Appendix B.
Principal/Co-Principal Investigator Survey

Guidelines for Reviewers

Note, because of the complicated skip patterns that will be programmed, the reviewer version of the survey, by necessity, requires that there be embedded among the questions notes documenting skip patterns, alternate wording of questions, and information about which respondents will receive a particular question. These programming notes appear in a small, blue, sans-serif font. Some questions also contain placeholders for text that varies depending on existing information (e.g., the start and end dates of a grant period) or a respondent's answer to an earlier item. These placeholders appear as [BROWN CAPITALIZED TEXT] inside brackets.

The online survey will automatically incorporate skip patterns and present the appropriate text for placeholders and question wording to the respondent. Also note that **boldface type** is used for emphasis, while an asterisk (*) indicates that a roll-over definition is available to online respondents (see Glossary, below). Surveys will employ a variety of response structures and will be programmed to use radio buttons, checkboxes, text boxes, and drop down boxes. Examples of each are shown below.

Radio Buttons – Allow only one answer to a question. Click circle to select option. To change answer, click another button.

> Are you currently employed?
> - ◉ Yes
> - ○ No

Checkboxes – Allow multiple answers to a question. Click a box to select a response. Click a checked box to remove the choice.

> Which of the following degrees you have completed? *Check all that apply.*
> - ☐ Doctoral degree
> - ☒ Master's degree
> - ☐ Post-baccalaureate certificate
> - ☒ Bachelor's degree

Text boxes – Allow respondent to type answer within a box. The number inside brackets indicates how many characters the respondent can enter into the textbox.

> What is your job title and what do you do in your job? [textbox, 2500]

Drop down – Allows respondent to select one answer from a list of specified list of options. Respondents click on box, then scroll to select option.

> In what month and year did you complete your graduate degree?
> Month: [Drop box]
> Year: [Drop box]

Glossary

Foreign: When referring to individuals, **"foreign"** means people who are **based primarily in institutions or locations outside the U.S.**, regardless of their citizenship or country of origin. (In other words, "foreign" could refer to a U.S.-citizen who is primarily based at an institution outside the U.S.) **When referring to places, "foreign"** means countries or locations outside the 50 United States or the District of Columbia.

Institution: Typically refers to a university, college or other higher educational entity but also includes private or governmental research institutes, museums, laboratories, foundations, non-profit or for-profit businesses, or other organizations where project participants may be employed or affiliated.

Placeholders

SURVEY_DATE / NOVEMBER 15, 2015: The first day that the survey is fielded will serve as a common reference date across respondents. November 15, 2014 is currently filled as a hypothetical survey fielding date. After OMB approval, this date will be replaced with the actual field date of the survey.

PIRE/COMPARISON_PROJECT_NAME: The title of the PI's or co-PI's project funded by PIRE or the comparison program.

COMPARISON_PROGRAM, COMPARISON_PROGRAM_ACRONYM: The name (or acronym) of the NSF program from which a PI in the comparison group received an award. For example, NSF's "Dynamics of Coupled Natural and Human Systems" is one of the programs from which projects in the comparison group are drawn.   The program acronym is "CNH."

ABBREVIATED_PROJECT_NAME: Because project titles are often long, a shortened name will be introduced and substituted for the full title in survey questions.

AWARD_START_DATE: Date when the PIRE/COMPARISON award period began, according to NSF records.

AWARD_END_DATE: Date when the PIRE/COMPARISON award period ended (if applicable), according to NSF records. If a project is still active, the SURVEY_DATE will be used as the most recent reference date for questions.

PARTICIPATION_START_DATE: Collected during the survey, the date the respondent reports first engaging in project activities. Not all co-PIs, postdocs, graduate students or undergraduates begin their participation on the date when the award officially commences.

PARTICIPATION_END_DATE: Collected during the survey, the date the respondent reports last engaging in project activities. Not all co-PIs, postdocs, graduate students or undergraduates continue participating on the project until its official end date.

URL TO AWARD ABSTRACT: Hypertext link to the award abstract posted on nsf.gov

HIGHEST_DEGREE: Collected during the survey, the highest post-secondary degree the respondent has completed.

Collaboration in Science and Engineering: Survey of Principal Investigators in the National Science Foundation's PIRE and [COMPARISON_PROGRAM] programs

This survey is about your role as a current or former Principal or Co-Principal Investigator of a National Science Foundation (NSF) award, "[PIRE/COMPARISON_PROJECT_NAME]". You can view a description of this award by clicking <URL TO AWARD ABSTRACT>. The survey asks about research conducted as part of this award and your collaborations with other researchers, postdocs and students. None of the questions are of a sensitive nature, but you are free to skip any question you prefer not to answer.

Researchers at Abt Associates, an independent research firm with over 40 years of experience in higher education, are conducting this survey as part of an evaluation of NSF's *Partnerships for International Research and Education* (PIRE) program.

For the survey to be useful, we need Principal Investigators and Co-Principal Investigators **of PIRE awards** [for comparison group respondents only: **and of other NSF award programs such as [COMPARISON_PROGRAM]**] to participate. .

Participation is voluntary. Choosing to participate or not will have no effect on your current or future receipt of NSF funding (we will not reveal to NSF whether or not you have participated). **We will protect your privacy** to the extent permissible by law by separating the responses you provide from your name, contact information and other identifiers (e.g., your computer's IP address, your institution's name). Your survey results will be summarized along with the responses of other PIs in aggregate statistical form only. We will give NSF data from survey respondents only after we have removed personally identifiable information about you.

Questions? See the Frequently Asked Questions page <FAQs>; or contact the study director, Carter Epstein of Abt Associates Inc. (toll-free: 1-800-XXX-XXX; email: NSF_PIRE_Abt@abtassoc.com) or contact John Tsapogas at NSF (jtsapoga@nsf.gov). For questions about participating in this research study, contact Abt's Institutional Review Board (XXX-XXX-XXXX; email: irb@abtassoc.com. This study's IRB approval number is #XXXX.

