

ANNUAL REPORT

1976

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THE ROCKEFELLER FOUNDATION
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ORGANIZATIONAL INFORMATION

MEETINGS

The annual meeting of the Corporation and a regular stated meeting of the Board of Trustees were held on April 7, a stated meeting of the Board was held on December 6, and special meetings of the Board were held on June 15 and September 8. Three regular meetings and one special meeting of the Executive Committee of the Trustees were held to take actions within the general policies approved by the Board.

TRUSTEES AND PRINCIPAL OFFICERS

Clark Kerr, Chairman of the Carnegie Council on Policy Studies in Higher Education and former President of the University of California, retired from the Board of Trustees, effective June 30. He was elected a Trustee in 1960 and served for two years as an alternate member of the Executive Committee, for three years as a member of the Nominating Committee, one of those years as its Chairman, and for one year as Committee on Audit.

At the April meeting Richard W. Lyman, President of Stanford University, was elected a Trustee, effective July 1. He taught history at Harvard, Swarthmore, and Washington University before joining the Stanford faculty in 1958. He was appointed Professor of History in 1962, Associate Dean of the School of Humanities and Sciences in 1964, Vice President and Provost in 1967, and President in 1970.

Robert F. Goheen, President of Princeton University from 1957 to 1972, and Chairman of the Council on Foundations since then, resigned from the Board of Trustees, effective December 7. He was elected a Trustee in 1963 and served for thirteen years on the Executive Committee and for six years on the Nominating Committee, for three years as its Chairman. Dr. Goheen is resigning from the Council as of January 14 and will take up new duties as President of the Edna McConnell Clark Foundation on January 15, 1977.

At the June meeting Mason Willrich was elected Director for International Relations, effective September 1. He had served as Professor of Law at the University of Virginia since 1968 and as Associate Professor since 1965. Between 1962 and 1965 he served in the Office of General Counsel of the U.S. Arms Control and Disarmament Agency.

At the December meeting Kenneth S. Warren was elected Director for Health Sciences, effective July 1, 1977. He has been the Director of the Division of Geographic Medicine at Case Western Reserve University since 1973 and has served since 1963 on the University's faculties of medicine, preventive medicine, geographic medicine, and library science.

THE
PRESIDENT'S
REVIEW

The Rockefeller Foundation has been blessed with Trustees of the highest quality since its inception in 1913. At no time has this been more evident than in the selection and recruitment of distinguished Americans to serve in or to advise the new administration of President Jimmy Carter. The chairman of our Board, Cyrus R. Vance, has been appointed Secretary of State while the Trustee Chairman of our Audit Committee, W. Michael Blumenthal, has been chosen Secretary of the Treasury. Other Trustees whose advice and interest have been sought by the President are Robert Roosa, Father Ted Hesburgh, Jane Cahill Pfeiffer, Vernon Jordan, Paul Volcker, Lane Kirkland, and Clifton Wharton. Mr. Vance becomes the third Trustee in the history of the Foundation to be named Secretary of State, the others being John Foster Dulles and Dean Rusk.

At the same time, John D. Rockefeller IV was elected Governor of West Virginia. The Clark Foundation has selected Dr. Robert Goheen as its second President in January 1977, while Dr. Robert Ebert will become President of the Milbank Fund in January 1978. Dr. Frederick Seitz, having reached the mandatory retirement age, will resign from the Board in June 1977. Thus, as of January 1977, Messrs. Vance, Blumenthal, Rockefeller, and Goheen will be leaving our Board, and during the year, Drs. Seitz and Ebert will follow. Each and every one of these distinguished men has exercised his trusteeship in the most responsible and productive way—whether at our Executive Committee and full Board meetings or in service on our Finance and Audit Committees or on the newly constituted Staff-Trustee Program Review Committees. The quality and coherence of our work reflects their substantial contributions of time and thought and all of us will miss their wise counsel and their fellowship.

The Past Five Years

We have over the past nearly five years pursued the course set by the Trustees after an extensive review instituted when I joined the Foundation in 1972. The review resulted in the establishment of a new program, Conflict in International Relations; increased emphasis on fellowship support in our domestic programs; marked expansion of our interests in the humanities; and renewed emphasis on international health and tropical medicine. Sustained or increased commitment was affirmed by the Trustees to resolving the problems of food production and malnutrition, population growth, and education for development in the less developed countries; and to overcoming those obstacles to equal opportunity and justice for all (with specific reference to minority groups); to the full development of the arts; and to the knowledge needed to deal with the complexities of environmental planning.

The Foundation was reorganized to make fuller use of our Trustees in a true partnership with the staff. This was accomplished by increasing the number of Board meetings from two to four annually; by establishing Trustee-Staff program review committees which meet at least once annually, encouraging greater exchange of ideas between Trustees and officers; and by revising extensively the material we present to our Trustees for their deliberations so as to give them a coherent framework for their decisions. Trustees have been encouraged to attend working meetings with outside advisers in our New York offices as well as to visit our field stations abroad. (Mr. W. Michael Blumenthal visited our staff in Bangkok, Thailand for three weeks in June 1976 and submitted an extraordinarily perceptive and valuable report on our activities there.) The Chairman of the Board has appointed *ad hoc* committees of the Trustees from time to time to deal with problems of special concern. (Mr. Ben Heineman is chairing such a committee with Mrs. Jane Cahill Pfeiffer and Dr. Robert Ebert to review during early 1977 the subject of justice for children.) At the Board level, the Trustees established an Audit Committee and have revised the procedures of the Nominating Committee to ensure the fullest participation of the entire Board in the selection of new Trustees.

Internally we have established interdisciplinary program committees, weekly staff conferences with outside speakers, and standing committees on evaluation, intellectual rejuvenation, and special interests and explorations. Simplified budgeting procedures have facilitated the Trustees' policy considerations as well as both the short- and long-range planning of the officers and staff. Stress on the rapid dissemination of current information on leading domestic and international problems has led to an extraordinary demand for our publications. (A new Program in Educational Publishing was established during the year and is described below.) We continue to emphasize the importance of multiple sources of funding both domestically and internationally. We have reduced staff without jeopardizing the quality of our work or demoralizing the institution—thus leaving more money for grants, fellowships, and the dissemination of knowledge gained. We must continue to monitor and evaluate our productivity and efficiency and the quality of our work. To this end, we have revised old procedures and instituted new ones in an effort to improve the evaluative process.

Since 1972, we have appropriated \$45 million annually. The formula for determining our expenditures was established in the 1950's when capital growth (as contrasted with income) was the primary objective in the management of our assets and we were 100 percent invested in equities. The formula consisted of appropriating annually 5 $\frac{3}{4}$ % of a five-year moving average of our assets. The average allowed us to cushion changes in our

assets. Rational planning was thereby facilitated without wild swings in appropriations which could make expenditures for staffing uncertain (and therefore demoralizing to our staff) to say nothing of the anxieties generated in the recipients of our grants, uncertain of our on-going commitments to the support of their work. Now, with the uncertainties of capital growth, we have for the first time invested in fixed income securities. At the present time roughly 70 percent of our assets are invested in equities, and 30 percent in fixed income securities. We have accordingly revised the formula for expenditures so that the balance between capital growth and income will be reflected accurately and allow us to maintain fairly even expenditures each year (at roughly \$45 million).

At the present time roughly 33 percent of our expenditures are used for our direct functions (field staff and field projects, program officers and administration), and 67 percent for the "indirect" functions of grants, grants in aid, and fellowships. This ratio has been maintained over the past several years with a slight shift toward increasing expenditures for our indirect functions as we have reduced staff and administrative costs.

Activities in the International Sphere:

More importantly, over 50 percent of our total annual expenditures are related to work in the international sphere, specifically within the less developed countries where our programs in Education for Development (\$8 million), Conquest of Hunger (\$7 million) and Population and Health (\$7 million) are centered. The new program, Conflict in International Relations, expends \$3 million annually. Much of our work in Educational Publishing is related to international affairs and global issues of food production, population stabilization, education, health, economic and social development. The international Study and Conference Center in Bellagio, Italy operates year-round with some 75 scholars in residence (nine at any one time) and more or less weekly conferences involving 15 to 20 people dealing with the major issues facing the world.

I believe we have an important and, by some measures, a unique role to play for the foreseeable future in the advancement of knowledge and the resolution of those issues of major importance to the world community whether in food production and economic development, population stabilization, the full development of educational institutions at all levels, or the reduction of the potential for destructive conflict. We have developed a fine reputation over the 64 years of our existence for the quality of our staff, both as professionals and as sensitive human beings. We have no ax to grind and we have many friends and colleagues—past and present—throughout the world who are similarly occupied with ameliorating human misery. Our partnerships in the less developed countries of the world

encourage us to believe that with sustained effort much can and will be accomplished to improve the quality of life for us all.

A New Division of International Relations:

To these ends, several important developments have occurred in the past year. The Trustees authorized a new Division of International Relations and appointed Dr. Mason Willrich its first Director. Dr. Willrich was formerly Professor of Law at the University of Virginia and Director of its Center for the Study of Science, Technology and Public Policy. He has worked actively in government as Assistant General Counsel of the U.S. Arms Control and Disarmament Agency. Long devoted to interdisciplinary work, his studies have integrated scientific and technical issues with national and international economic, legal, political and governmental policy studies. His book with Theodore B. Taylor on *Nuclear Theft: Risks and Safeguards* (1974) written for the Ford Foundation Energy Policy Project, has been extremely well-received for it brings scientific and technical considerations into realistic play with policy alternatives. Dr. Willrich believes that relevant disciplines cannot function in isolation when dealing with complex issues, nor can the various representatives of those most interested and in positions of control be neglected. When dealing with energy, representatives of government, academic institutions, and industry must be present and in balance or the art as well as the science of the possible will miss valid description. Dr. Willrich is developing new strategies and objectives within the Conflict in International Relations program and has already established joint interests with the Conquest of Hunger, Quality of the Environment, and Population and Health programs.

The International Agricultural Development Service:

The International Agricultural Development Service was established by the Foundation in 1975 as a free-standing, tax-exempt organization to provide needed services for those less developed nations desirous of increasing food production and alleviating the poverty which vast numbers of their rural populations suffer. Designed as a contracting agency—and not a funding or granting agency—it offers the technical expertise to facilitate rural and agricultural development in those countries which wish to contract for its services. It will help to obtain needed funds from the major international banking agencies—World Bank, Inter-American Bank, various U.N. agencies, and the agencies for international development of some sixteen countries—and provide the technical advisers to develop and oversee the plans and programs. To date a contract has been developed with the government of Nepal and has become operational.

Another is in the final stages of development with Indonesia, and discussions are underway with Sudan, Ecuador, Brazil, Bangladesh, Botswana and several other countries. Initially staffed largely by Rockefeller Foundation agricultural specialists, it has a distinguished and active Board of Trustees and gives every promise of adding significantly to the world's need for accelerating national agricultural development.

The Health Sciences Division:

The Health Sciences division will be depleted in June 1977 when three of its distinguished members retire. The Trustees have appointed Dr. Kenneth S. Warren, Professor of Medicine and head of the Department of Geographic Medicine at Case Western Reserve University, to succeed Dr. John Maier as head of the division, July 1, 1977. Dr. Warren has had a distinguished and active career in the field of tropical medicine and has done significant fundamental research in schistosomiasis. His arrival gives us a new opportunity to review our Population and Health program with an eye to increasing our efforts and influence in the field of international health, while we sustain our long-standing interest in and commitment to the extremely complex and multifaceted problems of population growth.

