

Name: _____

Dear REU participants—thank you in advance for filling out this Monster Survey. We are trying to track the impact of our REU program; we are interested in how it affects your career preparation, presentation skills, and specific research skills. Thus, we will conduct both entrance and exit surveys.

You

1. What is the highest educational level attained by your mother or female guardian?
 - a) Grade School b) Some High School c) Graduated from High School or earned G.E.D.
 - d) Some College e) College Associate Degree f) College Bachelor's Degree
 - g) Master's Degree h) Ph.D. i) First Professional Degree (M.D., J.D., D.D.S.)

2. What is the highest educational level attained by your father or male guardian?
 - a) Grade School b) Some High School c) Graduated from High School or earned G.E.D.
 - d) Some College e) College Associate Degree f) College Bachelor's Degree
 - g) Master's Degree h) Ph.D. i) First Professional Degree (M.D., J.D., D.D.S.)

3. To what educational level do you aspire?
 - a) Some College b) College Associate Degree c) College Bachelor's Degree
 - d) Master's Degree e) Ph.D. f) First Professional Degree
(M.D., J.D., D.D.S.)

4. Name of your College or University: _____

5. Your Major(s) or Concentration(s): _____

6. How many years of college have you completed? _____

7. Approximate size of your College or University:

- a) less than 1000 students b) 1000 to 5000 students c) 5000 to 20,000 students
d) more than 20,000 students

8. Does your college or university have graduate programs in your major? _____

9. If yes to question h, indicate which graduate degrees are offered in your major area

Masters Degree? _____ Ph.D.? _____

10. Are there opportunities for research at your college? _____ If yes, describe the opportunities for research that exist:

Application

11. How did you find out about our program?

_____ Saw the poster _____ a Web site _____ received a postcard
_____ Faculty member _____ friend
_____ Other _____

12. Was our deadline of March 1 too...

_____ early _____ late _____ just right

13. How many other, formal, summer research programs did you apply to? (Feel free to name them if you wish).

14. Do you have any suggestions for improving the application process?

Career

15. Have you ever read a scientific paper from the primary literature?

No yes, 1-3 papers yes, 3-6 papers yes, >6 papers

16. Which scientific journals do you look at regularly?

17. How often did you attend scientific talks this past semester, Spring, 2001? (departmental seminars, colloquia, etc., not course lectures)

At least once a week Several times each semester
 Once or twice in a semester Never

18. Have you ever attended a scientific meeting? If yes, which meeting and what was your role?

19. If you wanted a letter of recommendation, how many professors know you well enough (from more than just being a student in a lab or lecture course) to write you a strong letter?

20. Do you have a lot of friends who are studying science? (If you answer no, then answer this question: Do you have a lot of friends?)

21. What are three things you are considering doing after you graduate with a BA/BS degree?

i.

ii.

iii.

22. What are you hoping to accomplish this summer with respect to your career goals?

Presentation skills

23. What types of scientific presentations have you done? Please describe the venue (was it for a class, at a scientific meeting, etc), the form of the presentation (a poster, 20 min talk using slides, 5 min chalk talk, etc), and the purpose of the talk (present research, review literature, “magic show” for 4th graders, etc) for each scientific presentation.

24. What one presentation skill do you most want to improve or to learn?

Scientific style

25. Have you done research before? If yes, please describe what you did and tell what you most enjoyed or gained from this experience.

26. What characteristics does it take to be a good scientist?

27. Do you know someone who is a scientific role model for you? If so, describe how and why that person is a role model for you.

28. If a non-scientist friend asked you, “what are the three broad areas of chemical investigation,” how would you reply?

Analytical Techniques

I have used this.	I have heard of this but have not done it myself.	I have never heard of this.	
			TLC
			Preparation of standard solutions
			serial dilution
			ESI
			Maldi
			pH titration
			column chromatography
			flash chromatography
			HPLC
			gas chromatography
			mass spectroscopy
			IR
			Quadrupoles
			UV-Vis spectroscopy
			fluorescence spectroscopy
			continuous wave NMR (eg most 60 MHz instruments)
			Fourier transform NMR (most high-field NMR instruments)
			any nucleus other than ^1H NMR
			decoupling experiments
			variable temperature NMR
			2-D NMR (COSY, NOSY, etc.)
			EPR
			circular dichroism
			STM
			AFM
			ellipsometry
			contact angle measurement
			photoacoustic spectroscopy
			FAB
			Nitrogen laser
			single-crystal X-ray diffraction
			electrochemistry
			YAG laser
			Excimer laser
			use of lasers (what kind of laser & what did you use it for?)
			elemental analysis

Synthetic methods

I used this in a previous course or in research.	I have never heard of this.	
		Benchtop reactions (beaker chemistry)
		reflux
		distillation
		transferring liquids by syringe
		water aspirator
		vacuum distillation
		recrystallization
		filtration
		vacuum filtration
		sublimation
		synthesis involving more than three separate reaction steps
		reaction under inert atmosphere
		use of Schlenk line
		use of vacuum line
		use of glove box
		solid-state synthesis
		hydrothermal synthesis
		hot plate
		bunsen burner
		heating mantle
		sand bath
		oil bath
		tube furnace
		use of autoclave for sterilization
		use of autoclave for heating reaction
		ice for cooling reactions
		slurries
		handling dry ice/acetone
		handling liquid nitrogen
		handling of lecturn bottles
		handling of inert gas cylinder
		use of pyrophoric reagents
		proper use of cyanide
		thermal evaporation
		colloid synthesis
		scale-up

Computers

I used this in a previous course or in research.	I have never heard of this.	
		Web page creator
		ftp
		Mac computer
		PC computer
		Unix computer
		Linux computer
		ChemDraw
		used Excel to graph design
		any program to simulate experimental data (name program)
		any ab initio package (name program)
		molecular mechanics package (name program)
		programming (name language)
		Math CAD