5. Appendix 5: Wave 1 Performer Questionnaire

Survey of 1996 and 1997 Research and Development Performance by Nonprofit Organizations



National Science Foundation

Nonprofit organizations play a key role in conducting important research in the medical and health related sciences, natural and social sciences, and engineering. The National Science Foundation is asking for your help in understanding the activities of the nonprofit sector by completing this questionnaire on science and engineering research and development activities undertaken by nonprofit organizations like yours.

For this survey we are asking you to respond to ten items in two categories:

- Expenditures of your organization in all science and engineering research and development activities
- Science and engineering research and development employment in your organization

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your organization.

The president or director of your organization named the individual on the label below to coordinate data collection for this survey. Please correct any incorrect information on the label.

Organization Identification #
Contact Name
Name of Organization
Address of Organization
Phone number
E-mail address

If someone other than the person listed above coordinates the data collection, please tell us whom we may call if we have questions about the data.

Name

Title

Phone

It is estimated that response to this survey will require 10.5 hours. If you wish to comment on this burden, please contact Gail A. McHenry, Reports Clearance Officer, NSF, at 703-306-1125 ext. 2010 or e-mail gmchenry@nsf.gov.

Please return the completed survey by (date) to: National Science Foundation PO Box 5700

Lincoln, NE 68505-9926

If you have any questions or comments about the survey, contact Mary V. Burke at NSF at 703-306-1772 ext. 6933 (*mvburke@nsf.gov*) or Heather Bellows of The Gallup Organization at 1-800-588-5776 (*NSF@gallup.com*).

Table of Contents

General I	Instructions	3
Item 1.	Your Organization	6
Item 2.	Types of Science and Engineering Research and Development Expenditures and Total Operating Budget	8
Item 2a.	Science and Engineering Research and Development Capital Expenditures	11
Item 3.	Sources of Funds for <i>Intramural</i> Science and Engineering Research and Development Expenditures	12
Item 4.	Expenditures for Intramural Science and Engineering Research and Development by Field of Science and Engineering and Source	14
Item 4a.	Medical or Health Science Expenditures for Intramural Science and Engineering Research and Development by Subfield of Medical and Health Science.	16
Item 5.	Expenditures by Sources of Funds for Intramural Basic and Applied Science and Engineering Research and Development	18
Item 6.	Intramural Science and Engineering Research and Development Expenditures by State Location for Headquarters and Site Offices	20
Item 7.	Sources of Funds for <u>Extramural</u> Science and Engineering Research and Development Expenditures	22
Item 7a.	Type of Subrecipient/Subcontractor for Science and Engineering Research and Development Expenditures Subcontracted Using Funds from other Sources, including Organization's Own Funds	24
Item 8.	Your Organization's Staff	26
Item 9.	Your Organization's Website	28
Item 10.	Comments and Feedback	28

General Instructions

Please read the detailed instructions for each item before completing the table for that item.

- Please report for the entire organization including any branches, divisions and departments that are not separately incorporated. If your organization has offices and facilities in the United States in addition to those at the address to which the survey materials were mailed, please indicate the name and address of each of these facilities in the comment section (Item 9), or on an attached sheet.
- The survey covers your fiscal years ending in 1996 and 1997.
- Where exact data are not available, please give the best estimate you can.
- Enter "0" as an item total rather than leave an item blank.

If you have any questions or comments about the survey, contact Mary V. Burke at NSF at 703-306-1772 x 6933 or Heather Bellows of The Gallup Organization at 1-800-558-5776.

About this survey

1. How to use the "Tips" box

Within each item in this survey, along with instructions for completing the item, you will find a "Tips" box containing additional information to help you complete the item correctly. The box also contains definitions of terms that appear in the item. Terms appearing in **boldface type** in the instructions are defined in the "Tips" box on that page.

2. Definition of research and development

Research is systematic study directed toward fuller knowledge or understanding of the subject studied. Research is classified as either basic or applied, according to the objectives of the investigator.

Development is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

Research and development includes the development and use of scientific knowledge through fundamental research in the laboratory, in the field or through experiments; clinical investigations; clinical trials; epidemiological and demographic studies and controlled pilot projects. Included in this definition is the preparation for publication of books and papers describing the results of the specific research and development, if carried out as an integral part of that research and development. Also included is the administration of research and development. Traineeships, if they are mainly directed to R&D, also are included.