A New Program: Educational Publishing:

Foundations have sometimes made a virtue of hiding their light under a bushel, but to the founders of The Rockefesler Foundation publications were an important way of reaching the objectives of the Foundation's charter. As a matter of record, Section 1 of that document states that "to promote the well-being of mankind throughout the world. . .it shall be within the purposes of said corporation to use publications...as means to that end."

The full disclosure of its activities has been a precept for this Foundation since 1913. This is to our credit: we know from the Filer Report and previous national commissions that even today we are in the minority. But there is a fundamental difference between publishing for the record and publishing of the kind envisioned by the original Board, which thought of it as a program objective. What they had in mind, in short, was educational publishing.

When I came to the Foundation in 1972, I was amazed at the wealth of knowledge and information in hand or available to us. The Trustees' decision in December 1972 to make our archives "as fully accessible for research and study as the nature of the records will permit" was vitally important, and the greatly increased use of this material attests to its unique value. It seemed clear that the wide dissemination of information should

become an even more integral part of our strategy—to compound the influence of The Rockefeller Foundation in times of inflation and massive public expenditures. We began by developing three new thrusts—RF Illustrated and RF Working Papers were new in-house publications, one directed to a general audience, the other to more specialized groups. In addition, we gave the working press full access to conferences and professional staff. In everything we did, we considered it important to the effectiveness of all our work to have the Foundation itself more visible and publicly accountable and, if deserved, more widely recognized for its intellectual as well as its material contributions.

Working Papers are aimed at people with a professional interest in a particular field. We reach such people through direct mail solicitation (based on our own and specialized mailing lists) and through advertising. To obtain their copies, these readers must write us a letter. The advantages of this system of demand distribution are two-fold: publications are not wasted on people who don't want them, and we know, after the orders are in, how many copies to print. Results have been very encouraging, even granted that the material is free. Orders from substantial direct mail campaigns range from 10 to 40 percent. Letterheads indicate that virtually all orders come from people connected with universities, schools or public agencies. Repeat orders for bulk copies for teaching and other purposes are the rule rather than the exception.

Small ads in professional publications have also proven productive. Working Papers are also described in the H.W. Wilson *Vertical File Index*; this regularly stimulates several hundred requests from libraries. In the month of December alone, over one thousand copies of various Working Papers were mailed on request.

The kinds of people foundations want to reach are often the most difficult to reach. They receive a great deal of printed material even as their reading time is limited by competing professional concerns. Another part of the difficulty may rest with foundations themselves: their reporting often appears to be dictated by a sense of duty rather than pleasure and interest.

RF Illustrated, a full-color newspaper, was invented (it has no precedent) to cut through some of these difficulties. We aimed at a periodical that would be sufficiently intriguing in appearance to stand out visually among competing publications; a periodical that the recipient would be reluctant to discard without at least a glance at the contents.

As for the content itself, in addition to being informative and interesting, we hoped to move beyond the traditional foundation formula of describing goals to also describe the complexities which underlie the *process* of working, here and abroad, toward human well-being—complexities which

are so great that the RF's determination to persist seems at times fully as remarkable as its occasional triumphs. In short, we hoped to reflect in RF Illustrated our own humanness, our own pleasures and frustrations in dealing with that great abstraction, humanity.

RF Illustrated is also a demand-circulation publication; people must write or call us to become subscribers. We now have an estimated 100,000 readers per issue—the overwhelming majority professional people, the result primarily of self-selection on the basis of the publication's contents.

We have an interested audience: from announcements in RF Illustrated more than 2,000 people requested the trustee statement "The Course Ahead"; and several hundred requests are received for each Working Paper. Many readers write us informed and complimentary letters, with an occasional complaint that the pages are hard to read and to file.

RF Illustrated has developed a following among columnists, editors, science writers, and other journalists. It is an effective instrument for stimulating the attention of the press, radio and television to the Foundation's fields of interest, its grantees, and to the Foundation itself. Closer relationships between the press and the Foundation have become one way to lever the Foundation's influence. Particularly qualified journalists have been participants in a variety of conferences held in New York, resulting in several major articles. Program officers are increasingly becoming journalistic sources, particularly in the health, population, environmental, and agricultural sciences, as well as the arts and humanities.

The dissemination of knowledge has become a programmatic means toward our stated goals, fully integrated with our other programs. It seemed therefore justified to formalize this fact by changing the status of our publishing and information efforts from a "service" activity to a program—with a separate budget and clearer, more productive relationships to each one of our program efforts. The name Educational Publishing program seemed an appropriate one to the Trustees and it has been authorized by them. Henry Romney is the Director of the program and deserves credit for its creativity—if creative be defined as "the ability to evoke effective surprise."

In addition to the above activities, many of us publish articles and books or edit essays for publication within areas of personal interest and expertise. During the year, John J. McKelvey edited a volume *The Future of Insecticides* (Wiley & Sons, Inc., 1976); Sterling Wortman wrote the lead article and helped assemble the essayists for the issue of *Scientific American* devoted to Food and Agriculture (September 1976) and to which Nevin Scrimshaw, Peter Jennings, and Edwin Wellhausen contributed essays (nearly all the essayists were or are connected to the RF!); Mason Willrich

published—just in time for the cold wave—a book *Administration of Energy Shortages: Natural Gas and Petroleum* (Ballinger, 1976); and Beverly Winikoff has assembled a series of essays on governmental policies in relation to nutrition in the U.S. and the LDC's which will be published by the MIT Press in 1977. Finally, I had a Bicentennial essay on health published in *Time Magazine* (August 9, 1976); "China Diary" as an RF Working Paper recounting the October 1975 trip to China with a world affairs delegation headed by Cyrus Vance; a guest editorial "International Health: 1976" in the *Annals of Internal Medicine*; and edited a collection of essays entitled "Doing Better and Feeling Worse: Health in the United States" (*Daedalus*) now available as a book from W.W. Norton & Company.

In addition, practically all of us are involved with *ad hoc* national and international commissions which publish reports of their deliberations, and serve on working committees of appropriate professional organizations here and abroad.

* * * *

During 1977 we will review the past five years, and this may lead to various recommendations for change in both our programs and our strategies to the Board of Trustees at its annual meeting in December. This effort will demand extensive use of the Trustee-Staff program committees and will, I am sure, prove to be intellectually rigorous to us all. Continuing, thorough review of our programs is basic to improving their quality, and to keeping us all alert, responsive, and energetic in our quest to "promote the well-being of mankind throughout the world."

April 1977 .

John H. Knowles, M.D.

GRANTS

AND

PROGRAMS

CONQUEST OF HUNGER

The Foundation's collaboration with nations to increase the quantity and quality of foodstuffs for their people began as an experiment in Mexico in 1943. It was then, and remains today, one of the most imaginative and far-reaching activities undertaken by private philanthropy. Unique among its characteristics was the long-term commitment of highly qualified professionals—interdisciplinary teams of scientists focusing on major technological problems affecting the productivity of important food crops. The evolution of these early activities has been described in numerous articles, books, and other publications.

To give breadth and depth to earlier activities, the Foundation broadened its goals in 1971 to include:

- Diversification and strengthening of the world network of international institutes
- Improvement of the nutritional quality, as well as the yields, of selected food crops; improvement of animal health and production
- Exploratory research to broaden the food production base
- Assistance to nations to strengthen agricultural institutions promoting rural development
- Strategies to improve the quality of life of the rural poor
- Socioeconomic analyses of food production and distribution.

THE INTERNATIONAL CENTERS

The concept of the autonomous international institute, with a highly professional staff focusing on production oriented research, training, and extension, grew out of the Foundation's national programs in Mexico, Colombia, Chile, and India. The rapid and significant contributions made by the first center, the International Rice Research Institute in the Philippines, confirmed the value of such instrumentalities.

Today there are nine international research centers linked into a problem-solving system capable of providing in a strategic manner technological information and assistance within the developing world. The International Food Policy Research Institute, sponsored by the International Development Research Centre and the Ford and Rockefeller Foundations, carries out research and current policy analysis on problems affecting the production, consumption, availability, and equitable distribution of food throughout the world, but particularly in the developing nations.

The system consists of three elements, some in place, others in the process of evolution. The pivot of the system is in the international institute

network itself. These institutes in turn draw on the sophisticated resources of universities and other research institutions in the developed world. Concurrently, the centers work with nations in the developing world to adapt the advanced technology for extension to their farmers.

Since 1971 the institutes have been supported by an informal coalition of governments, assistance agencies, and the Rockefeller, Ford, and Kellogg Foundations known as the Consultative Group on International Agricultural Research. In 1976, the Group allocated \$66 million for the institutes.

The following grants were made by The Rockefeller Foundation:

GRANTS:

International Food Policy Research Institute
Washington, D.C.

The Institute, established in 1975, conducts research on selected policy problems affecting the production and consumption of foodstuffs throughout the world and disseminates the results in ways that assist decision makers in choosing among alternative policies.

\$230,000

International Rice Research Institute (IRRI)
Los Baños, Philippines

International Maize and Wheat Improvement Center (CIMMYT)
Texcoco, Mexico

International Institute of Tropical Agriculture (IITA)
Ibadan, Nigeria

International Center of Tropical Agriculture (CIAT)
Palmira, Colombia

International Laboratory for Research on Animal Diseases (ILRAD)
Kabete, Kenya

The network of international agricultural research institutes continues to be one of the most effective modern day operations in international cooperation and plays a vital role in meeting world food needs.

\$2,100,000

International Potato Center (CIP)
Lima, Peru

The International Potato Center is rapidly assuming a role of leadership in worldwide potato research. Its work is based on the RF's 25-year-old potato program, which began in Mexico and has now been incorporated into CIP.

\$50,000

Pioneering efforts by the Foundation to direct international attention to the unsatisfactory productivity of grain legumes have resulted in systematic attack by the international centers on the yield-limiting problems of the more important legume species. This enhanced focus on these nutritionally superior crops will contribute markedly to food production in the developing countries. Continuing field staff activities and selective general support to the international centers and national research programs have contributed to accelerated adoption of new cereal technology and production. Modern rice and wheat production practices continue to result in greater food production in Asia, Latin America, and the Middle East. Improvement of triticale, a new species derived by crossing wheat and rye, has given yield results surpassing that of the better wheat varieties. Foundation support of work on this cereal is helping to raise triticale to the position of a significant international grain crop. Maize, durum wheat, and cassava are other important food crops that have shown substantial progress in production technology from continuing Foundation support.

Complementary to support of food crop research, the Foundation continues its active role in the collection, evaluation, and preservation of germplasm of major food crops to reduce the danger of loss of valuable genetic material. Support was given to Oregon State University to strengthen and expand its capability to provide training in applied plant breeding.

In the area of protection from pests and pathogens, the outstanding discovery of anti-juvenile hormone compounds and their potential role in the control of insects resulted from RF support of work at the Geneva Experiment Station, Cornell University. This finding provides the possibility of synthesizing highly specific insecticides. The Foundation's efforts in the area of animal health and production are focused on the control of hemoparasitic infections of livestock which cause great losses in the tropics.

