

# Biology REU Core Assessment Questions

## \*Draft\*

### 1. Gains in THINKING AND WORKING LIKE A SCIENTIST: APPLICATION OF KNOWLEDGE TO RESEARCH WORK.

How much did you GAIN in the following areas as a result of your most recent research experience?      no gains    a little gain    moderate gain    good gain    great gain    NA

- 1.1 Knowing how data is collected.
- 1.2 Analyzing data for patterns.
- 1.3 Figuring out the next step in a research project.
- 1.4 Problem-solving in general.
- 1.5 Formulating a research question that could be answered with data.
- 1.6 Identifying limitations of research methods and designs.
- 1.7 Understanding the theory and concepts guiding my research project.
- 1.8 Understanding the connections among scientific disciplines.
- 1.9 Understanding the relevance of research to my coursework.

### 2. PERSONAL GAINS RELATED TO RESEARCH WORK

How much did you GAIN in the following areas as a result of your most recent research experience?      no gains    a little gain    moderate gain    good gain    great gain    NA

- 2.1 Confidence in my ability to contribute to science.
- 2.2 Comfort in discussing scientific concepts with others.
- 2.3 Comfort in working collaboratively with others.
- 2.4 Confidence in my ability to do well in future science courses.
- 2.5 Ability to work independently.
- 2.6 Developing patience with the slow pace of research.
- 2.7 Understanding what everyday research work is like.
- 2.8 Taking greater care in conducting procedures in the lab or field.

### 3. Gains in SKILLS

How much did you GAIN in the following areas as a result of your most recent research experience?      no gains    a little gain    moderate gain    good gain    great gain    NA

- 3.1 Writing scientific reports or papers.
- 3.2 Making oral presentations.
- 3.3 Defending an argument when asked questions.
- 3.4 Explaining my project to people outside my field.
- 3.5 Preparing a scientific poster.
- 3.6 Keeping a detailed lab notebook.
- 3.7 Conducting observations in the lab or field.
- 3.8 Using statistics to analyze data.
- 3.9 Calibrating instruments needed for measurement.
- 3.10 Working with computers.
- 3.11 Understanding journal articles.
- 3.12 Conducting database or internet searches.
- 3.13 Managing my time.



## 8. Research experience

Compared to your intentions BEFORE doing research, HOW LIKELY ARE YOU NOW to:

not more likely    a little more likely    somewhat more likely    much more likely    extremely more likely    NA

- 8.1 complete your Associates degree?
- 8.2 transfer to a 4-year institution?
- 8.3 complete your Bachelors degree in science, mathematics or engineering?
- 8.4 enroll in a Ph.D. program in science, mathematics or engineering?
- 8.5 enroll in a masters program in science, mathematics or engineering?
- 8.6 enroll in a combined M.D/PhD program
- 8.7 enroll in medical or dental school?
- 8.8 enroll in a program to earn a different professional degree (i.e. law, veterinary medicine, etc.)
- 8.9 pursue certification as a teacher?
- 8.10 work in a science lab?
- 8.11 Other

comments box

## 9. Future career plans

How did your research experience influence your thinking about future career and graduate school plans? Please explain.

comments box

## 10. Other gains

Did you make other gains from doing research that we didn't mention? If so, please briefly describe these.

comments box

## 11. Academic experience

11.1 In the upcoming semester, I will be a:

Freshman    Sophomore    Junior    Senior

11.2 My overall GPA is:

\_\_ / 4.00

11.2 The highest degree my home institution offers is a(n):

Associate's  
Baccalaureate  
Master's  
Doctorate

## 12. Previous research experience

12.1 How many times have you participated in SUMMER research, including this most recent experience?

1 summer    2 summers    3 summers    NA

12.2 How long was this most recent SUMMER research experience?

8 weeks    9 weeks    10 weeks    11 weeks    more than 11 weeks

12.3 How important was the stipend or money you were paid during this most recent SUMMER research experience?

Not at all important    slightly important    important    very important

12.4 How many times have you participated in ACADEMIC YEAR research?

Never participated    1 semester    2 semesters    3 semesters    4 or more semesters

12.4 To how many REU programs did you apply for this summer?

comments box

### 13. Demographics

	Male	Female	Your choice label here...
13.1 What is your gender?			
13.2 What is your race? (choose all that apply)			
American Indian		yes	no
Asian		yes	no
Black or African American		yes	no
Native Hawaiian or other Pacific Islander		yes	no
White		yes	no
Other (please specify)			
13.3 Are you Hispanic or Latino/Latina?		yes	no
13.4a Please indicate your mother's education level.			
		Not a high school graduate	
		High school graduate	
		Some college	
		Associates Degree	
		College graduate - Bachelors Degree	
		Graduate or Professional Degree	
13.4b Please indicate your father's education level.			
		Not a high school graduate	
		High school graduate	
		Some college	
		Associates Degree	
		College graduate - Bachelors Degree	
		Graduate or Professional Degree	
13.5 Are you from a low-income home? ( <a href="http://www2.ed.gov/about/offices/list/ope/trio/incomelevels.html">http://www2.ed.gov/about/offices/list/ope/trio/incomelevels.html</a> )		yes	no