

**Appendix B**  
**Survey Instruments**

**QUESTIONNAIRE COVER LETTER**

**Survey of SGER Principal Investigators**

Subject line: NSF Small Grants for Exploratory Research (SGER) Survey
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Dear Dr. [insert last name],

We are conducting a study for the National Science Foundation (NSF) on the Small Grants for Exploratory Research (SGER) mechanism. We would appreciate your participation in this study. NSF has provided your name as a recipient of one or more SGER awards in fiscal years 1990–2007.

If you did not receive a SGER award in fiscal years 1990–2007, please reply to this e-mail with “NO SGER AWARD” in the subject line, and we will remove your name from the survey population.

If you received a SGER award in fiscal years 1990–2007, please access our survey questionnaire by clicking on this link:

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

All of your responses are confidential and will be used only in combination with those from other respondents. Information stored in the SRI SGER database will be stripped of individual PI names and award/proposal information. The ID number included in the survey URL allows us to cross your name off our contact list once we have received your survey 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 survey as soon as possible. Your participation is very important to the success of this study.

Sincerely yours,

Caroline Wagner, Ph.D.  
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 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 Small Grants for Exploratory Research (SGER) mechanism from the perspectives of the principal investigators who submitted proposals for a SGER award. It is anticipated that the study results will help NSF better understand the characteristics of SGER proposals and awards, and the value of the SGER mechanism to NSF's research mission and the Nation's science and engineering enterprise. The study is NOT an evaluation of outcomes from individual SGER awards or the people involved with them.

### **How were you selected for this study?**

All principal investigators who received a SGER award in fiscal years 1990–2007 are included in this study. Also included are individuals who submitted a SGER proposal that was declined in fiscal years 2002–2007 and who did not receive a SGER award in earlier years. The names of the awardees and declines were provided by NSF.

### **Can you get a copy of the study results?**

SRI International will send all survey participants a web link to the summary of survey results in early 2009.

### **Privacy Notice**

Information from this survey will be retained by the National Science Foundation (NSF), a federal agency, in accordance with the Privacy Act of 1974. The data will be made available in the form of summary analyses and in a database stripped of individual PI names and titles of awards/proposals. This information is being collected for the sole purpose of monitoring, assessing, and evaluating NSF programs. The data 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.

### **How can you obtain more information about the project?**

Contact the SRI study director, Caroline Wagner ([caroline.wagner@sri.com](mailto:caroline.wagner@sri.com), 703-247-8478) or the NSF program manager, Connie Della-Piana ([cdellapi@nsf.gov](mailto:cdellapi@nsf.gov), 703-292-8040).

NATIONAL SCIENCE FOUNDATION

SMALL GRANTS FOR EXPLORATORY RESEARCH  
(SGER)

**SURVEY OF  
SGER  
PRINCIPAL INVESTIGATORS**

**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 [REDACTED]. Public reporting burden for this collection of information is estimated to average 20 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 [REDACTED], 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 confidential and will be used only in combination with those from other respondents. Information stored in the SRI SGER database will be stripped of individual PI names and award/proposal information.**

## SECTION A: YOUR SGER PROPOSAL

PLEASE ENTER THE TIME IT IS NOW: \_\_\_\_\_ (hh:mm)

**SRI will insert a “referenced proposal” with title, award number, award date**

**PLEASE KEEP THIS SPECIFIC PROPOSAL/PROJECT IN MIND AS YOU ANSWER THE QUESTIONS.**

**A1. Was the SGER proposal referenced above your ...?**

*(MARK ONE IN EACH ROW)*

	Yes	No
First SGER proposal .....	1	2
First proposal of any kind to NSF.....	1	2
First award of any kind from NSF .....	1	2

**A2. How did you learn about SGER?**

*(MARK ALL THAT APPLY)*

- 01 From an NSF program director
  - 02 From an NSF document (e.g., Grant Proposal Guide)
  - 03 From a search of NSF web pages
  - 04 At an NSF Regional Grants Conference
  - 05 At another NSF conference, workshop, or PI meeting
  - 06 At a conference/meeting of a professional society
  - 07 From my campus' Sponsored Projects Office
  - 08 From a colleague
  - 09 From an article or report that credited an SGER award
  - 10 Other *(PLEASE SPECIFY)*
-

