QUESTIONNAIRE COVER LETTER
For BBSI Faculty Participants

Subject line: NSF/NIH Bioengineering and Bioinformatics Summer Institutes Program (BBSI)

Dear Dr. [insert last name],

We are conducting a study for NSF and NIH on their jointly sponsored Bioengineering and Bioinformatics Summer Institutes (BBSI) program. We would appreciate your participation in this study. Your name was provided to us by [insert PI name] as someone who mentored/supervised students in the BBSI program at some point from Summer 2003 to Summer 2007.

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 <u>not</u> mentor/supervise BBSI students <u>at all</u> between Summer 2003 and Summer 2007, please reply to this e-mail with "NOT BBSI" in the subject line, and we will remove your name from our survey population.

All of your responses will be strictly confidential and 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,

Jongwon Park
Study Director
SRI International
1100 Wilson Blvd. Suite 2800
Arlington, VA 22209

STUDY OVERVIEW

Who funded this study and who is involved?

The project is funded by the National Science Foundation (NSF) and the National Institutes of Health (NIH), and is conducted by researchers from SRI International (formerly Stanford Research Institute) http://www.sri.com/policy.

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/NIH Bioengineering and Bioinformatics Summer Institutes (BBSI) program from the perspectives of the faculty and student participants. It is anticipated that the study results will help NSF and NIH better understand the components and characteristics of effective BBSIs and thus will help provide direction to the BBSI program officers at NSF and NIH in their reviews of BBSI proposals and in the advice they give to the principal investigators (PIs) of BBSIs. The study is NOT an evaluation of outcomes from individual BBSI awards or the people involved with them.

How was I selected for this study?

All students, faculty mentors, and PIs who participated in the BBSI program at any time from Summer 2003 to Summer 2007 are included in this study. The PIs of the BBSIs were contacted in 2006 and 2007. They provided us with the names and contact information for students who participated in BBSI activities, as well as faculty who mentored/supervised the students.

Can I get a copy of the study results?

We will send all survey participants a brief summary of the survey results in 2008. The study report will be available on SRI's Web site at http://www.sri.com/policy/csted/reports/university.

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, Jongwon Park (jongwon.park@sri.com, 703-247-8550) or the NSF program manager, Mary Poats (mpoats@nsf.gov , 703-292-5357).

NATIONAL SCIENCE FOUNDATION DIRECTORATE FOR ENGINEERING
NATIONAL INSTITUTE OF BIOMEDICAL IMAGING AND BIOENGINEERING

BIOENGINEERING AND BIOINFORMATICS SUMMER INSTITUTES PROGRAM (BBSI)

SURVEY OF FACULTY MENTORS

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 _____. 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

_____, 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.

SECTION A: YOUR PARTICIPATION IN BBSI

A1. How important was each of the following in your decision to participate in the BBSI program?

(MARK ONE IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important
a. Advancing the field of bioengineering or bioinformatics	1	2	3	4
b. Payback for your own undergraduate/graduate school experiences	1	2	3	4
c. Interacting/collaborating with colleagues in other departments/schools within your institution	1	2	3	4
d. Interacting/collaborating with colleagues at your BBSI partner institutions	1	2	3	4
e. Having an opportunity you wouldn't have during the school year to work with undergraduate students	1	2	3	4
f. Having an opportunity to teach	1	2	3	4
g. Giving undergraduate students a hands-on research experience	1	2	3	4
h. Working with a diverse group of students	1	2	3	4
i. Advancing your career	1	2	3	4
j. Bringing recognition to your department/program or institution	1	2	3	4
k. Other *(PLEASE SPECIFY)* _____	1	2	3	4

A2. Were you involved in selecting students to participate in the BBSI program?

(MARK ONE)

Yes..... 1 → *CONTINUE*

No..... 2 → *SKIP TO QUESTION A5*

A3. In your opinion, how important was each of the following in selecting students to participate in the BBSI program?

