

QUESTIONNAIRE COVER LETTER
For REU Undergraduate Students

Subject line: NSF Research Experiences for Undergraduates (REU) Study

Dear [insert first name],

We are conducting a study for the National Science Foundation (NSF) on its Research Experiences for Undergraduates (REU) Program and would appreciate your participation. Your name was provided to us by [insert PI name] as someone who participated in the REU Program and received an NSF stipend during [insert time period].

As thanks for your participation, we will send you a \$20 [insert online retailer] gift certificate after we receive your completed questionnaire.

Our survey questionnaire can be accessed by clicking on this link:

[insert link to questionnaire—respondent’s survey ID number will be imbedded]

If you did not participate in the REU Program during [insert time period], please reply to this e-mail with “NOT REU” in the subject line, and we will remove your name from our survey sample.

All your responses will be strictly confidential and will be used only in combination with those from other respondents. The ID number included in the survey URL allows us to cross your name off our contact list once we have received your questionnaire and to send you a summary of the study results.

For more information about our study, please see the overview below. If you have any questions or problems with the survey, simply reply to this e-mail.

Please complete and submit the questionnaire as soon as possible. Your participation is important to the success of this study.

Sincerely yours,

Mary P. Hancock
Study Director
SRI International
1100 Wilson Blvd. Suite 2800
Arlington, VA 22209

STUDY OVERVIEW

What is the objective of this study?

The objective of the study is to obtain in-depth information about the activities, outcomes, and impacts of the NSF Directorate of Engineering (ENG) Research Experiences for Undergraduates (REU) Program from the perspectives of the faculty and undergraduate student participants. It is anticipated that the study results will help NSF better understand the components and characteristics of effective REUs and thus will help provide direction to ENG's REU program officers in their reviews of REU proposals and in the advice they give to REU PIs. The study is NOT an evaluation of outcomes from individual NSF awards or the people involved with them.

How was I selected for this study?

All undergraduate students, faculty mentors, and principal investigators (PIs) who participated in NSF ENG REU awards during 2003 through 2006 are included in this study. The PIs of those awards were contacted earlier this year and provided us with the names and contact information of undergraduate students who engaged in REU activities during 2003 through 2006, as well as faculty who mentored/supervised those students.

Can I get a copy of the study results?

We will send all survey participants a brief summary of the survey results next year. The study report will be available on SRI's Web site at <http://www.sri.com:8000/policy/csted/reports/university>.

Who funded the study and who is involved?

The project is funded by the National Science Foundation and conducted by researchers from SRI International (formerly Stanford Research Institute) <http://www.sri.com/policy>.

Privacy Notice

Information from this survey will be retained by the National Science Foundation (NSF), a federal agency, and will be an integral part of its Privacy Act System of Records in accordance with the Privacy Act of 1974 and maintained in the Education and Training System of Records 63 Fed. Reg. 264, 272 (January 5, 1998). These are confidential files accessible only to appropriate NSF officials, their staffs, and their contractors responsible for monitoring, assessing, and evaluating NSF programs. Only data in highly aggregated form will be made available to anyone outside of NSF for research purposes. Data submitted will be used in accordance with criteria established by NSF for monitoring research and education grants, and in response to Public Law 99-383 and 42 USC 1885c.

Where can I find more information about the project?

Contact the SRI study director, Mary Hancock (360-380-4126, mary.hancock@sri.com) or the NSF project officer, Esther Bolding (ebolding@nsf.gov, 703-292-5342).

**NATIONAL SCIENCE FOUNDATION DIRECTORATE FOR ENGINEERING
RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU) PROGRAM**

2003-2006 STUDENT PARTICIPANT SURVEY

Public Burden

Submission of the requested information is voluntary. Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0121. Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Suzanne Plimpton, Reports Clearance Officer for OMB Collection 3145-0121 (ENG REU), Facilities and Operations Branch, Division of Administrative Services, National Science Foundation, 4201 Wilson Blvd., Suite 295, Arlington, VA 22230.

Your responses to this questionnaire are strictly confidential.

