supplemental online materials for

*Volunteered or voluntold? Motivations and perceived outcomes  
of graduate and postdoctoral mentors of undergraduate researchers*

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## **Interview guide**

The interview guide for semi-structured interviews conducted for this study. The interview questions are organized into five topics: introduction, antecedents, correlates and moderators, outcomes, and wrap-up. The guide includes both questions to be verbally asked as well as references to questions that benefit from a visual aid, which are presented to the interviewee in the “Interview visual questions” document (S4).

### *Part 1: Introduction*

1. How many Undergraduate Researchers (URs) have you worked with in your position?
2. How long had you been in the lab as a [postdoc/grad student] before you began working with URs?

### *Part 2: Antecedents*

Think back to before you started working with URs.

3. What were your reasons for working with a UR?

\*\*\**Interview visual question #1, autonomy*

4. Please explain your response.
5. What did you think you would get out of working with a UR?
6. Was there anything that made you hesitant to work with a UR?

### *Part 3: Correlates and moderators*

Now think about your day-to-day work with the UR.

7. Describe a typical week working with the UR.

\*\*\**Interview visual question #2, mentorship structure*

8. Please explain your response.
9. Please describe how you and your PI interacted about the UR and their project.

### *Part 4: Outcomes*

10. What did you do to help the UR?
11. What did the UR do to help you?
12. How, if at all, was working with the UR a hindrance to you?
13. How, if at all, was working with the UR beneficial to you?

\*\*\**Interview visual question #3, intentions to mentor again*

14. Please explain why you chose that response.
15. How, if at all, is working with URs related to your career interests?
16. Please explain your response

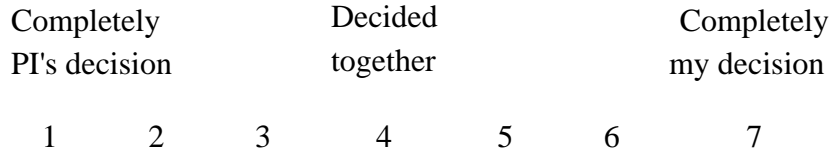
### *Part 5: Wrap-up*

17. Is there anything else you would like to add about your experience?
18. Do you have any final questions for me?

**Interview visual questions**

*Question #1: Autonomy*

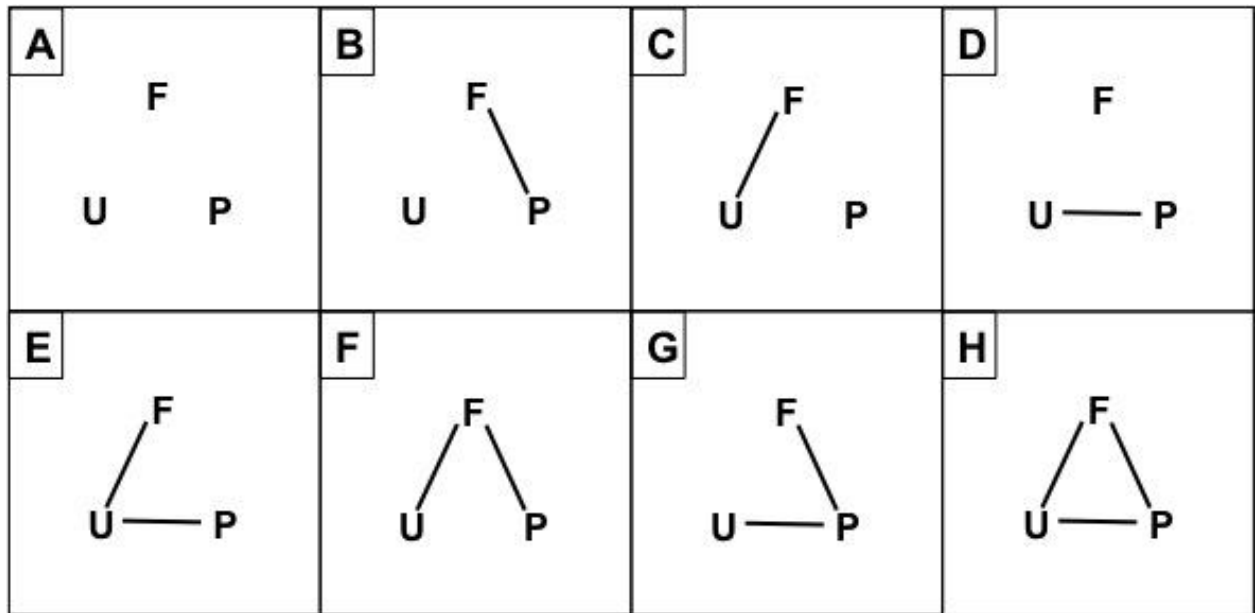
To what extent did you have control over whether or not you worked with an undergraduate researcher?



*Question #2: Mentoring structure*

In the following figure, please indicate which best represents the relationship you had with the undergraduate researcher and your faculty PI.

Key: U = Undergraduate researcher; F = Faculty member (PI); P = Post-graduate (Graduate student or postdoctoral researcher).



*Question #3: Intentions to mentor again*

If you have a chance in the future, how likely are you to work with an undergraduate researcher again?



**Screening questions**

Participants were asked to answer the set of six questions twice, once for their most positive experience and once for their most negative experience. Questions were adapted from Allen and Eby(2003).

	Very unsatisfied			Very satisfied			
	1	2	3	4	5	6	7
<b>1.</b> Overall, how satisfied are you with your mentoring experience?							
	Completely disagree			Completely agree			
<b>2.</b> The mentoring relationship between my undergraduate researcher and I was very effective	1	2	3	4	5	6	7
<b>3.</b> I am very satisfied with the mentoring relationship my undergraduate researcher and I developed	1	2	3	4	5	6	7
<b>4.</b> I was effectively utilized as a mentor by my undergraduate researcher	1	2	3	4	5	6	7
<b>5.</b> My undergraduate researcher and I enjoyed a high-quality relationship	1	2	3	4	5	6	7
<b>6.</b> Both my undergraduate researcher and I benefitted from the mentoring relationship	1	2	3	4	5	6	7

**References**

Allen, T., & Eby, L. T. (2003). Relationship Effectiveness for Mentors: Factors Associated with Learning and Quality. *Journal of Management*, 29(4), 469–486.  
[https://doi.org/10.1016/S0149-2063\(03\)00021-7](https://doi.org/10.1016/S0149-2063(03)00021-7)