(MARK ONE IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important
a. Overall grade point average	1	2	3	4
b. Grade point average in major or selected courses	1	2	3	4
c. Major	1	2	3	4
d. Academic level (rising sophomore/junior/senior, graduate student)	1	2	3	4
e. Courses taken	1	2	3	4
f. Previous research experience	1	2	3	4
g. Previous experience in bioengineering or bioinformatics	1	2	3	4
h. Student's essay/statement of interest	1	2	3	4
i. Letter(s) of recommendation	1	2	3	4
j. Match of student's interests with interests of faculty	1	2	3	4
k. Interview or other personal contact with student	1	2	3	4
l. Motivation, enthusiasm of student	1	2	3	4
m. Obtaining a good mix of majors	1	2	3	4
n. Obtaining a good mix of institutions (e.g., research, liberal arts, predominantly minority)	1	2	3	4
o. Obtaining a racially/ethnically diverse group	1	2	3	4
p. Obtaining a good mix of male and female students	1	2	3	4
q. Including students with disabilities	1	2	3	4
r. Providing opportunity to students from schools with few undergraduate research opportunities				

A4. In selecting UNDERGRADUATES for participation in the BBSI program, which of the following did you tend to prefer?

(Consider as undergraduates new graduates who had not completed at least one semester of graduate school by the time they entered the BBSI program.)

a. Those who were undecided about graduate school OR those who were already committed to going to graduate school?

(MARK ONE)

Those who were undecided.....

Those who were committed.....

Some of both.....

Other *(PLEASE SPECIFY)* .....

_____

No preference.....

b. Sophomores OR juniors OR seniors OR new graduates?

(MARK ONE)

Sophomores.....

Juniors.....

Seniors.....

New graduates.....

A mix of classes.....

No preference.....

c. Other important selection criteria:_____

A5. Do you plan to continue, or renew, your participation in the BBSI program?

(MARK ONE)

Yes..... 1

No..... 2

SECTION B: YOUR BBSI PROGRAM

NOTE: If you participated in the BBSI program for more than one summer, please answer questions B1 to B6 for the MOST RECENT SUMMER.

Education Component

B1. Please indicate the educational activities in which students participated during their <u>first</u> BBSI summer.

(MARK ONE IN EACH ROW)

	Yes	**No**
Formal courses taught by BBSI faculty.....	1	2
Research seminars led by BBSI faculty.....	1	2
Seminars/lectures given by outside speakers…	1	2
Seminars in which students presented and discussed their research.....	1	2
Other *(PLEASE SPECIFY)*.....	1	2

_____

Other *(PLEASE SPECIFY)*.................................... 1 2

____

B2. Please indicate the subjects/topics covered in your BBSI program's courses/seminars/lectures that students attended in their <u>first</u> BBSI summer.

(MARK ONE IN EACH ROW)

	Yes	No
Academic subjects/research topics		
Bioinformatics	1	2
Bioengineering	1	2
Other engineering	1	2
Biology	1	2
Statistics	1	2
Computer programming	1	2
Ethics	1	2
Research tools and techniques	1	2
Other *(PLEASE SPECIFY)* _____	1	2
Other *(PLEASE SPECIFY)* _____	1	2
Professional development topics		
Communication/presentation skills	1	2
Proposal writing	1	2
Resume preparation	1	2
Career planning	1	2
Other *(PLEASE SPECIFY)* _____	1	2
Other *(PLEASE SPECIFY)* _____	1	2

B3. Did you personally teach or lead any courses/seminars/lectures in your BBSI program?

(MARK ONE IN EACH ROW)

	Yes	No
Courses on subject-matter content	1	2
Research seminars	1	2
Courses/seminars/lectures on professional development (e.g., oral presentation, writing, resume preparation, career planning)	1	2
Other *(PLEASE SPECIFY)* _____	1	2

B4. In your opinion, how important was each of the following educational activities to students in their <u>first</u> BBSI summer?

(MARK ONE IN EACH ROW)

	Not Important	Somewhat Important	Fairly Important	Extremely Important
a. Formal courses taught by BBSI faculty	1	2	3	4
b. Research seminars led by BBSI faculty	1	2	3	4
c. Seminars/lectures given by outside speakers	1	2	3	4
d. Seminars in which students presented and discussed their research	1	2	3	4
e. Courses/seminars/lectures on professional development (e.g., communication/presentation skills, proposal writing, resume preparation, career planning.)	1	2	3	4

B5. With respect to the courses/seminars/lectures attended by students in their <u>first</u> BBSI summer, please indicate how much you disagree or agree with each of the following statements.