**A3. How important was each of the following in your decision to apply for the referenced SGER?**

*PLEASE NOTE: The term “regular proposal” in this survey refers to a non-SGER proposal, i.e., one that meets NSF’s usual proposal requirements including review by peer experts external to NSF.*

(MARK ONE IN EACH ROW)

	<b>Not Important/ Doesn't Apply</b>	<b>Somewhat Important</b>	<b>Fairly Important</b>	<b>Extremely Important</b>
a. My research idea might have been (or was) considered “too high-risk” by peer reviewers of a regular proposal. “High risk” is defined as <i>research where possible outcomes are not clearly foreseen and the values cannot be estimated. Possible outcomes range from total failure to produce any findings or impacts to groundbreaking discoveries. There is a high degree of uncertainty because the probabilities of any particular outcome cannot be known.</i>	1	2	3	4
b. My research idea was at odds with conventional paradigm(s) and might not have been (or was not) received well by peer reviewers of a regular proposal.	1	2	3	4
c. My research idea was so novel that it might not have been (or was not) fully understood by peer reviewers of a regular proposal.	1	2	3	4
d. My research idea was so novel that it might not have been fully understood by the research community.	1	2	3	4
e. My research idea was controversial and might not have been (or was not) received well by peer reviewers of a regular proposal.	1	2	3	4
f. My research idea crossed disciplinary lines, and the pool of peer reviewers qualified to assess a regular proposal on this topic was/is quite small.	1	2	3	4
g. Peer reviewers of a regular proposal might have (or did) consider me to be too inexperienced to conduct the work successfully.	1	2	3	4
h. Reviewers of a regular proposal might have (or did) deem the equipment and research “climate” at my institution to be inadequate for my research to succeed.	1	2	3	4
i. The proposal requirements were short and simple.	1	2	3	4
j. The funding and duration were about all I needed at the time.	1	2	3	4
k. I needed a quick decision.	1	2	3	4

l. My usual funding source had no similar mechanism.	1	2	3	4
m. My research idea was not sufficiently developed for a regular proposal.	1	2	3	4
n. Other ( <i>PLEASE SPECIFY</i> )	1	2	3	4
o. Other ( <i>PLEASE SPECIFY</i> )	1	2	3	4
p. Other ( <i>PLEASE SPECIFY</i> )	1	2	3	4

**A4. Before applying for the referenced SGER, had you submitted a regular proposal on the same research topic that NSF declined?**

(*MARK ONE*)

- 1 Yes → *CONTINUE*
- 2 No → *SKIP TO QUESTION A6*

**A5. Whose idea was it to resubmit your research idea in an SGER proposal?**

(*MARK ALL THAT APPLY*)

- 1 NSF program director or other NSF staff member
- 2 Someone at my institution
- 3 Someone outside of NSF and my institution
- 4 I decided on my own, without suggestion from anyone else

**A6. At what point before submission did you discuss the SGER proposal with the NSF program director who would be handling it?**

(*MARK ONE*)

- 0 We did not discuss it before it was submitted → *SKIP TO SECTION B*
- 1 Before writing had begun (idea stage) → *CONTINUE*
- 2 When it was partly written → *CONTINUE*
- 3 When it was nearly ready to submit → *CONTINUE*

**A7. In the course of pre-submittal discussions, to what extent did the NSF program director ... ?**

(*MARK ONE IN EACH ROW*)

	<b>To what extent?</b>			
	<b>Not At All</b>	<b>Some-what</b>	<b>A Fair Amount</b>	<b>A Great Deal</b>
a. Seem well informed about SGERs	1	2	3	4
b. Seem supportive of SGERs in general	1	2	3	4
c. Help you consider the advantages and disadvantages of preparing an SGER proposal	1	2	3	4
d. Encourage you to prepare an SGER proposal	1	2	3	4
e. Encourage you to submit a regular proposal instead	1	2	3	4
f. Other comment about your pre-submittal discussions with the NSF program director ( <i>PLEASE SPECIFY</i> )	1	2	3	4

g. Other comment about your pre-submittal discussions with the NSF program director ( <i>PLEASE SPECIFY</i> )	1	2	3	4

