Preflection Survey

Please enter your name or program identifier:
Name or identifier
Please indicate the college or university where you are regularly enrolled:
Institution
Will you carry out your research at the institution where you are regularly enrolled?
O Yes O No
If you answered "No" to the previous question, please select the institution, location, or laborator where you will carry out your research:
Research institution
Please indicate the <i>funding source</i> for your research:
Funding source
If you have more than one source of funding, please enter the additional source of funding below:
Additional funding source
Gender:
O Male
FemalePrefer not to answer

Ethnicity:
O Alaskan Native
O American Indian
O Asian American
O Black or African American
O Filipino
O Foreign National
O Hawaiian
 Hispanic/Latino Pacific Islander
O White
O Two or more races
O Other
O Prefer not to answer
What is your current status?
O I am a high school student.
O I am a first-year college undergraduate.
O I am a second-year college undergraduate.
O I am a third-year college undergraduate.
O I am a fourth-year college undergraduate.
O I am a graduate or medical student.
O Other
O Not applicable / Prefer not to answer
What is your academic major (best fit):
O Biology
O Chemistry
O Physics
O Earth & Planetary Sciences
O Math
O Computer Science
O Biochemistry
O Bioinformatics
O Psychology
O Neurobiology
O EngineeringO Education
O Other: Social Sciences
O Other: Humanities
Other: Natural Sciences
O Other
O Undecided
O Not applicable / Prefer not to answer

What is your field of research (best fit)?
 Biology Chemistry Physics Earth & Planetary Sciences Math Computer Science Biochemistry Bioinformatics Psychology Neurobiology Engineering Education Other: Social Sciences Other: Humanities
 Other: Humanities Other: Natural Sciences Other Undecided
O Not applicable / Prefer not to answer
Have you participated in research prior to your most recent research experience?
 No, I have not had a prior research experience. Yes, during one academic semester (typically ~10 hr/wk). Yes, during multiple academic semesters (typically ~10 hr/wk). Yes, during a summer research program (typically full-time for at least 5 weeks). Yes, during a prior academic semester (or semesters) and a summer. Yes, during prior years and/or several summers. Not applicable / Prefer to not answer

Do you have plans to continue your education beyond your undergraduate degree? Please check the most likely plan for what you will do <i>immediately following</i> graduation.
 My goal is to go to graduate school for a Ph.D. degree in a biology-related field. My goal is to go to graduate school for a Ph.D. degree in the physical sciences (including engineering, math, and computer science) My goal is to go to graduate school for an MA in the life sciences. My goal is to go to graduate school for an MA in the physical sciences (including math, engineering, computer science, etc.) My goal is to go to graduate school for an MA or Ph.D. degree in a field other than science My goal is to go to medical school for an M.D. degree. My goal is to go to school for an M.D./Ph.D. My goal is to go to school for other health professions. My goal is to go to school for a professional degree such as law or business. My goal is to join the Peace Corps, Teach for America, or similar organization. My goal is to work, then go to school for my M.D., Ph.D., or other professional degree. I plan to work in a science related career without going to school after college. I plan to work in a non-science career without going to school after college.
O Not applicable / Prefer not to answer

When someone discusses "a career scientist," how easy is it for you to visualize a career of that sort?

O I don't have a clue as to what they are talking about.	
O I have a vague idea of what they are talking about.	

I think I know what they are talking about, but I am not confident.
I have a good idea of what they are talking about.
I have a very clear idea of what they are talking about.

Life Choices

Below are some general categories of motives and intentions that influence choices of what to do with your life after graduation. Check the appropriate box to indicate the relative importance of the motive in your choices for post-graduation life. Make a choice for each topic.

	Not important	Important	Very important
Continue your education	0	0	0
Get work or financial independence	O	0	0
Perform public service/work for social change	O	O	0
Be with a partner and start your own family	O	O	0
Be free to travel	O	O	0
Manage your health	O	O	0
Pursue spiritual values	O	O	0
Live near your parents or siblings	O	O	0
Teach elementary or high school students	O	O	0
Become a well-known scientist	0	O	0
Helping people with their physical or mental health	0	0	0
Return to your home community	O	0	O

Your opinions about yourself and about science

Compared to the average college student, where the average student is at the 50th percent, rate your confidence about your level of skill according to the following scale.

