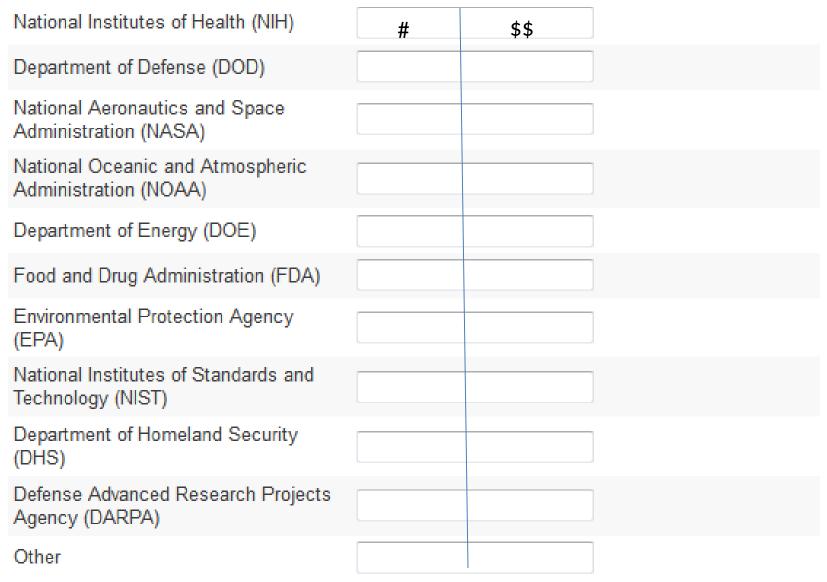


Original Indicator #7

Provide the number and the total dollar amount of grants co-funded by the agencies listed below



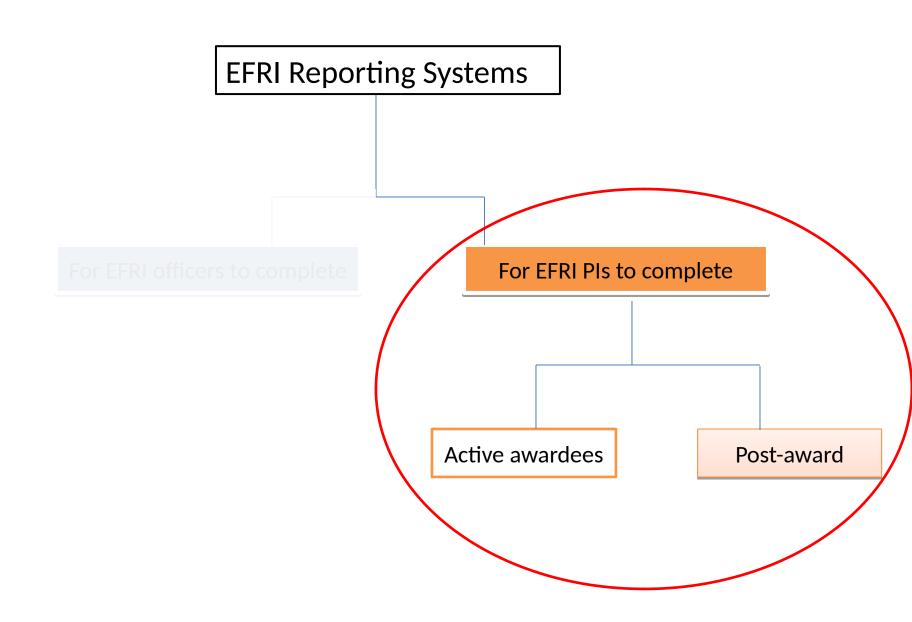


Select to add additional fields

Programmatic Evolution (Original Indicator #18)

Please indicate if this EFRI research has led to new programs at any research funding agency

Program Name		Program Description	Agency
+	Select to add additional	fields	



Question 1 (Indicator #9)

For EFRI PIs to complete

Active awardees

Post-award

Please check the Grand Challenges and/or National Needs that this EFRI research initially set out to address as indicated in the grant proposal

Make solar energy economical	Reverse-engineer the brain
Provide energy from fusion	Prevent nuclear terror
Develop carbon sequestration methods	Secure cyberspace
Manage the nitrogen cycle	Enhance virtual reality
Provide access to clean water	Advance personalized learning
Restore and improve urban infrastructure	Engineer the tools of scientific discovery
Advance health informatics	National Need

Engineer better medicines

Engineer better medicines

Does the research project <u>currently address the same set of Grand Challenges and/or National</u> <u>Needs that the research initially set out to address?</u>

If not, please indicate below the set of Grand Challenges and/or National Needs the research currently addresses.