Factors in Your Decision to Do Research

1. How important was each of the following in your decision to first do research? (If an item does not apply to you, please circle the “not important” category.)
(PLEASE CIRCLE ONE NUMBER IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important	Don't Remember
a. I wanted to know if engineering was for me.	1	2	3	4	9
b. I wanted to learn more about what it's like to be a researcher.	1	2	3	4	9
c. I wanted to know if going to graduate school in engineering was for me.	1	2	3	4	9
d. I wanted hands-on research experiences to reinforce what I learned in class.	1	2	3	4	9
e. Doing research was more appealing than other kinds of jobs available to me.	1	2	3	4	9
f. I needed to fulfill my school's or scholarship's requirements for research.	1	2	3	4	9
g. I thought it would help me get into graduate school or get a job.	1	2	3	4	9
h. I needed/wanted the academic credit I could get from doing research.	1	2	3	4	9
i. I thought it would be fun.	1	2	3	4	9

2. How important was each of the following in your decision to apply to participate in the specific research project that you were in during [insert time period]?
 (If an item does not apply to you, please circle the “not important” category.)
(PLEASE CIRCLE ONE NUMBER IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important	Don't Remember
a. I wanted to know if this field of research was for me.	1	2	3	4	9
b. I like this field of research and wanted to work in it.	1	2	3	4	9
c. The research project(s) sounded interesting.	1	2	3	4	9
d. I wanted to do something different than what I've done before.	1	2	3	4	9
e. Someone I knew recommended it.	1	2	3	4	9
f. Personal interaction with the program coordinator, director, or other faculty member or researcher.	1	2	3	4	9
g. The reputation of the host institution.	1	2	3	4	9
h. The amount of the stipend and support package (housing, meals, etc.).	1	2	3	4	9
i. The living arrangements for this program.	1	2	3	4	9
j. The social/cultural activities for this program.	1	2	3	4	9
k. I wanted to be close to home.	1	2	3	4	9
l. I wanted to be far from home.	1	2	3	4	9
m. Geographic location of the project (not the distance from home <i>per se</i>) was appealing.	1	2	3	4	9
n. This was the first program/project that accepted me at the time.	1	2	3	4	9
o. This was the only research program/project that accepted me at the time.	1	2	3	4	9

3. Did you apply to any **other** research or intern programs/projects for [insert time period]?
(PLEASE CIRCLE ONE NUMBER)

Yes 1 → *PLEASE CONTINUE*
 No..... 2 → *PLEASE SKIP TO QUESTION 5*
 Don't remember 9 → *PLEASE SKIP TO QUESTION 5*

4. To how many research or intern programs/projects did you apply, including the program you participated in during [insert time period]?

(Please enter your best estimate) _____ Don't remember..... 99

Your Research Activities

5. Did your research activities during [insert time period] take place entirely in the United States, or did they take place at least in part in another country? **(PLEASE CIRCLE ONE NUMBER)**

Entirely in the United States 1

At least part was in another country.... 2

6. Where did the research that you participated in during [insert time period] take place? **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

At the college I was already attending 1

At another college 2

At a non-academic institution 3

7. Did you receive academic credit for your research activities during [insert time period]? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1

No..... 2

Don't remember ... 9

8. Did you receive pay (for example, a stipend) for your research activities during [insert time period]? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1

No..... 2

Don't remember ... 9

9. When you started the [insert time period] research program/project, how well prepared did you feel you were for the work you were asked to do? **(PLEASE CIRCLE ONE NUMBER)**

Not at all prepared..... 1

Somewhat prepared..... 2

Fairly well prepared 3

Extremely well prepared 4

Don't remember 9

10. What was the average number of hours per week that you spent engaged in **research-related activities** during [insert time period]? **(PLEASE ENTER YOUR BEST ESTIMATE)**

_____ hours per week Don't remember 99

11. During your research experiences during [insert time period], what was the average number of hours per week that you spent engaged in **research-related activities with each of the following types of individuals?**

(PLEASE CIRCLE YOUR BEST ESTIMATE IN EACH ROW)

Note: If your research was done at a non-academic institution, please consider the senior researcher(s) or engineer(s) you worked with to be “faculty.”

