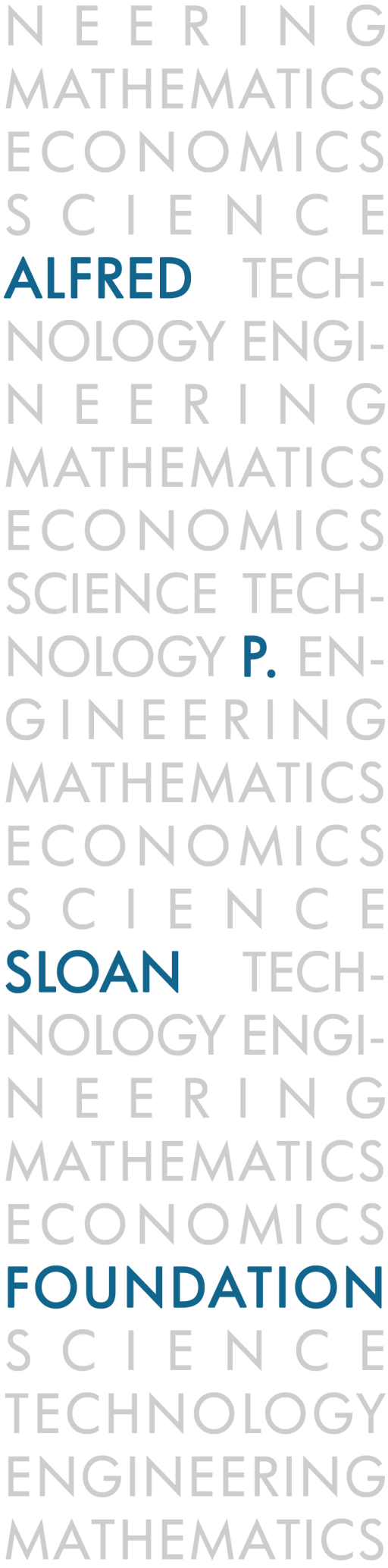

2009 ANNUAL REPORT

Contents

The ALFRED P. SLOAN FOUNDATION makes grants primarily to support original research and broad-based education related to science, technology, economic performance and the quality of American life. The Foundation is unique in its focus on science, technology, and economic institutions—and the scholars and practitioners who work in these fields—as chief drivers of the nation's health and prosperity. The Foundation has a deep-rooted belief that carefully reasoned systematic understanding of the forces of nature and society, when applied inventively and wisely, can lead to a better world for all. The Foundation's endowment provides the financial resources to support its activities. The investment strategy for the endowment is to invest prudently in a diversified portfolio of assets with the goal of achieving superior returns.

In each of our grants programs, we seek proposals for original projects led by outstanding individuals or teams. We are interested in projects that have a high expected return to society, and for which funding from the private sector, government or other foundations is not yet widely available.

2009 Grants By Program

About the Grants Listing

Grants listed in this report are divided into three types.

Trustee Grants are grants for amounts equal to or greater than $125,000. All Trustee grants are reviewed by an independent panel of experts and are presented quarterly to the Board of Trustees for approval.

Grants Made Against Prior Authorizations are grants in any amount made from funds set aside by the Board of Trustees to be used for specific purposes. Depending on the amount or subject matter of the grant, Grants Made Against Prior Authorizations may or may not have been subject to external review by an independent panel of experts. For each authorization, the Foundation reports once yearly to the Board of Trustees about grants made against the authorized funds.

Officer Grants are grants for amounts less than $125,000. Depending on the amount or subject matter of the grant, officer grants may or may not have been subject to external review by an independent panel of experts. Trustee grants made by the Foundation are reported to the Board of Trustees quarterly.

Grants listed herein are listed by program, then by grant type, then alphabetically by the name of the institution receiving the grant. Not all programs make grants of each type each year.

Sloan Research Fellowships

These $50,000 awards go to the most promising early-career scientists and scholars nominated. The purpose is to help them make breakthroughs that significantly advance their fields. In 2010, as in recent years, 118 Sloan Research Fellowships were awarded in seven fields: chemistry (23), computer science (16), economics (8), mathematics (20), computational and evolutionary molecular biology (12), neuroscience (16), and physics (23). Since the program was established in 1955, fellowships totaling over $135 million have been awarded to more than 5,000 early-career researchers. Of these, 38 Sloan Research Fellows have gone on to become Nobel Laureates; 16 were named Fields Medalists in mathematics; 10 recent Fellows have won the John Bates Clark Medal in economics; and 57 have been recipients of the National Medal of Science. Hundreds of others have received notable prizes, awards, and honors in recognition of their major research accomplishments.

2009 Fellowships

University of Arizona
Jeffrey Pyun, Chemistry

Boston University
Anatoli Polkovnikov, Physics

Brandeis University
Suzanne Paradis, Neuroscience

University of British Columbia
Robert Raussendorf, Physics

Brown University
Justin A. Holmer, Math
Odeste Chadwicke Jenkins, Computer Science

Burnham Institute for Medical Research
Rongsheng Jin, Neuroscience

California Institute of Technology
Gil Refael, Physics
Doris Ying Tsao, Neuroscience

University of California, Berkeley
Jose M. Carmena, Neuroscience
Hartmut Haeffner, Physics
Shachar Kariv, Economics
Richmond Sarpong, Chemistry
Rachel A. Segalman, Chemistry
Ahmet Yildiz, Physics

University of California, Davis
Graham Coop, Molecular Biology

University of California, Irvine
Kevin R. Thornton, Molecular Biology

University of California, Los Angeles

Paula Diaconescu, Chemistry
Eleazar Eskin, Molecular Biology
Patrick Guggenberger, Economics
Yi Tang, Chemistry

University of California, San Diego

Stefan Leutgeb, Neuroscience
Alex C. Snoeren, Computer Science

University of California, Santa Barbara

Thuc-Quyen Nguyen, Chemistry
Liming Zhang, Chemistry

University of California, Santa Cruz

Samit Dasgupta, Mathematics
Mark R. Krumholz, Physics

Carnegie Mellon University

Ryan William O'Donnell, Computer Science
Luis von Ahn, Computer Science

Case Western Reserve University

Roberto Fernandez Galan, Neuroscience
Thomas G. Gray, Chemistry

University of Chicago

Florencia Canelli, Physics
Mathias Drton, Mathematics
Matthew Gentzkow, Economics
Luis E. Silvestre, Mathematics
Dmitri Talapin, Chemistry

Cold Spring Harbor Laboratory

Adam Kepecs, Neuroscience

University of Colorado at Boulder

Niels H. Damrauer, Chemistry

Columbia University

Julien Dubedat, Mathematics
Robert Lipshitz, Mathematics

Cornell University

Peng Chen, Chemistry
Liam McAllister, Physics
Adam Siepel, Molecular Biology

Dartmouth College

Fabio Pellacini, Computer Science

Duke University

Kamesh Munagala, Computer Science

Fred Hutchinson Cancer Research Center

Philip H. Bradley, Molecular Biology

Georgia Institute of Technology

Hang Lu, Neuroscience

Harvard University

Alan Aspuru-Guzik, Chemistry
Erica Field, Economics
Thomas Lam, Mathematics
Andres E. Leschziner, Economics
Nathan Nunn, Economics
Bence P. Olveczky, Neuroscience
Lauren K. Williams, Mathematics

University of Illinois at Chicago

Izzet Coskun, Mathematics
Alina Marian, Mathematics

University of Illinois, Urbana-Champaign

Martin D. Burke, Chemistry
Benjamin J. McCall, Chemistry

Indiana University

Ciprian Demeter, Mathematics

University of Iowa

Julianna Tymoczko, Mathematics

Johns Hopkins University

David J. Foster, Neuroscience
Rene Vidal, Computer Science

Massachusetts Institute of Technology

Scott Aaronson, Computer Science
Pablo Jarillo-Herrero, Physics
Guido Lorenzoni, Economics
John McGreevy, Physics
Ramesh Raskar, Computer Science
Robert A. Simcoe, Physics

University of Massachusetts, Amherst

Kevin Fu, Computer Science

University of Michigan

Zhuoqing Morley Mao, Computer Science
Haoxing Xu, Neuroscience

University of Minnesota

Yoichiro Mori, Mathematics

Northern Illinois University

Gerard Awanou, Mathematics

Northwestern University

Francesco Calegari, Mathematics
Adilson E. Motter, Physics

University of Notre Dame

Steven A. Corcelli, Chemistry

Ohio State University

Chiu-Yen Kao, Mathematics
Todd A. Thompson, Physics

Pennsylvania State University

Anna Stasto, Physics

University of Pennsylvania

Joshua B. Plotkin, Molecular Biology
Steve Zdancewic, Computer Science

University of Pittsburgh

Brent Doiron, Neuroscience
Michael Grabe, Molecular Biology

Princeton University

Bogdan Andrei Bernevig, Physics
M. Zahid Hasan, Physics
Andrew Houck, Physics
William C. Jones, Physics
Alexandre Mas, Economics

Purdue University

Luis M. Kruczenski, Physics

Rice University

Tze Sing Eugene Ng, Computer Science
Wotao Yin, Mathematics

University of Rochester

Daven C. Presgraves, Molecular Biology

Rutgers University

Alexandre V. Morozov, Molecular Biology
Jian Song, Mathematics

l'Universite de Sherbrooke

Christian Lupien, Physics

University of Southern California

Frank Alber, Molecular Biology
Tansu Celikel, Neuroscience
David Kempe, Computer Science

Stanford University

Chao-Lin Kuo, Physics
Maxence V. Nachury, Neuroscience
Michele Tertilt, Economics

University of Texas, Austin

Ila R. Fiete, Neuroscience
Sara Sawyer, Molecular Biology

University of Texas, Southwestern Medical Center at Dallas

Jennifer J. Kohler, Chemistry
Joseph M. Ready, Chemistry

University of Toronto

Vy Maria Dong, Chemistry
Aaron R. Wheeler, Chemistry

Tufts University

Dan Margalit, Mathematics

Vanderbilt University

Jesse Peterson, Mathematics

University of Vermont

Rory Waterman, Chemistry

Virginia Polytechnic Institute and State University

Edward Valeev, Chemistry

University of Washington

Subhadeep Gupta, Physics
James Russell Lee, Computer Science

University of Wisconsin, Madison

Shuchi Chawla, Computer Science
Karsten M. Heeger, Physics
Song Jin, Chemistry
Tehshik P. Yoon, Chemistry

York University

Denise Y. P. Henriques, Neuroscience

STEM Research

BARCODE OF LIFE

THIS PROGRAM, STARTED IN 2002, aims to speed the building and use of a library of short DNA sequences (barcodes) to identify animal and plant species reliably and inexpensively. Foundation grantmaking has supported the selection of gene regions for use in identification and the networking of stakeholder institutions in the field, which include museums and herbaria that have collections of specimens, laboratories that perform analyses, and regulatory agencies concerned, for example, about the accuracy of food labeling. The Consortium for the Barcode of Life, based at the Smithsonian Institution, includes over 170 member organizations from 50 countries. Barcodes of over 850,000 specimens from over 70,000 species have been accumulated with plans to extend the barcode library to 500,000 species over the next five years. Grantmaking for 2010 will focus on supporting the Consortium as it shifts to financial reliance on government agencies concerned both with basic science and with consumer and environmental protection. Additional information about barcoding is available at www.barcodeoflife.org.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In December of 2006, the Board of Trustees authorized the expenditure of up to $300,000 for small grants to support the development of DNA barcoding, including, but not limited to, efforts to extend DNA barcoding to fungi and protists, studies of how to effectively access and organize DNA sequences, projects to address technical hurdles associated with barcoding, and initiatives to expand the circle of stakeholders. The following grants were made against this previously authorized fund.

MOUNT SINAI SCHOOL OF MEDICINE OF NEW YORK UNIVERSITY
NEW YORK, NY

$66,017 OVER **24** **MONTHS** TO DEVELOP MATHEMATICAL PROCEDURES FOR EXTRACTING CLASSIFICATION PATTERNS FROM DNA BARCODE DATABASES. **PROJECT DIRECTOR:** LAWRENCE SIROVICH, PROFESSOR

Census of Marine Life

THE GOAL OF THIS PROGRAM is to advance a major international observational program to assess and explain the diversity, distribution, and abundance of marine life. Beginning in 2000, Foundation grants now total about $78 million. Together with more than $550 million from non-Sloan sources around the world, including national governments, international organizations, and maritime industries, they have helped fund 14 field projects, build the History of Marine Animal Populations to benchmark current populations, create a network to predict the future of marine animal populations, develop the Ocean Biogeographical Information System (now containing over 22 million records of more than 112,000 marine species), and support the International Scientific Steering Committee and Secretariat, the U.S. National Committee, and an Education and Outreach Network to lift the project's visibility and engage other nations and organizations and to develop the capacity for further discovery and application of accumulated knowledge once the Census is completed. Thousands of scientists from more than 80 nations are participating. Foundation support will culminate with the release of the first ever Census of Marine Life in October, 2010. Detailed information on the Census can be found at www.coml.org.

Trustee Grants

University of Alaska, Fairbanks

Fairbanks, AK

$550,000 over **18 months** to complete and disseminate the results of the Arctic project of the Census of Marine Life. **Project Director:** Rolf R. Gradinger, Associate Professor

The polar field programs of Census of Marine Life (CoML) have been among its most successful. Supported since 2003 with $1.6 million of Sloan funds, the leadership of the Arctic Ocean Diversity (ArcOD) team returns now for a final grant to coordinate its final observational activities and synthesize its findings in anticipation of the completion of the CoML in late 2010.

A Canada-Germany-U.S. trio has ably led ArcOD since its initiation, helped by an advisory committee with members from Norway, the U.K., Russia, and other nations active in the Arctic. The Sloan funds would be applied as usual for core activities such as project management and coordination with other CoML efforts, such as those concerned with the Antarctic, the history of marine animal populations, and Ocean Biogeographic Information System.

Exploring from seafloor pockmarks through the 3,000 meters of the water column in the Canada basin to surface populations of sea birds, ArcOD has now documented more than 5,500 species living in Arctic waters, including startlingly abundant and beautiful crystalline jellies, crustacea that may be changing their range due to climate change, and the migratory routes of narwhals, the unicorns of the sea. While much information needs to be digested, we can be confident that the Census will offer a fresh and exciting picture of the diversity, distribution, and abundance of Arctic marine life.

University of California, San Diego

La Jolla, CA

$500,000 over **14 months** to complete, integrate, and disseminate the results of the reefs field project of the first Census of Marine Life. **Project Director:** Nancy Knowlton, Director, Scripps Institution of Oceanography

Reefs form the most charismatic ecosystems in the oceans. Still, even the corals that form the reefs are little known. A 2008 expedition on Australian reefs by the reefs team of the Census of Marine Life (CoML) found about 150 new forms of soft corals. The reefs team was formed in 2004 to assess global patterns of biodiversity, in particular for the largely unstudied groups that represent the bulk of the diversity of marine life. Notably, the team has introduced a simple, inexpensive new method of sampling called the Autonomous Reef Monitoring Structure (ARMS), essentially an empty dollhouse that can later be collected and examined to see who has moved in. The ARMS method, as well as benefits of shared databases and access to molecular tools, has attracted many participants to the reefs project, including major institutional partners, such as the World Bank. The Sloan funds would be used in customary ways, including a chapter for the CoML overview volume, participation in cross-cutting working groups (in particular on evolutionary roles of the long tail of rarely occurring species, which appears extraordinarily long in reefs), and deposition of data in the Ocean Biogeographic Information System (more than 250,000 records already

entered). The coral reefs project is on track to present the first global baseline assessment of the biodiversity of shallow water reefs, as well as a legacy of databases, standardized protocols for sampling reef biodiversity, and a global array of deployed ARMS.

University of California, San Diego

La Jolla, CA

$500,000 over **14 months** to complete, integrate, and disseminate the results of the seamounts field project of the first Census of Marine Life. **Project Director:** Karen I. Stocks, Assistant Research Scientist, San Diego Supercomputer Center

The appearance about a decade ago of the orange roughy fish in restaurants brought attention to the undersea mountains that rise thousands of meters from the sea floor, but do not pierce the sea surface (as do the Hawaiian Islands, for example). Prior to the Census of Marine Life (CoML), no global community of seamount researchers existed, nor did an assessment of the diversity, distribution, and abundance of life on them. Supported with three prior grants totaling $1.5 million, some three hundred researchers worldwide have come together in the seamounts field project of the Census and return here for a final grant to carry out their synthetic activities. The project is led jointly by researchers at the New Zealand National Institute of Water and Atmosphere and bioinformatics expert Karen Stocks at the San Diego Super Computer Center. Sloan funds would be used for integrative activities, including production of a seamounts chapter in the Census overview volume, collections of public access papers, and participation with the other CoML projects in an overall deep sea synthesis.

University of Connecticut

Storrs, CT

$500,000 over **17 months** to complete, integrate, and disseminate the results of the global zooplankton field project of the first Census of Marine Life. **Project Director:** Ann Bucklin, Head and Professor

Since 2003, the Trustees have provided support to the international team conducting the first-ever survey of the jellies and other animals known as

zooplankton that drift rather than swim through the world's oceans. The project has followed the CoML framework of assessing diversity and distribution as well as abundance. Molecular approaches such as DNA barcoding have been especially fruitful in identifying specimens, as zooplankton are difficult to capture intact. The project is overseen by a steering committee of 23 members from 14 countries, with leading nodes in Japan and Germany as well as Connecticut. Connecticut's Ann Bucklin has proven one of the most able and diplomatic of all CoML field project leaders. The project has raised about $30 million in non-Sloan funds, and has consistently met or exceeded all the milestones by which CoML fields projects are monitored and managed. The requested funds would be applied to an ambitious suite of synthesis projects, including providing chapters for the CoML overview volume, at least two special issues of journals, species pages in the Encyclopedia of Life, deposition of data in the Ocean Biogeographical Information System and the barcode database, and, hopefully, a Scientific American paper on "The Superpowers of Plankton." While much remains unknown about zooplankton, for example, in the waters of the Eastern Pacific deeper than 1,000 meters, the CoML zooplankton project seems sure to provide the First Census of Marine Life with the reference information for which it aims.

Consortium for Ocean Leadership Inc.

Washington, D.C.

$788,804 over **14 months** to support the activities associated with the culmination of the First Census of Marine Life in October 2010. **Project Director:** Kristen Yarincik, Program Manager

The Consortium of Ocean Leadership (COL) in Washington, D.C. operates the Secretariat and International Scientific Steering Committee of the Census of Marine Life (CoML). This grant, tightly coordinated with a proposal from the Education and Outreach team based at the University of Rhode Island, will enable the COL team to orchestrate the crescendo of events associated with the release of the First Census of Marine Life the week of October 4, 2010 in London. The stakes are very high, and COL is approaching the crescendo with plans for staff contingencies and risk management, as keeping key members of the team fully on-board through calendar year 2010 and a few months into 2011 is crucial. The team has had an excellent track record of organizing complex meetings all around the world, but nothing has required the level of synchronization demanded by the London crescendo.

CONSORTIUM FOR OCEAN LEADERSHIP INC.

Washington, D.C.

$500,000 OVER **18 MONTHS** TO ENSURE AN EFFECTIVE SYNTHESIS PHASE OF THE CENSUS OF MARINE LIFE RESEARCH PROGRAM IN THE U.S. **PROJECT DIRECTOR:** ROBERT GAGOSIAN, PRESIDENT AND DIRECTOR

Experts from more than 80 nations contribute to the Census of Marine Life (CoML). Most participate both through involvement in a particular field program and through a National or Regional Implementation Committee (NRIC). The NRICs have grown to 12 in number, some representing a region, such as the Caribbean, and some a major nation, such as Japan.

Since 2002, the Foundation has provided $1.5 million for the U.S. National Committee, which has obtained roughly equal matching funds from U.S. government agencies, primarily the National Oceanic and Atmospheric Administration, but also the Navy, Environmental Protection Agency, and other organizations with a stake in the Census. Such matching funds are lined up again, and the total will enable the U.S. Committee to maintain a high level of operation right through the final weeks of the first Census.

Importantly, the U.S. Committee has been influential in arranging the $200 million or more that U.S. organizations have provided the Census since its origin. The U.S. National Committee will host a major event in Washington, D.C. for the U.S. community in the autumn of 2010, a few weeks after the global release of the Census in London on October 4, 2010.

The Consortium for Ocean Leadership (COL), which hosts the CoML's International Secretariat, also hosts the U.S. National Committee, which assures close coordination of the national and international programs.

The notion of the Census of Marine Life originated in the U.S., and the first major commitments to it came from Sloan and U.S. government agencies in spring 2000. This final grant for the U.S. National Committee can help assure that the U.S. sustains its leadership in the program at its crescendo and benefits fully from the many insights and advances the program has generated.

DUKE UNIVERSITY

Durham, NC

$419,000 OVER **12 MONTHS** TO PRODUCE COMPELLING, INTUITIVE, ACCURATE, AND CONSISTENT MAPPING AND VISUALIZATION PRODUCTS FOR THE CENSUS OF MARINE LIFE. **PROJECT DIRECTOR:** PATRICK N. HALPIN, ASSOCIATE PROFESSOR OF MARINE GEOSPATIAL ECOLOGY, DIRECTOR OF THE GEOSPATIAL ECOLOGY PROGRAM

Every project of the Census of Marine Life (CoML) produces maps and other representations of the diversity, distribution, and abundance of marine life. To avoid a Babel of mapping and visualization products, the International Scientific Steering Committee of CoML asked the Sloan Foundation to support an effort to help improve and standardize this crucial dimension of the program. In 2007, a grant to Duke University established a dedicated top-notch mapping and visualization (M&V) team for CoML to carry out intensive training workshops for designated M&V experts from CoML's 14 field projects. This grant provides the Duke M&V team with a final year of support to conclude its work.

