

## **National Science Foundation Science and Technology Centers Former Graduate Student Survey**

This survey is being conducted by Abt Associates Inc. for the National Science Foundation (NSF), to learn about the graduate experiences, career choices, and professional activities of individuals who participated in NSF's Science and Technology Centers (STC). You are receiving this survey because you were a graduate student participant at an STC.

### **Confidentiality and Participation**

Participation in the survey is voluntary and nonparticipation will have no impact on you or your institution. Your responses to this survey will be kept completely confidential. You will never be identified by name, and information from the study will only be reported in the aggregate.

### **Completing the Survey**

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-XXXX. NSF estimates that each respondent should take about 30 minutes to complete this survey, including time to read the instructions. You may have comments regarding this burden estimate or any other aspect of this survey, including suggestions for reducing this burden. If so, please send them to NSF Reports Clearance Officer, Division of Administrative Services, NSF, 4201 Wilson Blvd., Arlington, VA. 22230. If you have questions about the study, please contact the study director, Dr. Alina Martinez of Abt Associates Inc. at (617) 349-2312 or email her at [Alina\\_Martinez@abtassoc.com](mailto:Alina_Martinez@abtassoc.com).

To learn more about this study, please refer to the **Commonly Asked Questions** page.

### **Consent**

Please continue with the survey if you agree to participate in this study.

**[Note for reviewers: This survey will be programmed for on-line administration. The formatting of items may appear differently on-line.]**

**Notes in blue are for programming purposes.**

The web survey can present multiple questions on a single screen as space permits.

Some questions will be received by specific groups of individuals only. These skip patterns are indicated throughout the survey. For the pilot survey, we have included these skip patterns in text. These will be programmed into the online version.

The survey will begin with a welcome page outlining the purpose of the study, topics covered, estimated time of completion, OMB Clearance, etc, and information on how to contact us with questions.

There are places throughout the survey where Institution Name or STC name will be filled into the question or instruction text using a sample file.

By their nature, STCs develop a range of research and education opportunities for participating graduate students. For a reminder, click here for a list of the activities that the **[Name of Center]** in which you participated reported as available to graduate students.

**[PROGRAMMING NOTE: add hyperlink to the sentence above that opens a pop-up window populated by the list of activities offered by the survey taker's specific STC.]**

**We now would like to ask you about your experiences participating in the [STC] as a graduate student. Please respond to the best of your recollection.**

## Section A: Education & Training

A1. We have identified you as a graduate student participant at the [Name of Center]. This Center was funded under the National Science Foundation's Science and Technology Centers (STC) program. Do you recall participating in this Center in some fashion?

<sub>1</sub> Yes

<sub>2</sub> No

**PROGRAMMING NOTE: if respondent answers "No" to A1, ask:**

**Our records indicate that you are [First Name, Middle Name/Initial, Last Name]. Is this information correct?**

<sub>1</sub> Yes, this is correct.

<sub>2</sub> No, my name has changed or my name is misspelled above. My name is: \_\_\_\_\_

<sub>3</sub> No, I am not the person named above. I believe you have reached me by mistake.

**Our records indicate that you received a graduate degree from [INSTITUTION]. Is that correct?**

<sub>1</sub> Yes, this is correct.

<sub>2</sub> No, I did not complete the degree.

<sub>3</sub> No, I did not attend graduate school at [INSTITUTION].

**If respondent answers 3, exit survey. If responded 1 or 2, ask:**

**As a graduate student, do you remember participating in any of following activities offered by [Name of Center] [LIST OF STC's ACTIVITIES]?**

<sub>1</sub> Yes

<sub>2</sub> No

**If respondent answers "no", exit survey. If answer "yes", state:**

**These activities were part of [NAME OF THE CENTER] that was funded by the National Science Foundation's Science and Technology Center program. Please answer the following questions based on your experience with the STC.**

**Continue with survey.**

We will begin this survey by asking questions about your graduate school experiences and experiences with the [Name of Center]. Throughout this survey, we will use the phrase “the STC” to refer to the [Name of Center].

