



We are pleased that you were an APS Undergraduate Summer Research Fellow and hope the program, from your time in the lab this past summer through attending EB, was a good experience. The purpose of this survey is to help us evaluate the effectiveness of the program.

Thank you for agreeing to complete the survey. Please note the following:

- Your responses are confidential. APS will publish reports on the program evaluation using anonymous data. We will list you and your institution as an awardee/participant but will NEVER associate your name or institution with any individual ratings, comments, or quotes. If we ever wish to use a quote from a survey, we will contact you and get your approval in writing.
- Required questions are marked with an asterisk (*).
- If you have questions about the survey, contact APS staff member Brooke Bruthers, bbruthers@the-aps.org.
- **Be sure to complete all questions thoughtfully and completely by April 19th, 2019.**

I understand that by clicking on the link below I agree to:

- **Complete all survey questions thoughtfully and completely by the stated deadline.**
- **Allow APS to use my application and survey data anonymously for published reports and papers concerning the program or event in which I am participating. My name and institution will NOT be associated with my ratings, comments, or quotes I make in this survey.**
- **Allow APS to list my name and institution on a list of participants in this program in reports and on the website.**
- **Contact APS staff (Brooke Bruthers, bbruthers@the-aps.org) if I have any concerns about the use of my survey responses or application information in the program evaluation, reports, or papers.**



*** 1. I am a Fellow in this APS undergraduate summer research program:**

- ☐ IOSP
- ☐ Hearst
- ☐ STRIDE
- ☐ UGREF
- ☐ UGSRF
- ☐ Not Sure



The next series of questions will ask you to rate your understanding or skills in a number of areas from "Expert" to "Novice".

What do we mean by "Expert" and "Novice"?

- **Expert:** Think of your summer research host... An "expert" is an experienced researcher who can do work **independently without assistance or help** and has the **knowledge to guide/teach** these skills to others
- **Novice:** Think of a "first-timer" in the lab... a "novice" has very limited lab experience, **needs assistance** or guidance in doing his/her work, and **does not yet have the knowledge** to guide/teach these skills to others.

Please note: There are NO right or wrong answers... please answer thoughtfully and honestly. **It is OK to be a novice at this stage of your career!** We do not expect our **undergraduate** fellows to be proficient in all of these areas! If you find yourself marking "expert" on many or most questions, please read the definitions above carefully.

*** 2. I have read these instructions and will follow them in answering the questions below.**

☐ Yes

Remember to consider the scale: "Expert" would be comparable to your research host's knowledge and skills, "novice" has very limited knowledge and skills.

*** 3. RESEARCH SKILLS UNDERSTANDING:** This series of questions asks you to *rate your skills/understanding RIGHT NOW*. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
How much detail to include in my lab notebook when describing my experimental methods.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The proper way to keep a lab notebook detailing my experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reasons why data must be recorded directly into a lab notebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not taping printouts from lab equipment into my lab notebook is an acceptable way to record data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reasons why data should never be recorded on scrap paper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to write a hypothesis so it can be tested by conducting experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
How to design an experiment that will test my hypothesis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to design proper controls for my experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to revise my hypothesis after obtaining results from my experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to develop alternative hypotheses for my project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to identify chemicals, reagents, and/or biological wastes that may require special handling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety requirements for clothing, hair, shoes, and protective gear in my lab.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to dispose of chemical or biological wastes in the laboratory.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What to do and whom to notify if there is an accident in the lab.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to use the safety equipment in the lab (e.g., eye wash).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Remember to consider the scale: "Expert" would be comparable to your research host's knowledge and skills, "novice" has very limited knowledge and skills.