GRANTS:

International Centre of Insect Physiology and Ecology (ICIPE)
Nairobi, Kenya

Research on the salivary physiology of the tsetse fly is a crucial phase in the hoped for development of a practical vaccine against trypanosomiasis.

\$78,155

Oregon State University

Corvallis, Oregon

Oregon State is expanding its interdisciplinary training program in small grain breeding techniques for plant breeders from the developing nations and the United States—a critical step toward achieving increased cereal productivity.

\$84,000

Oregon State University

Corvallis, Oregon

Oregon State's winter-spring wheat crossing program has been able to plant experimental wheat varieties in forty different countries. OSU also offers a cooperative program of research and training in wheat improvement for the Middle East and North Africa.

\$69,653

Rockefeller University

New York, New York

Research on the surface coat and/or plasma membrane of trypanosomes can lead to a better understanding of the host defense mechanism and to a rational approach to vaccine production or chemotherapy.

\$16,800

University of Glasgow

Glasgow, Scotland

The Glasgow research team continues to study the genetic resistance of animals to trypanosomiasis and to develop and test potential field vaccines for African cattle.

\$103,000

University of Illinois

Urbana, Illinois

Research in the College of Veterinary Medicine has already yielded a safe vaccine capable of immunizing cattle against at least some forms of anaplasmosis. These studies have now been expanded to include work on babesiosis and field studies in Mexico and Colombia to determine the effectiveness and limitations of existing vaccines.

\$266,000

World Health Organization

Geneva, Switzerland

Under RF support, the WHO Immunoglobulin Laboratories Research and Training Centre, Lausanne/Geneva, has been able to isolate the hemolytic factors probably responsible for the anemia

affecting cattle with trypanosomiasis. Present efforts are directed toward developing an effective vaccine.

\$12,000

GRANTS IN AID (\$35,000 or under):

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, Yonkers, New York, for an international conference on stress physiology of plants useful for food production.

\$15,000

F. BURSELL, University of Rhodesia, Salisbury, for a chemosterilization project of tsetse fly populations.

\$14,000

CORNELL UNIVERSITY, Ithaca, New York, for use by the Department of Plant Breeding and Biometry for a study on physiological-genetic improvement of yield in dry beans.

\$16,900

INTERNATIONAL CENTER OF TROPICAL AGRICULTURE, Cali, Colombia, for a conference of research workers to plan cooperative research on hemotropic diseases.

\$5,000

MICHIGAN STATE UNIVERSITY, East Lansing, for use by the Department of Crop and Soil Sciences for a study of plant architecture and physiologic efficiency in the field bean.

\$17,329

NEW YORK UNIVERSITY MEDICAL CENTER, New York, New York, for use by its Division of Parasitology for research on the potentiation of the immune response to Plasmodia (malaria) and Trypanosomes (sleeping sickness and Chagas' disease).

\$33,875

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, New Brunswick, for development of new methods of crop protection against the yellows type diseases that affect corn, legumes, and other crops.

\$25,000

UNIVERSITY OF CALIFORNIA, Riverside, for use by the Department of Plant Sciences for a research project on "Amphiploid Wheats: Their Experimental Production and Use."

\$10,000

UNIVERSITY OF EDINBURGH, Scotland, for use by its Centre for Tropical Veterinary Medicine for an international conference on tick-borne diseases and their vectors.

\$3,570

UNIVERSITY OF FLORIDA, Gainesville, for use by the Center for Tropical Agriculture for research focused on increasing peanut production and quality on an international scale in the developing countries.

\$25,000

UNIVERSITY OF FLORIDA, Gainesville, for use by the Vegetable Crops Department for research on the protein improvement of cowpeas (*Vigna unguiculata*).

\$2,100

UNIVERSITY OF MINNESOTA, St. Paul, for use by its Department of Plant Pathology for a study on generalized resistance in wheat to rust.

\$35,000

PIONEERING RESEARCH

Broadening the food production base through conventional approaches is not sufficient. Pioneering efforts are essential if the world's population is to be adequately fed. Workers at Oregon State University, with RF support, have been investigating how the nitrogen-fixing bacteria *Rhizobia* can assist plants to manufacture their own fertilizer. Common strains of these bacteria normally found in soybean root nodules waste almost half the energy supplied to them as sugar by the plant leaves, but certain efficient strains of these bacteria can increase soybean plant yield ten percent or more. The successful crossing of wheat and rye for improving yields and for developing a crop plant with great tolerance of cold weather has prompted others to make crosses in different genera to achieve similar results.

The development and application of new technologies—combined with many traditional management systems—in increasing the productivity of aquatic resources are receiving renewed attention by the Foundation. The International Center for Living Aquatic Resources Management (ICLARM) was established to focus attention on research, training, and development programs in aquaculture and fisheries. The Center has initiated research on life-cycle management systems for fresh and brackish water species. In addition, it has begun to explore possibilities of seeding the Antarctic with salmon, following systems developed in the northern hemisphere oceans.

GRANT:

International Center for Living Aquatic Resources Management (ICLARM)

Honolulu, Hawaii

ICLARM, to be headquartered in a Southeast Asian country, will be charged with development of small-scale, labor-intensive capture fisheries and aquaculture adaptable to local fishing systems and traditions as a way to improve health and nutrition in the Pacific Basin region.

\$200,000

GRANTS IN AID (\$35,000 or under):

CONNECTICUT AGRICULTURAL EXPERIMENT STATION, New Haven, for research on cell and tissue techniques to improve crop photosynthesis.

\$35,000

NEW ALCHEMY INSTITUTE EAST, Woods Hole, Massachusetts, for a fisheries conference.

\$1,000

OCEANIC FOUNDATION, Waimanalo, Hawaii, for the planning phase of a program for salmon production in the Antarctic.

\$24,975

OREGON STATE UNIVERSITY, Corvallis, for use by its Department of Agronomic Crop Science for research on triticale improvement.

\$35,000

OREGON STATE UNIVERSITY, Corvallis, for use by the Department of Botany and Plant Pathology for work in biological nitrogen fixation.

\$29,994

OREGON STATE UNIVERSITY, Corvallis, for use by the Microbiology, and Botany and Plant Pathology Departments for a workshop and consultation concerning research techniques for the investigation of nitrogen fixation by legumes.

\$5,000

UNITED NATIONS DEVELOPMENT PROGRAMME, New York, New York, for the formulation of an expanded program of research and development for cotton.

\$10,000

UNIVERSITY OF COLORADO, Boulder, for "An Investigation of the Biochemical Determinants of Symbiont-Host Selectivity between Nitrogen-Fixing Bacteria and Plants."

\$35,000

UNIVERSITY OF WISCONSIN, Madison, for use by the Department of Bacteriology for a research project on the biological conversion of nitrogen gas to ammonia.

\$19,840

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, Blacksburg, for use by its Department of Biology for an investigation of the classification of the bacterium *Spirillum*.

\$7,755

STRENGTHENING NATIONAL AGRICULTURAL INSTITUTIONS

In the face of more intensive demands on the food producing capacity of most nations of the world, it has become increasingly evident that nations individually must accelerate their rural development efforts. An increased food supply is but one aspect of the changes needed to alleviate poverty and malnutrition and to improve the general quality of life of many rural people. Building on the experience of earlier programs, the Foundation is pioneering new efforts to more effectively develop comprehensive approaches reaching the level of rural dwellers.

To this end, in 1975 the Foundation moved to establish the International Agricultural Development Service, an autonomous, nonprofit, technical assistance agency. IADS specializes in participating with developing nations in long-range cooperative production programs, or in agricultural research, education, or development efforts that are production-oriented. In addition, the agency seeks to facilitate and improve cooperation between donor agencies and country needs for more effective contributions to the alleviation of the world's food problems.

GRANTS:

Association for the Advancement of Agricultural Sciences In Africa

Addis Ababa, Ethiopia

The AAASA, created in 1968, is the only organization that provides a communication link among agricultural scientists in French- and English-speaking Africa. It serves as a forum where scientists meet to deal with practical problems of agricultural development, regional in scope and of a policy nature, and to influence administrators and academics to bring scientific expertise to bear on the problems of farmers.

\$50,000

International Agricultural Development Service (IADS)

New York, New York

The IADS will assist interested developing countries, individually and collectively, to accelerate agricultural production and rural prosperity while strengthening their indigenous agricultural, educational, and development institutions.

\$2,250,000

International Center of Tropical Agriculture (CIAT)

Palmira, Colombia

CIAT provides major support and training services to the Instituto de Ciencia y Tecnologia Agricolas (ICTA), Guatemala, an agency assigned countrywide responsibility for dealing with production of all major commodities, particularly at the small farmer level.

\$100,000

International Maize and Wheat Improvement Center (CIMMYT)

Texcoco, Mexico

CIMMYT provides staff, expertise, and training to regional scientists in the Mid-East Wheat Research and Training Program.

\$78,700

Mid-East Wheat Research and Training Program

Ankara, Turkey

The wheat improvement program initiated by the Foundation is not only increasing wheat production but also strengthening the agricultural research capabilities of the region where wheat originated thousands of years ago.

\$124,995

Pan American School of Agriculture

Tegucigalpa, Honduras

The Pan American School of Agriculture is engaged in an extensive revision of its present three-year diploma program.

\$118,581

RURAL DEVELOPMENT

Improving the quality of life for the rural poor remains one of the great challenges of our time. While there are no set answers despite decades of effort within greatly varying political systems, it is becoming increasingly evident in less developed countries that improvements in agriculture are central to rural as well as general economic development. Increased agricultural productivity is essential to capital formation and makes possible the investments required for progressive growth and development. However, improvements in agriculture alone are not sufficient and require complementary improvements in other socioeconomic areas. By concentrating on very carefully selected rural development demonstration projects in several representative regions, the Foundation hopes to help identify and pursue strategies which can be employed to improve simultaneously small farmer incomes, health and family planning, education, and nutrition while maintaining cultural values.

GRANTS:

International Rice Research Institute (IRRI)

Los Baños, Philippines

The ultimate test for new agricultural technology is whether the small farmer can use it. IRRI, in conjunction with the Philippine Council for Agricultural and Resources Research, is engaged in a program ("Masagana 99") to bring high yield technology to small rice farmers in upland and rainfed areas of the Philippines.

\$31,800

Massachusetts Institute of Technology

Cambridge, Massachusetts

The International Nutrition Planning Program at MIT, founded in 1972 with RF support, addresses the critical problems of malnutrition in low income countries through effective multidisciplinary planning.

\$170,000

GRANTS IN AID (\$35,000 or under):

ALICIA PATTERSON FOUNDATION, New York, New York, to enable one of its fellows to undertake investigations on the social role of the Roman Catholic Church in Latin America today.

\$6,000

ASIA SOCIETY, New York, New York, in support of the Indo-U.S. Subcommission on Education and Culture seminar on "Linkages of Agriculture and Education."

\$3,200

ASOCIACION COLOMBIANA PARA EL ESTUDIO DE LA POBLACION, Bogotá, Colombia, for a regional study of the work roles and status of rural women in Colombia.

\$34,960

SOCIOECONOMIC INVESTIGATIONS

The Foundation is supporting research in five areas critical to food production and distribution and rural incomes in the developing countries: (1) international trends in food availability; (2) processes of formulation and implementation of government policies affecting agricultural and rural development; (3) effectiveness of rural organizations for agricultural change and rural income improvement; (4) differential contributions to food production of income, sex, and regional groupings and their access to improved technology and markets; and (5) the diffusion and effects of new technologies in different socioeconomic environments and improved criteria for technology design to fit such environments.