(MARK ONE IN EACH ROW)

	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Have No Idea
a. Students gained fundamental knowledge in the subjects relevant to bioengineering and bioinformatics.	1	2	3	4	9
b. Students refreshed their previous knowledge of useful tools.	1	2	3	4	9
c. Students learned new tools and skill sets.	1	2	3	4	9
d. Students bonded by spending time together in class.	1	2	3	4	9
e. Students benefited from exposure to career professionals.	1	2	3	4	9
f. Formal courses and research seminars are an important feature of the BBSI program.	1	2	3	4	9

B6. If you have any comments about the education component of your BBSI program, please enter them here.

_____

_____

Research Component

NOTE: If you participated in the BBSI program for more than one summer, please answer questions B7 to B9 for the MOST RECENT SUMMER.

B7. Please indicate the research-related activities in which students participated during their <u>first</u> BBSI summer.

(MARK ONE IN EACH ROW)

	Yes	No
Writing proposals that described the research they planned to do	1	2
Collecting and/or analyzing data or information to try to answer research questions	1	2
Mentoring other students in conducting research or leading student research teams	1	2
Going on research-related field trip(s) to other labs, universities, industry, etc	1	2
Preparing/presenting poster presentations that described their research and results	1	2
Preparing final written research reports that described their research and results	1	2
Delivering oral presentations that described their research and results	1	2
Authoring or co-authoring papers that have been or will be submitted for publication in professional journals	1	2
Attending student conference(s) that included students from multiple colleges	1	2
Attending professional conference(s) that were not specifically for students	1	2
Completing their research projects (either during the summer or later)	1	2

B8. In general, what percentage of their time did students spend on BBSI courses/seminars/lectures vs. "hands-on" research in their <u>first</u> BBSI summer?

(ENTER YOUR BEST ESTIMATE FOR EACH)

_____ % time on courses/seminars/lectures _____ % time on "hands-on" research

B9. In your opinion, was the amount of time that students spent on BBSI courses/seminars/lectures and "hands-on" research in their <u>first</u> BBSI summer … ?

*(*mark one in each column)

	Courses/ Seminars/Lectures	"Hands-on" Research
Too little	1	1
About right	2	2
Too much	3	3

Have no idea..............................9.................   9

B10. With respect to students' experience with "hands-on" research in their <u>first</u> BBSI summer, please indicate how much you disagree or agree with each of the following statements.

(MARK ONE IN EACH ROW)

	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Have N Idea
a. They learned how to properly design a research project.	1	2	3	4	9
b. They became more skilled at collecting and/or analyzing data or information to answer research questions.	1	2	3	4	9
c. They learned how to present research results.	1	2	3	4	9
d. They learned how to conduct research independently.	1	2	3	4	9
e. They learned how to collaborate with others on research.	1	2	3	4	9
f. "Hands-on" research is an important feature of the BBSI program.	1	2	3	4	9

B11. If you have any comments about the research component of your BBSI program, please enter them here.

_____

_____

Second BBSI Summer

NOTE: If you participated in the BBSI program for more than one summer, please answer questions B12 to B18 for the MOST RECENT SUMMER.

B12. Did any students in your BBSI program participate for two consecutive summers?

(MARK ONE)

Yes..... 1 → *CONTINUE*

No..... 2 → *SKIP TO QUESTION B19*

B13. Please indicate the educational activities in which students participated during their <u>second</u> BBSI summer.

(MARK ONE IN EACH ROW)

	Yes	No
Formal courses taught by BBSI faculty.....	1	2
Research seminars led by BBSI faculty.....	1	2

Seminars/lectures given by outside speakers…	1	2
Seminars in which students presented and discussed their research.....	1	2
Other *(PLEASE SPECIFY)*..... _____	1	2
Other *(PLEASE SPECIFY)*..... _____	1	2

B14. What percentage of their time did students spend on BBSI courses/seminars/lectures vs. "hands-on" research in their <u>second</u> BBSI summer?

(ENTER YOUR BEST ESTIMATE FOR EACH)

_____ % time on courses/seminars/lectures

_____ % time on "hands-on" research

B15. In your opinion, was the amount of time that students spent on BBSI courses/seminars/lectures and "hands-on" research in their <u>second</u> BBSI summer … ?

*(*mark one in each column)

	Courses/ Seminars/Lectures	**"Hands-on" Research**
Too little.....	1	1
About right.....	2	2
Too much.....	3	3
Have no idea.....	9	9

B16. With respect to the <u>second-summer</u> experience, please indicate how much you disagree or agree with each of the following statements.

