## 9. Appendix 9: Wave 2 Performer Questionnaire

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



### NATIONAL SCIENCE FOUNDATION (NSF)

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 seeking your help in understanding the work of the nonprofit sector by asking you to complete this questionnaire on the science and engineering research and development activities undertaken by 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 not adversely affect your organization. Information received from individual organizations may be published in NSF reports.

Please write any corrections in the space next to the address.

If anyone other than the person listed above completes all or part of this survey, please ask each respondent to fill in the requested information in Question 8, page 11.

It is estimated that response to this survey will require three hours. If you wish to comment on this burden, please contact Suzanne H. Plimpton, Reports Clearance Officer, NSF, at 703-306-1125, or email splimpto@nsf.gov.

Please return the completed survey by (date) 1999 to:

NSF Survey of Nonprofits The Gallup Organization Survey Processing Center P.O. Box 5700 Lincoln, NE 68505-9926

If you have any questions or comments about the survey, please contact Barbara Wells of The Gallup Organization at 1-888-558-5776 or NSF@gallup.com.

## General Instructions

#### WHAT TO INCLUDE

- 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 listed on *the cover of the booklet*, please indicate the names and addresses of each of these facilities in the Comments and Feedback section on page 12.
- The survey covers your fiscal years ending in 1996 and 1997.
- If exact data are not available, please give the best estimate.
- Enter "0" as an item total rather than leave an item blank.

#### **GLOSSARY OF TERMS**

Refer to the Glossary on pages 13-14 for detailed definitions of research and development and science and engineering and a list of Federally Funded Research and Development Centers (FFRDC).

#### **QUESTIONS**

If you have any questions or comments about the survey, please contact Barbara Wells of The Gallup Organization at 1-888-558-5776 or NSF@gallup.com.

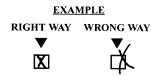
#### RETURNING THE COMPLETED SURVEY

Return this survey by **XX X, 1999** in the enclosed pre-paid envelope or mail directly to:

NSF Survey of Nonprofit Organizations The Gallup Organization Survey Processing Center P.O. Box 5700 Lincoln, NE 68505-9926

#### SCANNABLE FORM

This questionnaire is a scannable form. Please mark your responses with an "x" using a blue or black pen as in the example below.



### ELECTRONIC VERSION (WORLD WIDE WEB)

This questionnaire is available in an electronic form. The web address for the electronic version of the questionnaire is <a href="http://nsfperformer.gallup.com">http://nsfperformer.gallup.com</a> and is available using most browsers including Netscape and Internet Explorer. Your password and the nonprofit organization's EIN is printed on the front cover of the paper questionnaire.

## 1. Type of Organization

Please MARK ONE BOX next to the item that most closely describes your organization's function in 1996. If your organization fits into more than one category, please select the one that *best* describes your organization's primary function.

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).
<b>University-affiliated hospital</b> —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 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.
<b>Professional or technical society, or academy of science and/or engineering</b> —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 knowledge for the benefit of their members and the scientific community as a whole.
<b>Private foundation</b> —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 that allocate the greater proportion of their R&D budgets to intramural performance, and philanthropic foundations that allocate most of their funds to grants and contracts for research to be performed extramurally.
<b>Science exhibitor</b> —A nonprofit organization which has as its primary goal the expansion of scientific and technologies literacy within its community by providing exhibits that display and interpret the latest scientific and technological advances within its field or fields. Included in this category are museums, zoological parks, botanical gardens, and arboreta.
<b>Trade association</b> —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.
<b>Industrial consortium</b> —A not-for-profit research joint venture conducting science and engineering research and development.
<b>Academic consortium</b> —An academically administered not-for-profit research joint venture conducting science and engineering research and development.
<b>Agricultural cooperative</b> —An organization of individuals or business entities nominally competitors, engaged in the production and sale of agricultural products. Its activities may include one or more of the following areas: collective marketing or purchasing, research and development,

public relations, and the improvement of the economic condition of the farm population of the United States.
<b>Federally Funded Research and Development Center</b> (FFRDC)— One of the specific organizations that was established to meet the particular research and development needs of a Federal agency. See list on last page of the Glossary, page 14.