3. Science and Engineering

For this survey, science and engineering (S&E) includes:

- Medical or Health Related Sciences including Biochemistry, Genetics, Physiology, Cell Biology/Molecular Biology, Pharmacology/Toxicology, Epidemiology, Health Care Sciences and Services, Reproduction, Growth and Development, Oncology/Pathology/Hematology, Immunology, Microbiology/Virology, Biomedical Engineering and Instrumentation, Neuroscience, Clinical Medicine, and other medical or health sciences.
- Natural and Social Sciences including Agricultural Sciences, Biological Sciences (nonmedical), Computer Sciences, Environmental Sciences, Mathematical Sciences, Physical Sciences, Psychology, and Social Sciences.
- **Engineering**, including Aeronautical and Astronautical, Chemical, Civil, Electrical, Mechanical, Metallurgical and Materials, and other engineering fields.

Science and engineering *do not* include law, business administration/management science, humanities, history (except research in history and philosophy of science and technology), the arts, or education (except educational psychology).

Item 1. Your Organization

Item 1 (below) asks you to state the year of your organization's establishment, and describe your organization in terms of the categories below. If you have difficulty categorizing your organization, please call Jennifer Spielvogel at The Gallup Organization at 1-800-288-9439.

To complete Item 1, please indicate the year of your organization's establishment, and check the box of the *one* category which *most closely* described your organization in 1996:

In what year was your organization established? _____

Research institute, including medical research organizations

A separately incorporated, independent nonprofit organization operating under the direction of its own controlling body. It performs research and development in engineering, and in the medical, health, natural and social sciences (including policy analysis).

University-affiliated hospital

A member of the American Hospital Association which operates as an integral part of an institution of higher education. Hospitals which have been set up by research institutes and which, while providing patient care, function primarily as laboratories for the research institutes should be considered "Research Institutes."

Other voluntary nonprofit hospital

A member of the American Hospital Association not subject to the control of either Federal, State, or local governments, nor an integral part of any institution of higher education. Hospitals which have been set up by research institutes and which, while providing patient care, function primarily as laboratories for the research institutes should be considered "Research Institutes."

Professional or technical society, or academy of science and/or engineering

A voluntary association of individuals sharing a common interest in the advancement of knowledge, either within a single field or across a broad spectrum of disciplines. The major function of these organizations is to aid and encourage the collection, collation, and dissemination of scientific and engineering knowledge for the benefit of their members and the science and engineering community as a whole.

Private foundation

A nongovernmental, nonprofit organization having a principal fund of its own, managed by its own trustees or directors, and established to maintain or to aid activities serving the common welfare. This organizational type includes operating foundations, which allocate the greater proportion of their R&D budgets to intramural performance, and philanthropic foundations, which allocate most of their funds to grants and contracts for research to be performed extramurally.

Check One Box

•

Ω

0

0

ò

Science exhibitor

A nonprofit organization which has as its primary goal the expansion of scientific and technological literacy within its community by providing exhibits that display and interpret the latest scientific findings and technological advances within its field or fields. Included in this category are museums, zoological parks, botanical gardens, and arboreta.

Trade association

An organization of business competitors in a specific industry or business, primarily interested in the commercial promotion of products or services. Membership is usually held in the name of a business entity. Its activities may fall into one or more of the following areas: business ethics, management practices, standardization, commercial (i.e., statistical) research, publication, promotion, and public relations.

Industrial consortium

A not-for-profit research joint venture conducting science and engineering research and development.

Academic consortium

An academically administered not-for-profit research joint venture conducting science and engineering research and development

Agricultural cooperative

An organization of individuals or business entities nominally competitors, in the production and sale of agricultural products. Its activities may include one or more of the following areas: collective marketing or purchasing, research, public relations, and the improvement of the economic condition of the farm population of the United States.

Federally Funded Research and Development Center (FFRDC)

One of the specific organizations that was established to meet the particular research needs of a Federal agency.

If you had difficulty categorizing your organization, please call Heather Bellows at The Gallup Organization at 1-800-558-5776.

 \cap

Ò

 \mathbf{O}

25

Item 2. Types of Science and Engineering Research and Development Expenditures and Total Operating Budget

Item 2 (next page) asks for your organization's following items: *extramural* and *intramural* science and engineering R&D expenditures; an estimate of *total operating budget*; and *capital science and engineering R&D expenditures*.

