

**SURVEY OF PARTICIPANTS
IN NATIONAL SCIENCE FOUNDATION'S
INDUSTRY/UNIVERSITY COOPERATIVE RESEARCH CENTERS (I/UCRC) PROGRAM**

Based on information provided to SRI by the I/UCRCs, your organization is a member of the Center identified below. Is that correct? (Note: We use the term "firm" to refer to all types of I/UCRC Center member organizations, including military and civilian laboratories and agencies.)

[insert label here identifying Center]

NSF is interested in determining the results and benefits of five specific I/UCRC activities taken separately. These are:

- ◆ **Generic, fundamental research**, relevant to industry needs, funded by member and affiliate dues;
- ◆ **Research projects sponsored by one or more firm**;
- ◆ **Use of I/UCRC facilities**;
- ◆ **Technical advice or consulting services from I/UCRC personnel** (technical consultation in-person, by phone or other means); and
- ◆ **Training provided by the I/UCRC personnel** (short courses, one-on-one training from center staff)

Please indicate below the operational unit (the division, center, department, section or other organizational entity) that is the primary direct beneficiary of your company's participation in the I/UCRC. Note: in small companies, the entire company may be the primary direct beneficiary.

Unit Name: _____

Most of the questions that follow are about this unit's relationship with the I/UCRC. All responses are confidential and will be made public in summary form only.

In answering the questions in this instrument, please include the results, benefits and costs of your unit's involvement with the Center over the entire period that your firm has been a member and/or affiliate of the Center.

1. A) How many years has your firm been a member and/or affiliate of the I/UCRC?
(PLEASE CIRCLE **ONE** NUMBER)

- One 1
- Two..... 2
- Three..... 3
- Four 4
- Five..... 5
- Six..... 6

B) How many years have you been your company’s representative to the Center?
 (PLEASE CIRCLE **ONE** NUMBER)

- One 1
- Two..... 2
- Three..... 3
- Four 4
- Five..... 5
- Six..... 6

2. Please consider the Center’s **generic, fundamental research** that is relevant to industry needs, funded by pooled member and affiliate dues.

(A) To your knowledge, how has your unit benefited as a direct result of the **fundamental research projects** supported collectively by the fees of member organizations?
 (PLEASE CIRCLE **ONE** NUMBER FOR EACH ITEM IN SECTION A OF THE TABLE)

(B) If "yes" on (A): How would you rate the benefit that your unit derived?
 (PLEASE CIRCLE **ONE** NUMBER FOR **EACH APPLICABLE** ITEM IN SECTION B OF THE TABLE)

		(A) DIRECT RESULTS OF FUNDAMENTAL RESEARCH				(B) IF “YES,” BENEFIT DERIVED:				
		Yes	No	Privileged Info.	Have No Idea	None	Some	Quite a Bit	A Great Deal	Have No Idea
a.	We obtained access to new ideas or know-how	1	2	3	4	1	2	3	4	9
b.	Our R&D agenda was influenced	1	2	3	4	1	2	3	4	9
c.	We licensed or patented software, product(s), or process(es)	1	2	3	4	1	2	3	4	9
d.	We improved a product(s) or process(es)	1	2	3	4	1	2	3	4	9
e.	We developed a new product(s) or process(es)	1	2	3	4	1	2	3	4	9
f.	We had more interaction than in the past with other Center firms	1	2	3	4	1	2	3	4	9
g.	We were able to provide our customers/suppliers	1	2	3	4	1	2	3	4	9

	with improved technical information									
h.	We made unexpected operational changes (e.g., equipment or project additions or cancellations)	1	2	3	4	1	2	3	4	9
i.	Other direct results (please describe:)					1	2	3	4	9

3. Please consider the Center’s **research projects** sponsored directly by one or more firms.

If your unit has not supported special research projects sponsored by one or more firms as part of your Center involvement, please skip to question 4.

(A) To your knowledge, which of the following has your unit done as a direct result of **sponsored research projects** your firm sponsored?
 (PLEASE CIRCLE **ONE** NUMBER FOR **EACH** ITEM IN SECTION A OF THE TABLE)


(B) If “yes” on (A): How would you rate the benefit that your unit derived?
 (PLEASE CIRCLE **ONE** NUMBER FOR **EACH APPLICABLE** ITEM IN SECTION B OF THE TABLE)