## 2. Total Intramural Science and Engineering Research and Development Expenditures for Fiscal Years 1996 and 1997

Complete the grid below with your organization's total intramural science and engineering (S&E) research and development (R&D) expenditures for fiscal years 1996 and 1997. Please categorize your organization's expenditures as basic research, applied research, or development funds for each fiscal year. If your records do not yield exact figures on amounts expended for each of the three categories, please provide your best estimates.

#### TIPS:

- **Basic research** is directed toward an increase of knowledge; 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.
- 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.

#### **Include:**

- cost of research and development performed by scientists and engineers doing research at your organization, whether in the United States or abroad
- ✓ independent research and development, classified research and development, and 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:**

- \* grants and fellowships, traineeships, and other assistantships awarded by your organization
- \* the gathering of general-purpose data, and activities concerned primarily with the dissemination of scientific information
- **x** all research and development contracts and subcontracts
- \* extramural S&E R&D expenditures including 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.

Intramural S&E R&D expenditures	<u>FY 1996</u>		<u>FY 1997</u>
1. Amount used for basic research	\$	\$	
2. Amount used for applied research	\$	\$	
3. Amount used for development	\$	\$	
Total intramural S&E R&D expenditures (sum of rows 1, 2, and 3)	\$	\$	

<i>3</i> .	Total Extramural Science and Engineering Research and Development Expenditures for
	Fiscal Years 1996 and 1997

Please fill in the grid below with your organization's total extramural science and engineering (S&E) research and development (R&D) expenditures for fiscal years 1996 and 1997. If your records do not yield exact figures on amounts expended, please provide your best estimates.

#### **TIPS**

• Extramural S&E R&D expenditures include all research and development contracts, subcontracts, all costs of R&D your organization contracted out or passed through to sub-recipients, and research conducted by others outside your organization with funds distributed through or by your organization.

	<u>FY 1996</u>		<u>FY 1997</u>
Extramural S&E R&D expenditures	\$	\$	

# 4. Sources of Funds for Intramural Science and Engineering Research and Development Expenditures, and Research and Development Categories

Please fill in the grid below with your organization's sources of funds for intramural science and engineering (S&E) research and development (R&D) expenditures for fiscal years 1996 and 1997.

#### TIPS

- **Source of funds** refers to the ultimate source rather than immediate source 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.
- **Federal government** includes all federal grants and contracts that the agencies awarded specifically for research and development.
- **State** and **local governments** include all grants and contracts these government officials awarded specifically for R&D.
- Nonprofit organizations include all grants and contracts from any nonprofit organizations, including foundations, public charities, and professional associations. (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*, *including your 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* and *local government*.
- Universities and colleges include all grants and contracts from colleges and universities awarded specifically for research and development.
- **Industry** includes 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; these should be reported under *nonprofit organizations*.
- Other sources, including organization's own funds should include any additional funds received from outside sources other than those already noted. Examples include gifts, grants, or contracts received from private individuals and all foreign sources. 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.

Sources of Funds	<u>FY 1996</u>	<u>FY 1997</u>
a. Federal government, Total	\$	\$
a1. Federal funds used for basic research	\$	\$
a2. Federal funds used for applied research	\$	\$
a3. Federal funds used for development	\$	\$
b. State and local governments	\$	\$
c. Nonprofit organizations	\$	\$
d. Universities and colleges	\$	\$
e. Industry	\$	\$
f. Other sources, including your organization's own funds	\$	\$
Total Sources of Funds (Sum of rows a-f)	\$	\$

Data Check: Total Sources = Total in Question 2

## 5. Expenditures for Intramural Science and Engineering Research and Development by Field of Science and Engineering

Please fill in the grid on the following page with your organization's total expenditures for intramural research and development by field of science and engineering for fiscal years 1996 and 1997.

#### **TIPS**

**Interdisciplinary research** should be categorized by individual research project according to the nature of the research performed. When individual projects encompass multiple fields, estimate and report that portion of the expenditures that can be assigned to each discipline involved.

