Please submit your survey data by January 29, 2016.

This survey collects data on research and development (R&D) activities at higher education institutions. Please report R&D activities and expenditures for your institution’s 2015 fiscal year.

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 institution’s response is entirely voluntary.

Response to this survey is estimated to require 8 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.shortform.herdsurvey.org

Or mail this form to:
ICF International
530 Gaither Road, Suite 500
Rockville, MD 20850

Questions?
Technical support:
Support@HERDsurvey.org
(866) 936-9376

General survey questions:

Ronda Britt
National Center for Science and Engineering Statistics
National Science Foundation
rbritt@nsf.gov
(703) 292-7765

Thank you for your participation.
Survey Definitions and Instructions

Fiscal year (FY)
Please report data for your institution’s 2015 fiscal year.

Research and development (R&D) is creative work conducted systematically to increase the stock of knowledge (research) and to use this stock of knowledge to devise new applications (development). R&D covers three activities defined below—basic research, applied research, and development.

- **Basic research** is undertaken primarily to acquire new knowledge without any particular application or use in mind.
- **Applied research** is conducted to gain the knowledge or understanding to meet a specific, recognized need.
- **Development** is the systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

R&D expenditures
Include all R&D expenditures from your institution’s current operating funds that are separately accounted for. For purposes of this survey, R&D includes expenditures for organized research as defined by 2 CFR Part 200 Appendix III and expenditures from funds designated for research.

<table>
<thead>
<tr>
<th>R&amp;D includes:</th>
<th>R&amp;D does not include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sponsored research (federal and nonfederal)</td>
<td>• Public service grants or outreach programs</td>
</tr>
<tr>
<td>• University research (institutional funds that are separately budgeted for individual R&amp;D projects)</td>
<td>• Curriculum development (unless included as part of an overall research project)</td>
</tr>
<tr>
<td>• Startup, bridge, or seed funding provided to researchers within your institution</td>
<td>• R&amp;D conducted by university faculty or staff at outside institutions that is not accounted for in your financial records</td>
</tr>
<tr>
<td>• Other departmental funds designated for research</td>
<td>• Estimates of the proportion of time budgeted for instruction that is spent on research</td>
</tr>
<tr>
<td>• Recovered and unrecovered indirect costs (see definitions in Question 1)</td>
<td>• Capital projects (i.e., construction or renovation of research facilities)</td>
</tr>
<tr>
<td>• Equipment purchased from R&amp;D project accounts</td>
<td>• Non-research training grants</td>
</tr>
<tr>
<td>• R&amp;D funds passed through to a subrecipient organization, educational or other</td>
<td>• Unrecovered indirect costs that exceed your institution’s federally negotiated Facilities and Administrative (F&amp;A) rate</td>
</tr>
<tr>
<td>• Clinical trials, Phases I, II, or III</td>
<td></td>
</tr>
<tr>
<td>• Research training grants funding work on organized research projects</td>
<td></td>
</tr>
<tr>
<td>• Tuition remission provided to students working on research</td>
<td></td>
</tr>
</tbody>
</table>

Please **include** these components of your institution: Please do **not** include:

- • All units of your institution included in or with your financial statements, such as:
  • Agricultural experiment stations
  • Branch campuses
  • Medical schools
  • Hospitals or clinics
  • Research centers and facilities
  • A university 501(c)3 foundation
- • Federally Funded R&D Centers (FFRDCs). This information is collected separately. See the list of FFRDCs: http://www.nsf.gov/statistics/ffrdc/.
- • Other organizations or institutions, such as teaching hospitals or research institutes, with which your institution has an affiliation or relationship, but which are **not** components of your institution.
- • Other campuses headed by their own president, chancellor, or equivalent within your university system. Each campus is asked to respond separately.
**Question 1.** How much of your total expenditures for research and development (R&D) came from the following sources in FY 2015? (See definition of R&D on the previous page.)

- In rows a, b, c, d, and f: Include both **direct** and **recovered indirect costs** (reimbursement of F&A costs from external sponsors).
- Report the **original source** of funds, when possible.
- Include all fields of R&D (e.g., sciences, engineering, humanities, education, law, arts).

See full listing on pages 8–10.