[CONTINUE]

MODULE A: YOUR ROLE IN THE [PIRE/COMPARISON] AWARD

A1. To confirm that we've reached the right person, we'd like to begin with a few questions about you.

Is your name [First Name, Middle Name/Initial, Last Name]?

❍ Yes, this is correct.
❍ No, my name has changed or my name is misspelled above. My name is: [textbox, 75]
❍ No, I'm not the person named above.

If A1=   Yes, go to A2.
If A1=   My name has changed or my name is misspelled above, go to A2.
If A1=   No, I'm not the person named above, go to **EXIT SCREEN** and Flag for follow-up.

A2. Are you (or were you at one time) a Principal Investigator or Co-Principal Investigator of the NSF award, [PIRE/COMPARISON_PROJECT_NAME]?

❍ Yes
❍ No

If A2=   Yes, go to A3.
If A2=   No, go to **EXIT SCREEN** and Flag for follow-up.

A3.   The next questions ask about the dates and duration of your participation in the [PIRE/COMPARISON PROJECT_NAME] project.

The [ABBREVIATED_PROJECT_NAME] project officially began in [AWARD_START_DATE]. When did you **first** participate in activities associated with this award? If you are unsure of the month, please include your best estimate. *Please enter the month and year.*

❑ I have not yet begun participating in the PIRE project

Month: <dropdown from January to December>
Year: <dropdown from AWARD_YEAR to 2014>

Let PARTICIPATION_START_DATE = "Month, Year" entered.
if date entered ([PARTICIPATION_START_DATE]) is earlier than [AWARD_START_DATE], display the following note:

⚠️   You participated in activities for this project **prior to** its official starting date ([AWARD_START_DATE]). We recognize that activities related to a project may begin before the project's official start date. However, **please read survey items carefully** because some items may ask you to **exclude** activities that occurred before the project's official start date of [AWARD_START_DATE].

If "Not yet begun participating" is checked, go to EXIT SCREEN.
Else, let PARTICIPATION_START_DATE= A3_Month, A3_Year.
- • If the PIRE/COMPARISON award is no longer active, go to A5 (were you still contributing...in the month the award period ended?)
- • If the PIRE/COMPARISON award is still active, go to A4 (have you completed your contributions to the project?)

A4 is shown only if PIRE/COMPARISON award is still active. If award is not active, skip to A5.

A4.   As of [SURVEY_DATE], have you completed your contributions to the [ABBREVIATED_PROJECT_NAME] project? *Please mark Yes or No.*

If you will be engaging in research or educational activities that are part of this project in the future, please answer "No, I am still contributing – or I will be contributing in the future—to this project."

○ Yes, I have completed my contributions to this project.
○ No, I am still contributing – or I will be contributing in the future—to this project..

If A4=   Yes, go to A6 (to get PARTICIPATION_END_DATE).
If A4=   No, let PARTICIPATION_END_DATE = SURVEY_DATE. Go to A7 (duration of PIRE participation).
If A4=   Missing, let PARTICIPATION_END_DATE = SURVEY_DATE (i.e., classify respondent as still-active contributor).   Go to A7 (duration of PIRE participation).

A5.   The official award period for the [ABBREVIATED_PROJECT_NAME] project ended in AWARD_END_MONTH, AWARD_END_YEAR. Were you still contributing to this project in the month that the award period ended?

❍ Yes
❍ No

A5a.

⚠   We recognize that you may have conducted research or engaged in educational activities associated with the [ABBREVIATED_PROJECT_NAME] project **after** its official end date ([AWARD_END_DATE]), **but please read survey items carefully** because some items ask you to distinguish between activities that occurred **before** and activities that occurred **after** the official end date of [AWARD_END_DATE].

A6.   When did you last contribute to research or other activities associated with the [ABBREVIATED_PROJECT_NAME] project?   *Please enter the month and year*.

Month: <dropdown from January to December>
Year: <dropdown from AWARD_START_YEAR to [SURVEY_DATE_YEAR OR AWARD_END_YEAR]>

If PARTICIPATION_START_DATE equal to or later than AWARD_START_DATE, display version 1.
If PARTICIPATION_START_DATE earlier than AWARD_START_DATE, display version 2.

VERSION 1:

A7.   Between [PARTICIPATION_START_DATE] and [PARTICIPATION_END_DATE], about what percent time, on average, [have you been/were you] conducting research or educational activities associated with the project: [ABBREVIATED_PROJECT_NAME]?   For example, if you devoted an average of 3 months per year to the project, you would answer 25 percent. If you are unsure, please enter your best approximation.

If PIRE/COMPARISON award not active AND respondent was still contributing to the project in the final month of the award period (see Item A5), display the following warning:

⚠   We recognize that you may have conducted research (or engaged in educational activities) related to the project **after** [AWARD_END_DATE]}, but please **do not include** that time in your estimate.

VERSION 2:

A7.   Between [AWARD_START_DATE] (the offical start date) and [PARTICIPATION_END_DATE], about what percent time, on average, [have you been/were you] conducting research associated with the project: [ABBREVIATED_PROJECT_NAME]? For example, if you devoted an average of 3 months per year to the project, you would answer 25 percent. If you are unsure, please enter your best approximation.

Display the following warning:

⚠   We recognize that you may have conducted research (or engaged in educational activities) related to the project **before** [AWARD_START_DATE]} {(If PIRE/COMPARISON award not active AND respondent was still contributing to the project in the final month of the award period (see Item A9)}: or **after** [AWARD_END_DATE]}, but please **do not include** that time in your estimate.

Percent time: _____

Go to Module B.

MODULE B: COLLABORATIONS

In this section, we ask about your collaborations with others, both during and subsequent to your participation in the [ABBREVIATED_PROJECT_NAME] project and collaborations unrelated to the project.