To complete Item 2, please do the following:

- In the spaces at the top of the columns, fill in the months in which your fiscal years 1996 and 1997 began and ended.
- In Row a, Column 1 of the table on the next page, fill in all direct and indirect operating costs incurred for intramural R&D performance in fiscal year 1996. In Column 2, fill in the part of the costs in Column 1 that were for medical or health related R&D performance, again in FY 1996. In Columns 3 and 4, fill in the corresponding figures for FY 1997.
- In Row b, Column 1, fill in all costs for extramural R&D performance (contracted out or performed by others outside your organization under a grant or fellowship) for which your organization was responsible in FY 1996. In Column 2, fill in the part of those extramural costs that were for medical or health related R&D performance, again in FY 1996. In Columns 3 and 4, fill in the corresponding figures for FY 1997.
- In Row c, Column 1, fill in all expenditures your organization made in FY 1996 not covered above, including non-R&D expenditures. In Column 3, fill in the corresponding amount for FY 1997. Leave Columns 2 and 4 blank.
- In Row d, Column 1, fill in your organization's total operating budget in FY 1996. It should be the sum of all the previous entries in the column. In Column 3, fill in the corresponding amount for FY 1997. Leave Columns 2 and 4 blank.

- Financial data are requested for *your* fiscal years 1996 and 1997. Regardless of the dates of *your* fiscal year (e.g., January to December, July to June, September to August), for this survey "1996" refers to the fiscal year that ended during 1996 (for example, July 1995 to June 1996), and "1997" refers to the fiscal year that ended during 1997.
- *Medical or Health Related Research and Development* is aimed ultimately at the improvement of human health and conquest of disease. Within this context, medical or health related research and development includes Health Sciences and Services; Biomedical Engineering and Instrumentation; Clinical Medicine; and other disciplines--see the attached List of Detailed Fields, paragraph B7, for more detail.
- Exclude any R&D conducted by FFRDC's under your control.
- Include fellowships, traineeships, and other assistantships if these are primarily directed to R&D.

Types of Expenditures:

- *Intramural S&E R&D Expenditures* include all direct and indirect operating costs incurred for S&E R&D performance conducted internally by people who do research at your organization. These costs typically include wages and salaries of researchers and consultants, and all supporting personnel such as technicians, secretaries and other personnel; costs of administration; costs of materials and supplies consumed; service and supporting costs; depreciation; and shares of other overhead expenses. Intramural expenses also include payments for goods or services provided to a vendor necessary to conduct the intramural research and development activity.
 - *Include* the cost of research and development performed by scientists and engineers doing research at your organization, whether done in the United States or abroad.
 - *Include* independent research and development; also include classified research and development. *Include* all indirect costs for research and development.
 - If your organization performed research and development for others on contract, *include* the total your organization charged for the work performed in the year covered by survey.
 - *Exclude* research and development contracts, subcontracts, grants and fellowships, traineeships, and other assistantships awarded by your organization.
 - *Exclude* the gathering of general purpose data, and activities concerned primarily with the dissemination of scientific information.
- *Extramural S&E R&D expenditures* include all costs of all R&D your organization contracted out or passed through to subrecipients, and research conducted by others outside your organization with funds distributed through or by your organization.
- *All other expenditures* include all of your organization's non-R&D expenditures and unallowable costs (see OMB Circular A133, section 210).
- *Total operating budget* includes all expenditures for current operations and administration of the organization and its facilities; and all gifts, grants, contracts, scholarships, etc., made to outside organizations and individuals in the United States and foreign countries, and the administrative and operating expenses associated with such disbursements.

	FY 1996 Month beginning: Month ending:		FY 1997 Month beginning: Month ending:	
Type of expenditure	Total (1)	Medical or health related (2)	Total (3)	Medical o health relat (4)
a. Intramural <i>(internal only)</i> S&E R&D expenditures	\$	\$	\$	\$
 b. Extramural (passed through to subrecipients) S&E R&D expenditures 				
c. All other expenditures, including non-R&D expenditures				
d. Total operating budget (sum of rows a, b and c)	\$		\$	

Item 2a. Science and Engineering Research and Development Capital Expenditures

To complete Item 2a (below), please do the following:

In Column 1, fill in all capital expenditures you made during FY 1996 for buildings, fixtures and depreciable equipment used for S&E R&D. In Column 2, fill in the part of those expenditures that you would attribute to medical or health related R&D. In Columns 3 and 4, fill in the corresponding figures for FY 1997.

