

V. APPENDICES



DESCRIPTION OF NSF DIRECTORATES AND MANAGEMENT OFFICES

The **Directorate for Biological Sciences (BIO)** supports research programs ranging from the study of the structure and dynamics of biological molecules, such as proteins and nucleic acids, through cells, organs and organisms, to studies of populations and ecosystems. It encompasses processes that are internal to the organism as well as those that are external, and includes temporal frameworks ranging from measurements in real time through individual life spans, to the full scope of evolutionary times. Among the research programs BIO supports is fundamental academic research on biodiversity, environmental biology, and plant biology, including providing leadership for the Multinational Coordinated *Arabidopsis* Genome Project.

The **Directorate for Computer and Information Science and Engineering (CISE)** supports research on the theory and foundations of computing, system software and computer system design, human-computer interaction, as well as prototyping, testing and development of cutting-edge computing and communications systems to address complex research problems. CISE also provides the advanced computing and networking capabilities needed by academic researchers for cutting-edge research in all science and engineering fields.

The **Directorate for Education and Human Resources (EHR)** supports a cohesive and comprehensive set of activities that encompass every level of education and every region of the country. EHR promotes public science literacy and plays a major role in the Foundation's long-standing commitment to developing our nation's human resources for the science and engineering workforce of the future. Focus is given to programs that encourage the participation and achievement of groups underrepresented in science and engineering. NSF-supported education and training programs cover a broad spectrum—from supporting students and teachers, to creating new ways of teaching and learning, to assisting school districts and other systems forge greater gains in learning.

The **Directorate for Engineering (ENG)** supports research and education activities contributing to technological innovation that is vital to the nation's economic strength, security, and quality of life. ENG invests in fundamental research on engineering systems, devices, and materials, and the underpinning processes and methodologies that support them. Emerging technologies—nanotechnology, information technology and biotechnology—comprise a major focus of ENG research investments. ENG also makes critical investments in facilities, networks and people to assure diversity and quality in the nation's infrastructure for engineering education and research.

The **Directorate for Geosciences (GEO)** supports research in the atmospheric, earth and ocean sciences. Basic research in the Geosciences advances our scientific knowledge of the Earth and advances our ability to predict natural phenomena of economic and human significance, such as climate change, weather, earthquakes, fish-stock fluctuations, and disruptive events in the solar-terrestrial environment. GEO also supports the operation of national user facilities.

The **Directorate for Mathematical and Physical Sciences (MPS)** supports research and education in astronomical sciences, chemistry, materials research, mathematical sciences and physics. Major equipment and instrumentation such as telescopes and particle accelerators are provided to support the needs of individual investigators. MPS also supports state-of-the-art facilities that enable research at the cutting edge of science and research opportunities in totally new directions.

The **Directorate for Social, Behavioral and Economic Sciences (SBE)** supports research to build fundamental scientific knowledge about human behavior, interaction, and social and economic systems, organizations and institutions. SBE also facilitates NSF's international activities by promoting partnerships between U.S. and foreign researchers, enhancing access to critical research conducted outside the U.S. and increasing knowledge of mutually beneficial research opportunities abroad. To improve understanding of the science and engineering enterprise, SBE also supports science resources studies that are the nation's primary source of data on the science and engineering enterprise.

The **Office of Polar Programs (OPP)**, which includes the U.S. Polar Research Programs and U.S. Antarctic Logistical Support Activities, supports multidisciplinary research in Arctic and Antarctic regions. These geographic frontiers—premier natural laboratories—are the areas predicted to be the first affected by global change. They are vital to understanding past, present, and future responses of Earth systems to natural and man-made changes. Polar Programs support provides unique research opportunities ranging from studies of Earth's ice and oceans to research in atmospheric sciences and astronomy.

The **Office of Budget, Finance and Award Management (BFA)** is headed by the Chief Financial Officer who has responsibility for budget, financial management, grants administration and procurement operations and related policy. Budget responsibilities include the development of the Foundation's annual budget, long range planning and budget operations and control. BFA's financial, grants and other administrative management systems ensure that the Foundation's resources are well managed and that efficient, streamlined business and management practices are in place. NSF has been acknowledged as a leader in the federal research administration community, especially in its pursuit of a paperless environment that provides more timely, efficient awards administration.

The **Office of Information and Resource Management (OIRM)** provides information systems, human resource management, and general administrative and logistical support functions to the NSF community of scientists, engineers, and educators as well as to the general public. OIRM is responsible for staffing and personnel service requirements for staff members including visiting scientists; NSF's physical infrastructure; dissemination of information about NSF programs to the external community; and administration of NSF's sophisticated technological infrastructure, providing the hardware, software and support systems necessary to manage the Foundation's grant-making process and to maintain advance financial and accounting systems.