B1a.　While conducting research for the [ABBREVIATED_PROJECT_NAME] project, [have you collaborated/did you collaborate] with any of the following?　*Select Yes or No in each row.*

Row	I [have collaborated/collaborated] with:		
A	Researchers (senior- or postdoctoral-level) based primarily **in the U.S.**	○	○
B	Researchers (senior- or postdoctoral-level) based primarily **outside the U.S.**	○	○

B1b. Between (PARTICIPATION_END_DATE) and SURVEY_DATE, have you collaborated with any U.S. or foreign member of the [ABBREVIATED_PROJECT_NAME] project team? *Please answer Yes or No for each row below.*

Note: By **"foreign"** member of the project team, we mean someone **based primarily at an institution or location outside the U.S.**

Row	Since my participation in the project ended, I have collaborated with:	Yes	No
A	One or more project members who were—and are still—based primarily **in the U.S.**	○	○
B	One or more project members who were —and are still—based primarily **outside the U.S.**	○	○
C	One or more project members who were based primarily **in the U.S.** but *who are now* based primarily **outside the U.S.**	○	○
D	One or more project members who were based primarily **outside the U.S.** but *who are now* based primarily **in the U.S.**	○	○

B1c. When was the most recent time you have collaborated with a member of the [ABBREVIATED_PROJECT_NAME] project team?

Row	Most recent collaboration with. . .	Within the past 6 months	6 months to less than 1 year ago	1 year to less than 2 years ago	2 years to less than 4 years ago	4 or more years ago
A	Display if B1b_RowA=yes One or more project members who were —and are still—based primarily **in the U.S.**	❍	❍	❍	❍	❍
B	Display if B1b_RowB=yes One or more project members who were —and are still—based primarily **outside the U.S.**	❍	❍	❍	❍	❍
C	Display if B1b_RowC=yes One or more project members who were based primarily **in the U.S.** but *who are now* based primarily **outside the U.S.**	❍	❍	❍	❍	❍
D	Display if B1b_RowD=yes One or more project members who were based primarily **outside the U.S.** but *who are now* based primarily **in the U.S.**	❍	❍	❍	❍	❍

If B1b_ RowB=No and B1b_RowC=No and B1b_RowD=No, skip to B1e (collaborated with non- PIRE/COMPARISON foreign researchers?)
If B1b_RowB=Yes or B1b_RowC=Yes or B1b_RowD=yes, go to B1d (describe most recent collaboration with foreign researcher)

B1d.   Which of the following describe your collaboration(s) with someone from the [PIRE/COMPARISON] project team who was—or who is now—based primarily **outside the U.S.** (that is, with a **foreign*** partner)? *Check all that apply.*

Rollover definition: By **"foreign"** partner, we mean someone **who was, or who is now, based primarily at an institution or location outside the U.S.,** regardless of this person's citizenship or country of origin.

❑ I have traveled outside the U.S. to work with one or more foreign partners
❑ I have met with one or more foreign partners at conferences outside the U.S.
❑ I have (or have had) a position at an institution outside the U.S.
❑ A foreign partner has traveled to the US to work with me
❑ A former foreign partner has (or has had) a position at an institution in the U.S.
❑ A former U.S.-based partner has (or has had) a position at an institution outside the U.S.
❑ I have planned one or more research projects with a foreign partner
❑ I have conducted one or more research projects with a foreign partner
❑ I have discussed developments in our research field(s) with a foreign partner
❑ I have shared data or other resources with a foreign partner
❑ None of the above

B1e.   Between [PARTICIPATION_END_DATE] and [SURVEY_DATE], have you collaborated with any **foreign*** partner (i.e., someone based primarily at an institution outside the U.S.) who was **not affiliated** with the [ABBREVIATED_PROJECT_NAME] project?

Rollover: By **"foreign"** partner, we mean someone **who was, or who is now, based primarily at an institution or location outside the U.S.** regardless of this person's citizenship or country of origin.

If a partner was based primarily at an institution outside the U.S. during some part of the collaboration, please answer yes. Otherwise, answer no.

❍ Yes
❍ No

B1f. Between (PARTICIPATION_END_DATE) and SURVEY_DATE, how many **foreign** partners have you collaborated with?

Note: By **"foreign"** partner, we mean someone **who was, or who is now, based primarily at an institution or location outside the U.S.** regardless of this person's citizenship or country of origin.

- ○ 1
- ○ 2
- ○ 3
- ○ 4 or more

B1g. Please think about the one foreign partner—that is, someone based primarily outside the U.S—with whom you have collaborated the **longest**.

(*i*) As of SURVEY_DATE, how long have you been collaborating with this person? You may enter months, years, or any combination:
   Years: <0 years to 30 or more years> **and Months**: <1 month to 11 months>

(*ii*) Is this person **currently** based primarily at an institution:
- ○ Outside the U.S.
- ○ Within the U.S.

(*iii*) As of SURVEY_DATE, how long [has this person been/was this person] based primarily at an institution outside the U.S.? If you are unsure please select your best guess.
   Years: <0 years to 30 or more years> **and Months**: <1 month to 11 months>

MODULE C: PROJECT EXPERIENCES

Only PIRE respondents see items C1a-C1c. If COMPARISON PI/COPI, skip to C2.

C1a.   [Have you been/were you] involved in planning, designing or conceptualizing the research or educational activities for the [ABBREVIATED_PROJECT_NAME] project?

◯ Yes
◯ No

If C1a=No (was not involved in planning), skip to C2.
If C1a=Yes (was involved in planning), go to C1b.

C1b is shown if C1a=Yes (was involved in planning). Only PIRE respondents see items C1a-C1b. If COMPARISON PI/COPI, skip to C2.

C1b.   During the planning of the project, did you meet in person (face-to-face) with foreign* members of the project team —that is, individuals based primarily outside the U.S.? *Please mark yes or no.*

◯ Yes
◯ No

C2.   As part of your participation in the [ABBREVIATED_PROJECT_NAME] project, [have you traveled/did you travel] outside the U.S. to conduct research or educational activities (**other than travel solely to** attend a professional conference)?