GRANTS IN AID (\$35,000 or under):

CORNELL UNIVERSITY, Ithaca, New York, for research on transportation and the structure of regional development in Nepal by Gary Ender.

\$10,000

CORNELL UNIVERSITY, Ithaca, New York, for a study on "The Political Economy of Irrigation Development: A Case Study of the United States Bureau of Reclamation Experience with Implications for Developing Countries."

\$2,500

DEVELOPMENT FOUNDATION OF TURKEY, Ankara, for a study entitled "Description and Analysis of Wheat Farming in Turkey with Implications for Agricultural Policy."

\$9,037

INSTITUTO DE CIENCIA Y TECNOLOGIA AGRICOLAS, Guatemala City, Guatemala, for training expenses of its Socioeconomic Unit.

\$4,800

INTERNATIONAL CENTER OF TROPICAL AGRICULTURE, Cali, Colombia, to enable David Franklin to complete his doctoral training in economics at North Carolina State University.

\$10,000

INTERNATIONAL RICE RESEARCH INSTITUTE, Los Baños, Philippines, for a research project on the diffusion of improved rice genetic materials in relation to the breeding objectives, information seeking habits, and the sociological characteristics of rice scientists in developing nations.

\$7,500

IOWA STATE UNIVERSITY, Ames, for use by its World Food Institute for the World Food Conference of 1976.

\$15,000

MICHIGAN STATE UNIVERSITY, East Lansing, for preparation of a computerized annotated bibliography on energy in agriculture.

\$5,000

MIDDLE EAST TECHNICAL UNIVERSITY, Ankara, Turkey, for preparation of a bibliography of economics of agriculture in Turkey.

\$2,000

SWARTHMORE COLLEGE, Pennsylvania, for publication, dissemination, and related costs of a volume on the problems and prospects of world food institutions. (Jointly with the Conflict in International Relations program)

\$10,562

UNIVERSITY OF CALIFORNIA, Berkeley, for use by its Department of Agricultural and Resource Economics for a study of rural development in Latin America.

\$15,000

POPULATION AND HEALTH

THE POPULATION PROGRAM

The Foundation's interest in population research began with demographic studies in the 1920's, continued in the 1930's in the then new field of reproductive endocrinology, and in 1963, with growing recognition of the problems posed for human welfare by rapid population growth, developed into a formal Population Program. Over the past decade the Foundation has been particularly active in promoting research in reproductive biology and on the social and economic determinants and consequences of population behavior. The Foundation has given strong support to strengthening population studies in social science research and training centers, and has supported the research and training aspects of field action programs which provide family planning services.

CURRENT TRENDS

The decade of the sixties saw a very rapid, worldwide evolution of public and governmental concern, of action programs, and available funds. In 1963, funds committed by *outside* sources (i.e., other than the internal resources of universities, research institutes, and governments) to research, training, and service programs totaled only about \$5 million, almost all of it coming from private sources, principally the Ford and Rockefeller Foundations, the Population Council, and individuals. In 1975, the total outside amount available had grown to about \$200 million, almost all of it from governmental agencies here and abroad—convincing evidence, incidentally, that private foundations can and do pioneer in the solving of fundamental problems.

Because of this increase in funds and concern for family planning programs and public education, The Rockefeller Foundation has been able over the past few years to significantly shift its support to areas of investigation less well funded.

Today, the main thrusts of the Foundation's program in population are the support of:

- Research and training in the social sciences focusing on developing country institutions and policy-relevant programs
- Basic research in reproductive biology
- Applied developmental research in contraceptive technology.

SOCIAL AND ECONOMIC CONSIDERATIONS

The long-term goal of world population stabilization requires not only safer, more efficient methods of contraception, but, as importantly, concomitant economic, social, and legal conditions conducive to reductions in family size. Policymakers in both developed and developing countries know little of precise interrelationships between population and social, economic, cultural, and political factors. Strengthening social science research on population policy issues is a means of remedying this situation, particularly if the research is conducted by indigenous social scientists.

Toward these goals, the following grants were made in 1976:

GRANTS:

American Friends Service Committee

Philadelphia, Pennsylvania

AFSC family planning programs in developing countries of Asia and Africa are carefully adapted to local needs and facilities in order to ensure maximum effectiveness.

\$72,400

Biswajit Banerjee

Oxford, England

Mr. Banerjee is studying migration to Delhi, particularly the relationship between population flows and urban unemployment and marginal employment.

\$2,135

Columbia University

New York, New York

Activities of the Center for Population and Family Health center around three objectives: to improve the planning, management, and effectiveness of population and family health programs here and abroad; to develop a comprehensive women's health care program for upper Manhattan; and to provide instruction and training opportunities in social science/population issues and in program administration.

\$500,000

Council for Asian Manpower Studies

Quezon City, Philippines

This regional organization of economists, demographers, sociologists, and other scholars promises to emerge as the authoritative source of applied, policy-oriented research on problems of population growth, employment, and manpower development for all of South and Southeast Asia.

\$125,298

El Colegio de México

Mexico City, Mexico

PISPAL, a Latin American social science research program on population problems, has in its four years of existence identified priority research areas, initiated and funded more than 20 research projects, and established a network among research institutions in the population field.

\$225,000

El Colegio de México

Mexico City, Mexico

Under El Colegio's leadership, a small group of internationally recognized experts are reviewing existing knowledge in the area of social science research on population behavior relevant to policy formulation. The group, in consultation with social scientists and policymakers from developing countries, will identify research gaps and will make recommendations for priority funding.

\$50,000

Federal University of Minas Gerais

Belo Horizonte, Brazil

In 1974, the Center for Regional Planning and Development of the Federal University of Minas Gerais established Brazil's first training and research program in economic demography at the master's degree level. Under the current grant, this multidisciplinary program—and its influence on Latin American economic development planning—will be expanded, primarily through student stipends.

\$150,000

Mahidol University

Bangkok, Thailand

The Institute for Population and Social Research, which played an important role in the Government's decision to officially adopt a national family planning program, is becoming a major resource for meeting the family planning research and programmatic needs of the country.

\$90,000

Mahidol University

Bangkok, Thailand

The University has begun an intensive program to train a cadre of educators for the new population education unit in the Ministry of Education. These individuals, in turn, become responsible for training primary and secondary school teachers, and those involved in teaching out-of-school groups.

\$90,000

Program for Joint Studies on Latin American Economic Integration (ECIEL)

Rio de Janeiro, Brazil

ECIEL, whose membership now numbers thirty Latin American research centers, is coordinating a research project aimed at clarifying the interrelation between population growth, labor market performance, labor force participation, and economic development.

\$300,000

Research on Population Effects of Development Programs

In 1976 the trustees approved an appropriation of \$350,000 for allocation by Foundation officers to encourage and support 14 to 17 research projects designed to evaluate the impact of development programs on population growth and distribution. Each project would evaluate a specific development program to determine whether the resulting socioeconomic changes had affected the fertility and migration behavior of the participating families. Projects, to be selected with the help of an advisory panel, would be carried out by interdisciplinary teams in the countries concerned.

Rockefeller-Ford Foundations Research Program on Population and Development Policy

In 1970 the Rockefeller and Ford Foundations initiated a competitive research program in the field of population policy in order to promote the study of the determinants and consequences of population behavior. During the past six years, 171 scholars, representing a range of disciplines and countries, have been supported under this program.

In 1976 the trustees appropriated \$500,000 for this program. The following individuals were selected for RF awards:

BYUNG-JOON AHN, Center for Chinese Studies, University of Michigan: "South Korea's Population and Development Policies in 1962-1977."

ALBERTO BAYONA-NUNEZ, Pontifica Universidad Javeriana, Colombia: "The Interrelationship Fertility—Mortality and Intervening Contextual Factors: An Application of Path Analysis."

ROY H. BEHNKE, University of California, Santa Barbara: "Nomadic Settlement and the Economic Development of Commercial Ranching in Cyrenaica, Libya."

JERE R. BEHRMAN, University of Pennsylvania: "Biases in the Estimation of Fertility Determinants, Women's Labor Force Participation, and Wages in a Developing Country."

NANCY BIRDSALL, Yale University: "Family Size and Family Welfare in Colombia."

JEAN M. BRAINARD and MICHAEL A. LITTLE, State University of New York at Binghamton: "Demographic Consequences of Social Behavior: Polygyny in South Turkana, Kenya."

FE DEL MUNDO, Institute of Community and Family Health, Philippines: "An Evaluation of the Special Integrated Financing Program of the Rural Bank of San Luis."

C. EASTMAN, Woden Valley Hospital, Australia, and BARBARA T. GROSS, Australian National University: "Urban Stress, Lactation, Ovulation, Fertility in Two Cultures."

GLORIA JAVILLONAR, Virginia Polytechnic Institute and State University (on leave from the University of South Alabama): "Labor Force Participation and Fertility of Married Filipino Women."

MICHAEL KATZ, York University, Canada: "Differential Fertility and Industrialization."

DIANA KAYONGO-MALF and PARVIN WALJI, University of Nairobi: "Child Labor Contributions and Changing Division of Family Labor in Kenya."

SUNG JIN LEE and SANG CHIN CHOI, Korean Institute for Research in the Behavioral Sciences: "Study on Sex Preference Socialization."

THOMAS W. MERRICK, Georgetown University: "Marriage, Fertility, and Land Availability in Rural Brazil."

BARBARA D. MILLER, Syracuse University: "Sexual Inequality and Population Dynamics in India."

CHRISTINE OKALI and CHRISTINE OPPONG, University of Ghana, and KAMENA OKONJO, University of Nigeria: "Women's Roles and Fertility in West Africa: A Biographical Approach."

SUZANA PRATES, NELLY NIEDWOROK, and MARIO LOMBARDI, Centro de Informaciones y Estudios del Uruguay: "Modernization, Demographic Transition and Development."

ARISTIDE R. ZOLBERG, University of Chicago: "Determinants of National Migration Policies in a Changing International System."

University of the Philippines

Quezon City, Philippines

In collaboration with the University's Population Institute, the School of Economics has developed a master's degree program in demographic economics. Foundation support provides fellowships for foreign developing-country graduate students, primarily from Southeast Asia.

\$275,000

Xavier University

Cagayan de Oro City, Mindanao, Philippines

The University's Department of Sociology and Anthropology has expanded its graduate program in demography to include training at the doctoral level. Foundation funds will support this program, permit the addition of an economic demography component, and provide research assistance for projects of the Mindanao Center for Population Studies.

\$75,000

GRANTS IN AID (\$35,000 or under):

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for a project on the history of the scientific study of fertility in the United States.

\$9,000

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D.C., for its Kenyan ethnography of reproduction project to support the development of new methodologies for estimating population characteristics of small areas.

\$6,000

ASSOCIATION FOR THE STUDY OF ABORTION, New York, New York, for termination of its activities.

\$10,000

COMMITTEE FOR COMPARATIVE BEHAVIORAL STUDIES IN POPULATION, Seoul, Korea, for a multinational comparative study on the value of children.

\$20,000

GEORGE WASHINGTON UNIVERSITY, Washington, D.C., for increased distribution of the *Population Reports* by its Population Information Program.