	I'm in the bottom 10%	I'm below average but not in the bottom 10%	I'm about average	I'm above average but not in the top 10%	I'm in the top 10%	N.A.
Math skill	0	0	O	0	O	O
Writing skill	0	0	O	0	O	O
Public speaking skill	•	O	0	0	0	•
Social skill	0	0	O	0	O	O
Computer skill	0	0	O	0	O	O

Learning Context

It has become common to say that no student is an empty bucket, waiting for a teacher to pour in knowledge. Research on learning acknowledges that students approach a course with well-formed opinions of themselves and of the subject matter. In this section we present questions about science and questions about you. These will help us put learning in context.

For each item below please rate your agreement with the item.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N.A.
Even if I forget the facts, I'll still be able to use the thinking skills I learn in science.	O	O	O	•	0	•
You can rely on scientific results to be true and correct.	0	0	0	O	•	0
The process of writing in science is helpful for understanding scientific ideas.	0	O	0	0	O	0
When scientific results conflict with my personal experience, I follow my experience in making choices.	•	0	•	•	•	0
Students who do not major/concentrate in science should not have to take science courses.	•	0	•	•	•	0
I wish science instructors would just tell us what we need to know so we can learn it.	0	O	O	0	O	0
Creativity does not play a role in science.	•	0	0	O	•	0
Science is not connected to non- science fields such as history, literature, economics, or art.	•	O	•	•	•	0
When experts disagree on a science question, it's because they don't know all the facts yet.	0	0	O	0	0	0
I get personal satisfaction when I solve a scientific problem by figuring it out myself.	0	O	•	•	•	•
Since nothing in science is known for certain, all theories are equally valid.	O	0	O	0	0	0

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N.A.
Science is essentially an accumulation of facts, rules, and formulas.	0	0	O	•	0	•
I can do well in science courses.	O	O	O	O	O	O
Real scientists don't follow the scientific method in a straight line.	•	O	O	•	O	O
There is too much emphasis in science classes on figuring things out for yourself.	•	O	O	•	O	•
Only scientific experts are qualified to make judgments on scientific issues.	•	•	•	0	0	O
Scientists know what the results of their experiments will be before they start.	0	0	•	0	O	O
Explaining science ideas to others has helped me understand the ideas better.	•	0	•	0	O	O
The main job of the instructor is to structure the work so that we can learn it ourselves.	0	0	0	•	O	•
Scientists play with statistics to support their own ideas.	0	0	•	O	•	O
Lab experiments are used to confirm information studied in science class.	0	0	0	0	O	0
If an experiment shows that something doesn't work, the experiment was a failure.	О	•	•	•	O	0

Paired Statements

Below are ten pairs of statements. The number scale between them is used to indicate how well a statement or a pair of statements describes you. For example, on the first pair, a "6" would indicate you are very action oriented, while a "4" would indicate you were more action-oriented than reflective, but somewhat reflective. For each pair of statements, choose a number that indicates how well the statement describes you. Do not worry that some pairs are not opposite.

Paired statement responses

	1	2	3	4	5	6	NA	
I would describe myself as reflective.	•	•	0	•	•	•	O	I would describe myself as action oriented.
I prefer subjects with precise answers.	•	•	0	•	•	•	O	I prefer subjects with multiple interpretations.
I value patience.	0	0	0	0	0	0	0	I value getting things done.
I like things to be varied and colorful.	0	0	0	0	0	0	O	I like to be exact and precise.
I would describe myself as a doer.	0	0	0	0	0	0	0	I would describe myself as an observer.
I take a creative and imaginative approach to solving problems.	0	0	0	•	0	0	•	I take a precise and calculated approach to solving problems.
I would describe myself as evaluative and logical.	0	•	0	•	•	•	0	I would describe myself as receptive and accepting.
I like to watch what is going on.	0	•	0	•	0	0	0	I like to see the results of my actions.
I strive for versatility.	O	•	•	•	•	•	•	I strive for accuracy.
I am reserved.	O	O	O	O	O	O	O	I am prepared.