If your **only** foreign travel (to date) for this project was for the purpose of attending professional conference, please answer "no."

◯ Yes
◯ No

If C2=Yes, then go to C3.
If C2=No, go to C6

C3.   Where outside the U.S., [have you traveled/did you travel] for activities related to the [ABBREVIATED_PROJECT_NAME] project? Do not include brief stops due to travel layovers or delays or stays lasting less than 24 hours. You may indicate up to five different countries.

If project is not active:
Please **exclude** any trips for which you departed the U.S. **after** [AWARD_END_DATE].
If project is active:
Please **exclude** any trips for which you departed the U.S. **after** [SURVEY_DATE].

1st country
Select the first letter of the country to see a list
[populated with drop-down list of countries. See APPENDIX H.2]

A	B	C	D	E	F	G	H	I-J	K
L	M	N	O	P	Q-R	S	T	U-V	W-Z

2nd country

A	B	C	D	E	F	G	H	I-J	K
L	M	N	O	P	Q-R	S	T	U-V	W-Z

3rd country

A	B	C	D	E	F	G	H	I-J	K
L	M	N	O	P	Q-R	S	T	U-V	W-Z

4th country

A	B	C	D	E	F	G	H	I-J	K
L	M	N	O	P	Q-R	S	T	U-V	W-Z

5th country

A	B	C	D	E	F	G	H	I-J	K
L	M	N	O	P	Q-R	S	T	U-V	W-Z

C4. While conducting these activities **outside the U.S.** as part of the [ABBREVIATED_PROJECT_NAME] project, [have you interacted/were you interacting] directly with any foreign* project members (that is, project members who were based primarily at an institution outside the U.S.)? *Select Yes or No in each row.*

Rollover definition:

By "**foreign**" partner, we mean someone **who was based primarily at an institution or location outside the U.S.** regardless of this person's citizenship or country of origin. **When referring to places, "foreign"** means countries or locations outside the 50 United States or the District of Columbia.

Row	While I was outside the U.S. for the project, I interacted directly with:	Yes	No
A	Senior- or postdoctoral-level partners based primarily **outside the U.S.**	○	○
B	Graduate or undergraduate students based primarily **outside the U.S.**	○	○

C5a. As of [SURVEY_DATE], how many times [have you traveled/did you travel] outside the U.S. for activities related to the [ABBREVIATED_PROJECT_NAME] project? **Exclude** any trip you took **only** to attend a professional conference.

[if award is active display note:
Please **exclude** any trip for which you departed the U.S. **after** [SURVEY_DATE]
[if award is no longer active display note:
Please **exclude** any trip for which you departed the U.S. **after** [AWARD_END_DATE]

○ Once
○ More than once: Please enter the total number of trips as of: __

If C5a= "Once," skip to C5c. If C5a= "More than once," go to C5b.

C5b.   Thinking about these [NUMBER OF TRIPS FROM C5a] trips outside the U.S., how many consecutive days, weeks or months were you outside the U.S. for activities related to the [ABBREVIATED_PROJECT_NAME] project? Please indicate the number of consecutive days, weeks or months **on average**, and the number of consecutive days, weeks or months for the **single longest** such trip?

On average, a trip outside the U.S. for activities related to the project lasted how many consecutive days/weeks/months?	__	<select days, weeks or months>
Single longest trip outside the U.S. for activities related to the project lasted how many consecutive days/weeks/months?	__	<select days, weeks or months>

C5c.   How many consecutive days, weeks or months were you outside the U.S. for activities related to the [ABBREVIATED_PROJECT_NAME] project?

How many consecutive days/weeks/months did this trip outside the U.S. (for activities related to the project) last?	__	<select days, weeks or months>

MODULE D: FUNDING AND RESULTS OF YOUR NSF AWARD

D1a.   Did any **foreign*** partner on the [ABBREVIATED_PROJECT_NAME] project receive funding to support research or educational activities for the project? A **foreign** partner is someone **who is based primarily at an institution or location outside the U.S.**

Do not include any funding awarded to PI or coPI based primarily in the U.S.

❍ Yes
❍ No
❍ Not applicable, there were no foreign partners on the project [this response option is listed only for COMPARISON respondents]
❍ Don't know

D1b.   Please estimate the total amount of funding that **all foreign* partners combined** received to support research or educational activities for the project. A foreign partner is someone who is based primarily at an institution outside the U.S.

Please respond in terms of US dollars (USD). For help converting foreign currencies, see:
        http://www.oanda.com/currency/converter/

Please mark one response:

❍ I don't know
❍ Less than $50,000 USD   ❍ $500,001 to $550,000 USD   ❍ 1,000,001 to 1,050,000 USD
❍ $50,001 to $100,000 USD   ❍ $550,001 to $600,000 USD   ❍ 1,050,001 to 1,100,000 USD
❍ $100,001 to $150,000 USD   ❍ $600,001 to $650,000 USD   ❍ 1,100,001 to 1,150,000 USD
❍ $150,001 to $200,000 USD   ❍ $650,001 to $700,000 USD   ❍ 1,150,001 to 1,200,000 USD
❍ $200,001 to $250,000 USD   ❍ $700,001 to $750,000 USD   ❍ 1,200,001 to 1,250,000 USD
❍ $250,001 to $300,000 USD   ❍ $750,001 to $800,000 USD   ❍ 1,250,001 to 1,300,000 USD
❍ $300,001 to $350,000 USD   ❍ $800,001 to $850,000 USD   ❍ 1,300,001 to 1,350,000 USD
❍ $350,001 to $400,000 USD   ❍ $850,001 to $900,000 USD   ❍ 1,350,001 to 1,400,000 USD
❍ $400,001 to $450,000 USD   ❍ $900,001 to $950,000 USD   ❍ 1,400,001 to 1,450,000 USD
❍ $450,001 to $500,000 USD   ❍ $950,001 to $1,000,000 USD   ❍ 1,450,000 to 1,500,000 USD
                                                                                                                    ❍ More than 1,500,000 USD

D2a. Aside from the [ABBREVIATED_PROJECT_NAME] award itself, [have you received/did you receive] **other funding** from NSF or other sources to support another part of the research program for which you received the [PIRE/COMPARISON_PROGRAM] award?