The CoML community has seized the opportunities provided by Duke. Every project has participated in training workshops, and many projects have sent experts for extended stays at Duke or invited Duke team members for visits. Indeed, the capacity of CoML as a partner in visualization has created opportunities unanticipated at the origin of the M&V effort. For example, when Sylvia Earle of the U.S. National Committee for the Census of Marine Life was asked by Google Earth to chair their advisory committee to create Google Ocean, Dr. Earle enlisted the leader of the Duke effort, Patrick Halpin, to help direct the Google effort. Equally important, the expanding cooperation with the National Geographic Society now includes preparation by its cartographic division, in cooperation with the Duke team, of a two-sided wall map for the London October 2010 crescendo summarizing CoML discoveries.

UNIVERSITY OF GUELPH

Guelph, ON

$298,450 OVER **12 MONTHS** TO GROW THE LIBRARY OF DNA BARCODES FOR MARINE SPECIES, TO CREATE A NEW VIEW OF THE RELATEDNESS OF ALL FORMS OF MARINE LIFE,

AND TO CREATE GENETIC FINGERPRINTS OF DIFFERENT MARINE ECOSYSTEMS. **PROJECT DIRECTOR:** DIRK STEINKE, MARBOL LEAD AND POSTDOCTORAL FELLOW, BIODIVERSITY INSTITUTE OF ONTARIO,

In December of 2007, the Trustees provided a total of about $900,000 over two years to a consortium of five institutions to accelerate marine barcoding so that, by the completion of the Census of Marine Life, DNA barcodes would exist for all key marine groups and allow creation of an updated tree of marine life. The project has dual value in applied and basic science. On one hand, accurate identification of marine life protects consumers from fraudulent sale of seafood and helps regulators control trade in endangered species. On the other hand, genetic characterization of species allows assessment of their relatedness and evolutionary history. The team, led by Guelph molecular ecologist, Dirk Steinke, will use the library in several ways. The team is working with the U.S. Food and Drug Administration (FDA) to achieve official adoption of barcoding protocols for seafood by the FDA and other regulatory agencies before the end of 2010 as a demonstration of the practical value of the Census of Marine Life (CoML) and its cousin, the Barcode of Life initiative. Researchers may be able to take representative tissues from an "environmental sample," and use the DNA barcodes of the suite of specimens to create an overall genetic file that characterizes, for example, life in the Sargasso Sea, a Caribbean coral reef, or New York Harbor. The "wet lab" work of the Marine Barcode of Life (MARBOL) project is almost complete. Funds from this grant will support analyses, preparation of papers (including a collection for Public Library of Science), and dissemination.

MARINE BIOLOGICAL LABORATORY

Woods Hole, MA

$450,000 OVER **12 MONTHS** TO COMPLETE, INTEGRATE, AND DISSEMINATE THE RESULTS OF THE MICROBIAL FIELD PROJECT OF THE FIRST CENSUS OF MARINE LIFE. **PROJECT DIRECTOR:** MITCHELL L. SOGIN, DIRECTOR AND SENIOR SCIENTIST

Census of Marine Life (CoML) researchers have made startling discoveries about the smallest as well as the largest forms of marine life. Grams of sand from the North Sea contain between 5,000 and 19,000 unique types of bacteria (28 grams make an ounce). Overall, the International Census of Marine Microbes (ICOMM) estimates that within the size spectrum of microbes it is examining, the oceans may harbor more than two million genomically unique "phylotypes," the microbial equivalent of species. Because

of their microscopic size, DNA is of course the most powerful means to identify and describe marine microbes. Studies of abundance have also yielded a major surprise: very steep distributions of bacterial types ending in the long-tail of the "rare biosphere," which has itself burgeoned as a field of study. Not surprisingly, ICOMM's results have won space in *Science*, *Nature*, *PNAS*, and *PLoS Biology*. The final year of Sloan support would be applied to preparation of integrative papers, specialized collections of papers in the Public Library of Science (PLoS) as part of the CoML "Hub" that PLoS is creating, and archiving of information in CoML's Ocean Biogeographic Information System (OBIS) and its microbial spawn, MICROBIS. ICOMM is also working hard to develop visualizations that communicate effectively to non-microbiologists about the diversity, distribution, and abundance of its unseen majority. While ICOMM will, perhaps more than any other field project, describe the unknown and perhaps unknowable for the CoML London crescendo in October 2010, it will vividly document that even the most seemingly inhospitable marine environments host a rich diversity of microbial life.

University of New Hampshire

Durham, NH

$624,000 over **18 months** to lift public understanding and secure the legacies of the historical portion of the Census of Marine Life. **Project Director:** Andrew A. Rosenberg, Natural Resources & Oceans Policy

The History of Marine Animal Populations (HMAP) Program of the Census of Marine Life (CoML) provides a historical backdrop to enhance the value of the new information being collected by the Census. HMAP has surprised even the CoML leadership with the quality of its discoveries, its success in building historical marine ecology as a field, and the level of public interest in its work. This grant will support HMAP's efforts synthesize, archive, and disseminate its findings as part of the crescendo of the Census during 2010.

Looking forward to the release of the First Census in London in October 2010, HMAP will publish a general environmental history of marine animal populations, create an online image gallery, a series of maps of historical exploitations and impacts, and papers that synthesize information on historical declines and recoveries. Sloan Foundation funds will be used to keep the social network operating, as well as to provide matching funding to complete projects such as the image gallery.

University of Rhode Island

Kingston, RI

$737,662 over **14 months** to communicate globally the accomplishments of the decade of discovery of the Census of Marine Life. **Project Director:** Sara C. Hickox, Director, Office of Marine Programs/GSO

Early in the life of the Census of Marine Life (CoML) program, the Foundation, together with the CoML leadership, made the important decision to give responsibility for Education and Outreach (E&O) to a team dedicated to ocean education at the University of Rhode Island and an international network of E&O liaisons operated by the Rhode Island office. This final grant will help the E&O team create and disseminate the many CoML products in store for 2010. Among the products are popular books for adults and children, a technical book for the scientific community, clusters of papers in the online Public Library of Science hub for marine life or as special issues of journals, a two-sided National Geographic Society wall map, integration of CoML results into Google Ocean, a short final popular "Highlights" report, and an issue of Nature magazine focusing on the Census the week of the release of the Census, October 4, 2010, in London.

At the same time, about half of the funds will focused on communication associated with the October crescendo in London, called "A Decade of Discovery." We are confident the strategy developed by the Rhode Island team, closely coordinated with CoML headquarters, will meet the demonstrated high demand for well-presented information about marine life in many media and markets and achieve a glorious crescendo for the Census.

Scientific Committee on Antarctic Research (SCAR)

Cambridge, United Kingdom

$500,000 over **14 months** to complete, integrate, and disseminate the results of the Antarctic field project of the first Census of Marine Life. **Project Director:** Colin Summerhayes, Executive Director

The southern pole of Earth is covered by a large continent fringed by both permanent and seasonal ice shelves and a whirling carousel of ocean. Famously inhospitable, the seas around Antarctica had never been systemically surveyed for life before the Census of Antarctic Marine Life

formed in 2003 as one of the 14 field projects of the Census of Marine Life (CoML) program. The project's accomplishments to date include more than one million observations of more than 7,500 marine species in well-organized and accessible data sets. The funds from this grant will be applied to a set of synthesis projects, including chapters for the CoML overview volume, open access collections of papers in Public Library of Science and specialized polar journals, and species pages in the Encyclopedia of Life, as well as comparative activities with the CoML Arctic project to provide an overall polar synthesis.

University of Southampton

Southhampton, United Kingdom

$684,000 over **21 months** to complete the field project for the first Census of Marine Life concerned with life around deep seafloor vents and seeps. **Project Director:** Paul Alan Tyler, Department of Deep-Sea Biology

The discovery in 1977 near the Galapagos Islands of colorful communities of crabs, shrimp, fish, molluscs, and anemones living around steaming seafloor vents 10,000 feet deep, independent of the energy of the sun, counts as one of the major biological surprises of recent decades. The Census of Marine Life (CoML) organized the first attempt to provide a global picture of the diversity, distribution, and abundance of such communities. The "Chemosynthetic Ecosystem," or ChEss project, has succeeded remarkably well in its phase of exploration and observation. Organizing and federating more than 100 cruises, ChEss discovered the first vent sites in the South Atlantic, the hottest and deepest vents yet known, and the northernmost vents in the Arctic. Funds from this grant will support the production of summaries for both popular and peer audiences, including a collection of about 35 technical papers in the Public Library of Science, as well as other synthesis activities in association with the public release of the Census in October, 2010.

Stanford University

Stanford, CA

$450,000 over **12 months** to complete, integrate, and disseminate the results of the top predators field project of the first Census of Marine Life. **Project**

DIRECTOR: BARBARA A. BLOCK, CHARLES AND ELIZABETH PROTHRO PROFESSOR IN MARINE SCIENCES

The top predators project (TOPP) of the Census of Marine Life (CoML) has produced some of the program's most amazing discoveries. For example, bluefin tuna swim from Los Angeles to Tokyo in two and a half months, leatherback turtles circumnavigate the entire Pacific Basin in a few years, and elephant seals dive almost 8,000 feet, presumably in search of tasty food. This grant will support the top predators project's efforts to synthesize and disseminate its findings. TOPP has done superbly in the Pacific, with time series from 4,300 animals from 23 species. Vivid maps and animations now chart the habitat utilization of the Pacific by these species. Apart from geographic coverage, the project has exceeded expectations. It has delivered many papers in *Science* and *Nature* and won superb coverage in the mass media, including the Colbert Report, which highlighted TOPP's "Great Turtle Race" tracking turtles from Central American beaches to the Galapagos Islands. Sloan Foundation funds will be used in the familiar ways to conclude a CoML field project: for integrative papers, archiving and improving the accessibility of data sets, and lively dissemination to a range of audiences and stakeholders.

VIRGINIA INSTITUTE OF MARINE SCIENCE AT THE COLLEGE OF WILLIAM AND MARY

Gloucester Point, VA

$600,000 OVER **18 MONTHS** TO COMPLETE AND DISSEMINATE THE RESULTS OF THE MID-ATLANTIC RIDGE PROJECT OF THE CENSUS OF MARINE LIFE. **PROJECT DIRECTOR:** ODD AKSEL BERGSTAD, INSTITUTE OF MARINE RESEARCH, NORWAY.

The project studying life on and above mid-ocean ridges was the second of the 14 field projects that the Census of Marine Life (CoML) established, and produced some of the earliest dramatic discoveries of the CoML.

Chaired by Norwegian Odd Aksel Bergstad of Bergen's Institute of Marine Research, MAR-ECO has come to involve about 120 scientists from 16 countries as well as many university students.

The bulk of grant funds will be dedicated to completing about 300 scientific papers, synthesizing them in a chapter for the overall CoML book, contributing to cross-project syntheses about the deep-sea, entering records

into the geographical information system of the CoML (OBIS), Google Ocean, and the marine DNA barcode database, and also producing an educational computer game.

Officer Grants

California Academy of Sciences
San Francisco, CA

$19,100 over **9 months** to prepare a report on the history of knowledge of marine fish diversity and its implications for future discovery as a contribution to the Census of Marine Life. **Project Director:** William N. Eschmeyer, Curator Emeritus

InMER Expeditions
Monterey, CA

$124,664 over **7 months** to prepare three short videos about the Census of Marine Life that could be adapted to reach a wide range of audiences. **Project Director:** Randy Kochevar, Science Communications Manager, Monterey Bay Aquarium

InMER Expeditions
Monterey, CA

$48,221 over **4 months** to prepare three to eight treatments for short open-access videos and animations about the Census of Marine Life for wide audiences. **Project Director:** Randy Kochevar, Science Communications Manager, Monterey Bay Aquarium

Scottish Association for Marine Science
Argyll, United Kingdom

$50,000 over **16 months** to assist the European Census of Marine Life community transition to its synthesis phase. **Project Director:** Bhavani Narayanaswamy, Department of European Census of Marine Life

DEEP CARBON OBSERVATORY

THIS NEW PROGRAM AIMS TO REVOLUTIONIZE our understanding of the carbon deep in the Earth, including its connections to the origins of life and to the origins, distribution, and abundance of fossil fuels, through a multidisciplinary international network developing and applying new instruments, taking observations, and performing analyses. A three-year 2009 grant to the Carnegie Institution of Washington supports the initial phase of the program, which will focus on developing instruments to meet the severe technical challenges associated with probing the high-pressure, high-temperature processes in Earth's deep interior and on building an organizational infrastructure to set strategic priorities, engage a network of researchers, and secure funding commitments from institutional partners. For more information, visit the Deep Carbon Observatory Web site at http://dco.gl.ciw.edu.

TRUSTEE GRANTS

CARNEGIE INSTITUTION OF WASHINGTON

Washington, D.C.

$4,000,000 OVER **36 MONTHS** TO LAUNCH A DECADE-LONG EFFORT TO UNDERSTAND EARTH'S DEEP CARBON CYCLE THROUGH AN INTERNATIONAL DEEP CARBON OBSERVATORY. **PROJECT DIRECTOR:** ROBERT HAZEN, SENIOR STAFF SCIENTIST

With Sloan Foundation support, the Carnegie Institution of Washington (CIW) will launch the development of a worldwide Deep Carbon Observatory and serve as its anchor institution.

The Deep Carbon Program will address four major areas. First, it will seek to estimate more accurately the reservoirs of carbon from the Earth's core, where iron may bind large amounts of carbon, through the mantle where convective cells may carry it upward to the crust which traps the reservoirs that are most familiar to humanity. While some crustal reservoirs may be "biotic," that is, formed from formerly living matter that is buried and cooked in the crust, it is now clear that Earth also contains much larger amounts of abiotic carbon, part of the primordial rock and gas at the planet's origins. Improving estimates of

fluxes will be the second major focus of the Deep Carbon Observatory. The third focus will be the origins and synthesis of the particular chemical forms that carbon takes, including methane, which the high pressures and temperatures at great depths make possible.

The fourth focus will be deep life. Humanity has never drilled deeper than life. The mud recovered from the deepest holes contains microbes. Geobiologists conjecture that the weight of the "deep hot biosphere" may rival the weight of the surface biosphere.

The strategy of the Deep Carbon Observatory draws on experiences of the Digital Sky Survey, Census of Marine Life, and other Sloan science initiatives. Success will depend on development of innovative instruments for working at very high pressures and temperatures. Success will also depend on high leveraging of Sloan funds: the CIW proposal aims to reach $50 million in additional commitments within three years.

ENCYCLOPEDIA OF LIFE

THE GOAL OF THIS PROGRAM is to help build a reliable online encyclopedia with a Web page for each of the named 1.8 million species of plants, animals, and fungi. A $2.5 million grant from the Alfred P. Sloan Foundation along with a $10 million grant from the John D. and Catherine T. MacArthur Foundation initiated the project in 2007. Over 30,000 pages of the Encyclopedia were released early in 2008 and the site has since grown to include more than 200,000 authenticated species-pages. Content is being generated via the Biodiversity Heritage Library (a consortium of ten major natural history museum libraries, botanical libraries, and research institutions), other Web-based resources, and by professional and citizen scientists. Wikipedia-style, people worldwide are invited to contribute text, video, images, and other information about a species and have it incorporated, upon review, into the authenticated pages. A 2009 three-year grant supports the EOL's efforts to expand its worldwide institutional base of participants and its movement toward achieving self-sufficiency by 2012 when Foundation support will end. For more information about the project, see www.eol.org.

TRUSTEE GRANTS

SMITHSONIAN INSTITUTION

Washington, D.C.

$2,500,000 OVER **36 MONTHS** TO GROW THE "ENCYCLOPEDIA OF LIFE," AN ONLINE ENCYCLOPEDIA WITH A WEB PAGE FOR EVERY SPECIES. **PROJECT DIRECTOR:** JAMES L. EDWARDS, EXECUTIVE DIRECTOR

In December 2006, a consortium of institutions led by the National Museum of Natural History of the Smithsonian launched a visionary project to create an online Encyclopedia of Life (EOL) with an extensible Web page for each of the 1.8 million or so known species of plants, animals, and fungi and the capacity to grow as more species are discovered and described.

Since that time, the EOL project has exceeded its milestones. Since going online in February 2008, the EOL has now grown to over 180,000 richly

populated species-pages. Funds from this grant will allow the EOL to continue adding species, content, and functionality as it comes closer to its goal of creating a Web site with a page for every species on Earth.

Officer Grants

Eclipse TV Production
Englewood, NJ

$20,000 over **6 months** to establish a video and audio archive on the origins and early operations of the Encyclopedia of Life (EOL) for the historic record, public outreach, and education. **Project Director:** Richard E. Morris, Producer/Director/Cameraman

Global Biodiversity Information Facility
Copenhagen, Denmark

$45,000 over **8 months** to enhance the International Conference on Biodiversity Informatics and its benefits for scientific initiatives including the Encyclopedia of Life, DNA barcoding, and the Ocean Biogeographical Information System. **Project Director:** Samy Francois Gaiji, Head of Informatics

Indoor Environment

While humans average 23 hours per day indoors, most environmental research and policy have focused on natural or urban outdoor environments. The goal of Sloan's Indoor Environment program is to grow a new field of scientific inquiry, focused on the indoor microbial environments where people live, work, and play. Grantmaking will focus on establishing a center for Microbial Ecology of Indoor Environments; building a network of scientists, engineers, architects and related field stakeholders; developing data visualization and imaging techniques and repositories; and supporting select high-value research projects. Recent grants have included funds to develop an inventory of indoor microbial organisms commonly encountered by humans, and a study of the effect of natural versus mechanical ventilation on the microbial populations of health care facilities.

Officer Grants

University of Illinois at Chicago
Chicago, IL

$35,000 over **8 months** to support a workshop of the Indoor Environment Grantees. **Project Director:** David T. Eddington, Assistant Professor

University of Oregon
Eugene, OR

$119,948 over **6 months** to conduct a case study of a health care facility examining the role of natural vs. mechanical ventilation on indoor air microbial diversity and abundance. **Project Director:** Jessica Lee Green, Assistant Professor

University of Oregon
Eugene, OR

$119,835 over **11 months** to support a pilot study to examine biological diversity in the indoor environment. **Project Director:** Jessica Lee Green, Assistant Professor

SLOAN DIGITAL SKY SURVEY

DURING EIGHT YEARS OF OPERATIONS starting in 2000, the Sloan Digital Sky Survey (SDSS) obtained deep, multi-color images covering more than a quarter of the sky and created three-dimensional maps containing more than 930,000 galaxies and more than 120,000 quasars. Periodic releases of SDSS data to the scientific community and the general public have been an important feature of the project. In 2007, the Foundation made a seventh major grant to the Astrophysical Research Consortium to continue the SDSS work, now mainly focused on understanding dark energy. Work is scheduled to conclude in 2014. Details of the project, including its large data records and research reports, can be found at www.sdss.org.

GRANTS

No grants were made in the Sloan Digital Sky Survey Program during 2009.

SYNTHETIC BIOLOGY

THE GOAL OF SLOAN'S SYNTHETIC BIOLOGY INITIATIVE is to identify the risks associated with research in and applications of synthetic biology and to assess the ethical, regulatory, and public policy implications of these risks. Grantmaking aims to educate scientists, policy makers, journalists and the public about synthetic biology; improve biosecurity and biosafety within the field; lay the groundwork to address issues in regulation and governance; and develop a cadre of scholars and practitioners to evaluate the ethical, social, and public policy consequences of synthetic biology research.

Recent grantmaking in this program has focused on informing key audiences about the potential risks of synthetic biology. A grant to The Hastings Center supports a project by ethicists to identify and articulate ethical issues associated with synthetic biology research and provide a basis for informed policy discussion. A Sloan-funded project at the J. Craig Venter Institute is educating the scientific community about societal concerns regarding synthetic biology and educating the policy and journalism communities about the science underlying synthetic biology research. A grant to the Woodrow Wilson International Center aims to identify risks associated with synthetic biology, evaluate the adequacy of existing regulatory mechanisms, and educate policy makers and the public through events and through its Web site, www.synbioproject.org.

TRUSTEE GRANTS

CALIFORNIA INSTITUTE OF TECHNOLOGY

Pasadena, CA

$111,500 OVER **15 MONTHS** TO EXAMINE THE APPLICATION OF ENGINEERING METAPHORS AND CONCEPTS IN SYNTHETIC BIOLOGY. **PROJECT DIRECTOR:** ANDREA LOETTGERS, POSTDOCTORAL RESEARCHER

One of the goals of Sloan's Synthetic Biology Program is to identify and address the risks associated with research in and applications of developments in synthetic biology. The Hastings Center project is identifying and

articulating the ethical issues in synthetic biology and will provide a basis to inform the policy discussions. Also stimulating informed discussion, the Venter Institute project is educating the scientific community about the societal issues and educating the policy and journalism communities about the scientific issues. The Wilson Center project is providing valuable information about the public's perception of the issues, is beginning to evaluate the adequacy of the current regulatory framework for synthetic biology, and is educating policy makers through a series of events and their Web site www.synbioproject.org. A bright young historian of science, Andrea Loettgers, in collaboration with an outstanding synthetic biologist, Michael Elowitz, proposes to examine the application of engineering metaphors and concepts in synthetic biology based on observation of actual research practice. The Caltech team proposes to conduct their work through laboratory-based observations of synthetic biology in practice. These observations include regular attendance at group meetings and discussions with individual group members about their respective projects. The project fits well into our strategy. It will bring a novel perspective to inform the Sloan-funded synthetic biology projects at the Hastings Center, Wilson Center, and Venter Institute. It will foster the development of a young historian of science and add to our program a prominent practitioner of synthetic biology.

STEM Education

ANYTIME, ANYPLACE LEARNING

IN THE 18 YEARS SINCE 1992, the Foundation has made grants totaling nearly $75 million in support of the development of Asynchronous Learning Networks (ALNs). These networks provide remote access to high-quality higher education and training—anytime and anyplace—by providing access to instructors, classmates, syllabi, readings, and other educational resources via the Internet.