**R&D expenditures**

<table>
<thead>
<tr>
<th>Source of funds</th>
<th>Dollars in thousands</th>
<th>(Dollars in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source of funds</strong></td>
<td></td>
<td>(For example, report $25,342 as $25)</td>
</tr>
<tr>
<td>a. U.S. federal government</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Any agency of the United States government.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include federal funds passed through from another institution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. State and local government</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Any state, county, municipality, or other local government entity in the United States, including state health agencies. Include state funds that support R&amp;D at agricultural and other experiment stations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Public institutions</em> should report state appropriations restricted for R&amp;D activities here rather than in row e, Institutional funds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Business</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Domestic or foreign for-profit organizations. Report funds from a company’s nonprofit foundation in row d.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Nonprofit organizations</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Domestic or foreign nonprofit foundations and organizations, except universities and colleges. Report funds from your institution’s 501(c)3 foundation in row e1. Funds from other universities and colleges should be reported in row f.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Institutional funds</td>
<td></td>
<td>$__________ as (Confidential1)</td>
</tr>
<tr>
<td>1. Institutionally financed research</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>All R&amp;D funded by your institution from accounts that are only used for research.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Cost sharing</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Include committed cost sharing other than unrecovered indirect costs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Unrecovered indirect costs</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Calculate this amount as follows for your externally funded R&amp;D only (preferably on a project-specific basis) using the appropriate cost rate—on-campus, off-campus, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• First, multiply the <strong>negotiated</strong> rate by the corresponding base.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Second, subtract recovered indirect costs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Total institutional funds2</td>
<td></td>
<td>$TOTAL</td>
</tr>
<tr>
<td>f. All other sources</td>
<td></td>
<td>$__________</td>
</tr>
<tr>
<td>Other sources not reported above, such as funds from foreign governments, foreign or U.S. universities, and gifts designated by the donors for research.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Total2</td>
<td></td>
<td>$TOTAL</td>
</tr>
</tbody>
</table>

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1 Information from confidential items is not published or released for individual institutions; only aggregate totals will appear in publications. In accordance with the National Science Foundation Act of 1950, as amended, and other applicable federal laws, your responses will not be disclosed in identifiable form to anyone other than agency employees or authorized persons.

2 Totals for rows e4 and g are automatically generated on the Web survey.
<table>
<thead>
<tr>
<th>Question 1.1. Did you include the following types of funding in your responses to Question 1, row e1?</th>
<th>Included</th>
</tr>
</thead>
</table>
| a. **Competitively awarded internal grants for research**  
Expenditures for organized research projects, involving a proposal or statement of work with expected research outcomes. | ☐ |
| b. **Startup packages/bridge funding/seed funding**  
Expenditures from funds provided to faculty members to begin or continue their research while seeking external sponsors. | ☐ |
| c. **Other departmental funds designated for research**  
Expenditures for research from other departmental or central accounts which do not match the descriptions provided in rows a or b. | ☐ |
| d. **Tuition assistance for student research personnel**  
University tuition assistance, waivers, or remission provided to students working on organized research. Please check “Included” even if these funds are reported as part of the expenditures included under Question 1 rows a, b, or c. | ☐ |
Question 2. What were your FY 2015 R&D expenditures in the fields below? Please report federally funded expenditures in column (1) and all other expenditures in column (2).

- Examples of the disciplines included under each field are provided on pages 8–10.

<table>
<thead>
<tr>
<th>R&amp;D Fields</th>
<th>(1) Federal</th>
<th>(2) Nonfederal</th>
<th>(3) Total¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Computer Sciences</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>b. Engineering</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>c. Environmental Sciences</td>
<td>$_________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>d. Life Sciences</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>e. Mathematical Sciences</td>
<td>$_________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>f. Physical Sciences</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>g. Psychology</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>h. Social Sciences</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>i. Other Sciences</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>j. Non-S&amp;E fields</td>
<td>$___________</td>
<td>$_____________</td>
<td>$ TOTAL</td>
</tr>
<tr>
<td>k. Total for All Fields of R&amp;D¹</td>
<td>$ TOTAL</td>
<td>$ TOTAL</td>
<td>$ TOTAL</td>
</tr>
</tbody>
</table>

Total in row k, column (1) should match total reported in Question 1, row a.
Total in row k, column (2) should match total reported in Question 1, rows b–f.

¹ Row and column totals are automatically generated on the Web survey.
**Question 3.** How much of your R&D expenditures reported in Question 1 did your institution receive as a subrecipient from another U.S. university or college?

Please report the original source of funds in columns (a) and (b).