\$24,000

INSTITUTO DE NUTRICION DE CENTRO AMERICA Y PANAMA, Guatemala City, Guatemala, for a joint study on the social science and biomedical interrelationships among nutrition, child health and development, and fertility.

\$15,000

MINISTRY OF EDUCATION, Bangkok, Thailand, for use by its Department of Educational Techniques for a Population Education Unit.

\$25,000

NATIONAL INSTITUTE OF DEVELOPMENT ADMINISTRATION, Bangkok, Thailand, for use by its Graduate School of Public Administration for a workshop for an analysis and empirical study on the economic costs of children.

\$15,000

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT, Paris, France, for use by its Development Centre for a study to determine the effectiveness of dissemination methods for demographic research in Brazil.

\$15,000

POLICY STUDIES ORGANIZATION, Urbana, Illinois, for a symposium on critical issues in population policy.

\$2,000

POPULATION ASSOCIATION OF AMERICA, Providence, Rhode Island, for use by its Committee on Population Statistics for general operating expenses.

\$10,000

POPULATION CRISIS COMMITTEE, Washington, D.C., for expenses of eight resource people from the United States and Canada who attended the Hemispheric Conference on Teen-Aged Fertility.

\$3,000

PRINCETON UNIVERSITY, New Jersey, for use by its Office of Population Research for completion of research on the relationships between economic development and birth rates.

\$30,000

PROJECTS FOR POPULATION ACTION, New York, New York, for preliminary costs of its population activities.

\$20,000

SMITHSONIAN INSTITUTION, Washington, D.C., for use by its Research Institute on Immigration and Ethnic Studies for a conference on "The New Immigration."

\$2,527

TRANSNATIONAL FAMILY RESEARCH INSTITUTE, Bethesda, Maryland, for its International Reference Center for Abortion Research and the publication of *Abortion Research Notes*.

\$10,000

MARIS A. VINOVSKIS, Ann Arbor, Michigan, for a study on voting behavior in the 94th Congress on population policy.

\$3,350

BASIC RESEARCH IN REPRODUCTIVE BIOLOGY

The widespread use of the pill and the intrauterine device over the past decade has shown that these methods, although unquestionably more effective than those in use previously, have defects which limit their usefulness. Because there is general agreement that better methods are a necessary (though not a sufficient) condition for worldwide limitation of population growth, the support of basic research in reproductive biology is essential: better contraceptive methods can come only from a more complete understanding of the complex events involved in the reproductive process.

A large part of this aspect of the Foundation's program has been assistance for the establishing of major centers for research and training in reproductive biology in a number of U.S. laboratories. Such centers, which

typically include a group of senior investigators working with postdoctoral research associates and graduate students in an integrated program of research on a number of related topics, have been supported in previous years at the University of California, San Diego, the University of North Carolina, the Salk Institute, Rockefeller University, Harvard Medical School, and the University of California San Francisco Medical Center, at a total cost to the Foundation of more than \$12 million.

Grants are also made on a highly selective basis for research by smaller groups in single university departments, particularly when there is a good opportunity to add reproductive biological research to laboratories of high quality which have been working in other areas relevant to little-studied aspects of reproductive biology, or as a means of increasing the contributions of other fields to reproductive biology. In 1976 grants were made for new basic science research positions in reproductive biology in the departments of obstetrics and gynecology at the University of California, San Diego, and the University of Pennsylvania; support was renewed for positions previously established at the University of Pennsylvania and Washington and Cornell Universities.

GRANTS:

Colorado State University

Fort Collins, Colorado

A newly organized program of research on cellular and molecular regulation of the corpus luteum gives promise of developing new methods of fertility control.

\$230,000

University of Bristol

Bristol, England

The reproductive immunology research group at the University of Bristol is internationally recognized for its work on the major problems in immunological approaches to fertility control.

\$225,000

University of Texas

San Antonio, Texas

A unique training program at the Center for Research and Training in Reproductive Biology and Voluntary Regulation of Fertility combines instruction in social science population studies with basic biology and clinical medicine, to produce a core of population workers—chiefly from Latin America—conversant with all aspects of population problems.

\$366,000

Washington University

St. Louis, Missouri

The results of studies on the vas deferens, conducted by Dr. Peregrina Labay, Department of Urology, should establish a more informed and rational approach to male contraception and will contribute to basic knowledge of the male reproductive process.

\$105,000

GRANTS IN AID (\$35,000 or under):

COLUMBIA UNIVERSITY, New York, New York, for a research position in the Department of Obstetrics and Gynecology in its College of Physicians and Surgeons.

\$23,760

CORNELL UNIVERSITY, Ithaca, New York, for research in synthesizing and developing analogues of the gonadotropins, to be conducted by the Department of Medicine of its Medical College.

\$35,000

JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland, for research in reproductive biology in the Department of Physiological Chemistry, School of Medicine.

\$25,000

MAHIDOL UNIVERSITY, Bangkok, Thailand, for research in reproductive biology in the Department of Biochemistry, Faculty of Science.

\$17,920

NEW YORK BOTANICAL GARDEN, Bronx, New York, for an herbarium search for plants with reputed contraceptive and/or abortifacient activity.

\$35,000

UNIVERSITY OF TEXAS, Dallas, for a postdoctoral research position in the Department of Obstetrics and Gynecology of the Health Sciences Center at Dallas.

\$24,700

**APPLIED DEVELOPMENTAL RESEARCH IN
CONTRACEPTIVE TECHNOLOGY**

Potential new contraceptive methods had been partially developed in recent years, but these leads were not being followed for various reasons. Although no immediate breakthroughs are in sight, the Foundation continues its support for the International Committee for Contraception Research for intensive laboratory and clinical research to provide definitive answers as to which leads are promising enough to warrant further exploration.

GRANT:

Population Council

New York, New York

A major international program of applied laboratory and clinical research tests the effectiveness and safety of potential new contraceptive methods and determines their suitability for large-scale use.

\$500,000

GRANT IN AID (\$35,000 or under):

INSTITUTO MEXICANO DEL SEGURO SOCIAL, Mexico City, for its program for adaptation of contraceptive technologies for local use.

\$35,000

THE HEALTH PROGRAM

The provision of adequate health care is one of the problems besetting most nations, but the problem is more serious in the Third World. With the evolution after World War II of international and national agencies with health programs, The Rockefeller Foundation terminated its former programs aimed at the control of specific diseases (with the exception of schistosomiasis). Instead, the intent is to focus, largely through the Education for Development program, on increasing support for community medicine which, as currently defined, would include training and research in generic problems of nutrition, maternal and child health, sanitation, infectious diseases, population dynamics, family planning, and health care delivery systems (with specific attention to the training of auxiliaries)—each in the context of a defined population and with due consideration of related socioeconomic and cultural factors. Unlike the Foundation's activities in population, the health components of the program are largely staffed by RF personnel.

HEALTH SCIENCES IN EDUCATION FOR DEVELOPMENT

At all of the institutions which since 1963 have been supported as University Development Centers, substantial strides have been made to prepare young men and women for careers in the health sciences with a special, firsthand awareness of the health problems of rural populations.

To varying degrees, the means have been to strengthen undergraduate and graduate science departments, to help structure good medical schools, and, importantly, to expose medical students to the real-life health problems of rural people as a regular part of their training.

Comparable working relationships are beginning to take shape at the three institutions which have come more recently into the Education for Development orbit.

In Zaïre, a Foundation staff member with long experience in the training and use of auxiliary personnel as providers of health care is working with the National Health Council on the development of curricula and training methods for such personnel and the organization of a large-scale system built around their utilization. At the Federal University of Bahia in Brazil, the program is involved with structuring community health components for both rural and urban development efforts. And at Gadjah Mada University in Indonesia, work is progressing to create, at the Faculty of Medicine, teaching and training programs, as well as medical research, relevant to the nation's health problems. Six members of the Foundation's professional field staff in the health sciences were assigned to centers in the Education for Development program during 1976.

TROPICAL MEDICINE

The Foundation is resuming its interest in basic research in the human parasitic diseases indigenous to the tropics, in large part because it is apparent that the economic and social development of those regions may be thwarted by the prevalence of such diseases in humans and animals. Of particular interest is the program begun in 1967 to study control of schistosomiasis on the island of St. Lucia. Interest is growing in this disease which is endemic to tropical and semi-tropical zones and is spreading because of alterations in the ecology resulting from dams and irrigation systems. Eight RF staff members are resident on the island. The Rockefeller Foundation is also supporting basic studies in other locations on the snail vectors, new drugs, and immunology.

GRANTS:

Brown University
Providence, Rhode Island

Studies on chemotherapy and immunology in experimental schistosomiasis offer hope for improved diagnosis and treatment, and for a better understanding of the immunology of the disease.

\$180,000

Cornell University

Ithaca, New York

The State of Bahia, the Federal University of Bahia, and Cornell University Medical College are collaborating in establishing a Center for the Study and Control of Communicable Diseases. A central laboratory, to be located in the city of Salvador, will serve as the hub of a statewide network to assist in diagnosis and control of infectious diseases prevalent in northeastern Brazil.

\$300,000

London School of Hygiene and Tropical Medicine

London, England

Scientists at the School are now ready to test a newly developed live vaccine against schistosomiasis in domesticated animals, particularly cattle and sheep. Extensive field tests planned for the future, if successful, can be a powerful stimulus to accelerate research on a vaccine for humans.

\$140,000

GRANTS IN AID (\$35,000 or under):

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for the production of a special issue of *Daedalus* dealing with health in America.

\$30,000

BOSTON UNIVERSITY, Massachusetts, for research on the formulation of government policy in nutrition with specific reference to the promotion, sales, and use of infant formula in developing countries.

\$25,000

CASE WESTERN RESERVE UNIVERSITY, Cleveland, Ohio, for use by its School of Medicine for research on the immunology of schistosomiasis to be carried out in the Division of Geographic Medicine.

\$25,000

COLUMBIA UNIVERSITY, New York, New York, for the collection and processing of Lassa fever immune plasma by the Division of Tropical Medicine, College of Physicians and Surgeons.

\$35,000

COLUMBIA UNIVERSITY, New York, New York, for joint research by its Institute of Human Nutrition and the Ministry of Health, Republic of Panama, on the comparative impact of selected nutrition and agriculture programs on the health status of local populations in Panama.

\$33,000

CORNELL UNIVERSITY, Ithaca, New York, to enable its College of Engineering to maintain a faculty position in environmental engineering concerned with problems of underdeveloped countries.

\$5,000

HARVARD UNIVERSITY, Cambridge, Massachusetts, for a program on population, maternal and child health, and nutrition conducted by its School of Public Health in conjunction with the Ministry of Public Health in Haiti.

\$16,000

HEALTH SERVICES FOUNDATION, Chicago, Illinois, for production of a document on new directions in U.S. health care.

\$19,200

INTERFAITH CENTER ON CORPORATE RESPONSIBILITY, New York, New York, for its activities to promote better understanding of the inappropriate use of infant formula in developing countries.

\$500

INTERNATIONAL INSTITUTE FOR VITAL REGISTRATION AND STATISTICS, Chapel Hill, North Carolina, for its programs.

\$20,000

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, England, for statistical studies of the St. Lucia schistosomiasis project.

\$23,500

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, England, to enable Ms. Linda Brink to attend the meetings of the American Society and the Royal Society of Tropical Medicine and Hygiene in Philadelphia in 1976.