Approximately five million learners in degree-granting institutions now enroll in at least one ALN online course. ALN blends (ALN combined with traditional classroom teaching) have helped academic institutions meet the needs of local student populations. The program has demonstrated effective applications of online education for such special populations as U.S. Army personnel and students displaced by Hurricane Katrina, for workforce development in specific industries, and for training of low-wage workers. The Sloan Consortium (see www.sloan-c.org), now a group of about 1,500 academic institutions, spearheaded the movement to establish quality online courses and programs. A 2008, three-year, $4 million grant to the Consortium led to a business plan for the Consortium's transition to a self-sustaining 501(c)(3) professional society. Ongoing projects are focusing on increasing the Sloan Consortium membership base, creating strategic relationships with foreign universities to add an international dimension to the Consortium, increasing the Consortium's non-membership revenue base, and creating a credible and up-to-date national catalog of online courses and programs.

Significant grantmaking in this program ended in 2008, though selective support of ongoing projects will continue through 2010.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In December 2009, the Board of Trustees authorized the expenditure of up to $340,000 for a series small grants to expand and solidify the gains made in the Anytime, Anyplace Learning program in anticipation of ending grantmaking by the end of 2009. The following grants were made against this previously-authorized fund.

Research Foundation of the City University of New York
New York, NY

$20,000 over **12 months** for the Graduate Center to develop a time line of significant events in the Anytime/Anyplace Learning Program. **Project Director:** Anthony G. Picciano, Professor and Executive Director

University of Illinois at Springfield
Springfield, IL

$115,000 over **19 months** to support online collaboration among smaller universities. **Project Director:** Raymond E. Schroeder, Director, Office of Technology-Enhanced Learning

Polytechnic Institute of New York University
Brooklyn, NY

$65,000 over **12 months** for workshops to engage corporations in Sloan-C. **Project Director:** Robert N. Ubell, Vice President

Southern Oregon University
Ashland, OR

$50,000 over **18 months** to strengthen ALN program offerings and connections with Sloan-C. **Project Director:** Jennifer McVay-Dyche, Director, Distance Education Center

State Board for Community and Technical Colleges
Olympia, WA

$25,000 over **12 months** to support faculty development in online education. **Project Director:** Cable Green, Director, Distance Education Program

Officer Grants

Association of Public and Land-Grant Universities
Washington, D.C.

$125,000 over **12 months** to complete a project to raise awareness of the Presidents and Chancellors re: ALN as a strategic opportunity. **Project Director:** Robert Samors, Associate Vice President/Research and Science Policy

Regis University
Denver, CO

$125,000 over **24 months** to create two blended Master's Degree Programs in the Denver region. **Project Director:** William Husson, Vice President for Professional Studies & Strategic Alliances Workforce Strategy Center

Workforce Strategy Center

New York, NY

$55,000 over **20 months** to initiate blended learning for workforce development at community colleges. **Project Director:** Julian L. Alssid, Executive Director

EDUCATION FOR UNDERREPRESENTED GROUPS

BLACKS, HISPANICS AND NATIVE AMERICANS are underrepresented among M.S. and Ph.D. recipients in mathematics, engineering, and the natural sciences. Over the past 15 years, the Foundation has made grants totaling over $50 million to support graduate-level education for these underrepresented groups in three separate grantmaking initiatives: The Sloan Minority Ph.D. program, the Sloan Indigenous Graduate Partnership, and a program to support select projects with a national impact that promote the advancement of women and minorities in science and engineering.

The Sloan Minority Ph.D. program supports minority graduate students enrolled in selected science, mathematics, and engineering programs that the Foundation believes will successfully mentor and graduate minority Ph.D. candidates. The program is administered by longtime Foundation partner, the National Action Council for Minorities in Engineering, which receives applications, selects students for scholarships, administers awards, and supports recruitment efforts by participating faculty.

The Sloan Indigenous Graduate Partnership provides funding to selected regional centers focused on mentoring and supporting Native American, Native Alaskan, and Native Hawaiian graduate students in the mathematical and natural sciences and engineering.

Both programs are continuing with a new focus on encouraging participating campuses to institutionalize their student support programs for minority graduate students and increase the number of faculty committed to program goals.

BOARD OF CONTROL FOR SOUTHERN REGIONAL EDUCATION

Atlanta, GA

$598,851 OVER **36 MONTHS** TO FUND CONTINUED PARTICIPATION BY SLOAN SCHOLARS AND ASSOCIATED FACULTY IN THE ANNUAL COMPACT FOR FACULTY DIVERSITY'S INSTITUTE ON TEACHING AND MENTORING AND THE 2010 CONFERENCE OF DIRECTORS OF SLOAN MINORITY PROGRAMS. **PROJECT DIRECTOR:** ANSLEY ABRAHAM, DIRECTOR, SREB DOCTORAL SCHOLARS PROGRAM

Since 1998, students in our Minority Ph.D. Program who are committed to or are considering academic careers have been invited, along with their faculty mentors, to participate in the Institute on Teaching and Mentoring of the Southern Regional Education Board (SREB).

This grant will enable SREB to invite our students and faculty to the Institute and to run the next conference of campus directors with the Institute in 2010. SREB will also make significant improvements in the areas of evaluation and in making participation in the Institute more meaningful to the students and faculty in our Indigenous Graduate Partnership Program.

NATIONAL ACTION COUNCIL FOR MINORITIES IN ENGINEERING, INC.

White Plains, NY

$4,518,400 OVER **66 MONTHS** TO FUND NEW OBLIGATIONS IN THE MINORITY PH.D. PROGRAM AND THE SLOAN INDIGENOUS GRADUATE PROGRAM FROM JULY 1, 2009, THROUGH JUNE 30, 2010. **PROJECT DIRECTOR:** AILEEN WALTER, VICE PRESIDENT

This grant provides funds that NACME will need to fund expected new obligations incurred during the 2009-10 academic year as participating campuses and departments in the Minority Ph.D. program and the Sloan Indigenous Graduate Partnership admit new students. NACME administers these two programs on a day-to-day basis, paying and monitoring both student

scholarships and grants to campuses in the feeder component of the Minority Ph.D. program and to special cases within that program.

Grants Made Against Prior Authorizations

In June of 2009, the Board of Trustees authorized the expenditure of up to $165,310 for small grants to provide administrative support to universities that participate in the Sloan Indigenous Graduate Partnership. The following grants were made against this previously-authorized fund.

University of Arizona
Tucson, AZ

$80,310 over **12 months** to fund for an additional year the recruitment and retention portion of the Sloan Indigenous Graduate Partnership at the University of Arizona. **Project Director:** Maria Teresa Velez, Associate Dean

Purdue University
West Lafayette, IN

$84,831 over **12 months** to fund for an additional year the recruitment and retention portion of the Sloan Indigenous Graduate Partnership at Purdue University. **Project Director:** Kevin D. Gibson, Associate Professor

In October of 2007, the Board of Trustee authorized the expenditure of up to $200,000 for grants to fund small projects to improve education opportunities and outcomes for underrepresented groups in science and engineering. The following grants were made against this previously authorized fund.

American Association for the Advancement of Science
Washington, D.C.

$44,416 over **13 months** to support a technical legal assistance workshop to help AAU campuses implement diversity programs in a manner that conforms to federal laws. **Project Director:** Daryl E. Chubin, Director

Officer Grants

National Action Council for Minorities in Engineering, Inc.
White Plains, NY

$50,536 over **26** **months** to provide controlled online access to National Action Council for Minorities in Engineering's (NACME) Sloan Scholar database. **Project Director:** Julie Saltzman, Program Manager, Sloan Scholarships

Professional Science Master's Degree

THE LONG PERIOD REQUIRED TO EARN A PH.D. in many fields of science, coupled with doubts about the suitability of traditional graduate training for non-academic careers, suggest that graduate schools might consider a different kind of graduate degree in addition to the Ph.D. In this program, the Foundation makes grants to encourage the widespread adoption of the Professional Science Master's degree (PSM), a two-year degree, heavily oriented toward coursework that provides a sound basis for work outside academia in scientific and technical fields.

Since 1997, the Foundation has made grants totaling over $21 million and supported the creation of about 125 PSM degree programs in selected science fields at research universities, at "master's-focused" universities, and at minority-serving institutions. Ongoing grants support a variety of activities to increase the number and pace of growth of PSM degree programs, to establish a significant PSM presence in minority-serving institutions, and to broaden national support for the PSM degree by outreach to state governments, business leaders, human resource managers, government agencies with strong science interests, and leaders of the nation's large state university systems. Current information on professional science master's degree programs is provided on the Web at www.sciencemasters.com.

Trustee Grants

University of D.C. Foundation

Washington, D.C.

$247,250 over **36 months** for the implementation of Professional Science Master's Degree Programs at the HBCU Mid-Atlantic PSM Alliance. **Project Director:** Beverly Karplus Hartline, Dean, of Graduate Studies & Research

Historically Black Colleges and Universities (HBCUs) comprise only 3% of the nation's institutions of higher education, but matriculate 24% of all

African-American students enrolled in four-year colleges, and graduate more than 50% of African-American bachelor recipients in scientific fields such as physics. This grant aims to increase the percentage of underrepresented minority students enrolled in Professional Science Master's (PSM) degree programs by supporting the efforts of a new HBCU Mid-Atlantic PSM Alliance.

Organized by volunteer faculty and administrators, the fledgling HBCU Mid-Atlantic PSM Alliance has made significant inroads, obtaining the formal written support from the presidents of eight historically black colleges and universities: Bowie State University, Delaware State University, Howard University, Morgan State University, Norfolk State University, University of the District of Columbia, University of Maryland Eastern Shore, and Virginia State University. (American University, which is not an HBCU, has also joined as an Associate Member of the Alliance.) Taken together, the eight full-member institutions enroll over 48,000 students, of which 41,000 are African-American. Grant funds will be used to support Alliance initiatives to foster the development of PSM programs on member campuses.

University of Massachusetts, Lowell

Lowell, MA

$124,200 over **24 months** to support the development of a University of Massachusetts system-wide Professional Science Master's (PSM) degree initiative. **Project Director:** Donald E. Pierson, Vice Provost for Graduate Education

There are at present only two universities in Massachusetts offering PSM degrees: Northeastern (3 PSMs, in Bioinformatics; Biotechnology; and Marine Biology); and Worcester Polytechnic Institute (two PSMs, in Industrial Mathematics and in Quantitative Finance (Financial Mathematics). Both institutions are private. This grant will support efforts by UMass to bring PSM degrees, most likely focused on the life sciences, to the public UMass university system.

The efforts underway have been formally embraced by the relevant campus chancellors and deans, by the Massachusetts Biotechnology Council, the industry association of 650 biotech companies and other organizations in the state; and by six specific employers who have expressed interest in welcoming PSM interns, hiring PSM graduates, and providing advice to PSM Programs.

Over 2,500 responses from Massachusetts students indicate substantial interest in possible PSM degrees.

Oregon State University

Corvallis, OR

$185,840 over **24 months** to support the implementation of Oregon's statewide strategy for growth in Professional Science Master's (PSM) degree programs. **Project Director:** Ursula Bechert, Director, Off-campus programs

Oregon was one of the five states invited by the National Governors Association to participate in the Sloan Foundation-supported Policy Academy on the Professional Science Master's degree, held in Sacramento, California in June 2008 (and co-sponsored by the Office of the Governor of California). Oregon was the quickest off the mark following this Policy Academy, beginning immediate planning for developing PSM degrees.

This grant will provide partial support for a new statewide PSM office to lead this initiative for the state as a whole. Oregon anticipates conservatively that by academic year 2013 these efforts will lead to the creation of at least seven new PSM degrees enrolling at least 150 students. Additional PSM degrees may also emerge, but are not a formal part of this grant's expected outcomes.

Grants Made Against Prior Authorizations

In October of 2008, the Board of Trustees approved the expenditure of up to $1,000,000 in small grants to help institutionalize the Professional Science Master's Degree as a regular and respected feature of U.S. graduate education in the sciences. The following grants were made against this previously-authorized fund.

University of Arizona
Tucson, AZ

$38,503 over **20 months** to support an Arizona statewide PSM initiative. **Project Director:** Lindy A. Brigham, Assistant Research Professor/Department of Plant Sciences

BIOCOM Institute
San Diego, CA

$36,000 over **11 months** to support a pilot web-based portal and other facilities to increase interaction between biotech employers and biotech PSM degree programs and students. **Project Director:** Joseph Panetta, President

University of Central Florida
Orlando, FL

$86,250 over **24 months** to plan for a Florida statewide initiative for Professional Science Master's Programs. **Project Director:** Patricia J. Bishop, Vice Provost

The Council of Graduate Schools
Washington, D.C.

$124,106 over **12 months** to development a process for Professional Science Master's affiliation. **Project Director:** Debra W. Stewart, President

Student Retention

THE GOAL OF THIS SMALL PROGRAM is to contribute to the improvement of undergraduate and graduate completion rates in mathematics, science and engineering fields, especially for women and minority students. A recent focus of this program has been to encourage colleges and universities to obtain and make use of reliable data on retention, completion rates, and time-to-degree in order to improve learning and graduation outcomes of their students.

Trustee Grants

Swarthmore College

Swarthmore, PA

$313,029 OVER **36 MONTHS** TO LAUNCH A MULTI-CAMPUS PROJECT TO IMPROVE UNDERSTANDING OF UNDERGRADUATE STUDENT MIGRATION INTO AND OUT OF SCIENCE, ENGINEERING, AND MATHEMATICS DISCIPLINES. **PROJECT DIRECTOR:** LYNNE A. MOLTER, PROFESSOR AND CHAIR

In recent years, our small program to improve retention and graduation rates for undergraduate and graduate students in STEM disciplines has focused on encouraging campuses to obtain and use good data on STEM enrollments, migration, retention, graduation rates and time-to-degree. A recent small grant to Washintgon University focused on investigating how to collect and use such data at selective public universities, private universities, and private colleges.

This project, with leadership now transferred to Swarthmore College, has sparked the desire to create and institutionalize a consortium of campuses that collect uniform institutional data and survey students in order to improve understanding of undergraduate student migration into and out of science, engineering and mathematics disciplines. The group will start by reviewing and revising, as appropriate, the data collection template and survey instrument that emerged from the previous, preliminary project. The participating institutions will then initiate regular collection and reporting of data and surveying of students. At this time, fifteen institutions have agreed to

participate, many of which were also involved in the preliminary project. The consortium's executive committee continues to recruit additional institutions to participate.

Officer Grants

The Council of Graduate Schools
Washington, D.C.

$80,845 over **18** **months** to develop a national strategy for enhancing the Master's Degree completion in STEM disciplines. **Project Director:** Debra Stewart, President

Thurgood Marshall College Fund
New York, NY

$34,750 over **12** **months** to plan the launching of a program through which Thurgood Marshall College Fund universities would collect and analyze data on student retention and migration in STEM disciplines. **Project Director:** Rebecca Bennett, VP, Programs/TMCF

University of Washington
Seattle, WA

$31,538 over **18** **months** to supplement a previous grant for the Project to Access Climate in Engineering to derive maximum benefit from a newly-planned December 2010 meeting in Banff. **Project Director:** Suzanne G. Brainard, Executive Director/Center for Workforce Development

Public Understanding of Science, Technology, Business, & Economics

BOOKS

BOOKS ARE CRITICAL for the understanding of science and technology, allowing us to delve deeply and thoroughly into difficult or complicated subjects. The Foundation supports books that explain the scientific basis of confusing or controversial issues, that profile scientific and technological figures, and that relate the relevance of technology to daily life. In 2009, grants were made to support a scientific memoir by Benoit Mandelbrot, the father of fractal geometry, and for a book about the impact of emerging digital technologies on the art of photography. Recently published books supported by the Foundation include: *Smallpox: The Death of a Disease* by D.A. Henderson; *ReAction!: Chemistry in the Movies* by Mark Greig and Marjorie Mikasen; *No Small Matter: Science on the Nanoscale* by Felice Frankel and George Whitesides; *The Poisoner's Handbook: Murder and the Birth of Forensic Medicine in Jazz Age New York* by Deborah Blum; and the 17th volume of *The Correspondence of Charles Darwin* published by Cambridge University Press.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In October of 2008, the Board of Trustees authorized the expenditure of up to $450,000 for small grants to support promising new books on science and technology. The following grants were made against this previously-authorized fund.

HARVEY WANG
NEW YORK, NY

$45,000 OVER **18 MONTHS** TO RESEARCH AND WRITE A BOOK ABOUT THE IMPACT OF THE DIGITAL REVOLUTION ON THE ART OF PHOTOGRAPHY. **PROJECT DIRECTOR:** HARVEY WANG

YALE UNIVERSITY
NEW HAVEN, CT

$45,000 OVER **12 MONTHS** TO SUPPORT THE WRITING OF A SCIENTIFIC MEMOIR BY BENOIT MANDELBROT. **PROJECT DIRECTOR:** NANCY GOFF, GRANT & CONTRACT MANAGER

FILM

THIS PROGRAM AIMS TO INFLUENCE the next generation of filmmakers to tackle science and technology themes and characters, to increase the visibility of such films, and to encourage the production of new scripts about science and technology and about scientists, engineers, and mathematicians. The program works primarily through initiatives with film schools, film festivals, and independent and Hollywood film producers. The program supports the nation's six leading film schools (American Film Institute; UCLA School of Theater, Film and Television; Carnegie Mellon University School of Drama; Columbia University Film Department; NYU Tisch School of the Arts; and USC School of Cinematic Arts) in awarding annual prizes for screenwriting and production of new films dramatizing science and technology. The Foundation has partnered with three major film festivals (Hamptons, Sundance, and Tribeca) and with Film Independent to develop screenplays toward production and to award prizes to outstanding feature films centered around science and technology by such acclaimed directors as Darren Aronofsky, Werner Herzog, Julian Schnabel, and Michael Apted. Major 2009 grants provided renewed support to film programs at UCLA, USC, AFI and NYU and to partners Film Independent and the Tribeca Film Institute.

TRUSTEE GRANTS

AMERICAN FILM INSTITUTE

Los Angeles, CA

$270,000 OVER **36 MONTHS** FOR SCREENWRITING AND PRODUCTION OF SCIENCE AND TECHNOLOGY FILMS BY TOP FILM STUDENTS. **PROJECT DIRECTOR:** JOE PETRICCA, EXECUTIVE VICE DEAN

This three-year grant to the American Film Institute (AFI), one of the nation's leading film schools, will support AFI's continuing program awarding tuition stipends and screenwriting and production awards for Science and Technology (S&T) films and to hold an annual S&T seminar. The film school program, supported for over a decade now, has been successful as measured by both

quantity and quality of work. Beyond that, it is the cornerstone of our broader film program because it has created a growing body of work—and an emerging cadre of talented filmmakers—all focusing on S&T films. AFI has a unique status as a national film conservatory and their finished Sloan films, such as *Skylab* and *The Monster and the Peanut*, traditionally have excellent production values and a sophisticated aesthetic.

University of California, Los Angeles

Los Angeles, CA

$309,750 over **36 months** for screenwriting and production of science and technology films by top film students. **Project Director:** Hal Ackerman, Sloan Faculty Advisor

This is one of a trio of three-year grants to the nation's leading film schools to continue awarding screenwriting and production awards for science and technology films and to hold an annual science and technology seminar.

Many producers are now combing through all the Sloan student winners for new scripts. Our 2008 Sloan Summit, which showcased the work of student winners, attracted executives from the major studios and independent film companies.

University of California, Los Angeles (UCLA) has made great strides during the past three years. During its last grant, UCLA turned in two outstanding scripts (*The Magic Pill*; *The Ten Commandments of Leo Szilard*). Several Sloan films UCLA submitted to festivals across the country have won awards and one production (*Death Strip*) took home a Student Emmy.

Film Independent, Inc.

Los Angeles, CA

$156,000 over **24 months** to develop three science and technology films through the production process. **Project Director:** Josh Welsh, Director of Talent Development

Film Independent is one of the largest and most prominent organizations dedicated to independent films in the United States. FI sponsors screenings,

special events, film education and talent development for its 6,000 filmmaker members, who include established Oscar-winning actors and directors.

Film Independent performed very well with the one previous two-year grant they received, yielding two outstanding projects: *Basmati Blues*, a romantic comedy with Bollywood elements about a female geneticist from the U.S. who goes to India to help farmers with genetically modified rice; and *The Man Who Knew Infinity*, a tale about the great Indian mathematician Ramanujan.

This two-year grant will continue Foundation support for Film Independent's Producer's Lab, an intense seven-week program that focuses on ten scripts each year, and will also establish a $25,000 named fellowship for a second science-themed project. This fellowship would include a $10,000 production grant, underwriting for participation in Fast Track, an intensive film financing market that takes place at the Los Angeles Film Festival, and year-round support and resources from FI, including mentorship from science advisors.

New York University

New York, NY

$429,450 over **36 months** for screenwriting and production of science and technology films by top film students. **Project Director:** Sheril Antonio, Associate Dean

This is one of a trio of three-year grants to the nation's leading film schools to continue awarding screenwriting and production awards for science and technology films and to hold an annual science and technology seminar.

Many producers are now combing through all the Sloan student winners for new scripts. The Foundation's 2008 Sloan Summit, which showcased the work of student winners, attracted executives from the major studios and independent film companies.

New York University Tisch School of the Arts has continued to develop and refine its program, including the planned addition of a "script doctor"—Professor Ezra Sacks, an established screenwriter—to advise and assist students in the development and writing of their screenplays.

University of Southern California

Los Angeles, CA

$325,611 over **36 months** for screenwriting and production of science and technology films by top film students. **Project Director:** Michael Renov, Associate Dean

This is one of a trio of three-year grants to the nation's leading film schools to continue awarding screenwriting and production awards for science and technology films and to hold an annual science and technology seminar.

Many producers are now combing through all the Sloan student winners for new scripts. The Foundation's 2008 Sloan Summit, which showcased the work of student winners, attracted executives from the major studios and independent film companies.

University of Southern California (USC) is the oldest film school in the country and consistently competes with New York University for the ranking of number one film school in the nation.

USC has very strong ties with the industry and active alumni involved with the school include George Lucas, Steven Spielberg and Robert Zemeckis. USC graduates have done well in securing industry jobs and enjoy the benefits of a very strong network.