(MARK ONE IN EACH ROW)

	Disagree	**Disagree Somewhat**	**Agree Somewhat**	**Agree**	**Have N Idea Doesn Appl**
a. The second summer allows students to focus a lot more on research than they could in the first summer.	1	2	3	4	9
b. Having had the first-summer experience, students are able to jump right into their research the second summer.	1	2	3	4	9
c. By the end of the second summer, undergraduates resemble graduate students in their ability to do research.	1	2	3	4	9
d. Second-summer students help orient first-	1	2	3	4	9

	summer students and serve as peer mentors.					
e.	One summer of BBSI would be enough for most undergraduates.	1	2	3	4	9
f.	The coursework for second-summer students should be different in content from that for first-summer students.	1	2	3	4	9
g.	The time required for coursework should be less for second-summer students than for first-summer students.	1	2	3	4	9
h.	A two-summer program promotes a longer, more continuous connection between faculty and students.	1	2	3	4	9
i.	The second summer produces a higher quality student.	1	2	3	4	9
j.	The real payoff for the program comes in the second summer.	1	2	3	4	9
k.	It is better to maximize the number of student participants by minimizing the number of second-summer students.	1	2	3	4	9
l.	It is better to fund students for a second summer using non-BBSI resources (e.g., other grant money).	1	2	3	4	9
m.	The second-summer experience is an important feature of the BBSI program.	1	2	3	4	9

B17. In your opinion, which students should be invited back for a second summer?

*(*mark one)

All of them.....1

Only outstanding students.....2

None of them; the second summer should be dropped from the BBSI program 3

PLEASE EXPLAIN YOUR RESPONSE

_____

B18. If you have any comments about the second-summer option of the BBSI program, please enter them here.

_____

_____

Graduate Students

NOTE: If you participated in the BBSI program for more than one summer, please answer questions B19 to B21 for the MOST RECENT SUMMER.

B19. Were there any graduate student participants in your BBSI program who had to satisfy the same coursework and research requirements as the undergraduate students?

(Consider as graduate students only those who had completed at least one semester of graduate school.)

(MARK ONE)

Yes..... 1 → *CONTINUE*

No..... 2 → *SKIP TO QUESTION B22*

B20. With respect to graduate student participants in the BBSI program, please indicate how much you disagree or agree with each of the following statements.

(MARK ONE IN EACH ROW)

	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Have I Idea
a. Undergraduate students benefit from observing the maturity and work ethic of graduate student participants.	1	2	3	4	9
b. Graduate student participants help undergraduates in considering further education and career tracks.	1	2	3	4	9
c. The BBSI program gives graduate student participants an opportunity to change direction or narrow their focus.	1	2	3	4	9
d. Allowing graduate students to participate is an important feature of the BBSI program.	1	2	3	4	9

B21. If you have any comments about the participation of graduate students in the BBSI program, please enter them here.

_____

_____

Student Mentoring

NOTE: If you participated in the BBSI program for more than one summer, please consider ALL of your BBSI summers when answering questions B22 to B30.

B22. Which of the following best describes the focus of your BBSI research?

(MARK ONE)

Bioengineering or biomedical engineering.... 1 → Please specify subfield (if any) _____

Bioinformatics..... 2 → Please specify subfield (if any) _____

Both fields..... 3 → Please specify subfield (if any) _____

Other field(s) *(PLEASE SPECIFY)*..... 4

_____

B23. Considering ALL the summers you participated in the BBSI program, how many BBSI students did you personally mentor?

Number of students: _____ *IF NONE, ENTER 00 AND SKIP TO SECTION C*

B24. On average, how many hours per student per week did you engage in research-related mentoring activities?

Number of hours per student per week: _____

B25. Please indicate the ways in which you helped the students that you mentored, during their BBSI summers (Column A) and also after they completed the BBSI program (Column B).

(MARK ONE IN COLUMN (A) AND ONE IN COLUMN (B) FOR EACH ROW)

	(A) During BBSI			(B) After BBSI		
	Yes	**No**	**Doesn't Apply**	**Yes**	**No**	**Doesn't Apply**
Advised them on the direction of their research.....	1	2	9	1	2	9
Advised them on courses to take in undergraduate school.....	1	2	9	1	2	9
Advised them on graduate school plans.....	1	2	9	1	2	9
Advised them on career choices.....	1	2	9	1	2	9
Wrote recommendation letter(s) for employment….	1	2	9	1	2	9
Wrote recommendation letter(s) for graduate school applications.....	1	2	9	1	2	9
Wrote recommendation letter(s) for fellowship/ grant/etc. applications.....	1	2	9	1	2	9
Other *(PLEASE SPECIFY)*..... _____	1	2	9	1	2	9
Other *(PLEASE SPECIFY)*..... _____	1	2	9	1	2	9

B26. Did you communicate with any of your BBSI students' home institution mentors?