\$750

MOREHOUSE COLLEGE, Atlanta, Georgia, for support of a faculty member in the Department of Biochemistry to develop an appropriate curriculum for the Morehouse Medical Education Program.

\$18,625

STATE UNIVERSITY OF NEW YORK DOWNSTATE MEDICAL CENTER, Brooklyn, for use by its Department of Microbiology and Immunology for studies of immunology in experimental schistosomiasis.

\$18,750

TULANE UNIVERSITY, New Orleans, Louisiana, to enable its Department of Tropical Medicine to strengthen its teaching program by using outside consultants and visiting lecturers and by visits of faculty members to other tropical medicine centers.

\$15,000

UNIVERSITY OF GEORGIA, Athens, for further studies of schistosome interactions with host blood proteolytic systems to be carried out in the Department of Zoology.

\$25,000

EDUCATION FOR DEVELOPMENT

A university can be a powerful force for social and economic development, provided it is structured as an institution responsive to the needs of society and not as an end in itself.

What is today the Education for Development program was adopted in 1963 as a primarily field staff-operated cooperative program with institutions in Latin America, Asia, and Africa. Its objective was to help create strong universities staffed largely by indigenous scholars and engaged in teaching and research relevant to national and regional needs. Since then a number of reviews, the latest begun in 1975 and concluded last December, have sharpened the focus of the program.

The broad, multidisciplinary approach previously held, which permitted the Agricultural Sciences, Health Sciences, and Social Sciences to move only in unison, has been discontinued; single disciplines or pairs of disciplines now can proceed on their own. Second, the requirement that only a university be utilized as the instrument for development has been abolished. Non-university agencies and educational institutions which can demonstrate true relevance to national development are also eligible.

The main thrusts of the current program are fourfold:

- To strengthen indigenous faculties
- To develop curricula appropriate to local needs
- To encourage research relevant to national needs
- To help structure outreach programs that address themselves to fundamental national deficiencies, particularly in rural life.

THE FIRST ROUND

After more than a decade of close working relationships with the universities that came under the original program, the Foundation is phasing out its financial support, if not its interest. It is hoped that much of lasting value has been achieved.

At the University of Valle, in Cali, Colombia, an outstanding medical school has been developed. An important component of its curriculum is a mandatory period of clinical residency in the Candelaria Rural Health Center to make students more aware of the needs of rural people and to teach the rudiments of preventive medicine. Currently, two innovative projects related to the delivery of health care are underway: the first, a system of "simplified surgery" that would reduce the huge load of unmet

surgical needs in the Cauca Valley region; the second, a program utilizing paramedical personnel to handle the brunt of common psychiatric problems in a community setting.

At the University of the Philippines, a graduate program in economics has been built from the ground up. The faculty has provided graduate training to young economists from approximately a dozen Asian countries. A rural health center in the Bay district is available to help train medical students in the delivery of health care to isolated villages.

In Bangkok, a basic science curriculum has been developed at Mahidol University. This institution has emerged as the major graduate training center in the basic medical sciences in Southeast Asia. Here again, as an integral part of the program, medical students are exposed to rural health problems. At Kasetsart University, agricultural training and research have focused on the problems that limit yields of basic food crops and on livestock improvement, while the concept of practical research in the field has been successfully introduced in connection with the development of a modern experimental farm. Studies in economics to the M.A. level have been built up at Thammasat University and a close working relationship established with the Faculty of Economics at the University of the Philippines. The three universities are also cooperating in a special rural development project funded by the Foundation.

In Nigeria, the University of Ibadan, once a university college in the British tradition, is today a full-fledged university. Graduates who have done advanced work either there or overseas now form the majority of the faculties of Nigeria's other universities, and students from other West African countries and Zaïre come to study in its program of agricultural economics.

The EFD program in East Africa has provided selected support for (1) activities which extend university capacity to address problems of national development, (2) postgraduate programs designed to meet critical manpower needs, and (3) development of teaching materials and qualified staff. The applied social science research units in the Universities of Nairobi and Dar es Salaam are institutions which governments and other agencies can draw on for the pursuit of increased understanding of development problems. Particularly noteworthy are the Institute for Development Studies and the development of graduate studies in economics at the University at Nairobi in Kenya, and the Bureau of Resource Assessment and Land Use Planning at the University of Dar es Salaam. The impact of these institutions has crossed the boundaries of the sponsoring countries to influence education and economic development in other African nations.

Today even the casual reader of international news knows that in many parts of the world a university can abruptly become the focal point for protest and its severe repression. In 1976, serious difficulties were experienced by faculty members and students of Makerere University in Uganda, and Thammasat University in Thailand. Such events were keenly felt by Foundation staff, particularly those with close working relationships with the institutions concerned, both in the field and in New York.

Gadjah Mada University in Yogyakarta is the oldest of the universities established by the Indonesians themselves and thus the source of considerable national pride. In 1971 The Rockefeller Foundation and Gadjah Mada joined in a cooperative effort to strengthen the University.

In the area of health sciences, teaching and research are being directed primarily toward community medicine with the assistance of two Foundation specialists. A maternal/child health program is also operational.

The agricultural complex now provides new agricultural research and development station facilities for training in adaptive research and extension work with small farmers. The Foundation has contributed an animal scientist and a plant scientist to the agricultural team.

The social science complex at Gadjah Mada has been a significant influence in creating a system of higher education responsive to national and regional needs through appropriate teaching, research, and outreach programs. In the past four years, two special institutes have been created to this end: the Institute of Population Studies, which has an interdisciplinary staff under the leadership of a highly regarded Indonesian scholar; and the Institute of Rural and Regional Studies, devoted to improving the quality of life for all Indonesians. Three Foundation field staff—two in the Faculty of Economics, one in the IRRS and the Department of Sociology—are currently assigned here.

ZAIRE

In 1971 Zaire set for itself the task of reorganizing its entire system of higher education. With the aid of Foundation field staff and support funds, the National University of Zaire has embarked on an ambitious plan, calling for a complete departure from the colonial university system, the introduction of a solid, practical component into the curriculum, and a drastic reduction of the wastage that characterized the previous system.

In the Faculty of Social Sciences and the Center for Social Research the top leadership is now completely Zaïrian. Most specialized positions are

occupied by Zairians who have returned from doctoral programs; many of these younger faculty members were supported in their advanced studies by the Foundation. Progress has also been made in the creation of a well organized undergraduate reading library.

The Agricultural Sciences Faculty is in the process of structuring a program that has the potential for producing a competent cadre of agronomists and other agricultural scientists capable of applying the principles of modern agriculture to local conditions and enabling farmers to raise food crop production levels.

Special summer programs in intensive English language instruction, short-term grants for advanced study outside Zaire, and regular Foundation fellowships are also accelerating staff development.

The National Health Council of Zaire, created in November 1974, is working with the University to develop a new curriculum and training program for paramedical personnel and an appropriate health care delivery system for Zaire's rural population.

BRAZIL

The Federal University of Bahia is the most recent addition (1973) to the institutions assisted under the Foundation's Education for Development program. Through its innovative Program of Research and Education for Development (PROPED), substantial progress has been made in collaborative, developmental efforts between the University, the State of Bahia, the City of Salvador, and appropriate Brazilian federal agencies. Research and extension projects established under PROPED focus on the five critical areas of agriculture, health, economics, management, and education.

GRANTS:

Federal University of Bahia

Salvador, Brazil

As the cooperative program between the Foundation and the University has evolved, it has become one of the most innovative of the Education for Development programs, combining the strengthening of teaching and research relevant to state and national needs with outreach and extension activities geared to the needs of the region.

\$755,400

Gadjah Mada University

Yogyakarta, Indonesia

Gadjah Mada is developing programs in the health sciences, the agricultural sciences, and the social sciences to help Indonesia meet national goals, particularly in the area of rural development.

\$183,575

Kasetsart University
Mahidol University
Thammasat University
Bangkok, Thailand

The Thailand cooperative effort, which began in 1963 and which has since evolved into one of the largest and most complex undertakings of the current Education for Development program, has resulted in a strong university system with a nucleus of highly qualified scholars engaged in teaching and research directed to national and regional needs.

\$378,831

Makerere University
Kampala, Uganda

University of Dar es Salaam
Dar es Salaam, Tanzania

University of Nairobi
Nairobi, Kenya

With Foundation support, the three major national universities of East Africa have now established competent indigenous faculties, sound undergraduate teaching programs, and applied research programs attuned to national and regional development needs.

\$174,117

National University of Zaire
Kinshasa, Zaire

The University is engaged in active development of academic and administrative staff, intensive curricula reforms, and important research on immediate problems of development.

\$148,000

University of Ibadan
Ibadan, Nigeria

The Foundation is contributing to the support of a Chief Planning Officer for its Planning and Research Unit.

\$25,000

University of Valle
Cali, Colombia

Foundation support to this major Latin American university in 1976 was concentrated in the areas of the health sciences, engineering, and community outreach programs.

\$307,184

University of Valle

Cali, Colombia

Foundation support will enable two new programs for the improved delivery of health care to become fully operative on a scale wide enough to accumulate convincing data on costs and results, and to serve as models for replication.

\$185,000

GRANTS IN AID (\$35,000 or under):

MUDDATHIR ABDEL-RAHIM, Uppsala, Sweden, for a study on polity and identity. \$15,000

BOWLING GREEN STATE UNIVERSITY, Ohio, for a project, "Studies in the Development of the Labor Sector of Thailand." \$1,890

HARVARD UNIVERSITY, Cambridge, Massachusetts, for a conference on an African policy for the United States. \$10,000

HARVARD UNIVERSITY, Cambridge, Massachusetts, for the study, "The Effects of Transnational Conflict on Political Development: A Case Study of the Repression of Political Opposition in Kenya." \$7,500

INTERNATIONAL COUNCIL FOR EDUCATIONAL DEVELOPMENT, New York, New York, for the continuing study of higher education for development. \$15,000

PRINCETON UNIVERSITY, New Jersey, to enable scholars to accept assignments for teaching and research related to university development in Africa, Asia, and Latin America. \$6,477

UNIVERSITY OF DAR ES SALAAM, Tanzania, for the World Conference on Adult Education and Development. \$6,000

UNIVERSITY OF DAR ES SALAAM, Tanzania, to enable three staff members of the East African universities to participate in the Fourth World Congress of Rural Sociology. \$4,709

UNIVERSITY OF THE PHILIPPINES, Quezon City, for use by its School of Economics for a study on the distribution of municipalities and villages by average household incomes. \$7,670

CONFLICT IN INTERNATIONAL RELATIONS

Through this program, the Foundation seeks to contribute to the development of more secure and equitable international relations in an increasingly interdependent world community. The emphasis in the program thus far has been on the anticipation, control, and resolution of conflict. Grants to institutions, awards to outstanding persons in the field of international relations, and sponsorship of conferences have been used to focus on the following areas:

- International economic and resource issues
- Arms control and international security
- New approaches to world order
- Analysis of particular conflicts.

INTERNATIONAL ECONOMIC AND RESOURCE ISSUES

Energy resources, food scarcities, environmental pollution, and population growth raise basic questions about the capacity of the planet to sustain economic prosperity for its inhabitants and the capacity of international institutions to achieve an equitable allocation of the world's available resources.

GRANTS:

University of Michigan

Ann Arbor, Michigan

Three social scientists at the University's Center for Russian and East European Studies are studying the effects of recent changes in the world economy on relations between Eastern Europe and the Soviet Union.