NSF EXECUTIVE STAFF AND NSF OFFICERS

NSF Executive Staff

Office of the Director

Rita R. Colwell, Director
Joseph Bordogna, Deputy Director

National Science Board

Warren M. Washington, Chair
Gerard R. Glaser, Acting Executive Officer

Office of Equal Opportunity Programs

Ana A. Ortiz, Program Manager

Office of the General Counsel

Lawrence Rudolph, General Counsel

Office of the Inspector General

Christine C. Boesz, Inspector General

Office of Integrative Activities

Nathaniel G. Pitts, Director

Office of Legislative and Public Affairs

Curtis Suplee, Director

Office of Polar Programs

Karl A. Erb, Director

Directorate for Biological Sciences

Mary E. Clutter, Assistant Director

Directorate for Computer and Information Science and Engineering

Peter A. Freeman, Assistant Director

Directorate for Education and Human Resources

Judith A. Ramaley, Assistant Director

Directorate for Engineering

Esin Gulari, Acting Assistant Director

Directorate for Geosciences

Margaret S. Leinen, Assistant Director

Directorate for Mathematical and Physical Sciences

John B. Hunt, Acting Assistant Director

Directorate for Social, Behavioral and Economic Sciences

Norman M. Bradburn, Assistant Director

Office of Budget, Finance, and Award Management

Thomas N. Cooley, Director

Office of Information and Resource Management

Nathaniel G. Pitts, Acting Director

NSF Officers

Chief Financial Officer

Thomas N. Cooley (Office of Budget, Finance, and Award Management)

Chief Information Officer

Linda P. Massaro (Office of Information and Resource Management)

NSF Affirmative Action Officer

Ana A. Ortiz (Office of Equal Opportunity Programs)

NATIONAL SCIENCE BOARD MEMBERS DURING FY 2002

Eamon M. Kelly (Chair¹)
President Emeritus
Professor
Payson Center for International
Development and Technology Transfer
Tulane University

Warren M. Washington (Chair²)
Senior Scientist and
Head, Climate Change Research Section
National Center for Atmospheric Research

Anita K. Jones (Vice Chair¹)
Quarles Professor of Engineering and
Applied Science
Department of Computer Science
University of Virginia

Diana S. Natalicio (Vice Chair²)
President
The University of Texas at El Paso

John A. Armstrong
Vice President for Science and Technology
IBM (Retired)

Nina V. Fedoroff
Willaman Professor of Life Sciences
Director, Life Sciences Consortium
Director, Biotechnology Institute
The Pennsylvania State University

Pamela A. Ferguson
Professor of Mathematics
Former President
Grinnell College

Mary K. Gaillard
Professor of Physics
Lawrence Berkeley National Laboratory
University of California-Berkeley

M.R.C. Greenwood
Chancellor
University of California-Santa Cruz

Stanley V. Jaskolski
Vice President
Eaton Corporation (Retired)

George M. Langford
Professor
Department of Biological Science
Dartmouth College

Jane Lubchenco
Wayne and Gladys Valley Professor of
Marine Biology
Distinguished Professor of Zoology
Oregon State University

Joseph A. Miller, Jr.
Executive Vice President
Chief Technology Officer
Corning, Inc.

Robert C. Richardson
Vice Provost for Research
Professor of Physics
Department of Physics
Cornell University

Michael G. Rossmann
Hanley Distinguished Professor of
Biological Sciences
Department of Biological Sciences
Purdue University

Vera C. Rubin
Research Staff, Astronomy
Department of Terrestrial Magnetism
Carnegie Institution of Washington

Maxine Savitz
General Manager
Technology Partnerships
Honeywell Corporation (Retired)

Luis Sequeira
J.C. Walker Professor Emeritus
Departments of Bacteriology and Plant
Pathology
University of Wisconsin-Madison

¹ Till May 8, 2002

² From May 8, 2002

Daniel Simberloff
Nancy Gore Hunger Professor of
Environmental Science
Department of Ecology and Evolutionary
Biology
University of Tennessee

Bob H. Suzuki
President
California State Polytechnic University

Richard Tapia
Noah Harding Professor of Computational
and Applied Mathematics
Department of Computational and Applied
Mathematics
Rice University

Chang-Lin Tien³
University Professor
NEC Distinguished Professor of
Engineering
Department of Mechanical Engineering
University of California-Berkeley