Include funding only for which you [are/were] a PI or coPI. **Do not include** funding for conferences or symposia.

❍ Yes
❍ No

D2b. Please estimate the total **amount of additional funding** from all other sources (other than from the [ABBREVIATED_PROJECT_NAME] program) you received to support your research program in areas related to your [PIRE/ COMPARISON_PROGRAM] funded research.

Include funding only for which you [are/were] a PI or coPI. **Do not include** funding for conferences or symposia.Please **do not include** funding obtained by foreign* partners. if respondent is co-PI, display: The survey is designed to ask Lead PIs for this award about any funding from foreign partners.

Please mark one response:

❍ Less than $50,000	❍ $500,001 to $550,000	❍ 1,000,001 to 1,050,000
❍ $50,001 to $100,000	❍ $550,001 to $600,000	❍ 1,050,001 to 1,100,000
❍ $100,001 to $150,000	❍ $600,001 to $650,000	❍ 1,100,001 to 1,150,000
❍ $150,001 to $200,000	❍ $650,001 to $700,000	❍ 1,150,001 to 1,200,000
❍ $200,001 to $250,000	❍ $700,001 to $750,000	❍ 1,200,001 to 1,250,000
❍ $250,001 to $300,000	❍ $750,001 to $800,000	❍ 1,250,001 to 1,300,000
❍ $300,001 to $350,000	❍ $800,001 to $850,000	❍ 1,300,001 to 1,350,000
❍ $350,001 to $400,000	❍ $850,001 to $900,000	❍ 1,350,001 to 1,400,000
❍ $400,001 to $450,000	❍ $900,001 to $950,000	❍ 1,400,001 to 1,450,000
❍ $450,001 to $500,000	❍ $950,001 to $1,000,000	❍ 1,450,000 to 1,500,000
		❍ More than 1,500,000

If PARTICIPATION_START_DATE (see Item A3) equal to or later than AWARD_START_DATE, display version 1.
If PARTICIPATION_START_DATE (Item A3) earlier than AWARD_START_DATE, display version 2

Version 1:
D3a.   Between [PARTICIPATION_START_DATE] and [SURVEY_DATE], how many of the following works related to the [ABBREVIATED_PROJECT_NAME] project have you produced as an author, co-author, inventor, co-inventor, developer, or co-developer?   Make your best approximation if you do not know the exact number.

Version 2:
D3a.   Between [AWARD_START_DATE] and [SURVEY_DATE], how many of the following works related to the [ABBREVIATED_PROJECT_NAME] project have you produced as an author, co-author, inventor, co-inventor, developer, or co-developer?   Make your best approximation if you do not know the exact number.

	None	Total	How many of these include a foreign* co-author, co-inventor, co-developer?
Conference abstracts, posters or presentations (not including those any published in conference proceedings	❑		
Patents, registered or pending, provisional or non-provisional	❑		
Other products that have been disseminated to the scholarly community or public (e.g., educational material, software application, dataset, database)	❑		

Roll-over definition:
By **foreign** co-author, co-inventor, or co-developer, we mean a person who is based primarily at an institution or location outside the U.S.

Version 1:

D3b. Between [PARTICIPATION_START_DATE] and [SURVEY_DATE], how many **invited** talks, presentations or seminars have you given on research conducted as part of your participation in the [ABBREVIATED_PROJECT_NAME] project? Have any of these invited talks included a foreign co-presenter?

Version 2:

D3b. Between [AWARD_START_DATE] and [SURVEY_DATE], how many **invited** talks, presentations or seminars have you given on research conducted as part of your participation in the [ABBREVIATED_PROJECT_NAME] project? Have any of these invited talks included a foreign co-presenter?

None	Total # of invited talks	How many of these included a foreign* co-presenter?
❑		

Roll-over definition:

By **foreign** co-presenter, we mean a person who is based primarily at an institution or location outside the U.S.

D4a.   As of [SURVEY_DATE], how many of the following **not yet published** works related to the [ABBREVIATED_PROJECT_NAME] project have you produced as an author or co-author? For this question, only include works that were in press, under review, in preparation, or otherwise not yet published, posted or disseminated either in print or electronically as of [SURVEY DATE].

Do not include already published works. The study includes a separate data collection of already published works on which you are an author or co-author.
Make your best approximation if you do not know the exact number.

As of [SURVEY DATE]:	None	Total (if none, enter "0")	How many of these include a foreign* co-author?
Peer-reviewed research reports, articles or papers **IN PRESS**	❑		
Research reports, articles or papers **UNDER REVIEW**	❑		
Manuscripts **IN PREPARATION**	❑		

Roll-over definition:
By **foreign** co-author, we mean a person based **primarily at an institution or location outside the U.S.**

D4b.   Between the time that the [ABBREVIATED_PROJECT_NAME] award was made (in [AWARD_START_DATE]) and [SURVEY_DATE], how many proposals for other grant funding have you **submitted** as Lead or Co-Principal Investigator, and how many of those grants have you **received**? If you have not submitted or received any grants as PI or co-PI during this time, please check "None to date."

Between [AWARD_START_DATE] and [SURVEY_DATE]:	None to date	Number
A. Enter total number of **proposals submitted** as lead PI/co-PI:	❑	
B. Total number of **grants received** as lead PI/co-PI:	❑	

If PIRE respondent, go to D5.
If COMPARISON respondent, go to D7.