## SECTION B: YOUR SGER PROJECT

**B1a. NSF defines SGER research in terms of the five characteristics described below. Which of these characteristics apply to the referenced SGER project?**

(MARK ALL THAT APPLY)

1	Preliminary work on untested and novel idea(s) <i>This is defined as research in new areas or on new ideas not researched before, for which little (if any) data exist, which have few (if any) references in the literature, and which may require new methods. Emphasis is on the newness and novelty of the research area being addressed.</i>	
2	Venture into emerging and potentially transformative research ideas <i>“Emerging research” is defined as a research area in which a small number of non-conclusive findings exist that suggest a new field of study. It may develop into an accepted, or consensus-based, research area.</i>  <i>“Transformative research” is driven by ideas that stand a reasonable chance of radically changing our understanding of an important existing scientific concept or leading to the creation of a new paradigm or field of science. Such research also is characterized by its challenge to current understanding or its pathway to new frontiers.</i>	
3	Application of new expertise or new approaches to an “established” research topic	
4	Work having a severe urgency with regard to availability of, or access to, data, facilities, or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events	→ Did you receive the SGER award in sufficient time to take advantage of the urgent opportunity?  (MARK ONE) 1 Yes 2 No ( <i>PLEASE EXPLAIN</i> ) <hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
5	Effort of similar character likely to catalyze rapid and innovative advances  <i>“Innovative advances” in scientific understanding emerge from step-by-step, project-focused research, with new projects building upon the results of previous studies or testing long-standing hypotheses and theories. Innovative advances extend or shift prevailing paradigms over time. Innovation is evolutionary, whereas transformative research is revolutionary.</i>	

6 Other characteristic (*PLEASE DESCRIBE*)

\_\_\_\_\_

**B1b. Which one of the characteristics you marked in question B1a is the primary characteristic of the referenced SGER project?**

*(MARK ONE. IF TWO CHARACTERISTICS ARE EQUALLY PRIMARY, PLEASE MARK ONE AND SPECIFY THE OTHER EQUALLY PRIMARY CHARACTERISTIC IN THE SPACE PROVIDED BELOW)*

- 1 (1) Preliminary work on untested and novel idea(s)
- 2 (2) Venture into emerging and potentially transformative research ideas
- 3 (3) Application of new expertise or new approaches to an “established” research topic
- 4 (4) Work having a severe urgency with regard to availability of, or access to, data, facilities, or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events
- 5 (5) Effort of similar character likely to catalyze rapid and innovative advances
- 6 (6) Other characteristic (as described in question B1a)

*(ANSWER ONLY IF TWO CHARACTERISTICS ARE EQUALLY PRIMARY)*

**Which one other characteristic is equally primary?** (*PLEASE SPECIFY THE NUMBER (1–6) OF THE OTHER PRIMARY CHARACTERISTIC*) \_\_\_\_\_

**B1c. Was the referenced SGER project primarily about convening a workshop?**

*(MARK ONE)*

- 1 Yes
- 2 No



**B2. Excluding yourself and any co-PIs, how many of the following types of people worked (or are working) on the referenced SGER project?**

(IF YOU ARE NOT CERTAIN ABOUT THE NUMBER, PLEASE ENTER YOUR BEST ESTIMATE.  
IF NONE, PLEASE ENTER '0'.)

	<b>Total Number of Participants</b> <i>(excluding yourself and co-PIs)</i>	<b>Number of Women</b> <i>(excluding yourself and co-PIs)</i>	<b>Number of Hispanics, Blacks/African-Americans, American Indians/Alaska Natives, and Native Hawaiians/ Pacific Islanders</b> <i>(total women and men, excluding yourself and any co-PIs)</i>
a. Undergraduate students			
b. Graduate students			
c. Postdocs			
d. Postsecondary faculty or researchers			
e. K-12 teachers or students			
f. Other professionals			
g. Other ( <i>PLEASE SPECIFY</i> ) _____			

**B3. Did (or does) the SGER project involve ...?**

(MARK ALL THAT APPLY)