**A2. How did you learn about the STC? (Check all that apply.)**

- <sub>1</sub> A friend or colleague informed me
- <sub>1</sub> I attended an STC recruiting event
- <sub>1</sub> I read about the STC on NSF’s website
- <sub>1</sub> I read about the STC on its website
- <sub>1</sub> My advisor asked me to work on an STC project
- <sub>1</sub> I was recruited by an STC faculty or staff member
- <sub>1</sub> I participated in an STC undergraduate activity
- <sub>1</sub> I was invited to visit the STC
- <sub>1</sub> I learned about the STC through some of its publications
- <sub>1</sub> I saw an STC presentation or booth at conference
- <sub>1</sub> Other, please specify: \_\_\_\_\_

**A3. In what graduate degree program were you enrolled when you participated in the STC? (Check all that apply.)**

- <sub>1</sub> Undergraduate student
- <sub>1</sub> Master’s student
- <sub>1</sub> Doctoral student
- <sub>1</sub> Other, please specify: \_\_\_\_\_

**A4. When applying to graduate programs, were you interested in having interdisciplinary education or research training experiences? (Check only one.)**

- <sub>1</sub> Yes
- <sub>2</sub> No
- <sub>3</sub> I don’t remember

**PROGRAMMING NOTE: Master’s students answer A5. All others skip to A6.**

**A5. When you applied to the master’s program during which you participated in the STC, did you intend to pursue a doctoral degree eventually?**

- <sub>1</sub> Yes
- <sub>2</sub> No
- <sub>3</sub> I don’t remember

**PROGRAMMING NOTE: Questions A6 and A7 will be asked for each of the degrees marked in A3.**

**A6. In what month and year did you originally ENROLL in the [program marked above] degree program?**

\_\_\_\_\_ month \_\_\_\_\_ year

**A7. Did you graduate with this degree? (Check one only.)**

<sub>1</sub> Yes → Please enter month and year degree received:

\_\_\_\_\_ month \_\_\_\_\_ year

<sub>2</sub> No, I am still enrolled.

<sub>3</sub> No, I left the program. → Please enter month and year of departure:

\_\_\_\_\_ month \_\_\_\_\_ year

**A8. Which of the following discipline(s) listed below best describes your field(s) when you participated in the STC? (Check all that apply.)**

<sub>1</sub> Agricultural Sciences/Natural Resources

<sub>1</sub> Astronomy

<sub>1</sub> Atmospheric Science and Meteorology

<sub>1</sub> Biology

<sub>1</sub> Biomedical Sciences

<sub>1</sub> Chemistry

<sub>1</sub> Communications

<sub>1</sub> Computer and Information Sciences

<sub>1</sub> Education

<sub>1</sub> Engineering

<sub>1</sub> Geological and Earth Sciences

<sub>1</sub> Health Sciences

<sub>1</sub> Humanities

<sub>1</sub> Mathematics

<sub>1</sub> Ocean/Marine Sciences

<sub>1</sub> Physics

<sub>1</sub> Business Management/Administration

<sub>1</sub> Psychology

<sub>1</sub> Social Sciences

<sub>1</sub> Other, please specify: \_\_\_\_\_

**A9. Did you receive any funding for your graduate education through the STC?**

<sub>1</sub> Yes

<sub>2</sub> No

**A10. Did any of the following elements of your STC experience contribute to your ability to complete your graduate degree? (Check all that apply.)**

<sub>1</sub> Participation did not contribute to my degree completion

<sub>1</sub> Financial support

<sub>1</sub> Support network of STC faculty members

<sub>1</sub> Support network of other STC students

<sub>1</sub> Scientific knowledge gained from STC experiences

<sub>1</sub> Skills gained from STC experiences

<sub>1</sub> STC-related research fulfilled degree requirements

<sub>1</sub> STC-related courses fulfilled degree requirements

<sub>1</sub> Satisfaction derived from my participation in the STC

<sub>1</sub> Collaboration with researchers in the STC

<sub>1</sub> Other, please specify: \_\_\_\_\_

**A11. Did any of the following elements of your STC experience detract from your ability to complete your graduate degree? (Check all that apply.)**

