

2005 ANNUAL REPORT

ALFRED P. SLOAN FOUNDATION



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SCIENCE AND TECHNOLOGY

FELLOWSHIPS

Sloan Research Fellowships

\$5,220,000

The Sloan Research Fellowship Program aims to stimulate fundamental research by young scholars with outstanding promise to contribute significantly to the advancement of knowledge. Over the past 50 years, fellowships have been awarded to more than 4,000 early-career researchers and have accounted for expenditures of approximately \$109 million. Thirty-five Fellows have received Nobel prizes, fourteen have been awarded the prestigious Fields Medal in mathematics, and hundreds have received other notable prizes, awards, and honors in recognition of their major research accomplishments. The program is described in detail in the [Sloan Research Fellowships Brochure](#).

Department heads or other senior scientists familiar with their work nominate candidates for Sloan Research Fellowships. Within each discipline, a committee of three distinguished scientists reviews all nomination documents and recommends the final selections. During 2005, the Foundation awarded Research Fellowships of \$45,000 each, over a two-year term, to 116 scholars at 53 institutions in seven fields: chemistry (23), computer science (14), economics (8), mathematics (20), molecular biology (12), neuroscience (16), and physics (23). Each fellowship is administered by the Fellow's institution and is designed to allow the greatest possible freedom and flexibility in its use. The following committees reviewed nominations for the 2005 fellowships:

Chemistry: Laura L. Kiessling, University of Wisconsin; John C. Tully, Yale University; Joan Valentine, University of California, Los Angeles.

Computational and Evolutionary Molecular Biology: Barry Honig, Columbia University; Martin Kreitman, University of Chicago; Terence Speed, University of California, Berkeley.

Computer Science: David Dobkin, Princeton University; Hector Garcia-Molina, Stanford University; Jeannette M. Wing, Carnegie Mellon University.

Economics: Daron Acemoglu, Massachusetts Institute of Technology; David K. Levine, University of California, Los Angeles; Mark Watson, Princeton University.

Mathematics: Ingrid Daubechies, Princeton University; Benedict Gross, Harvard University; Dusa McDuff, State University of New York, Stony Brook.

Neuroscience: David J. Anderson, California Institute of Technology; Catherine Carr, University of Maryland; John H. R. Maunsell, Baylor College of Medicine.

Physics: J. Richard Bond, University of Toronto; Laura H. Greene, University of Illinois at Urbana Champaign; Michael E. Peskin, Stanford University.

SLOAN RESEARCH FELLOWSHIP RECIPIENTS

Bowdoin College

Neuroscience: Hadley Wilson Horch

Bowling Green University

Chemistry: Pavel Anzenbacher

British Columbia, University of

Mathematics: Vlada Limic

Physics: Steven Samuel Plotkin

Mark Van Raamsdonk

Fei Zhou

California Institute of Technology

Computer Science: Chris Umans

California, University of, Berkeley

Chemistry: Dean Toste

Computer Science: Martin Wainwright

Economics: Edward Andrew Miguel

Mathematics: Elchanan Mossel

Physics: Yasunori Nomura

California, University of, Davis

Mathematics: Roman Vershynin

Physics: Kai Liu

California, University of, Irvine

Mathematics: Natasha Komarova

Molecular Biology: Thorsten Ritz

Neuroscience: Frances Chance

California, University of, Los Angeles

Economics: Matthias Doepke

Mathematics: Narutaka Ozawa

Neuroscience: Joshua Trachtenberg

California, University of, San Diego

Computer Science: Serge Belongie

Molecular Biology: Glenn Tesler

California, University of, San Francisco

Molecular Biology: Tanja Kortemme

Christopher A.

Voigt

Neuroscience: Nirao M. Shah

Erik M. Ullian

California, University of, Santa Barbara

Chemistry: Frank L. H. Brown

Mathematics: Jeff Moehlis

Milen Yakimov

Physics: Everett Lipman

California, University of, Santa Cruz

Computer Science: Cormac Flanagan

Carnegie Mellon University

Computer Science: Anastassia Ailamaki

Karl Cray

Anupam Gupta

Chicago, University of

Chemistry: Chuan He

David Arthur Mazziotti

Economics: Monika Piazzesi

Mathematics: Jesper Grodal

Colorado State University

Chemistry: Tomislav Rovis

Physics: Randy A. Bartels

Columbia University

Computer Science: Ravi Ramamoorthi

Rocco A. Servedo

Economics: Woicich Kopczuk

Physics: Amber Dawn Miller

Cornell University

Chemistry: Brian R. Crane
Mathematics: Camil Muscalu
Molecular Biology: Colleen E. Clancy
Physics: Erich Mueller
Anders Ryd

Dartmouth College

Computer Science: Chris Bailey-Kellogg

Duke University

Mathematics: Jonathan Mattingly
Molecular Biology: Alexander
Hartemink
Uwe Ohler
Neuroscience: W. Daniel Tracey

Emory University

Chemistry: James T. Kindt

Georgia Institute of Technology

Chemistry: Marcus Weck
Molecular Biology: Jeffrey Todd
Streelman
Physics: Alex Kuzmich

Harvard University

Computer Science: David C. Parkes
Economics: Marc J. Melitz
Physics: Bryan M. Gaensler

Hawaii, University of

Physics: Michael C. Liu
Kirill Melnikov

Houston, University of

Neuroscience: Valery Kalatsky

Illinois, University of, at Chicago

Mathematics: Dhruv Mubayi

Illinois, University of, at Urbana-Champaign

Chemistry: Paul J. Hergenrother

Indiana University

Chemistry: Daniel J. Mindiola

Iowa State University

Chemistry: Nicola L. Pohl

Johns Hopkins University

Neuroscience: Seth Blackshaw
Xinzhong Dong
Guo-li Ming
Physics: David Kaplan

Massachusetts Institute of Technology

Chemistry: Alice V. Ting
Economics: Victor Chernozhukov
Mathematics: Denis Auroux
Jason Starr
Physics: Nergis Mavalvala

Massachusetts, University of, Medical School

Neuroscience: Marc Freeman

McGill University

Physics: Guillaume Gervais

Michigan State University

Mathematics: Fengbo Hang

Michigan, University of

Chemistry: Alan J. Matzger
Mathematics: Jinho Baik

Minnesota, University of

Chemistry: T. Andrew Taton
Neuroscience: Geoffrey M. Ghose

New York University

Molecular Biology: Mark L. Siegal

Northwestern University

Chemistry: Mark C. Hersam
Teri W. Odom
Mathematics: Dmitry E. Tamarkin

Notre Dame, University of
Physics: Morton Ring Eskildsen

Ohio State University
Chemistry: Heather C. Allen

Pennsylvania State University
Chemistry: Mary Elizabeth Williams

Pennsylvania, University of
Physics: Marija Dmdic

Pittsburgh, University of
Neuroscience: Marc A. Sommer

Princeton University
Economics: Markus K. Brunnermeier
Helene Rey
Molecular Biology: Olga Troyanskaya

Purdue University
Chemistry: Garth J. Simpson

Rutgers University – Newark
Neuroscience: Kenneth D. Harris

Southern California, University of
Mathematics: Tobias Ekholm
Molecular Biology: Jeffrey D. Wall

Stanford University
Neuroscience: Mark J. Schnitzer

Texas, University of, at Austin
Mathematics: Gavril Farkas
Tamas Hausel
Physics: Joshua R. Klein
Eiichiro Komatsu

Toronto, University of
Computer Science: Sam Rowels

Washington, University of
Chemistry: Daniel T. Chiu
Computer Science: Venkatesan
Guruswami
Mark Oskin
Neuroscience: Adrienne Fairhall

Wesleyan University
Physics: Greg A. Voth

Wisconsin-Madison, University of
Chemistry: Daesung Lee
Mathematics: Jordan Ellenberg

Yale University
Chemistry: Victor S. Batista
Physics: Daniel McKinsey

DIRECT SUPPORT OF RESEARCH

LIMITS TO KNOWLEDGE, TRUSTEE GRANT

Rice University

\$110,000

Houston, TX 77005

This grant supports a project on fundamental tax reform, including consideration of such issues as business behavioral responses to tax changes, the effects of alternative tax reforms, and tax-induced movements of capital across international borders. Underlying all is the question of limits to modeling complex details of the existing or modified tax structure. The project will include both historical and international studies examining the expectations of what reforms might achieve in theory and what happened in practice. A 2006 conference, for which a dozen papers will be commissioned from leading experts and involving about 75 finance economists, tax lawyers, and experts from academia, business, government, and the media, will be organized. Fundamental tax reform presents an important example of a controversial issue where both the producers and consumers of knowledge benefit from better understanding of the limits to knowledge. Project Director: John W. Diamond, Research Fellow in Tax Policy, Baker Institute for Public Policy.

DIRECT SUPPORT OF RESEARCH

CENSUS OF MARINE LIFE, TRUSTEE GRANTS

Consortium for Oceanographic Research and Education **\$400,000**
Washington, DC 20005

The Consortium for Oceanographic Research and Education (CORE) has played a central role in managing the Census. It hosts the International Secretariat and International Scientific Steering Committee, as well as the United States National Committee for the Census. This new grant will enable CORE to continue its activities during 2006-2007. In addition to two or three meetings per year, the National Committee also holds workshops to advance particular Census projects. Its members make many visits to federal agencies and Congress. New U. S. commitments to the Census rose from about \$20 million in 2004 to about \$45 million during 2005. The United States National Committee is also working to assure that support of observing systems and databases created as part of the Census is continued by federal agencies after the Census project formally concludes in 2010. The aim is to achieve a smooth transition from experimental observational systems supported by research funds to routine observational systems supported by federal mission agencies. Project Director: Admiral Richard D. West, President.

Dalhousie University **\$900,000**
Halifax, Nova Scotia
Canada B3H 4J1

A 2002 grant to a group of researchers forming a network on the “Future of Marine Animal Populations” (FMAP) supported the addition of a synthetic and predictive dimension to the Census, supplementing studies of what lived in the oceans in the past and what is now living in the oceans. This grant renews support for this research focused on the question of what will live in the oceans in the future. FMAP operates through five international working groups and has centers in Japan, Iceland, and Nova Scotia. Dalhousie University serves as headquarters and includes one of the world’s foremost research groups in global analysis and prediction of marine diversity. A network of graduate students and postdocs are associated with each of the 14 FMAP field projects. During the next three years, FMAP plans to release preliminary censuses of at least three key species groups: sharks, gelatinous zooplankton (jellies), and marine mammals. FMAP attracted matching funds for the earlier grant at a better than 3:1 ratio and plans to maintain this ratio. Project Director: Professor Ransom A. Myers, Department of Biology.

Richard Ellis **\$80,000**
New York, NY 10003

The final “First Census of Marine Life” is planned for presentation in the fall of 2010. Leaders of the census project, which was launched in 2000, believe that the midpoint of

the project is a good time to issue a popular book describing what we know now about marine life, how we came to know it, some of the important early findings of the project, and what might yet be learned. In October of 2004, the Foundation made an officer grant to an accomplished writer on marine subjects, Richard Ellis, to develop a book concept, learn about the Census of Marine Life project, begin writing, and arrange publication. Since then, much writing has been completed and many Ellis drawings beautifully illustrating the diversity of marine life have been produced. This initial material has been endorsed by the Scientific Steering Committee of the census project. The current grant extends support to ensure early completion and marketing of the book. (Note. The book, titled “Singing Whales and Flying Squid: The Discovery of Marine Life,” was published in January 2006 by The Lyons Press.) Project Director: Richard Ellis, Research Associate, American Museum of Natural History.

Louisiana State University
Baton Rouge, LA 70803

\$400,000

This grant supplies partial funding for the field project of the Census of Marine Life that will study life on and above the “continental margins” which slope from the shelves with water about 200 meters deep to the beginning of the abyssal plains about 4000 meters deep. A Census team will undertake the study of continental margin ecosystems on a worldwide scale. New technologies for access, including manned and remotely operated vehicles, now allow better visualization and precision sampling of the seabed in rugged terrain. The project will collate and synthesize previously gathered data, coordinate ongoing sampling and cruises already committed to take place, and stimulate at least three additional cruises to achieve representative sampling of the margins. Although most previous study has occurred in the Atlantic, the new sampling will focus on baseline surveys in poorly studied regions like the Indian Ocean and on hotspots of biodiversity. Data will be entered into the Ocean Biogeographic Information System of the Census. Close coordination with the Census field projects on ridges, seamounts, chemosynthetic ecosystems (such as vents), and abyssal plains will provide integrated and comprehensive deep sea coverage in the final 2010 Census. France has covered the costs of this project’s initial development and has committed to provide major funding. Sloan grant funds will support the organizational infrastructure of the project and cover the first 16 months of operations. Project Directors: Professor Robert S. Carney, Coastal Ecology Institute, LSU; and Myriam Sibuet, Director, Department of Deep-Sea Environment, French Research Institute for Exploitation of the Sea (IFREMER), Centre de Brest, France.

Massachusetts Institute of Technology
Cambridge, MA 02139

\$926,000

Imagine a moored vessel that emits a low frequency, low power sound from a source about 50 meters deep. Another vessel nearby tows a horizontal array of devices about 30 meters below the surface that listen for echoes created by fish or other objects in the water. The technology, called Ocean Acoustic Remote Sensing (OARS), allows tracking over areas as deep as 200 meters and as distant as 200 kilometers — a very significant improvement over conventional technology that can survey only much more restricted

areas. The method was successfully tested in 2003 to detect, monitor, and enumerate fish populations over the New Jersey continental shelf to a distance of 60 kilometers. In this project, observations will be made in the Gulf of Maine, one of the prime ecosystems under study in the Census of Marine Life. Should it work as hoped, it could be deployed in several other Census field projects before 2010. The MIT team includes partners from the Naval Research Laboratory, Naval Facilities Engineering Center, Navy SPAWAR (space, warfare) Center, National Maritime Fisheries Service, Pennsylvania State University's Acoustic Research Laboratory, Northeastern University, and the Woods Hole Oceanographic Institution. The Sloan Foundation grant provides support for the academic partners, about 60% of the total cost. Project Director: Professor Nicholas C. Makris, Director, Laboratory for Undersea Remote Sensing, Center for Ocean Engineering Mechanics, Department of Mechanical Engineering.

University of California, San Diego
La Jolla, CA 92093

\$600,000

Coral reefs, ranging from the intertidal to about 50 meters deep, flourish only in the tropical and subtropical ocean. The largest are in the Indo-West Pacific (including Australia's Great Barrier Reef) and the western Atlantic and Caribbean. Overfishing, destructive fishing (using cyanide or dynamite), disease, bleaching, land-based pollution, and careless tourism all threaten reef ecosystems. This grant supports an international team that will conduct a global census of coral reef ecosystems as one of the field projects of the Census of Marine Life. The project will aim to standardize and extend sampling protocols used in reef research. New molecular techniques, including DNA barcoding, make much greater coverage of species feasible and affordable. The Reef Census will implement three new model field studies during the next two years, in the Great Barrier Reef, Hawaii, and the Caribbean. Additional sites in the Indian Ocean and elsewhere are planned for future work. Historic and new reef data obtained as part of the project will be integrated into the Ocean Biogeographic Information System. Estimates of reef-associated species range from 1 to 10 million. The richness of species challenges the number and expertise of researchers: 5000 species of mollusks have been found within a few tens of square meters in Philippine reefs. Along with Scripps, the research team has affiliations with the Australian Institute of Marine Science and the Pacific Islands Fisheries Center in Hawaii and includes scientists from Costa Rica, Israel, and Indian Ocean countries. Project Director: Nancy Knowlton, Professor of Marine Biology and Director, Center for Marine Biodiversity and Conservation, Scripps Institution of Oceanography.

University of New Hampshire
Durham, NH 03824

\$730,000

The History of Marine Animal Populations (HMAP) program, an essential component of the Census of Marine Life project, seeks to learn about life in the oceans before fishing, as well as the changes in marine animal populations since fishing became important. The program has been supported with major grants in 2000 and 2002. HMAP studies of the log books of captains of schooners based in Beverly, Massachusetts in the mid-19th

century have shown that tonnage of cod on the shelves off Nova Scotia at that time was 20 times the amount today. Studies of journals of Columbus and other explorers together with archaeological and paleoecological sources, such as bones and shells, enabled a reconstruction of “reefs since Columbus” that shows the population of sea turtles in the Caribbean 500 years ago numbered in the millions, much less than today’s thousands. The current grant will enable the HMAP program to continue work on 11 case studies already underway and to develop 4 more, aiming to complete a good sample of regions and species groups by 2010. One new study will concentrate on very large mollusks (such as conchs) that were exploited for shells as well as meat in Southeast Asia. A conference on “Ocean’s Past” will be held in Denmark for members of the HMAP network and others. A book on HMAP’s initial findings is planned for 2007 publication. HMAP operates with centers in Denmark, the UK (Hull) and the USA (University of New Hampshire) and involves affiliated scholars at other institutions in many nations. About \$5 million has already been raised in matching funds for HMAP research and the program maintains an aggressive plan for grants through 2010. Project Directors: Andrew A. Rosenberg, Ocean Process and Analysis Laboratory, Institute for the Study of Earth Oceans and Space, UNH, and Professor Poul Holm, Center for Maritime and Regional History, University of Southern Denmark, Esbjerg, Denmark.

University of Rhode Island
Narragansett, RI 02882

\$750,000

A major goal of the Census of Marine Life is to share what is learned with a broad public. Communicating the plans, achievements, and benefits of the Census also crucially affects the likelihood of winning financial and political support. Since the fall of 2002, Sloan Foundation grants of about \$1 million have supported a team based at the University of Rhode Island (URI) to lead the communication efforts of the Census and to coordinate a worldwide Education and Outreach Network of people in all Census projects. The current grant will carry these activities through the end of 2007. The URI team attracted major attention in the worldwide press, radio, and television to early discoveries of the Census. It developed and operates a much-used portal for the Census and helped upgrade the websites of all Census field projects. Every Census project has a designated Education and Outreach liaison. These liaisons, together with several non-academic communication professionals, form an active creative network that has innovated, for example, with the development of cruise diaries (blogs) posted online daily by members of Census expeditions. During the next two years, the Education and Outreach Network will focus on expeditions underway and important discoveries. Major thrusts will occur in conjunction with meetings that convene all Census leaders and occur when the Census will issue progress reports. URI activities will continue to balance attention to various media and audiences, ranging from school children to adults. To achieve a wide geographic and cultural spread, the Network collaborates with the National and Regional Implementation Committees of the Census. These groups, such as the U.S. National Committee for the Census of Marine Life, aim to reach high-level individuals in government, industries, and academia to help maintain the favorable climate for worldwide support of the Census project. Project Director: Sara C. Hickox, Director, Office of Marine Programs, Graduate School of Oceanography.

University of Southampton
Southampton, SO 14 3ZH, UK

\$630,000

A 2002 grant to the Southampton Oceanography Centre supplied funds to design and initiate the survey of life in vent and seep communities on the ocean floor as part of the Census of Marine Life. The “ChEss” (Chemosynthetic Ecosystems) project, as it came to be known, obtained agreement on a strategy and research protocols from the international community, stimulated the writing of many proposals to governments around the world for coordinated exploration of these environments, and won some \$13 million in commitments. In February 2004 a ship left from the Cape Verde Islands to make the first ever exploration for vents south of the equator in the Atlantic. A little more than a month later, a robot that can reconnoiter at 3000 meters uncovered evidence of a hydrothermal vent and set off a wave of excitement and more detailed observation. The ChEss team assembled archival data for entry into the Ocean Biogeographic Information System. The current grant renews support of the ChEss project for another two years. Sloan funds will be devoted to overall program coordination and management, database and web maintenance, and education and outreach efforts. Expeditions in the Southeast Pacific and New Zealand regions, as well as in the Equatorial Atlantic, are planned. Resources must yet be obtained for expeditions in the Cayman Trough and Gulf of Mexico. Project Director: Paul A. Tyler, Professor of Deep-Sea Biology.