(A) DIRECT RESULTS OF SPONSORED RESEARCH PROJECTS					(B) IF “YES,” BENEFIT DERIVED:					
		Yes	No	Privileged Info.	Have No Idea	None	Some	Quite a Bit	A Great Deal	Have No Idea
a.	We obtained access to new ideas or know-how	1	2	3	4	1	2	3	4	9
b.	Our R&D agenda was influenced	1	2	3	4	1	2	3	4	9
c.	We licensed or patented software, product(s), or process(es)	1	2	3	4	1	2	3	4	9
d.	We improved, developed and/or commercialized products(s)/ process(es)	1	2	3	4	1	2	3	4	9
e.	We had more interaction than in the past with other Center firms	1	2	3	4	1	2	3	4	9
f.	We were able to provide our customers/suppliers with improved technical information	1	2	3	4	1	2	3	4	9
g.	We made unexpected	1	2	3	4	1	2	3	4	9

	operational changes (e.g., equipment or project additions or cancellations)								
h.	Other direct results <i>(please describe:)</i>				1	2	3	4	9

4. Did your unit **use any of the Center’s facilities?** (*PLEASE CIRCLE ONE NUMBER*)

Yes..... 1  Please continue

No 2  Please skip to question 6

Not sure 9  Please skip to question 6


5. (A) To your knowledge, which of the following has your unit done as a direct result of your unit’s **use of the Center’s facilities?**
 (*PLEASE CIRCLE ONE NUMBER FOR EACH ITEM IN SECTION A OF THE TABLE*)

(B) If “yes” on (A): How would you rate the benefit that your unit derived?
 (*PLEASE CIRCLE ONE NUMBER FOR EACH APPLICABLE ITEM IN SECTION B OF THE TABLE*)

(A) DIRECT RESULTS OF USE OF THE RESEARCH CENTER’S FACILITIES						(B) IF “YES,” BENEFIT DERIVED:				
		Yes	No	Privi- leged Info.	Have No Idea	None	Some	Quite a Bit	A Great Deal	Have No Idea
a.	We obtained access to new ideas or know-how	1	2	3	4	1	2	3	4	9
b.	Our R&D agenda was influenced	1	2	3	4	1	2	3	4	9
c.	We licensed or patented software, product(s), or process(es)	1	2	3	4	1	2	3	4	9
d.	We improved, developed and/or commercialized products(s)/ process(es)	1	2	3	4	1	2	3	4	9
e.	We had more interaction than in the past with other firms	1	2	3	4	1	2	3	4	9
f.	We were able to provide our customers/suppliers with improved technical information	1	2	3	4	1	2	3	4	9
g.	We made unexpected operational changes (e.g., equipment or project additions or cancellations)	1	2	3	4	1	2	3	4	9
h.	Other direct results , e.g , saved money, gained market advantage (<i>please describe:</i>)					1	2	3	4	9

6. Did your unit receive any **technical advice or consulting services** (technical consultation in-person, by phone, or other means) from Center faculty, researchers, or students? (*PLEASE CIRCLE ONE NUMBER*)

Yes..... 1  Please continue

No 2  Please skip to question 8


Not sure 9  Please skip to question 8


7. (A) To your knowledge, which of the following has your unit done as a direct result of the **technical advice or consulting** received from the Center?
(*PLEASE CIRCLE ONE NUMBER FOR EACH ITEM IN SECTION A OF THE TABLE*)


(B) If “yes” on (A): How would you rate the benefit that your unit derived?
(*PLEASE CIRCLE ONE NUMBER FOR EACH APPLICABLE ITEM IN SECTION B OF THE TABLE*)

		(A) DIRECT RESULTS OF TECHNICAL ADVICE OR CONSULTING RECEIVED FROM THE RESEARCH CENTER				(B) IF “YES,” BENEFIT DERIVED:				
		Yes	No	Privileged Info.	Have No Idea	None	Some	Quite a Bit	A Great Deal	Have No Idea
a.	We obtained access to new ideas or know-how	1	2	3	4	1	2	3	4	9
b.	Our R&D agenda was influenced	1	2	3	4	1	2	3	4	9
c.	We licensed or patented software, product(s), or process(es)	1	2	3	4	1	2	3	4	9
d.	We improved, developed and/or commercialized products(s)/ process(es)	1	2	3	4	1	2	3	4	9
e.	We had more interaction than in the past with other Center firms	1	2	3	4	1	2	3	4	9
f.	We were able to provide our customers/suppliers with improved technical information	1	2	3	4	1	2	3	4	9
g.	We made unexpected operational changes (e.g., equipment or project additions or cancellations)	1	2	3	4	1	2	3	4	9
h.	Other direct results (<i>please describe:</i>)					1	2	3	4	9

8. Did any of your staff receive any **formal training from the Center faculty or researchers** (via short courses, formal one-on-one training from Center staff)? *(PLEASE CIRCLE ONE NUMBER)*

Yes..... 1  Please continue

No 2  Please skip to question 10


Not sure 9  Please skip to question 10

9. (A) To your knowledge, which of the following has your unit done as a direct result of the staff **training received from the Center**? *(PLEASE CIRCLE ONE NUMBER FOR EACH ITEM)*