<sub>1</sub> Participation did not detract from my degree completion

<sub>1</sub> Involvement took time away from my departmental studies

<sub>1</sub> Involvement took time away from my research projects

<sub>1</sub> Involvement lengthened the time it took me to complete my degree

<sub>1</sub> STC faculty members discouraged my progress

<sub>1</sub> STC students discouraged my progress

<sub>1</sub> Involvement distanced me from students or faculty in my home department

<sub>1</sub> Other, please specify: \_\_\_\_\_

**A12. Listed below are decisions you may have made related to a doctoral or professional degree program. Did your STC experiences influence any of the following decisions? (*Check all that apply.*)**

- <sub>1</sub> Whether to pursue a doctoral or professional degree
- <sub>1</sub> Type of degree to pursue (e.g., Ph.D., M.D., M.B.A., J.D.)
- <sub>1</sub> Choice of institution and/or lab
- <sub>1</sub> Choice of discipline/field of study
- <sub>1</sub> Choice of thesis/dissertation topic
- <sub>1</sub> Choice of thesis/dissertation advisor
- <sub>1</sub> Research methods to use in my thesis/dissertation
- <sub>1</sub> None of the above

**Please explain how your experiences with the STC influenced decisions you made related to pursuing a doctoral or professional degree program:**

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**PROGRAMMING NOTE: Individuals who participated as doctoral students (see A3), ask A13 & A14. All others skip to Section B.**

**A13. Listed below are decisions you may have made related to enrollment in a postdoctoral fellowship/appointment. Did your experiences at the STC influence any of the following decisions? (*Check all that apply.*)**

- <sub>1</sub> Whether to pursue a postdoctoral fellowship/appointment
- <sub>1</sub> Choice of institution
- <sub>1</sub> Choice of supervisor
- <sub>1</sub> Choice of discipline/field of research
- <sub>1</sub> Choice of research project or dissertation
- <sub>1</sub> None of the above

**Please explain how your experiences with the STC influenced your decisions related to pursuing a postdoctoral position:**

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**A14. Have you ever or are you currently holding a postdoctoral appointment?**

- <sub>1</sub> Completed postdoctoral appointment
- <sub>2</sub> Currently pursuing postdoctoral appointment
- <sub>3</sub> Never pursued postdoctoral appointment
- <sub>4</sub> Planning to pursue postdoctoral appointment

## Section B: Graduate School and STC Experiences

**B1. Did you receive formal training or take courses in any of the following areas as part of your STC participation? (*Check all that apply.*)**

For a reminder of what graduate courses were offered by your STC, [click here](#).

**[PROGRAMMING NOTE: add hyperlink to the sentence above that opens a pop-up window populated by the list of courses offered by the survey taker's specific STC.]**

Yes	Training/Course Area
<input type="checkbox"/> <sub>1</sub>	Ethics/Responsible conduct of research
<input type="checkbox"/> <sub>1</sub>	Research methods
<input type="checkbox"/> <sub>1</sub>	Laboratory methods
<input type="checkbox"/> <sub>1</sub>	Scientific theory
<input type="checkbox"/> <sub>1</sub>	Computation, simulation, and/or modeling
<input type="checkbox"/> <sub>1</sub>	Professional communication (e.g., writing, presentation skills)
<input type="checkbox"/> <sub>1</sub>	Teaching methods and practices
<input type="checkbox"/> <sub>1</sub>	Topics related to the STC research area(s)
<input type="checkbox"/> <sub>1</sub>	None of the above

**B2. Did you engage in any of the following teaching and education-related activities at the university level as part of your STC experience? (*Check all that apply.*)**

Yes	Teaching/ Education Activity at the University Level
<input type="checkbox"/> <sub>1</sub>	Developed materials for an undergraduate/graduate level course or lab activity
<input type="checkbox"/> <sub>1</sub>	Taught a course or lab activity to undergraduate/graduate students
<input type="checkbox"/> <sub>1</sub>	Helped teach a course or lab activity to undergraduate/ graduate students, but did not give lectures
<input type="checkbox"/> <sub>1</sub>	Gave a presentation at a workshop or a seminar for undergraduate students, graduate students, or faculty
<input type="checkbox"/> <sub>1</sub>	None of the above

**B3. Did you engage in any of the following other teaching and education-related activities as part of your STC experience? (Check all that apply.)**