TIPS

• S&E R&D Capital Expenditures include all expenses for buildings, fixtures, and depreciable equipment used in S&E R&D performed within your organization. Include only costs which are normally chargeable to fixed asset accounts for which depreciation accounts are ordinarily maintained; *include* major alterations, capitalized repairs and improvements; and *include* expenditures made during the year for establishments under construction but not yet in operation. Do not include capital expenditures made by owners of property rented or leased by you, including the Federal Government. *Exclude* cost of land and cost of maintenance and repair charged as current operating expense. Also *exclude* cost of government-owned structures or equipment.

2a.	S&E R&D Capital Expenditures				
]	FY 1996	FY	1997
		Total	Medical or	Total	Medical or
		(1)	health related (2)	(3)	health related (2)
	S&E R&D Capital Expenditures				
		\$	\$	\$	\$

Item 3. Sources of Funds for <u>Intramural</u> Science and Engineering Research and Development Expenditures

Item 3 (next page) asks you for *the sources of funds* for your intramural S&E R&D expenditures for FY 1996 and FY 1997 (the figures you reported in Item 2, Row a). Please provide separate estimates of the portion of those expenditures for medical or health related S&E R&D for each year.

- *Source of funds* refers to ultimate sources rather than immediate sources of funds concerned. For example, if your organization is working as a subcontractor to a prime contractor and the prime contract is with the federal government, you should list *Federal Government* as the source of funds.
- In considering funds, exclude the amounts of R&D contracted out by your organization to be performed by other organizations.
- Under *Federal Government* (Row a), include all Federal grants and contracts which the agencies awarded specifically for research and development. *State Government* (Row b) and *Local Government* (Row c) should include all grants and contracts these government officials awarded specifically for R&D.
- Under *Nonprofit Organizations* (Row d), include all grants and contracts from any nonprofit organizations, including foundations, public charities and professional associations. (In this category, include all funds used for R&D whether or not the source has awarded them specifically for R&D.) Funds from foundations that are affiliated with or grant solely to your organization should be included under *Other Sources/Organization's own funds* (Row g). Funds specifically designated for R&D and derived from a health agency that is a unit of a State or Local government should be reported under *State* or *Local government*.
- Under *Universities and Colleges*, (Row e) include all grants and contracts from colleges and universities awarded specifically for research and development.
- Under *Industry* (Row f), include all grants and contracts which profit-making organizations awarded specifically for R&D. Do not include grants and contracts from nonprofit foundations financed by industry, which should be reported under *Nonprofit Organizations*.
- Under *Other sources, including organization's own funds* (Row g), report any additional funds received from outside sources other than those already noted. Examples include gifts, grants, or contracts received from private individuals. Organization's own funds include earnings from investments, disbursements from capital, membership dues and assessments, liquidation of assets, <u>unrestricted funds from all sources except other nonprofit organizations</u>, and earnings from miscellaneous sources such as publication sales, admissions, advertising, etc. Include independent R&D.
- Each Row h total should be the sum of its respective column. In addition, these totals should equal the figures reported in Item 2, Row a.

	F	'Y 1996	F	Y 1997
Source of funds	Total (1)	Medical or health related (2)	Total (3)	Medical or health related (4)
Federal Government				
a1. Department of Defense	\$	\$	\$	\$
a2. Department of Education				
a3. Department of Energy				
a4. Department of Health and Human Services, including National Institutes of Health				
a5. Department of Transportation				
a6. Environmental Protection Agency				
a7. International Development Cooperation Agency, including Agency for International Development				
a8. National Aeronautics and Space Administration				
a9. National Science Foundation				
a10. Other Federal Government not listed				
a. Federal Government Total				
b. State government				
c. Local government				
d. Nonprofit organizations				
e. Universities and Colleges				
f. Industry				
g. Other sources, including organization's own funds				
h. Total (a-g)	\$	\$	\$	\$

3.

Item 4. Expenditures for Intramural Science and Engineering Research and Development by Field of Science and Engineering and Source

Item 4 (next page) asks for your total and federally financed expenditures for intramural research and development by field of science and engineering. The last row (Row D) asks for totals:

- Row D, Total Engineering and All Sciences (All Sources), Columns 1 and 3, should equal Item 2, Row a, Columns 1 and 3, respectively.
- Row D, Total Engineering and All Sciences (Federal Gov't), Columns 2 and 4, should equal Item 3, Row a, Columns 1 and 3, respectively.