(B) If “yes” on (A): How would you rate the benefit that your unit derived? *(PLEASE CIRCLE ONE NUMBER FOR EACH APPLICABLE ITEM)*

(A) DIRECT RESULTS OF STAFF TRAINING RECEIVED FROM THE RESEARCH CENTER						(B) IF “YES,” BENEFIT DERIVED:				
		Yes	No	Privileged Info.	Have No Idea	None	Some	Quite a Bit	A Great Deal	Have No Idea
a.	We obtained access to new ideas or know-how	1	2	3	4	1	2	3	4	9
b.	Our R&D agenda was influenced	1	2	3	4	1	2	3	4	9
c.	We licensed or patented software, product(s), or process(es)	1	2	3	4	1	2	3	4	9
d.	We improved, developed and/or commercialized products(s)/ process(es)	1	2	3	4	1	2	3	4	9
e.	We had more interaction than in the past with other Center firms	1	2	3	4	1	2	3	4	9
f.	We were able to provide our customers/suppliers with improved technical information	1	2	3	4	1	2	3	4	9
g.	We made unexpected operational changes (e.g., equipment or project additions or cancellations)	1	2	3	4	1	2	3	4	9
h.	Other direct results <i>(please describe:)</i>					1	2	3	4	9


10. How many Center students or graduates, if any, has your unit hired?
 (PLEASE CIRCLE **ONE** NUMBER)

None 0  Please skip to question 12

One 1

Two..... 2

Three.....3

 Please answer question 11

Four or more (please specify:)... 4

At least one, but don't

know how many 9

11. In general, how would you rate the Center students and graduates that your company unit has hired as regular employees compared to students and graduates hired from non-Center engineering programs? (PLEASE CIRCLE **ONE** NUMBER FOR EACH ITEM)

		CENTER STUDENTS/GRADUATES ARE:					
		Much Worse	Somewhat Worse	About the Same	Somewhat Better	Much Better	Have No Idea
a.	Depth of technical knowledge	1	2	3	4	5	9
b.	Breadth of technical knowledge	1	2	3	4	5	9
c.	Contribution to the company's technical work	1	2	3	4	5	9
d.	Company-funded training required before they became a net contributor to the company's work	1	2	3	4	5	9
e.	Ability to apply knowledge from different disciplines and use technologies in an integrated fashion to solve problems	1	2	3	4	5	9
f.	Ability to solve problems within constraints of time, money, and human resources	1	2	3	4	5	9
g.	Ability to work in interdisciplinary teams	1	2	3	4	5	9
h.	Familiarity with engineering systems	1	2	3	4	5	9

	approach						
i.	Ability to use knowledge to develop technology	1	2	3	4	5	9
j.	Overall preparedness for working in industry	1	2	3	4	5	9

12. To the best of your knowledge, what is the amount that your unit actually has paid to date to the Center over the years that you have been a representative to the Center?
(PLEASE FEEL FREE TO INDICATE AMOUNTS FOR INDIVIDUAL LINE ITEMS OR TOTAL AMOUNT PAID, AS YOU PREFER.)

TYPE OF SUPPORT	AMOUNT PAID TO DATE
Cash support	\$
“In-kind” support	\$
Fees for use of facilities	\$
Fees for training	\$
Fees for technical assistance	\$
Other <i>(please specify)</i>	\$
TOTAL AMOUNT PAID	\$

13. Which one of the following categories best describes the benefit/cost value of what your unit has received from the Center? *(PLEASE CIRCLE ONE NUMBER)*

Benefits Much Less than Costs	Benefits Somewhat Less than Costs	Benefits About the Same as Costs	Benefits Somewhat Greater than Costs	Benefits Much Greater than Costs	Have No Idea
1	2	3	4	5	9

14. A) If possible, please estimate any savings your firm has experienced through reduced training costs incurred for new hires who are Center students and graduates compared with training costs that are typically necessary for similar employees who are non-Center students and graduates:

Approximate dollar value: \$ _____

- B) If possible, please estimate the cost savings from benefits other than those covered in part A):

Approximate dollar value: \$ _____

15. If possible, please estimate the dollar value of financial benefits your firm made as a result of interacting with the Center ***beyond cost savings***, e.g., revenue stream from a new product, license, etc.?

Approximate dollar value: \$ _____

If we have more questions about your unit's membership in the Center, whom should we contact?

Name: _____

Title: _____

Name of unit: _____ Telephone: _____

THANK YOU VERY MUCH FOR YOUR HELP.

Please return this completed questionnaire in the enclosed postage-paid envelope to:

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