University of Southern Maine
Portland, ME 04101

\$750,000

It was in 1999 that a first Foundation grant supported a team to conduct surveys in the Gulf of Maine region. This project has now grown into one of 14 principal field projects of the Census of Marine Life that together sample all the major oceans realms and groups of species. The Gulf of Maine program is one of four projects that jointly cover the near-shore environment and adjacent shallow continental shelf. The goal of the Maine program is to better identify everything that lives in the water column from sediments to surface in a region in which fisheries are of great importance. A Gulf of Maine Registry of Marine Species has been completed and published online. The registry is the first comprehensive accounting of the diversity of species in the area, listing 3,323 species of phytoplankton, invertebrates, fishes, mammals, and birds. An electronic Dynamic Atlas of the region was introduced in spring 2005 and offers tailor-made maps to users. Researchers collected data in fieldwork along the shore and on six cruises in 2004 and 2005. Commitments have been secured for more expeditions in 2006 and 2007. The team is on schedule to produce the most complete census ever of a regional ecosystem as part of the final 2010 Census. The Gulf of Maine effort deals with one of the most examined parts of the ocean. It provides valuable tests of how much what is “known” about marine life may need revision and how much new information can be produced by more thorough and continuous sampling. The current grant will fund continued work on the Gulf of Maine Census by the joint US-Canadian team headquartered at the University of Southern Maine. Project Directors: Evan D. Richert, Associate Research Professor,

Muskie School of Public Service; and Lewis S. Incze, Senior Research Scientist, Bioscience Research Institute.

Virginia Institute of Marine Science
Gloucester Point, VA 23062

\$650,000

The Mid-Atlantic Ridge extends from Iceland almost to Antarctica with many peaks rising 3,000 meters or more from the sea floor. It is the locale of the first field project of the Census of Marine Life to accomplish landmark fieldwork focusing on life on and above underwater mountain ranges. Earlier Foundation grants supported the planning and start of the Mid-Atlantic Ridge Ecosystem (MAR-ECO) project and management of the initial field phase. Past work has been noteworthy. In 2003 a Russian-US team used manned Russian submersibles to explore areas never before visited by humans at 450 meters below the surface. In 2004, scientists from 16 nations, cruising on a new Norwegian vessel, the most advanced fisheries research vessel in the world, crisscrossed the Ridge between Iceland and the Azores Island. They deployed advanced technology and instruments for observing and sampling animals to depths of 4,000 meters in rugged terrain and collected some 80,000 specimens, including fishes, crustaceans, squids, and jellies. A 1-hour TV documentary about the expedition aired on Norwegian TV and is being marketed elsewhere. The MAR-ECO team has received funding of about \$15 million in Europe, the United States, and Canada for its activities, including at least 5 more cruises that should produce an exemplary census of the Mid-Atlantic Region by 2010. Based at the Institute of Marine Research in Bergen, Norway and the Virginia Institute of Marine Science, the leaders of the project need to arrange for the completion of fieldwork in the North Atlantic and for analysis and communication of the results. In order that the Census of Marine Life can include by 2010 a globally representative report of ridge life, they also must propagate the methods and protocols of the program to regions in the South Atlantic, Indian, and Pacific Oceans. The current grant funds continuation of fieldwork and analysis of results. Project Director: Michael Vecchione, Adjunct Professor, VIMS School of Marine Science, College of William & Mary.

The following four 2005 grants were funded from a \$400,000 appropriation approved by the Sloan Foundation Board of Trustees to support small grants to advance the implementation of the Census of Marine Life. These grants were for a variety of purposes: dissemination of information and outreach; strengthening commitments of U.S. constituencies and cooperation with international organizations and industries; support of national programs for the Census abroad; and field program development.

Rutgers University
New Brunswick, NJ 08901

\$45,000

To strengthen implementation of the Census of Marine Life in China. Project Director: Yunqing (Phoebe) Zhang, Assistant Research Professor, Ocean Biogeographic Information System.

Universidad Simon Bolivar **\$45,000**
Caracas, Venezuela

To strengthen implementation of the Census of Marine Life in the Caribbean. Project Director: Professor Patricia Miloslavich, Institute of Technology and Marine Sciences, Division of Biological Sciences.

University of Connecticut **\$45,000**
Storrs, CT 06269

For a workshop to advance use of DNA barcoding in the Census of Marine Life. Project Director: Professor Ann Bucklin, Head, Department of Marine Sciences.

University of Rhode Island **\$45,000**
Narragansett, RI 02882

To help support participation of a Census of Marine Life team in an underwater survey of the Sumatran earthquake site. Project Director: Associate Professor Kathryn Moran, Department of Ocean Engineering, Graduate School of Oceanography.

The following grant was funded from an appropriation approved by the Sloan Foundation Board of Trustees to co-fund, with the National Ocean Partnership, research projects for the Census of Marine Life.

Duke University **\$45,000**
Durham, NC 27708

To clarify requirements among non-academic users of the Ocean Biogeographic Information System of the Census of Marine Life. Project Director: Associate Professor Patrick N. Halpin, Division of Coastal Systems Science and Policy, Nicholas School of the Environment and Earth Sciences.

CENSUS OF MARINE LIFE, OFFICER GRANT

National Marine Sanctuary Foundation **\$5,000**
Silver Springs, MD 20910

To organize a luncheon during Capitol Hill Oceans Week to lift Congressional awareness of the Census of Marine Life. Project Director: Lori Arguelles, Executive Director.

DIRECT SUPPORT OF RESEARCH

OTHER SCIENCE, TRUSTEE GRANTS

Rockefeller University
New York, NY 10021

\$385,000

A major grant to the Venter Institute in 2004 to study the genome of indoor and outdoor air samples from a New York City skyscraper initiated the Foundation's interest in research, at the microbial level, on the human indoor environment. Although of interest as a fundamental scientific field, this research may help make this environment more hospitable to human life or more resistant to biological attack. The current grant supports research on a different approach for understanding the microbial world. The aim is to design and examine new growth media that will allow culturing previously viable bacteria unable to be cultured. Most microbes that can be observed under a microscope do not grow in culture or form colonies in known growth media. To be tested is the hypothesis that new growth factors (possibly to be found in bacterial lysates, i.e., the "soup" produced when bacteria are broken up) will allow these bacteria to grow. New metabolites that will allow many kinds of bacteria to grow may be discovered. Success in this research project to develop new methods to grow "unculturable" microbes will open up a new window for understanding the microbial world. Project Director: Professor David S. Thaler, Laboratory of Molecular Genetics and Informatics.

Royal Botanic Garden, Kew
Surrey TW9 3AB, UK

\$400,000

The Consortium for the Barcode of Life, launched by the Foundation in 2004, has defined a DNA barcode as a short DNA sequence, from a uniform location on the genome, used for identifying species. Experts were able to settle on a section of the so-called CO1 gene found in mitochondria, organelles that exist in many copies in every animal cell, for use as a DNA barcode for birds, fish, butterflies, scorpions, leeches, and other animals. Selecting a barcode for plants is more challenging. This grant supports work by an international network based at the Royal Botanic Garden, Kew to test various candidates and to converge on a suitable barcode by the end of 2006. Plant diversity is enormous; some 750,000 species of land plants have been identified, ranging from moss to ferns to roses to pines. The hope is that a single DNA region can be identified as the barcoding marker for global land plants. However, if no single gene evolves fast enough to provide global species resolution, it may be necessary to build a nested system in which plants for which one region does not suffice would be further distinguished by a second segment. The Kew network plans tests involving more than 1500 species. The ten main laboratories in the network span four continents and all forms of vegetation. The New York Botanical Garden is the key USA participant. To fund the \$800,000 total cost of this barcoding project, The Gordon and Betty Moore Foundation has joined with the Sloan Foundation and has also made a \$400,000 grant to the Royal Botanic Garden, Kew. Project Director: Robyn S. Cowan, Conservation Genetics Scientist, Jodrell Laboratory.

Royal Institution World Science Assembly **\$55,000**
Stamford, CT 06903

The possible spread to humans of the avian influenza virus is a danger that has alerted the world. The virus has caused the death of millions of birds, but as yet only few humans have become infected. The Royal Institution World Science Assembly, organized by the Royal Institution in London, one of the world's oldest scientific societies, has the goal of building better communication between those engaged in science and those in public policy. An earlier officer grant (see below) led the Assembly to arrange for a special issue of *Foreign Affairs* entitled "The Next Pandemic?" that was published in July/August 2005. A special Council on Foreign Relations meeting attended by more than 100 persons, including prominent scientists, was held to discuss the facts and issues raised by the publication and the potential pandemic. This grant supports further public meetings and briefings to be held in at least six cities across the U.S. Additional articles will be invited and published by the editor of *Foreign Affairs* as new evidence and analyses of avian influenza danger emerge. Project Director: Daniel Sharp, President.

OTHER SCIENCE, OFFICER GRANTS

California Institute of Technology **\$20,000**
Pasadena, CA 91125

To provide partial support for the 2005 summer workshop for the Sloan-Swartz Centers for Theoretical Neurobiology. Project Director: Professor Christof Koch, Division of Biology.

Harvard University **\$25,000**
Cambridge, MA 02138

To support extended visits of scientists and engineers from the University of Baghdad to Harvard University. Project Director: Richard Wilson, Professor of Physics.

Harvard University **\$45,000**
Cambridge, MA 02138

For a workshop to plan and organize a project to develop DNA barcodes for the 10,000 birds of the world by 2010 as part of the Barcode of Life Initiative. Project Director: James Hanken, Professor of Biology and Director, Museum of Comparative Zoology.

Royal Institution World Science Assembly **\$45,000**
Stamford, CT 06903

Partial support for a project to generate and accelerate coordinated preparations for a potential influenza pandemic. Project Director: Daniel Sharp, President.

University of Guelph
Guelph, ON N1G 2W1
Canada

\$45,000

For support of a workshop to develop the plans and cooperation to obtain DNA barcodes for all marine fish by 2010. Project Director: Paul D. N. Hebert, Canada Research Chair in Molecular Biodiversity.

University of Texas
Austin, TX 78713

\$35,775

For a workshop and related activities to develop paleontological research on the Mene de Inciarte, a fossil-rich tar pit in Venezuela, potentially on a scale comparable to the La Brea site. Project Director: Christopher J. Bell, John A. Wilson Fellow in Vertebrate Paleontology, Department of Geological Sciences, Jackson School of Geosciences.

HISTORY OF SCIENCE AND TECHNOLOGY

OFFICER GRANTS

American Physical Society **\$5,000**
College Park, MD 20740

To help establish the Pais Book Prize in the history of physics. Project Director: Alan Chodos, Associate Executive Officer.

Chicago Historical Society **\$45,000**
Chicago, IL 60614

To develop plans for Memory Boards and other elements of a novel electronic alumni network for the Chicago Public Schools and implement the plans in two schools. Project Director: Lisa Wiersma, Project Manager.

Fulbright Academy of Science and Technology **\$35,000**
Cape Elizabeth, ME 04107

To develop an internet memory board as a way to collect current and historical information on the role of Fulbright scholarships in the history of science and engineering. Project Director: Eric S. Howard, Executive Director.

George Mason University Foundation, Inc. **\$45,000**
Fairfax, VA 22030

To develop a digital memory bank for residents of the Gulf Coast in the wake of Hurricanes Katrina and Rita. Project Director: Roy Rosenzweig, Director, Center for History & New Media, Department of History.

STANDARD OF LIVING AND ECONOMIC PERFORMANCE

INDUSTRIES

INDUSTRY CENTERS, TRUSTEE GRANTS

Harvard University
Boston, MA 02115

\$247,698

The Managed Care Industry Center was established at Harvard with a major grant in 1995. A renewal three-year grant was made in 1998. The Center has secured the largest amount of government funding (\$6.3 million) of all the Industry Centers. Close ties to managed care companies have led to high-quality research on important national health care issues that have had a significant impact both on the companies and on government programs. This research has focused on monetary incentives to patients, reimbursement incentives of health plans, the efficiency of plans that specialize in mental health and substance abuse, and on public policies that affect the industry. The Center is expected to be self-sustaining over the long term, primarily by means of grants from government and healthcare-oriented foundations. The Center has produced more than 18 Ph.D. students. Although the Center's large government grants support specific faculty projects, they do not cover students doing independent research for dissertations. Government training grants generally apply to students in the first two years of their doctoral coursework before they have well-developed research projects. This Foundation grant will be used to support third and higher year students working on their dissertation research and will help produce well-trained, high-quality Ph.D.s who both work in and continue to study the managed care industry. Project Director: Joseph P. Newhouse, Professor of Health Care Policy, Harvard Medical School.

Rochester Institute of Technology
Rochester, NY 14623

\$250,000

A 2001 Foundation grant supported the establishment of a Printing Industry Center at RIT. A number of faculty from the business and print media schools have since been involved in developing relationships with the industry, obtaining important company and industry data, and producing useful research results. They have studied factors that differentiate leaders from laggards within the industry. The future research agenda includes study of outsourcing and offshoring of print services, as well as growth opportunities for the industry. The Center has developed a core of affiliates, mainly large firms providing print services, but also the Government Printing Office, that support them financially. Most of the Center's support now comes from industry and other sources and their plan calls for total-self-sufficiency following this Sloan grant. Project Director: Patricia Sorce, Administrative Chair, School of Print Media, College of Imaging Arts and Sciences.

University of California, San Diego
La Jolla, CA 92093

\$500,000

The Information Storage Industry Center, established at UC, San Diego with a 1999 grant, initially concentrated on the rapid globalization of the industry that resulted in the appearance of industry concentrations in Singapore, Malaysia, and Indonesia. Since it was clear by 2003 that product development and manufacturing at the component level was rapidly becoming a low-margin commodity business that had nearly all migrated abroad, the Center turned toward storage systems, which were thriving, profitable, U.S.-centric, and becoming a huge part of all data centers. Interactions with new companies were forged, a new research program in storage systems organized, and new Center research participants were recruited. New directions include study of information life cycle management, competitive structure of the industry, security infrastructure, and device reliability. This final Sloan grant supports the Center's research program. The Center is expected to be self-sustaining beyond the three-year period of this grant, keeping both faculty and graduate student researchers studying and reporting on the thriving, rapidly-growing, and rapidly-changing information storage industry. Project Director: Roger E. Bohn, Associate Professor of Management, Graduate School of International Relations and Pacific Studies; Director, Information Storage Industry Center.

University of Maryland Foundation, Inc.
Adelphi, MD 20783

\$100,000

The University of Maryland plans to establish a biotechnology industry center. Solid financial commitments in support of the center have been obtained and this Sloan grant completes the funding package needed to launch the center. A prior Sloan officer grant had supported planning for the center and obtaining financial support from other stakeholders, including the State of Maryland and the industry. With almost a million dollars pledged or in hand, the organizers are confident of obtaining substantial additional funding over the next three years from non-Sloan sources. Biotechnology is a relatively young but growing sector of the U.S. economy. In 2002, the U.S. had nearly 1,500 biotechnology companies, employing nearly 200,000 workers and with revenues of \$36 billion on their biotech products. Although many state and local government development agencies consider biotechnology to be a critical engine for economic growth, the management and competitiveness of the biotechnology industry presents significant challenges. Product development is highly uncertain and research intensive. Many industry processes and products are strictly regulated by government agencies. The center expects to start with a project to deepen the understanding of the sources of uncertainty in the industry as firms evolve from start-up, to development and scale-up, to production and commercialization. They will bring together a multidisciplinary team of researchers and carry out a set of in-depth case studies, utilizing multiple interviews, company documents, and surveys, focusing on companies at different stages of development, thereby identifying new lines of research that will be of most interest and importance to the industry. Project Director: Professor Jacques S. Gansler, Director, Center for Public Policy and Private Enterprise, School of Public Affairs.

University of Minnesota Foundation
Minneapolis, MN 55455

\$156,000

The Food Industry Center was established at the University of Minnesota in 1995. Since funding from the Sloan Foundation began winding down four years ago, substantial funds have been received from government sources, but raising funds from the industry has been more difficult. Recognizing that such industry funding is critical to the sustainability of the Center over the long term, the approach to development and fundraising has been carefully reviewed and reconfigured. This grant will allow the Center to complete this work and take other steps to develop a larger and more solid financial foundation. The Food Industry Center has established an international reputation for expertise about the structure and operation of the retail end of the food supply chain. It is widely recognized for knowledge about consumer trends related to food consumption. As part of its revised sustainability plan, food system security (especially in relation to terrorism) and food, diets, and lifestyles (including a focus on obesity and childhood nutrition) have been identified as critical initiatives. They should allow the Center to bring real value to the industry because they are broader than what any one company can provide for itself. This Sloan grant will be used to bring in an experienced development professional (with funding shared equally by the University) and a part-time, retired industry executive who will work together with members of the Center's Board of Advisors to seek substantial annual support from companies, along with endowment funding. The Center's core faculty will continue to generate research project grants from government and foundation sources. Project Director: Professor Jean D. Kinsey, Department of Applied Economics; Director, Retail Food Industry Center.

INDUSTRIES

INDUSTRY STUDIES, TRUSTEE GRANTS

Massachusetts Institute of Technology
Cambridge, MA 02139

\$221,000

This grant supports organizing and holding the Industry Studies Annual Conference scheduled for December 14-16, 2005. These conferences, originally limited to faculty and students from the Sloan Industry Centers, now reach out to other researchers who have been invited to become “Affiliates” of the industry studies program. In addition to 3-4 attendees from each of the 26 Industry Centers, perhaps another 75-100 Affiliates are expected to attend this year’s conference. The conference will serve to move the industry studies community further in the direction of a professional society or association. Parallel sessions will be held of invited scholarly papers, solicited (and reviewed by a panel of academic peers) not only from each Center’s best work during the past year but also from a number of Affiliates. Over time it is planned to add more parallel sessions and eventually to have an open, fully peer-reviewed competition for submission and selection of papers. Two thematic sessions are planned, one on globalization and another on innovation. Additional new activities moving further in the direction of a professional association include prizes for the best book, best dissertation, and best papers, all to be presented at a new Awards Ceremony, along with recognition for the new Sloan Industry Studies Fellows. There will also be two pre-conference professional development workshops, one focused on the needs of early-career faculty and the other on effective practices for achieving long-run sustainability of industry centers. Project Director: Professor Richard K. Lester, Department of Nuclear Science and Engineering; Director, Industrial Performance Center.

The following ten grants were made from a \$400,000 appropriation approved in December 2004 by the Board of Trustees to support the Sloan Industry Studies Fellowship Program, academic workshops, and other services in support of the industry studies community.

Massachusetts Institute of Technology
Cambridge, MA 02139

\$26,800

Support to plan the 2005 industry studies annual conference. Project Director: Professor Richard K. Lester, Department of Nuclear Science and Engineering; Director, Industrial Performance Center.

University of Pittsburgh **\$30,000**
Pittsburgh, PA 15260

For support of the careers of recent Ph.D. graduates from the Sloan Industry Centers.
Project Director: Professor Frank Giarratani, Department of Economics; Director, Center for Industry Studies.

Worcester Polytechnic Institute **\$33,900**
Worcester, MA 01609

To support a workshop, "To Review Effective Practices and to Discuss How to Embed and Sustain Industry Studies in the Academic Enterprise." Project Director: Diran Apelian, Professor of Mechanical Engineering; Director, Metal Processing Institute.

Worcester Polytechnic Institute **\$27,191**
Worcester, MA 01609

For support of a workshop, "Globalization, China and the Industry Studies Program."
Project Director: Professor Chickery J. Kasouf, Department of Management.

Sloan Industry Studies Fellowship Awards starting June 1, 2005:

Columbia University **\$40,000**
New York, NY 10027

Sloan Industry Studies Fellowship for Assistant Professor Pierre Azoulay, Graduate School of Business.

Massachusetts Institute of Technology **\$40,000**
Cambridge, MA 02139

Sloan Industry Studies Fellowship for Assistant Professor Fiona Murray, Sloan School of Management.