Average number of hours per week :							
	No Time With This Person	Less Than 1 Hour	1 Hour Up to 5 Hours	5 Hours Up to 10 Hours	10 Hours Up to 20 Hours	20 Hours or More	Don't Remember
a. Your faculty mentor(s)	1	2	3	4	5	6	9
b. Graduate students/postdocs	1	2	3	4	5	6	9
c. Other undergraduates	1	2	3	4	5	6	9
d. K-12 grade teachers	1	2	3	4	5	6	9

12. Overall, how did you feel about the amount of contact you had with each of the following during [insert time period]? **(PLEASE CIRCLE ONE NUMBER IN EACH ROW)**

	Too Little Contact	About the Right Amount	Too Much Contact	Doesn't Apply	Don't Remember
a. Your faculty mentor(s)	1	2	3	8	9
b. Graduate students/postdocs	1	2	3	8	9
c. Other undergraduates who were doing research	1	2	3	8	9
d. K-12 grade teachers	1	2	3	8	9

13. Did any **other** undergraduates do research during [insert time period] with the **same faculty mentor as you?** **(PLEASE CIRCLE ONE NUMBER)**

- Yes 1
- No..... 2
- Don't know or don't remember 9

14. Was your faculty mentor male or female? **(PLEASE CIRCLE ONE NUMBER)**

- Male..... 1
- Female 2

15. Was your faculty mentor's race/ethnicity the same as yours? **(PLEASE CIRCLE ONE NUMBER)**

- Yes..... 1
- No..... 2
- Not sure 9

16. When your research activities began during [insert time period], did you have a choice of projects to work on?

- Yes 1
- No..... 2
- Don't remember... 9

17. Which one of the following best describes your involvement in designing your research project during [insert time period]? (If you had more than one research project, please answer for the one you worked on the most.)

(PLEASE CIRCLE ONE NUMBER)

- Doesn't apply: Did not have my own research project..... 1
 - The research project was designed by someone else, without input from me 2
 - Someone else had primary responsibility for designing my research project but I provided input 3
 - I had primary responsibility for designing the research project that I worked on 4
 - Other (*please specify:*) 5
-
- Don't remember 9

18. **Generally speaking**, who made each of the following kinds of decisions during [insert time period]? **(PLEASE CIRCLE ONE NUMBER IN EACH ROW)**

	I Did	Faculty/Grad Student Mentor and I Together	Faculty/Grad Student Mentor	Don't Remember
a. What research techniques/materials were used	1	2	3	9
b. What to do next (for example, following interim results)	1	2	3	9

19. Which of the following did you do as part of your research experiences during [insert time period]?
(PLEASE CIRCLE ONE OR MORE NUMBERS)
- Wrote a proposal describing the research I planned to do 1
 - Collected and/or analyzed data or information to try to answer a research question..... 2
 - Did little or nothing that seemed to me to be real research..... 3
 - Gained increasing independence over the course of the summer 4
 - Was able to complete my research project (either then or later)..... 5
 - Mentored other students conducting research or led a student research team 6
 - Understood how my work contributed to the “bigger picture” of research in this field 7
 - Attended lectures/seminars on research ethics..... 8
 - Went on research-related field trip(s) (to other labs, universities, industry, etc.)..... 9
 - Attended student conference(s) that included students from multiple colleges..... 10
 - Attended professional conference(s) (conferences not specifically for students)..... 11
 - Received training in written or oral communication skills 12
 - Received training to use research tools (computer program/language, lab or field equipment, etc.) 13
 - Delivered an oral/PowerPoint presentation describing my research and results 14
 - Prepared/presented a poster presentation describing my research and results..... 15
 - Prepared a final written research report describing my research and results 16
 - Authored or co-authored a paper that has been or will be submitted for publication in a professional journal..... 17
 - Don't remember 99