The **subrecipient** for an award carries out the work but receives the funds from a pass-through entity rather than directly from the original funding source. Subrecipients tend to be the co-authors of publications, writers of technical reports discussing findings, inventors, etc. Do **not** include contractor or vendor relationships. A contractor or vendor receives payment for goods and services provided. See 2 CFR Part 200 Subpart D Section 330.

<table>
<thead>
<tr>
<th>Originating source of R&amp;D expenditures (Dollars in thousands)</th>
<th>(a) Federal</th>
<th>(b) Nonfederal</th>
<th>(c) Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds received from other U.S. higher education institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include colleges and universities and units owned, operated, and controlled by such institutions.</td>
<td>$_______</td>
<td>$_______</td>
<td>$TOTAL</td>
</tr>
</tbody>
</table>

1 The row total is automatically generated on the Web survey.

---

**Question 4.** How much of the R&D expenditures reported in Question 1 did your institution pass through to subrecipients at other U.S. universities or colleges?

Please report the original source of funds in columns (a) and (b).

<table>
<thead>
<tr>
<th>Originating source of R&amp;D expenditures (Dollars in thousands)</th>
<th>(a) Federal</th>
<th>(b) Nonfederal</th>
<th>(c) Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds passed through to other U.S. higher education institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Include colleges and universities and units owned, operated, and controlled by such institutions.</td>
<td>$_______</td>
<td>$_______</td>
<td>$TOTAL</td>
</tr>
</tbody>
</table>

1 The row total is automatically generated on the Web survey.
### Question 5.

**A. Contact information:** Please complete the contact information for the person responsible for the survey and an alternate contact.

<table>
<thead>
<tr>
<th></th>
<th>Primary contact</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department/office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailing address (line 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mailing address (line 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City, state, and ZIP code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail address</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. Fiscal year:** In what month did your institution’s 2015 fiscal year end?  

**C. Additional comments:**

- 
- 
- 
- 
- 
- 
- 
- 
- 
-
## EXAMPLES OF DISCIPLINES UNDER EACH R&D FIELD

### 1. Computer Sciences
- Computer systems analysis
- Data processing
- Information sciences
- Information technology
- Management information systems

### 2. Engineering
#### Aeronautical/Astronautical
- Aerodynamics
- Aerospace engineering
- Space technology

#### Bioengineering/Biomedical engineering
- Biomaterials
- Medical engineering

#### Chemical
- Petroleum
- Petroleum refining process
- Plastics
- Polymer
- Wood science

#### Civil
- Architectural
- Architecture
- Environmental
- Environmental health
- Geotechnical
- Hydraulic
- Hydrologic
- Sanitary
- Structural
- Transportation

#### Electrical
- Communications
- Computer
- Electronics
- Power

#### Mechanical
- Engineering mechanics

#### Metallurgical/Materials
- Ceramic
- Materials science
- Metallurgy
- Mining and mineral
- Textile
- Welding

#### Other engineering
- Agricultural
- Engineering design
- Engineering physics
- Engineering science
- Marine
- Naval architecture
- Nuclear
- Ocean
- Systems

### 3. Environmental Sciences
#### Atmospheric sciences
- Aeronomy
- Extraterrestrial atmospheres
- Meteorology
- Solar
- Weather modification

#### Earth sciences
- Cartography
- Earth and planetary sciences
- Geochemistry
- Geodesy and gravity
- Geology
- Geomagnetism
- Geophysics
- Hydrology
- Paleomagnetism
- Paleontology
- Physical geography
- Seismology
- Surveying

#### Oceanography
- Biological oceanography
- Chemical oceanography
- Geological oceanography
- Marine biology
- Marine oceanography
- Physical oceanography

---

Examples of disciplines continue on next page.
### 4. Life Sciences

**Agricultural sciences**  
Agricultural chemistry  
Agricultural economics—report in Social sciences, Economics  
Agricultural engineering—report in Engineering  
Agricultural production  
Agronomy  
Animal science  
Aquaculture  
Conservation  
Fish and wildlife  
Forestry  
Horticulture  
International agriculture  
Landscape architecture  
Plant sciences  
Renewable natural resources  
Soil sciences  

**Biological sciences**  
Allergies and immunology  
Anatomy  
Bacteriology  
Biochemistry  
Biogeography  
Biology, general  
Biometrics  
Biophysics  
Biostatistics  
Biotechnology  