Tribeca Film Institute Inc.

New York, NY

$700,000 over **25 months** to develop new science and technology feature films for production and to showcase science and technology films and hold panels at the Tribeca Film Festival. **Project Director:** Beth Janson, Artistic Director

This grant to the Tribeca Film Institute (TFI) will support two more years of the TFI Sloan Filmmaker Fund and Retrospective Screening and Discussion Series. The Foundation's early partnership with Jane Rosenthal and Robert De Niro at the Tribeca Film Festival—of which the Foundation was a founding sponsor—has yielded several high profile projects. Tribeca has shrewdly begun pulling together the most promising Sloan projects from other

programs, as well as developing its own, producing a strong suite of film projects. One example is *Face Value*—the story of screen siren and technologist Hedy Lamar—now slated for production starring Academy Award-winning actress Rachel Weisz in the title role.

Officer Grants

American Museum of the Moving Image
Astoria, NY

$72,313 over **12 months** to enhance the Sloan Film Program by showcasing winning films and filmmakers, holding annual events and creating a science and film Web hub. **Project Director:** Carl Goodman, Senior Deputy Director & Director Digital Media

National Academy of Sciences
Washington, D.C.

$45,000 over **12 months** to develop a web site for Science and Entertainment Exchange. **Project Director:** Barbara Kline Pope, Executive Director

RADIO

RADIO'S STRENGTHS—large audiences and relatively low cost—have led to Foundation support that resulted in a substantial increase in both the quality and quantity of science and technology coverage on a variety of radio programs. Alfred P. Sloan Foundation support led to the start of the science and technology desk on National Public Radio and on Public Radio International's *The World* and also sponsored science coverage on commercial radio. During 2009, the Foundation renewed support to WNYC Radio for continued production and distribution of *Radiolab*, an innovative science-themed show on public radio, while grants from prior years continued to support science programming on *Science Friday* and *Studio 360*. In addition, a partnership with L.A. Theatre Works resulted in the recording and distribution of two science-themed plays produced through the Foundation's theater program: *Lucy*, produced by the Ensemble Studio Theatre, and *Fake*, developed by Manhattan Theatre Club and produced at the Steppenwolf Theatre.

TRUSTEE GRANTS

WNYC RADIO

New York, NY

$225,000 OVER **12 MONTHS** FOR THE PRODUCTION AND DISTRIBUTION OF RADIOLAB, AN INNOVATIVE SCIENCE-THEMED SHOW ON PUBLIC RADIO. **PROJECT DIRECTOR:** ELLEN HORNE, EXECUTIVE PRODUCER

This grant to WNYC will provide continuing support for Radiolab, the award-winning science series produced in conjunction with National Public Radio (NPR), for the production and distribution of ten one-hour science-themed shows. WNYC's Radiolab, one of the most innovative public radio shows in the country also produces ten feature science-based pieces that are broadcast on National Public Radio magazine shows Morning Edition, All Things Considered, and Weekend Edition, and over 20 podcasts' worth of additional material. Radiolab is unique, fresh, informative and inspiring—an exemplary

radio show about science with the most original voice heard in many years and has found a large, receptive, and relatively young public audience.

TELEVISION

THE FOUNDATION CONTINUES TO DEVELOP various projects, mainly with public television, to help integrate science and technology, along with profiles of scientists, engineers, and mathematicians, into the nation's regular programming. Major grants in 2009 provided continuing support for Paul Solman's Emmy-winning on-air and online coverage of economic and financial literacy on the *PBS NewsHour*, as well as support for the production of four science and technology-themed documentaries to air on the *American Experience*. Other recent grants in this program resulted in the production and broadcast of a documentary based on Michael Pollan's bestseller, *The Botany of Desire*; a documentary on the life and work of maverick scientist Tommy Gold, *Renegade Genius*; *The Secret Life of Scientists & Engineers*, a Web-series profiling sixteen working scientists produced by *NOVA scienceNOW*; a three-part PBS series, *The Human Spark,* about how humans differ from other species; and two documentaries aired by the *American Experience*: *The Trials of J. Robert Oppenheimer* and *The Polio Crusade*.

TRUSTEE GRANTS

GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOCIATION INC.

Arlington, VA

$1,500,000 OVER **24 MONTHS** FOR ON-AIR AND ONLINE COVERAGE OF ECONOMIC AND FINANCIAL LITERACY ON THE PBS NEWSHOUR. **PROJECT DIRECTOR:** LESTER M. CRYSTAL, PRESIDENT

This grant to the Greater Washington Educational Telecommunications Association, Inc., provides two years of funding for enhanced economics coverage on the *PBS NewsHour* (The NewsHour), both on-air and online. The NewsHour continues to be the most serious and effective news show on television and has impressively maintained an audience of 1.2 million viewers nightly, higher than every news show except Fox News and the networks. Previous Foundation support for segments advancing the public understanding of economics on The NewsHour resulted in a very impressive output—twice

the number of on-air spots by Paul Solman about economic and financial literacy as originally envisioned. Currently, The NewsHour Web site attracts about half a million visitors a week and about 100,000 visit the three Sloan-supported economics sites. Just under a million users have visited Solman's site in the past six months and 720,000 have downloaded his material, providing an effective vehicle for delivering accessible economic and financial information to the public.

WGBH Educational Foundation

Boston, MA

$2,500,000 over **24 months** to research and produce four documentaries about the role of science and technology in history for The American Experience. **Project Director:** Mark Samels, Executive Producer

This grant supports the production of four science and technology-themed documentaries to air over the next two years on WGBH's *American Experience*. The four proposed episodes include a two-hour special by the acclaimed director Ric Burns *Into the Deep: America, Whaling, and the World* that tells the story of three centuries of American whaling and traces the remarkable growth of this early global industry to its decline; another two-hour show about the creation of the Panama Canal, the largest and most ambitious engineering project in history; a one-hour feature about the harrowing scientific expedition to the Arctic led by Adolphus Greely in 1881, the first International Polar Year; and a fourth program to be determined. *American Experience* continues to define excellence in documentary filmmaking—it has received every television award numerous times—and is America's most-watched history series.

THEATER

GRANTMAKING IN THIS PROGRAM aims to engage playwrights, actors, directors, producers, and theater companies to write and produce new plays about scientists, engineers, and mathematicians. Foundation grants continue to support commissioning, development, and production of new science and technology plays at Ensemble Studio Theatre (EST), Manhattan Theatre Club (MTC), and Playwrights Horizons. EST's program includes a national competition for new dramatic works exploring the worlds of science and technology and the annual *EST/Sloan First Light Festival*, a month-long event focused on new science and technology plays and featuring a mainstage production — in 2010, it was Vern Thiesen's acclaimed play *Lenin's Embalmers* — and a series of staged readings, workshops, and related activities. The EST/Sloan program continues to partner with over 20 regional theaters across the country to produce and stage science and technology plays. The Foundation's partnership with MTC, which began with the Tony- and Pulitzer Prize- winning hit, *Proof*, supports annual commissions for emerging, mid-level, and established writers, as well as a production grant to write and stage science and technology plays. Over 20 playwrights have received commissions including Craig Lucas, Bryony Lavery, and Beau Willimot. Details of MTC/Sloan commissioned plays and playwrights can be found at www.mtc-nyc.org/about_sloan.asp. A grant to Playwrights Horizons has resulted in two commissions of science and technology plays to Lisa Kron and Chrisopher Kyle.

TRUSTEE GRANTS

MANHATTAN THEATRE CLUB

New York, NY

$500,000 OVER **36 MONTHS** TO COMMISSION, DEVELOP, AND PRODUCE SCIENCE AND TECHNOLOGY PLAYS. **PROJECT DIRECTOR:** ANNIE MACRAE, LITERARY MANAGER

The Manhattan Theatre Club (MTC) is one of the nation's finest and most successful nonprofit theater companies, having received four of the last eight Pulitzer Prizes awarded in drama. The grant will provide funds to continue

the operation and expansion of MTC's efforts to support science and technology-themed scripts and theatrical productions.

The centerpiece of this effort is four annual playwright commissions, three to mid-level or established playwrights and one to an emerging playwright. Sloan's collaboration with MTC is increasingly attracting leading playwrights and the resulting work is playing at theaters across the country. Since *Proof* in 2000 and *Humble Boy* in 2003—both MTC plays that were supported by Sloan after others had developed them—six new plays commissioned by Sloan have gone on to be staged at major theaters across the country, including *Fake* currently at the Steppenwolf in Chicago and *Intelligence Slave* now at the Alley Theater in Houston.

Other Efforts

THIS PROGRAM ENCOMPASSES a range of initiatives—live performances, lectures and conferences, museum exhibits, and Web activities—to help reach a wide contemporary audience and advance public understanding of science and technology. Major grants in 2009 supported a Phillip Glass opera on the life of Johannes Kepler and renewed support of the World Science Festival in New York City.

Trustee Grants

Science Festival Foundation

New York, NY

$600,000 over **9 months** to support the third World Science Festival and to develop a strategic business plan for the future. **Project Director:** Tracy Day, Co-Founder, Executive Director

The first two World Science Festivals (WSF), in which Sloan played the initiatory role and then was one of two key early funders, have been major successes. The 2009 WSF sold out virtually every event and achieved massive media penetration. All the institutions of higher learning in New York, along with the major art museums, science halls, cultural centers and performance spaces, play host to this city-wide science festival and bring their traditional audiences into the tent. Co-founders Alan Alda and Brian Greene appeared as hosts and eloquent spokespeople for the value and impact of science in our culture. This grant, which will support the third annual World Science Festival, to take place in June 2010, also includes funds earmarked for the development of a three to five year Strategic Plan and Business Development Initiative that will focus on the long-term growth, expansion and stability of the World Science Festival.

Officer Grants

Brooklyn Academy of Music
Brooklyn, NY

$20,000 over **6 months** to support for a Phillip Glass opera on Johannes Kepler and supplementary scientific material. **Project Director:** Karen Brooks Hopkins, President

Science Festival Foundation
New York, NY

$45,000 over **12 months** to develop an educational outreach initiative for the World Science Festival. **Project Director:** Tracy Day, Co-Founder, Executive Director

Economic Performance & Quality of Life

Economic Institutions, Behavior, & Performance

THIS PROGRAM FUNDS EMPIRICAL and policy-relevant research in economics, management, regulation, law, and political economy related to the structure, behavior, and performance of the U.S. economy and its place in the global economy. Grantmaking supports the development of objective and nonpartisan research insights that will eventually inform and strengthen critical decisions facing leaders, policymakers, and the public.

Recent grants have funded a project to create publicly accessible data on world financial crises throughout history, a joint initiative with the Russell Sage Foundation on applying behavioral economics to the regulation of consumer financial markets, research on the industrial organization of credit rating agencies, and an annual forum addressing international monetary reform.

Grants in this program also advance the Foundation's ongoing research agenda concerning the scientific and engineering work force, including research on the economics of science, the economics and organization of the U.S. university system, and the impact of highly skilled immigration.

Trustee Grants

The Brookings Institution

Washington, D.C.

$605,347 over **48 months** for an annual and independent forum that will identify, analyze, discuss, and promote options for international monetary reform. **Project Director:** Eswar Prasad, Senior Fellow, Global Economy and Development

Multinational financial organizations like the International Monetary Fund (IMF) can sometimes become insular, politicized, ponderous, and unaccountable. That is why Raghuram Rajan from the University of Chicago and Barry Eichengreen from the University of California, Berkeley, plan on

establishing an independent "Council on International Monetary Reform" (CIMR) to monitor, advise, consult with, and critique the IMF. These two professors are among the world's most respected and engaged authorities on international financial and monetary economics. The CIMR will consist of fewer than 18 members representing a balanced variety of countries, ideologies, and economic approaches. The grant budget provides for a CIMR planning conference followed by three annual meetings. The Council will interact with senior IMF officials, with attendees at the main IMF meetings each fall, and with the media as well. Establishing this CIMR is just one component of the Sloan Foundation's developing initiative on international financial regulation. The goal of this entire initiative is to inform, prepare, and eventually institute significant reforms of the international financial and monetary system.

University of California, Berkeley

Berkeley, CA

$333,500 over **24 months** To improve understanding of copyright economics in the digital age. **Project Director:** Suzanne Scotchmer, Professor

The "copyright clause" of the U.S. Constitution empowers Congress "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Digitization has made intellectual property issues like this so important that, for the first time, the President has appointed a "copyright czar" to serve in the White House. Students face huge fines for sharing songs over the Internet, for example. Incentives to create or share innovations appear threatened. The proposed "Google Settlement" could monopolize access to certain books, including "orphan works," as discussed in a brief filed by the United States Department of Justice in the U.S. District Court reviewing the Settlement.

How can research help? Whereas patenting has been studied extensively by legal scholars and economists, thorough theoretical and empirical analyses of copyright policy and its effects in the digital age remain yet to be done. To this end, Berkeley Professor of Economics, Law, and Public Policy Suzanne Scotchmer proposes to study the benefits, costs, and distributional consequences of potential solutions to a set of copyright problems. One is compulsory licensing by collective rights management organizations like Broadcast Music, Inc. (music performance rights) and the American Society of

Composers, Authors and Publishers. This project will help provide theoretical foundations for a Sloan Foundation initiative that will sponsor further theoretical, empirical, and interdisciplinary research on copyright policy and information goods.

Carnegie Mellon University

Pittsburgh, PA

$149,776 over **20 months** to initiate research on the industrial organization of credit rating agencies. **Project Director:** Chester Spatt, Tepper School of Business

Credit rating agencies (CRAs) are supposed to help measure the financial risk associated with securities issues by private and public organizations which turn to the public for financing. A bond rated AAA by Standard & Poor's, for example, means that its probability of default is deemed closer to zero than securities in any other category. On the other hand, a BB rating or lower earns it "junk" status, which the issuer must compensate for by offering investors a higher yield. Clearly, the issuers who pay for these ratings would like the highest grade possible. Do they "shop" by going to Moody's or Fitch or perhaps one of the lesser-known ratings agencies if they do not like Standard & Poor's estimates? Commentators have been quick to blame the CRAs for the current financial crisis since so many securities that they rated AAA or the equivalent are now considered toxic. This work will help support efforts by Professor Chester Spatt to build the conceptual framework needed to address the important questions now being asked about CRAs.

Cornell University

Ithaca, NY

$183,809 over **24 months** To develop, test, and propagate innovative Bayesian methods for estimating and regulating risks taken on by financial institutions. **Project Director:** Nicholas Kiefer, Ta-Chung Liu Professor

Nicholas Kiefer of Cornell University is developing new analytical techniques directly motivated by and applicable to the needs of effective international bank regulation. Specifically, the Basel Accords set standards for determining how much capital a bank should be required to keep in reserve to guard

against financial and operating risks. There are two main approaches that statisticians use to estimate probabilities. Frequentists think of the probability of an event (say, flipping heads with a coin) as the long run proportion of repeated trials when it occurs. By contrast, Bayesian statisticians approach an estimation problem with subjective beliefs about the "prior probability" and then concentrate on systematically using whatever data becomes available to update their estimates. Through further consultations with practitioners, more research publications, continued work with graduate students, and the development of a course on Bayesian risk estimation in finance, this project stands to improve the understanding, management, and regulation of financial risk.

University of Maryland, College Park

College Park, MD

$323,115 over **24 months** To create and launch an International Financial Crisis Database that provides open access information about many countries, many centuries, and many variables. **Project Director:** Carmen Reinhart, Professor

Financial crises are thankfully infrequent. That means looking for patterns requires lots and lots of data. Two top macroeconomists, Ken Rogoff from Harvard and Carmen Reinhart from the University of Maryland, have been collecting financial crisis records covering many variables in many countries and going back many years. Their main finding is that even though people always like to say that this time is different, financial crises do follow patterns. Having heard about this work, scholars from around the world have contacted Reinhart and Rogoff about gaining access to their data and contributing even more data to expand the historical record. Rather than keeping this wealth of information to themselves, they plan to create a living and open-access database that researchers and the interested public can put to good use and help to expand. Launching this "International Financial Crisis Database" not only represents a great service to the field, it is also consistent with the Sloan Foundation's tradition of facilitating cooperation by scholars from around the world in compiling comprehensive, high quality, and open access research tools.

National Bureau of Economic Research, Inc.

Cambridge, MA

$349,324 over **24 months** to stimulate new academic research on global aspects of the financial crisis and "Great Recession". **Project Director:** Kristin Forbes, Professor of Global Economics & Management

Surprisingly few ideas from the field of international economics have turned out to be useful either in the run-up to the recent financial upheaval or in its aftermath. To reinvigorate the field of international macroeconomics, Kristin Forbes of the Massachusetts Institute of Technology (MIT) and Jeff Frankel of Harvard University are organizing a National Bureau of Economic Research (NBER) project on "The Global Financial Crisis." Pairing the two of them illustrates how the project will be strictly non-partisan and aimed at developing fundamental understanding rather than explicit policy recommendations. For example, three basic research questions this project will concentrate on are: How did global imbalances contribute to the crisis? How was the crisis transmitted internationally? How has the global nature of the crisis affected macroeconomic policy ranging from fiscal and monetary policy to bank regulation and the role of the dollar? The plan is to issue a broad call for proposals to prepare and present papers on these topics, commission a dozen of the best submitted in the competitive solicitation, post them as working papers, and hold a pre-conference with assigned discussants to provide critiques. Refocusing and revitalizing research on international macroeconomics like this is just one component of the Sloan Foundation's developing initiative on international financial regulation. The goal of this entire initiative is to inform, prepare, and eventually institute significant reforms of the international financial and monetary system.

Resources for the Future, Inc.

Washington, D.C.

$202,264 over **6 months** to ensure that appropriate economic data will be collected and distributed concerning new policies for regulating Green House Gas emissions. **Project Director:** Juha Siikamaki, Fellow

Reduction of greenhouse gas emissions in the U.S. will have significant impacts on our economy. How will it be possible to monitor, evaluate, and improve the carbon cap-and-trade and other mitigation mechanisms currently

envisioned? There are strong positive and negative precedents for how to go about this. For example, when the Clean Air Act Amendments of 1990 established a cap-and-trade system to limit emissions of sulfur dioxide in the U.S., powerful industry opposition to the transparent collection and release of data was successfully overcome by prominent economists working through the Acid Rain Advisory Council. Resources for the Future (RFF) has realized not only that it is critical to learn from past successes like this and build reporting requirements into the regulatory plans now being formulated, they have also recognized the need to train a new generation of scholars who will have a stake in monitoring and analyzing the data going forward many years. This project will also coordinate with an ongoing RFF study of how to measure carbon sequestration in forests that the Sloan Foundation has funded.

Grants Made Against Prior Authorizations

In June of 2009 the Board of Trustees authorized the expenditure of up to $900,000 over two years to fund joint or exploratory small grants in economics, in particular to fund grants resulting from a joint effort with the Russell Sage Foundation to identify unique research opportunities in behavioral economics. The following grants were made against this previously authorized fund.

Center for a New American Security, Inc.
Washington, D.C.

$66,760 over **4 months** to generate a literature review and research agenda that explore the industrial organizational puzzles arising from the globalization of defense-related industries. **Project Director:** Ethan Kapstein, Non-Resident Senior Fellow

Committee on Capital Markets Regulation, Inc.
Cambridge, MA

$120,200 over **15 months** to investigate the role of market discipline in regulating the risks taken by financial institutions. **Project Director:** Hal S. Scott, President

Harvard University
Cambridge, MA

$123,954 over **12 months** for research on Collaborative Filtering in Financial Markets. **Project Director:** Richard Zeckhauser, Frank Plumpton Ramsey Professor

National Academy of Sciences
Washington, D.C.

$61,849 over **6 months** to support a workshop on the data, analytical, and budgetary resources needed to regulate systematic financial risk. **Project Director:** Scott Weidman, Director, Board on Mathematical Sciences

National Bureau of Economic Research, Inc.
Cambridge, MA

$107,410 over **12 months** to promote research on the economics of household finance. **Project Director:** Peter Tufano, Professor of Financial Management

Officer Grants

The Brookings Institution
Washington, D.C.

$44,159 over **12 months** to provide expert input into the debate over automobile industry restructuring and to provide an agenda for related policy-oriented research in microeconomics. **Project Director:** Martin Neil Baily, Senior Fellow/Economic Studies

The Brookings Institution
Washington, D.C.

$26,073 over **21 months** to develop policy advice and a research agenda for applying behavioral economics to federal regulatory design. **Project Director:** Sendhil Mullainathan, Professor of Economics

Consortium for Mathematics and Its Applications (COMAP) Inc.
Lexington, MA

$19,580 over **7 months** to survey, inform, and plan improvements in education about finance and decision making. **Project Director:** Solomon A. Garfunkel, Chief Executive Officer

Massachusetts Institute of Technology
Cambridge, MA

$20,000 over **19 months** to prepare and post a comprehensive data base for studying the effects of rent control. **Project Director:** David Autor, Alfred P. Sloan Research Fellow

National Bureau of Economic Research, Inc.
Cambridge, MA

$20,000 over **8 months** to develop a research program and data survey on the economics of the copyright system. **Project Director:** Scott Stern, Professor, MIT Sloan School of Management

FEDERAL STATISTICS

THE FEDERAL STATISTICS PROGRAM makes grants to improve the conceptual underpinnings of federal statistics, especially economic statistics. Grants in this program promote sustainable mechanisms by which expertise might be applied to improve the validity of federal statistical measures, in view of rapid changes in the U.S. economy and society that have brought existing measurement approaches into doubt.