- Please refer to the attached List of Detailed Fields for definitions of the fields shown on the next page.
- Interdisciplinary research should be categorized by individual research project according to the nature of the research performed. When individual projects encompass multiple fields of science and engineering, prorate expenditures to report the proportions of each discipline involved. Do not combine funds into "other" field categories unless the type of research is actually defined as "other".
- Include all expenditures for science and engineering R&D, by field of science and engineering, whether such expenditures derive from outside sources or your organization's own funds, and whether from contracts, grants, gifts, endowments (income or principal), State and local government appropriations, or other sources, provided the funds were separately budgeted for R&D and were expended in the fiscal years 1996 and 1997. Also include any indirect costs reimbursed or reimbursable by outside sponsors of R&D projects.
- Do not include expenditures by contractors, subcontractors or subrecipients.

	FY	1996	FY 1	1997
Field	All Sources (1)	Federal Gov't (2)	All Sources (3)	Federa Gov't (4
A. Medical or Health Sciences				
Natural and Social Sciences				
1. Physical sciences				
a. Astronomy				
b. Chemistry				
c. Physics				
d. Other physical sciences,				
n.e.c.				
2. Environmental sciences				
a. Atmospheric				
b. Earth sciences				
c. Oceanography				
d. Other environmental				
sciences, n.e.c.				
3. Mathematical sciences				
4. Computer sciences				
5. Agricultural sciences				
6. Biological sciences (non-				
medical)				
7. Psychology				
8. Social sciences				
a. Anthropology/				
Archeology				
b. Economics				
c. Political science				
d. Sociology				
e. Other social sciences,				
n.e.c.				
9. Other sciences, n.e.c.				
B. Natural/Social Sciences Total				
Engineering				
1. Aeronautical & astronautical				
2. Chemical				
3. Civil				
4. Electrical				
5. Mechanical				
6. Metallurgical & materials				
7. Other engineering , n.e.c.				
C. Engineering Total				
D. Total Science and Engineering Research and Development (A+B+C)	\$	\$	\$	\$

(D1 and D3 should equal Item 2, Row a, Columns 1 and 3; D2 and D4 should equal Item 3, Row a, Columns 1 and 3).

Item 4a. Medical or Health Science Expenditures for Intramural Science and Engineering Research and Development by Subfield of Medical and Health Science

Item 4a (next page) asks for more detail on your organization's Medical or Health Science R&D Expenditures. Item 4a should be completed only by those who marked any expenditures for "Medical and Health Sciences" in Item 4, Row A.

- Row 16 totals in Item 4a, Columns 1 through 4, should equal Item 4, Row A (Medical or Health Sciences), Columns 1 through 4, respectively.
- As in Item 4, Federal Government funds are R&D-awarded funds.
- Include in *All Sources* (Columns 1 and 3) all expenditures for science and engineering R&D, by subfield of medical science, whether such expenditures derive from outside sources or your organization's own funds, and whether from contracts, grants, gifts, endowments (income or principal), State and local government appropriations, or other sources, provided the funds were separately budgeted for R&D and were expended in the fiscal years 1996 and 1997. Also include any indirect costs reimbursed or reimbursable by outside sponsors of R&D projects.
- Do not include expenditures by contractors, subcontractors or subrecipients.
- The specific subfields of medical and health science, adapted from the National Institutes of Health's Central Scientific Classification System (CSCS), are:
 - **1. Biochemistry** (Carbohydrate; Fat and Lipid; Protein/Amino Acid; Enzyme/Metabolism; Hormone/Vitamin; Nucleic Acid; Physical; Physiological/Clinical; Biomaterials)
 - **2. Genetics** (Biochemical and Molecular; Cytogenetics; Developmental Genetics; General Genetics; Quantitative Genetics; Genetics of Evolution; Radiation Genetics; Human Genetics; Mutagenesis)
 - **3. Physiology** (Cell; Neuro/Muscular; Gastrointestinal; Cardiovascular/Pulmonary; Reproductive; Excretory; Blood/Blood Forming; Endocrine; Communicative Sciences; Physiological Optics)
 - **4. Cell Biology/Molecular Biology** (Fine Structure; Cyto/Histo Chemistry; Cell Division; Morphogenesis; Cell Physiology; Cell Radiation; Tissue Culture)
 - **5. Pharmacology/Toxicology** (Chemical Pharmacology; Pharmaco-Endocrinology; Clinical--Therapeutics; Drug Enzymology; Neuropharmacology; Toxicology/Pharmacodynamics; Psychopharmacology; Developmental; Aquatic; Environmental; Forensic; Inhalation; Occupational/Safety)
 - **6. Epidemiology** (Communicable Diseases; Inheritable Diseases; Noncommunicable Diseases; Population Dynamics; Statistical; Mental Diseases; Information Sciences)
 - 7. Health Care Sciences and Services (Health Administration; Health Care Policy; Health Services Delivery; Public Health; Health Care Economics)
 - **8. Reproduction, Growth and Development** (Fertilization; Embryology; Infancy; Adolescence; Gerontology)
 - **9. Oncology/Pathology/Hematology** (Cytopathology; Oncology; Neuropathology; Histopathology; Experimental; Clinical; Tissue Culture)
 - **10. Immunology** (Immunogenetics; Immunochemistry; Immunopathology; Hypersensitivity; Immunotherapy)