*** 4. DATA ANALYSIS AND PRESENTATION SKILLS:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
Knowing the proper way to record and analyze the results of my experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my data analyses: Whether or not to include results from an experiment that do not agree with those of previous experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my data analyses: Whether or not to include results from an experiment where one solution was made incorrectly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not to include both the experimental results and the statistical tests I used for analysis in my lab notebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using statistics to determine what statements I can make about my results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
Selecting and using common statistical tests to analyze my data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting the appropriate statistical test for my data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When to use the terms "significant" and "meaningful" in describing my results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When to use a table versus a graph to display my results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When to report data means with standard error versus standard deviation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it is better to present data in the text of my abstract or manuscript instead of in a table or figure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to decide whether a bar graph, pie chart, scatterplot, or line graph is most appropriate for each type of data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On this question please answer "Novice".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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*** 5. SCIENTIFIC COMMUNICATION- WRITING:** This series of questions asks you to rate your skills/understanding RIGHT NOW. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
How to include funding sources (e.g., grants, fellowships) in my abstracts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What the major differences are between an abstract for a scientific paper and an abstract for a meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not meeting abstracts can include references.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not meeting abstracts can include figures or tables.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether or not an abstract for a journal manuscript will include less background and methods than will an abstract for a meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to draft the text for a poster on my research findings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
How to draft the figures and tables for a poster on my research findings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to select the results for my poster that tell one research story.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What the parts or sections of a scientific manuscript are and what each section should include.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who should be listed as an author on a paper I would write about my research project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to select the results for a journal manuscript that tell one research story.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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*** 6. SCIENTIFIC COMMUNICATION- ORAL PRESENTATION:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
How much text to include on slides for an oral presentation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many results to include on slides for an oral presentation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to anticipate and prepare for likely questions about my oral presentation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to change my poster into slides for an oral presentation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to lay out my poster so a reader can understand it even when I'm not there to explain it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to present an oral research talk using slides.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to anticipate and prepare for likely questions about my poster.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
How to prepare for an give a one minute presentation on the key findings of my poster.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to prepare for and give a 3 to 5 minute talk about my poster.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to prepare for and give a 15 minute detailed description of my poster methods, results, and conclusions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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*** 7. NETWORKING:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
How effective networking can positively affect my career path.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How the lack of networking can negatively affect my career path.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to broaden my professional network in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to deepen my relationships with colleagues in my network.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognizing my own value as a colleague for other scientists and trainees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building my my professional network with colleagues (such as other Fellows in the program).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Remember to consider the scale: "Expert" would be comparable to your research host's knowledge and skills, "novice" has very limited knowledge and skills.

*** 8. NETWORKING AT A SCIENTIFIC MEETING:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
How to introduce myself to someone at a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to network at a reception at a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to introduce myself to a speaker after a session at a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to converse with new contacts at a dinner meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to find receptions and informal gatherings where I can network with other students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to find receptions and informal gatherings where I can meet more senior researchers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to make best use of the different session types (posters, symposia, major lectures, receptions).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
If and/or when it is appropriate to take time off from the meeting for sightseeing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to find career development and professional development sessions at a large meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to get reimbursed for money I spend while attending a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The kinds of expenses for which I can get reimbursed after attending a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Why I should check my social media "profile" before a meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to follow up after the meeting with someone who expressed interest in my work during the meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to follow up after a meeting with someone who does research in which I'm interested.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Remember to consider the scale: "Expert" would be comparable to your research host's knowledge and skills, "novice" has very limited knowledge and skills.

*** 9. SCIENTIFIC ETHICS AND RESPONSIBLE CONDUCT OF RESEARCH:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert	6	5	4	3	2	1 Novice
Whether or not I can use text from my previously published abstract in a new abstract.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developing a system so that I do not plagiarize previous works including those by my coworkers and me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to both list and apply the International Committee of Medical Journal Editors (ICMJE) authorship guidelines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding who should be acknowledged as a contributor on an abstract.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to explain what the order of the authors' names on a journal article or meeting abstract means in terms of their contributions to the research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert	6	5	4	3	2	1 Novice
Whom to contact if a lab coworker has plagiarized my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to determine whether a colleague should be an author on a paper or be recognized in the acknowledgements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The proper way to work with animals in the laboratory.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The proper way to work with human subjects in experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding how to perform procedures on animals, with proper supervision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding how to take clinical trial patient histories, with proper supervision.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding when it is appropriate to use a model other than animals or human subjects.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The next series of questions will ask you to rate your understanding or skills in a number of areas from “Expert Understanding” to “Novice Understanding.” What do we mean by “Expert Understanding” and “Novice Understanding”?