#### Include:

- ✓ all expenditures for science and engineering R&D by field
- ✓ all expenditures derived from outside sources and your organization's own funds
- ✓ all 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 during the fiscal years 1996 and 1997
- ✓ any indirect costs reimbursed or reimbursable by outside sponsors of R&D projects

#### Exclude:

- \* research and development expenditures in the field of Education
- \* expenditures by contractors, subcontractors, or subrecipients

#### **Definitions of Fields**

- a. Biological (nonmedical) Sciences include Biotechnology, Botany, Ecology, Biostatistics, Zoology, etc.
- b. *Agricultural Sciences include* Aquaculture, Plant Science, Soil Science, Renewable Natural Resources, Landscape Architecture, Horticulture, etc.
- c. Medical and Health-Related Sciences include 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-related sciences.
- d. *Psychology* includes General Psychology, Clinical Psychology, School Psychology, Art Therapy, Animal Behavior, Educational Psychology, Experimental Psychology, Human Development and Personality, and Social Psychology.
- e. *Environmental/Earth Sciences* include Atmospheric Sciences, Meteorology, Geology, Paleontology, Seismology, and Oceanography.
- f. *Physical Sciences* include Astronomy, Astrophysics, Chemistry, Physics, and Physical Sciences, etc.
- g. Mathematics and Computer Sciences

- h. *Engineering* includes Aeronautical, Astronautical, Chemical, Civil, Electrical, Mechanical, Metallurgical and Materials, and other engineering fields.
- i. *Social Sciences* include Anthropology, Archaeology, Economics, Political Science, Sociology, and other social sciences **excluding Education**.
- j. Other Sciences (excluding Education) not elsewhere classified.

## Expenditures for Intramural S&E R&D by Field of Science and Engineering

Field of Science & Engineering	FY 1996 Expenditures	FY 1997 Expenditures
A. Biological (nonmedical) Sciences		
B. Agricultural Sciences		
C. Medical and Health-Related Sciences		
D. Psychology		
E. Environmental/Earth Sciences		
F. Physical Sciences (Astronomy, Astrophysics, Chemistry, Physics, etc.)		
F. Mathematics and Computer Sciences		
G. Engineering		
H. Social Sciences		
1. Other Sciences, not elsewhere classified		
TOTAL INTRAMURAL		
SCIENCE AND ENGINEERING Research and Development Expenditures		

## 6. Top Three Major States and Their Intramural Science and Engineering Research and Development Expenditure.

In what three states did your organization perform the *largest* amounts of S&E R&D in fiscal years 1996 and 1997? This includes intramural S&E R&D expenditures for your main office as well as any site offices.

#### **TIPS**

- Your organization's **main office or headquarters** 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.

		Amount of S&E R&D
FY 1996	1.	\$
	2.	\$
	3.	\$
	Name of State	Amount of S&E R&D

#### 7. Researchers at Your Organization

How many S&E R&D full-time equivalents (FTE's) were compensated by your organization as of March 1996 and March 1997?

#### **TIPS**

**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.

- Include visiting researchers and graduate students if your organization compensates them directly.
- Include people compensated by your organization in the United States and in foreign countries.

**Full-time equivalents** (FTE's) represent the sum of all individuals with full- and part-time commitments to research and development or other activities. For example, if two physicians spend half of their time in direct patient care and half of their time on research and development, together they represent one FTE scientist engaged primarily in research and development.

Year	Number of FTE researchers on staff
1996	
1997	

## 8. Respondent Information

Please fill in your name and title at this organization, as well as the names and titles of any other individuals who answered any questions in this survey and the question number(s) each individual worked on. Also, include telephone numbers in case we have questions about any entries. *If you need additional space to list respondents, please use the space in the Comment and Feedback section on page 12.* 

a.	Name of primary contact:
	Title:
	Telephone:
	Please write in the question numbers answered:
	Organization & Address (If different than organization and address on the cover of the booklet.)
	If your organization is different from the one printed on the cover of the booklet, what is your organization's relationship to that organization?
b.	Name of other respondent:
	Title:
	Telephone:
	Please write in the question numbers answered:
	Organization & Address (If different than organization and address on the cover of the booklet.)

If your organization is different from the one printed on the cover of this booklet, what is your organization's relationship to that organization?

#### 9. Comments and Feedback

Development Performance by Nonprofit Organizations. How many person-hours/minutes were required to complete this questionnaire? minutes hrs If you have any comments regarding this study, please write them in the space below.