New York University **\$40,000**
New York, NY 10012

Sloan Industry Studies Fellowship for Assistant Professor Natalia Levina, Stern School of Business.

Northwestern University **\$40,000**
Evanston, IL 60208

Sloan Industry Studies Fellowship for Assistant Professor Karen Smilowitz, Department of Industrial Engineering and Management Sciences.

Rochester Institute of Technology **\$40,000**
Rochester, NY 14623

Sloan Industry Studies Fellowship for Assistant Professor Sandra L. Rothenberg, College of Business.

University of Michigan **\$40,000**
Ann Arbor, MI 48109

Sloan Industry Studies Fellowship for Assistant Professor Amy M. Cohn, Department of Industrial and Operations Engineering.

The following four grants were made from a \$470,000 appropriation approved in December 2005 by the Board of Trustees to support the Sloan Industry Studies Fellowship Program, academic workshops and other services in support of the industry studies community. Fellowship awards below start June 1, 2006 and have been increased to \$45,000.

Georgia Institute of Technology **\$45,000**
Atlanta, GA 30308

Sloan Industry Studies Fellowship for Assistant Professor Frank T. Rothaermel, College of Management.

Harvard School of Public Health **\$45,000**
Boston, MA 02115

Sloan Industry Studies Fellowship for Assistant Professor Meredith B. Rosenthal, Department of Health Policy and Management.

University of Michigan **\$45,000**
Ann Arbor, MI 48109

Sloan Industry Studies Fellowship for Assistant Professor Jason Owen-Smith, Department of Sociology.

University of Pennsylvania **\$45,000**
Philadelphia, PA 19104

Sloan Industry Studies Fellowship for Assistant Professor Anita L. Tucker, Program in Operations and Information Management, Wharton School of Business.

INDUSTRY STUDIES, OFFICER GRANTS

Duke University **\$15,000**
Durham, NC 27708

Partial support for the winter conference of Organizational Science, in order to observe and learn how this successful journal and professional association might be used as a model for industry studies. Project Director: Arie Y. Lewin, Professor of Business Administration and Sociology, Fuqua School of Business.

Massachusetts Institute of Technology **\$32,153**
Cambridge, MA 02139

To prepare four industry studies cases for distribution by Harvard Business School Press. Project Director: Joel Cutcher-Gershenfeld, Senior Research Scientist, Department of Behavioral Policy Science, Sloan School of Management.

University of California, Berkeley **\$45,000**
Berkeley, CA 94720

Support to write a book on the global evolution of the semiconductor industry that integrates the work of the Semiconductor Industry Center over the past 15 years. Project Director: Clair Brown, Professor of Economics; Director, Center for Work, Technology and Society, Institute of Industrial Relations.

University of Minnesota **\$15,000**
Morris, MN 56267

Partial support for a study of truckers and turnover, funded mostly by industry and other sources. Project Director: Professor Stephen V. Burks, Department of Economics.

INDUSTRIES

GLOBALIZATION, TRUSTEE GRANTS

Institute for International Economics

\$300,000

Washington, DC 20036

As globalization has evolved and changed, its implications for American workers have also been changing. More service activities are being exported and service workers, including those from relatively high-skill service occupations, are increasingly among the displaced. Two different approaches generally characterize research on globalization: detailed industry analyses and aggregate statistical estimates. Each has been applied separately, often with little reference to the knowledge and insight developed by the other. With this grant, the Institute for International Economics (IIE) will combine their expertise in the statistical analysis of nationally representative economic data with industry studies researchers' detailed knowledge of individual firms and industries. The aim is to produce new insights about how global outsourcing of services is changing the operating environment of U.S. companies and workers. The project would bring together three researchers at IIE with industry studies researchers with expertise on software, semiconductors, and telecommunication call centers. Together they will analyze the forces driving global outsourcing in each industry, identify strategies firms are using to respond to the changing environment, attempt to develop better measures of the impact of global outsourcing on firms and industries, and assess the impact of the changes on U.S. workers. They plan to produce three industry-specific academic papers, each co-authored by an industry studies and IIE researcher, and a book co-authored by the IIE research group. Funds to support the \$700,000 total project cost are also being contributed by the W. M. Keck Foundation and the Russell Sage Foundation. Project Director: J. Bradford Jensen, Deputy Director.

National Academy of Sciences

\$370,000

Washington, DC 20001

With a Foundation grant in 1997, the National Academy of Sciences' Board on Science, Technology and Economic Policy (STEP) undertook a collaborative study involving seven industry centers on the role of innovation and other factors in the improved performance of different industries during the 1990s. "U.S. Industry in 2000: Studies in Competitive Performance," an edited volume of all the industry studies, and "Securing America's Industrial Strength," a report from the STEP Board based on these studies, were published. Meaningful cross-industry comparisons were able to be drawn from the project. For example, the factors or policies that were most important contributors to productivity improvements and innovation could be compared from one industry to another. This 2005 grant supports a new project, "The Globalization of Innovation: Implications for U.S. Industrial Competitiveness and Workforce Needs," using the successful methodology of the earlier project. A common framework will again be developed for analysis with the industry studies participants. The STEP Board will invite presentations from a U.S. perspective on up to 10 industries, some examined in the earlier

project and some other industries. These analyses will be presented at a Washington conference and all or some further developed and published. The Board will also organize a conference to compare the innovative capacities of China, India, and a third country. Selected conference presentations will be published in the NAS journal, "Issues in Science and Technology," and made available on CD-ROM. The first activity will involve experts primarily from Sloan Industry Centers. The second will also involve other experts. Project Director: Stephen A. Merrill, Executive Director, Board on Science, Technology and Economic Policy.

Stanford University
Stanford, CA 94305

\$173,000

A 2003 Sloan grant supported research by Martin Kenney of University of California, Davis and Rafiq Dossani of Stanford to study outsourcing and offshoring of services between the U.S. and India. This grant will support their continued research, with special emphasis on the development of new databases and the improvement of understanding of the implications of global open-source software. Very scattered data on offshoring of services will be collected, collated, and organized into databases. The first will be organized as a time series allowing researchers to examine trends and growth. The second database will involve monthly downloads of advertisements for jobs in the service sector from U.S. corporate websites in India and China. These data should have some interest for social scientists interested in labor force issues. Developing and spreading via the Internet and available free of charge, open source software makes possible globalizing and reshaping the value-chain of software and business services. Issues connected to open source software will be studied by means of a questionnaire survey and visits to software executives in the U.S. and India. Project Director: Raffiq Dossani, Senior Research Scholar, Freeman Spogli Institute for International Studies.

GLOBALIZATION, OFFICER GRANTS

University of California, Berkeley
Berkeley, CA 94720

\$25,000

Partial support for a conference to share globalization experience with Nordic countries. Project Director: Professor Stephen S. Cohen, Department of City and Regional Planning; Co-Director, Berkeley Roundtable on the International Economy.

University of Washington
Seattle, WA 98195

\$44,400

Support for a book project involving five Industry Center faculty and seven Industry Study Affiliates, on the impact of global retailing on supplier and consumer markets. Project Director: Professor Gary G. Hamilton, Department of Sociology.

INDUSTRIES

BUSINESS ORGANIZATIONS, TRUSTEE GRANT

University of California, Los Angeles
Los Angeles, CA 90095

\$508,000

With the help of a 1999 grant to Georgetown University, Lynn Stout and Margaret Blair published a paper entitled, “A Team Production Theory of Corporate Law,” which challenged the “principal/agent” theory that has dominated thinking in corporate law. Team production problems arise when a productive activity, like manufacturing a product, requires the combined investment and coordinated effort of two or more individuals or groups. Principal/agent problems are those that require motivating one person or group to act on behalf of another, such as an employee (agent) acting in the interests of the employer (principal). The principal/agent model of the corporation has received much more scholarly attention and has led to the view that the primary goal of the corporation is (or ought to be) maximizing shareholders’ wealth. For this reason, it is often referred to as “shareholder primacy.” Blair/Stout argued from a legal perspective that a different model of the public corporation, one that made the team production problem central, was a more appropriate basis for understanding the legal and economic features of public corporations. Their team production model has received a high level of attention from legal scholars and, over the years, increasing acceptance. UCLA, to which Stout had moved, received a grant in 2003 to continue support of her research, bring more attention to team production, and encourage other scholars in corporate law to build on the Blair/Stout work. The UCLA-Sloan Research Program on Business Organizations has seen the development of new ideas supporting the team production approach and challenging the conventional principal/agent model. A substantial academic literature has been generated extending the team production concept beyond corporate governance into bankruptcy and tax law. Progress has also been made in expanding awareness of team production beyond corporate law to judges, business executives, practicing corporate lawyers, business school professors, and the business press. This grant supports continued research and writing of Stout and her colleagues for another two years. Project Director: Professor Lynn A. Stout, School of Law.

BUSINESS ORGANIZATIONS, OFFICER GRANTS

Brooklyn Law School
Brooklyn, NY 11201

\$20,000

To establish a new electronic interdisciplinary journal on business organizations from the perspective of law and social science. Project Director: James A. Fanto, Professor of Law.

CERES, Inc. **\$45,000**
Boston, MA 02111

To explore the use of non-financial performance measures with an international group of institutional investors. Project Director: Ariane van Buren, Senior Manager, Investor Outreach.

Columbia University **\$45,000**
New York, NY 10027

Partial support for a conference, jointly with UCLA, on the pros and cons of increasing shareholder power in publicly-held corporations. Project Director: Professor John C. Coffee, Jr., Columbia University Law School.

Net Impact **\$35,000**
San Francisco, CA 94104

To introduce team production to interested business school students and recent graduates. Project Director: Elizabeth Maw, Executive Director.

Saint Mary's College of California **\$45,000**
Moraga, CA 94575

To support a conference for institutional investors on the theory and practice of universal ownership. Project Director: Professor James P. Hawley, School of Economics and Business Administration.

Stanford University **\$45,000**
Stanford, CA 94305

To partly fund the study of the history of American business schools. Project Director: James G. March, Professor of Sociology (Emeritus).

University of Iowa **\$45,000**
Iowa City, IA 52242

To support a conference on changing views of corporate structure and governance in the academic literature over the past twenty years. Project Director: Professor Hilary A. Sale, College of Law.

NONPROFIT SECTORS

UNIVERSITIES, OFFICER GRANT

Community College of Southern Nevada
Las Vegas, NV 89146

\$45,000

To advance the development of a community college simulator based on Virtual U.
Project Director: Alberto Valbuena, Vice President for Information Technology.

NONPROFIT SECTORS

PERFORMANCE MEASUREMENT AND REPORTING, TRUSTEE GRANTS

Association of Government Accountants

\$360,000

Alexandria, VA 22301

In 2002, a three-year grant to the Association of Government Accountants (AGA) helped launch a Certificate of Excellence in the Service Efforts and Accomplishments (SEA) reporting program. Under this program, AGA reviews SEA performance measurement reports voluntarily submitted by state and local governments. AGA evaluators score these reports for conformity with the Suggested Criteria for Performance Reporting of the Governmental Accounting Standards Board (GASB). AGA then provides the submitting governments with recommendations to improve their reports. A Certificate of Excellence is awarded to a government whose report is deemed sufficiently worthy. The Certificate Program has exceeded its target numbers of participating jurisdictions and has attracted excellent people as evaluators. The Program also strongly supports the work of the GASB by encouraging jurisdictions to use the GASB-suggested criteria and demonstrating that a range of governmental entities can effectively do so at reasonable cost. Project Director: Julie V. Bryant, Director of Performance Reporting.

CCAF-FCVI, Inc.

\$450,000

Ottawa, ON, Canada

The Canadian Institute of Chartered Accountants, working through its Public Sector Accounting Board (PSAB), sets accounting standards applicable to governments. PSAB's Performance Reporting Task Force has for some time been exploring performance reporting by governments in a manner analogous to what the Sloan-supported Governmental Accounting Standards Board (GASB) has been doing in the United States. In Canada, research related to establishing standards and reporting performance is conducted by CCAF-FCVI, Inc. It has recently produced a path-breaking report on the users and uses of Public Performance Reports. It identifies the interests and needs of potential users of performance reports (legislators, media, and the public) and discusses how government performance reports should be prepared and written to maximize the likelihood that they are actually used by them. This grant supplies partial funding for various activities of CCAF-FCVI related to its Users and Uses Project. For example, they will widely distribute, in Canada and the U.S., their report and one-page versions for legislators, media, and the interested public, conduct pilot projects to introduce the users and uses perspective into performance reports, and work with legislators, journalists, and editorial boards of major Canadian newspapers and broadcast media, and leaders of non-government organizations to encourage demand for and use of government performance information. Users' perspectives in performance reporting in the U.S. will also be promoted. Key Americans will be invited to participate in many CCAF meetings, GASB staff will be involved in their Implementation Task Force, and explore working together on a pilot project in the U.S. Project Director: Michael Eastman, Executive Director.

Citizens Union Foundation
New York, NY 10007

\$100,000

The *Gotham Gazette*, published by the Citizens Union Foundation is an on-line daily magazine featuring news, commentary, and in-depth analysis focused on New York City. This grant will enable the magazine to launch a new initiative in performance measurement and reporting. At least twelve articles and six commentaries on performance measurement will be published and the subject will receive more attention in regular reporting. News releases will be issued pertaining to performance assessment of city government and other opportunities will be sought for bringing performance measurement and reporting to the attention of citizens who are interested in public policy and other civic affairs in the City. Project Director: Dick Dadey, Executive Director.

Congressional Quarterly, Inc.
Washington, DC 20036

\$129,280

Governing is a monthly magazine with a circulation of 85,000 subscribers who work in governments at the state, county, city, and special district levels, plus several thousand more in corporations, non-profit organizations, and the media. Its total readership is estimated to be about 220,000. Its associated website has been growing rapidly in recent years. With this grant, the magazine will launch a new initiative in performance measurement and reporting by local governments. Feature articles will be published and a new performance-related section of *Governing.com* will include such articles as well as links to other websites. A special workshop or session on performance measurement and reporting will be held at the magazine's large conference in the fall of 2006. Project Director: Peter Harkness, Editor and Publisher.

National Center for Civic Innovation, Inc.
New York, NY 10013

\$1,600,000

Since 1995, three large grants have been awarded to the Fund for the City of New York's Center on Municipal Government Performance (CMGP) to support its performance measurement and reporting activities. CMGP has created and applied reliable measures of government performance that reflect the public's interest. It has made notable achievements in New York City and has been increasingly influential around the country. Its considerable expertise in the field has led to a book, *Listening to the Public: Adding the Voices of the People to Government Performance Measurement and Reporting*, by Barbara Cohn Berman, published by the Fund in January 2006. The most successful of CMGP's performance measurement programs has been Computerized Neighborhood Environmental Tracking (ComNET). ComNET enables organized groups of interested citizens to record with hand-held computers the observable conditions of city streets, to analyze findings, and to report to city government those conditions judged by the citizen groups to need city attention. ComNET and its derivatives (City Scan in various Connecticut cities and Park Scan for San Francisco parks) are now used in 35 New York City neighborhoods and 20 others around the country in projects supported with Sloan

grants and in a number of sites elsewhere without Sloan involvement. This grant funds continued efforts by CMGP to make municipal governments more responsive to their citizens. The focus will now be less on New York City and more on the nation. Because of the national focus, this grant is made to the Fund for the City of New York's sister organization with a national focus, the National Center for Civic Innovation. Project Director: Barbara Cohn Berman, Vice President.

The Urban Institute **\$290,000**
Washington, DC 20036

With this grant, The Urban Institute, working with the National League of Cities, the national organization for local elected officials, will produce print and audio materials intended to: (1) help local elected officials and their staffs understand the potential benefits of performance measurement; (2) show them how to obtain meaningful performance information from government agencies; and (3) illustrate for them how to use performance information to review programs and budgets and to communicate with the public. Similar materials produced for state elected officials have been favorably received. The local-level materials will be produced in two batches, with feedback on draft versions obtained from potential users. By the end of the two-year grant period, evidence should be available on whether the materials can be expected to enter into widespread use by local elected officials and their staffs. Project Director: Harry P. Hatry, Distinguished Fellow; Director, Public Management Program.

The following eight grants are funded from appropriations approved by the Board of Trustees to support small projects, start-up grants, and community building in the Foundation's program on citizen-based performance assessment of municipal governments.

Baruch College of the City University of New York **\$72,623**
New York, NY 10010

To continue the development of eTownPanel, an Internet-based panel survey of citizen satisfaction with their local government. Project Director: Associate Professor Gregg Van Ryzin, School of Public Affairs.

Community Research Council **\$100,000**
Chattanooga, TN 37405

To add a strong citizen component to ongoing performance measurement and reporting in Chattanooga. Project Director: David R. Eichenthal, President and Chief Executive Officer.

Iowa State University **\$45,000**
Ames, IA 50011

To fund a project to develop and implement citizen-based performance measures for e-government in small rural communities. Project Director: Associate Professor Jo Min, Department of Industrial and Manufacturing Systems Engineering, College of Engineering.

Jacksonville Community Council, Inc. **\$42,325**
Jacksonville, FL 32207

To partially fund a conference sponsored by the Community Indicators Consortium. Project Director: Ben Warner, Deputy Director.

National Association of State Budget Officers **\$60,000**
Washington, DC 20001

To help fund a Leadership Seminar that will include performance measurement and reporting as a major component. Project Director: Scott D. Pattison, Executive Director.

Rutgers, The State University of New Jersey **\$42,100**
Newark, NJ 07102

To explore the possibility of establishing a Responsive Government Network to promote the goals of the Sloan Foundation's program to make municipal governments more responsive to their citizens. Project Director: Professor Marc Holzer, Chair, Graduate Department of Public Administration.

Sustainable Seattle **\$20,000**
Seattle, WA 98101

Partial funding for a regional meeting of people working on performance measures and community indicators and for launching an ongoing network of such people. Project Director: Chantal Stevens, Executive Director.

The Urban Institute **\$40,000**
Washington, DC 20036

To enable The Urban Institute to explore the potential value of preparing action briefs related to performance measurement and reporting for municipal legislators. Project Director: Harry P. Hatry, Distinguished Fellow; Director, Public Management Program.

The following six grants are funded from a \$40,000 appropriation approved by the Board of Trustees to support the initial stages of website improvement by grantees in the Foundation's program to make municipal governments more responsive to their citizens.

Neighborhood Capital Budget Group **\$3,970**
Chicago, IL 60604

To fund the initial stages of website improvement for Better Transit. Project Director: Jacqueline Leavy, Executive Director.

New Yorkers for Parks **\$4,000**
New York, NY 10017

To fund the initial stages of website improvement for New Yorkers for Parks. Project Director: Mark Caserta, Deputy Director.

Rutgers, The State University of New Jersey **\$4,000**
Newark, NJ 07102

To fund the initial stages of website improvement for the National Center for Public Productivity. Project Director: Professor Marc Holzer, Chair, Graduate Department of Public Administration; Executive Director, National Center for Public Productivity.

Sustainable Seattle **\$1,750**
Seattle, WA 98101

To fund the initial stages of website improvement for the Cascadia progress and performance network. Project Director: Chantal Stevens, Executive Director.

Sustainable Seattle **\$1,680**
Seattle, WA 98101

To fund the initial stages of website improvement for Sustainable Seattle's Sustainable Urban Neighborhood Initiative. Project Director: Chantal Stevens, Executive Director.

Worcester Regional Research Bureau **\$3,800**
Worcester, MA 01608

To fund the initial stages of website improvement for the Worcester Regional Research Bureau's Center for Community Performance Measurement. Project Director: Roberta Schaefer, Executive Director.

WORKPLACE, WORKFORCE AND WORKING FAMILIES

WORKING FAMILIES AND EVERYDAY LIFE, OFFICER GRANTS

Boston College

\$44,000

Chestnut Hill, MA 02467

For construction of a database of Sloan-sponsored studies and projects. Project Director: Associate Professor Marcie Pitt-Catsoupes, Graduate School of Social Work; Co-Director, Center on Aging and Work/Workplace Flexibility.