- **“Expert Understanding”** means you have **extensive** knowledge in this area, do not need assistance from anyone to find critical information or training, and can guide/teach this information to others.
- **“Novice Understanding”** means you **have just begun to explore this area**, need assistance and/or advice to know where to find information or training, and do not yet have the knowledge to guide/teach this information to others.

Please note: There are NO right or wrong answers...please answer thoughtfully and honestly. It is OK to be a novice at this stage of your career! We do not expect our undergraduate fellows to be proficient in all of these areas! If you find yourself marking “Expert” on many or most questions, please read the definitions above carefully.

*** 10. I have read these instructions and will follow them in answering the questions below.**

☐ Yes

Remember to consider the scale: "Expert" would be comparable to your research host's knowledge and skills, "novice" has very limited knowledge and skills.

*** 11. SCIENTIFIC CAREER UNDERSTANDING AND PLANNING:** This series of questions asks you to rate your skills/understanding RIGHT NOW. Choose one answer for each item.

	7 Expert Understanding	6	5	4	3	2	1 Novice Understanding
Where I can go to find out information about different career paths.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whom I should consider talking to about various career paths.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The education and training required for the career I'm hoping to have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Which universities offer degree programs in my planned career area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Requirements for applying to a degree program in my planned career area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to draft a plan to help guide my work toward achieving my career goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert Understanding	6	5	4	3	2	1 Novice Understanding
How to develop and revise an Individual Development Plan (IDP) or Personal Implementation Plan (PIP).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to identify mentors and experts to meet with about my career.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to identify the most appropriate person to ask for a recommendation for a fellowship program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to write a personal statement for a degree or fellowship program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to avoid making common mistakes on a degree or fellowship application.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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*** 12. INTERACTIONS WITH RESEARCH MENTOR AND LAB GROUP:** This series of questions asks you to rate your skills/understanding **RIGHT NOW**. Choose one answer for each item.

	7 Expert Understanding	6	5	4	3	2	1 Novice Understanding
When to go to my lab supervisor for guidance and when to make a decision myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who needs to approve my draft poster before printing the final copy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When to get my research host's input in the development of my abstract.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who has to approve my abstract before it is submitted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to identify who should be an author on my poster and in what order.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What my research host will expect of me at a scientific meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What roles each person in our lab group has in designing and carrying out experiments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What writing tasks I will be expected to do if my work becomes a journal article.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 13. Rate your knowledge/understanding RIGHT NOW in the following areas.**

	7 Expert Understanding	6	5	4	3	2	1 Novice Understanding
How effective networking can benefit my career path.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people who would be good to maintain contact with as resources and mentors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How to develop a network of people to act as my mentors.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Possible careers in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skills necessary for various scientific careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding how my strengths can affect my career choice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding how my weaknesses can affect my career choice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How resources from APS on the various career paths can be of benefit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 Expert Understanding	6	5	4	3	2	1 Novice Understanding
How resources from APS on the skills necessary to be successful in most careers can be of benefit during my career.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How resources on various career paths from other professional societies can be of benefit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How scientists communicate their research findings with each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How scientists communicate their research findings with the general public.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Please mark this question with a "5".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 14. Indicate how useful each resource was in your career exploration activities during this fellowship.**

	Very Useful	Somewhat Useful	Undecided	Not Very Useful	Not at All Useful	I did not use this resource	I did not know this resource was available
APS Career web site (www.the-aps.org/careers)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
APS/ACDP List of Professional Skills for Physiologists and Trainees (http://bit.ly/1PriQ9c)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
APS Ethics Policies (http://bit.ly/1PriYW8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
APS Info for Authors web site (http://bit.ly/1RgnHQe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
APS staff contacts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional Skills Training Resources (www.the-aps.org/PST)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



*** 15. You have many training options after you earn your undergraduate degree. Please rate the following options on how you feel RIGHT NOW:**