We appreciate the time you have taken to fill out the Survey of 1996 and 1997 Research and

## Thank you very much for your participation.

Please return the completed questionnaire in the enclosed pre-paid envelope, or mail directly to:

NSF Survey of Nonprofit Organizations
The Gallup Organization Survey Processing Center
P.O. Box 5700
Lincoln, NE 68505-9926

## Glossary of Terms

Please refer to the following definitions when responding to survey questions, even if your organization uses different definitions

**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, engineering, 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, are also included.

#### 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-related sciences.
- Natural and Social Sciences including Agricultural Sciences, Biological Sciences (non-medical), Computer Sciences, Environmental Sciences, Mathematical Sciences, Physical Sciences, Psychology (including Educational Psychology), and Social Sciences.
- **Engineering** including Aeronautical and Astronautical, Chemical, Civil, Electrical, Mechanical, Metallurgical and Materials, and other engineering fields.

#### Science and Engineering (S&E) excludes:

 law, business administration/management science, humanities, history (except research in history and philosophy of science and technology), the arts, or **education** (except educational psychology).

#### Federally Funded Research and Development Center (FFRDC). Any of the specific

organizations (listed below) that were established to meet the particular R&D needs of a federal agency:

Aerospace Federally Funded Research and Development Center (Aerospace Corp.)

Ames Laboratory (Iowa State University of Science and Technology)

Argonne National Laboratory (University of Chicago)

Arroyo Center (RAND Corp.)

**Brookhaven National Laboratory** 

C3I Federally Funded Research & Development Center (MITRE Corp.)

Center for Advanced Aviation System Development (MITRE Corp.)

Center for Naval Analyses (CNA Corp.)

Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute)

Energy Technology Engineering Center (removed from FFRDC list in November 1995)

Ernest Orlando Lawrence Berkeley National Laboratory (University of California)

Fermi National Accelerator Laboratory (Universities Research Association, Inc.)

Idaho National Engineering Laboratory (Lockheed Idaho Technologies Inc.)

Inhalation Toxicology Research Institute (removed from FFRDC list in May 1996)

Institute for Defense Analyses Studies and Analyses FFRDC (IDA)

Institute for Defense Analyses Communications and Computing FFRDC (IDA)

Internal Revenue Service FFRDC (MITRE Corp.)\*

Jet Propulsion Laboratory (California Institute of Technology)

Lawrence Livermore National Laboratory (University of California)

Lincoln Laboratory (Massachusetts Institute of Technology)

Logistics Management Institute (LMI)

Los Alamos National Laboratories (University of California)

National Astronomy and Ionosphere Center (Cornell University)

National Center for Atmospheric Research (University Corporation for Atmospheric Research)

National Defense Research Institute (RAND Corp.)

National Renewable Energy Research Laboratory (Midwest Research Institute)

National Radio Astronomy Observatory (Associated Universities, Inc.)

National Optical Astronomy Observatories (Association of Universities for Research in Astronomy, Inc.)

NCI Frederick Cancer Research and Development Center (Science Applications International Corp.;

Advanced BioScience Laboratories, Inc.; Charles River Laboratories, Inc.; Data Management Services, Inc.)

Oak Ridge Institute for Science and Education (Oak Ridge Associated Universities, Inc.)

Oak Ridge National Laboratory (Lockheed Martin Energy Systems, Inc.)

Pacific Northwest National Laboratories (Battelle Memorial Institute)

Princeton Plasma Physics Laboratory (Princeton University)

Project Air Force (RAND Corp.)

Sandia National Laboratory (Sandia Corp.)

Savannah River Technology Center (Westinghouse Savannah River Co.)

Science and Technology Policy Institute (RAND Corp.)\*\*

Software Engineering Institute (Carnegie Mellon University)

Stanford Linear Accelerator Center (Leland Stanford, Jr. University)

Thomas Jefferson National Accelerator Facility\*\*\* (Southeastern Universities Research Association)

\* (In October 1998 the name was changed from Tax Systems Modernization Institute.)

\*\* (In October 1998 the name was changed from The Critical Technologies Institute.)

\*\*\* (In May 1996 the name was changed from Continuous Electron Beam Accelerator Facility.)