FORM APPROVED OMB No. 3145-0100 Expiration Date: xx/xx/xx



## NATIONAL SCIENCE FOUNDATION ALEXANDRIA, VA 22314

## FFRDC RESEARCH AND DEVELOPMENT SURVEY FY 2019

Please submit your survey data by January 31, 2020.

Your participation in this survey provides important information on the national level of R&D activity. The National Science Foundation (NSF) is authorized to collect this information under the National Science Foundation Act of 1950, as amended. Your organization's response is entirely voluntary.

Response to this survey is estimated to require 11 hours. If you wish to comment on the time required to complete this survey, please contact Suzanne H. Plimpton of NSF at (703) 292-7556, or e-mail splimpto@nsf.gov.

The Web address for submitting your data:

http://www.ffrdcsurvey.org

Or mail this form to:

ICF 530 Gaither Road, Suite 500 Rockville, MD 20850

### **Questions?**

Technical support:

Support@FFRDCsurvey.org (866) 936-9376

General survey questions:

Michael Gibbons National Center for Science and Engineering Statistics National Science Foundation mgibbons@nsf.gov (703) 292-4590

Thank you for your participation.

# What's New for FY 2019

## **New Question**

• **Question 3** asks which agencies funded the expenditures reported under *Other federal sources* in Question 2, row h, and how much was from each agency.

# **Survey Definitions and Instructions**

This survey collects data on research and development (R&D) activities at Federally Funded R&D Centers (FFRDCs). Please report R&D activities and expenditures for your organization's **2019** fiscal year.

## Fiscal Year (FY)

Please report data for your organization's 2019 fiscal year.

### Research and Development (R&D)

R&D activity is creative and systematic work undertaken in order to increase the stock of knowledge — including knowledge of humankind, culture, and society — and to devise new applications of available knowledge. R&D covers three activities defined below — basic research, applied research, and experimental development.

- **Basic research** is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.
- **Applied research** is original investigation undertaken in order to acquire new knowledge. It is directed primarily towards a specific, practical aim or objective.
- **Experimental development** is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

### **R&D** Expenditures

Please include all current operating expenditures for activities specifically organized to produce R&D outcomes. This includes basic research, applied research, and experimental development funded by external sponsors or separately budgeted and accounted for by your organization using internal funds.

R&D <i>includes:</i>	R&D does <i>not</i> include:
<ul> <li>Sponsored research (including federal and nonfederal sponsors)</li> <li>Indirect costs associated with R&amp;D projects</li> <li>R&amp;D equipment and software</li> <li>R&amp;D subcontract expenditures</li> <li>Clinical trials</li> <li>Research training grants</li> </ul>	<ul> <li>Outreach or training programs</li> <li>R&amp;D conducted by staff at outside institutions that is not accounted for in your financial records</li> <li>Capital projects (i.e., construction or renovation of research facilities)</li> <li>Routine testing</li> <li>Non-R&amp;D program implementation or management</li> <li>Policy development</li> </ul>

Ques	tion 1.	How much of your total expenditures for separately budgeted resear development (R&D) came from the following sources in FY 2019? (See definition of R&D on the previous page.)	earch and
		Report the <b>original source</b> of funds, when possible. For example, if you <b>federal</b> funds from another organization, report that amount under "U.S. government."	
		Please do not report capital construction costs.	
So	urce of fu	nds	R&D expenditures (Dollars in thousands) (for example, report \$25,342 as \$25)
a.	U.S. fede	eral government	
		ncy of the United States government.	\$
	Include to	ederal funds passed through from another organization.	
h	Stata an	d local government	
D.		d local government e, county, municipality, or other local government entity in the United State	tes. \$
		state health agencies.	4 <u></u>
C.	Busines	S	
		or foreign for-profit organizations. (Report funds from a company's	\$
	nonprofit	foundation in row d.)	
	Nammad		
a.	-	it organizations c or foreign nonprofit foundations and organizations, except universities	\$
		ges. Funds from other universities and colleges should be reported in row	
e.	All other	sources	
		urces not reported above, such as funds from foreign governments,	\$
	and forei	gn or U.S. universities.	
f.	Total <sup>1</sup>		\$ <u>TOTAL</u>
<sup>1</sup> Coli	imn totals a	re automatically generated on the Web survey	

Question 2. Of the federally funded R&D expenditures reported in Question 1, row a, how much came from the following agencies?			
Report the agency that was the <b>original source</b> of funds, when possible.			
		A list of the subagencies belonging to each department/agency shown below is included as a link on Question 2 of the web survey.	
Fui	nding age	ncy	R&D expenditures (Dollars in thousands)
a.	Departm	ent of Defense	\$
b.	Departm	ent of Energy	\$
c.		ent of Health and Human Services g the National Institutes of Health)	\$
d.	Departmo	ent of Homeland Security	\$
e.	Departm	ent of Transportation	\$
f.	National	Aeronautics and Space Administration	\$
g.	National	Science Foundation	\$
h.	Other fee	deral agencies	\$
i.	<b>Total</b> <sup>1</sup> (should m	natch total from Question 1, row a)	\$ <u>TOTAL</u>
<sup>1</sup> Colu	mn totals a	re automatically generated on the Web survey.	