Make solar energy economical	Reverse-engineer the brain
Provide energy from fusion	Prevent nuclear terror
Develop carbon sequestration methods	Secure cyberspace
Manage the nitrogen cycle	Enhance virtual reality
Provide access to clean water	Advance personalized learning
Restore and improve urban infrastructure	Engineer the tools of scientific discovery
Advance health informatics	National Need

Question 2 (Indicator #1 and 8)

EFRI Monitoring Systems
For EFRI PIs to complete
Active awardees
Post-award

Please list all collaborators/partners that you consider to be interdisciplinary

Please indicate the nature of the collaboration and whether the partner is international (check all that apply)

me Institution	Discipline	II DI	C	NP	G
Select to add additional fields	Engineering Physics Biology Chemistry Other Define:	Key Degree Granting I II = Intra-institutio DI = Domestic Intrinstitutions) Non-Degree Gran C = Corporation NP = Non-profit G = Government I = International	on (withi er-institu	in same in ution (diff	

Question 3 (Indicator #2)

Number of accepted publications with co-authors from different disciplines that have resulted from this award

field only

Please list all achievements of any of the PIs and Co-PIs involved in the EFRI research in the appropriate category

PI Name	Achievement	Description
Lead PI (name pre-populated)	Recognition Awards	
Select to add additional fiel Co-PI #1 (name pre-populated)	ds Cromotions	
Select to add additional field	ds	
Co-PI #2 (name pre-populated)		
Select to add additional fiel	ds	
Etc		

Question 5 (Indicator #5 and 10)

EFRI Monitoring Systems

For EFRI PIs to complete

Active awardees

Post-award

Has this research generated additional funding from other sources (other NSF programs or other agencies) for all PIs and Co-PIs involved in this EFRI project research?

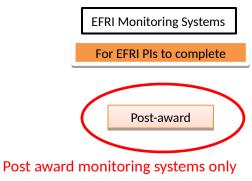
Please collect this data for all PI's listed below.

Past-PIs are displayed in gray, with option to add information if additional funding is in any way related to the EFRI research

PI Name	Grant Title	Agency	> \$2 Million/ grant
Lead PI (name pre-populated)			Yes/No
Select to add additional PI #1 (name pre-populated)	fields		
End to add additional PI #2 (name pre-populated)	fields		
Select to add additional	fields		

Please list any researchers who have spent more than 10% of their time in a laboratory <u>at a different</u> <u>institution</u> (including EFRI partner laboratories)

Name	Host Institution	Title
		PI
Select to add ad	ditional fields	Co-PI Research Faculty
	·	Post-Doctorate Graduate Student Undergraduate Research Assistant Visiting Researcher Other



Please list any companies or start-ups that were developed directly or indirectly based on the research funded by EFRI

Companies/Start-Ups	Product/Service/ Process	Description of Product/Service/ Process	Year Founded
	Product		
Elect to add add	Service		
	Process		
	Other		

For EFRI PIs to complete

Active awardees

Post-award

Please provide the following information about any licensing activity that has resulted from your EFRI research

Technology being licensed	Type of license	Year of licensing agreement
	Patent	
Select to add additional	fiel	

For EFRI PIs to complete

Active awardees

Post-award

Please list any companies that have demonstrated interest in partnership activities related to your EFRI research. Please gather this information from all leadership in the EFRI grant.

Company	Please describe nature of interest for partnership
Select to add additional fields	Continued Conversations Monetary Commitment Contractual Agreement
	Other



Question 10 (Indicator #15)

Please list new research capabilities resulting from EFRI research that are being utilized and adopted by the research community and their appropriate categories

Description	Туре
	Technique or Method
• Select to add additional fields	 Tool or Equipment
	O Resource
	O Model
	O Device
	Other

For EFRI PIs to complete

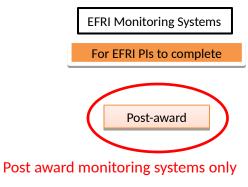
Active awardees

Post-award

Question 11 (Indicator #16, 17, and 18)

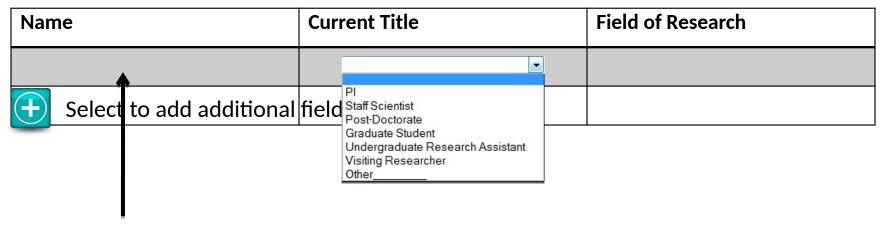
Please indicate if this EFRI research has led to curriculum changes at any educational level, collegiate or pre-collegiate

Curriculum change	Describe	Education Level
New Course Supplement to existing course Course Substitution New Program Program modification Other	fields	PK-12 College



Question 12 (Indicator #20)

Please provide the following information about former EFRI-supported students who have become involved in high-risk/ high-reward research.