TRUSTEE GRANTS

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

$128,694 OVER **36 MONTHS** TO HELP DEMOCRATIZING ACCESS TO THE AMERICAN COMMUNITY SURVEY. **PROJECT DIRECTOR:** WILLIAM H. FREY, RESEARCH PROFESSOR

This grant provides partial support for an ambitious effort to create a user-friendly web portal designed to democratize access to the complex data that are beginning to be produced by the American Community Survey (ACS). The ACS, which has been under development over the past decade, is a rolling representative sample survey of U.S. households. This is an exceptionally large sample survey—the Census Bureau will be surveying 3 million U.S. households each year. The ACS has been designed to replace the "Long Form" of the U.S. Census, which for decades has provided almost all of the detailed Census data by sending a very extensive Census questionnaire to a 1-in-6 sample of the households canvassed by the Census. The proposers, the Social Science Data Analysis Network (www.SSDAN.net) at the University of Michigan, previously have developed a successful user-friendly web portal for previous Census data, initiated under a $25,000 Sloan grant in the 1990s. With subsequent support obtained elsewhere, that 1990s project has become a major source of data and information about Census data. Professor Frey and his team hope to replicate this successful effort with the newly-emerged ACS data.

INDUSTRY STUDIES

THE INDUSTRY STUDIES PROGRAM BEGAN IN 1990 with the establishment of the first Sloan Industry Center. The goals of the program at that time were to make the study of industries an accepted approach within academia, and to provide useful information and insights to industry and government policymakers. Throughout the next decade, establishing and renewing grants to Centers remained the primary focus of the program. In 2000 the Foundation's emphasis shifted to growing the Industry Studies community wherever such scholars might be located (which increasingly meant outside the Centers) through research support on topics such as globalization.

After exactly two decades of support and approximately $112M of Foundation grants, the program will reach its conclusion in 2010. Several of the topics covered by the Industry Studies program will be absorbed by the new Economic Institutions, Behavior, and Performance program. The main focus of Sloan's Industry Studies program in recent years has been developing the elements of an independent and self-sustaining professional society, the Industry Studies Association (ISA). Full details of ISA conferences and other activities, as well as information about Sloan Industry Centers and other aspects of industry studies, are available at www.industrystudies.org.

TRUSTEE GRANTS

UNIVERSITY OF PITTSBURGH

Pittsburgh, PA

$339,740 OVER **18 MONTHS** FOR FINAL SUPPORT TO ESTABLISH THE INDUSTRY STUDIES ASSOCIATION AS A SELF-SUSTAINING, INDEPENDENT ORGANIZATION. **PROJECT DIRECTOR:** FRANK GIARRATANI, DEPARTMENT OF ECONOMICS

The Industry Studies Program as it has been structured in the past will be brought to a close in 2010. In December 2008 the Trustees approved the first element of that plan: providing final financial support for the Industry Studies Annual Conferences. This grant implements the second key element of the plan: to provide tie-off funding for the secretariat at the University of

Pittsburgh, in order to develop the Industry Studies Association (ISA) into a self-sustaining, independent organization. In October 2007 a legal entity—the Industry Studies Association—was incorporated in the State of Pennsylvania, and officers and members of its Board of Directors were chosen. Over the next few months Professor Frank Giarratani, coordinator of the industry studies secretariat at the University of Pittsburgh since 2003 and now the President of the ISA, will work with the ISA Board to map out a transition that will allow the ISA to become a self-sustaining, independent organization by December 2010 with its activities financed entirely by member dues, conference revenues, grants and gifts. The goal of this grant is to give those in this scholarly community a chance to show whether there is enough interest to support such an association.

Grants Made Against Prior Authorizations

In June of 2009, the Board of Trustees authorized the expenditure of up to $250,000 to fund up to five $45,000 fellowships to fund the work of Industry Studies researchers, with the remaining balance to be spent on administration of the fellowships and the provision of grants to defray the costs of visits to industrial sites. The following grants were made against this previously authorized fund.

University of California, Los Angeles
Los Angeles, CA

$45,000 over **24 months** for a Sloan Industry Studies Fellowship for Gabriel Rossman. **Project Director:** Gabriel Rossman, Assistant Professor/Sociology/CCPR

Carnegie Mellon University
Pittsburgh, PA

$45,000 over **24 months** for a Sloan Industry Studies Fellowship for Rahul Telang. **Project Director:** Rahul Telang, Associate Professor of Information Systems

Columbia University
New York, NY

$45,000 over **24 months** for a Sloan Industry Studies Fellowship for John Eric Taylor. **Project Director:** John Eric Taylor, Assistant Professor/Civil Engineering & Engineering Mechanics

University of Michigan
Ann Arbor, MI

$4,400 over **12 months** for a Site Visit Grant to encourage early career scholars to incorporate direct observation into their research by providing travel support for research-related site visits. **Project Director:** Ryan Kellogg, Assistant Professor

University of Missouri - Columbia
Columbia, MO

$4,950 over **12 months** for a Site Visit Grant to encourage early career scholars to incorporate direct observation into their research by providing travel support for research-related site visits. **Project Director:** Francisco X. Aguilar, Assistant Professor

New York University
New York, NY

$4,600 over **12 months** for a Site Visit Grant to encourage early career scholars to incorporate direct observation into their research by providing travel support for research-related site visits. **Project Director:** Natasha Iskander, Assistant Professor

Officer Grants

Industry Studies Association
Pittsburgh, PA

$13,150 over **36 months** to support and institutionalize a working relationship between INFORMS and the Industry Studies Association through the award of an Industry Studies Best Paper Prize at INFORMS annual conferences. **Project Director:** Frank Giarratani, Department of Economics

Institute for Operations Research and the Management Sciences
Hanover, MD

$84,378 over **36 months** to support and institutionalize a working relationship between INFORMS and the Industry Studies Association through formal academic panels at INFORMS Practitioner conferences. **Project Director:** Mark Doherty, Executive Director

Syracuse University
Syracuse, NY

$20,000 over **6 months** planning support to develop an approach to assessing points of value-capture in land-based, electricity-generating wind-mills. **Project Director:** Jason Dedrick, Associate Professor

Making Municipal Governments More Responsive to Their Citizens

THE FOUNDATION'S PROGRAM to make municipal governments more responsive to their citizens, now ended, had two components. First, to make citizen-informed and citizen-based government performance measurement and reporting widespread, normal and expected. Second, to accelerate the spread of telephone-based or Web-based technologies that enable citizens to make and track direct service requests to their local governments.

Performance measurement and reporting are citizen-informed under the following conditions:

- when the government involves the public in developing measures that citizens care about;
- when the government involves the public in deciding how performance will be reported; and
- when the government obtains and takes seriously feedback from the public on performance reports.

Performance measurement and reporting are citizen-based when done from outside the government, typically by a non-government organization and preferably with the cooperation of the government.

Trustee Grants

Rutgers, The State University of New Jersey

New Brunswick, NJ

$450,306 OVER **24 MONTHS** TO SUPPORT THE CONTINUED GROWTH OF THE PUBLIC PERFORMANCE MEASUREMENT AND REPORTING NETWORK. **PROJECT DIRECTOR:** MARC HOLZER, DEAN

As the Foundation brings to a close its grantmaking in this program to make municipal governments more responsive to their citizens, it aims to leave behind a continuing and flourishing online network that brings together and provides valuable resources to practitioners who are engaged in citizen-based and citizen-informed performance measurement and reporting, academics who teach about and do research in the field, and others.

Funds from this grant support the Network's efforts to grow membership, viewership and online resources; add four additional communities of practice; offer a growing number of webinars; expand its speakers bureau and directory of services; issue a monthly newsletter; consolidate and further expand partnerships; and continue to become the central online address for the performance measurement community. They have a detailed plan that, if successful, will enable them to continue on a self-sustaining basis beyond the end of the grant period.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In March of 2006, the Board of Trustees authorized the expenditure of up to $410,000 to fund planning grants, small projects, and community-building activities aimed at making municipal governments more responsive to their citizens. The following grants were made against this previously authorized fund.

COUNCIL OF STATE GOVERNMENTS
LEXINGTON, KY

$10,000 OVER **6 MONTHS** TO RECRUIT STATE PARTICIPANTS TO THE STATE COMPARATIVE PERFORMANCE MEASUREMENT PROJECT. **PROJECT DIRECTOR:** MICHAEL J. ROBINSON, SENIOR DEPUTY EXECUTIVE DIRECTOR

URBAN INSTITUTE
WASHINGTON, D.C.

$45,000 OVER **9 MONTHS** TO OBTAIN FEEDBACK ON THE USEFULNESS AND SUSTAINABILITY OF STATE COMPARATIVE PERFORMANCE MEASUREMENT REPORTS. **PROJECT DIRECTOR:** HARRY HATRY, DIRECTOR, PUBLIC MANAGEMENT

Officer Grants

University of Nebraska
Lincoln, NE

$46,315 over **12** **months** to conduct an experiment that will advance the theory and practice of citizen-informed performance measurement and reporting. **Project Director:** Alan J. Tomkins, Director

Rutgers University Foundation
New Brunswick, NJ

$123,000 over **36** **months** to provide continuing and final support to CivicPanel. **Project Director:** Gregg Van Ryzin, Associate Professor

SCIENCE & ENGINEERING WORK FORCE

Grants in this program support the development and assembly of objective data and basic facts about the U.S. labor market in science and engineering. As a result of the Foundation's work in this program, the nation's understanding of this work force is expanding. Leading researchers are developing information and analyses on temporary workers, graduate students, postdoctoral students, and part-time or adjunct faculty.

Grantmaking supports creative research on the U.S. work force and labor markets in science and engineering and encourages the development of innovative yet feasible research ideas.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In October of 2007, the Board of Trustees authorized the expenditure of up to $450,000 for small grants designed to expand the pool of active researchers focused on the U.S. science and engineering work force. The following grants were made against this previously authorized fund.

HEALTH RESEARCH, INC.
MENANDS, NY

$45,000 OVER **12 MONTHS** FOR RESEARCH ON INTERSTATE MIGRATION OF FOREIGN SCIENTISTS AND ENGINEERS. **PROJECT DIRECTOR:** MARTIN D. SORIN, SPECIAL ADVISOR TO THE DIRECTOR

UNIVERSITY OF MICHIGAN
ANN ARBOR, MI

$45,000 OVER **24 MONTHS** FOR RESEARCH ON SOCIAL, ECONOMIC, AND DEMOGRAPHIC FACTORS AFFECTING THE SCIENTIFIC LABOR FORCE. **PROJECT DIRECTOR:** YU XIE, RESEARCH PROFESSOR

PURDUE UNIVERSITY
WEST LAFAYETTE, IN

$44,703 OVER **14 MONTHS** FOR RESEARCH ON EXPLORING PARTICIPATION IN ENGINEERING COOPERATIVE EDUCATION AS A LEADING INDICATOR OF ENGINEERING LABOR MARKET DYNAMICS. **PROJECT DIRECTOR:** MATTHEW W. OHLAND, ASSOCIATE PROFESSOR

Reed College
Portland, OR

$38,478 over **12 months** for research on the influence of network structure on sex disparities in scientific collaboration: 'Commerical Innovation in the Life Sciences.' **Project Director:** Kjersten Bunker Whittington, Assistant Professor

University of Kansas
Lawrence, KS

$38,952 over **12 months** for research on the impact of science & engineering immigration on the U.S. economy. **Project Director:** Donna Ginther, Associate Professor

Officer Grants

Association of American Colleges and Universities
Washington, D.C.

$20,000 over **36 months** to convene a board of scholarly advisors who will prepare and disseminate planning papers on the future of Project Kaleidoscope's work on STEM education. **Project Director:** Carol Geary Schneider, President

Georgia State University
Atlanta, GA

$49,964 over **18 months** for partial support for a new book, "The Economics of Science." **Project Director:** Paula E. Stephan, Project Director

University of Michigan
Ann Arbor, MI

$50,000 over **12 months** to fund research on effects of highly-skilled immigrants on US science and engineering labor markets. **Project Director:** John Bound

University of Michigan
Ann Arbor, MI

$50,000 over **18 months** to support the beginning of a Longitudinal Study of Early-Career Scientists' Professional Accomplishments and Personal Lives. **Project Director:** Robert J. Willis

WORKING LONGER

OVER THE NEXT 20 YEARS, the U.S. population aged 62 and older is projected to increase from 45 million to 80 million. This new research program has evolved out of prior Foundation grantmaking in the Workplace, Work Force and Working Families program and is aimed at increasing understanding of the issues facing older workers. Given the salience of flexibility to older workers there will be some sustained focus on workplace flexibility.

Initial grantmaking in this program will focus on developing a solid research agenda regarding aging and work in the U.S., identifying high-value research opportunities, engaging a network of researchers interested in aging and work issues, conducting case studies in firms across various industries, assessing the economic impacts of work, retirement, and savings decisions by older workers, and developing accessible high-quality data for use by researchers.

OFFICER GRANTS

AMERICAN COUNCIL ON EDUCATION
WASHINGTON, D.C.

$49,900 OVER **4 MONTHS** TO SUPPORT AN EXPLORATORY PROJECT ON THE LATTER STAGES OF FACULTY CAREERS. **PROJECT DIRECTOR:** CLAIRE A. VAN UMMERSEN, SENIOR ADVISOR

WORKPLACE, WORK FORCE, & WORKING FAMILIES

OVER THE LAST 50 YEARS, a profound and largely unexamined social and economic change took place in America: the rise of middle-class dual-earner households. Grantmaking in the Workplace, Work Force, and Working Families program has aimed to address this monumental change on three fronts: by creating a rigorous new interdisciplinary field of work-family scholarship, by educating the public about the results of this scholarship, and by establishing the National Workplace Flexibility Initiative with the aim of making workplace flexibility a compelling national issue and standard of the American workplace.

Since the program's beginnings in 1994, the Foundation has made grants totaling $120 million in pursuit of these goals. The Foundation created six centers on working families at leading universities across the country to encourage scholars to publish, collaborate, share research across disciplinary boundaries, and educate the next generation of work-family researchers. Other grants supported the creation of an online network devoted to making work-family scholarship readily accessible to academics, policymakers, business leaders, and the public. Still others sought to encourage voluntary employer efforts to adopt flexible workplace practices by creating national awards programs recognizing local businesses for instituting innovative and effective flexible work arrangements and universities for their effective and imaginative faculty career flexibility programs. Other grants supported the nonpartisan analysis of legal barriers and disincentives to voluntary adoption of flexible work arrangements and the development of a bipartisan conversation in Washington around workplace flexibility issues.

Today, workplace flexibility is part of the modern lexicon and is increasingly recognized by employees, companies, and federal policymakers for its ability to improve lives and achieve business objectives. Work-family is now a recognized academic field. Newspapers, magazines, and radio programs feature recurring columns, articles, and segments on issues facing working families. With the aims of the program largely achieved, grantmaking will end in 2010.

FAMILIES AND WORK INSTITUTE, INC.

New York, NY

$2,838,785 OVER **29 MONTHS** PROVIDE A FINAL GRANT FOR WHEN WORK WORKS, A GRASSROOTS ORGANIZATION THAT WORKS WITH LOCAL BUSINESSES TO INCREASE VOLUNTARY ADOPTION OF WORKPLACE FLEXIBILITY PRACTICES. **PROJECT DIRECTOR:** ELLEN GALINSKY, PRESIDENT

The National Workplace Flexibility Initiative was initiated in 2003, as a result of Sloan-supported research that showed that today's diverse work force, increasingly comprised of working parents and aging workers, greatly values having more flexibility, i.e., more control over the time and timing of their work. Families and Work Institute (FWI) is the anchor grant in Sloan's efforts to increase voluntary employer adoption of workplace flexibility.

FWI has effectively grown a grassroots movement to promote workplace flexibility as a strategic means of achieving business goals. This grant will enable FWI to extend its efforts regionally and nationally and to develop and begin to implement its sustainability plan. To that end, FWI will emphasize regional and state expansion of the awards; it will develop an at-large application for the Sloan Awards so that the awards program will be available nationwide; and it will continue to find ways through the business press, conferences, and its Web site to educate employers about the strategic use of flexibility to achieve business goals.

GEORGETOWN UNIVERSITY

Washington, D.C.

$341,435 OVER **16 MONTHS** TO SUPPORT A FINALE CONFERENCE TO MARK THE ACHIEVEMENTS OF THE WORKPLACE, WORK FORCE, AND WORKING FAMILIES PROGRAM. **PROJECT DIRECTOR:** KATHLEEN ELLEN CORRIGAN, CO-DIRECTOR FOR WORKPLACE FLEXIBILITY

This grant will support a finale conference to mark the end of the Workplace, Work Force & Working Families program, celebrate its accomplishments,

and set the stage for work remaining to be done. To that end, Georgetown University's Workplace Flexibility 2010 plans to host a 1½-day conference in November 2010. The conference will begin with a reception, to take place at the Corcoran Gallery of Art, that will feature employers who have won the Alfred P. Sloan Award for Business Excellence in Workplace Flexibility. Georgetown intends to invite leaders from multiple domains, including labor, the military, business, and government. A number of products will be prepared for use at the dinner, conference, and post-conference events. These include:

- Eleven research-based papers, which will be published on the Internet and promoted to relevant journalists, bloggers, and others interested in workplace flexibility;
- A special issue of an academic journal comprised of these papers;
- Two videos, which will be screened at the conference;
- A graphic timeline of milestones marking advances in research, policy, and business practices relating to work-family issues will be developed and displayed at the dinner and conference and put on the following Web site, along with the research papers;
- A "Workplace Flexibility" Web site that will serve as a portal to all relevant Web sites on workplace flexibility or related issues;
- A monograph addressing the unique strategic approach to social change developed and executed by this Sloan program.

GEORGETOWN UNIVERSITY

Washington, D.C.

$2,589,612 OVER **24 MONTHS** TO SUPPORT A FINAL GRANT TO WORKPLACE FLEXIBILITY 2010. **PROJECT DIRECTOR:** KATHLEEN ELLEN CORRIGAN, CO-DIRECTOR FOR WORKPLACE FLEXIBILITY

Whereas the Families and Work Institute successfully anchors our efforts with business to increase voluntary employer adoption of workplace flexibility, the Georgetown University's Workplace Flexibility 2010 (WF 2010) and the New America Foundation (NAF) anchor our activities in Washington to inform and

educate policymakers and regulatory agencies on issues related to workplace flexibility. When the Foundation funded the creation of WF2010 in 2003, the overall notion of workplace flexibility was not even on the D.C. radar screen. At that time, the term 'workplace flexibility' was not in use and there were only two related policy ideas in play, paid leave and comp time, and both were in stalemate. In the last several years, WF2010 has generated a dramatic number of new ideas, particularly regarding Flexible Work Arrangements (FWAs). Through its meetings with top management and plaintiff lawyers, its bipartisan Congressional briefings, and the Senate Working Group on Workplace Flexibility, WF2010 has built a broad and deep coalition of major Washington groups, which recognize and support the relevance of workplace flexibility for their particular constituencies. This final grant will support Georgetown's WF2010's efforts to achieve its overall goal of positioning workplace flexibility as a sufficiently compelling issue so that Members of Congress, the Obama Administration, the federal government as employer, and a core group of constituency groups will move forward with consensus-based, bipartisan and viable policy ideas. In all of its efforts, WF2010 will work with and leverage the efforts of its partner, the New America Foundation.

HARVARD UNIVERSITY

Cambridge, MA

$221,575 OVER **30 MONTHS** TO SUPPORT RESEARCH AND A BOOK ON THE ECONOMIC HISTORY OF CAREER AND FAMILY FOR COLLEGE-EDUCATED WOMEN. **PROJECT DIRECTOR:** CLAUDIA GOLDIN, HENRY LEE PROFESSOR OF ECONOMICS

With support from this grant, Professor Goldin will conduct original research on career/family tradeoffs, including an assessment of why some professions, occupations, and sectors are better at supporting working parents' abilities to manage the demands of work and career than are others, and prepare a book reporting the findings of her research.

NEW AMERICA FOUNDATION

Washington, D.C.

$250,000 OVER **34 MONTHS** FINAL GRANT TO THE NEW AMERICA FOUNDATION SUPPORTING WORKPLACE FLEXIBILITY 2010. **PROJECT DIRECTOR:** DAVID GRAY, DIRECTOR, WORKPLACE AND FAMILY PROGRAM

The New America Foundation has been funded by the Sloan Foundation since 2006 to complement the efforts of Georgetown's Workplace Flexibility 2010 (WF2010) in advancing workplace flexibility policy ideas in Washington, D.C. This is the Foundation's final grant to the New America Foundation for its activities supporting WF2010. Over the next two years, New America will focus on six activities that will be pursued in concert with Georgetown's WF2010 to advance workplace flexibility policy ideas. First, it will work with the Obama Economic Recovery Team to ensure that the federal economic recovery plans include workplace flexibility. Second, it will work to include workplace flexibility as an issue in the 2010 Midterm Congressional elections. Third, it will engage House Republicans, in order to gain support for workplace flexibility within the GOP caucus. Fourth, NAF will continue to build faith-based support for workplace flexibility. Fifth, NAF will work with Georgetown on events in strategic states, such as California, that highlight state-level efforts regarding workplace flexibility. Finally, NAF will work to further Department of Labor's regulations and guidance in favor of workplace flexibility.

GRANTS MADE AGAINST PRIOR AUTHORIZATIONS

In June of 2008, the Board of Trustees authorized the expenditure of no more than$1,250,000 for the Alfred P. Sloan Awards for Faculty Career Flexibility. Administered by the American Council on Education, these $200,000 awards are given on a competitive basis to liberal arts colleges in recognition of their leadership and accomplishments in implementing groundbreaking policies and practices supporting career flexibility for tenured and tenure-track faculty. Two smaller, $25,000 awards, are given in recognition of innovative faculty career flexibility packages. Award funds are to be used to accelerate the implementation and use of career flexibility policies and practices. The following grants were made against this previously authorized fund.