(MARK ONE)

Yes..... 1 → *CONTINUE*

No..... 2 → *SKIP TO QUESTION B28*

B27. When you communicated with your BBSI students' home institution mentors, did you discuss …?

(mark one in each row)

	Yes	**No**
The student.....	1	2
Mutual research interests of the mentor and yourself.....	1	2

Collaborations between the mentor and yourself.....	1	2
Other *(PLEASE SPECIFY)*.....	1	2

_____

B28. On average, including both formal and informal activities, how frequently did you socialize with the BBSI students you mentored?

*(*mark one)

Not at all.....9...

Once a month.....1...

2-3 times a month.....2...

4-5 times a month.....3...

6 or more times a month.....4...

B29. Did you stay in touch with any of the BBSI students that you mentored after they completed the BBSI program?

(MARK ONE)

Yes.....1.....

No.....2.....

B30. If you have any comments about mentoring BBSI students, please enter them here.

_____

_____

SECTION C: EFFECTS OF THE BBSI PROGRAM

NOTE: If you participated in the BBSI program for more than one summer, please consider ALL of your BBSI summers when answering the questions in Section C.

Effects on Students

C1. To what extent do you think the BBSI experience increased each of the following for the students you mentored?

(MARK ONE IN EACH ROW)

	Extent of Increase				
	Not At All	**Some-what**	**A Fair Amount**	**A Great Deal**	**Have No Idea**
Their understanding or awareness of…					
a. a …what bioengineering and/or bioinformatics are, including the variety of applications	1	2	3	4	9
b. b …how their work contributed to the "bigger picture" of research in bioengineering and/or bioinformatics	1	2	3	4	9
c. d …the variety of fields related to bioengineering and/or bioinformatics that they could specialize in	1	2	3	4	9
d. e …career options in bioengineering and/or bioinformatics	1	2	3	4	9
Their skills/abilities in…					
e. h …working collaboratively with others	1	2	3	4	9
f. i …working independently	1	2	3	4	9
g. j …preparing written research reports, papers, or posters	1	2	3	4	9
h. k …delivering oral research presentations	1	2	3	4	9
Their…					
i. …confidence in their research skills generally	1	2	3	4	9
j. …qualifications for jobs in bioengineering and/or bioinformatics	1	2	3	4	9
k. …understanding of the nature of the job of a researcher	1	2	3	4	9
l. …ability to clarify their interests and to make informed decisions about their future plans	1	2	3	4	9
m. …confidence in their ability to succeed in graduate school	1	2	3	4	9
n. ...understanding of what graduate school is like	1	2	3	4	9

o. …intellectual and social network of professional colleagues and friends	1	2	3	4	9

C2. At any point in time (during or after the BBSI experience), did you co-author with BBSI students you mentored any articles about bioengineering or bioinformatics that were, or will be, published in peer-reviewed journals?

(MARK ONE)

Yes..... 1 → Number of articles: _____

No..... 2

C3. If you have any additional comments about the effects (both positive and negative) that the BBSI program has had on students (including those you did not mentor), please enter them here.

_____

_____

C4. How do you think NSF could improve the BBSI experience for students?

_____

_____

Effects on You Personally

C5. With respect to effects on you personally, to what extent has the BBSI program … ?

(MARK ONE IN EACH ROW)

	To what extent?				
	Not At All	**Some-what**	**A Fair Amount**	**A Great Deal**	**Have No Idea**
a. Redirected your research	1	2	3	4	9
b. Increased your involvement in interdisciplinary research	1	2	3	4	9
c. Increased your interactions with faculty in other departments/schools within your institution	1	2	3	4	9
d. Increased your interactions with faculty at other institutions	1	2	3	4	9
e. Led to new collaborations with faculty in other departments/schools within your institution	1	2	3	4	9
f. Led to new collaborations with faculty at other institutions	1	2	3	4	9
g. Provided an opportunity you didn't have during the school year to work with undergraduate students	1	2	3	4	9

h. Allowed you to gain needed teaching experience	1	2	3	4	9
i. Brought greater visibility to your academic activities	1	2	3	4	9
j. Helped you get a promotion in academic rank	1	2	3	4	9
k. Helped you in the tenure process	1	2	3	4	9
l. Slowed you down in the tenure process	1	2	3	4	9
m. Led to publication of your article(s) in peer-reviewed journals	1	2	3	4	9
n. Reduced your usual publication output	1	2	3	4	9
o. Limited your time for doing research	1	2	3	4	9
p. Left you with little time to spend with family and friends	1	2	3	4	9
q. Other *(PLEASE SPECIFY)* _____	1	2	3	4	9

C6. If you have any additional comments about the effects (both positive and negative) that your BBSI program has had on you personally, please enter them here.