Cornell University

\$42,666

Ithaca, NY 14853

Support for a study of how being a parent impacts hiring experiences. Project Director: Assistant Professor Shelley Correll, Department of Sociology.

WORKPLACE, WORKFORCE AND WORKING FAMILIES

WORKPLACE FLEXIBILITY, TRUSTEE GRANTS

American Public Media
Saint Paul, MN 55101

\$52,800

A 2004 grant to American Public Media (APM) supported the production and airing of stories covering workplace flexibility on *Marketplace*, a 30-minute early evening business news program and on *Marketplace Morning Report*, airing on weekday mornings. Together these programs reach over 7 million listeners. With this new grant, ten more stories that focus on workplace flexibility will be produced and aired. Project Director: J. J. Yore, Executive Producer.

The BOLD Initiative, Inc.
New York, NY 10016

\$1,755,360

This grant to the BOLD Initiative (Business Opportunities for Leadership Diversity) supports a project to implement a team-based, results-focused approach to flexibility in 17 companies and to disseminate results throughout the business community. With two prior grants, BOLD carried out a workplace flexibility demonstration program in ten companies. The goals in each company were to increase the number of employees using flexible work arrangements, to increase the range of flexibility options available to employees, and to use flexibility as a way of enhancing performance. The pilot studies showed improvements in performance, increased cost savings attributable to paid time off, and increased employee morale and satisfaction. BOLD emphasizes flexibility as a tool for achieving business results and the results have included significant gains in productivity. Another aspect of the BOLD project was the dissemination of the results of its demonstration program to the business community in order to strengthen the understanding by executives of workplace flexibility as a vehicle for enhancing business success. With the new grant, BOLD will use the knowledge and experience gained from the pilot programs to assist nine of the original ten companies that have committed to undertake additional workplace flexibility efforts. It will also begin demonstration projects in eight additional firms in Fort Worth, Texas and Seattle, Washington. The results of these flexibility programs will be widely distributed throughout the business community. Each of the 17 participating companies will contribute funds, as well as staff time and labor, in developing the flexibility programs. BOLD will continue to present findings of the project at national business conferences and in industry-specific publications. Project Director: Beatrice A. Fitzpatrick, President and CEO.

Boston College
Chestnut Hill, MA 02467

\$2,990,474

Recent studies have shown that a large majority of baby boomers intend to work beyond conventional retirement age, but most want to work neither full time nor full year. Yet

today's workplace is not structured to provide opportunities for flexible work that will meet such expectations. With this grant, Boston College will establish a Center on Flexible Work Options and Older Workers that will collaborate closely with business and union partners to study flexible work options for the growing older segment of the workforce. The planned research program includes the following four studies: (1) "National Study of Business Response to the Aging Workforce: The Adoption of Flexible Work Options," the first comprehensive study to provide information on the availability of flexible work options for older workers, examining the business environment, organizational characteristics, and workforce demographics in seeking explanations for the existing variation in firms' adoption of flexible work arrangements; (2) "Health Insurance Costs and the Employment of Older Workers," a multi-state study that will examine the impacts (positive and negative) of health insurance mandates on the employment of older workers; (3) "Workplace Culture and Flexible Work Arrangements," a comparison of the adoption of flexible work arrangements at eight different worksites of a retail pharmacy company with an explicit human resources strategy emphasizing flexible schedules as a way to recruit and retain older workers; and (4) "The Adoption, Implementation, and Utilization of Flexible Work Options by Older Workers: A Five-Company Study," using information from over 500 employees of five firms representing different industry sectors to explore the adoption of flexible work options by these firms. Leading scholars will direct and participate in these studies. Nine major corporations are expected to collaborate with the Center by sponsoring reports, serving as sites for research, and convening meetings. With these businesses, as well as several unions, the Center will establish the Sloan Employment Network for Informing Organizational Response (SENIOR), a group that will advise the Center on research activities, ensure that results are disseminated to the business community, and encourage both the business community and organized labor to engage with the research findings to create real changes and results in the workplace. The Center staff will work with members of the SENIOR advisors to translate research evidence into "Standards of Excellence" for the adoption, implementation, and utilization of flexible work options for older workers. By the end of its first three years of operation, it is expected that this Center will be viewed as the premier source of research-based information on flexible work options for older workers. Project Directors: Associate Professor Marcie Pitt-Catsouphes, Graduate School of Social Work; Co-Director, Center on Aging and Work/Workplace Flexibility; and Michael A. Smyer, Dean of the Graduate School of Arts and Sciences; Co-Director, Center on Aging and Work/Workplace Flexibility; Professor of Psychology.

Brandeis University
Waltham, MA 02454

\$392,097

One in eight employees currently is a caregiver for an elderly family member and evidence indicates that the percentage of employed caregivers will continue to grow. Providing care to elderly family members takes a toll on the caregiver's health, finances, and job performance. Flexible work arrangements could be a critical way to meet the needs of employed caregivers who, when surveyed, reveal that easier access to flextime is the workplace option they most desire. There is much research needed to understand

better the connections between stress levels of employed caregivers providing elder care and work conditions. For example, direct elder care, in which the caregiver is physically present and taking care of the elderly person on a day-to-day basis needs to be distinguished from indirect care, in which the caregiver is not present but is being financially supportive or is trying to arrange medical and housing logistics from a distance. This grant supports research to identify and understand the range of concerns that caregiving employees have. An important part of the project will be the development of a measure of stress associated with caring for adult relatives and elders. The linkages between levels of this measure of stress and a host of personal and job-related outcomes associated with work flexibility arrangements will be studied. Project Director: Rosalind Chait Barnett, Research Director, Community, Families and Work Program, Women's Studies Research Center.

Families and Work Institute

\$2,401,316

New York, NY 10016

Over the last year, Families and Work Institute (FWI) launched “When Work Works: A Project on Workplace Effectiveness and Workplace Flexibility.” This public engagement campaign is designed to highlight the importance of flexibility in the workplace as a win-win strategy that benefits both employers and employees. With a 2003 Sloan grant, FWI partnered with the Center for Workforce Preparation, an affiliate of the U.S. Chamber of Commerce, and the Center for Emerging Futures to develop and implement an outreach campaign that was both community-based in eight targeted communities and also national in scope. To raise awareness of the importance of workplace flexibility to employers and employees, nationally and locally, local Sloan Awards for Business Excellence in Workplace Flexibility were launched in eight major U.S. cities. With support from IBM, a report that received national media attention was issued on flexibility as the missing ingredient in business effectiveness. A website was created with downloadable tips for managers and employees to use in implementing flexible arrangements, including flextime, compressed work weeks, part time, part year, and job sharing. FWI will now undertake a two-year, multi-pronged approach for Phase Two of “When Work Works,” building on the successes of Phase One and the experience gained in the eight cities in which Sloan Awards are being administered. By year two, FWI will be administering Sloan Awards in 24 major U.S. cities and will have mounted a major media campaign, established a speakers bureau, and produced a comprehensive e-marketing technical assistance toolkit on how to mobilize a community for workplace flexibility. Public service announcements for local radio stations, flyers, emails, and DVDs will be delivered to each targeted Award community. Another version will be disseminated to a minimum of 50 other communities and additional material will be distributed to 830 trade associations and 2500 chambers of commerce. Project Director: Ellen Galinsky, President.

Georgetown University
Washington, DC 20057

\$2,343,264

Workplace Flexibility 2010 (WF2010), funded with an earlier Sloan grant, initially focused on analyzing the legal landscape regarding workplace flexibility. Subsequently it also turned to the political and social engagement of key Washington players in flexibility issues, as well as to building a research base and rationale for improved flexibility policies. WF2010 has been successful in engaging the most politically diverse array of participants yet assembled on flexibility. At a January 2005 forum open to the public, panelists discussing the need for flexibility included management and labor, left and right, religious and secular, and feminists and traditionalists. With this new grant, WF2010 will over the next two years continue to conduct legal research on a number of issues, including, for example, the legal obstacles to phased retirement. They will write detailed legal analyses on laws and regulations that implicitly either facilitate or impede part-time employment and phased retirement, including the Age Discrimination in Employment Act, the Internal Revenue Code, the Employee Retirement and Income Security Act, the Social Security Act, and the Consolidated Omnibus Budget Reconciliation Act. WF2010 will then organize cluster meetings in which stakeholders from diverse groups and political points of view can review and discuss the legal issues. It will arrange up to six briefings for Congressional staffers. At the same time, WF2010 will establish working groups to develop policy ideas and policy principles upon which they will seek agreement from different stakeholder groups. WF2010 will work with members of Congress to establish a Congressional Caucus on workplace flexibility, as a way to build momentum and support for this issue among lawmakers. WF2010 aims at getting agreement within the Beltway on a set of principles regarding workplace flexibility that may lead to concrete changes in law for facilitating greater opportunities for flexibility in the American workplace. Project Director: Professor Chai Feldblum, Law Center.

Linköping University
Linköping, Sweden

\$97,440

Università degli Studi di Roma
Rome 00185, Italy

\$97,440

In 2002, the Sloan UCLA Center on the Ethnography of Everyday Life spawned two projects to conduct comparative research on the everyday life of working families in Sweden and Italy, using a variety of methods, including video ethnography, surveys, and observations, and to compare their findings with UCLA's findings on U.S. families. Data on the Swedish and Italian families have been collected and qualitative analyses of the data completed. Some interesting cross-cultural differences have emerged. For example, far more parental time is devoted in American households to overseeing children's homework. American parents also spend much more time shuttling children to extracurricular activities, especially competitive sports, and children spend more time at such activities than they do in European families. These follow-up grants will support quantitative analyses of the collected data in order to develop greater understanding of

marriages, parent-child relations, household management, and community involvement in Sweden and Italy and to allow comparisons among those countries and the U.S. The Swedish and Italian researchers, in conjunction with the UCLA team, intend to produce scientific reports and a comprehensive book about working families in the three countries. Project Directors: Professor Karin Aronsson, Department of Child Studies, Tema Institute (Linköping); Professor Clotilde Pontecorvo, Department of Social, Developmental and Educational Psychology (Universita degli Studi di Roma).

Michigan State University
East Lansing, MI 48824

\$394,827

Historically, unions have had limited interest in promoting the scheduling of flexible work arrangements. Traditional male patterns of work based on shift work and overtime pay were seen as being threatened by flexible work schedules. However, the nature of union ranks has changed in recent years to include more women, single parents, and younger men in dual-earner families. A recent study found that union members, more so than union stewards and national leaders, are now interested in obtaining union contracts including flexible work options. The project supported by this grant will have dual goals: to analyze flexibility practices in union settings; and to develop a training program about flexibility. Phase I, The Research Phase, will focus on documenting how workplace flexibility can benefit both union members and employers, and on identifying effective contract language and contract administration. The Michigan State University team will partner with several unions, including the Communications Workers of America, American Federation of State and City Municipal Workers, and the United Auto Workers, thereby working with different industries and occupations of workers. Phase II, The Training Program and Knowledge Dissemination Phase, will draw on the findings of Phase I and focus on creating tools to inform dialogue about workplace flexibility and foster change in unionized work settings. Policy briefings and training materials for union leaders and their management counterparts will be developed and disseminated via union and company training programs, national and regional labor and/or management conferences, and the Internet. Project Director: Ellen Ernst Kossek, Professor of Human Resource Management and Organizational Behavior, School of Labor and Industrial Relations.

University of California Hastings College of the Law
San Francisco, CA 94102

\$465,011

Caregiver bias refers to workplace bias against adults of either sex with caregiving responsibilities. Both sociological research and over 200 successful lawsuits have made caregiver bias an issue that cannot be ignored. This grant will support work to help employers avoid caregiver bias. The approach will combine research, public education, and efforts toward institutional change. A Cognitive Bias Research Group will produce training materials and conduct training sessions to provide guidance for critical intermediaries, including management-side employment lawyers, general counsel of both employers and unions, and human resources professionals, in order to persuade employers that ending family-hostile practices is sound business policy. Past work of

such a Sloan-supported group was focused on bias experienced by mothers as opposed to women generally. A new research group will address caregiver bias against men, especially related to part-time and other flexible work arrangements. The grant also supports continuation of the Project for Attorney Retention (PAR), focused specifically on law firms and corporate legal counsels, to educate and persuade them, as employers, to provide practical and fair part time work policies. Over the last three years, PAR has worked with 15 law firms and 2 bar associations to implement measures from the PAR Model Policy and to use the PAR Usability Test as a way to assess whether an employer's part-time policy is "up to par" and is avoiding stigma and schedule creep. Caregiver bias, if left unaddressed, will hinder workplace flexibility initiatives by stigmatizing workers with flexible schedules as less competent and committed than full-time workers. The educational and outreach aspects of this project should prove helpful to employers, both within the legal profession and elsewhere, in recognizing and avoiding caregiver bias. Project Director: Joan C. Williams, Distinguished Professor of Law and Director, Center for WorkLife Law.

WFD Consulting

\$105,000

Newton, MA 02458

During the last decade, WFD Consulting has created a number of data sets, organized at the firm level, that include responses by 200,000 employees who are representative of 600,000 employees. Reorganizing the data at the individual level would create one sample of 200,000 respondents and enable researchers to conduct rigorous sub-group analyses. The data include a wide range of reliable measures of flexibility, commitment, stress, and resilience and can be used to answer questions about the impact of flexible work arrangements on an array of employer and employee outcomes. WFD has never made these databases available for research or public purposes. The data were collected entirely at the request of companies under contracts and/or clear understandings between clients and WFD Consulting that they were confidential and proprietary. As a result, in this current project only WFD staff will have direct access to the data. The project will reorganize the WFD data sets at the individual level, form a collaborative research committee of WFD and Sloan researchers to develop an analytic plan, mine the data for findings relevant to workplace flexibility, and communicate these findings to the business press, academic researchers, and the business community. Project Director: Jan Civian, Senior Consultant.

The following three grants are funded from an appropriation approved by the Board of Trustees for small grants to raise the visibility of the issue of workplace flexibility.

Boston College

\$45,000

Chestnut Hill, MA 02467

To develop case studies of flexible work practices. Project Director: Associate Professor Marcie Pitt-Catsoupes, Graduate School of Social Work; Co-Director, Center on Aging and Work/Workplace Flexibility

Center for Work-Life Policy **\$40,000**
New York, NY 10023

For development of case studies for inclusion in the book, *The Female Brain Drain: How to Reverse It and Win the War for Talent*. Project Director: Sylvia Hewlett, President.

Pennsylvania State University **\$39,316**
University Park, PA 16802

Support to conduct research on who wants and who gets flexibility. Project Directors: Robert Drago, Professor of Labor Studies and Industrial Relations and Women's Studies, Pennsylvania State University; and Professor Mark Wooden, Deputy Director and Professorial Research Fellow, Institute of Applied Economics and Social Research, Melbourne University, Australia.

WORKPLACE FLEXIBILITY, OFFICER GRANTS

American Council on Education **\$44,000**
Washington, DC 20036

For an invitational conference to promote career flexibility in the academy. Project Director: Claire Van Ummerson, Vice President, Center for Effective Leadership.

American Sociological Association **\$13,500**
Washington, DC 20005

To support a study of faculty work hours and their relationship to productivity and work-family policies. Project Director: Roberta Spalter-Roth, Director, Research and Development Program.

Center for Law and Social Policy **\$19,342**
Washington, DC 20005

Support for one audio conference and two issue briefs on flexible work policies and practices for low income workers. Project Director: Jodie Levin-Epstein, Deputy Director.

Corporate Voices for Working Families **\$45,000**
Washington, DC 20036

To fund the dissemination of the business case for workplace flexibility. Project Director: Donna Klein, President and Chief Executive Officer.

EDUCATION AND CAREERS IN SCIENCE AND TECHNOLOGY

SCIENTIFIC AND TECHNICAL CAREERS

ANYTIME, ANYPLACE LEARNING, TRUSTEE GRANTS

Franklin W. Olin College of Engineering
Needham, MA 02492

\$1,100,000

Hurricane Katrina hit the Central Gulf Coast on August 29. Its storm surge caused catastrophic damage along the coastlines of Louisiana, Mississippi and Alabama. Eighty percent of New Orleans was flooded. Among the many in Louisiana and neighboring states who were significantly affected by Hurricane Katrina and again shortly thereafter by Hurricane Rita were college students attending area institutions that were too severely devastated to stay open. Many were unable to continue their education. The Executive Committee of the Sloan Foundation Board of Trustees received a grant proposal for the project described below on September 1 and approved the grant the next day. The proposal came from the Olin College of Engineering representing the membership of Sloan-C, the online learning consortium developed and supported by the Foundation. It suggested that Sloan-C member colleges and universities offer ALN college courses free of charge to all students affected by the hurricanes. The schools would voluntarily join this effort by offering online courses during a "Sloan Semester," a special compressed eight-week term with courses starting October 10 and ending by mid-January. Sloan funds would provide subsidies for modest faculty stipends to institutions for each online course offered, with the institutions voluntarily absorbing all other costs. Olin College offered to manage and administer the program and be the fiscal agent with no additional overhead. A special website (www.sloansemster.org) for this project was created to allow colleges to enter their courses into the Sloan Semester catalog and students to register. Overall project direction was invested in a four-person Sloan-C committee, which worked closely with the Southern Regional Education Board. SREB, the South's "electronic marketplace" of e-learning courses, programs and services, operates the Electronic Campus that now offers 10,000 online credit courses and 500 degree programs from 300 colleges and universities from its 16 member states. SREB was able to make high-level contacts with state governing boards of education in the impacted states in order to identify affected institutions and their students. Endorsements from state education commissioners followed quickly. Publicity from provider institutions and numerous radio interviews reached potential students. By September 3, the date the special website went live, more than 60 institutions had expressed interest in providing courses, and information for students was made available. By September 15, over 1000 online courses (to grow to over 1300) were posted as available by some 160 provider colleges and universities from 38 states. Students began registering for these courses less than a week later. By October 10, when the first Sloan Semester courses began, there were 1092 students approved to participate and 2554 valid course registration requests. Project Director: John R. Bourne, Professor of Electrical and Computer Engineering.

Franklin W. Olin College of Engineering
Needham, MA 02492

\$1,000,000

This grant renews support for a variety of activities to strengthen the world-wide online ALN user community. The Sloan Consortium (Sloan-C) has approximately 1300 active organization members, including colleges, universities, consortia, and vendors, all involved in online education, mainly by means of asynchronous learning networks (ALN). The ALN center at the Olin College of Engineering and Babson College will maintain responsibility for publishing the online refereed *Journal of Asynchronous Learning Networks*, a newsletter, the monthly *Sloan-C View* (Perspectives in Quality Online Education), and a few books each year; for organizing and conducting online faculty workshops to help improve the effectiveness, accessibility, and affordability of online education; for operating the Sloan-C Listserv and website (www.sloan-c.org) which features a catalog of degree and certificate ALN courses and programs; for providing support for the Sloan-C special project for the U.S. Army (eArmyU); and for bringing new membership into Sloan-C. Professor Bourne also has responsibilities associated with other Sloan-C activities, including the annual ALN Conference and the annual Sloan-C Awards. These and related projects will be continued with grant funds. A portion of the grant will be applied to the following new and important efforts: helping to promote “blended learning,” a mixture of ALN and traditional classroom teaching; promoting ALN in minority institutions; and beginning a small involvement in ALNs for K-12 education. Project Director: John R. Bourne, Professor of Electrical and Computer Engineering.