- 1 Collaboration of your institution/organization with one or more industries/businesses → Please list the collaborating industries/businesses  
\_\_\_\_\_
- 2 Collaboration of your institution/organization with one or more Federal laboratories → Please list the collaborating Federal laboratories  
\_\_\_\_\_
- 3 Collaboration of your institution/organization with one or more state or local government entities → Please list the collaborating state/local government entities  
\_\_\_\_\_
- 4 Collaboration of your institution/organization with one or more community colleges, women's colleges, minority institutions, EPSCoR institutions, or primarily undergraduate institutions → Please list the collaborating institutions  
\_\_\_\_\_
- 5 Contribution to knowledge about a topic of public interest (e.g., environment, public health, national security) → Please specify the general topic(s)  
\_\_\_\_\_
- 6 Dissemination of results to the general public
- 7 Accessing unique resources
- 8 Other (*PLEASE SPECIFY*)  
\_\_\_\_\_

**B4. NSF would like to learn about the outcomes of your SGER project, including both expected and unexpected findings. Please indicate whether or not your SGER project has led to or resulted in each of the following, either during your project or afterward.**

(MARK ONE IN EACH ROW)

	Yes	No
<b>Your research plan</b>		
Identification of faulty reasoning or other problems in your research plan .....	1	2
Refinement of your research questions .....	1	2
Other (PLEASE SPECIFY) _____	1	2
Other (PLEASE SPECIFY) _____	1	2

**Contributions to knowledge**

Preliminary findings about novel or previously untested ideas .....	1	2
New avenues of research/new hypotheses .....	1	2
Sufficient data to prepare a follow-up proposal ...	1	2
Development of new techniques, research tools, and/or instruments.....	1	2
Modification of existing techniques, research tools, and/or instruments.....	1	2
Rapid and innovative research advances.....	1	2
Potentially transformative findings .....	1	2
Data on a disaster or other short-lived event or situation requiring a quick response .....	1	2
Other (PLEASE SPECIFY) _____	1	2
Other (PLEASE SPECIFY) _____	1	2

**Dissemination of findings**

Development of a new database available to other researchers .....	1	2
Addition of data to, or other enhancement of, an existing database available to other researchers...	1	2
Publication of books or articles in peer-reviewed journals .....	1	2
Patent application(s).....	1	2
Dissemination of findings to public .....	1	2
Presentation of findings at meetings, conferences, or workshops .....	1	2
Other (PLEASE SPECIFY) _____	1	2
Other (PLEASE SPECIFY) _____		

**B5. Have you subsequently (or do you plan to) use the results from this SGER project as a basis for preparing one or more regular proposals?**

(MARK ONE)

- 1 Yes → CONTINUE
- 2 No → SKIP TO QUESTION B10

**B6. Have you submitted any subsequent proposals yet?**

(MARK ONE)

- 1 Yes
- 2 No

**B7. To which agencies or other funding sources did you (or will you) submit these proposals?**

(MARK ALL THAT APPLY)

- 01 National Science Foundation (NSF) → → (if already submitted to NSF, please provide the proposal number(s), title(s), and/or approximate date(s), as convenient)

- 
- 02 National Aeronautics and Space Administration (NASA)
  - 03 National Institutes of Health (NIH)
  - 04 National Oceanographic and Atmospheric Administration (NOAA)
  - 05 U.S. Department of Agriculture (USDA)
  - 06 U.S. Department of Energy (DOE)
  - 07 U.S. Geological Survey (USGS)
  - 08 U.S. Air Force Office of Scientific Research (AFOSR)
  - 09 U.S. Army Research Office (ARO)
  - 10 U.S. Office of Naval Research (ONR)
  - 11 U.S. Defense Advanced Research Projects Agency (DARPA)
  - 12 Industry/business
  - 13 Private foundation
  - 14 Other (PLEASE SPECIFY)
- 

**B8. Have any of these proposals been awarded?**

(MARK ONE)

- 1 Yes → CONTINUE
- 2 No, it is (they are) still in review → SKIP TO QUESTION B10
- 3 No, it was (they were) declined → SKIP TO QUESTION B10