- **11. Microbiology/Virology** (Bacteriology; Immunology; Immunochemistry; Mycology; Microbial Biochemistry; Microbial Physiology; Parasitology)
- **12. Biomedical Engineering and Instrumentation** (Biomedical Engineering; Biomedical Automation; Bioinstrumentation; Clinical Engineering; Instrumentation Development; Prosthesis; Biomaterials; Biological and/or Ecological Control Systems; Image and Waveshape Processing, Analysis and Display)
- 13. Neuroscience (Computational/Structural; Neuroanatomy; Neurobiology; Neurophysiology)

4a

- **14.** Clinical Medicine, General (Patient Research; Clinical Trials; Diagnostics; Evaluation, Treatment Plans; Disease Prevention)
- **15.** Other (Please list any other medical sciences subfields for which your organization had intramural R&D expenditures)

		FY	1996	FY 1997	
	Subfield	All Sources	Federal Gov't	All Sources	Federa Gov't
		(1)	(2)	(3)	(4)
1.	Biochemistry				
2.	Genetics				
3.	Physiology				
4.	Cell Biology/Molecular Biology				
5.	Pharmacology/Toxicology				
6.	Epidemiology				
7.	Health Care Sciences and Services				
8.	Reproduction, Growth and Development				
9.	Oncology/Pathology/ Hematology				
10.	Immunology				
11.	Microbiology/Virology				
12.	Biomedical Engineering and Instrumentation				
13.	Neuroscience				
14.	Clinical Medicine, General				
15.	Other (Please list)				
16.	Total Medical and Health Science Expenditures	\$	\$	\$	\$

(Row 16, Columns 1, 2, 3, 4 should equal Item 4, Row A, Columns 1, 2, 3, 4)

Item 5. Expenditures by Sources of Funds for *Intramural Basic and Applied Science and Engineering Research and Development*

Item 5 asks you to categorize your organization's intramural *S&E research* and *development* expenditures as basic, applied, or development by source of funds. The data for **Federal Government** and **Industry** should be based on the funds that the sources awarded specifically for R&D and were reported in Item 3, Columns 1 and 3, Row a (Federal Government) and Row f (Industry).

To complete Item 5, please do the following:

- In Row a, Column 1, fill in the approximate dollar value of all of your intramural basic research expenditures in FY 1996 that came from the *Federal Government*. In Row b, Column 1, fill in the approximate dollar value of intramural basic research expenditures that came from *Industry*. In Row c, fill in the approximate dollar value that came from *All other sources*. Row d should be the sum of Rows a, b and c.
- Then go on to complete Columns 2 and 3 for intramural applied research and intramural development.
- The total in Row a, column 4 should equal Item 3, Row a, Column 1. The total in Row b, Column 4 should equal Item 3, Row f, Column 1. The total in Row d, Column 4 should equal Item 3, Row h, Column 1.
- Then go on to complete Rows e, f, g and h for FY 1997.
- Column 4 totals for FY 1997 should match the respective row and column totals in Item 3, as described above.

TIPS

• **Basic research** is directed toward an increase of knowledge; it is research where the primary aim of the investigator is a fuller knowledge or understanding of the subject under study rather than a specific application thereof.

Applied research is directed toward the practical application of knowledge. The definition of applied research differs from the definition of basic research chiefly in terms of the objectives of the investigator.

Development is the systematic use of 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. It does not include quality control or routine product testing.

• We recognize that your records may not yield exact figures on amounts expended for each of the three categories. Your best estimates will be fine.