Question 3	n 3. Of the amount reported for Other federal sources in Question 2 (row h), which agencies funded this R&D and how much of the reported amount was from each agency?		
	If your institution reported \$0 in Question 2, row h, skip this question a	nd go to Question 4.	
	<ul> <li>Use rows a–j to list up to 10 agencies that funded the largest R&amp;D</li> <li>Use row k to report any remaining amount.</li> <li>For subrecipient funding in this question, list the sponsor of the ori</li> </ul>		
Federal	agencies (list up to 10)	R&D expenditures (Dollars in thousands)	
a.		\$	
b.			
5.		\$	
С.		\$	
d.		¢	
		\$	
e.		\$	
f.		\$	
		Ψ	
g.		\$	
h.		\$	
		· · · · · · · · · · · · · · · · · · ·	
i.		\$	
j.		\$	
k.	Other agencies included in Question 2, row h, but not listed above	\$	
I.	Total (should match Question 2, row h) <sup>1</sup>	\$ <u>TOTAL</u>	
<sup>1</sup> The colum	n total is automatically generated on the Web survey.		

Question 4. What amounts of your FY 2019 R&D expenditures were for basic research, applied research, and experimental development?				
	If possible, these categories defining the type of R&D should be coded at the individual project level by the principal investigator or project director. Estimates are acceptable if necessary.			
	See the table below this question for examples.			
			R&D expenditure Dollars in thousand	
		(1) Federal	(2) Nonfederal	(3) Total <sup>1</sup>
a.	Basic research			
	Experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.	\$	\$	\$ <u>TOTAL</u>
b.	Applied research			
	Original investigation undertaken in order to acquire new knowledge. It is directed primarily towards a specific, practical aim or objective.	\$	\$	\$ <u>TOTAL</u>
c.	Experimental development			
	Systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.	\$	\$	\$ <u>TOTAL</u>
-				
	<b>Total<sup>1</sup></b> Column 1 total should match Question 1, row a. Column 3 total should match Question 1, row f.	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>	\$ <u>TOTAL</u>
<sup>1</sup> Row a	and column totals are automatically generated on the Web survey.			

Examples		
Basic research	Applied research	Experimental development
A researcher is studying the properties of human blood to determine what affects coagulation.	A researcher is conducting research on how a new chicken pox vaccine affects blood coagulation.	A researcher is conducting clinical trials to test a newly developed chicken pox vaccine for young children.
A researcher is studying the properties of molecules under various heat and cold conditions.	A researcher is investigating the properties of particular substances under various heat and cold conditions with the objective of finding longer-lasting components for highway pavement.	A researcher is working with state transportation officials to conduct tests of a newly developed highway pavement under various types of heat and cold conditions.
A researcher is investigating the effect of different types of manipulatives on the way first graders learn mathematical strategy by changing manipulatives and then measuring what students have learned through standardized instruments.	A researcher is studying the implementation of a specific math curriculum to determine what teachers needed to know to implement the curriculum successfully.	A researcher is developing and testing software and support tools, based on fieldwork, to improve mathematics cognition for student special education.

		Of the total R&D expenditures reported in Question 1, what were the amounts for the following types of costs?		
		Please report only direct costs in rows a-e. Indirect costs should be reported	in row f.	
			R&D expenditures (Dollars in thousands)	
Dir	ect costs	from all sources		
а.		wages, and fringe benefits		
	temporar	ompensation for all R&D personnel whether full-time or part-time, y or permanent. Include salaries, wages, and fringe benefits paid rnal funds and from external support.	\$	
b.	Software	e purchases		
		ents for software. Include both purchases of software packages se fees for systems.	\$	
c.	Equipme	ent		
	Payment	s for movable equipment. Include ancillary costs such as delivery and setup.	\$	
d.	Subcont	racts		
		s to subcontractors or subrecipients for services on R&D projects.	\$	
e.	Other di	rect costs		
		sts that do not fit into one of the above categories, including imited to) travel, computer usage fees, and supplies.	\$	
Inc	lirect cost	s		
f.	Indirect	costs		
	Include a	Il indirect costs (overhead) associated with R&D projects.	\$	
g.	Total <sup>1</sup>			
	(should n	natch total from Question 1, row f)	\$ <u>TOTAL</u>	
<sup>1</sup> Colu	ımn totals a	re automatically generated on the Web survey.		

Question 6. What was the total executed operating budget of your FFRDC in FY 2019, excluding capital construction costs?			
	(	Dollars in thousa	nds)
Total op	erating budget	\$	

Question 7.
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Primary Contact Information	n. Please complete the contact information for the person responsible for the survey.
Name	
Job Title	
Institution name	
Office/Department	
Mailing address (line 1)	
Mailing address (line 2)	
City, state, and ZIP Code	
Phone number	E-mail address
	List individuals who should be copied on all e-mails about the survey or can create a login ude information about office/department as appropriate (e.g., Office of Finance Director).
Other Contact 1	
Name	
Job Title	
Phone Number	E-mail address
Other Contact 2	
Name	
Job Title	
Phone Number	E-mail address
Other Contact 3	
Name	
Job Title	
Phone Number	E-mail address