	7 My Top Choice(s)- I'm Committed to Pursuing This	6	5	4 Undecided	3	2	1 Not at All Interested in Pursuing	Don't Know Much About It
Find a job after graduation in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Find a job after graduation, but not in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend graduate school in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend graduate school, but not in science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend combined degree program (e.g., MD/PhD).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend medical school (e.g., MD, DO).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend other professional school in science (e.g., DVM, dentistry, physician assistant, physical therapy).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attend professional school, but not in science (e.g., JD, MBA).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

*** 16. You have many training options after you earn your undergraduate degree. Please rate the following options based on how you feel RIGHT NOW:**

	7 My Top Choice(s)- I'm Committed to Pursuing This	6	5	4 Undecided	3	2	1 Not at All Interested in Pursuing	Don't Know Much About It
A career in biomedical research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career in physiology research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career as an MD with a clinical research component.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career as an MD not involving research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career in cardiovascular research (e.g., cardiovascular, pulmonary, hematologic, and sleep disorders).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career in digestive, diabetes, or kidney research (e.g., diabetes, endocrinology, metabolism, nutrition, obesity, and digestive, liver, urologic, kidney, and hematologic diseases).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	7 My Top Choice(s)- I'm Committed to Pursuing This	6	5	4 Undecided	3	2	1 Not at All Interested in Pursuing	Don't Know Much About It
A career in comparative physiology research (exploring the similarities and differences between living organisms).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career in another science-based profession (e.g., DDS, PA, DO).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A career in a non-science based profession (e.g., law or business).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Graduating and going directly into the workforce.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="text"/>							

*** 17. Please rate your agreement with the following statements about interactions with persons during your summer lab experience. Remember, your responses are confidential and will not be reported to your research mentor or lab group.**

	Strongly Agree	Somewhat Agree	Not Sure	Somewhat Disagree	Strongly Disagree
My research host met with me on a daily basis over the summer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My research host met with me on a weekly basis over the summer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I didn't see much of my research host during the summer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was trained by someone on how to do everything in the lab from making chemicals to using software.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had to figure out how to do the experiments myself since it's my project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Someone told me what to do with my results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Someone told me what statistical tests to run on my results.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Every lab had several people in it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Strongly Agree	Somewhat Agree	Not Sure	Somewhat Disagree	Strongly Disagree
I had the opportunity to attend lab meetings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was able to present my data at lab meetings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had the opportunity to attend departmental seminars.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had the opportunity to interact with other undergraduates in the fellowship program over the summer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I had the opportunity to interact with other researchers in the department over the summer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Final Questions

*** 18. Did this program (summer research experience, online professional development, scientific meeting attendance) change your career plans?**

- ☐ Yes
- ☐ No
- ☐ Not Sure

19. If Yes, how did your career plans change? Please be specific!

*** 20. What did you like BEST and LEAST about working in the lab? Please comment on both.**

*** 21. What did you like BEST and LEAST about the online professional development activities you did? Please comment on both.**

*** 22. What did you like BEST and LEAST about attending the scientific meeting? Please comment on both.**

*** 23. What was the most useful skill that you learned through the program?**

Help us improve the program.

*** 24. What suggestions do you have for improving this fellowship program? Please be specific.**

*** 25. What would you say to a friend who was interested in this program?**

*** 26. May we use your statement in question #25 anonymously for program promotion?**

☐ Yes

☐ No

We value our alums! Please answer the following questions so we can reach you in the future.

Why do we need this? We periodically reach out to our program alums to touch base. This information will not be shared with any other organization.

*** 27. Please give us an email address where we can always reach you (not a temporary address such as a school account).**

28. Please give us the contact information for someone who will always know how to reach you (ex. parent or spouse).

Name

Address

Address 2

City/Town

State/Province

ZIP/Postal Code

Country

Email Address

Phone Number

Why do we need this? We periodically reach out to our program alums to touch base. This will not be shared with any other organization.



Thank you so much for providing feedback. If you have any questions or would like to talk with a staff member, please feel free to contact Allison Hood at ahood@the-aps.org or Brooke Bruthers at bbruthers@the-aps.org.