	Type of S&E R&D Activity					
Sources	Basic Research	Applied Research	Development	Total		
	(1)	(2)	(3)	(4)		
FY 1996				-		
a. Federal Government						
b. Industry						
c. All other sources*						
d. Total	\$	\$		\$		
FY 1997						
e. Federal Government						
f. Industry						
g. All other sources*						
h. Total	\$	\$		\$		

5.

* All other sources includes State government; local government; nonprofit organizations; and other sources, including organization's own funds.

Item 6. Intramural Science and Engineering Research and Development Expenditures by State Location for Headquarters and Site Offices

Item 6 asks you to report your organization's intramural S&E R&D expenditures by state for your organization's *main or headquarters office* and any established *site offices*.

- Your organization's *main or headquarters office* is the corporate headquarters for your organization. If you operate in only one location, all of your intramural R&D expenditures will be in the state housing that location. If you have multiple sites in the same state, combine activities within that state.
- *Site offices* are other locations managed by your organization in which your organization conducts R&D activities (ignore site offices in which no R&D occurs). These could be field sites, experiment stations, data collection facilities, or sites for experimental or laboratory equipment. Exclude sites managed by subcontractors or subrecipients.
- For example, your organization may be conducting a clinical trial in multiple states but the data collection is managed from a site office in Texas. If so, the field expenses for the clinical trial should all be attributed to Texas, even though they occur in multiple states.
- Totals in Item 6 should equal Item 2, Row a, Column 1 and 3.

State	FY 1996	FY 1997	State	FY 1996	FY 199
Alabama	\$	\$	Montana		
Alaska			Nebraska		
Arizona			Nevada		
Arkansas			New Hampshire		
California			New Jersey		
Colorado			New Mexico		
Connecticut			New York		
Delaware			North Carolina		
District of			North Dakota		
Columbia					
Florida			Ohio		
Georgia			Oklahoma		
Hawaii			Oregon		
Idaho			Pennsylvania		
Illinois			Rhode Island		
Indiana			South Carolina		
Iowa			South Dakota		
Kansas			Tennessee		
Kentucky			Texas		
Louisiana			Utah		
Maine			Vermont		
Maryland			Virginia		
Massachusetts			Washington		
Michigan			West Virginia		
Minnesota			Wisconsin		
Mississippi			Wyoming		
Missouri			Puerto Rico		
			Other territories		
			and U.S.		
			possessions		
			Locations outside		
			the United States		
			Total	\$	\$

Item 7. Sources of Funds for <u>Extramural</u> Science and Engineering Research and Development Expenditures

Item 7 (next page) asks for the sources of funds for R&D that your organization contracted out or passed through to subrecipients (the figures you reported in Item 2, Row b). All of the definitions and guidelines that applied to Item 3 apply to this item as well. They are repeated here for ease of reference.

- Source of funds refers to ultimate sources rather than immediate sources of funds concerned.
- Under *Federal Government* (Row a), include all Federal grants and contracts which the agencies awarded specifically for research and development. *State Government* (Row b) and *Local Government* (Row c) should include all grants and contracts the government officials awarded specifically for R&D.
- Under *Nonprofit Organizations* (Row d), include all grants and contracts from any nonprofit organizations, including foundations, public charities and professional associations. (In this category, include all funds used for R&D whether or not the source has awarded them specifically for R&D.) Funds from foundations that are affiliated with or grant solely to your organization should be included under *Other Sources/Organization's own funds*. Funds specifically designated for R&D and derived from a health agency that is a unit of a State or Local government should be reported under *State* or *Local government*.
- Under *Universities and Colleges* (Row e), include all grants and contracts from colleges and universities awarded specifically for research and development.
- Under *Industry* (Row f), include all grants and contracts which profit-making organizations awarded specifically for R&D. Do not include grants and contracts from nonprofit foundations financed by industry, which should be reported under *Nonprofit Organizations*.
- Under *Other sources, including organization's own funds* (Row g), report any additional funds received from outside sources other than those already noted. Examples include gifts, grants, or contracts received from private individuals. Organization's own funds include earnings from investments, disbursements from capital, membership dues and assessments, liquidation of assets, <u>unrestricted funds from all sources except other nonprofit organizations</u>, and earnings from miscellaneous sources such as publication sales, admissions, advertising, etc.
- Each Row h total should be the sum of its respective column. In addition, these totals should equal the figures reported in Item 2, Row b.