20. To what extent, if at all, do you think your research experiences during [insert time period] **increased** each of the following? (PLEASE CIRCLE ONE NUMBER IN EACH ROW)

	How Much Each Increased:				
	Not At All	Some-what	A Fair Amount	A Great Deal	Have No Idea
Your understanding of...					
a ... how to formulate a research question	1	2	3	4	9
b ... how to plan a research project	1	2	3	4	9
c ... how to conduct a research project	1	2	3	4	9
d ...how to deal with setbacks, negative results, etc.	1	2	3	4	9
e ...how engineering knowledge is built	1	2	3	4	9
f. ...the nature of the job of a researcher	1	2	3	4	9
Your skills/abilities in..					
g ...working collaboratively with others	1	2	3	4	9
h ...working independently	1	2	3	4	9
i. ...preparing written research reports, papers, or posters	1	2	3	4	9
j. ...delivering oral research presentations	1	2	3	4	9
Your awareness of...					
k ...career paths of the faculty in the program (how they got to where they are now)	1	2	3	4	9
l. ...what graduate school is like	1	2	3	4	9
m ...the variety of engineering fields you could specialize in	1	2	3	4	9
n ...career options in engineering	1	2	3	4	9
o ...ethical issues in conducting research	1	2	3	4	9
Your ...					
p ...confidence in your research skills generally	1	2	3	4	9
q ...confidence in your ability to succeed in graduate school	1	2	3	4	9
r. ...qualifications for jobs in related fields	1	2	3	4	9

21. How dissatisfied or satisfied were you with each of the following aspects of your research experiences during [insert time period]? **(PLEASE CIRCLE ONE NUMBER IN EACH ROW)**

	<u>Very Dissatisfied</u>	<u>Somewhat Dissatisfied</u>	<u>Somewhat Satisfied</u>	<u>Very Satisfied</u>	<u>Doesn't Apply</u>	<u>Don't Remember</u>
a. The research project(s) you worked on	1	2	3	4	8	9
b. The amount of involvement you had in selecting or designing your research project(s)	1	2	3	4	8	9
c. The overall supportiveness of your faculty mentor(s)	1	2	3	4	8	9
d. The overall supportiveness of your graduate student or postdoc mentor(s)	1	2	3	4	8	9
e. The extent to which you felt you were an integral part of a research team	1	2	3	4	8	9
f. The adequacy of the technical guidance you received	1	2	3	4	8	9
g. The independence you had in doing your work	1	2	3	4	8	9
h. Your living arrangements (housing, meals)	1	2	3	4	8	9
i. The social/cultural activities	1	2	3	4	8	9
j. How well organized the program was	1	2	3	4	8	9
k. The experience as a whole	1	2	3	4	8	9

22. Which of the following best describe the academic field(s) of your research during [insert time period]? **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

- | | | | |
|--|---|--|----|
| Aerospace engineering..... | 1 | Industrial or manufacturing engineering..... | 10 |
| Agricultural engineering..... | 2 | Materials or metallurgy engineering..... | 11 |
| Architectural engineering..... | 3 | Mechanical engineering..... | 12 |
| Bioengineering or biomedical engineering ... | 4 | Mining or mineral engineering..... | 13 |
| Chemical engineering..... | 5 | Nuclear engineering..... | 14 |
| Civil engineering..... | 6 | Ocean, marine, or naval engineering..... | 15 |
| Computer engineering..... | 7 | Systems engineering..... | 16 |
| Electrical engineering..... | 8 | Transportation engineering..... | 17 |
| Environmental engineering..... | 9 | Other engineering (<i>please specify below</i>)..... | 18 |
| | | A non-engineering field..... | 19 |
| | | (<i>please specify below</i>) | |

Please specify "other engineering field" or "non-engineering field":

23. How related was your research during [insert time period] to courses in your major that you have taken, either before that time or since then? **(PLEASE CIRCLE ONE NUMBER)**