**Medical sciences**  
(continued)  
Botany  
Cellular biology  
Ecology  
Entomology  
Epidemiology  
Foods and nutrition studies  
Genetics, plant and animal  
Immunology  
Medical microbiology  
Microbiology  
Molecular biology  
Nutritional sciences  
Parasitology  
Pathology, human and animal  
Pharmacology, human and animal  
Physical anthropology  
Physiology, human and animal  
Toxicology  
Virology  
Zoology  

**Biology (continued)**  
Botany  
Cellular biology  
Ecology  
Entomology  
Epidemiology  
Foods and nutrition studies  
Genetics, plant and animal  
Immunology  
Medical microbiology  
Microbiology  
Molecular biology  
Nutritional sciences  
Parasitology  
Pathology, human and animal  
Pharmacology, human and animal  
Physical anthropology  
Physiology, human and animal  
Toxicology  
Virology  
Zoology  

**Medical sciences**  
(continued)  
Dermatology  
Family medicine  
Gastroenterology  
General surgery  
Geriatric medicine  
Gynecology  
Hematology  
Internal medicine  
Mental health  
Neonatal-perinatal medicine  
Neurological surgery  
Neurology  
Neuros Sciences  
Nuclear medicine  
Nuclear radiology  
Obstetrics  
Oncology  
Ophthalmology  
Optometry  
Oral surgery  
Orthopedic surgery  
Orthopeds  
Osteopathic medicine  
Otorhinolaryngology  
Pediatrics  
Pharmacology  
Pharmacy  
Physical and rehabilitative medicine  
Plastic surgery  
Podiatry  

### 5. Mathematical Sciences

- Algebra  
- Analysis  
- Applied mathematics  

- Foundations and logic  
- Geometry  
- Numerical analysis  

- Operations research  
- Statistics  
- Topology  

### 6. Physical Sciences

**Astronomy**  
Astrophysics  
Gamma-ray astronomy  
Neutrino astronomy  
Optical astronomy  
Radio astronomy  
X-ray astronomy  

**Chemistry**  
(continued)  
Analytical chemistry  
Inorganic chemistry  
Organic chemistry  
Organo-metallic chemistry  
Pharmaceutical chemistry  
Physical chemistry  
Polymer sciences  

**Physics**  
Acoustics  
Atomic physics  
Chemical physics  
Condensed matter physics  
Elementary particle physics  
Mathematical physics  
Molecular physics  
Nuclear structure  
Optics  
Plasma physics  
Theoretical physics  

### 7. Psychology

- Animal behavior  
- Art therapy  
- Clinical psychology  

- Educational psychology  
- Experimental psychology  
- Human development and personality  
- School psychology  
- Social psychology  

Examples of disciplines continue on next page.
### 8. Social Sciences

**Economics**
- Agricultural economics
- Applied economics
- Business development
- Econometrics
- Industrial economics
- International economics
- Labor economics
- Managerial economics
- Public finance and fiscal policy
- Quantitative economics
- Resource economics

**Political science**
- Comparative government
- Government
- International relations and affairs
- Legal systems
- Political theory
- Public administration
- Public policy analysis
- Regional studies

**Sociology**
- Anthropology, cultural and social
- Anthropology, physical—report in Life Sciences
- Comparative and historical sociology
- Complex organizations
- Cultural and social structure
- Demography
- Group interactions
- Population studies
- Social problems and welfare theory

**Other social sciences**
- Archaeology
- Area and ethnic studies
- City and community planning
- Community services
- Corrections
- Criminal justice
- Geography
- History of science
- Linguistics
- Urban affairs
- Urban and regional planning
- Urban studies

### 9. Other Sciences

Use this category for R&D that involves at least one S&E field (fields 1–8) if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields.

### 10. Non-S&E Fields

**Business and management**
- Business management and administrative services
- Marketing distribution
- Marketing operations

**Communication, journalism, and library science**
- Communication
- Communications technologies
- Library science

**Education**

**Humanities**
- English language and literature
- Foreign languages and literature
- General studies and humanities
- History (except history of science—report in Social sciences)
- Letters
- Liberal arts and sciences
- Philosophy and religion
- Theological studies and religious vocations

**Law**
- Legal studies

**Social work**
- Visual and performing arts

**Other non-S&E fields**
- Military technologies
- Parks, recreation, leisure and fitness studies
- Other non-S&E fields that cannot be classified using the fields listed above