John A. White, Jr.
Chancellor
University of Arkansas-Fayetteville

Mark S. Wrighton
Chancellor
Washington University

Rita R. Colwell (*Member Ex Officio*)
Director
National Science Foundation

Marta Cehelsky⁴
Executive Officer
National Science Board

Gerard R. Glaser⁵
Acting Executive Officer
National Science Board

³ Deceased October 29, 2002

⁴ Through July 13, 2002

⁵ From July 14, 2002

LIST OF ACRONYMS

AC	Advisory Committee	CO	Carbon monoxide
AC/GPA	Advisory Committee for GPRA Performance Assessment	CO ₂	Carbon dioxide
ACS	American Chemical Society	COV	Committee of Visitors
ADHD	Attention Deficit Hyperactivity Disorder	CPMSA	Comprehensive Partnerships for Mathematics and Science Achievement
ADVANCE	Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers	CQ	Continual Queries
AGEP	Alliances for Graduate Education and the Professoriate	CREST	Centers for Research Excellence In Science and Technology
AIM	American Institute for Mathematics	CRIF	Chemistry Research Instrumentation and Facilities
AMO	Atomic, Molecular and Optical	CSRS	Civil Service Retirement System
ANIR	Advanced Networking Infrastructure and Research	CSTB	Computer Science and Telecommunications Board
ANTC	Algebra, Number Theory, Combinatorics	CTIO	Cerro Tololo Inter-American Observatory
AOVEF	Arecibo Observatory Visitor and Education Facility	DARPA	Defense Advanced Research Projects Agency
AP	Advanced Placement	DASI	Degree Angular Scale Interferometer
ATI	Advanced Technologies and Instrumentation	DFT	Density Functional Theory
ATRP	Atom Transfer Radical Polymerization	DGA	Division of Grants and Agreements
BAC	Bacterial Artificial Chromosome	DISL	Dauphin Island Sea Laboratory
BCS	Behavioral and Cognitive Sciences	DNA	Deoxyribonucleic Acid
BES	Division of Bioengineering and Environmental Systems	DOE	Department of Energy
BFA	Division of Budget, Finance, and Award Management	DOL	Department of Labor
BIO	Directorate for Biological Sciences	EAR	Division of Earth Sciences
BMSA	Board on Mathematical Sciences and Their Application	EC	European Community
BPA	Board on Physics and Astronomy	EEG	Electroencephalograms
BPN	Business Partner Network	EFT	Electronic Fund Transfer
C4I	Command, Control, Communications, Computers and Intelligence	EHR	Directorate for Education and Human Resources
CBI	Cosmic Background Imager	EIA	Division of Experimental and Integrative Activities
CD	Climate Dynamics	EIS	Enterprise Information System
CDP	Community Data Portal	ENG	Directorate for Engineering
CEBAF	Continuous Electron Beam Accelerator Facility	EPA	Environmental Protection Agency
CFO	Chief Financial Officer	EPSCoR	Experimental Program to Stimulate Competitive Research
CH ₄	Methane	EST	Expressed Sequence Tag
CIO	Chief Information Officer	ETH	Swiss Federal Institute of Technology
CIP	Construction in Progress	FACA	Federal Advisory Committee Act
CISE	Directorate for Computer and Information Science and Engineering	FAS	Financial Accounting System
CMB	Cosmic Microwave Background	FASAB	Federal Accounting Standards Advisory Board
CNRS	Centre National de Recherche Scientifique	FCC	Federal Communications Commission
		FECA	Federal Employees Compensation Act
		FERS	Federal Employees Retirement System
		FFMIA	Federal Financial Management Improvement Act of 1996