It was **closely** related to courses I have taken in my major 1

It was **somewhat** related to courses I have taken in my major 2

It was **unrelated** to courses I have taken in my major 3

24. Were you enrolled in classes during [insert time period]? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1

No..... 2

Don't remember 9

26. Did you continue your research after [insert time period], either with the same faculty mentor or with a different mentor? **(PLEASE CIRCLE ONE NUMBER)**

Yes, with the same mentor 1

Yes, but with the different mentor ... 2

No..... 3

Don't remember 9

Other Research-Related Issues

27. When did you first become interested in engineering? **(PLEASE CIRCLE ONE NUMBER)**

Doesn't apply to me: I'm really **not** very interested in engineering 1

I've been interested ever since I was a child..... 2

During high school..... 3

During college..... 4

Don't remember 9

28. While you were in high school or the summer after you graduated from high school, did you participate in any science or math fairs? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1

No..... 2

29. Were the [insert time period] research activities at the college/university you were already attending? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1 → *PLEASE SKIP TO QUESTION 31*

No..... 2 → *PLEASE CONTINUE*

30. Were there any opportunities for undergraduates in your major to do research at the undergraduate college/university you attended? **(PLEASE CIRCLE ONE NUMBER)**

- Yes 1 → *PLEASE CONTINUE*
- No..... 2 → *PLEASE SKIP TO QUESTION 32*
- Not sure..... 9 → *PLEASE SKIP TO QUESTION 32*

31. At your undergraduate college/university, are undergraduates in your major **required** to do hands-on research (other than library research)? **(PLEASE CIRCLE ONE NUMBER)**

- Yes, all in my major are 1
- Only for honors or scholarship 2
- No..... 3
- Not sure..... 9

32. Please read all the way through the list of activities below and then indicate:

- A. **Including the research you did during [insert time period]**, which kinds of hands-on research activities you have participated in, either at your high school, your college, or at some other location. **(PLEASE CIRCLE ONE NUMBER IN EACH ROW)**
- B. If “yes” on A, for how many months in total you have you done this. **(PLEASE ENTER YOUR BEST ESTIMATE FOR EACH APPLICABLE ITEM)**

A. Have you done this, either in high school or college? (Please do not include an activity in more than one category.)			B. Total number of months you have done this:
	Yes	No	
(1) Summer research, other than intern or co-op program, with some group activities. Undergraduates work one-on-one with professors or other researchers. The focus is full-time individual research, supplemented by regular group meetings and other group activities. Usually some kind of final report or presentation is required at the end.	1	2	Number of months: _____
(2) Summer research, other than intern or co-op program, with few or no group activities. A full-time research project with a professor or researcher. Differs from item (1) in that there are few or no group activities with other undergraduates.	1	2	Number of months: _____
(3) Hands-on research with a professor during one or more academic terms, while enrolled in classes.	1	2	Number of months: _____
(4) Intern or co-op program that involved hands-on research as its <u>main</u> component. Usually, a company or other organization pays you for working on a research project at its site. Sometimes you receive academic credit at your school for this research. May happen any time of year.	1	2	Number of months: _____
(5) A junior or senior thesis that involves hands-on research (other than library research) as its <u>main</u> component	1	2	Number of months: _____

33. At which of the following kinds of organizations have you participated in any hands-on research with a teacher, professor, or research engineer or scientist? **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

- My high school 1
 - My college/university 2
 - Other college or university..... 3
 - Hospital or medical clinic 4
 - Non-profit research organization 5
 - Government lab/facility 6
 - For-profit company 7
 - Other organization (*please specify below*) 8
-

Effects of Your Undergraduate Research Experiences

34. To what extent has your interest in each of the following increased or decreased as a result of **all** the undergraduate research experiences you have had?