ALBRIGHT COLLEGE
READING, PA

$200,000 OVER **25 MONTHS** TO IMPLEMENT A FACULTY FLEXIBILITY ACCELERATOR PROGRAM IN ASSOCIATION WITH THE ALFRED P. SLOAN AWARDS FOR FACULTY CAREER FLEXIBILITY IN THE ACADEMY. **PROJECT DIRECTOR:** ANDREA CHAPDELAINE, PROVOST/VICE PRESIDENT

BOWDOIN COLLEGE
BRUNSWICK, ME

$200,000 OVER **25 MONTHS** TO IMPLEMENT A FACULTY FLEXIBILITY ACCELERATOR PROGRAM IN ASSOCIATION WITH THE ALFRED P. SLOAN AWARDS FOR FACULTY CAREER FLEXIBILITY IN THE ACADEMY. **PROJECT DIRECTOR:** CRISTLE COLLINS JUDD, DEAN FOR ACADEMIC AFFAIRS

Dickinson College
Carlisle, PA

$25,000 over **25 months** Disbursement of Innovation Award to winning applicant for the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** Walter Chromiak, Associate Provost

Middlebury College
Middlebury, VT

$200,000 over **25 months** to implement a faculty flexibility accelerator program in association with the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** Jim Ralph, Dean for Faculty Development & Research

Mount Holyoke College
South Hadley, MA

$200,000 over **25 months** to implement a faculty flexibility accelerator program in association with the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** Sarah Sutherland, Associate Dean of Faculty

Oberlin College
Oberlin, OH

$200,000 over **25 months** to implement a faculty flexibility accelerator program in association with the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** Sean Decatur, Dean

Smith College
Northampton, MA

$25,000 over **13 months** disbursement of Innovation Award to winning applicant for the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** Maureen Mahoney, Dean of the College

Washington and Lee University
Lexington, VA

$200,000 over **25 months** to implement a faculty flexibility accelerator program in association with the Alfred P. Sloan Awards for faculty Career Flexibility in the Academy. **Project Director:** June R. Aprille, Provost

In October of 2007, the Board of Trustees authorized the expenditure of up to $450,000 for a series of Alfred P. Sloan Work-Family Career Development Grants. These $45,000 grants, administered by an independent panel of experts, are awarded to young researchers of outstanding promise who are working in the field of work-family scholarship. The following grants were made against this previously authorized fund.

Bowling Green State University
Bowling Green, OH

$45,000 over **26 months** for a Sloan Work-Family Early Career Development Grant. **Project Director:** Catherine Kenney, Assistant Professor, Sociology

George Mason University
Fairfax, VA

$45,000 over **26 months** for a Sloan Work-Family Early Career Development Grant. **Project Director:** Eden King, Assistant Professor, Department of Psychology

University of Michigan
Ann Arbor, MI

$45,000 over **24 months** for a Sloan Work-Family Early Career Development Grant. **Project Director:** Sarah Burgard, Professor, Department of Sociology

Northeastern University
Boston, MA

$45,000 over **24 months** for a Sloan Work-Family Early Career Development Grant. **Project Director:** Jamie Jocelyn Ladge, Assistant Professor, Management and Organizational Development

University of Pennsylvania
Philadelphia, PA

$45,000 over **24 months** for a Sloan Work-Family Early Career Development Grant. **Project Director:** Betsey Stevenson, Assistant Professor of Business and Public Policy

Officer Grants

Boston College
Chestnut Hill, MA

$30,000 over **5 months** to support development of a business plan for the Sloan Network on Work and Family Research. **Project Director:** Judith Casey, Director, Sloan Work and Family Research Network

University of California, Berkeley
Berkeley, CA

$44,714 over **12 months** to support the completion of a book on family formation and career formation in the academy. **Project Director:** Mary Ann Mason, Co-Director, Berkeley Law Center of Health, Economic, and Family Security

Urban Institute
Washington, D.C.

$75,492 over **6 months** to support an analytic review article of existing research on older workers to identify what is known and unknown regarding the experiences of and obstacles to working longer in the United States. **Project Director:** Richard Johnson, Senior Fellow

DIGITIZATION & THE DISSEMINATION OF KNOWLEDGE

THIS PROGRAM CONSISTS of three interconnected components: digitization and universal access; knowledge-generating communities; and the economics of information goods.

Grantmaking in this program has traditionally aimed to support the digitization of scientific and cultural knowledge, and to preserve the openness and accessibility of all such knowledge for the widest public benefit. Major grants have gone to the Internet Archive, with its huge scanning and storage capacity, and to the Open Content Alliance, a consortium of over 100 universities, libraries, and scientific and cultural organizations committed to placing all their scanned materials into a common open digital repository. A $2 million grant to the Library of Congress supported its digitization efforts and established it as a regional scanning center for the Smithsonian and other federal institutions. One million public domain books have been digitized under open content principles and are available on the Internet Archive. In 2008, a $3 million grant went to improve the accuracy and organizational capacity of Wikipedia, the largest encyclopedia in history, the fifth largest Web site in the world, and a model of collaborative open source knowledge on the Web. Major grants in 2009 supported the establishment of coordinating institutions to facilitate cooperation among stakeholders in digitization efforts, and for the creation of a digital library on the history of medicine.

Grantmaking focused on knowledge-generating communities aims to create new, interactive communities of people with similar interests who can share knowledge centered around specific fields of social and natural science, and who can use this knowledge as a spur for deeper interactions and new discoveries. A 2009 grant to the Public Library of Science (PLoS) will help launch prototype hubs around scientific and medical subjects. Hubs are collections of materials built around research articles drawn from multiple sources, along with the tools needed to discover, organize, filter, and mine information of interest to individuals and scientific communities.

Other grantmaking in this program supports research to develop a deeper understanding of the economics of information goods. Topics of interest

include the legal and regulatory practices that influence the preservation of information; public policies supporting efficient and fair financial arrangements to promote the creation and public distribution of knowledge; and theoretical and empirical research aimed at understanding the economics of markets for information goods. Recent grants have supported the launch of a new project to study the impact of copyright policy on innovation.

Trustee Grants

National Academy of Sciences

Washington, D.C.

$250,000 over **15 months** to fund a project on The Impact of Copyright Policy on Innovation in the Digital Era. **Project Director:** Stephen A. Merrill, Senior Director, Board on Science, Technology & Economic Policy

The debate surrounding copyright has been informed by more heat than light. This grant to the National Academy of Sciences (NAS) aims to bring a more rational and systematic approach to discussions of copyright by expanding research in this area and by identifying a community of researchers with interest and knowledge of copyright to inform broader policy discussions. Efforts would begin by commissioning three background papers: 1) a review of existing literature on the costs and benefits of copyright and related Intellectual Property Rights (IPR) policies; 2) A baseline estimate of the magnitude and categories of U.S. economic activity affected by copyright together with a discussion of the range of business models dependent on its protection; and 3) a theoretical analysis of how copyright might stimulate or inhibit innovation, collaboration, and creativity.

The project will also create a public Web site to post papers, comments, and other discussion items regarding copyright. NAS will also host a day and a half workshop to address and prioritize a range of research topics and methodologies.

Open Knowledge Commons, Inc.

Boston, MA

$1,528,170 over **24 months** to create the first phase of a universal open digital library on the history of medicine from the collections of five leading institutions. **Project Director:** Maura Marx, Executive Director

The Foundation helped create the Open Knowledge Commons (OKC) in order to have more community-building efforts in Sloan's open digitization initiatives and to catalyze new large-scale collaborations among libraries. This grant is the first major digitization effort from OKC, and involves creating an open digital library focusing on the history of medicine as a theme and drawing on the participation of five major institutions: the National Library of Medicine (NML); the Francis A. Countway Library of Medicine at Harvard Medical School; the Harvey Cushing/John Hay Whitney Medical Library at Yale University; the Augustus C. Long Health Sciences Library at Columbia University; and the New York Public Library. Following an initial phase of digitization of public domain monographs, they would also create a de-duplication database to prevent redundancy of efforts, a tool based on that used by the successful Biodiversity Heritage Library (BHL). The BHL is a model for this theme-based approach to scanning.

The history of medicine is a rich discipline intellectually that cuts across many fields. It is estimated that the entire field numbers about 1,500,000 volumes, of which half (750,000) are pamphlets, including dissertations, one third (500,000) are serial volumes, and the remaining sixth (250,000) are monographs. This effort would digitize 30,000 monographs or just over 10% of the existing collection and would be a collaborative venture taking into account the scholarly needs and sensitivities of the academic and library communities which have not always felt well-served by existing digitization efforts.

Open Knowledge Commons, Inc.

Boston, MA

$330,000 over **12 months** to support the Open Knowledge Commons in uniting the library community and the public behind the implementation of a universal digital library. **Project Director:** Maura Marx, Executive Director

This grant to the Open Knowledge Commons (OKC) will fund activities to build the organization's base and public profile and to develop a national digital strategy that will appeal to policymakers as well as libraries.

Previous Foundation grants to help create the Open Knowledge Commons out of a recognition for the need to strengthen existing partnerships and forge new alliances with libraries, archives, funders, legislators and the public behind a universal digital library. This grant will provide one year of support to help consolidate and expand the role of OKC in developing a blueprint for a national strategy for book digitization that will be useful to policy makers as well as the library community and to create demonstration projects that showcase the benefits of such a blueprint. OKC is the only organization devoted exclusively to this vision and it fills a very important gap.

Grants Made Against Prior Authorizations

In June of 2009, the Board of Trustees authorized the expenditure of up to $250,000 for small grants to facilitate public use of demographic and redistricting data. The following grants were made against this previously authorized fund.

The Brookings Institution
Washington, D.C.

$96,400 over **9 months** to advise and oversee the development of software that facilitates public use of demographic and redistricting data. **Project Director:** Michael McDonald, Nonresident Senior Fellow, Governance Studies

George Mason University
Fairfax, VA

$124,095 over **9 months** to demonstrate the feasibility of redistricting software accessibility through a web-browser. **Project Director:** Michael McDonald, Nonresident Sernior Fellow, Governance Studies

Officer Grants

Public Library of Science
San Francisco, CA

$125,000 over **12 months** to launch online open access article collections for the Census of Marine Life and to prototype hubs as a new way to organize scientific literature for scholarly and public benefit. **Project Director:** Peter Jerram, Chief Executive Officer

Select National Issues

BIOSECURITY

THIS PROGRAM, INITIATED IN 2000 and with grants totaling over $44 million, aims to bring attention and resources to the issues and challenges posed by biological attacks and epidemics, improve U.S. and world biosecurity, and reduce the threat of bioterrorism. Initial grantmaking focused on preparedness, both for individual citizens and for organizations. Major grants supported a number of important projects, including the development of the U.S. Department of Homeland Security's Ready.gov initiative and support of the influential Center for Biosecurity of the University of Pittsburgh Medical Center. Other grantmaking addressed issues surrounding dangerous research and the potential misuse of scientific knowledge, methods, and materials in the life sciences. In this arena, the Foundation funded a number of significant projects, including the landmark Fink committee report: "Biotechnology Research in an Age of Terrorism," the U.S. National Academies' International Biosecurity Project, and the World Health Organization's program to raise awareness of the potential for misuse of biotechnology research. Major grants in 2009 went to a project examining terrorist efforts to use anthrax in Tokyo, an analysis of the institutional response to the H1N1 influenza pandemic, and to efforts to further engage the biotechnology industry in biosecurity issues.

Once an understudied area, U.S. government funding strictly for biodefense has grown from $50 million in 2000 to a $1.09 billion in 2010. With major funding now available from other sources, grantmaking in this program will end in 2010.

TRUSTEE GRANTS

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

New York, NY

$374,041 OVER **12 MONTHS** TO DEVELOP GUIDANCE TO ASSURE MEDICAL, INDUSTRIAL, AND ACADEMIC NUCLEAR FACILITIES' USE OF RADIOACTIVE MATERIALS IS ADEQUATELY SECURE AND RESILIENT TO MAN-MADE AND NATURAL HAZARDS. **PROJECT DIRECTOR:** JAMES WILLIAM JONES, SENIOR FELLOW

Radioactive materials are used in hospitals, universities, and in many industries including the food and construction industries. These radioactive sources cannot be used for nuclear weapons, but it is important to keep them safe and secure. The Nuclear Regulatory Commission (NRC) was created to enable the nation to safely use radioactive materials for beneficial civilian purposes while ensuring that people and the environment are protected. The grant to the American Society of Mechanical Engineers (ASME) addresses that gap. ASME proposes a one year program to assure medical, industrial and academic nuclear (MIAN) facilities' use of radioactive material is adequately secured and resilient to man-made and natural hazards. The objective of the proposed work is to develop a sector-specific risk assessment and management methodology, i.e., a Sector Specific Guidance (SSG) document, which is consistent with the National Infrastructure Protection Plan issued by the U.S. Department of Homeland Security (DHS). ASME plans to develop, test and field-verify a fast, simple screening methodology to differentiate among MIAN facilities based upon potential for serious risks and provide a streamlined process for meeting NRC security requirements for all facilities. While the NRC has developed regulations concerning MIAN materials, they have not provided specific, systematic procedures for meeting these regulatory requirements. DHS has not been granted the regulatory authority to require and enforce detailed risk assessment and risk management procedures. Successful completion of the proposed project will increase the security, resilience and awareness of current MIAN sites, while reducing the likelihood of misappropriated MIAN materials being used in off-site attacks. This will reduce the risk of fatalities, serious injuries, and financial and economic losses to the MIAN sites, to the communities in which they operate, and to the potential targets of low-grade nuclear attacks. The methodology document will provide users with a uniform, consistent procedure for meeting current security regulations while identifying, quantifying, and reducing the risk of radioactive material hazards. The proposed activities to assure the safe and secure use of radioactive materials is a conceptual extension of the Foundation's work in biosecurity and preparedness, where the Foundation has worked closely with universities and industry to improve biosafety and biosecurity.

Center for a New American Security, Inc.

Washington, D.C.

$259,206 over **15 months** to further examine Aum Shinrikyo's attempts to use anthrax to attack Tokyo. **Project Director:** Richard J. Danzig, Former Secretary of the Navy

In the mid 1990's, the cult Aum Shinrikyo successfully attacked the Tokyo subway system with sarin, a chemical weapon. Aum also tried to attack Tokyo with anthrax, but failed for a variety of reasons. In 2007, the Foundation provided a small grant to the Honorable Richard Danzig, former Secretary of the Navy, at the Center for a New American Security (CNAS), to examine Aum's attempts to use anthrax to attack Tokyo. The interviews illuminated how Aum probably obtained anthrax vaccine strains, how it appears to have used modern biotechnology to combine these innocuous strains to obtain a virulent pathogen, why weaponization of that pathogen and the cult's use of an aerosol distribution method failed to be effective, and how and why Aum conceived this project and later abandoned it. This led to the hypothesis that Aum-due to fears of discovery by outsiders-decided to acquire a vaccine strain, actually two vaccine strains, and then used low cost equipment to combine the benign stains (each of which lacked a different potent plasmid) into a potent one (that contained both plasmids required for lethality). This is at odds with the more prevalent analysis that Aum was unskilled or that its anthrax program was subjected to sabotage (either internally or externally). This grant will enable CNAS to more firmly establish (or refute) insights drawn from the initial work and to broaden understanding of how terrorist groups function. It is particularly valuable to interview Aum Shinrikyo members now to build on relationships established by Danzig under the previous grant and because several members will exhaust their final appeals and face execution in the year ahead. The U.S. Government is providing partial support for the project by contributing the time and travel costs for two staff scientists who are anthrax experts from the National Biodefense Analysis and Countermeasures Center.

University of Minnesota

Minneapolis, MN

$498,319 over **12 months** To provide full documentation and a comprehensive review of all aspects of pandemic influenza vaccine

PREPAREDNESS AND RESPONSE, AND A BLUEPRINT FOR FUTURE PANDEMIC INFLUENZA VACCINE PREPAREDNESS. **PROJECT DIRECTOR:** MICHAEL J. OSTERHOLM, DIRECTOR

An effective influenza vaccine is the primary tool public health has to reduce the human illness burden caused by influenza. For more than five years, significant planning activities around pandemic vaccine production, allocation and distribution have occurred. This grant will support an *ex post* evaluation of how the U.S. has handled the H1N1 flu situation and see what lessons can be learned to improve responses the next time around. Led by Michael Osterholm, a leading figure in the field of infectious diseases and public health, this grant will support a one-year project to provide a comprehensive documentation and review of all aspects of pandemic influenza vaccine preparedness and response based on the events of the current H1N1 vaccine effort and, on the basis of that documentation and review, to provide a blueprint for future pandemic influenza vaccine preparedness and identify applicable lessons for other mass vaccination campaigns. Osterholm has assembled an impressive Expert Advisory Group that includes current and former vaccine industry executives, former government officials, leaders in public health, a risk communication specialist, and influenza researchers. The strength, diversity, and commitment of this group is key because the project will require the cooperation of many different groups, including vaccine manufacturers, public health practitioners, and senior U.S. government officials. This project provides an important opportunity to elucidate what went wrong and what was done correctly in the current pandemic.

NATIONAL ACADEMY OF SCIENCES

Washington, D.C.

$150,000 OVER **12 MONTHS** TO PROVIDE PARTIAL SUPPORT FOR "TRENDS IN SCIENCE AND TECHNOLOGY RELEVANT TO THE BIOLOGICAL WEAPONS CONVENTION: AN INTERNATIONAL WORKSHOP". **PROJECT DIRECTOR:** JO L. HUSBANDS, SCHOLAR/SENIOR PROJECT OFFICER

The Foundation has supported biosecurity work at the National Academies since 2001. The Academies have done some excellent work since that time. They produced the landmark report "Biotechnology Research in an Age of Terrorism," also known as the Fink Report. With Sloan support, the Academies promoted implementation of the Fink Report's recommendations. In 2004, the Academies created the International Biosecurity Project. The Project's overarching goal is to develop and promote more effective

international strategies to reduce the risk that advances in life sciences research could be misused for biological weapons or bioterrorism. This terminal grant to the National Academies will support their ongoing international biosecurity activities, enabling them to continue their good work as they identify other sources of funding.

Grants Made Against Prior Authorizations

In October of 2007, the Board of Trustees authorized the expenditure of up to $300,000 to fund short-term projects and the planning stages of promising larger projects to reduce the threat of bioterrorism. The following grants were made against this previously authorized fund.

American Association for the Advancement of Science
Washington, D.C.

$45,000 over **6 months** to support a workshop to educate the scientific and security communities about the risk of biological research. **Project Director:** Kavita Berger, Project Director

Officer Grants

Center for Security Policy, Inc
Washington, D.C.

$18,000 over **4 months** to provide partial support for a conference on the "World at Risk: The Report of the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism". **Project Director:** Amanda Bowman, New York Director/Conference Director

University of Minnesota
Minneapolis, MN

$20,000 over **3 months** to support a three-month pilot study to monitor and document vaccine manufacturing, allocation, distribution, and impact during the 2009 novel H1N1 influenza pandemic in the United States of America. **Project Director:** Michael J. Osterholm, Director

National Academy of Sciences
Washington, D.C.

$23,585 over **10 months** to support a planning meeting of delegates and staff from the science and engineering academies of the U.S., U.K., and China to organize three symposia on synthetic biology. **Project Director:** Anne-Marie Mazza, Director, Committee on Science, Technology, and Law

Partnerships for Global Security
Washington, D.C.

$125,000 over **8 months** to engage the private biotechnology sector in biosecurity. **Project Director:** Kenneth Luongo, President

ENERGY & ENVIRONMENT

GRANTMAKING IN THIS SMALL INTERDISCIPLINARY PROGRAM looks for unique opportunities to expand understanding of the economic, technological, organizational, regulatory, national security, and environmental consequences of energy production and consumption. Grantmaking in this program has supported innovative research on the future of nuclear power, the future of coal, carbon dioxide capture and sequestration, and the future of solar energy. Major grants to MIT led to the publication of two influential reports on nuclear power and coal: The Future of Nuclear Power (2003), and The Future of Coal (2007). A third grant to MIT in 2008 focuses on economic, technological, and institutional issues associated with the use of solar energy to generate electricity and a report on the results of this research is scheduled to be released in 2010. In 2009, Foundation grants went to support projects to explore strategies for the expansion of nuclear power around the world that ensure that nuclear facilities are built and operated safely and effectively contain the risks of nuclear weapons proliferation, and to examine the feasibility of extending the life of existing nuclear plants beyond 60 years. Grants to Resources for the Future supported research on the measurement of carbon sequestered in forests and to support open access to information necessary to evaluate the impacts of a cap and trade system for greenhouse gases if and when such a system is put in place in the U.S. A grant to the Council on Foreign Relations supported papers and a workshop on energy security issues. Related research on consumer decision making about energy efficiency opportunities is being supported as part of the Foundation's behavioral economics program. In 2010, the Foundation will continue to look for unique research opportunities in this area, including a focus on exploring the economic and environmental consequences of new discoveries of natural gas and of new techniques for its extraction.

AMERICAN ACADEMY OF ARTS AND SCIENCES

Cambridge, MA

$302,009 OVER **26 MONTHS** TO IDENTIFY AND PROMOTE MEASURES THAT WILL LIMIT THE SECURITY AND PROLIFERATION RISKS INHERENT IN THE GLOBAL EXPANSION OF NUCLEAR POWER. **PROJECT DIRECTOR:** STEVE MILLER, DIRECTOR, INTERNATIONAL SECURITY PROGRAM, HARVARD UNIVERSITY

This grant provides support to the Global Nuclear Future Initiative of the American Academy of Arts and Sciences. The goal of this project is to identify and promote measures that will limit the security and proliferation risks inherent in the global expansion of nuclear power. Two important features of the project are that it has deeply engaged the U.S. nuclear utilities into these discussions for the first time and it is working hard to understand and incorporate the perspectives of non-nuclear weapons states, especially those that aspire to launch new nuclear power programs.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Washington, D.C.

$250,000 OVER **12 MONTHS** TO SUPPORT THE CARNEGIE ENDOWMENT'S PROJECT TO DEVELOP A VOLUNTARY CODE OF CONDUCT FOR NUCLEAR REACTOR VENDORS. **PROJECT DIRECTOR:** GEORGE PERKOVICH, DIRECTOR, NUCLEAR POLICY PROGRAM

There is wide agreement in the world that the rules governing the use of nuclear technology and materials, especially those associated with nuclear power reactors and their fuel cycle, need major revision to minimize the safety, security and proliferation risks intrinsically associated with these technologies and materials. However, there is no consensus among governments or others on what such revised rules should allow and constrain. Governments have been slow to move and international organizations cannot move ahead of what their member governments will agree to. This grant will support the Carnegie Endowment for International Peace and its efforts to work with the world's nuclear reactor vendors, including notably vendors from

Russia, China, and Korea, as well as from the United States, Europe, Japan and Canada, to draft a voluntary Code of Conduct.