	F	FY 1996		Y 1997
Source of funds	Total (1)	Medical or health related (2)	Total (3)	Medical or health related (4)
a. Federal government	\$	\$	\$	\$
b. State government				
c. Local government				
d. Nonprofit organizations				
e. Universities and Colleges				
f. Industry				
g. Other sources, including organization's own funds				
h. Total	\$	\$	\$	\$

7.

Item 7a. Type of Subrecipient/Subcontractor for Science and Engineering Research and Development Expenditures Subcontracted Using Funds from other Sources, including Organization's Own Funds

Table 7a, next page, asks for some additional information on your organization as a funder of external research. In this table, please provide more detail on the types of subrecipients or subcontractors your organization funded using other sources of funds or your organization's own funds. The totals in Row e of Table 7a should equal the respective amounts in Item 7, Row g.

To complete Item 7a, please do the following:

• Enter the amounts subcontracted using funds from other sources, including your organization's own funds, by the type of subcontractor or subrecipient.

If Item 7, Row g is zero, please enter zeroes in Row e, Columns 1-4.

7	a.

Type of Subrecipient/Subcontractor for S&E R&D Expenditures Subcontracted Using Funds from Other Sources, Including Organization's Own Funds (Item 4, row f)

		F	FY 1995		1996
	Type of Subcontractor	Total (1)	Medical or health related (2)	Total (3)	Medical or health related (4)
a.	Universities and Colleges	\$	\$	\$	\$
b.	Nonprofit organizations				
с.	Industry				
d.	Other (please specify)				
e.	Total (Item 7, Row g)	\$	\$	\$	\$

Item 8. Science and Engineering Research Employment

To complete Item 8 (next page), please do the following:

- In Rows a1, a2, and a3, Column 1, fill in the number of S&E R&D employees *Full Time Equivalents (FTEs)* working in your organization as of March 1996. Use the definitions below to determine the appropriate category of S&E R&D staff. In Column 2, fill in the corresponding numbers as of March 1997.
- In Row b, Column 1, fill in the number of *All Other Employee FTEs* working in your organization in non-S&E R&D activities as of March 1996. In Column 2, fill in the corresponding number as of March 1997.
- In Row c, Column 1, fill in the *Total FTEs* working in your organization as of March 1996. Rows a1, a2, a3 and Row b should sum to the number in Row c. In Column 2, fill in the corresponding number as of March 1997.

- *Full-time Equivalents (FTEs)* represent the sum of all full- and part-time commitments to research and development or other activities. For example, if two physicians spend half-time in direct patient acre and half-time on research, together they represent one FTE scientist engaged primarily in research and development and one FTE scientist engaged primarily in other activities.
- Only include people compensated through or by your organization as of March 1996 or March 1997.
- Include people working in your organization in the United States and in foreign countries.
- *S&E R&D personnel* include all persons employed directly on R&D, as well as those providing direct services such as R&D managers, administrators and clerical staff.
- *Researchers* are professionals engaged in the conception or creation of new knowledge, products, processes, methods, and systems, and in the management of the projects concerned.
- *Technicians and equivalent staff* are persons whose main tasks require technical knowledge and experience in one or more fields of engineering, physical and life sciences, or social sciences. They participate in R&D by performing scientific and technical tasks involving the application of concepts and operational methods, normally under the supervision of researchers. Many technicians will have college degrees.
- *Support Staff* include skilled and unskilled craftsmen, secretarial and clerical staff participating in R&D projects or directly associated with such projects.
- *All other employees* include the balance of the people working in your organization. Include professional staff not involved in S&E R&D.
- Positions that do not require science or engineering backgrounds should be categorized as *Other Employees* regardless of the background and training of people in these positions.

Category of Staff	March 1996 (1)	March 1997 (2)
S&E R&D Employees		
a1. Researchers		
a2. Technicians and equivalent staff		
a3. Support Staff		
a. S&E R&D Total		
b. All other employees		
c. Total employees		

8.

Item 9. Your Organization's Website

Reports of the survey results will be available via the World Wide Web. Users of the survey may wish to contact your website directly.

Please write your organization's website address below.

Item 9. Comments and Feedback

We appreciate the time you have taken to fill out the *NSF Survey of 1996 and 1997 Research and Development Funding and Performance by Nonprofit Organizations.*

How many person-hours were required to complete this form?

If you have any comments regarding this study, please write them in the space below.

Return the survey by *(date)* to:

National Science Foundation PO Box 57001 Lincoln, NE 68505-9926