Could possibly pre-populate fields with names of researchers from RPPR

Post-award

Please list any activities of new research communities that have formed around EFRI topics

New meetings/ conferences	New journals	New workshops/ working groups	News coverage/ press release	Other (ex: congressional hearings, website, social media, professional society)	
Gelect to add	additional fields				

Your research team, including senior, stipend, for-credit, and volunteer personnel, will be contacted to collect information on demographics and career path decisions. Please list all researchers that have participated in the EFRI research.

Name			Email	Role in the laboratory		
(+)	Sele	ct to add additiona	fields	Research Faculty Post-Doctorate		
				Graduate Student Undergraduate Research Assistant Visiting Researcher Other		

Could possibly pre-populate fields with names of researchers from RPPR (capturing current and past trainees within the grant)

• Auto-generate different emails for different categories of researchers (ie. Grad students, post-docs, etc.) to be sent out to those participants asking them the following questions found on the following slides

Email generated to researchers: Demographic information may not be necessary to include if it is going to be collected through RPPR

Demographic Information

Why This Information Is Being Requested

The National Science Foundation is committed to broadening the participation of groups currently under-represented in science and engineering. In order to accurately gauge our progress in achieving this important goal, we ask that applicants provide the requested demographic information. Submission of the requested information is voluntary and is not a precondition of award. Nonetheless, we need your cooperation, for information not submitted will seriously undermine the statistical validity and, therefore, the usefulness of information reported. The Foundation strongly encourages women, minorities, persons with disabilities, and veterans to participate fully in its programs. In accordance with Federal statutes, regulations and NSF policies, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination, under any program or activity receiving financial assistance from NSF. Race and Ethnicity Definitions

Disability Definitions	
*Gender:	•
*Veteran Status:	© Yes
	O No
	O Do not wish to provide
*Race:	(select one or more)
	American Indian or Alaskan Native
	Asian Asian
	Black or African American
	Native Hawaiian or Other Pacific Islander
	White
	Do not wish to provide race
*Ethnicity:	T
*Disability:	None None
	Do not wish to provide disability status
	(select one or more)
	Blind or serious difficulty seeing even when wearing glasses
	Deaf or serious difficulty hearing
	Serious difficulty walking or climbing stairs
	Other Disability (Please specify. Must be less than 255 characters)

Please list any significant achievements that resulted from your EFRI research involvement.

	Achievement		Describe
	•		
(conference presentation awards scholarships/fellowships	dditional fields	
	scholarships/fellowships recognition other		

Please list any outreach activities you participated in for work related to your EFRI project.

Formal Education	Describe
guest lecture class instruction	
other	
Informal Education	Describe
public speaking museum exhibit participation	
science fair events science writing	
media dissemination	

Is there any other information you would like to share with us regarding your experience with this EFRI project?

Questions sent to students

Please consider how strongly you agree or disagree with the following statement:

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
When I began my involvement with this EFRI research, I had a clear career goal	0	\odot	\odot	\bigcirc	0

Please rate your interest in pursuing each of the following career pathways at the beginning of your EFRI research experience

	Strongly DIsagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Click to write Scale point 6
Faculty at a research-intensive university	0	0	0	0	\bigcirc	0
Faculty at a teaching-intensive university	0	\odot	O	\odot	\odot	\odot
Research career, non-academic (industry, pharmaceutical, biotech, government, start-up, etc.)	©	0	O	Ô	0	O
Non-research career (consulting, policy, science writing, patent law, business, etc.)	O	0	0	\bigcirc	\odot	\odot
Comments:						

Please rate your interest in pursuing each of the following career pathways currently or at the conclusion of your EFRI research

	Strongly DIsagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Faculty at a research-intensive university	0	0	\bigcirc	۲	0
Faculty at a teaching-intensive university	O	O	\odot	\odot	0
Research career, non-academic (industry, pharmaceutical, biotech, government, start-up, etc.)	©	0	©	0	0
Non-research career (consulting, policy, science writing, patent law, business, etc.)	O	0	0	\odot	Ô
Comments:					