D5.   For each of the following statements please indicate whether you strongly agree, agree, disagree or strongly disagree. *Mark one answer in each row.*

Rollover definition:

A **foreign** partner is someone **based primarily in an institution or location outside the U.S.** (regardless of his or her citizenship or country of origin). A **foreign** location is a place outside the 50 United States and the District of Columbia.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
My research benefited from access to expertise of foreign* researchers in my field	❍	❍	❍	❍	❍
My research benefited from access to data acquired in foreign* locations	❍	❍	❍	❍	❍
My research benefited from access to equipment or facilities in foreign* locations	❍	❍	❍	❍	❍
My research benefited from access to place-based phenomena that occur outside the U.S. (e.g., biological, geological, cultural phenomena)	❍	❍	❍	❍	❍
Regulatory, bureaucratic or administrative procedures in a foreign country [have hindered/hindered] the progress of the research*	❍	❍	❍	❍	❍
Different cultural perspectives [have improved/improved] the quality of the research	❍	❍	❍	❍	❍
Language differences [have hindered/hindered] the progress of the research.*	❍	❍	❍	❍	❍

Note: Items marked with an * are reverse-scored.

D6.   [Have you experienced/Did you experience] any of the following challenges during the PIRE project? *Check all that apply.*

❑   Inadequate access to data, specimens, facilities, equipment, other resources

❑   Conflicts over authorship or credit for contributions to the research

❑   Funding expected from foreign (non-U.S.) sources did not materialize

❑   Delays in getting publications written due to the cross-cultural nature of the team

❑   Bias from foreign* partners based on my nationality, gender, race, ethnicity, religion, disability or sexual orientation

❑   Key foreign* partners were not as available as I expected or did not contribute enough to the project

❑   Other (please specify): [textbox, 300]

❑   None of the above

Rollover definition:

By **foreign** partner, we mean a person **based primarily in an institution or location outside the U.S.** (regardless of his or her citizenship or country of origin). A **foreign** location is a place outside the 50 United States and the District of Columbia.

D7.   Has the [PIRE/COMPARISON_PROGRAM] award resulted in any of the following career outcomes? *Check yes or no for each statement.*

Yes	No	
○	○	Helped me receive tenure or led to a promotion. ❑ (Not applicable: I already had tenure)
○	○	Helped me receive a promotion
○	○	Provided me an opportunity to leverage other funds to support my research.
○	○	Provided me an opportunity to move to a more prestigious institution.

D8. Since receiving the [PIRE/COMPARISON_PROGRAM] award in [AWARD_START_DATE], have you received any unsolicited* offers of employment?

Rollover definition: An unsolicited offer of employment is one that occurs independently of any action you initiated to seek different employment.

○ Yes
○ No

Go to Module E.

MODULE E: ABOUT YOU PRIOR TO THE [PIRE/COMPARISON_PROGRAM] AWARD

E1.   What is the highest degree you have completed? *Mark one response.*

  ○ Doctoral degree (PhD, D.Phil, D.Sc., D.Eng)
  ○ Master's degree (M.S., M.A., M.Sc., M.Eng)
  ○ Bachelor's degree (B.S., B.A., B.Sc.)
  ○ A different degree—(please enter the degree here:) [textbox, 50]

Let HIGHEST_DEGREE = response to E1.

E2.   In what year did you receive your [HIGHEST_DEGREE]? If you completed more than one [HIGHEST_DEGREE], please enter the year that you received your most recent [HIGHEST_DEGREE].

Dropdown menu:

<select year>	if before 1980:	If before 1970:	If before 1950:
before 1980	before 1970	before 1950	1940
1981	1970	1950	1941
1982	1971	1951	…
…	…	…	
1991	1980	1969	1949
1992			
…			
2001			
2002			
…			
2014			

Let HIDEGREE_YEAR = year entered in E2.

E3.   What discipline best characterizes your primary field of research?

First select the general area; then select the field or discipline that best describes the field in which you primarily conduct research.

Dropdown menus: **<select general area>   <select field>**

SEE APPENDIX H.1 for areas and fields.

E4.	Did you receive any of the following degrees from a college or university **outside the U.S.?**

	Yes	No
[if HIGHEST_DEGREE=other]: HIGHEST_DEGREE	❍	❍
Doctoral degree or professional degree	❍	❍
Master's degree or certificate	❍	❍
Bachelor's degree (or its equivalent)	❍	❍

E5.	After completing your [HIGHEST_DEGREE] did you ever hold any postdoctoral appointments **outside the U.S.**?

❍	Yes
❍	No

Version 1:
E6.	Between the year you completed your [HIGHEST_DEGREE] (in [HIDEGREE_YEAR]) and the start of your participation in the [ABBREVIATED_PROJECT_NAME] project (in [PARTICIPATION_START_DATE]), had you ever collaborated on any research or education with someone who was based primarily at an institution **outside the U.S.**?

Version 2:
E6.	Between the year you completed your [HIGHEST_DEGREE] (in [HIDEGREE_YEAR]) and the start of your participation in the [ABBREVIATED_PROJECT_NAME] project (in [AWARD_START_DATE]), had you ever collaborated on any research or education with someone who was based primarily at an institution **outside the U.S.**?

❍	Yes
❍	No

If PIRE/COMPARISON award is active: who are currently
If PIRE/COMPARISON award is no longer active: who were

E7a. Are/were any of these foreign* partners with whom you collaborated (before the start of your participation in the [ABBREVIATED_PROJECT_NAME] project) also participants in the project?

    ❍ Yes
    ❍ No

If E7a=Yes, go to E7b.
If E7a=No, go to E8.

E7b. For how many months or years had you been collaborating with these individuals prior to the start of the [ABBREVIATED_PROJECT_NAME] project (in [AWARD_START_DATE])? Do not include time spent preparing the [PIRE/COMPARISON] proposal. *Check one response.*

If you were collaborating with multiple individuals for different durations, pick the longest duration that applies.