Franklin W. Olin College of Engineering
Needham, MA 02492

\$105,000

Franklin W. Olin College of Engineering
Needham, MA 02492

\$101,000

The first of these grants supports the seventh annual Sloan Consortium ALN summer workshop to be held in Victoria, Canada, the first such workshop to be held on the west coast and outside of the U.S. The second grant will enable Sloan-C to organize and hold its eighth annual summer workshop in 2006. In addition to supplying a venue for the most experienced ALN community members to share research and teaching practices, the workshops encourage attendees to accept speaking engagements to disseminate what was discussed and learned. A pre-seventh conference activity will organize attendees into groups to discuss the five challenge areas related to ALN: Policy, Institutional Change, Collaboration, Growth Paradigms, and Blending. (Blending refers to a mixture of online and traditional classroom education.) These online discussions will serve as the basis for workshop sessions focused on practical actions to respond to each ALN challenge. A recently developed online version of the summer workshop provides a new way to disseminate workshop content to many more persons than the 40 or so who attend in person. In 2004, for example, there were two online sessions of the workshop offered to 700 registered attendees. The eighth annual workshop will pay special attention to the positive and negative reactions of faculty to ALN teaching and ways to motivate

additional faculty to join the ranks of ALN-enabled teachers. It will also discuss problems learners perceive and how they benefit from ALN courses. Results of the two workshops will be published as the seventh and eighth monographs of the series “Elements of Quality Online Education,” and will be prepared, as in preceding years, by John Bourne. Project Director: John R. Bourne, Professor of Electrical and Computer Engineering.

League for Innovation in the Community College

\$530,000

Phoenix, AZ 85048

The League for Innovation in the Community College (LICC) is a consortium of about 800 community colleges from across the country. With a 2003 grant, LICC studied the question of whether community colleges would be willing to buy and sell ALN courses from and to each other. For example, suppose a community college offered an ALN course sequence in some specialty. Suppose further that another community college, although unable to sustain the cost of a new department to offer this specialty, nevertheless had some interest in making it available to its students. A business transaction making such an arrangement possible could benefit both parties. The provider college would gain revenue from the transaction and further upgrade its expertise in ALN teaching of the specialized course. The receiving college would be able to offer the new specialty to its students, perhaps creating a new major for its degree program, thereby gaining students, revenue, and improved standing within the community. Its students and local industries would have access to much-needed skills and education not currently available. LICC ran a prototype market of this sort for 18 months under the name SAIL, for Specialty Asynchronous Industry Learning. The SAIL catalog has over 100 courses listed for sale or lease and more than 100 transactions between institutions have been recorded. LICC plans to enlarge and refine the inter-institutional transaction model and identify more specialties available in ALN that can be added to its catalog. Its website will be upgraded and new procedures put in place for ensuring an acceptable level of quality in all provider course offerings. LICC will develop a solid basis for encouraging community colleges to participate and industries to request such special but unavailable ALN courses or programs from their local community colleges. This grant will support LICC staff in adding these new capabilities to its “broker” function and will support the core group of providers for dissemination and awareness-raising activities, and for development of some new ALN courses. Project Director: Stella Perez, Director of League Online.

Research Foundation of the State University of New York

\$300,000

Albany, NY 12246

University of Washington

\$260,000

Seattle, WA 98195

A number of universities, often with Sloan support, have developed and offer online master’s level engineering degrees in a variety of sub-specialties. However, there is no fully accredited bachelor’s degree in any engineering discipline offered entirely online. These two grants support the development and offering of the first online bachelor’s

degrees in electrical engineering. There are thousands of technicians and other skilled workers in industry who have a community college Associate degree or equivalent coursework. All would benefit from having the option to move up in the ranks by enrolling in and completing a fully accredited undergraduate engineering degree. The SUNY effort is built by pooling faculty resources of three engineering campuses (Stony Brook, Binghamton, and Buffalo), each of whom will develop some of the courses needed for the degree, thus achieving something no one institution could do on its own. A student will register and eventually receive a degree at the one campus he or she chooses, after taking most courses entirely online. Laboratories will be handled through a combination of computer simulations and/or physical labs established at several of the SUNY community colleges. The University of Washington electrical engineering faculty has developed a small box (the SOMA box that can be shipped through the mail and can be connected to a home computer to perform the basic functions of a sophomore electrical circuits laboratory. It will be an integral part of the university's online program and will overcome one of the main obstacles to online engineering education: lack of a good way to handle the laboratory requirement. The University of Washington degree will offer a specialty in design and application of digital signal processors to various products, such as consumer music devices, toys, and automobiles. The Accreditation Board for Engineering and Technology will work closely with the institutions as they strive toward full accreditation of these two ground-breaking online programs. Project Directors: David Porush, Executive Director, SUNY Learning Environments; David P. Szatmary, Vice Provost, Educational Outreach, University of Washington.

The following grant was made from an appropriation approved by the Sloan Foundation Board of Trustees to fund small projects for the ALN Program.

University of Illinois at Chicago **\$45,000**
Chicago, IL 60612

Support to organize the second workshop on blended learning. Project Director: Mary P. Niemiec, Executive Director, External Education.

The following grants, made from an appropriation approved by the Board of Trustees, support exploratory efforts to make New York City a leader in the use of asynchronous learning networks (ALNs) for anytime, anyplace learning.

Marist College **\$45,000**
Poughkeepsie, NY 12601

Support to create an ALN eight-course Certificate program for managers working in a Global Teams environment. Project Director: Dennis R. DeLong, Dean, School of Graduate and Continuing Education.

New York Institute of Technology **\$40,000**
Old Westbury, NY 11568

Support to create 24 ALN courses for teachers. Project Director: Professor Stanley Silverman, School of Education and Professional Services.

Stevens Institute of Technology **\$45,000**
Hoboken, NJ 07030

Support to develop and implement two projects for local academic institutions to provide ALN training for two legal corporations. Project Director: Robert N. Ubell, Dean, Online Learning.

ANYTIME, ANYPLACE LEARNING, OFFICER GRANTS

Charter Oak State College Foundation **\$30,000**
Newington, CT 06111

Support to develop an assessment for computer literacy. Project Director: Diane Goldsmith, Dean of Planning, Research, and Assessment, Connecticut Distance Learning.

Franklin W. Olin College of Engineering **\$45,000**
Needham, MA 02492

Support for a project to more strongly connect presidents and chancellors in ALN learning. Project Director: John R. Bourne, Professor of Electrical and Computer Engineering.

Hunter College of the City University of New York **\$45,000**
New York, NY 10021

Support for a national survey of K-12 online activities. Project Director: Professor Anthony G. Picciano, School of Education.

Pennsylvania State University **\$45,000**
University Park, PA 16802

For a conference on K-12 online initiatives. Project Director: Gary Miller, Associate Vice-President for Distance Education and Executive Director, World Campus.

State University of New York, Albany
Albany, NY 12222

\$45,000

Support to initiate a project assessing the impacts of ALN on faculty. Project Director: Assistant Professor Peter Shea, Department of Educational Theory and Practice, School of Education.

University of Wisconsin
Madison, Wisconsin 53706

\$28,500

Partial support for the weekly Academic ADL Co-Lab Newsletter. Project Director: Judith C. Brown, Emerging Technology Analyst; Director, Academic Advanced Distributed Learning (ADL) Lab.

SCIENTIFIC AND TECHNICAL CAREERS

PROFESSIONAL MASTER'S DEGREES, TRUSTEE GRANTS

Council of Graduate Schools

\$1,815,065

Washington, DC 20037

The Professional Science Master's (PSM) degree program, initiated by the Foundation in 1997, has now grown substantially to include nearly 100 such master's programs at about 50 universities. This grant funds the Council of Graduate Schools (CGS) for a three-year period to organize and conduct a concerted and institutionalized set of promotional and outreach efforts in support of the overall PSM degree initiative. CGS is an organization dedicated solely to the advancement of graduate education and research. Its institutional membership includes the graduate deans of over 450 universities in the U.S. and Canada. Its member institutions collectively account for over 95 percent of all doctorates and 70 percent of all master's degrees awarded annually by U.S. universities. With a 2003 Foundation grant, CGS has been actively engaged in promoting the creation of PSM degrees at master's-focused universities. The CGS Board has decided to make the professional science master's degree one of its few primary foci for improving graduate education in the U.S. With this grant, CGS will carry out a wide range of activities aimed at making PSM degrees a regular feature of American graduate education. These include: guiding and monitoring existing PSM degree programs; promoting numerous new PSM degrees among its member graduate schools; expanding liaison with interested business and industry groups; developing initiatives to enlist the support of Federal agencies and legislators; reaching out to the mass and specialized media to publicize PSM degree programs; collecting and managing data about PSM degree programs, students and graduates; and organizing a 2007 national meeting on PSM degrees. Project Directors: Paul Tate, Dean in Residence and Carol Lynch, Senior Scholar in Residence.

Council of Graduate Schools

\$170,975

Washington, DC 20037

This grant was made from an appropriation approved by the Board of Trustees to provide supplementary support for the effort originally approved in 2001 to encourage development of Professional Science Master's (PSM) degree programs at master's-focused institutions. Most of the master's degrees such institutions now offer are one-year degrees within a particular discipline and often are not sufficient to prepare their recipients for professional careers in scientific fields. The effort, conducted by the Council on Graduate Schools (CGS), had two phases. In Phase I, small planning grants were awarded to 36 such universities and larger implementation awards went to 9 of these whose plans were favorably evaluated in a peer review process. In Phase II, it was expected that some 10-12 master's-focused institutions would receive planning grants. At the same time, a grant to the University of Texas, El Paso (UTEP) was made for a joint project with Howard University to reach out to minority-serving institutions to facilitate their consideration of the new type of PSM degrees. This led to a decision by CGS, UTEP, and Howard to convene a joint workshop on PSM degrees for minority-serving

institutions, many of which are also master's-focused universities. The result was the receipt of many more requests for planning grants than had been originally expected. Peer reviews of the 31 such proposals received suggested that 20 of these receive implementation grants, well above the originally budgeted number. Of these, five are Historically Black colleges and universities and two are Hispanic-serving institutions, most of which had been energized by the workshop. This grant provides funding to support these additional small grants. Project Director: Les Sims, Senior Scholar in Residence.

Council of Graduate Schools
Washington, DC 20037

\$55,105

The initiative by the Council on Graduate Schools (CGS) to encourage development of Professional Science Master's (PSM) degrees at numerous institutions that focus on and produce large numbers of master's degrees has been more successful than originally anticipated. (See the preceding grant description.) This supplementary grant supplies additional funds needed for CGS oversight and assistance for new PSM degree implementation grants at master's-focused universities. Project Directors: Les Sims, Senior Scholar in Residence and Paul Tate, Dean in Residence.

National Academy of Sciences
Washington, DC 20001

\$275,000

Professional Science Master's (PSM) degree programs have become increasingly visible and credible as they have been implemented at more and more universities. During 2004 there were 1,162 graduates from such 2-year PSM programs and the number is expected to increase significantly. The programs have received considerable press attention. This grant supports a report on enhancing master's-level education in the sciences to be conducted by the National Academies' Board on Higher Education and Workforce. The Board's charge is at the nexus of higher education and the workforce. An expert panel will be appointed made up of graduate deans, faculty leaders of PSM degree programs, other faculty scientists and mathematicians, and also employers from industry, government and nonprofit sectors. The report will provide a thorough and independent assessment of PSM and other science master's degrees. It will highlight exemplary practices and develop a set of recommendations for action to enhance and strengthen the science master's degree as a professional degree. These recommendations would be addressed to faculty, department chairs, graduate school deans and other university administrators, accrediting organizations, employers, federal agencies and policymaking bodies, and others interested in the U.S. high-technology workforce. The National Academy will seek additional funding in order to expand the scope of its assessments to include not only the natural sciences and mathematics, but also engineering and the social sciences. If only funds from this Sloan grant prove to be available, the project will address only the natural sciences. Project Director: Peter Henderson, Director, Board on Higher Education and the Workforce, Policy and Global Affairs Division.

National Conference of State Legislatures
Denver, CO 80230

\$184,483

This grant supports a project of the National Conference of State Legislators (NCSL) to communicate information about and catalyze support among state legislatures and legislators for Professional Science Master's (PSM) degree programs. The NCSL is a nonprofit and bipartisan organization serving the legislators and staffs of the nation's 50 states. Its membership includes nearly 7,400 elected state legislators and large numbers of legislative staff. The education staff of the NCSL believes that PSM degree programs will interest the many state legislators who are strongly committed to promoting economic development and mathematics and science education in their states. NCSL's publications and website, widely read by its large membership, and its annual meeting, attracting over 5,000 attendees, will serve to generate support for PSM degree programs. NCSL will also build personal connections between individual legislators and PSM degree programs located in their districts, and will advise chairs, members, and staffs of legislative education committees as to how state policy can support such programs. Project Director: Julie Davis Bell, Education Program Director.

University of North Carolina
Chapel Hill, NC 27515

\$330,000

Five individual campuses in the State University System of North Carolina have already successfully initiated a total of six Professional Science Master's (PSM) degrees. This grant supports an NC System project to extend PSM degree programs to many more of the 16 campuses of the University. The grant will be used in two ways. About half the funds will cover time of a professional staff member in the Office of the President dedicated to catalyzing PSM degree programs throughout the System and working with the State legislature. The remainder would go to ease implementation on individual campuses and to foster communication among campuses and employers about these programs. The project will make use of distance learning, encourage inter-campus collaborations, and make possible the portability of course credits, all of which make programs more accessible for students. Project Director: Alan Mabe, President.

PROFESSIONAL MASTER'S DEGREES, OFFICER GRANT

University of Washington
Seattle, WA 98105

\$45,000

Support to conduct a study of the market for provision of professional science master's degrees by the public four-year institutions of the State of Washington. Project Director: David P. Szatmary, Vice Provost, Educational Outreach.

SCIENTIFIC AND TECHNICAL CAREERS

SCIENCE AND ENGINEERING WORKFORCE, TRUSTEE GRANTS

Georgetown University
Washington, DC 20057

\$194,673

This grant supports research on the declining numbers of foreign students and immigrants in U.S. graduate schools of science and engineering. Most reports of this phenomenon have attributed it to changes in visa issuance policies and practices following the 9/11 attacks. Less attention has been paid to other possible explanatory factors, such as changes in demand for labor in U.S. high-tech sectors; reduced availability of U.S. funding for graduate students; expansion of access to university-level education in several of the largest source countries for foreign graduate students, especially China and India; and changes in alternative destinations as the European Union and some national governments have taken steps to make their universities more attractive to foreign graduate students. The weaknesses of available data and analyses needed for well-informed assessment of these possibilities and for the formulation of effective policy are recognized. This one-year project will produce a set of three reports on the research findings, a web-based series of short briefs, op-eds in leading publications, presentations and publications for professional meetings and journals, and a co-authored book. Project Directors: B. Lindsay Lowell and Susan Martin, Directors, Institute for the Study of International Migration.

Harvard University
Cambridge, MA 02138

\$898,150

National Bureau of Economic Research, Inc.
Cambridge, MA 02138

\$1,086,200

With a 2002 grant, the National Bureau of Economic Research (NBER) created a national research network on the science and engineering workforce. The goal has been to address the absence of fact-based and sophisticated labor market analyses needed to assess concerns that have been expressed both about “shortages” in the U.S. high-skill workforce and about the implications of rising science and engineering competencies in large Asian countries such as China and India. Members of the NBER Science and Engineering Workforce Project have since developed new data and analyses on the U.S. science and engineering workforce. These have been presented at many conferences, briefings, workshops, and symposia. Numerous Federal agencies, including the White House Office of Science and Technology Policy, the National Science Foundation, the National Institutes of Health, and the National Security Agency have sought advice on science and engineering workforce issues and policy concerns. Three rounds have been held of a national competitive program for fellowships in support of dissertation research on the U.S. science and engineering workforce and six such awards have been made.

There is now a large enough group of researchers and others studying the U.S. science and engineering workforce at Harvard University and other campuses in the Boston area and elsewhere, that it is feasible to build upon the success of the NBER research network to create a Science and Engineering Workforce and Policy Center. The Center will be a joint project of the NBER and the Harvard Law School's Labor and Workforce Program. The goals of the Center are: to provide rigorous analysis (and to disseminate this analysis) on the supply, demand, and impact of science and engineering on the U.S. economy; to inform intelligent discussion and sensible policy formulation on these issues; and to develop the study of the science and engineering workforce into a legitimate and influential academic research area. Current Network activities (conduct research, hold annual research conferences, organize and make presentations at academic society meetings, arrange policy briefings and workshops in Washington, and conduct the annual national competitive dissertation awards program) will be continued. Project Directors: Professor Daniel L. Goroff, Department of Mathematics, Harvard University; Richard B. Freeman, Professor of Economics, Harvard University and Director, NBER Labor Studies Program.

Population Reference Bureau

\$400,000

Washington, DC 20009

The "long form," a lengthy questionnaire that every ten years is completed by one sixth of U.S. households, is the source for all of the more detailed data that comes from the Census. The American Community Survey (ACS) of the U.S. Census Bureau is planning to discontinue use of the long form. Instead, the ACS will now interview a national sample of three million households each year. With this grant, the Population Reference Bureau will take advantage of the new ACS as a source of more fine-grained and up-to-date data on the U.S. science and engineering workforce. The ACS sample will for the first time allow the development of credible estimates of persons in particular science and engineering occupations broken down by sex, age group, level of education, status as native-born or immigrant, all disaggregated by state, region, and even local area. The ACS data will now be released only six months after collection. Timeliness of such data has become increasingly important with rapid changes in both demand for and supply of scientists and engineers. The Population Reference Bureau has a staff with considerable experience working with pilot data from the ACS. Two staff members are already approved by the Census Bureau for access to internal data files kept behind strong privacy firewalls. The Bureau is well-positioned to make use of the new data from the ACS better than ever to establish and assemble the basic facts about the U.S. labor market and workforce in science and engineering. Project Directors: William Butz, President and CEO and Linda Jacobson, Director of Domestic Programs.

SCIENTIFIC AND TECHNICAL CAREERS

RETENTION, TRUSTEE GRANT

University of Wisconsin
Madison, WI 53706

\$206,452

This grant supports a three-year project to improve the retention of underrepresented minority undergraduate students studying life sciences and engineering at the University of Wisconsin Madison campus. In-depth interviews and surveys will explore what student life is like from the perspective of the students. The resulting data will be disaggregated by racial/ethnic group and by gender. The project is strongly supported by those who run and have responsibility for retention-oriented intervention programs in the College of Engineering and the College of Agriculture and Life Sciences. The research focuses on entering underrepresented minority freshmen in fall 2005 who declare a major in science or engineering or who are in a pre-science or engineering program in the two Colleges (about 50 students), and on seniors who are declared science and engineering majors in these Colleges as of the same date (also about 50 students). Forty-eight of these students (male and female freshmen and seniors from each of four ethnic/minority groups in each of three fields) will be selected for interviews each spring for three years. Eight of these students will be interviewed early to guide the creation of an online survey instrument to be administered twice annually to all underrepresented minority students in the two Colleges. This ensures that students who leave their major as well as those who stay in their major and the experiences of students from freshman year through graduation and beyond will be included. Research results will be used to guide the revision of the existing minority-oriented retention programs in both Colleges. A measurable improvement is expected in the six-year completion rate of 75% in their major for students who declare a science or engineering major after their first semester and of only 33 percent for those who so declare as new freshmen. Project Director: Assistant Professor Angela Byars-Winston, Department of Counseling Psychology.

RETENTION, OFFICER GRANTS

Michigan State University
East Lansing, MI 48824

\$45,000

To enable Barbara Lovitts to revise for publication her manuscript, *Making the Implicit Explicit: Creating Performance Expectations and Assessing the Outcomes of Graduate Education*. Project Director: Karen Klomprens, Dean, Graduate School.

University of St. Thomas
Houston, TX 77006

\$38,000

To help improve the retention and graduation rates of Hispanic students from mathematics and science disciplines. Project Director: Professor Michael Colvin, Chair, Department of Mathematics.