**B9. Which agencies or other sources provided funding for these awards?**

*(MARK ALL THAT APPLY)*

- 01 National Science Foundation (NSF)
  - 02 National Aeronautics and Space Administration (NASA)
  - 03 National Institutes of Health (NIH)
  - 04 National Oceanographic and Atmospheric Administration (NOAA)
  - 05 U.S. Department of Agriculture (USDA)
  - 06 U.S. Department of Energy (DOE)
  - 07 U.S. Geological Survey (USGS)
  - 08 U.S. Air Force Office of Scientific Research (AFOSR)
  - 09 U.S. Army Research Office (ARO)
  - 10 U.S. Office of Naval Research (ONR)
  - 11 U.S. Defense Advanced Research Projects Agency (DARPA)
  - 12 Industry/business
  - 13 Private foundation
  - 14 Other (*PLEASE SPECIFY*)
- 

**B10. To date, has your SGER research idea (including subsequent work done by other people) resulted in anything transformative?**

*(MARK ONE)*

- 1 Yes → *PLEASE DESCRIBE BELOW*
- 2 Maybe, not sure → *PLEASE EXPLAIN BELOW*
- 3 No → *CONTINUE*

*(IF YOU ANSWERED "YES" OR "MAYBE, NOT SURE" PLEASE DESCRIBE/EXPLAIN HERE)*

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## SECTION C: Your Views About SGER

**C1. With respect to the referenced SGER award, how much do you disagree or agree with the following statements?**

*(MARK ONE IN EACH ROW)*

	Disagree	Disagree Somewhat	Agree Somewhat	Agree	Have No Idea/ Doesn't Apply
a. Without this SGER award, I would have pursued similar research, but much later.	1	2	3	4	9
b. Without this SGER award, I would not have pursued the same research at all.	1	2	3	4	9
c. Without this SGER award, I would have missed the opportunity for timely access to certain data, equipment, sites, or facilities.	1	2	3	4	9
d. The amount of this SGER award was sufficient to complete the work as proposed.	1	2	3	4	9
e. The duration of this SGER award was sufficient to complete the work as proposed.	1	2	3	4	9
f. The time from submission of this SGER proposal to the date funding began was reasonable.	1	2	3	4	9

**C2. Was your experience with this SGER award such that you would apply for another one?**

*(MARK ONE)*

1 I already have done so

2 I would if the opportunity arose

3 No → → → → Why not? *(PLEASE EXPLAIN)*

→ → \_\_\_\_\_

**C3. Did you encounter any problems or challenges due to the design of the SGER mechanism?**

*(MARK ONE)*

1 Yes → *PLEASE DESCRIBE*

\_\_\_\_\_

2 No → *CONTINUE*

**C4. Please comment on any other aspects of the SGER proposal and award process, including preparation, submittal, NSF decision making, and implementation.**

\_\_\_\_\_

## SECTION D: BACKGROUND INFORMATION

The following information will help us interpret your responses to the previous questions. All of your responses are confidential and will be used only in combination with those from other respondents. Information stored in the SRI SGER database will be stripped of individual PI names and award/proposal information.

### D1. What is your most advanced degree and when did you receive it?

(MARK ALL THAT APPLY; IF YOU RECEIVED BOTH A RESEARCH DOCTORATE AND A MEDICAL DOCTORATE, PLEASE MARK BOTH CATEGORIES)

- 1 Research doctorate (e.g., PhD, DSc) → Year of receipt \_\_\_\_\_
- 2 Medical doctorate (e.g., MD, DDS, DVM, PsyD) → Year of receipt \_\_\_\_\_
- 3 Other (PLEASE SPECIFY)  
\_\_\_\_\_ → Year of receipt \_\_\_\_\_

### D2. What is your sex?

(MARK ONE)

- 1 Male
- 2 Female

### D3. Are you Hispanic or Latino?

(MARK ONE)

- 1 Yes
- 2 No

### D4. What is your race?

(MARK ALL THAT APPLY)

- 1 American Indian or Alaska Native
- 2 Native Hawaiian or Pacific Islander
- 3 Asian
- 4 Black or African-American
- 5 White

## **SECTION E: YOUR VIEWS ABOUT THIS SURVEY**

**E1. If there are matters about SGER that you feel were not adequately addressed in this survey, please tell us about them.**

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**E2. If you have any comments about the survey itself, please enter them here.**

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**PLEASE ENTER THE TIME IT IS NOW: \_\_\_\_\_ (hh:mm)**

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS STUDY**

If you have questions, please contact Lori Thurgood at [lori.thurgood@sri.com](mailto:lori.thurgood@sri.com)