_____

_____

C7. How do you think NSF could improve the BBSI experience for faculty mentors?

_____

_____

Effects on Your Institution, Department, or Program

C8. With respect to effects on your BBSI institution, department, or program, to what extent has the BBSI program … ?

(MARK ONE IN EACH ROW)

	To what extent?				
	Not At All	**Some-what**	**A Fair Amount**	**A Great Deal**	**Have No Idea**
a. Increased interactions/collaborations among faculty in different departments or on different campuses	1	2	3	4	9
b. Increased interactions/collaborations with other institutions	1	2	3	4	9

c. Helped in recruiting high quality students	1	2	3	4	9
d. Led to the creation of a new graduate program in bio/biomedical engineering, bioinformatics, or related field	1	2	3	4	9
e. Brought new recognition/prestige to your institution, department, or program	1	2	3	4	9
f. Changed perceptions about what undergraduates can do	1	2	3	4	9
g. Promoted interdisciplinary research	1	2	3	4	9
h. Other *(PLEASE SPECIFY)* _____	1	2	3	4	9

C9. If you have any additional comments about the effects (both positive and negative) that your BBSI program has had on your institution, department, or program, please enter them here.

_____

C10. How do you think NSF could improve the BBSI program for institutions?

_____

C11. Which of the following best describes your department's position on undergraduate research mentoring/supervising?

(MARK ONE)

Faculty are required to serve as mentors/supervisors on undergraduate research.....1
Faculty are not required to mentor/supervise undergraduate research, but are encouraged to do so.....2
The department takes no position on mentoring/supervising undergraduate research.....3
Other *(PLEASE SPECIFY)*.....4
_____

SECTION D: CURRENT EMPLOYMENT

D1. Which field best describes the work you do in your current job?

(MARK ONE)

Bioengineering or biomedical engineering….	1	→	Please specify subfield (if any) _____
Bioinformatics.....	2	→	Please specify subfield (if any) _____
Both fields.....	3	→	Please specify subfield (if any) _____
Other field(s) *(PLEASE SPECIFY)*.....	4		

_____

D2. By which of the following kinds of organizations are you currently employed?

(MARK ALL THAT APPLY)

College/university.....
Industry/for-profit organization..
Non-profit organization.....
Government.....
Other *(PLEASE SPECIFY)*.....

_____

IF YOU ARE NOT CURRENTLY EMPLOYED BY A COLLEGE/UNIVERSITY, SKIP TO SECTION E

D3. (If currently employed by a college/university) What is your current academic rank?

(MARK ONE)

Professor.....1
Associate professor.....2
Assistant professor.....3
Adjunct professor.....4
Instructor or lecturer.....5
Research associate.....6
Other *(PLEASE SPECIFY)* 7

_____

D4. (If currently employed by a college/university) What is your current tenure status?

(MARK ONE)

Doesn't apply: No tenure system here.....
Tenured.....
On tenure track but not tenured.....
Not on tenure track.....

SECTION E: BACKGROUND INFORMATION

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

E1. What is your age? _____

E2. What is your sex?

(MARK ONE)

Male..... 1
Female..... 2

E3. What is your ethnicity?

(MARK ONE)

Hispanic or Latino..... 1
Not Hispanic or Latino..... 2

E4. What is your race?

(MARK ONE)

American Indian or Alaskan Native	1
Asian	2
Black or African American	3
Native Hawaiian or Pacific Islander	4
White	5
Combination of Asian and White	6
Combination that includes any of the following: American Indian or Alaskan Native; Black or African American; Native Hawaiian or Pacific Islander	7

E5. If you have any comments about this survey, please enter them here.

_____

_____

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS STUDY

If you have questions, please contact Jongwon Park: 703-247-8550, bbsi@wdc.sri.com