EDUCATION FOR MINORITIES AND WOMEN

MINORITIES, TRUSTEE GRANTS

Commission on Professionals in Science and Technology
Washington, DC 20005

\$153,612

African Americans, Hispanic Americans, and Native Americans are underrepresented in mathematics, science, and engineering at all levels in the United States. Unfortunately, relatively little is known about the academic career paths of minorities compared to non-minorities in these disciplines. For example, it is not known whether these minority groups are underrepresented among postdoctoral fellows and faculty at all levels relative to their representation within the pool of persons from which new postdocs or faculty are drawn, namely new Ph.D.s in the case of postdocs and new Ph.D.s and postdocs in the case of assistant professors. It is also not known whether minority postdocs and faculty are distributed across departments of varying quality and prestige differently or equivalently to the distribution of non-minorities, and what difference, if any, the distribution makes for the overall career trajectory of minorities versus non-minorities. With this grant, the Commission on Professional in Science and Technology will carry out a research project, involving the use of many different and scattered data sets, designed to answer these and related questions. Project Director: Lisa Frehill, Executive Director.

The following grants are funded from appropriations approved by the Sloan Foundation Board of Trustees for the Minority Ph.D. Program and the University of Arizona American Indian Program. The aim of the Minority Ph.D. Program is to increase the number of underrepresented minority Ph.D.s in mathematics, science and engineering by 100 per year. The aim of the American Indian Program is to recruit and graduate American Indian science and engineering students at the Master and Ph.D. levels. Recruitment and retention efforts and direct aid for students are part of the programs, as are meetings of faculty participants and Sloan Scholars (students participating in the program). The programs are administered by the National Action Council for Minorities in Engineering. The Minority Ph.D. Program includes a feeder component in which grants are made to selected college and university departments that have both a high percentage of minority students and also send on for Ph.D.s in science and technology fields a significant number of their minority bachelor's and master's degree graduates. The aim is to encourage and support efforts within the selected departments to increase the number of such minority Ph.D. students.

National Action Council for Minorities in Engineering, Inc. **\$4,701,642**
New York, NY 10118

This grant enables the National Action Council for Minorities in Engineering (NACME) to continue to administer the Sloan Foundation's Minority Ph.D. Program and the American Indian Program during the academic year 2005-06. NACME receives applications for Sloan scholarships from eligible students in both programs, selects awardees using Foundation-specified criteria, and makes scholarship payments. It monitors student progress. NACME also makes payments and monitors grants for the undergraduate and master's feeder programs for the Minority Ph.D. Program. Project Director: Aileen Walter, Vice President, Scholar Management.

National Action Council for Minorities in Engineering, Inc. **\$313,500**
White Plains, NY 10601

This grant supports the continuation of NACME's administration of the Sloan minority Ph.D. program for an additional three years. Project Director: Aileen Walter, Vice President, Scholar Management.

Southern Regional Education Board **\$60,467**
Atlanta, GA 30318

The Compact for Faculty Diversity is a partnership of regional, federal and foundation programs that focus on minority graduate education and faculty diversity. Its goal is to increase the number of minority students who earn doctoral degrees and become college and university faculty. The Southern Regional Education Board and the Alfred P. Sloan Foundation are among the members of the Compact. This grant supports continued participation of Sloan Scholars, students supported in the American Indian Program, and their faculty mentors in the Compact for Faculty Diversity's annual Institute on Teaching and Mentoring. Project Director: Ansley Abraham, Director, Doctoral Scholars Program.

American Association for the Advancement of Science **\$44,886**
Washington, DC 20005

Support for a conference on the implications of U.S. Supreme Court affirmative action rulings on programs to promote underrepresented minorities in science and engineering. Project Director: David Chubin, Director, AAAS Center for Advancing Science and Engineering Capacity.

Gordon Research Conferences **\$40,000**
West Kingston, RI 02892

To increase the participation of underrepresented minority faculty, postdocs, and graduate students in Gordon Research Conferences. Project Director: Gerri A. Miceli, Program Manager.

University of Arizona **\$45,000**
Tucson, AZ 85721

To fund the initial year of a program to increase the graduation rates of Native American seniors in science and engineering. Project Director: Maria Teresa Velez, Associate Dean, Graduate College.

University of Oklahoma **\$45,000**
Norman, OK 73019

To support a survey of the demographics of university science and engineering departments, with an emphasis on the representation of women and underrepresented minorities, and to disseminate the results. Project Director: Associate Professor Donna Nelson, Department of Chemistry.

EDUCATION FOR MINORITIES AND WOMEN

WOMEN, OFFICER GRANT

Society for Women's Health Research
Washington, DC 20036

\$45,000

To launch a national award clearinghouse to facilitate nomination of women for scientific and medical achievement awards. Project Director: Stephanie Pincus, Emeritus Professor and Chair, Department of Dermatology, State University of New York at Buffalo.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

BOOKS, TRUSTEE GRANTS

The following grants are funded from an appropriation approved by the Board of Trustees to support small grants for promising new books on science and technology.

Stephen Hall **\$45,000**
Brooklyn, NY 11225

For research and writing of a book about the biology and psychology of physical size.
Project Director: Stephen Hall, Writer.

Robert Kanigel **\$43,000**
Baltimore, MD 21212

Research and writing of a book about the material and cultural history of leather. Project Director: Robert Kanigel, Writer.

Jessica Snyder Sachs **\$45,000**
Maplewood, NJ 07040

Research and writing of a book on bacteria and humans. Project Director: Jessica Snyder Sachs, Writer.

Victor King McElheny **\$45,000**
Cambridge, MA 02138

Research and writing of a book on the human genome project. Project Director: Victor King McElheny, Visiting Scholar, Program in Science , Technology, and Society, Massachusetts Institute of Technology.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

RADIO, TRUSTEE GRANT

WNYC Radio

\$260,000

New York, NY 10007

Studio 360 is a popular weekly one-hour radio show on creativity, culture and the arts. Produced by WNYC and Public Radio International, it has half a million listeners and is notable for its wide-ranging, in-depth discussions. It touches on various science and technology issues, but does not have the resources to develop such programming. This grant will allow the show to create a new half-time Associate Producer whose role would be to develop in-house science expertise and to coordinate meetings and discussions with scientists and engineers. A permanent board of science advisors will be created and an annual meeting will be held with these advisors to plan new science and technology programming. An annual scientist/artist salon will be organized to bring the two cultures together. Two annual cover stories — two full hours devoted to science and technology subjects — plus at least 15 additional segments of 7-12 minutes on these themes, will be produced. More scientists and engineers will appear on air and be integrated into their stories. Project Director: Julie Burstein, Executive Producer.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

PUBLIC TELEVISION, TRUSTEE GRANTS

Catticus Corporation
Berkeley, CA 94710

\$733,143

This grant supports the production and airing of a one-hour PBS prime time documentary about fractal geometry, *Roughing Up Reality: Seeing The World Through Fractal Eyes*. The film will feature Benoit Mandelbrot, who coined the term “fractal” in 1975 and is largely responsible for the current high interest in fractal geometry. Fractals can be applied in mathematics and occur in the modeling of many natural phenomena, ranging widely from turbulence and phase transitions in physics and cell growth in physiology to the behavior of prices in economics and the mapping of coastlines in geology. Fractals also appear in Hollywood, where special effects artists like George Lucas use them to create phenomenally realistic landscapes. The film will describe Mandelbrot’s background and intellectual contributions, as well as the challenges he faced before his work became widely accepted. It will advance public understanding of science and technology by depicting the crucial role of mathematics and mathematicians in the quest to grasp the laws of nature and to use this knowledge for the benefit of society. Project Director: Michael Schwartz, President, Kikim Media.

Documentary Educational Resources
Watertown, MA 02172

\$597,000

Scientist Thomas Gold is famous for plunging into new fields, challenging the experts with radical-sounding theories, and proving to be right, at least most of the time. He is an extraordinary theorist who created paradigm shifts in several different disciplines. In 1948 he used insights gained during wartime radar research to propose a totally novel theory of how the ear worked. His theory that the key lay in the hardware of the ear, not just the processing of the brain, was dismissed until 40 years later, when researchers found the anatomical structures Gold had predicted. In the late 1960s, he theorized that pulsars were rapidly spinning neutron stars, strange theoretical constructs that had never been directly observed. Astrophysicists thought little of the theory and ignored it until Gold turned out to be right again. His theories of a steady-state universe and that the lunar surface was covered with fine dust turned out to be wrong. One of his most controversial theories, on which the jury is still out, is that the world’s oil and gas reserves are not fossil fuels formed from buried organic surface material but rather were formed deep inside the earth from primordial inorganic chemicals. He concludes that these reserves are hundreds of times larger than most petroleum geologists believe. This grant supports the production and broadcast of a one-hour documentary on scientist Thomas Gold. Project Director: Jon Palfreman, Documentary producer.

Educational Broadcasting Company
New York, NY 10001

\$1,000,000

This grant supports research, production, and broadcast by WNET/13, New York's award-winning public television station, of a four-part, prime-time science series hosted by Alan Alda, the internationally known actor, writer, and director. The series will be accompanied by a website, extensive outreach, and a companion book. In seeking to answer the question of what makes us human, Alda will take viewers on a multi-disciplinary journey through evolution, genetics, cognitive neuroscience, behavioral science, anthropology, artificial intelligence, bionics, robotics, and computer science as he looks back to the great apes and forward to the merging of humans and computers. Using leading scientists as guides, Alda will ask simple, probing questions about the latest research in order to explain complex phenomena to a general audience. The first program will explore the fundamental differences and similarities between humans and primates. Program 2 will examine the crucial split between Neanderthals and Cro-Magnons and what led to the sudden displacement of the Neanderthals. Program 3 will use the latest brain imaging and cognitive neuroscience techniques to explore the nature of human consciousness. The final program will delve into questions about the future of humanity, including artificial intelligence and the possibility of transferring the human "essence" into machines. Though other shows have probed some of these issues, this television series will be the first that explores what it means to be human in all its dimensions, seeking to understand our origins, our present, and our future through many prisms. The unifying thread will be Alan Alda with his everyman approach to how science advances and redefines our understanding of ourselves. Project Director: Jared Lipworth, Executive Producer.

WGBH Educational Foundation
Boston, MA 02134

\$2,450,000

The American Experience is the longest running and most esteemed history series on television. It has received nine Academy Award nominations and 15 Emmy awards and continues to define excellence in documentary filmmaking. It reaches over 5.4 million viewers each week. With this grant, *The American Experience* will produce and broadcast four one-hour documentaries focusing on the role of science and technology. The project includes developing accompanying websites and a tune-in advertising campaign. The four shows include *The Ultimate Weapon*, on the history of biological warfare; *Yellow Fever*, about public health and infectious disease; *Test Tube Baby*, on modern reproductive technology and in vitro fertilization; and *The Alaskan Pipeline*, a story of technology and the environment. The narrative focus of the entire series is on the extraordinary impact that science and technology have on people's lives. The grant supports production and broadcast of three of the four documentaries. The fourth will be paid for by *The American Experience* from its own budget. Project Director: Mark Samuels, Executive Producer.

WGBH Educational Foundation
Boston, MA 02134

\$500,000

With this grant, NOVA Science Now, a new magazine format show by the television's flagship science producers, will create and include compelling personal profiles of scientists in each of its five episodes for next year. Each profile will be ten minutes long and will form one of the key elements of the one-hour science show. A Sloan start-up grant made last year helped launch this new effort to highlight the human side of science. Comments received from viewers of the first few episodes indicated that the personal profiles were the most popular part of the new series. NOVA Science Now has registered good audience numbers (over four million viewers on average), and excellent press coverage. The show has connected to a younger audience and has allowed NOVA to go outside its usual pool of viewers. (It created podcasts from the show, two of which reached number one in the podcast category on iTunes, making them among the most popular downloads in the country.) In addition to Sloan, the National Science Foundation and the Howard Hughes Medical Institute have also funded the series. Project Director: Paula Apsell, Senior Executive Producer.

PUBLIC TELEVISION, OFFICER GRANTS

Catticus Corporation
Berkeley, CA 94710

\$44,554

Support to develop a one-hour PBS show on fractal geometry. Project Director: Michael Schwartz, President, Kikim Media.

Educational Broadcasting Corporation
New York, NY 10001

\$45,000

Support to broadcast at least three *Open Mind* interviews on science and technology subjects. Project Director: Richard D. Heffner, Producer and Moderator of *The Open Mind* and University Professor of Communications and Public Policy, Rutgers, the State University of New Jersey.

University of California, Berkeley
Berkeley, CA 94720

\$30,000

To develop a treatment for a one-hour PBS documentary on John Bardeen. Project Director: David Pines, Co-Director, The Institute for Complex Adaptive Matter, Los Alamos National Laboratory.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

COMMERCIAL TELEVISION AND FILMS, TRUSTEE GRANTS

Galatée Films

\$2,000,000

Paris 75017, France

Jacques Perrin is a world-famous French actor and Oscar-winning film producer, best known in the U.S. for a remarkable series of nature films, most recently *Winged Migration*. This documentary about migrating birds has almost no dialogue, yet it became an international hit, viewed by 24 million people worldwide and winning numerous awards. For his next film, Perrin has turned his attention to the oceans. Over a year ago he made contact with the Census of Marine Life and has been meeting with Census scientists, much of whose research is supported by the Sloan Foundation. He has utilized Census advisors and integrated Census research into his screenplay. Discussions of a possible collaboration of Perrin and scientists participating in the Census of Marine Life have been held. Beyond its connection to the Census, Perrin's film should help advance public understanding of the mysterious world of the oceans and instill worldwide appreciation for the diversity and richness of marine life. The screenplay, which boldly mixes fiction and documentary, contains remarkably vivid writing about sea life and the preliminary underwater photography is breathtaking. This grant supplies only a small part of the film's \$40-50 million total budget. Project Director: Jacques Perrin, CEO.

Hamptons International Film Festival, Inc.

\$428,808

East Hampton, NY 11937

The Hamptons International Film Festival has grown in size and stature during the past three years, with selected features of the Festival supported by Sloan grants. Two years ago, a Sloan award for new films with a science or technology theme went to an unknown 23-year old director named Ryan Eslinger for his first film, *Madness and Genius*. Eslinger is now directing a feature film for Hollywood starring Sharon Stone. Last year, a Sloan award went to Oscar-winning director Bill Condon for his feature film *Kinsey*, later nominated for several Academy Awards. In both these cases the emphasis has been on science and technology as an integral part of the film narrative. The previous grant also included an annual science panel. These have been quite successful and have received extensive and favorable notices in film industry and general news media. The panels and awards ceremonies held at the Festival have been shown on cable television channels that broadcast across the country. This new grant will continue support for various programs at the Festival that emphasize science and technology films. In addition to continuing the annual award of a \$25,000 Sloan Film Prize for the best feature film that deals with science and technology, the screenwriting program will be significantly expanded. Several Sloan-supported scripts are in development. Included in the new grant are funds to take the winning screenwriters to the Berlin Talent Lab at the Berlin Film Festival and to hold readings and meetings with film industry people. Project Director: Denise Kasell, Executive Director.

Sundance Institute
Beverly Hills, CA 90211

\$750,000

With this three-year grant, the Sundance Institute will build and expand on past Sloan support for an annual film prize and a film panel at the Sundance Film Festival and a screenwriting development program at the Sundance Institute. The Sundance Film Festival is the premiere showcase for independent films. The Sloan-Sundance program, initiated by a 2002 grant, has established science and technology films as an integral part of the Festival. The annual Sloan film prize has been a big success since it picked three outstanding films, all of which have gone on to get theatrical distribution. One of the Sloan prize films, *Primer*, won the Grand Jury Prize at Sundance, the festival's highest award, creating a sensation when this \$7,000 home-made film debut won over several multimillion dollar efforts with star actors. This year's prize winner, *Grizzly Man* by Werner Herzog, is scheduled to open nationwide during the summer of 2005. The film panels, with the participation of major scientists and filmmakers, attracted near-sell-out audiences. The screenwriting program is progressing and now has several projects in development. Under the new grant, the entire program of activities will be continued and a new commissioning fund will be added to engage promising screenwriters and filmmakers at an earlier phase of development. These filmmakers would either take their scripts to the Sundance Lab or bypass this process and move directly towards production. The Foundation's work with the Sundance Institute and the Sundance Film Festival will continue to help give science and technology films, screenplays, panels, and prizes national visibility and to encourage a new generation to explore the science/technology theme for films. Project Director: Kenneth Brecher, Executive Director.

Tribeca Film Institute Inc.
New York, NY 10013

\$972,500

The Sloan Foundation was a founding sponsor of the Tribeca Film Festival in 2002. The initial grant was renewed for two years in 2003, featuring both the annual Sloan film series and the screenwriting program. The focus was shifted to established screenwriters and more developed screenplays so as to move closer to the goal of having films with a science or technology theme produced. Two 2004 Sloan scripts, one on actress Hedy Lamar and her contribution to frequency hopping and the other on scientist Rosalind Franklin, who played an important role in the discovery of the structure of DNA, have already attracted industry interest and are well on their way to production. In addition, this year's scripts include an excellent screenplay about astronomer Edwin Hubble, written by an accomplished screenwriter and already associated with a production company. Dramatic readings from Sloan screenplays by well-known actors at the Festival have helped attract industry interest. Foundation funds have also supported panel discussions with leading scientists like James Watson and Oliver Sachs. These discussions have brought the subject of science and technology to the attention of 80,000 Tribeca filmgoers and millions more through print and media coverage of the Festival. This new grant supports science and technology films and panels at the Tribeca Film Festival and also the continued development of screenplays with a science or technology theme toward production. Project Director: Jane Rosenthal, Co-Founder.

American Museum of Natural History
New York, NY 10024

\$44,344

To host a screening and panel discussion of Werner Herzog's documentary film, *Grizzly Man*. Project Director: Myles Gordon, Vice President for Education.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

THEATER, TRUSTEE GRANT

Playwrights Horizons
New York, NY 10036

\$178,500

Playwrights Horizons is devoted exclusively to developing new American plays. Four of its plays have won Pulitzer Prizes. It is recognized not only as an important institution in New York City, but as a national theater company with a consistently high quality of production, an impressive caliber of artists, and a significant role in introducing audiences to new plays. This grant supports a project by Playwrights Horizons to commission two established mid-career playwrights to write science and technology plays. Only if one of the two plays is produced for its mainstage theater will a significant production grant of \$100,000 be made. The mainstage theater has 198 seats and mainstage plays normally run for six weeks. Only six plays a year are produced and the average cost of production is \$400,000. Commissions are sizeable by theater standards and should enable Playwrights Horizons to work with established playwrights with a good track record. This grant expands the number of theater companies and playwrights committed to writing and producing plays with a science or technology theme. Project Director: Tim Sanford, Artistic Director.

THEATER, OFFICER GRANT

The Museum of Modern Art
New York, NY 10019

\$45,000

Support for *Pixar*, a theater and gallery exhibition on the art of animation technology. Project Director: Steven Higgins, Curator.

PUBLIC UNDERSTANDING OF SCIENCE AND TECHNOLOGY

OTHER, OFFICER GRANTS

The My Hero Project, Inc.
Laguna Beach, CA 92651

\$45,000

Support to increase the number of science profiles, including women and underrepresented minorities, on a popular national web site. Project Director: Jeanne Meyers, Director.

Science Festival Foundation
New York, NY 10023

\$45,000

To plan for the first New York International Science Festival. Project Director: Brian Greene, Professor of Mathematics and Physics, Columbia University.

University of California, Santa Barbara
Santa Barbara, CA 93106

\$45,000

To fund a three-day conference about physics in drama and narrative. Project Director: William Storm, Assistant Professor, Department of Theatre Arts, New Mexico State University.

SELECTED NATIONAL ISSUES AND THE CIVIC PROGRAM

SELECTED NATIONAL ISSUES

BIOTERRORISM, TRUSTEE GRANTS

**American Society of Heating, Refrigerating and
Air-Conditioning Engineers, Inc.**
Atlanta, GA 30329

\$136,712

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is a leader in the fields of air filtration, air movement, and contaminant control. Following September 11, 2001, the Society assembled a high level committee to address issues of homeland security. Two reports have been released and the issue continues to be studied. Supported by a 2003 Sloan grant, ASHRAE conducted a satellite broadcast on "Homeland Security for Buildings." With the current grant, ASHRAE will carry out two additional activities. The first is a satellite broadcast and simultaneous webcast on "Multiple Benefit Solutions for Enhanced Building Security." The program will include such topics as air filtration for health, comfort, security, and energy efficiency; tightening building envelopes for security and energy efficiency; and building controls for security and safety. ASHRAE expects to reach over 20,000 building and engineering professionals. ASHRAE also will expedite the preparation and production of a Guideline for Risk Management of Public Health and Safety in Buildings in order that this important report can be completed and made available to the public in one year. These ASHRAE activities will provide valuable information to enable and encourage building owners and engineers to make buildings safer against biological and other terrorist attacks. Project Director: Lawrence G. Spielvogel, Consulting Engineer, ASHRAE Fellow.