\$145,000

University of Pennsylvania

Philadelphia, Pennsylvania

The Economic Research Unit at the University of Pennsylvania is conducting econometric analyses of alternative price stabilization measures for four commodity markets: copper, bauxite and aluminum, wheat, and coffee.

\$200,000

University of Sussex

Brighton, England

The Centre for European Studies is conducting a two-year study of the ways in which the food and agricultural sector in Western Europe may change between the present and 1990, and the economic and political implications for alternative West European food policies for societies within and outside that region.

\$75,000

University of Washington

Seattle, Washington

The University of Washington is conducting research on the problems of fisheries in the North Pacific. Expected results are an atlas of marine use in the region, an analysis of relationships among various competitive uses, and recommendations for improved international oceanic management. (Jointly with the Quality of the Environment program)

\$200,000

GRANTS IN AID (\$35,000 or under):

MELVIN A. CONANT, Great Falls, Virginia, for a study of the competition for access to Middle East oil.

\$18,980

CORNELL UNIVERSITY, Ithaca, New York, for a project on the foreign economic policies of advanced industrial states.

\$3,000

INSTITUTE ON MAN AND SCIENCE, Rensselaerville, New York, for a conference entitled, "Nuclear Energy and World Order—Implications for International Organizations."

\$10,000

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, for a joint American-German conference on energy policy.

\$10,000

SOCIETY FOR INTERNATIONAL DEVELOPMENT, Washington, D.C., for an international seminar on the issues to be raised during the Fourth United Nations Conference on Trade and Development.

\$30,000

SWARTHMORE COLLEGE, Pennsylvania, for the publication, dissemination, and related costs of a volume on the problems and prospects of world food institutions. (Jointly with the Conquest of Hunger program)

\$21,125

UNIVERSITY OF BONN, West Germany, for a project on the historical climatology of Central Europe and its impact on cereal production. (Jointly with the Quality of the Environment program)

\$15,000

ARMS CONTROL AND INTERNATIONAL SECURITY

The arms control field illustrates dramatically the profound dilemmas facing the nation-state system in a multipolar world community. Assessments of national and international vulnerabilities have led to rapidly escalating military expenditures that in turn produce new fears and risks of armed conflict.

GRANTS:

Brookings Institution

Washington, D.C.

Analysts at the Brookings Institution are assessing international security problems that the United States will face by the year 2000 and are determining how this assessment should affect current decisions about U.S. force structure and defense policy.

\$225,000

University of Lancaster

Lancaster, England

The Department of Politics is engaged in a comparative study of current arms sales policies and practices in selected West European countries, focusing on public accountability through parliamentary processes and public information and citizen participation.

\$57,000

GRANTS IN AID (\$35,000 or under):

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for a symposium on the arms control implications of the widening use of nuclear power reactors to meet worldwide energy requirements.

\$8,000

GRADUATE SCHOOL AND UNIVERSITY CENTER OF THE CITY UNIVERSITY OF NEW YORK, for use by its Ralph Bunche Institute on the United Nations for a conference on international terrorism.

\$7,000

UNITED NATIONS ASSOCIATION OF THE UNITED STATES OF AMERICA, New York, New York, for the European meetings of the UNA/USA's conventional arms control group.

\$8,490

NEW APPROACHES TO WORLD ORDER

The need is urgent to conceptualize and bring into being a viable and more equitable world order—one with a greater capacity to respond to changing needs of interdependence.

GRANTS:

Asia Society

New York, New York

The Society's China Council, in cooperation with most of the China research centers in the United States, is developing a national educational program on China and principal aspects of U.S.-China relations.

\$100,000

Columbia University

New York, New York

Columbia's East Asian Institute and the Asia-Pacific Association of Japan have initiated a cooperative project to examine the prospect for greater U.S.-Japanese cooperation on energy, oceanic development, and trade issues in multilateral forums.

\$60,000

International Institute for Applied Systems Analysis

Laxenburg, Austria

The Institute, whose current membership consists of academies of science in fourteen industrial nations, organizes multidisciplinary teams of scientists for research on critical problems with international implications. With Foundation support, developing country scientists are being recruited to add their expertise to projects in the areas of energy, food and agriculture, ecology, and regional development.

\$150,000

Smithsonian Institution

Washington, D.C.

The Program on Latin American, Caribbean, and Inter-American Affairs of the Woodrow Wilson International Center for Scholars has begun a major project on the prospects for conflict and cooperation in inter-American relations.

\$100,000

GRANTS IN AID (\$35,000 or under):

AMERICAN FREEDOM ASSOCIATION, Greensboro, North Carolina, for the Ocean Education Project to promote greater public understanding of the issues under consideration by the Third United Nations Conference on the Law of the Sea.

\$10,000

CALIFORNIA INSTITUTE OF TECHNOLOGY, Pasadena, for use by Harrison Brown for an analysis of societal vulnerabilities and of the research and institutional resources available for launching major new programs of study focused on these questions.

\$15,288

INTERNATIONAL FEDERATION OF INSTITUTES FOR ADVANCED STUDY, Stockholm, Sweden, for a five-year review of its work and accomplishments.

\$4,500

INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES, London, England, for a conference relating to the future structure of peace in the Pacific area.

\$15,000

POTOMAC ASSOCIATES, Washington, D.C., for polling and analysis of United States public opinion on international issues.

\$10,000

SOCIETY FOR INTERNATIONAL DEVELOPMENT, Washington, D.C., for an international conference on alternatives to growth.

\$8,000

UNITED NATIONS ASSOCIATION OF THE UNITED STATES OF AMERICA, New York, New York, for a policy studies panel on international disaster relief.

\$15,000

ANALYSIS AND LESSONS OF PARTICULAR CONFLICTS

In certain areas of special importance there is a need for analysis of particular conflicts and of the lessons which can be learned from efforts to diminish, control, or resolve them.

GRANTS IN AID (\$35,000 or under):

ACADEMY FOR EDUCATIONAL DEVELOPMENT, New York, New York, for a project on bargaining strategies in selected international conflicts.

\$35,000

BROOKINGS INSTITUTION, Washington, D.C., for further meetings of the Brookings Middle East group.

\$15,000

COUNCIL ON FOREIGN RELATIONS, New York, New York, for a project entitled, "European Communism in the Era of Detente."

\$7,425

IRVING GOLDABER, North Bellmore, New York, for an analysis of recent experience in the resolution of social and ethnic conflicts in the United States and of the relevance of that experience for the resolution of international conflicts.

\$17,500

MISSISSIPPI STATE UNIVERSITY, State College, for a study by Janos Radvanyi on Communist decision making and the Vietnam War.

\$2,000

ST. ANTONY'S COLLEGE, Oxford, England, for use by Ambassador Rajeshwar Dayal for an analysis of the lessons of the UN peacekeeping experience in Lebanon in 1958 for future international efforts to control and resolve internal conflicts.

\$25,000

**SEVEN SPRINGS FARM CENTER, Mount Kisco, New York, for a symposium entitled,
"US-USSR Relationship: The Asian and European Dimensions."**

\$10,000

**UNIVERSITY OF KANSAS, Lawrence, for research on the role of the United States and
Japan in the Pacific.**

\$33,438

**UNIVERSITY OF TEXAS, El Paso, for research on tension management in US-Mexico
relations.**

\$30,000

ROCKEFELLER FOUNDATION FELLOWS IN CONFLICT IN INTERNATIONAL RELATIONS

In 1976 the trustees appropriated \$500,000 to continue the selection, with the advice of an expert advisory committee, of outstanding and innovative scholars who are studying issues central to international conflict. The following awards were made during 1976:

JOHN H. BARTON, Stanford Law School, California, to study possible revision of current European security guarantees and enforcement structures appropriate to arms control and reduction.

BARBARA F. SUNDBERG BAUDOT, Darien, Connecticut, to explore the possibilities for strengthening the role of the United Nations Secretariat in promoting international economic cooperation through further development of planning and program methods.

GERALD BENDER, Los Angeles, California, to study the United States response to the decolonization of Angola.

NAZLI CHOUCRI, Massachusetts Institute of Technology, Cambridge, to analyze the interdependence of producers and consumers of nonpetroleum mineral resources critical to industrial processes.

SUSAN ECKSTEIN, Boston University, Massachusetts, to study the domestic and international political and economic consequences of social revolution in Mexico, Bolivia, and Cuba.

DAVID V. EDWARDS, University of Texas, Austin, to analyze multiple loyalties and cross-pressure within transnational organizations and movements.

RICHARD R. FAGEN, Stanford University, California, to undertake a project entitled, "The United States, Latin America, and the Third World: The Next Decade."

ROBERT GILPIN, Princeton University, New Jersey, to explore the hypothesis that economic competition, under conditions of mutual deterrence, is displacing the exercise of force and territorial aggrandizement as the primary mechanism of international political change.

DONALD L. HOROWITZ, Smithsonian Institution, Washington, D.C., to study ethnic tensions and international conflict.

THOMAS KARIS, City University of New York, New York, to study racial accommodation and the coming generation of black and white leaders in South Africa.

STEPHEN D. KRASNER, University of California, Los Angeles, to analyze the degree of openness in the structure of international trade as a function of the distribution of economic power among states.

LINDA B. MILLER, Wellesley College, Massachusetts, to assess the likelihood of conflict and cooperation involving the United States, Western Europe, and Japan over scarce energy resources.

MYRON H. NORDQUIST, University of Virginia, Charlottesville, to analyze current and future issues for ocean management in light of his participation in the Third United Nations Conference on the Law of the Sea.

ANDREW PIERRE, Council on Foreign Relations, New York, New York, to undertake a study of multilateral supplier restraints on the transfer of conventional arms.

NEWELL M. STULTZ, Brown University, Providence, Rhode Island, to examine race relations in South Africa with special reference to independence for the Transkei.

DAVID TARR, University of Wisconsin, Madison, to undertake a project entitled, "Strategic Weapons and Defensive Technology: Moving from Deterrence to Defense."

BERNARD UDIS, University of Colorado, Boulder, to undertake a study entitled, "The Arms Race as a Race for High Technology Capability."

EDWARD J. WILLIAMS, University of Arizona, Tucson, to assess the likelihood of conflict and cooperation between Mexico and the United States on issues of trade, immigration, foreign investment, and the management of border issues.

EQUAL OPPORTUNITY

This program, formally adopted in 1963, grew out of the Foundation's historic concern for black people in America. Since then it has been reviewed periodically by trustees and staff to keep it consonant with changing needs. What has not changed is the program's overall goal of furthering a society which protects the basic rights of every individual.

The major thrusts of the program today fall within these areas:

- Community education
- Leadership development
- Policy-oriented research
- Special Program for the Southeastern United States
- Basic rights.

COMMUNITY EDUCATION

A strong national educational effort, supported by the communities it serves, is an effective means of moving minorities into the mainstream of American life. Comprehensive community education programs are being developed in several school systems around the country—among them, Oakland, California; Dade County, Florida; and New Orleans, Louisiana—which focus on encouraging parents, students, teachers, and administrators to work together within their own neighborhoods, to improve their local public schools. Community people, trained to take responsibility and make decisions about their children's education—an issue of strong personal interest—often go on to use their skills in other areas of local government.