(PLEASE CIRCLE ONE NUMBER IN EACH ROW)

Your interest in:	Decreased a Lot	Decreased Somewhat	No Effect	Increased Somewhat	Increased a Lot	Have No Idea
a. A career in engineering	1	2	3	4	5	9
b. A career in science	1	2	3	4	5	9
c. A career in research	1	2	3	4	5	9
d. A career in teaching	1	2	3	4	5	9
e. A career in industry	1	2	3	4	5	9

35. A. Before your **first** undergraduate research experience, what was the highest degree you expected to receive?
 B. What is the highest degree that **you expect to have 10 years from now?**
(PLEASE CIRCLE ONE NUMBER IN EACH COLUMN)

	A. Expectations Before <u>First</u> Undergraduate Research Experience	B. Expectations 10 Years from Now
Undecided	01	01
Associate of Arts (AA)	02	02
Bachelor's (BA or BS)	03	03
Master's (MA, MS, or MBA)	04	04
LLB or JD	05	05
PhD	06	06
MD	07	07
MD or PhD (not sure which)	08	08
MD and PhD (both degrees)	09	09
Other (<i>please specify below:</i>)	10	10

Your General Academic Experience

36. Did you start your undergraduate education at a 2-year college? (Do **not** include summer school at a 2-year school before you started at a 4-year school in the fall.) **(PLEASE CIRCLE ONE NUMBER)**

Yes..... 1
 No..... 2

37. What is the highest level of formal education that you have **now completed?** **(PLEASE CIRCLE ONE NUMBER)**

Some college 1
 Bachelor's (BA or BS) 2
 Some graduate work, but no graduate degree 3
 Master's (MA, MS, MBA, etc.) 4
 LLB or JD 5
 Post-Masters work but no doctorate..... 6
 PhD 7
 MD 8
 MD and PhD (both) 9
 Other (*please specify below:*)..... 10

38. What is the full name and location of the school from which you received or will receive your bachelor's degree? (If you do not expect to obtain a bachelor's degree, please enter the name of the school you attended most recently.)

Your **undergraduate** school's full name: _____

City: _____ State: _____

39. What was/is your total cumulative Grade Point Average (GPA) as an undergraduate?

GPA: _____._____ Out of a possible _____._____ Have no idea..... 999

40. Which of the following best describe your undergraduate major? (Include only those fields in which you completed or expect to complete the requirements for a major.) **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

- | | | | |
|--|-----------|---|-----------|
| Aerospace engineering..... | 1 | Industrial or manufacturing engineering | 10 |
| Agricultural engineering | 2 | Materials or metallurgy engineering | 11 |
| Architectural engineering..... | 3 | Mechanical engineering..... | 12 |
| Bioengineering or biomedical engineering ... | 4 | Mining or mineral engineering..... | 13 |
| Chemical engineering | 5 | Nuclear engineering..... | 14 |
| Civil engineering..... | 6 | Ocean, marine, or naval engineering | 15 |
| Computer engineering..... | 7 | Systems engineering..... | 16 |
| Electrical engineering | 8 | Transportation engineering | 17 |
| Environmental engineering | 9 | Other engineering (<i>please specify below</i>) | 18 |
| Do not have a major..... | 20 | A non-engineering field | 19 |
| | | <i>(please specify below)</i> | |

Please specify "other engineering" or "non-engineering field":

41. Which of the following describe your current academic status? **(PLEASE CIRCLE ONE NUMBER)**

I am currently enrolled as an undergraduate as a:

- Freshman..... 1
- Sophomore
- Junior
- Senior (including fifth or sixth year senior)..... 4

I am currently enrolled working on a 2nd Bachelor's degree..... 5

I have been accepted into a graduate program, but have not yet begun

I am currently enrolled as a graduate student (including medical, law, business school, etc.)..... 7

I am not currently enrolled in college

42. Have you ever attended or been accepted to graduate school? **(PLEASE CIRCLE ONE NUMBER)**

Yes 1 → *PLEASE CONTINUE*

No..... 2 → *PLEASE SKIP TO QUESTION 47*

43. For how many years have you attended **graduate** school? _____ years

44. What is the full name and location of the school where you are, will be, or were a **graduate** student?

Your **graduate** school's full name: _____

City: _____ State: _____

45. Which of the following best describe your field of study in **graduate** school?

(PLEASE CIRCLE ONE OR MORE NUMBERS)