Association of Graduates of the United States Military Academy
West Point, NY 10996

\$225,000

The Combating Terrorism Center at the United States Military Academy, located in the Department of Social Sciences at West Point and supported by external grants, has published a number of books and reports on terrorism. *Terrorism and Counterterrorism: Understanding the New Security Environment* (2002, revised and updated 2004) and *Defeating Terrorism: Shaping the New Security Environment* (2003) are now used as textbooks in over 90 colleges and universities worldwide. Published in 2005 was *Homeland Security and Terrorism: Readings and Interpretations* and a fourth volume on weapons of mass destruction remains to be completed. The Center has developed courses at West Point and elsewhere, including a counterterrorism course for the New York City Fire Department. With this grant the Center will engage a part-time fellow to develop a

bioterrorism curriculum, organize a lecture series, and incorporate bioterrorism expertise into the Center's ongoing work, such as their work with first responders. The fellow will contribute to the bioterrorism sections of the book on weapons of mass destruction. This grant enables the Center to apply its unique capabilities in intelligence and terrorism to issues in bioterrorism. Project Director: Major Reid L. Sawyer, Executive Director, Combating Terrorism Center, West Point.

Center for Strategic and International Studies
Washington, DC 20006

\$618,550

This grant supports a project by former Secretary of the Navy Richard J. Danzig and colleagues to explore two important components central to an effective bioterrorism strategy: (1) how the country's bioterrorism strategy should mesh with the war on terrorism and preparations for natural epidemics; and (2) citizen preparedness. The aim is to advance the conceptual understanding and develop a consensus among executive branch decision makers, congressional staffs and members, and key actors in independent think tanks, companies, and academia. Substantial reports will be written, then reviewed and refined by means of a series of events, including small workshops in Washington, at Stanford, and at Harvard's Kennedy School of Government. Outreach activities will follow with government, academia, industry, and think tank leaders. The project should result in new strategic guidance to prepare citizens for bioterrorism and epidemics and also to improve federal government performance to combat bioterrorism. The impact of the work will be able to be measured by the extent to which it informs congressional legislation and the guidance it offers is adopted by senior government officials, as reflected in their speeches and actions. Project Director: Richard J. Danzig, Sam Nunn Prize Fellow, International Security Program.

Council for Excellence in Government
Washington, DC 20005

\$520,706

This grant supports a one-year project by the Council for Excellence in Government (CEG) to pilot and institutionalize a Public Readiness Index (PRI). Although much work has been done on citizen preparedness for terrorist attacks, its effectiveness is unclear since no measurement tool exists for gauging citizen preparedness. The PRI would measure the public's readiness for a terrorist attack or other major emergency in homes, workplaces, and schools. It could be used by communities, organizations, and all levels of government on a voluntary basis to measure and track progress in public readiness in a clear and consistent way. CEG received a planning grant to design a prototype readiness index in October 2004. Such an index with underlying survey questions was developed, pilot testing was planned, and options for implementation were identified. CEG will now develop a validated survey instrument that has been field tested nationally and in four metropolitan cities. PRI-S, a short form of the survey will be developed for more frequent use. CEG will conduct a public event featuring senior government officials to introduce the PRI and will seek commitments from at least four cities to use the PRI. A report on the survey data for the nation and four cities will be made. Options for institutionalizing the index will then be examined. Development of the PRI is an important next step in the

Foundation's program to prepare citizens for terrorism. Project Director: Susan K. Neely, Special Advisor for Emergency Preparedness.

Council for Excellence in Government
Washington, DC 20005

\$134,000

A February 2005 planning grant funded a Council for Excellence in Government (CEG) project to organize and convene a major metropolitan emergency managers' "Learning and Exchange Forum." A forum design was developed and CEG convened a meeting in June attended by emergency management officials from Chicago, Los Angeles, Miami-Dade County, New York City, San Francisco, and Washington. On the agenda were such important issues as public preparedness plans and campaigns, critical infrastructure protection, and mass warning systems. A site visit to the D.C. Emergency Operations Center was made. Good outcomes include partnering of Chicago and New York City on a number of initiatives and the formation of a strong professional network by the six big city members of the forum. This new grant supports the forum for another two years, during which time four meetings will be organized and convened in the various forum cities and the group will be expanded to 10-14 cities. Although CEG will provide all the support functions for the forum, the emergency managers will establish meeting agendas. Current issues of concern include preparedness for an avian flu pandemic, lessons learned from Hurricane Katrina, the training of first responders, and how to measure progress in emergency preparedness for situations such as bioterrorism and chemical, radiological, or nuclear attacks. Sadly, there is no shortage of important topics deserving very careful attention at each of the forums by the metropolitan emergency management officials of the country's large cities. Project Director: Lynn A. Jennings, Counselor to the CEO.

Georgetown University
Washington, DC 20057

\$300,000

A 2001 grant funded a Georgetown group to prepare for the legal aspects of bioterrorism events. They drafted the Model State Emergency Health Powers Act, since adopted in whole or in part by 33 states and the District of Columbia. The Georgetown team has published many papers on the model act, established a website, and conducted workshops to help state and local governments in making legal assessments of their public health emergency powers. Federal emergency public health legal preparedness also needs assessment and reform. To date, no one has developed a detailed proposal to modernize federal public health powers. With this new grant, the Georgetown team will undertake a systematic examination to ensure that the federal government has the necessary powers in a public health emergency. A white paper on federal emergency health powers will be drafted. It will describe the powers of the federal government as they would apply in a public health emergency, and identify gaps in power, inadequate procedures, and cumbersome overlaps in federal jurisdiction. It will also suggest changes in the law and regulations to overcome or ameliorate these problems. Finally, the white paper will outline options for improving legal preparedness for bioterrorism and emerging infectious diseases and provide critical assistance to legislators and policy makers. An expert advisory committee will be formed to provide feedback on proposed ideas and to react to

products produced during the project. The Georgetown group will follow up by conducting training sessions for government officials, providing expert testimony and consultations to lawmakers and their staffs, drafting scholarly articles, issuing papers on federal emergency health powers and interjurisdictional issues, and by developing a robust website to disseminate their work products. Project Director: Professor Lawrence O. Gostin, Director, Law Center.

Global Action Plan for the Earth, Inc.

\$299,045

Woodstock, NY 12498

Global Action Plan is the nonprofit research arm of the Empowerment Institute, a consulting and training organization specializing in community-based behavior change and public participation programs. The Institute has worked with the NYC Office of Emergency Management on *All Together Now*, a disaster resiliency program to prepare New Yorkers for terrorist attacks and other disasters. Piloted with a \$500,000 congressional appropriation, it has succeeded in helping NYC residents, through their communities, to take emergency preparedness actions, such as storing emergency supplies of food and water, acquiring a battery-operated radio, and developing backup plans. During the pilot program, *All Together Now* worked with over 160 buildings and blocks, leading over 62,000 New Yorkers to adopt between six and eleven preparedness behaviors. This grant supports the development of a plan to scale up *All Together Now*. During this project, at least 40,000 residents and 20,000 households will be prepared with an average eight emergency preparedness behaviors adopted per household. The project will not only test whether a scale up is feasible, but should also yield a better estimate of the cost per prepared resident. Project Director: David Gershon, CEO.

ICPO-Interpol

\$1,665,422

Lyon 69006, France

Interpol is the world's largest international police organization. Its mission is to help police and law enforcement officers from around the world to work together to combat crime. It offers three core services: a unique secure global police communication system; a range of criminal databases and analytical services; and proactive support for police operations throughout the world. As part of a 2004 grant to Interpol for a two-year program to support the development of its capacity to combat terrorism, the 2005 conference, "Preventing Bioterrorism: The First Interpol Global Conference," was held, with participation of over 500 senior police and other officials from 155 member states. Interpol also hosted the first of three regional bioterrorism workshops in Cape Town, South Africa. Two more workshops will be held in 2006 in Chile and Singapore. Interpol is developing training materials for use by law enforcement and has engaged experts from public health, science, agriculture, and other relevant communities. This grant renews support for two additional years. Regional workshops will be held in the Middle East and in Central Asia, with at least 30 countries expected to participate. Three training sessions will be organized to "train the trainers" in bioterrorism prevention and response. The trainers will return to their global regions and train local personnel. Interpol plans to

train at least 75 trainers and over 1,000 police officers during the renewal period. Project Director: Ronald K. Noble, Secretary General.

New York University
New York, NY 10012

\$1,308,400

The International Center for Enterprise Preparedness (INTERCEP) at New York University was established in 2004 to advance the Federal 9/11 Commission's recommendations on private sector preparedness. INTERCEP is the first major academic center dedicated to private sector crisis management and business continuity. With this grant, INTERCEP will advance the case for business preparedness by developing high impact legal, insurance, rating agency, and regulatory incentives. To develop the legal incentives, the risks of insufficient corporate preparedness will be examined and the legal rationale for preparedness will be studied. To develop insurance incentives, INTERCEP will examine the impact of preparedness on loss reduction and will explore underwriting strategies in considering business preparedness for three types of insurance: property and casualty; directors and officers; and business interruption insurance. For rating agency incentives, the role of business preparedness in being able to meet debt obligations post-crisis will be examined. In addition, INTERCEP will consider legislative approaches and will examine regulatory reporting as incentives for business preparedness. INTERCEP has strong contacts with senior executives and legal, insurance, and credit reporting experts, many of whom have agreed to serve as members of project advisory committees. Roundtables are planned, along with legal briefs, lectures, and an online clearinghouse of preparedness information. INTERCEP will produce six preparedness incentives. Three will cover common law, insurance, and rating agency incentives. Two will involve drafting legislative language for new legal and new insurance incentives. Effectiveness of this project will be measured by surveying companies for preparedness actions, monitoring progress toward introduction of legislation, tracking adoption of new underwriting criteria by domestic insurance companies, and determining the number of rating agencies that adopt policies and procedures to reward preparedness. Project Director: William G. Raisch, Director, International Center for Enterprise Preparedness.

Tufts Health Care Institute, Inc.
Boston, MA 02111

\$155,965

Early detection of epidemics, whether from bioterrorism or natural events, is important to reduce the spread of disease. Syndromic surveillance, the monitoring of various non-specific disease indicators (ambulance calls, over the counter drug sales, etc.) as early warning signs of a bioterrorism attack or disease outbreak, is a developing science. Prior Sloan grants have led to the development and dissemination of syndromic surveillance software, of improved tools for integrating multiple signals and sounding alarms, and the building of a national retail data system for public health. Three annual meetings were held and a website (www.syndromic.org) created, resulting in the identification of a community of syndromic surveillance researchers and practitioners. New York City uses syndromic surveillance to help monitor the health of its residents. This grant supports the development of a professional society for the advancement of syndromic surveillance.

The society will organize annual meetings, maintain and update the website, and provide professional development opportunities and workshops. An online journal, “Advances in Disease Surveillance,” will be developed. Project Director: Rosalie Phillips, Executive Director.

University of Exeter
Exeter, UK EX4 4QJ

\$203,984

Past Sloan grants have supported various projects designed to address issues of dangerous dual-use research by raising awareness and finding practical steps to address the problem. As these efforts go forward, it would be helpful to understand current knowledge and attitudes about these issues in the scientific community. The Fink Committee Report, a result of a 2001 grant to the National Academies, calls for a “culture of responsibility,” a difficult goal for scientists to achieve. Brian Rappert, a sociologist, and Malcolm Dando, a biologist/arms control expert, have engaged British researchers in university life science departments in 26 deliberative seminars, a modified form of focus groups, to raise awareness and collect data. Three questions were raised: (1) Are there experiments or lines of research that should not be done? (2) Is some research better left unpublished or otherwise restricted in dissemination? (3) Are the proposed systems of pre-project research oversight strategies sensible? It turned out that very few scientists participating in the seminars had considered the dual-use potential of life science research. Some broad common themes emerged from the scientists’ responses: results from contentious experiments are inevitable; restricting publication is not advisable; and skepticism that any oversight system would work. With this grant, a series of 28 deliberative seminars will be conducted in the Netherlands, the U.S., and South Africa. Useful comparisons, country to country, should emerge. Briefings for government agencies and professional bodies in each of the countries will be held and two audiovisual programs will be posted on the website, the first representing an “ideal” deliberative seminar exploring a wide range of issues and tensions associated with dual-use research, and the second an “interactional” program that will enable users to choose different lines of responses to hear alternative arguments and counter-arguments. Project Director: Professor Brian Rappert, Department of Sociology, School of Historical, Political and Sociological Studies.

University of Maryland Foundation, Inc.
Adelphi, MD 20783

\$437,655

Previous grants have supported the work of John Steinbruner and colleagues at the Center for International and Security Studies at Maryland (CISSM) to craft and refine a comprehensive oversight system for dual-use research. Their oversight system, “Biological Research Security System,” is a prototype data reporting system for collection and analysis of information about research activities covered by the oversight requirements. During the past two years, they conducted a workshop on defining dangerous research, another aimed at young scholars, a third structured as a peer review simulation exercise, and a fourth on classification and biodefense research. They completed six working papers and presented their framework to key organizations in the

U.S. and abroad, and relevant officials from China, Canada, and the United Kingdom. With this new grant, the CISSM team will undertake a more focused outreach to help shape regional and international interest in mechanisms for managing the increasingly acknowledged risks from dual-use research. The goal is to stimulate broader agreement for the need for a globally effective oversight system and to begin to build support for incremental steps to that end. They will conduct regional workshops in Southeast Asia, the Western Pacific, and Europe to engage a broad range of government, scientific, academic, and industry experts on the dual-use issue. The need for a global oversight mechanism will be discussed at policy meetings with domestic and foreign experts. The CISSM group will collaborate with the World Health Organization on their 2005 new project (see below) in dual-use research. Project Director: Professor John D. Steinbruner, School of Public Policy and Director, Center for International and Security Studies at Maryland.

University of the Pacific
Sacramento, CA 95817

\$120,000

Last year, the International Consortium on Law and Strategic Security was formed as a way to use the rule of law to reduce security threats posed by weapons of mass destruction. This one-year grant supports the work of the Consortium to use the law to advance a global strategy to help prevent bioterrorism. The strategy includes four areas: measures to prevent wrongful access to bioscience capabilities (i.e., facilities and dangerous pathogens); measures to interdict transnational movement of bioterror-relevant materials and equipment (i.e., export controls); measures to gather and analyze information; and measures to enable national law enforcement and outbreak-response capabilities, including criminalization of wrongful conduct and authorization of transnational cooperation and emergency powers (i.e., apprehend and prosecute bioterrorists). The timing of this project will allow taking advantage of two official diplomatic events concerning the only international instruments relevant to preventing bioterrorism: United Nations Security Council Resolution 1540, to be considered for reauthorization in April 2006; and the Biological Weapons Convention, whose Sixth Review Conference (held every five years) will take place in November 2006. Project researchers will conduct a series of four regional workshops (in Moscow, Cairo, Costa Rica, and East Asia) with legal experts, scientists, diplomats, and politicians. Countries will be able to discuss their concerns and priorities and focus on bioterrorism, whether individually by adopting national legislation or collectively by means of international law. Project Director: Elizabeth Rindskopf Parker, Dean, McGeorge School of Law.

J. Craig Venter Institute, Inc.
Rockville, MD 20850

\$570,060

This grant supports a project by a consortium led by the Venter Institute to examine the risks and benefits of synthetic genomics. Scientists can now build genomes out of chemically synthesized sequences. In 2002, poliovirus was built from scratch and since then a bacteriophage was reconstructed from sequence information and the 30,000 base pair genome of the SARS coronavirus was assembled. Researchers are quickly learning

the skills and inventing the tools necessary to synthesize not just small parasitic viruses, but also free living bacteria. These advances in technology carry with them many potential benefits and risks. The Venter Institute, in collaboration with the Center for International and Strategic Studies and the Synthetic Biology Group at MIT, will examine the risks and benefits of synthetic genomics. A core group of leaders in science/technology and policy will be formed. A series of three workshops will be organized with attendance of the core group and approximately ten additional participants per workshop. The workshop topics are: (1) construction and synthesis technology; (2) benefits and risks; and (3) governance: guidelines and regulation. A summary of the proceedings and a draft paper for each workshop will be prepared, along with a variety of dissemination products, including reports, a website, and numerous scholarly publications. The final project event will be a two-day “by invitation only” meeting of 100 people to examine and discuss the findings of the workshops and related papers. Project Director: Robert M. Friedman, Vice President, Environmental and Energy Policy.

World Health Organization
Geneva 27, Switzerland

\$400,000

With this grant, the World Health Organization (WHO), the United Nations’ specialized agency for health, will carry out a global two-year program to raise awareness of the potential for misuse of biotechnology research. Inadvertent or deliberate misuse of biotechnology could result in bioterrorism and lethal global epidemics. WHO will develop the in-house capacity to provide guidance and technical support to member states and establish points of contact in all six regional offices. Their plan is to raise awareness of the potential for misuse of biotechnology research in all 192 member states. Project Director: Ottorini Cosivi, Project Leader, Preparedness for Deliberate Epidemics, Division of Communicable Diseases.

The following six grants were funded from an appropriation approved by the Board of Trustees for support of short-term projects and the planning stage of larger projects to reduce the threat of bioterrorism.

The Bellwether Group, Inc.
Boston, MA 02116

\$44,500

To conduct a pilot study of terrorism preparedness at five major U.S. corporations. Project Director: David A. Wilkinson, Principal.

Council for Excellence in Government
Washington, DC 20005

\$45,000

To develop a major metropolitan emergency managers’ “Learning and Exchange Forum.” Project Director: Susan K. Neely, Special Advisor for Emergency Preparedness.

Council of State Governments **\$45,000**
Lexington, KY 40578

To improve terrorism preparedness by outlining content for public education and information standards. Project Director: Emily Bentley, Executive Director, Environmental Monitoring and Assessment Program (EMAP).

National Association of Attorneys General **\$44,961**
Washington, DC 20002

To support a national conference for State Attorneys General: “Legal Preparedness for Public Health Emergencies.” Project Director: Lynn M. Ross, Executive Director.

Safe America Foundation, Inc. **\$45,000**
Marietta, GA 30066

To support a pilot program to engage the private sector in preparedness activities. Project Director: Len Pagano, President and CEO.

World Health Organization **\$45,000**
Geneva 27 Switzerland

To develop avian influenza preparedness guidance for healthcare workers. Project Director: Carmem Lúcia Pessoa-da-Silva, Medical Officer, Department of Epidemic and Pandemic Alert and Response.

BIOTERRORISM, OFFICER GRANTS

Trustees of Columbia University **\$45,000**
New York, NY 10027

To support a pilot study of terrorism related to children. Project Director: Irwin E. Redlener, Director, National Center for Disaster Preparedness and Professor of Clinical Public Health and Pediatrics, Mailman School of Public Health.

President and Fellows of Harvard College **\$45,000**
Cambridge, MA 02138

To support the Harvard Sussex Program. Project Director: Professor Matthew S. Meselson, Department of Molecular and Cellular Biology.

Health Science Center at Brooklyn Foundation, Inc. **\$45,000**
Brooklyn, NY 11203

To develop a business plan for the New York Center for Bioterrorism Prevention, Preparedness and Training to be located at the Brooklyn Army Terminal. Project Director: Eva Cramer, Vice President for Biotechnology and Scientific Affairs, SUNY Downstate Medical Center.