    ❍ Less than 1 month
    ❍ 1-12 months
    ❍ More than 12 months

E8. Between the time you completed your [HIGHEST_DEGREE] in [HI_DEGREE_YEAR] and the start of the [ABBREVIATED_PROJECT_NAME] award in [AWARD_START_DATE], about how many grants or other competitive funding awards **for research** had you received from the NSF or other sources.

Please provide your best estimate. It may be helpful to think about key events in your life during every couple of years after completing your degree. What were the important milestones, whether professional or personal, positive or negative? What professional triumphs, disappointments, or challenges did you experience? Were there major changes at your institution? What colleagues joined or left your institution or research team? Did you move your office or laboratory? **We recognize that your recall will be inaccurate, but would appreciate your best estimate.**

Include any grant or award on which you were a Principal Investigator or Co-Principal Investigator.

Between [YEAR_PHD] and [AWARD_START_DATE]:	**Enter number**
Total number of grants for research on which you were PI/coPI	__

E9. Between the time you accepted your first full-time research position after completing your [HIGHEST_DEGREE] and the date you received the [ABBREVIATED_PROJECT_NAME] award in [AWARD_START_DATE], had you received unsolicited* offers of employment?

An unsolicited offer of employment is one that occurs independently of any action you initiated to seek different employment.

❍ Yes
❍ No

If PIRE respondent, go to Module F.
If COMPARISON respondent, go to Module H.

MODULE F: THE PIRE AWARD AND YOUR INSTITUTION

In this section, we'd like to ask about any effects of PIRE on your institution.

F1.   [Has/Did] the PIRE award resulted/result in any changes in policies or practices related to **undergraduate** and/or **graduate** education in the sciences, engineering or other fields at your institution, or within your department?   *Please check one or more responses.*

- ❑ Yes, within my department
- ❑ Yes, within my institution
- ❑ No [if marked, no other response can be marked]
- ❑ Not applicable: I am not at an institution of higher education [if marked, no other response can be marked]

F1a.   Please describe these changes. [textbox, 3000]

F2.   For **undergraduate** or **graduate** students in the sciences, technology, engineering, or mathematics fields (STEM) at your institution, are there policies or practices that either *facilitate* or *hinder* participation in research or education abroad?

	Policies/ practices that *facilitate* participation	Policies/ practices that *hinder* participation	Policies/ practices neither facilitate nor hinder participation	Not applicable
Undergraduate majors in sciences, technology, engineering or mathematics	❑	❑	❑	❑
Graduate students in sciences, technology, engineering or mathematics	❑	❑	❑	❑

F2a.	Please describe how your institution's policies or practices facilitate or hinder the participation of undergraduate or graduate students in research/education abroad. [textbox, 3000]

F3.	Has your institution done/Did your institution do any of the following to facilitate or support PIRE's international research or education initiatives? *Check all that apply*.

- ❑ Provided individuals planning international research/educational collaborations with seed money
- ❑ Provided individuals writing grant proposals with assistance developing the international components of a proposal
- ❑ Assisted **students** with arrangements for research/education abroad
- ❑ Assisted **faculty/employees** with arrangements for international research/education abroad
- ❑ Helped participants in international activities coordinate with a partner institution in one or more countries outside the U.S.
- ❑ My institution has/had an existing exchange program with one or more countries involved in the PIRE project
- ❑ My institution has/had a campus in a country involved in the PIRE project
- ❑ Other. Please describe: [textbox, 2,500]
- ❑ None of the above

F4.   What administrative official at your institution would be most familiar with PIRE and/or any changes in institutional policies or practices regarding **international research or educational opportunities**?   Please identify up to two such individuals. For each person, we would appreciate this person's name and title, the name of the office or department in which they work, and a current email address. If you cannot give an individual's name, but you are able to specify the office or administrative unit at your institution that could respond to questions about PIRE, please do so. (A response is not required.)

First administrator:	
Name (optional):	
Title (if know):	
Office, Department or other Administrative Unit:	
Email address of this individual (if known):	

Second administrator	
Name (optional):	
Title (if know):	
Office, Department or other Administrative Unit:	
Email address of this individual (if known):	

MODULE G: CONTRIBUTIONS TO CHALLENGES OF GLOBAL SIGNIFICANCE OR SCALE

Module G is shown only to PIRE respondents.
In this section, we'd like to ask about the ways in which society might implement some of the research findings your project has produced (or may produce) to address problems of global significance or scale. These questions ask, how might society at large benefit from the results of PIRE? Such societal impacts should not be confused with the broader impacts criterion by which NSF proposals are evaluated: for example, although individuals who participate directly in a PIRE project may derive benefits (certainly, this is a broader impact), the questions here ask about the benefits for others—namely, those who have not participated directly in the project – and particularly any benefits of global significance or results that may help address a problem that exists on a global scale.

<table>
<tr><td>**Module G is shown only to PIRE respondents.**</td></tr>
</table>

G1.	Aside from any benefits that the PIRE project has had (or will have) for those participating directly in the project, what are the benefits of the PIRE project for society at large, or for those who have **not** participated directly in the project?
	[textbox, 3000]

G2.	How might society implement (or how has society implemented) some of the research findings that the PIRE project [PROJECT NAME] has produced, or that you anticipate it will produce, to help address challenges of global significance or problems that exist on a global scale?
	[textbox, 3000]

G3.   The National Academies of Science and Engineering (with their partners, the Institute of Medicine and the National Research Council) have identified a set of "global challenges" out of recognition that "Many of the world's greatest health, environmental, and security threats are beyond the ability of any one nation to confront by itself." Examples of areas where internationally-coordinated responses are needed include:

- Meet increased global demand for energy without causing irrevocable harm to the environment;
- Reduce the human forcing of climate change, and develop and implement economically viable low carbon energy technologies;
- Improve access to clean water that is threatened by rapid human population growth, increasing urbanization and poor water management;
- Address reduced agricultural output and increased food insecurity due to poor soil, lack of high quality seeds, and inefficient use of water or fuel;
- Minimize risks of dual-use technologies in the life and nuclear sciences that can be used to improve lives but also to manufacture weapons;
- Promote and protect innovation with appropriate protection that does not stifle further advances;
- Build resilience to hazards from natural and technological disasters
- Address demographic challenges from population growth, aging and urban population dynamics in developing countries

Has your PIRE project advanced knowledge or led to discoveries that might help address global challenges such as those listed above, or in another area in which solutions are unlikely to emerge from the efforts of one nation acting alone?
- ◯ Yes
- ◯ No
  If Yes, please describe. [textbox, 3000]

Citation: http://sites.nationalacademies.org/International/international_052200; also see the statements posted at http://sites.nationalacademies.org/International/International_080840

G4.   One of NSF's roles is to advocate for the importance of basic and applied science and engineering to policy-makers and the general public.