Council on Foreign Relations

New York, NY

$100,286 over **8 months** To fund a workshop on Reassessing Energy Security related to oil and gas. **Project Director:** Michael Levi, Director, Program on Energy Security and Climate Change

This grant to the Council on Foreign Relations will provide support for a workshop on energy security related to oil and gas. The workshop will have three important features:

- It will go beyond the platitudes and misconceptions that often dominate discussions of this subject;
- It will result in a well-considered research agenda for this field that could guide future grantmaking;
- It will make a special effort to involve young scholars and policy analysts (meaning those under 40) from a diverse set of academic and professional backgrounds as a modest first step in ensuring that new, fresh blood is brought into the field.

Officer Grants

American Society of Mechanical Engineers

New York, NY

$75,000 over **8 months** to support a workshop to determine whether it is feasible to extend the life of existing nuclear power plants to sixty years and beyond. **Project Director:** James William Jones, Senior Fellow

Arius Association

Baden,

$20,000 over **12 months** to fund promotion of multinational high-level waste repositories outside of Europe. **Project Director:** Charles McCombie, Chief Executive Officer

Civic Initiatives

THIS PROGRAM RESPONDS TO UNIQUE OPPORTUNITIES to benefit New York City that are not related to other Foundation programs. Grantmaking in 2009 included support for InsideSchools.org, an online resource providing the public with detailed qualitative and quantitative information about New York City schools; an initiative to discuss strategies for nurturing mathematical talent among New York City students; and funds to engage a hundred New York City math and science teachers in a science education initiative.

Officer Grants

Advocates for Children of New York, Inc.
New York, NY

$125,000 over **12 months** to provide valuable quantitative and qualitative information about New York Public Schools at a sustainable cost. **Project Director:** Kim Sweet, Executive Director

Manhattan Institute for Policy Research, Inc.
New York, NY

$18,000 over **6 months** to fund an infrastructure working session at the "Thinking Big, New York and London" conference to be convened in New York in September 2009. **Project Director:** Hope Cohen, Deputy Director, Center for Rethinking Development

New York Academy of Sciences
New York, NY

$20,000 over **12 months** to provide partial support to actively engage ca. 100 science/math teachers and administrators from the seven schools of 2009 Sloan Awardees for Excellence in the Teaching of Science and Mathematics as core participants in planned NYC Science Education initiative. **Project Director:** Stacie Bloom, VP & Scientific Director

The Philanthropic Initiative, Inc.
Boston, MA

$25,300 over **12 months** to identify, analyze, and discuss strategies for nurturing mathematical talent among New York City public school students who might not traditionally have opportunities to realize their full mathematical potential. **Project Director:** Joanne Duhl, Vice President

Philanthropic Research, Inc.

Williamsburg, VA

$5,000 over **12 months** to support completion of the Form 990 Project. **Project Director:** Kelly Ann Whalen, Development Director

Other Grants

The Foundation occasionally makes grants outside its normal grantmaking programs when a unique opportunity arises to benefit society or advance other Foundation aims. The following grants made in 2009 do not fall under existing Foundation programs.

Trustee Grants

Business History Conference

Wilmington, DE

$400,000 over **99 months** to establish a Ralph Gomory Prize in honor of Ralph Gomory for his 18 years of outstanding leadership of the Alfred P. Sloan Foundation. **Project Director:** Roger Horowitz, Secretary-Treasurer

This grant to the Business History Conference will establish a prize to honor Ralph Gomory. The Ralph Gomory Prize will recognize historical work focused on the effects that business enterprises have on the economic conditions of a country in which they operate. Beginning in 2011, two prizes of $5,000 each will be awarded annually, one for a book and the second for an article, and may be for work published in the two years prior to the year of the award. The grant will be separated into an endowment and an advertising fund intended to be used up in the early years of the award to enhance its visibility and to generate nominations. The endowment portion of the gift shall comprise at least 85% of the principal and be invested such that the prize can exist in perpetuity. In any given year, expenditures from this endowment can exceed no more than five (5) percent of the value of the endowment at the end of the previous year.

Officer Grants

Scientific Committee on Oceanic Research
Newark, DE

$63,625 over **12 months** to explore the value and feasibility of a global experiment in which human additions of noise to the oceans would be vastly reduced for several hours. **Project Director:** Edward R. Urban, Executive Director

Harvard University
Cambridge, MA

$25,000 over **8 months** to provide partial support for the 2009 Sloan-Swartz Meeting on Computational Neuroscience. **Project Director:** Markus Meister, Jeff C. Tarr Professor of Molecular and Cellular Biology

2009 Financial Review

The financial statements and schedules of the Foundation for 2009 and 2008 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 2009 was $11,667,690, a decrease of $4,917,749 from $16,585,439 in 2008. After the deduction of investment expenses and provision for taxes, net investment income was $3,820,652 in 2009 as compared to $5,980,220 for the prior year. Investment expenses for 2009 consisted of $4,112,004 of direct investment expenses and $2,885,034 for investment management fees. Total investment expenses and provision for taxes equaled $7,847,038 in 2009 versus $10,605,219 in 2008. Total investment gains net of deferred federal excise tax for 2009 were $265,388,130 as compared with losses of $433,846,784 in 2008.

Grants authorized (net of grant refunds) and management expenses during 2009 totaled $60,139,172, which was $56,319,140 greater than 2009 net investment income. Of this total, grants authorized (net of refunds) amounted to $50,171,017, while management expenses were $9,968,775. Since the Foundation's inception in 1934, the cumulative excess of grants and expenses over the Foundation's net investment income has amounted to $715.1 million.

Grant payments in 2009 were $68,143,639 compared to $72,961,731 for the prior year. Together with management expenses, investment expenses, and provision for taxes, the total of cash expenditures net of grant refunds in 2009 was $85,959,452 while in 2008 the amount was $92,469,621.

Grants authorized and payments made during the year ended December 31, 2009 are summarized in the following table:

Grants unpaid at December 31, 2008	$88,335,529
Authorized during 2009	50,390,820
Payments during 2009	(68,143,639)
Grants unpaid at December 31, 2009	$70,582,710

The fair value of the Foundation's total assets was $1,620,997,612 at December 31, 2009 including investments valued at $1,619,833,208 as compared with total assets of $1,422,748,108 at December 31, 2008.

AUDITED FINANCIAL STATEMENTS & SCHEDULES

ALFRED P. SLOAN FOUNDATION

Consolidated Financial Statements and Schedules

December 31, 2009 and 2008

(With Independent Auditors' Report Thereon)

Independent Auditors' Report

The Board of Trustees
Alfred P. Sloan Foundation:

We have audited the accompanying consolidated balance sheets of Alfred P. Sloan Foundation (the Foundation) as of December 31, 2009 and 2008, and the related consolidated statements of activities and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these consolidated 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 consolidated 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 consolidated 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Alfred P. Sloan Foundation as of December 31, 2009 and 2008, 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 consolidated financial statements taken as a whole. The supplementary information included in the schedule of management and investment expenses for the years ended December 31, 2009 and 2008 and the schedule of grants and appropriations for the year ended December 31, 2009 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 consolidated financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic consolidated financial statements taken as a whole.

June 23, 2010

ALFRED P. SLOAN FOUNDATION

Consolidated Balance Sheets

December 31, 2009 and 2008

Assets		2009	2008
Cash	$	1,164,404	1,144,245
Investments (note 3):			
Direct investments – equities		120,140,783	98,538,618
Direct investments – fixed income		179,230,086	134,004,053
Alternative investments		1,320,462,339	1,189,061,192
Total investments		1,619,833,208	1,421,603,863
Total	$	1,620,997,612	1,422,748,108
Liabilities and Net Assets			
Grants payable (note 8)	$	70,582,710	88,335,529
Federal excise tax payable (note 5)		6,573,338	87,750
Deferred compensation		385,006	1,069,841
Accrued postretirement benefit obligation (note 7)		6,735,887	5,825,846
Other liabilities		333,177	—
		84,610,118	95,318,966
Commitments (notes 3, 4 and 9)			
Net assets – unrestricted		1,536,387,494	1,327,429,142
Total	$	1,620,997,612	1,422,748,108

See accompanying notes to consolidated financial statements.

ALFRED P. SLOAN FOUNDATION

Consolidated Statements of Activities

Years ended December 31, 2009 and 2008

	2009	2008
Investment income:		
Interest and dividends	$ 11,667,690	16,585,439
Less:		
Investment expenses	6,997,038	8,755,219
Provision for taxes (note 5)	850,000	1,850,000
	7,847,038	10,605,219
Net investment income	3,820,652	5,980,220
Expenses:		
Grants authorized (net of refunds of $219,803 in 2009 and $710,119 in 2008)	50,171,017	82,004,038
Management expenses	9,968,775	8,902,671
	60,139,792	90,906,709
Excess of expenses over net investment income	(56,319,140)	(84,926,489)
Investment gains (losses):		
Net gain on disposal of investments	8,514,817	29,526,802
Unrealized gain (loss) on investments, net of deferred federal excise tax expense (benefit) of $6,485,588 and $(9,456,607) in 2009 and 2008, respectively	256,873,313	(463,373,586)
	265,388,130	(433,846,784)
Increase (decrease) in net assets before postretirement benefit adjustments	209,068,990	(518,773,273)
Amounts not yet recognized as a component of net periodic benefit cost	(110,638)	(139,829)
Increase (decrease) in net assets	208,958,352	(518,913,102)
Net assets at beginning of year	1,327,429,142	1,846,342,244
Net assets at end of year	$ 1,536,387,494	1,327,429,142

See accompanying notes to consolidated financial statements.

ALFRED P. SLOAN FOUNDATION

Consolidated Statements of Cash Flows

Years ended December 31, 2009 and 2008

	2009	2008
Cash flows from operating activities:		
Increase (decrease) in net assets	$ 208,958,352	(518,913,102)
Adjustments to reconcile increase (decrease) in net assets to net cash used in operating activities:		
Net gain on disposal of investments	(8,514,817)	(29,526,802)
Unrealized (gain) loss on investments	(263,358,901)	472,830,193
Amounts not yet recognized as a component of net periodic benefit cost	110,638	139,829
Increase (decrease) in federal excise tax payable	6,485,588	(10,978,755)
Decrease in other assets	—	785,183
(Decrease) increase in grants payable	(17,752,819)	9,752,426
Increase in accrued postretirement benefit obligation	799,403	752,603
(Decrease) increase in deferred compensation	(684,835)	1,069,841
Increase in other liabilities	333,177	—
Net cash used in operating activities	(73,624,214)	(74,088,584)
Cash flows from investing activities:		
Proceeds from sales of investments	898,196,895	1,001,749,057
Purchases of investments	(824,552,522)	(928,671,762)
Net cash provided by investing activities	73,644,373	73,077,295
Net increase (decrease) in cash	20,159	(1,011,289)
Cash at beginning of year	1,144,245	2,155,534
Cash at end of year	$ 1,164,404	1,144,245

See accompanying notes to consolidated financial statements.

(1) Nature of Operations

Alfred P. Sloan Foundation makes grants primarily to support original research and broad-based education related to science, technology, economic performance, and the quality of American life. Alfred P. Sloan Foundation is unique in its focus on science, technology, and economic institutions—and the scholars and practitioners who work in these fields—as chief drivers of the nation's health and prosperity. Alfred P. Sloan Foundation has a deep-rooted belief that carefully reasoned systematic understanding of the forces of nature and society, when applied inventively and wisely, can lead to a better world for all. Alfred P. Sloan Foundation's investment portfolio provides the financial resources to support its activities. The investment strategy for the investment portfolio is to invest prudently in a diversified portfolio of assets with the goal of achieving superior returns.

In June 2009, Sloan Projects LLC was established under the Delaware Limited Liability Company Act. Alfred P. Sloan Foundation and Sloan Projects LLC share the common charitable and educational purpose of supporting, among other projects, film, theatrical, and television projects that promote education about science and technology themes and characters and challenge existing stereotypes about scientists and engineers. Sloan Projects LLC is a single member limited liability company (LLC) with the sole member being Alfred P. Sloan Foundation. Sloan Projects LLC is consolidated with Alfred P. Sloan Foundation for financial statement and tax purposes.

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting and include the assets, liabilities, net assets, and financial activities of Alfred P. Sloan Foundation and Sloan Projects LLC (collectively, the Foundation). All significant interorganization balances and transactions have been eliminated in consolidation.

(b) Income Taxes

Alfred P. Sloan Foundation is exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code (the Code) and is a private foundation as defined in Section 509(a) of the Code. Sloan Projects LLC is a single member LLC and is a disregarded entity for tax purposes.

The Foundation adopted Accounting Standards Update (ASU) No. 2009-06, *Implementation Guidance on Accounting for Uncertainty in Income Taxes and Disclosure Amendments for Nonpublic Entities* (ASU 2009-06), in conjunction with its adoption of Financial Accounting Standards Board (FASB) Interpretation No. 48, *Accounting for Uncertainty in Income Taxes* (now included in Accounting Standards Codification (ASC) Subtopic 740-10, *Income Taxes – Overall*). Beginning with the adoption of ASU 2009-06 and FASB Interpretation No. 48, as of January 1, 2009, the Foundation recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Prior to the adoption of FASB Interpretation No. 48, the Foundation recognized the effect of income tax positions only if such positions were probable of being sustained. There was no significant impact to the Foundation's consolidated financial statements as a result of the adoption of FASB Interpretation No. 48 or ASU 2009-06.

(Continued)

(c) Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. Fair value is a market-based measurement, not an entity-specific measurement, and sets out a fair value hierarchy with the highest priority being quoted prices in active markets. The Foundation discloses fair value measurements by level within that hierarchy. The fair value hierarchy maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are those that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Foundation. Unobservable inputs reflect the Foundation's assumptions about the inputs market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The fair value is categorized into three levels based on the inputs as follows:

- Level 1 – Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Foundation has the ability to access at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. A quoted price in an active market provides the most reliable evidence of fair value and shall be used to measure fair value whenever available. Since valuations are based on quoted prices that are readily available and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

- Level 2 – Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

- Level 3 – Valuations based on inputs that are unobservable and significant to the overall fair value measurement. Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

(d) Investments

Equity securities with a readily determinable fair value and all debt securities are reported at fair value based on quotations obtained from national securities exchanges.

In 2009, the Foundation adopted FASB Staff Position (FSP) FAS 157-4, Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Has Significantly Decreased and Identifying Transactions That Are Not Orderly (FAS 157-4), included in ASC Subtopic 820-10, Fair Value Measurements and Disclosures. FAS 157-4 requires additional disclosures including the inputs and valuation techniques used to measure fair value and a change from disclosing securities by major category to disclosing securities by major security type based upon the nature and risk of the security.

In 2009, the Foundation also adopted the provisions of ASU No. 2009-12, *Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*, relating to certain investments

(Continued)

in funds that do not have readily determinable fair values, including private equities, hedge funds, real estate, and other funds (alternative investments). ASU 2009-12 allows for the estimation of the fair value of investments in investment companies for which the investment does not have a readily determinable fair value using net asset value per share or its equivalent, 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 net asset values of these investments. These estimated fair values may differ significantly from the values that would have been used had a ready market for these securities existed.

Most investments classified in Levels 2 and 3 consist of shares or units in investment funds as opposed to direct interests in the funds' underlying holdings, which may be marketable. Because the net asset value reported by each fund is used as a practical expedient to estimate fair value of the Foundation's interest therein, its classification in Level 2 or 3 is based on the Foundation's ability to redeem its interest at or near December 31. If the interest can be redeemed in the near term, the investment is classified as Level 2. The classification of investments in the fair value hierarchy is not necessarily an indication of the risks, liquidity, or degree of difficulty in estimating the fair value of each investment's underlying assets and liabilities.

Gains and losses on disposal of investments are determined on the first-in, first-out basis.

(e) Grants

Grants are recorded as an expense and liability of the Foundation when authorized by the Trustees.

(f) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

(Continued)

(3) Investments

The following tables present the fair value hierarchy of investments, the only financial instruments that are measured at fair value on a recurring basis, at December 31, 2009 and 2008, respectively:

	Fair value measurements at December 31, 2009			
	Total	**Level 1**	**Level 2**	**Level 3**
Direct investments:				
Equities:				
Domestic	$ 120,140,783	120,140,783	—	—
Fixed income:				
U.S. government	78,133,620	78,133,620	—	—
Investment grade corporate bonds	46,149,963	—	46,149,963	—
Mortgage-backed	50,611,976	—	50,611,976	—
Other asset-backed	4,334,527	—	4,334,527	—
Alternative investments:				
Equities:				
Domestic	122,405,022	—	121,373,934	1,031,088
Long/short	201,697,233	—	179,023,523	22,673,710
International	197,554,168	—	148,963,040	48,591,128
Fixed income:				
Global sovereign bonds	56,005,268	—	56,005,268	—
Independent return	449,370,010	16,135,890	88,691,246	344,542,874
Real estate	34,502,533	—	—	34,502,533
Private equity	258,928,105	—	—	258,928,105
	$ 1,619,833,208	214,410,293	695,153,477	710,269,438

(Continued)

	Fair value measurements at December 31, 2008			
	Total	**Level 1**	**Level 2**	**Level 3**
Direct investments:				
Equities:				
Domestic	$ 98,538,618	98,538,618	—	—
Fixed income:				
U.S. government	36,713,182	36,713,182	—	—
Investment grade corporate bonds	42,621,585	—	42,621,585	—
Mortgage-backed	51,145,902	—	51,145,902	—
Other asset-backed	3,523,384	—	3,523,384	—
Alternative investments:				
Equities:				
Domestic	121,131,885	—	27,271,025	93,860,860
Long/short	170,286,261	—	—	170,286,261
International	158,859,406	—	23,176,935	135,682,471
Fixed income:				
Global sovereign bonds	52,564,883	—	—	52,564,883
Independent return	440,642,020	—	67,650,295	372,991,725
Real estate	47,173,430	—	—	47,173,430
Private equity	198,403,307	—	—	198,403,307
	$ 1,421,603,863	135,251,800	215,389,126	1,070,962,937

The following table presents a reconciliation for all Level 3 assets measured at fair value at December 31:

	2009	**2008**
Beginning balance	$ 1,070,962,937	1,156,822,897
Total net realized and unrealized losses	55,715,255	(267,205,325)
Purchases and settlements, net	(75,277,046)	181,345,365
Reclassifications to Level 2	(341,131,708)	—
Ending balance	$ 710,269,438	1,070,962,937

Certain alternative investments were reclassified from Level 3 to Level 2 upon adoption of ASU 2009-12.

(Continued)

The following table lists the redemption terms and unfunded commitments for the alternative investments as of December 31, 2009:

	2009 Fair value	Unfunded commitments in millions	Redemption frequency	Redemption notice period
Alternative investments:				
Equities:				
Domestic	$ 122,405,022	—	monthly, annually	30 days
Long/short	201,697,233	—	quarterly, annually, other	45 – 60 days
International	197,554,168	—	monthly, quarterly, other	6 – 60 days
Fixed income:				
Global sovereign bonds	56,005,268	10	monthly	10 days
Independent return	449,370,010	22	monthly, quarterly, annually, other	20 – 180 days
Real estate	34,502,533	28	None	N/A
Private equity	258,928,105	98	None	N/A
Total	$ 1,320,462,339	158		

Equities: Alternative investments in this category invest predominantly in equity securities including U.S., international developed, and emerging markets, benchmarked against MSCI All Country World Index. Of the long/short equities, one fund for $22.7 million has no predetermined redemption date. Of the international equities, two funds for $48.6 million have initial lock provisions that expire February 2010 for one fund and July 2011 for the other fund.

Fixed Income: Alternative investments in this category invest in domestic and international fixed income securities, benchmarked against Citigroup Salomon Broad index.

Independent Return: Independent Return funds include investments such as low net exposure equity hedge funds, distressed credit and merger arbitrage. Such strategies are expected to have equity-like long-term returns but with less correlation to the equity markets. $111.4 million is invested in drawdown structures with no predetermined redemption date.

Real Estate: Includes funds that invest primarily in commercial real estate, all of which are illiquid investments.

Private Equity: Include private equity and venture capital, all of which are illiquid investments.

Private foundations are required by the Internal Revenue Service to distribute 5% of average assets during the year. In order to plan and budget in an orderly manner, the Foundation implements the 5% rule by using a 12-quarter rolling average of the fair market value of the investment portfolio to determine the distribution level for the year. The last quarter on the 12-quarter rolling average is September 30.

(Continued)

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

The Foundation's investment strategy has the ability to incorporate certain financial instruments that involve, to varying degrees, elements of market risk and credit risk in excess of the amounts recorded in the consolidated financial statements. Such contracts involve, to varying degrees, risk of loss arising from the possible inability of counterparties to meet the terms of the contract. There were no financial instruments held for 2009 or 2008.

(5) Taxes

The Foundation is liable for a federal excise tax of 2% of its net investment income, which includes realized capital gains. However, this tax is reduced to 1% if certain conditions are met. The Foundation met the requirements for the 1% tax for the year ended December 31, 2009, but did not meet the requirement for the year ended December 31, 2008. Therefore, current taxes are estimated at 1% of net investment income for 2009 and 2% for 2008. Additionally, certain of the Foundation's investments give rise to unrelated business income tax liabilities. Such tax liabilities for 2009 and 2008 are not significant to the accompanying consolidated financial statements; however, the provision for taxes, as of December 31, 2009 and 2008, 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% tax is not determinable until the fiscal year in which net gains are realized, deferred taxes represent 2% of unrealized gains at December 31, 2009 and 2008.

(6) 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 and Fidelity Investments, which provides for the purchase of annuities for employees. Retirement plan expense was $754,822 and $695,004 in 2009 and 2008, respectively.