Yes	Other Teaching/Education Activities
<input type="checkbox"/> <sub>1</sub>	Gave lectures or seminars to K-12 teachers
<input type="checkbox"/> <sub>1</sub>	Developed materials for K-12 teachers and students
<input type="checkbox"/> <sub>1</sub>	Offered research or educational experiences for the general public
<input type="checkbox"/> <sub>1</sub>	Participated in a community outreach event
<input type="checkbox"/> <sub>1</sub>	None of the above

**B4. Did you attend any of the following events as part of your STC experience? (Check all that apply.)**

Yes	Event
<input type="checkbox"/> <sub>1</sub>	Research workshop or seminar
<input type="checkbox"/> <sub>1</sub>	Professional meeting
<input type="checkbox"/> <sub>1</sub>	Graduate student retreat
<input type="checkbox"/> <sub>1</sub>	Research team retreat
<input type="checkbox"/> <sub>1</sub>	Research team meeting
<input type="checkbox"/> <sub>1</sub>	None of the above

**B5. Did you participate in any of the following leadership and mentorship activities as part of your STC experience? (Check all that apply.)**

Yes	Activity
<input type="checkbox"/> <sub>1</sub>	Mentored undergraduate or graduate students
<input type="checkbox"/> <sub>1</sub>	Mentored K-12 students
<input type="checkbox"/> <sub>1</sub>	Mentored K-12 teachers
<input type="checkbox"/> <sub>1</sub>	Participated in a student leadership council
<input type="checkbox"/> <sub>1</sub>	None of the above



**B6. In what format did you conduct STC-related research? (Check all that apply.)**

- Independently
- Only within my advisor's research group
- Minimal collaboration with others from the STC
- As part of a disciplinary team
- As part of an interdisciplinary team
- Other, please specify: \_\_\_\_\_
- I did not conduct STC-related research

**[PROGRAMMING NOTE: If respondent answers "I did not conduct STC-related research" on B6, skip to B9.]**

**B7. Did you collaborate with any of the following individuals as part of your STC experience? (Check all that apply.)**

Yes	Individual
<input type="checkbox"/>	Faculty
<input type="checkbox"/>	Students
<input type="checkbox"/>	Postdocs
<input type="checkbox"/>	None of the above

**B8. Did you collaborate with researchers from any of the following institutions as part of your STC experience? (Check all that apply.)**

Yes	Location
<input type="checkbox"/>	My graduate program's university
<input type="checkbox"/>	U.S. university other than my graduate program's institution
<input type="checkbox"/>	Industry
<input type="checkbox"/>	National labs and governmental facilities
<input type="checkbox"/>	Foreign universities
<input type="checkbox"/>	Other, please specify: _____
<input type="checkbox"/>	None of the above

**B9. Did your STC experience increase your knowledge of any of the following? (Check all that apply.)**

- My discipline
- Other disciplines
- Research methods or familiarity with equipment
- None of the above

**B10. Did your STC experience increase your access to any of the following? (Check all that apply.)**

- Equipment I wouldn't otherwise have had
- Opportunities for greater research independence or responsibility
- Opportunities for more experience across variety of topic areas
- Faculty in other departments
- Faculty in other institutions
- Graduate students in other departments
- Graduate students in other institutions
- None of the above

**B11. Did your STC experience broaden or expand any of the following? (Check all that apply.)**

- My perspective on the problems I worked on
- Interest in collaborative research
- Interest in interdisciplinary research
- Ability to make connections across STC thrusts
- My approach to research
- None of the above

**B12. Did your STC experience result in any of the following outputs? (Check all that apply.)**

Yes	Type of Output
<input type="checkbox"/> <sub>1</sub>	Articles in peer-reviewed journals
<input type="checkbox"/> <sub>1</sub>	Other publications
<input type="checkbox"/> <sub>1</sub>	Presentations
<input type="checkbox"/> <sub>1</sub>	Patents/licenses
<input type="checkbox"/> <sub>1</sub>	Not-patented tangible tools (e.g., databases, algorithms, software)
<input type="checkbox"/> <sub>1</sub>	Awards/prizes
<input type="checkbox"/> <sub>1</sub>	Postdoctoral fellowship
<input type="checkbox"/> <sub>1</sub>	Other, please specify: _____
<input type="checkbox"/> <sub>1</sub>	None of the above