Given this context, how would you describe the contributions of your PIRE project to policy-makers and the general public?
[textbox, 3000]

G5 is shown only to PIRE 2012 respondents

G5.   In its 2011 solicitation for proposals to the PIRE program, NSF asked PIs to propose research that would "*advance sustainability science, engineering and education as an integrative approach to the challenges of adapting to environmental, social and cultural changes associated with growth and development of human populations, and attaining a sustainable energy future.*"

Although your PIRE project is still underway, has the project resulted in any contributions to *"the challenges of adapting to environmental, social and cultural changes associated with growth and development of human populations, and attaining a sustainable energy future.*"? How can society implement some of the research findings that PIRE is producing to address sustainability challenges? Please describe separately any contributions that your project *has already made* and any contributions *that you anticipate* as the project progresses:

Contributions made to date (as of November 15, 2014): [textbox, 3000]

Anticipated contributions: [textbox, 3000]

MODULE H: DEMOGRAPHIC INFORMATION
Module H is shown to both PIRE and COMPARISON respondents.

We'd like to remind you that information collected in this survey will be reported only in summary form. We will not provide individual information about you that could be linked to your identity to the National Science Foundation, any other government agency, business, or persons outside the research team.

H1.   Did you ever attend elementary or secondary school outside the United States? (If you ever attended elementary or secondary school in Puerto Rico, American Samoa, Guam, Micronesia, the Marshall Islands, the Northern Mariana Islands, Palau, or the Virgin Islands, please answer YES)

❍ Yes
❍ No

H2.   When you were growing up, was English the language you spoke most often at home?

❍ Yes
❍ No

H3.   What is your gender?

❍ Female
❍ Male

H4.   What is your ethnicity? *Check one only.*

❍ Hispanic or Latino
❍ Not Hispanic or Latino

H5.   What is your race? *Check one or more.*

❑ American Indian or Alaska native
❑ Asian
❑ Black or African American
❑ Native Hawaiian or other Pacific Islander
❑ White

H6a.   Were you born in the United States?

❍ Yes
❍ No

If H6a=Yes, go to H7a (usual degree of difficulty with seeing, hearing, walking, lifting?)
If H6=No, go to H6b

H6b.   Are you a U.S. citizen?

❍ U.S. citizen
❍ Permanent resident ("green card")
❍ Student visa or exchange visitor visa (F1 or F2, J1 or J2 visa)
❍ Other temporary visa (e.g., H-1B, K, L, O or other visa)

The next question is designed to help us better understand the career paths of individuals with different physical disabilities:

H7a.

What is the USUAL degree of difficulty you have with: *Mark one answer for each item.*	None	Slight	Moderate	Severe	Unable to do
1 SEEING words or letters in ordinary newsprint (with glasses/contact lenses, if you usually wear them)	❏1	❏2	❏3	❏4	❏5
2 HEARING what is normally said in conversation with another person (with hearing aid, if you usually wear one)	❏1	❏2	❏3	❏4	❏5
3 WALKING without human or mechanical assistance or using stairs	❏1	❏2	❏3	❏4	❏5
4 LIFTING or carrying something as heavy as 10 pounds, such as a bag of groceries	❏1	❏2	❏3	❏4	❏5

If all 4 rows in H7a are marked "None," go to Thank You screen. Otherwise go to H7b.

H7a and H7b will appear on the same page of the online survey.

H7b.   What is the earliest age at which you first began experiencing any difficulties in any of these areas?
❏ Since birth; or Enter age in years: _____ valid data range is 0 to 99 yrs

CONCLUSION

Thank you! Your responses are very important to the National Science Foundation in understanding the research and career outcomes of NSF program participants. We appreciate the time you have taken to complete the survey. Your responses will be used to improve NSF programs and to provide a better understanding of support for talented STEM faculty, postdoctoral fellows, and graduate students.

The survey is now complete. You may close your internet browser or click Exit. <EXIT >

If you would like to send NSF any comments about the survey please contact:
Suzanne Plimpton at NSF (splimpto@**nsf**.gov) and include the OMB Control No. = xxxx-xxxx

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EXIT SCREEN
If we have identified the wrong respondent or have erroneous information, display this screen and FLAG this respondent for Abt follow-up (weekly basis)

Please accept our apology.
The information you supplied suggests that you are not eligible to participate in this study **or** that we have reached you in error. We regret any inconvenience to you. If you have any questions about this study or you would like to make a comment, please contact one of the following individuals and include the OMB Control No. = xxxx-xxxx:
- Dr. Carter Epstein, Study Director at Abt Associates: 1-800-XXX-XXXX or PIRE_Study@abtassoc.com
- John Tsapogas, PIRE Program Evaluation Officer at the National Science Foundation: jtsapoga@nsf.gov
- Suzanne Plimpton at NSF (splimpto@**nsf**.gov)

May we have permission to contact you by email in order to clarify your responses here? Answering "yes" does not obligate you to answer any questions.
- ❑ 1=Yes, you may contact me. My preferred email address is: [textbox 150]
- ❑ 0=No, please do not contact me to clarify.

Thank you very much.