(Continued)

(7) Postretirement Benefits Other Than Pensions

The Foundation provides healthcare benefits for qualified retirees. The Foundation records annual amounts relating to the plan based on calculations that incorporate various actuarial and other assumptions, including discount rates, mortality, turnover rates, and healthcare cost trend rates. The Foundation reviews its assumptions on an annual basis and makes modifications to the assumptions based on current rates and trends when it is appropriate to do so. The effect of modifications to those assumptions is recorded as a charge to net assets and amortized to net periodic cost over future periods using the corridor method. The net periodic costs are recognized as employees render the services necessary to earn the postretirement benefits. The following table sets forth the financial information for the plan for 2009 and 2008:

		2009	2008
Change in accrued postretirement benefit obligation:			
Benefit obligation at beginning of year	$	5,825,846	4,933,414
Service cost		288,917	229,362
Interest cost		348,386	287,125
Actuarial loss		506,157	586,783
Benefits paid		(233,419)	(210,838)
Benefit obligation at end of year	$	6,735,887	5,825,846
Components of net periodic benefit cost reported as expense in the statement of activities include:			
Service cost	$	288,917	229,362
Interest cost		348,386	287,125
Amortization of transition obligation		476,061	476,061
Amortization of gain		(80,542)	(29,107)
Net periodic postretirement benefit cost	$	1,032,822	963,441
Benefit obligation weighted average assumptions at December 31, 2009 and 2008:			
Discount rate		5.89%	5.98%
Periodic benefit cost weighted average assumptions for the years ended December 31, 2009 and 2008:			
Discount rate		5.98%	5.82%

The medical trend and inflation rate is 9% in 2010 grading down to 5.5% in 2014 and thereafter.

(Continued)

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the postretirement benefit plan. The effects of a 1% increase (decrease) in trend rates on total service and interest cost and the postretirement benefit obligation are as follows:

	2009		2008	
	1% Increase	1% Decrease	1% Increase	1% Decrease
Effect on total service and interest cost	$ 49,836	(44,627)	68,004	(52,781)
Effect on postretirement benefit obligation	728,731	(613,522)	747,768	(616,435)

Projected premium payments for each of the next five fiscal years and thereafter are as follows:

Year ending December 31:	
2010	$ 335,930
2011	374,786
2012	394,356
2013	393,299
2014	426,247
Thereafter through 2019	2,289,493
	$ 4,214,111

The accumulated amount not yet recognized as a component of net periodic benefit cost was $2,941,887 and $2,917,686 at December 31, 2009 and 2008, respectively. The components are as follows:

	2009	2008
Transition obligation	$ 4,843,528	5,319,589
Net actuarial gain	(1,901,641)	(2,401,903)
	$ 2,941,887	2,917,686

The transition obligation and gain that will be amortized into net periodic benefit cost in 2010 is $476,061 and $95,420, respectively.

(Continued)

(8) Grants Payable

The Foundation estimates that the grants payable balance as of December 31, 2009 and 2008 will be paid as follows:

	2009	2008
Year:		
2009	$ —	57,673,728
2010	51,549,349	21,751,727
2011	13,954,491	5,556,324
2012	4,058,784	3,210,000
2013	1,020,086	143,750
	$ 70,582,710	88,335,529

(9) Lease

The Foundation entered into a ten-year lease effective January 1, 1999. The lease contains an escalation clause that provides for rental increases resulting from increases in real estate taxes and certain operating expenses. On January 11, 2007, the Foundation renegotiated its lease for the period commencing on January 1, 2009 and expiring on December 31, 2016. As a result of the renegotiation, the fixed rent payable under the lease is an amount equal to (a) $1,270,335 per annum for the period commencing on January 1, 2007 and ending on December 31, 2011 and (b) $1,379,926 per annum for the period commencing on January 1, 2012 and ending on December 31, 2016. Effective November 1, 2008, the Foundation acquired additional space at an annual rent of $386,250. The lease on the additional space expires on December 31, 2016. Rent expense for 2009 and 2008, including escalations, was $1,679,908 and $1,242,025, respectively.

(10) Line of Credit

The Foundation established a $50,000,000 line of credit with Bank of New York Mellon in 2008 to provide bridge funding of grants and to finance short-term working capital needs of the Foundation. To date, the Foundation has not yet used the line of credit. The interest rate is calculated using the Mellon Monthly LIBOR plus 75 basis points, with a fallback rate of Wall Street Journal Prime minus 125 basis points. If the line is used, interest will be payable monthly on the 15th of each month and principal will be due on demand. If payment is not made within 15 days of the due date, a 4% late fee will be assessed.

(11) Subsequent Events

In connection with the preparation of the consolidated financial statements and in accordance with ASC Subtopic 855-10, *Subsequent Events*, which was adopted in 2009, the Foundation evaluated subsequent events after the balance sheet date of December 31, 2009 through June 23, 2010, which was the date the consolidated financial statements were available to be issued and determined that there were no matters that are required to be disclosed.

Schedule 1

ALFRED P. SLOAN FOUNDATION

Schedule of Management and Investment Expenses

Years ended December 31, 2009 and 2008

		2009	2008
Management expenses:			
Salaries and employees' benefits:			
Salaries	$	5,960,726	6,770,382
Employees' retirement plan and other benefits		3,346,645	3,182,935
Total		9,307,371	9,953,317
Rent		1,679,908	1,242,025
Program expenses		1,158,437	1,348,252
Office expenses		1,289,379	1,003,420
Website and publications		55,800	119,926
Professional fees		589,884	620,780
Total management expenses		14,080,779	14,287,720
Less direct investment and other management expenses allocated to investments		4,112,004	5,385,049
Management expenses	$	9,968,775	8,902,671
Investment expenses:			
Investment management fees and expenses	$	2,885,034	3,370,170
Direct investment and other management expenses allocated to investments		4,112,004	5,385,049
Investment expenses	$	6,997,038	8,755,219

ALFRED P. SLOAN FOUNDATION

Schedule of Grants and Appropriations

Year ended December 31, 2009

Grantee	Unpaid December 31, 2008	2009 Authorized	2009 Payments	Unpaid December 31, 2009
Advocates for Children of New York	$ —	125,000	125,000	—
Alaska, University of, Anchorage	160,000	—	80,000	80,000
Alaska, University of, Fairbanks	1,000,000	550,000	650,000	900,000
Albert Einstein College of Medicine	—	90,681	90,681	—
Albright College	—	200,000	200,000	—
American Academy of Arts and Sciences	—	302,009	161,009	141,000
American Association for the Advancement of Science	34,320	89,416	123,736	—
American Council on Education	368,071	49,900	417,971	—
American Film Institute	156,100	248,050	134,150	270,000
American Museum of the Moving Image	—	72,313	72,313	—
American Society of Mechanical Engineers	—	449,041	175,000	274,041
Arius Association	—	20,000	20,000	—
Arizona, University of	40,838	168,813	209,651	—
Association of American Colleges and Universities	—	20,000	—	20,000
Association of Government Accountants	125,000	—	125,000	—
Association of State Universities and Land-Grant Colleges	—	125,000	125,000	—
Astrophysical Research Consortium	5,000,000	—	3,166,000	1,834,000
Babson College	180,000	—	100,000	80,000
Berkeley, University of	—	50,000	50,000	—
BIOCOM Institute	—	36,000	36,000	—
Board of Control for Southern Regional Education	—	598,851	149,094	449,757
Boston College	2,381,012	30,000	1,323,849	1,087,163
Boston University	—	50,000	50,000	—
Boulder, University of Colorado	803,850	—	—	803,850
Bowdoin College	—	200,000	200,000	—
Bowling Green State University	—	45,000	45,000	—
Brandeis University	—	50,000	50,000	—
British, University of, Columbia	—	50,000	50,000	—
Brookings Institution	406,495	70,232	194,768	281,959
Brooklyn Academy of Music	—	20,000	20,000	—
Brown University	—	100,000	100,000	—
Burnham Institute	—	50,000	50,000	—
Business History Conference	—	400,000	400,000	—
California Academy of Sciences	—	19,100	19,100	—
California Institute of Technology	—	211,500	211,500	—
California, University of, Berkeley	588,850	764,656	770,006	583,500
California, University of, Davis	299,405	50,000	50,000	299,405
California, University of, Hastings College of the Law	201,017	—	201,017	—
California, University of, Irvine	50,000	—	50,000	—
California, University of, Los Angeles	1,234,527	504,750	1,182,427	556,850
California, University of, San Diego	200,000	1,195,000	595,000	800,000
California, University of, Santa Barbara	—	50,000	50,000	—
California, University of, Santa Cruz	—	100,000	100,000	—
Carnegie Endowment for International Peace	—	250,000	110,000	140,000
Carnegie Institute of Washington	—	4,000,000	2,000,000	2,000,000
Carnegie Mellon University	190,430	294,776	275,000	210,206
Case Western Reserve University	—	100,000	100,000	—
Center for a New American Security	—	325,966	116,760	209,206
Center for Marine Biodiversity Society	225,000	—	150,000	75,000
Center for Security Policy, Inc	—	18,000	18,000	—
Central Florida, University of	200,000	86,250	250,000	36,250
Chicago, University of	—	250,000	50,000	200,000
Cold Spring Harbor Laboratory	—	50,000	50,000	—
Colorado, University of	—	50,000	50,000	—
Columbia University	—	145,000	145,000	—
Committee on Capital Markets Regulation	—	120,200	—	120,200
Commission on Professionals in Science and Technology	—	8,345	8,345	—
Community Indicators Consortium, Inc	59,400	—	—	59,400
Congressional Quarterly, Inc.	142,937	—	142,937	—
Connecticut, University of	52,000	500,000	142,000	410,000
Consortium for Mathematics and Its Applications	—	19,580	—	19,580
Consortium For Ocean Leadership, Inc.	2,435,000	1,288,804	3,395,000	328,804
Cornell University	100,000	333,809	150,000	283,809
Council of Graduate Schools	1,422,153	204,951	842,064	785,040
Council of State Governance	—	10,000	10,000	—
Council on Foreign Relations	—	100,286	100,286	—
CUNY TV Foundation	148,253	—	148,253	—
Dalhousie University	517,000	—	400,000	117,000
Dartmouth College	—	50,000	50,000	—
DC Foundation, University of	—	267,973	95,723	172,250
Dickinson College	—	25,000	25,000	—
Duke University	184,000	469,000	234,000	419,000
Eclipse TV Production	60,000	20,000	60,000	20,000
Economic Strategy Institute	100,000	—	100,000	—

(Continued)

ALFRED P. SLOAN FOUNDATION

Schedule of Grants and Appropriations

Year ended December 31, 2009

Grantee	Unpaid December 31, 2008	2009 Authorized	2009 Payments	Unpaid December 31, 2009
Educational Broadcasting Corporation	$ 750,000	—	750,000	—
Emory University	804,042	—	—	804,042
Ensemble Studio Theatre	547,000	—	547,000	—
Exeter, University of	90,000	—	90,000	—
Face Value LLC	2,500,000	(2,500,000)	—	—
Families and Work Institute	—	2,838,785	700,000	2,138,785
Film Independent	—	156,000	78,000	78,000
Florida, University of	50,000	—	50,000	—
Foundation Center	130,000	—	65,000	65,000
Franklin W. Olin, College of Engineering	20,000	—	20,000	—
Fred Friendly Seminars, Inc.	500,000	—	500,000	—
Fred Hutchinson Research Center	—	50,000	50,000	—
Fund for the City of New York	1,655,750	—	432,000	1,223,750
Galatee Films	700,000	—	700,000	—
George Mason University	—	169,095	169,095	—
Georgetown University	364,600	2,931,047	1,495,832	1,799,815
Georgia Institute of Technology	—	50,000	50,000	—
Georgia State University	—	49,964	49,964	—
Global Biodiversity Information Facility	—	45,000	45,000	—
Greater Washington Educational Telecommunications Assoc.	487,160	1,500,000	1,237,160	750,000
Guelph, University of	120,000	298,450	120,000	298,450
Hamptons International Film Festiva	267,000	—	192,000	75,000
Hargittai, Istvan	13,320	—	13,320	—
Harvard University	210,000	679,975	618,400	271,575
Hastings Center	512,365	—	270,220	242,145
Hawaii, University of, at Manoa	725,000	—	650,000	75,000
Health Research	—	45,000	45,000	—
ICPO – Interpol	1,050,000	—	—	1,050,000
Illinois, University of, at Urbana Champaign	223,336	100,000	210,000	113,336
Illinois, University of, Chicago	260,000	135,000	245,000	150,000
Illinois, University of, Springfield	100,000	—	50,000	50,000
Indiana University	—	50,000	50,000	—
Industry Studies Association	—	13,150	—	13,150
InMer Expeditions	—	172,885	172,885	—
Institute for Operations Research and the Management Sciences	—	84,378	—	84,378
Institute of Internal Auditors	113,010	—	113,010	—
International City/County Management Association	245,865	—	172,924	72,941
Iowa, University of	—	50,000	50,000	—
J. Craig Venter Institute, Inc.	1,256,986	—	—	1,256,986
John Hopkins University	145,000	100,000	100,000	145,000
Kansas , University of, Center for Research	—	38,952	38,952	—
Keystone Symposia	68,067	—	68,067	—
L. A. Theatre Works	159,512	—	159,512	—
League for Innovation in the Community College	30,000	—	30,000	—
Levy Economic Institute at Bard College	277,450	—	166,000	111,450
Louisiana State University	730,000	—	500,000	230,000
Magic Theatre, Inc.	132,000	(132,000)	—	—
Manhattan Institute for Policy Research, Inc.	—	18,000	18,000	—
Manhattan Theatre Club	100,000	600,000	200,000	500,000
Marine Biological Laboratory	1,038,409	450,000	838,483	649,926
Maryland, University of, College Park	—	323,115	223,837	99,278
Massachusetts, University of, Lowell	—	124,200	31,200	93,000
Massachusetts Institute of Technology	400,000	320,000	500,000	220,000
Massachusetts, University of, Amherst	—	50,000	50,000	—
Memorial University of Newfoundland	600,000	—	400,000	200,000
Michigan, University of	15,000	502,820	331,642	186,178
Middlebury College	—	200,000	200,000	—
Minnesota, University of	—	568,319	370,000	198,319
Missouri-Columbia, University of	—	4,950	4,950	—
Montana, University of	144,998	—	71,551	73,447
Mount Holyoke College	—	200,000	200,000	—
Mount Sinai School of Medicine of New York University	—	66,017	66,017	—
Museum National d'Jistoire Naturelle	100,000	—	100,000	—
National Academy of Sciences	—	530,434	186,849	343,585
National Action Council for Minorities in Engineering	8,735,153	4,568,936	4,264,909	9,039,180
National Bureau of Economic Research	1,339,000	476,734	445,605	1,370,129
National Center for Civic Innovation	1,999,810	—	969,659	1,030,151
National Conference of State Legislatures	183,132	—	136,000	47,132
National Geographic Society	750,000	—	750,000	—
National Governors Association Center for Best Practices	90,194	—	90,194	—
National Public Radio, Inc.	200,000	—	200,000	—
Nebraska, University of	—	46,315	46,315	—
Nevada, University of	—	50,000	50,000	—
New America Foundation	—	250,000	80,000	170,000
New England States Government Finance Officers	99,100	—	46,800	52,300

(Continued)

ALFRED P. SLOAN FOUNDATION

Schedule of Grants and Appropriations

Year ended December 31, 2009

Grantee	Unpaid December 31, 2008	2009 Authorized	2009 Payments	Unpaid December 31, 2009
New Hampshire, University of	$ —	624,000	250,000	374,000
New Mexico, University	61,002	—	61,002	—
New School University	75,000	—	75,000	—
New York Academy of Sciences	—	20,000	20,000	—
New York Botanical Garden	72,000	—	72,000	—
New York University	277,000	472,700	218,250	531,450
Northeastern University	—	45,000	45,000	—
Northern Illinois University	—	50,000	50,000	—
Northwestern University	—	100,000	50,000	50,000
Notre Dame, University of	—	50,000	50,000	—
Oberlin College	—	200,000	200,000	—
Office for Oregon Health Policy Research	750,000	—	700,000	50,000
Ohio State University	—	100,000	100,000	—
Open Knowledge Commons	165,000	1,858,170	929,085	1,094,085
Oregon State University	—	185,840	65,810	120,030
Oregon, University of	—	239,783	119,835	119,948
Partnerships for Global Security	—	125,000	125,000	—
Pennsylvania State University	100,000	50,000	150,000	—
Pennsylvania, University of	—	145,000	145,000	—
Persephone Productions, Inc.	125,000	—	125,000	—
Philanthropic Research, Inc.	—	5,000	5,000	—
Pioneer Institute	50,000	—	35,000	15,000
Pittsburgh, University of	300,000	439,740	431,450	308,290
Pittsburgh, University of, Medical Center	750,000	—	500,000	250,000
Playwrights Horizons	100,000	—	—	100,000
Polytechnic Institute of New York University	—	65,000	—	65,000
Population Reference Bureau	215,000	—	—	215,000
Princeton University	—	208,798	208,798	—
Public Library of Science	—	125,000	125,000	—
Public Technology Institute	76,521	—	76,521	—
Purdue University	168,182	179,534	262,885	84,831
Queensland Museum	85,000	—	85,000	—
Reed College	—	38,478	38,478	—
Regis University	—	125,000	40,000	85,000
Research Foundation of City University of New York	—	20,000	20,000	—
Resources for the Future	330,000	202,264	365,192	167,072
Rhode Island, University of	450,000	737,662	900,000	287,662
Rice University	—	100,000	100,000	—
Rochester, University of	—	50,000	50,000	—
Rutgers University	154,402	—	154,402	—
Rutgers, The State University of New Jersey	550,000	573,306	732,863	390,443
Rutgers, University of, Piscataway	—	100,000	100,000	—
Science Festival Foundation	650,000	645,000	970,000	325,000
Scientific Committee on Antarctic Research (SCAR)	—	500,000	150,000	350,000
Scientific Committee on Oceanic Research	157,000	63,625	100,000	120,625
Scottish Association for Marine Science	—	50,000	50,000	—
Sherbrooke, University of	—	50,000	50,000	—
Simmons College	100,000	—	100,000	—
Sloan Consortium, Sloan-C	4,000,000	—	1,100,000	2,900,000
Sloan Projects LLC	—	2,500,000	—	2,500,000
Smith College	—	25,000	25,000	—
Smithsonian Institution	1,125,000	2,500,000	3,125,000	500,000
South Shore Educational Cooperative	200,000	—	200,000	—
Southampton, University of	—	684,000	360,000	324,000
Southern California, University of	45,000	475,611	115,000	405,611
Southern Maine, University of	650,000	—	450,000	200,000
Southern Oregon University	—	50,000	50,000	—
Springfield, University of Illinois	—	115,000	50,000	65,000
Stanford University	315,000	600,000	465,000	450,000
State University of New York, Albany	225,000	—	225,000	—
Sundance Institute	243,500	—	—	243,500
Swarthmore College	—	313,029	—	313,029
Syracuse University	—	74,596	—	74,596
Texas, University of, Austin	—	100,000	100,000	—
Texas, University of, SW Medical Center	—	100,000	100,000	—
The Brookings Institution	—	701,747	96,400	605,347
The Philanthropic Initiative Inc	—	25,300	25,300	—
The Urban Institute	—	45,000	45,000	—
Thurgood Marshall College Fund	—	34,750	—	34,750
Toronto, University of	—	100,000	100,000	—
Tribeca film Institute, Inc	344,500	700,000	744,500	300,000
Tufts University	—	50,000	50,000	—
Tulane University	69,000	—	69,000	—
Twiga Foundation	177,284	—	177,284	—
Twin Cities Public Television	500,000	—	500,000	—
Urban Institute	—	75,492	75,492	—

(Continued)

Schedule 2

ALFRED P. SLOAN FOUNDATION

Schedule of Grants and Appropriations

Year ended December 31, 2009

Grantee	Unpaid December 31, 2008	2009 Authorized	2009 Payments	Unpaid December 31, 2009
Vancouver Aquarium Marine Science Centre	$ 1,000,000	—	450,000	550,000
Vanderbilt, University of	—	50,000	50,000	—
Vermont, University of	—	50,000	50,000	—
Virginia Institute of Marine Science at the College of William & Mary	—	600,000	200,000	400,000
Virginia Technology	—	50,000	50,000	—
W. E. Upjohn Institute for Employment Research	58,865	—	58,865	—
Wang, Harvey	—	45,000	45,000	—
Washington and Lee University	—	200,000	200,000	—
Washington State Board for Community and Technical Colleges	—	25,000	25,000	—
Washington, University of	219,068	131,538	316,815	33,791
WGBH Educational Foundation	1,450,000	2,500,000	3,100,000	850,000
Wharton School of the University of Pennsylvania	733,318	—	246,951	486,367
Wikimedia Foundation	2,000,000	—	1,000,000	1,000,000
Wisconsin, University of, Madison	—	200,000	200,000	—
Wisconsin, University of, Milwaukee	100,000	—	100,000	—
WNYC Radio	462,500	225,000	462,500	225,000
Woodrow Wilson International Center for Scholars	525,000	—	250,000	275,000
Worcester Polytechnic Institute	100,000	22,794	122,794	—
Workforce Strategy Center	—	55,000	55,000	—
Yale University	397,331	45,000	216,723	225,608
York University	—	50,000	50,000	—
	70,799,390	54,481,530	67,777,187	57,503,733
Sloan Research Fellowships to be granted in ensuing year	5,900,000	—	—	5,900,000
Officer Grant Appropriation for grants in ensuing year	3,200,000	—	—	3,200,000
Other appropriations authorized but not committed	8,436,139	(1,225,509)	731,653	6,478,977
	17,536,139	(1,225,509)	731,653	15,578,977
Reduction for grant transfers	—	(365,201)	(365,201)	—
Elimination of grant to Sloan Projects LLC (eliminated upon consolidation)	—	(2,500,000)	—	(2,500,000)
	$ 88,335,529	50,390,820	68,143,639	70,582,710

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