**B13. Please specify how else the research you conducted at the STC resulted in any additional opportunities and/or outcomes.**

**B14. Did you have a mentor as part of your STC experience? By mentor, we mean someone who facilitated your professional growth and development during graduate school. (Check all that apply.)**

- <sub>1</sub> Yes, I had at least one mentor who had the same disciplinary field as mine.
- <sub>1</sub> Yes, I had at least one mentor who had a different disciplinary focus than mine.
- <sub>1</sub> No, I did not have a mentor.

**[PROGRAMMING NOTE: If respondent answers “No, I did not have a mentor” on B14, skip to B16.]**

**B15. Did the mentor(s) you had as part of your STC experience provide any of the following types of support? (Check all that apply.)**

Yes	Type of Support
<input type="checkbox"/> <sub>1</sub>	Helped me learn about my discipline and/or develop technical skills
<input type="checkbox"/> <sub>1</sub>	Gave constructive feedback on my performance
<input type="checkbox"/> <sub>1</sub>	Served as a professional role model
<input type="checkbox"/> <sub>1</sub>	Provided emotional support and encouragement
<input type="checkbox"/> <sub>1</sub>	Shared information about research, grant, internship, employment or other opportunities
<input type="checkbox"/> <sub>1</sub>	Shared insight into how to reach my career goals
<input type="checkbox"/> <sub>1</sub>	Made an effort to know, accept, and respect my goals and interests
<input type="checkbox"/> <sub>1</sub>	Opened doors by making personal introductions
<input type="checkbox"/> <sub>1</sub>	Other: _____

**B16. While you were a graduate student at [Institution Name], how connected did you feel with STC graduate students at institutions outside your own? (Check one only.)**

- <sub>1</sub> I had strong relationships with STC graduate students at other institutions
- <sub>2</sub> I felt some support from STC graduate students at other institutions
- <sub>3</sub> I did not feel at all connected with STC graduate students at other institutions

**B17. Did participating in any of the following STC activities increase your connection to graduate students at institutions outside your own?**

STC Activity	Yes	No	I did not participate in this activity.
Internships at other institutions	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
Monthly STC graduate student meetings	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
STC professional meetings (e.g., the STC directors meeting)	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
STC graduate student retreats	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
Online STC community communications like email messages, wikis, listservs, Facebook	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>
Other: please specify: _____	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>

**B18. As part of your participation in the STC, did you hold an internship or short-term job with a company, a government laboratory, or other laboratory?**

<sub>1</sub> Yes, please indicate how many: \_\_\_\_\_

<sub>2</sub> No

**[PROGRAMMING NOTE: If B18 = Yes, continue to B19; Otherwise, skip to B22]**

**Please answer the following questions about this internship or short-term job. If you had more than one internship or short-term job as part of your STC participation, please answer for the most recent.**

**B19. In what setting did you hold this internship or short-term job?**

<sub>1</sub> University or college (including university research centers/institutes)

<sub>2</sub> Government (including government/national laboratories)

<sub>3</sub> Non-government research center or institute

<sub>4</sub> Industry/business

<sub>5</sub> Private foundation or philanthropic institution

<sub>6</sub> Medical or healthcare facility

<sub>7</sub> Other, please specify: \_\_\_\_\_

**B20. Which of the following best describes the nature of the work you did during this internship or short-term job? (Check all that apply.)**

<sub>1</sub> Research and/or development (e.g., develop/produce materials, devices, or products)

<sub>1</sub> Policy

<sub>1</sub> Teaching

<sub>1</sub> Financial

<sub>1</sub> Management

<sub>1</sub> Administrative/clerical

<sub>1</sub> Other, please specify: \_\_\_\_\_

**B21. Was this internship within your primary field of research?**

<sub>1</sub> The internship was within my primary field of research

<sub>2</sub> The internship was outside of my primary field of research

**B22. Did you engage in any of the following international experiences as part of your STC participation? (Check all that apply.)**