- | | | | |
|--|---|---|----|
| Aerospace engineering..... | 1 | Industrial or manufacturing engineering | 10 |
| Agricultural engineering | 2 | Materials or metallurgy engineering | 11 |
| Architectural engineering..... | 3 | Mechanical engineering..... | 12 |
| Bioengineering or biomedical engineering ... | 4 | Mining or mineral engineering..... | 13 |
| Chemical engineering | 5 | Nuclear engineering..... | 14 |
| Civil engineering..... | 6 | Ocean, marine, or naval engineering | 15 |
| Computer engineering..... | 7 | Systems engineering..... | 16 |
| Electrical engineering | 8 | Transportation engineering | 17 |
| Environmental engineering | 9 | Other engineering (<i>please specify below</i>) | 18 |
| | | A non-engineering field | 19 |
| | | (<i>please specify below</i>) | |

Please specify "other engineering" or "non-engineering field":

46. Overall, how important were your undergraduate research experiences to each of the following?

(PLEASE CIRCLE ONE NUMBER IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important	Have No Idea
a. Your decision about whether to go to graduate school	1	2	3	4	9
b. Your decision about what field to study in graduate school	1	2	3	4	9
c. Your decision about where to apply for graduate school	1	2	3	4	9
d. Your acceptance into the graduate school where you are now	1	2	3	4	9

Employment Information

47. Are you currently employed? **(PLEASE CIRCLE ONE NUMBER)**

- Yes, I am employed full-time (35 or more hours per week) 1 → *PLEASE CONTINUE*
Yes, I am employed part-time (fewer than 35 hours per week) 2 → *PLEASE CONTINUE*
No..... 3 → *Please skip to question 52*

48. By what kind(s) of organization(s) are you currently employed? **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

- College or university 1
Elementary or secondary school 2
Military 3
Government (other than military) 4
Hospital, medical center, etc. 5
Research organization 6
For-profit company (other than medical or research) 7
Non-profit organization (other than medical or research)..... 8
Self-employed 9
Other (*please specify:*) 10
-

49. How related is your current job to your undergraduate major? **(PLEASE CIRCLE ONE NUMBER)**

- Not related..... 1
Somewhat related..... 2
Closely related 3

50. How much, if at all, do you use **any** of the skills you learned doing undergraduate research in your current job?
(PLEASE CIRCLE ONE NUMBER)

- Not at all..... 1
Somewhat..... 2
A lot 3

51. Does your current job involve engineering? **(PLEASE CIRCLE ONE NUMBER)**

- Yes 1
No..... 2

Background Information

Note: The following information will help us interpret your responses to the previous questions. **All** your responses to this questionnaire are **strictly confidential** and will not be released to anyone outside our small research project team.

52. What is your age? _____

53. What is your sex? **(PLEASE CIRCLE ONE NUMBER)**

Male..... 1

Female 2

54. What is your ethnicity? **(PLEASE CIRCLE ONE NUMBER)**

Hispanic or Latino..... 1

Not Hispanic or Latino... 2

55. What is your race? **(PLEASE CIRCLE ONE OR MORE NUMBERS)**

American Indian or Alaskan Native..... 1

Asian..... 2

Black or African American 3

Native Hawaiian or Pacific Islander..... 4

White 5

Overview

56. What was the most important thing you learned about yourself as a result of your undergraduate research experiences?

57. If you were designing undergraduate research programs, how would you make them better than the programs you participated in?

58. Other comments.

Follow-up Study for 2006 participants

59. We will be conducting a follow-up survey in 2009. To help us locate you at that time, please provide us with the following:

Your current personal (non-school-specific) e-mail address, if you have one:

Person likely to know how to reach you in 2009:

Name: _____

Relationship to you: _____

Mailing address: _____

City: _____ State: _____ ZIP: _____

Phone: _____

E-mail address: _____

**Thank you very much for your participation in this study.
As a token of our appreciation, we will send you a \$20 [insert online retailer] gift certificate
when we receive your completed questionnaire**

If you have questions, please contact Mary Hancock: 360-380-4126, mary.hancock@sri.com