International Institute for Strategic Studies – US **\$45,000**
Washington, DC 20006

To support the development of the International Council for the Life Sciences. Project Director: Terence Taylor, President and Executive Director.

Nuclear Threat Initiative **\$45,000**
Washington, DC 20006

To provide partial support for a bioterrorism exercise for international organizations. Project Director: Mark S. Smolinski, MD, Vice President for Biological Programs.

Pace University School of Law **\$43,000**
White Plains, NY 10603

To support a New York State symposium, “Public Health and the Law: Responding to Terrorism and Other Public Health Emergencies.” Project Director: Mark R. Shulman, Director of Graduate Programs.

University of Toronto **\$44,500**
Toronto M5S 1A1, Canada

To support a workshop, “Genomics for Development, Bioterrorism, and Human Security.” Project Director: Professor Peter A. Singer, MD, Director, Joint Centre for Bioethics.

SELECTED NATIONAL ISSUES

ACCESS TO RECORDED KNOWLEDGE, TRUSTEE GRANTS

Internet Archive **\$2,000,000**
San Francisco, CA 94129

A 2003 grant helped the nonprofit Internet Archive to expand its core activity of preserving the Internet. Libraries around the world, including the Library of Congress and the British Library, have now come to rely on the Archive to perform archival services. The success of the Archive in one major domain of digital preservation, namely the Internet, has led to consideration of the Archive becoming a universal library. The Archive would provide access not only to old versions of the Internet itself, but also to digitized books, film and video, still images, audio, and software. The vision of an online universal library received tremendous impetus in December 2004 when the Google company announced its aim to develop a commercial realization of this concept, supported by a variety of fees. Although several libraries, including Harvard and Stanford, agreed to contribute to the Google archive, there were concerns about relying on a sole system operated by a private for-profit entity. The best-placed organization to unite the holders of content in a counterpart massive digitization effort built around the concept of open access is the Internet Archive. This grant enables the Archive to take steps to build the universal digital library, beginning with an archive of millions of books. The project requires more than \$200 million in funds by 2010, to be obtained from other foundations, libraries and other archival institutions around the world, and from private sources. The best technical advice suggests that today's technology for scanning, data compression, storage, and distribution puts the goal within reach. The main hurdles are funding, political will, cooperation from libraries, copyright restrictions, and the competing commercial effort. Project Director: Brewster Kahle, Digital Librarian.

On Demand Books, LLC **\$766,000**
New York, NY 10012

This grant was made from an appropriation approved by the Board of Trustees for the development of five on-demand book machines that can print, trim, and bind from a digital file a library-quality paperback in minutes, on demand, with minimum human intervention, for about a penny a page. Such an experimental machine has been running for three years and has printed 10,000 books thus far. Once a commercial version is produced by a manufacturer, it will be beta tested before testing in the marketplace. The five machines will be placed in New York City public libraries where they will serve

foreign language readers in Spanish, Chinese, Russian, and possibly Hindi and Korean. Emphasis on books in these languages will likely lead to more accepting reactions to this development from American publishers, who mainly do not stock such foreign language books. After securing agreement with Russian and other foreign publishers, who are expected to welcome having additional outlets for their books, selected foreign titles will be digitized and made available to foreign language readers in New York who cannot now buy or borrow these books. There are many obstacles to success, but the technology is worth perfecting since on-demand books would serve a positive social good, ultimately allowing access to very large numbers of books and having the potential to make the world's storehouse of knowledge available to everyone. Also, piloting the effort in New York City's public libraries and supplying foreign titles not now available will serve a significant underserved population as the entire concept is realistically tested. Project Director: Jason Epstein, publisher and LLC member.

THE CIVIC PROGRAM

TRUSTEE GRANTS

City Futures, Inc. **\$160,000**
New York, NY 10005

Although New York City is a national leader in biomedical research and there are pockets of excellence in other science and engineering disciplines, it is not a leader in translating this research into related economic activity. With this grant, City Futures will carry out a series of activities designed to begin a transformation of the New York region into one where excellent scientific and engineering research yields related economic activity, jobs, and wealth creation. It will create an Innovation Index to be used to compare the New York area to others around the country. It will document best practices from other regions and issue a comprehensive policy-oriented analysis of the New York science and technology sector, documenting economic growth potential and providing a blueprint of how this might be realized. It will convene key leaders from academia, business, and government as an Advisory Board to review the analysis and recommendations. Finally, it will conduct a dissemination campaign directed at decision-makers within the three sectors and the public. City Futures will encourage the establishment of a permanent entity, perhaps in one of New York's schools of public policy, to periodically update the analysis and serve as an engine for development and implementation of an economically oriented science and technology policy for the City. Project Director: Neil Scott Kleiman, Director.

Fund for the City of New York **\$450,000**
New York, NY 10013

The goal of the Sloan Public Service Awards is to recognize outstanding contributions by New York City civil servants "whose work performance and commitment to the public transcend not merely the ordinary but the extraordinary, day after day and year after year." These awards go to six persons (or small-work teams) each year. Winners are selected by an independent Selection Committee and receive an award of \$7,500 and a personalized original drawing depicting the nature of the awardee's work for the City. Each year the Committee travels to the office of each of the six awardees for a celebration with their coworkers. That same evening, a gala evening awards ceremony and reception is held in the historic Great Hall of the Cooper Union, and is attended by hundreds of the awardees coworkers, families, and friends, along with City officials and members of the press and general public. This grant renews support of the Sloan Public Service Awards for another three years. Grant funds are used mainly to support the monetary portion and part of the public outreach efforts of the program. The Fund for the City of New York covers the larger portion of the program costs. Project Director: Barbara Cohn Berman, Vice President.

THE CIVIC PROGRAM, OFFICER GRANTS

New York City Industrial and Technology Assistance Corporation **\$7,500**
New York, NY 10007

To fund a study of the desirability and feasibility of creating a statewide association of technology-oriented business incubators. Project Director: Sara Garretson, CEO.

City University of New York **\$30,000**
New York, NY 10016

To enable CUNY's School of Professional Studies to launch an online undergraduate course, "Introduction to the Nature of New York." Project Director: Brian Patterson, Associate Dean.

University of Pennsylvania **\$6,600**
Philadelphia, PA 19104

To enable Michael Balinski to collaborate with colleagues at the University of Pennsylvania to develop further his concept of "fair majority voting." Project Director: Jack Nagel, Associate Dean for Graduate Studies.

ADDITIONAL GRANTS

TRUSTEE GRANTS

Council on Foundations **\$45,000**
Washington, DC 20036

General support (dues). Project Director: Dorothy S. Ridings, President and CEO.

Independent Sector **\$12,500**
Washington, DC 20077

General support (dues). Project Director: Diana Aviv, President and CEO.

New York Regional Association of Grantmakers **\$16,000**
New York, NY 10018

General support (dues). Project Director: Michael Seltzer, President.

The Foundation Center **\$195,000**
New York, NY 10003

The Foundation Center serves as an important resource for those seeking grants and for grantmakers. It operates five specialized libraries in New York City, Washington DC, Atlanta, Cleveland, and San Francisco, and coordinates 200 cooperating collections. It distributes publications, including *The Foundation Directory* and *Foundation Giving*, and maintains a computer database on foundation grants. The Center's website provides useful statistics, news of grants and grantmakers, research papers published by foundations, and a bibliography of literature on the industry, all free and readily available to the public. The Sloan Foundation has supported the Foundation Center since 1963, at the annual level of \$65,000 since 1996. This grant continues support for another three years. Project Director: Sara L. Engelhardt, President.

OFFICER GRANT

The New York Community Trust **\$5,000**
New York, NY 10022

For the Damon Weber Fund. Project Director: Liza Lagunoff, Grants Administrator.

2005 FINANCIAL REPORT



2005 FINANCIAL REVIEW

The financial statements and schedules of the Foundation for 2005 and 2004 have been audited by KPMG LLP. They include the balance sheets, statements of activities and cash flows, and schedules of management and investment expenses.

Investment income for 2005 was \$19,441,967, a decrease of \$1,398,939 from \$20,840,906 in 2004. After the deduction of investment expenses and provision for taxes, net investment income was \$9,310,704 in 2005 as compared with \$11,371,572 for the prior year. Investment expenses during 2005 totaled \$6,178,063 of which \$3,590,962 represented investment management fees. The provision for taxes amounted to \$3,953,000. The total of these deductions from investment income in 2005 was \$10,131,063 versus \$9,469,334 in 2004. Total investment gains for 2005 were \$132,776,637 as compared with \$181,054,706 in 2004.

Grants authorized (net of grant refunds) and management expenses during 2005 totaled \$74,600,845, which was \$65,289,941 greater than 2005 net investment income. Of this total, grants authorized (net of refunds) amounted to \$68,528,984 while management expenses were \$6,071,861. Since the Foundation's inception in 1934, the cumulative excess of grants and expenses over the Foundation's net investment income has amounted to \$440.9 million.

Grant payments in 2005 were \$61,165,933 compared with \$59,727,831 for the prior year. Together with management expenses, investment expenses, taxes paid and other charges, the total of cash expenditures net of grant refunds in 2005 was \$76,817,922 while in 2004 the amount was \$74,427,699.

Grants authorized and payments made during the year ended December 31, 2005 are summarized in the following table:

Grants unpaid at December 31, 2004	\$ 60,584,369
Authorized during 2005	69,533,322
Payments during 2005	<u>(61,165,933)</u>
Grants unpaid at December 31, 2005	<u>\$ 68,951,758</u>

The fair value of the Foundation's total assets was \$1,581,350,875 at December 31, 2005 including investments valued at \$1,580,439,653 as compared with total assets of \$1,505,602,994 at December 31, 2004.

AUDITORS' REPORT

Report of KPMG LLP
Independent Auditors

The Board of Trustees
Alfred P. Sloan Foundation:

We have audited the accompanying balance sheets of the Alfred P. Sloan Foundation (the Foundation) as of December 31, 2005 and 2004, and the related statements of activities and cash flows for the years then ended. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Foundation's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Alfred P. Sloan Foundation as of December 31, 2005 and 2004, and the changes in its net assets and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information included in the schedules of management and investment expenses for the years ended December 31, 2005 and 2004 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

KPMG LLP

June 2, 2006
New York, New York

BALANCE SHEETS
DECEMBER 31, 2005 AND 2004

	<u>2005</u>	<u>2004</u>
Assets		
Cash	\$ 713,638	\$ 724,042
Investments:		
Equities	1,120,857,809	1,105,515,417
Fixed income	251,059,091	245,277,385
Limited marketability	208,522,753	154,016,285
Total investments	<u>1,580,439,653</u>	<u>1,504,809,087</u>
Other	197,584	69,865
Total	<u>\$1,581,350,875</u>	<u>\$1,505,602,994</u>
Liabilities and Net Assets		
Grants payable	\$ 68,951,758	\$ 60,584,369
Deferred federal excise tax	5,898,896	5,749,281
Other	41,557	297,376
	<u>74,892,211</u>	<u>66,631,026</u>
Net assets - unrestricted	1,506,458,664	1,438,971,968
Total	<u>\$1,581,350,875</u>	<u>\$1,505,602,994</u>

See accompanying notes to financial statements.

STATEMENTS OF ACTIVITIES
YEARS ENDED DECEMBER 31, 2005 AND 2004

	<u>2005</u>	<u>2004</u>
Investment Income:		
Interest and dividends	\$ 19,441,967	\$ 20,840,906
Less:		
Investment expenses	6,178,063	6,744,334
Provision for taxes	3,953,000	2,725,000
	<u>10,131,063</u>	<u>9,469,334</u>
Net investment income	<u>9,310,904</u>	<u>11,371,572</u>
Expenses:		
Grants authorized (net of refunds of \$1,004,338 in 2005 and \$284,522 in 2004)	68,528,984	60,420,669
Management expenses	6,071,861	6,071,678
	<u>74,600,845</u>	<u>66,492,347</u>
Excess of expenses over net investment income	<u>(65,289,941)</u>	<u>(55,120,775)</u>
Investment Gains (Losses):		
Net gain on disposal of investments	125,445,454	80,885,574
Unrealized gain in investments, net of deferred federal excise tax of \$149,615 and \$2,044,269 in 2005 and 2004, respectively	7,331,183	100,169,132
	<u>132,776,637</u>	<u>181,054,706</u>
Increase in net assets	67,486,696	125,933,931
Net assets at beginning of year	1,438,971,968	1,313,038,037
Net assets at end of year	<u><u>\$1,506,458,664</u></u>	<u><u>\$1,438,971,968</u></u>

See accompanying notes to financial statements.

STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2005 AND 2004

	<u>2005</u>	<u>2004</u>
Cash flows from operating activities:		
Increase in net assets	\$ 67,486,696	\$ 125,933,931
Adjustments to reconcile increase in net assets to net cash used in operating activities:		
Net gain on disposal of investments	(125,445,454)	(80,885,574)
Unrealized gain in investments	(7,480,798)	(102,213,401)
Increase in deferred federal excise tax	149,615	2,044,269
(Increase) decrease in other assets	(127,719)	189,381
Increase in grants payable	8,367,389	977,359
(Decrease) increase in other liabilities	(255,819)	297,376
Net cash used in operating activities	<u>(57,306,090)</u>	<u>(53,656,659)</u>
Cash flows from investing activities:		
Proceeds from sales of investments	914,200,958	596,241,077
Purchases of investments	(856,905,272)	(542,590,739)
Net cash provided by investing activities	<u>57,295,686</u>	<u>53,650,338</u>
Net decrease in cash	(10,404)	(6,321)
Cash at beginning of year	724,042	730,363
Cash at end of year	<u>\$ 713,638</u>	<u>\$ 724,042</u>

See accompanying notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

(1) Summary of Significant Accounting Policies

The accompanying financial statements have been prepared substantially on the accrual basis of accounting. Investment income and investment and management expenses, including post-retirement benefit expense, are recorded on the cash basis, the effect of which on the accompanying financial statements is not materially different from the accrual basis. Grants are accrued when authorized by the Trustees. Certain accounting estimates are a routine part of financial statements prepared by management and are based upon management's current judgments. Actual results could differ from these estimates.

Gains or losses on disposal of investments are determined on the first-in, first-out basis. Investments are stated at fair value. The fair values of all debt and equity securities with a readily determinable fair value are based on quotations obtained from national securities exchanges. The alternative investments, which are not readily marketable, are carried at estimated fair values as provided by the investment managers. The Foundation reviews and evaluates the values provided by the investment managers and agrees with the valuation methods and assumptions used in determining the fair value of the alternative investments. Those estimated fair values may differ significantly from the values that would have been used had a ready market for these securities existed.

(2) Investments

Investments at December 31, 2005 and 2004 are summarized as follows:

	2005		2004	
	Cost	Fair value	Cost	Fair value
Equities:				
Large capitalization	\$ 261,477,002	314,424,368	279,987,037	355,106,856
Small capitalization	47,000,000	67,761,605	70,527,746	116,147,579
Equity hedge funds	92,000,000	143,945,566	91,662,409	143,411,458
Absolute return strategies	236,970,589	322,012,337	165,453,568	226,188,512
Non-US	154,289,717	272,785,171	170,954,787	264,596,801
Pending equity transactions, net	(71,238)	(71,238)	64,211	64,211
Fixed income:				
Bonds and notes	299,031,212	298,369,678	286,269,325	291,783,784
Obligations to return collateral held under securities lending agreement	(43,836,604)	(43,836,604)	(46,506,399)	(46,506,399)
Pending fixed income transactions, net	(3,473,983)	(3,473,983)	—	—
Limited marketability:				
Real estate	26,832,958	25,667,460	15,140,377	13,488,251
Private equity	215,275,143	182,855,293	183,792,740	140,528,034
Total	<u>\$ 1,285,494,796</u>	<u>1,580,439,653</u>	<u>1,217,345,801</u>	<u>1,504,809,087</u>

At December 31, 2005, the Foundation had unfunded commitments to limited partnerships of approximately \$231 million.

(3) Financial Instruments with Off-Balance-Sheet Credit or Market Risk

The Foundation's investment strategy incorporates certain financial instruments which involve, to varying degrees, elements of market risk and credit risk in excess of the amounts recorded in the financial statements. These instruments include forward foreign currency contracts and loaned securities.

The Foundation purchases forward foreign currency contracts as a hedge against fluctuations in currency prices. Forward foreign currency buy and sell contracts held as of December 31, 2005 were valued at approximately \$1,100 and \$1,100, respectively, and, as of December 31, 2004, at approximately \$1.6 million and \$1.6 million, respectively. Such contracts involve, to varying degrees, risk of loss arising from the possible inability of counterparties to meet the terms of the contract.

Through a securities lending program managed by a custodian firm, the Foundation loans certain stocks and bonds included in its investment portfolio. The custodian firm has indemnified the program. The Foundation's gross securities loaned to certain borrowers at December 31, 2005 and 2004 amounted to \$43 million and \$45 million, respectively. The Foundation holds collateral of 102 percent of the market value of the lent securities.

Management does not anticipate that losses, if any, resulting from its market or credit risks would materially affect the financial position of the Foundation.

(4) Taxes

The Foundation is liable for a federal excise tax of 2 percent of its net investment income, which includes realized capital gains. However, this tax is reduced to 1 percent if certain conditions are met. The Foundation did not meet the requirements for the 1 percent tax for the years ended December 31, 2005 and December 31, 2004. Therefore, current taxes are estimated at 2 percent of net investment income for 2005 and for 2004. Additionally, certain of the Foundation's investments give rise to unrelated business income tax liabilities. Such tax liabilities for 2005 and 2004 are not significant to the accompanying financial statements; however, the provision for taxes, as of December 31, 2005 and 2004, includes an estimate of tax liabilities for unrelated business income.

Deferred taxes principally arise from differences between the cost value and fair value of investments. Since the qualification for the 1 percent tax is not determinable until the fiscal year in which net gains are realized, deferred taxes represent 2 percent of unrealized gains at December 31, 2005 and 2004.

(5) Retirement Plan

The Foundation has a defined contribution retirement plan covering substantially all employees under arrangements with Teachers Insurance and Annuity Association of America and College Retirement Equities Fund which provides for the purchase of annuities for employees. Retirement plan expense was \$524,840 and \$506,320 in 2005 and 2004, respectively. In addition, the Foundation provides certain health care and life insurance benefits to its retirees. The cost of providing these benefits to retirees was \$188,140 and \$177,522 in 2005 and 2004, respectively, on a pay-as-you-go basis.

(6) Lease

The Foundation entered into a ten-year lease effective January 1, 1999. The lease contains an escalation clause which provides for rental increases resulting from increases in real estate taxes and certain operating expenses. Annual base rent expense increased in 2004 to approximately \$707,000 from approximately \$652,000 in 2003 and no increase for 2005. Rent expense for 2005 and 2004, including escalations, was \$859,757 and \$816,383, respectively.

**SCHEDULES OF MANAGEMENT AND INVESTMENT EXPENSES
YEARS ENDED DECEMBER 31, 2005 AND 2004**

	<u>2005</u>	<u>2004</u>
Management expenses:		
Salaries and employees' benefits:		
Salaries	\$4,304,283	\$4,113,462
Employees' retirement plan and other benefits	<u>1,648,296</u>	<u>1,523,890</u>
Total	5,952,579	5,637,352
Rent	859,757	816,383
Program expenses	968,401	1,087,500
Office expenses	528,651	507,300
Website and publications	68,265	37,130
Professional fees	<u>281,309</u>	<u>385,133</u>
Total management expenses	8,658,962	8,470,798
Less direct investment and other management expenses allocated to investments	<u>2,587,101</u>	<u>2,399,120</u>
Management expenses	<u>\$6,071,861</u>	<u>\$6,071,678</u>
Investment expenses:		
Investment management fees and expenses	\$3,590,962	\$4,345,214
Direct investment and other management expenses allocated to investments	<u>2,587,101</u>	<u>2,399,120</u>
Investment expenses	<u>\$6,178,063</u>	<u>\$6,744,334</u>

See accompanying auditors' report.