Yes	Experience
<input type="checkbox"/> <sub>1</sub>	Conducted research at a foreign institution
<input type="checkbox"/> <sub>1</sub>	Attended a conference held in a foreign country
<input type="checkbox"/> <sub>1</sub>	While in the U.S., collaborated with individuals who were based at foreign institutions
<input type="checkbox"/> <sub>1</sub>	Held an internship in a foreign country
<input type="checkbox"/> <sub>1</sub>	Other, please specify: _____
<input type="checkbox"/> <sub>1</sub>	None of the above

***Thesis/Dissertation field of research***

**B23. From the list of disciplines below, please select those you used in your dissertation/thesis for the degree program you were enrolled in during your STC participation. (Check all that apply.)**

*If your dissertation or thesis were interdisciplinary, please mark all the disciplines upon which you drew.*

- <sub>1</sub> Agricultural Sciences/Natural Resources
- <sub>1</sub> Astronomy
- <sub>1</sub> Atmospheric Science and Meteorology
- <sub>1</sub> Biology
- <sub>1</sub> Biomedical Sciences
- <sub>1</sub> Chemistry
- <sub>1</sub> Communications
- <sub>1</sub> Computer and Information Sciences
- <sub>1</sub> Education
- <sub>1</sub> Engineering
- <sub>1</sub> Geological and Earth Sciences
- <sub>1</sub> Health Sciences
- <sub>1</sub> Humanities
- <sub>1</sub> Mathematics
- <sub>1</sub> Ocean/Marine Sciences
- <sub>1</sub> Physics
- <sub>1</sub> Business Management/Administration
- <sub>1</sub> Psychology
- <sub>1</sub> Social Sciences
- <sub>1</sub> Other, please specify: \_\_\_\_\_
- <sub>2</sub> I did not complete a thesis or dissertation.

**B24. Would you recommend participating in the STC to prospective graduate students with interests similar to your own?**

- <sub>1</sub> Yes
- <sub>2</sub> No

**B25. Is there anything you would change to improve the STC experience?**

**[PROGRAMMING NOTE: If graduated (as reported in A7), continue to Section C, otherwise skip to Section D.]**

## Section C: Your Experience Entering the Workforce

The following questions concern your career interests and your employment after completing the degree program you were pursuing while you participated in the STC program.

**C1. Listed below are decisions you may have made related to pursuing your chosen career. Did your STC experiences influence any of the following decisions? (Check all that apply.)**

- Setting of career to pursue (academic, industry, government etc.)
- Choice of career type (research, teaching, entrepreneurship etc.)
- Choice of discipline in which to work
- Choice of specific employer
- None of the above

***How did your STC experience influence your decision?***

**C2. Regardless of which career options interest you, how prepared do you think you were for the following types of jobs after completing the degree that you pursued while participating in the STC?**

<i>I felt prepared to be a...</i>	<b>Strongly Disagree</b>	<b>Somewhat disagree</b>	<b>Somewhat agree</b>	<b>Strongly agree</b>	<b>I don't know</b>
Faculty member with teaching and research responsibilities	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Faculty member with only research responsibilities	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Faculty member with only teaching responsibilities	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Researcher at a government lab or research institution	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Researcher/developer in industry/business	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Non-research policy or planning position in government or nonprofit	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Researcher in an interdisciplinary center	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Scientific administrator or manager	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>
Postdoctoral fellow	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>



**C3. Are you currently employed? (Check one only.)**

- <sub>1</sub> Yes, in a paid full-time position
- <sub>2</sub> Yes, in a paid part-time position
- <sub>3</sub> Yes, in a postdoctoral position
- <sub>4</sub> Yes, in an unpaid position (e.g., internship)
- <sub>5</sub> Not employed

**[PROGRAMMING NOTE: Respondents indicating 1, 2, or 3 (Yes, full, part time or postdoctoral), skip to C5 (how difficult was it to obtain your first paid position); Respondents indicating 4 & 5 (unpaid or no), continue to C4.]**

**C4. What are your reasons for not working at this time? (Check all that apply.)**

- <sub>1</sub> Seeking employment
- <sub>1</sub> Student
- <sub>1</sub> Family responsibilities
- <sub>1</sub> Suitable job not available
- <sub>1</sub> Do not need or want to work
- <sub>1</sub> Other, please specify: \_\_\_\_\_