FMFIA	Federal Managers' Financial Integrity Act of 1982	LSAMP	Louis Stokes Alliances for Minority Participation
FY	Fiscal Year	LTER	Long-Term Ecological Research
GAO	General Accounting Office	MCEER	Multidisciplinary Center for Earthquake Engineering Research
GEO	Directorate for Geosciences	MCC	Management Controls Committee
GISRA	Government Information Security Reform Act	MCL	Mobile Chemistry Laboratory
GK-12	Graduate Teaching Fellows in K-12 Education	MGE@MSA	Minority Graduate Education at Mountain States Alliance
GPG	Grant Proposal Guide	MPS	Directorate for Mathematical and Physical Sciences
GPRA	Government Performance and Results Act	MREFC	Major Research Equipment and Facilities Construction (account)
GSA	Government Services Administration	MRI	Major Research Instrumentation (program)
H1-B	Nonimmigrant Petitioner Visa	MSD	Macromolecular Structure Database
HBCU	Historically Black Colleges and Universities	MSP	Math and Science Partnerships
HEPAP	High Energy Physics Advisory Panel	NA	Not Applicable or Not Available (see context)
HERO	Human Environment Regional Observatory	NACP	North American Carbon Program Plan
HHS	U.S. Department of Health and Human Services	NAIC	National Astronomy and Ionosphere Center
HRM	Division of Human Resources Management	NAPA	National Academy of Public Administration
HR	Human Resources	NAS	National Academy of Sciences
HS	Hydrologic Sciences	NASA	National Aeronautics and Space Administration
HUD	U.S. Department of Housing and Urban Development	NATO	North Atlantic Treaty Organization
IBMCS	International Business Machines Business Consulting Services	NCAR	National Center for Atmospheric Research
IERI	Interagency Education Research Initiative	NEON	National Ecological Observatory Network
IG	Inspector General	NIA	National Institute of Aging
IGERT	Integrative Graduate Education and Research Traineeship	NIH	National Institutes of Health
ILTER	International Long-Term Ecological Research	NIST	National Institute of Standards and Technology
IMD	Instructional Materials Development	NOAA	National Oceanic and Atmospheric Administration
INT	Office of International Science and Engineering	NOAO	National Optical Astronomy Observatory
IOOS	Integrated and Sustained Ocean Observing System	NOPP	National Oceanographic Partnership Program
IPA	Intergovernmental Personnel Act (appointee)	NRAO	National Radio Astronomy Observatories
IRIS	Incorporated Research Institutions for Seismology	NRC	National Research Council
IS	Information Security	NSDL	National Science Digital Library
ISP	Integrated and Sustained Program	NSB	National Science Board
IT	Information Technology	NSF	National Science Foundation
ITR	Information Technology Research	NSO	National Solar Observatory
ITRD	Information Technology Research and Development	NVO	National Virtual Observatory
ITS	Information Technology Security	ODS	Online Document System
JGOFS	Joint Global Ocean Flux Study	OEOP	Office of Equal Opportunity Programs
		OIG	Office of the Inspector General

OIRM	Office of Information and Resource Management	SES	Division of Social and Economic Sciences
OMB	Office of Management and Budget	SFFAS	Statement of Federal Financial Accounting Standards
OPM	United States Office of Personnel Management	SGER	Small Grant for Exploratory Research
OPP	Office of Polar Programs	SI	Systemic Initiative
OSAR	Organism/Chemical Structure/Bioactivity Relationships	SMA	Shape Memory Alloys
PACI	Partnerships for Advanced Computational Infrastructure	SMET	Science, Mathematics, Engineering and Technology
PARS	Proposal, PI and Reviewer System	SMETE	Science, Mathematics, Engineering and Technology Education
PBS	Public Broadcasting System	SOL	Standards of Learning
PD	Program Director	SRS	Division of Science Resources Statistics
PGE	Programs for Gender Equity	SSI	Statewide Systemic Initiative
PI	Principal Investigator	STC	Science and Technology Center
PIMS	Program Information Management System	STEM	Science, Technology, Engineering and Mathematics
PIT	People, Ideas, Tools	STEP	Systemic Teacher Excellence Preparation
PMA	President's Management Agenda	S&E	Salaries and Expenses
POD	Print on Demand	TBD	To be Determined
PPD	Programs for Persons with Disabilities	TCP	Tribal Colleges Program
PP&E	Property, Plant and Equipment	TE	Tissue Engineering
PSID	Panel Study of Income Dynamics	TIMSS	Third International Mathematics and Science Study
PZT	Piezoelectric Transducer	TN	Tennessee
PwC	PricewaterhouseCoopers LLP	UA	University of Arizona
QSAR	Quantitative Structure Activity Relationships	UC	University of California
R&RA	Research and Related Activities	UCAR	University Corporation for Atmospheric Research
REPP	Research in Education Policy and Practice	U.S.	United States of America
REU	Research Experiences for Undergraduates	USAID	U.S. Agency for International Development
ROLE	Research on Learning and Education	USAP	U.S. Antarctic Program
SAT	Scholastic Achievement Test	USDA	U.S. Department of Agriculture
SBE	Directorate for Social, Behavioral and Economic Sciences	USGS	U.S. Geological Survey
SBIR	Small Business Innovation Research	VA	Virginia
SDP	Software Design and Productivity	WMAT	White Mountain Apache Tribe
SEM	Science, Engineering, and Mathematics	WTEC	World Technology Evaluation Center