**[PROGRAMMING NOTE: Unemployed respondents (C3=5) skip to Section D (Background and Demographic Information)]**

**C5. On the following scale from 1 to 5, how difficult was it to obtain your first paid position (including postdoctoral positions) after completing the degree program that you pursued during the time you participated in the STC?**

- <sub>1</sub> Not difficult at all
- <sub>2</sub> A little difficult
- <sub>3</sub> Moderately difficult
- <sub>4</sub> Difficult
- <sub>5</sub> Very difficult

**C6. To what extent did your experience at the STC contribute to your ability to obtain a position in the workforce?**

- <sub>1</sub> Not at all
- <sub>2</sub> A little
- <sub>3</sub> To some extent
- <sub>4</sub> A great deal
- <sub>5</sub> I do not know

**[PROGRAMMING NOTE: If C6=1 or 5, skip to C8; If C6 = 2, 3, or 4, continue to C7.]**

**C7. Did any of the following elements of your STC experience contribute to your ability to obtain a position in the workforce? (Check all that apply.)**

- <sub>1</sub> Interdisciplinary research conducted
- <sub>1</sub> Access to cutting-edge tools and equipment
- <sub>1</sub> Freedom to explore research interests in more depth
- <sub>1</sub> Networking opportunities with STC faculty members
- <sub>1</sub> Career guidance from STC faculty members
- <sub>1</sub> Networking opportunities outside my institution
- <sub>1</sub> Exposure to nonacademic job opportunities
- <sub>1</sub> Connections made through STC-related internships
- <sub>1</sub> Opportunities to present my work
- <sub>1</sub> Experience working with others in the field outside my institution
- <sub>1</sub> Name recognition of the STC
- <sub>1</sub> Other, please specify: \_\_\_\_\_
- <sub>1</sub> None of the above

**C8. Which of the following best describes your current principal employer? (Choose only one.)**

- <sub>1</sub> Government (including government research labs)
- <sub>2</sub> Industry/business
- <sub>3</sub> College or university
- <sub>4</sub> Non-government lab
- <sub>5</sub> Research institution/Think tank
- <sub>6</sub> Other nonprofit organization or private foundation
- <sub>7</sub> K-12 school or district
- <sub>8</sub> Entrepreneur/self-employed
- <sub>9</sub> Other, please specify: \_\_\_\_\_

**[PROGRAMMING NOTE: If C8=3 (College or University), continue to C9. Otherwise, skip to C12.]**

**C9. What type of academic position(s) do you hold at your institution?**

- <sub>1</sub> Administrator (any level)
- <sub>2</sub> Faculty
- <sub>3</sub> Other university staff
- <sub>4</sub> Postdoc (e.g., postdoctoral fellow or associate)
- <sub>5</sub> Other, please specify: \_\_\_\_\_

**C10. What is your faculty rank? (Choose only one.)**

- <sub>1</sub> Professor
- <sub>2</sub> Associate Professor
- <sub>3</sub> Assistant Professor
- <sub>4</sub> Adjunct Professor
- <sub>5</sub> Instructor
- <sub>6</sub> Lecturer
- <sub>7</sub> Other, please specify: \_\_\_\_\_
- <sub>8</sub> No ranks are designated in my organization or for my position

**C11. What is your tenure status? (Choose only one.)**

- <sub>1</sub> Tenured
- <sub>2</sub> On tenure track but not tenured
- <sub>3</sub> Not on tenure track
- <sub>4</sub> No tenure system at this organization or for my position

**C12. Which of the following best describe(s) your current work responsibilities? (Check up to two.)**

- <sub>1</sub> Research, Technology and/or Development
- <sub>2</sub> Manufacturing
- <sub>3</sub> Technical Services or Technical Support
- <sub>4</sub> Education: Training, Teaching
- <sub>5</sub> Administration, Management
- <sub>6</sub> Media/Journalism (e.g., science writing, technical writing/editing)
- <sub>7</sub> Policy, Advocacy, and/or Lobbying
- <sub>8</sub> Other, please specify: \_\_\_\_\_

**[PROGRAMMING NOTE: If C12 = 1, 2, 3 continue to C13, otherwise skip to C14]**

**C13. Which of the following characterize(s) the type of work that you do? (Check all that apply.)**

- Basic research to gain scientific knowledge primarily for its own sake
- Applied research to gain scientific knowledge to meet a recognized need
- Development where I use knowledge gained from research to produce materials, devices, and products
- Design of equipment, processes, structures, models
- Computer applications, programming, systems development
- Production, operations, manufacturing, maintenance (e.g., chip production, operating lab equipment)
- Technology services/technological support
- Other, please specify: \_\_\_\_\_

**C14. From the list of disciplines below, please select those that best describe your current work. (Check all that apply.)**

- Agricultural Sciences/Natural Resources
- Astronomy
- Atmospheric Science and Meteorology
- Biology
- Biomedical Sciences
- Chemistry
- Communications
- Computer and Information Sciences
- Education
- Engineering
- Geological and Earth Sciences
- Health Sciences
- Humanities
- Mathematics
- Ocean/Marine Sciences
- Physics
- Business Management/Administration
- Psychology
- Social Sciences
- Other, please specify: \_\_\_\_\_

**C15. As part of your current job, do you regularly engage in the following activities?**  
**[PROGRAMMING NOTE: “How well did your STC experience prepare you?” (3 right hand columns) is grayed out until respondent marks “yes” (left hand column).]**

Yes	Activity	How well did your STC experience prepare you?		
		Not Well	Well	Very Well
<b>Research activities</b>				
<input type="checkbox"/>	Apply knowledge from different disciplines to solve problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Work as part of a team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Conduct high-risk, high-reward research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Publish research findings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Write successful proposals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Develop and/or commercialize a service or product	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Carry out research independently or with minimal supervision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Project management activities</b>				
<input type="checkbox"/>	Develop my own program or agenda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Lead projects or programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Manage a team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Manage a budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Balance demands of multiple projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Communication activities</b>				
<input type="checkbox"/>	Teach undergraduate/graduate level courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Participate in K-12 education activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Present research findings to other researchers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Explain my work to professionals in other disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Communicate science with policymakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Present my or my organization’s work to non-technical audiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Collaborative activities</b>				
<input type="checkbox"/>	Develop ties across organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Collaborate within my own discipline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Collaborate with researchers in other disciplines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Collaborate with researchers in other countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Develop ties across organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Leadership activities</b>				
<input type="checkbox"/>	Serve as a mentor/advisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Participate on committees or engage in other university service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Convene session at professional conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Review grants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Serve on a government review panel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**C16. What is the greatest contribution of your STC experience to your career? (If none, write none.)**

## Section D: Background and Demographic Information

**D1. What is your ethnicity? (Check only one.)**

- <sub>1</sub> Hispanic or Latino
- <sub>2</sub> Not Hispanic or Latino
- <sub>3</sub> I choose not to report this information

**D2. What is your race? (Check all that apply.)**

- <sub>1</sub> American Indian or Alaska Native
- <sub>1</sub> Asian
- <sub>1</sub> Black or African American
- <sub>1</sub> Native Hawaiian or Other Pacific Islander
- <sub>1</sub> White
- <sub>1</sub> I choose not to report this information

**D3. What is your gender? (Check only one.)**

- <sub>1</sub> Male
- <sub>2</sub> Female
- <sub>3</sub> I choose not to report this information

**D4. What is your citizenship status? (Check only one.)**

US Citizen

- <sub>1</sub> Since birth
- <sub>2</sub> Naturalized

Non-US Citizen

- <sub>3</sub> With a Permanent U.S. Resident Visa ("Green Card")
- <sub>4</sub> With a Temporary U.S. Visa

**D5. Has anyone in your immediate family earned a Ph.D. degree in a Science, Technology, Engineering, or Mathematics field? (Check all that apply.)**

- <sub>1</sub> Parent or guardian
- <sub>1</sub> Sibling
- <sub>1</sub> Spouse/partner
- <sub>1</sub> Other, please specify: \_\_\_\_\_
- <sub>1</sub> None of the above

**Thank you for completing this survey.**