GRANTS:

Memphis City Schools

Memphis, Tennessee

The Memphis City Schools is establishing a leadership development and community education program designed to improve citizen, staff, and parent participation in the educational process and to facilitate extension of the advisory council concept to the school level.

\$408,000

New Orleans Public Schools
New Orleans, Louisiana

Over the next two years, the New Orleans school system will give special attention to strengthening its community involvement program in the central city districts.

\$154,000

Westchester Academy
Baltimore, Maryland

Under the Academy's Home-Learning-Achievement Program participating pupils and their parents in three to five major cities receive a monthly package of reading materials with instructions designed to improve pupil achievement in basic learning skills.

\$379,000

GRANTS IN AID (\$35,000 or under):

BLACK CHILD DEVELOPMENT INSTITUTE, Washington, D.C., for its public policy community training and monitoring activities.

\$25,000

TRINITY UNITED METHODIST CHURCH, Baltimore, Maryland, for use by Westchester Academy for a training program for parents to assist their children at home and an assessment of their progress compared with the progress of children of nontrained parents.

\$24,000

LEADERSHIP DEVELOPMENT

Special efforts need to be made to overcome the present effects of past discrimination. One way is to identify and train talented men and women from minority groups, helping them to qualify for a variety of visible and responsible positions. A program in which minority group administrators work for a year under the direct supervision of top level school superintendents is now in its seventh year; its aim is to hasten the process by which administrators move up through the system, thereby producing a group of highly trained and experienced minority group superintendents in a relatively short time.

Private black colleges continue to be a primary source of college education for thousands of young black Americans. Recent efforts toward institutional consolidation and faculty/curriculum development received modest Foundation support in 1975.

Other Foundation programs in this area are providing training experiences for qualified individuals to assume positions as school principals in inner-city schools; as decision makers and financial administrators in black colleges, community and junior colleges; as administrators of early childhood and exceptional children educational programs; as resource administrators in agencies and programs that fund, or have a special interest in, minority programs.

ROCKEFELLER FOUNDATION SUPERINTENDENTS' TRAINING PROGRAM

A Foundation funded program, begun in 1969, it provides qualified minority group school administrators with a year of in-service training in the superintendent's office of each of two cities, to prepare them for positions of high level responsibility in U.S. urban school systems. To date, 57 men and women have completed their internships and thus have had an opportunity to work closely with those who shape urban educational policy. In 1976, the officers allocated a total of \$186,620.

1976-77 INTERNS: SUPERINTENDENTS' TRAINING PROGRAM

THADDEUS DUMAS, Fairbanks North Star Borough School District, Alaska

REGINALD L. GREEN, Memphis City Schools, Tennessee

ROBERT L. NEWELL, Berkeley Unified School District, California

WILLIAM R. PERRY, JR., Baltimore City Public Schools, Maryland

STELLA A. YOUNG, Unified School District No. 1 of Racine County, Wisconsin

GRANTS:

ASPIRA of America

New York, New York

A new educational leadership training program for young Puerto Rican educators combines internships under high level policymakers in federal and state government offices with intensive coursework at Fordham University's School of Education, leading to the Master of Science degree in Urban Education.

\$68,500

Atlanta University Center

Atlanta, Georgia

The Atlanta Fellows and Interns Program represents a combined effort by the Atlanta University Center and the City of Atlanta to integrate academic resources and urban management and decision making through involving young people in several programs linking city government and the university community.

\$100,000

Center for Educational Leadership

Los Angeles, California

CEL, in cooperation with the University of Southern California and La Verne College, continues to offer a program to train minority educators in modern management expertise and skills for placement as management specialists in urban school districts and state departments of education.

\$150,000

Cornell University

Ithaca, New York

Cornell's Coordinated Research Project, established in 1972, offers minority group doctoral candidates in the social sciences the opportunity to utilize their comparative advantage for conducting research in minority communities so as to generate new data on problems of minority community development and to further the solution of contemporary social problems.

\$61,400

Denver Public Schools

Denver, Colorado

Under a new Administrative Internship Program for minority group educators, six outstanding teachers are receiving on-the-job training while studying for the Colorado state school administrator's certificate. At the conclusion of the fifteen-month training program, the interns will be considered for administrative positions at or above the assistant principal level.

\$142,000

Massachusetts Institute of Technology

Cambridge, Massachusetts

Each year the Community Fellows Program, a mid-career experience, selects ten or eleven minority group individuals from communities throughout the United States to spend a year at MIT in study and research, utilizing the Institute's resources to prepare themselves for more effective service upon return to their home organizations.

\$200,000

Metropolitan Detroit Youth Foundation

Detroit, Michigan

Since 1971, four student resource centers have trained hundreds of young people as leaders who can work with high schools and community organizations in developing responses to critical needs in the school regions.

\$100,000

National Committee for Citizens in Education

Columbia, Maryland

Through regional workshops organized by the Leadership Development Institute for Citizens in Education, the Committee hopes to activate and support a network of local citizens groups working to organize and implement programs to increase citizen involvement and improve the quality of education.

\$100,000

National Urban League

New York, New York

The League has organized a program of regional seminars for the education specialists in its 104 affiliate offices to improve their capacities and skills for advising local communities on critical educational issues, particularly the implications for school finance.

\$51,450

Public Schools of the District of Columbia

Washington, D.C.

With RF assistance, the District of Columbia public school system has set up a leadership development program for its more than 300 school principals. With establishment of a main training center complete, local centers are now being set up in each of the six decentralized regions and steps are being taken to incorporate the program into the system's regular administrative and budgetary structure.

\$110,500

**Rockefeller Foundation Fellowships in Finance and Management
in Higher and Secondary Education for Minority Group Educators**

This program of fellowships, created in 1974, is serving to increase the number of minority group individuals in finance and management in public schools and black colleges and thus is improving the quality of financial administration at these institutions. In 1976 the trustees approved an appropriation of \$300,000 to continue the program, and the following awards were made:

ROY ECHOLS, Administrative Assistant for Finance and Personnel, Baldwin Community Schools, Baldwin, Michigan, currently studying for an M.B.A. at the University of Chicago Graduate School of Business.

MARION M. ELBERT, Administrative Assistant to the President, Clark College, Atlanta, Georgia, currently studying for an M.B.A. at the University of Miami Graduate School of Business Administration.

ARMAN W. GREEN, Principal of John McDonogh Senior High School, Orleans Parish School Board, New Orleans, Louisiana, currently studying at the University of Miami Graduate School of Business Administration.

THOMAS S. JOHNSON, District Business Manager, New York City Board of Education, currently working toward an M.B.A. at the Columbia University Graduate School of Business.

FRANKLIN F. JONES, JR., Director of Classified Personnel of the Louisville Public Schools, Kentucky, currently working toward an M.B.A. at the University of Chicago Graduate School of Business.

REATHEA KING, Associate Dean and Professor of Chemistry, York College, Jamaica, New York, currently working toward an M.B.A. at the Columbia University Graduate School of Business.

CLARENCE PROCTOR, School Principal, Orleans Parish School Board, New Orleans, Louisiana, currently studying for an M.B.A. at the University of Miami Graduate School of Business Administration.

JOHN H. WILLIAMS, Mathematics Teacher, Dade County Schools, Miami, Florida, currently working toward an M.B.A. at the University of Miami Graduate School of Business Administration.

DONNA C. WILSON, Management Associate, Office of Management and Budget, White House, Washington, D.C., currently studying for an M.B.A. at the Columbia University Graduate School of Business.

Rockefeller Foundation Fellowships in Higher Education Administration for Minority Group Educators

This domestic fellowship program, initiated in 1974, offers minority group educators opportunities to gain the experience and skills necessary to assume important positions in educational administration in the nation's colleges and secondary schools. In 1976 the trustees approved an appropriation of \$325,000 for continuation of the program and the following awards were made:

AMERICAN COUNCIL ON EDUCATION, Washington, D.C., to provide internships in higher educational administration for **LAMORE J. CARTER**, **RONALD J. FIELD**, **LAFAYETTE W. LIPSCOMB**, **BENNIE L. REEVES**, **HILDA RICHARDS**, **RONALD O. SMITH**, and **ANTHONY STRANGE**.

CLARK COLLEGE, Atlanta, Georgia, to provide a fellowship in higher educational administration for a minority group educator in the College's Southern Center for Studies in Public Policy.

RUTHE J. FARMER, for doctoral studies in educational administration at the University of North Carolina.

FLORIDA STATE UNIVERSITY, Tallahassee, Florida, to provide a fellowship in higher educational administration for a minority group educator.

BETTYE P. JOHNSTON, for doctoral studies in educational administration at the University of New Orleans.

NEW YORK UNIVERSITY, New York, to enable **DOROTHY SAUNDERS** to complete studies in early childhood education administration.

PRATT INSTITUTE, Brooklyn, New York, to enable **CLIFFORD C. COLES** to complete studies in educational administration at North Carolina State University.

CLARA W. RUTHERFORD, for studies in higher educational administration at Wayne State University.

LUTHER W. SEABROOK, for doctoral studies in educational administration at the University of Massachusetts.

STANFORD UNIVERSITY, California, to enable **BARRY W. TUCKER** to complete studies in educational administration; and to provide a fellowship in higher educational administration for **GWENN COFFEE-DIXON**.

UNIVERSITY OF MIAMI, Florida, to provide four fellowships in higher educational administration for minority group educators over the next two years.

Virginia State College

Petersburg, Virginia

Virginia State has initiated a program of professionally oriented training in public administration at the baccalaureate level to help fill the need for blacks qualified to fill public service positions at county, town, city, and state levels in Virginia.

\$318,000

GRANTS IN AID (\$35,000 or under):

COMMUNITY RENEWAL SOCIETY, Chicago, Illinois, for an educational leadership development internship for Alice T. Wood.

\$15,000

COMMUNITY RENEWAL SOCIETY, Chicago, Illinois, for its training program for graduate students from universities in the Chicago area planning careers as investigative journalists in urban affairs.

\$24,000

FLORIDA STATE UNIVERSITY, Tallahassee, for use by Joann Anderson for studies in early childhood education.

\$15,000

BRUCE A. JACKSON, New York, New York, for continued research on the molecular biology of interferon systems at the Sloan-Kettering Institute for Cancer Research.

\$5,000

KALAMAZOO COLLEGE, Michigan, for its administrative internship program for black educators.

\$21,000

MINNEAPOLIS PUBLIC SCHOOLS-SPECIAL SCHOOL DISTRICT No. 1, Minnesota, for a research internship in educational administration leading to a Ph.D. degree for Christine M. Dunham.

\$7,550

UNIVERSITY OF MARYLAND, College Park, for an educational leadership development internship for Norma Smith.

\$16,220

UNIVERSITY OF NEW ORLEANS, Louisiana, for use by Lynette Fornerette for studies in educational and urban planning.

\$10,350

UNIVERSITY OF TEXAS, El Paso, for an educational leadership development internship for Glenda E. Gill.

\$18,000

WESTERN SERVICE SYSTEMS, Lakewood, Colorado, for an educational leadership development internship for Yolanda Romero.

\$12,000

WOODLAWN ORGANIZATION, Chicago, Illinois, for an internship in community planning and organization for Donald M. Androzzo.

\$7,600

POLICY-ORIENTED RESEARCH

Many questions concerning the disadvantaged remain unanswered. Wherever possible, the participation of minority group scholars and scientists in research projects on these subjects has been sought.

GRANT:

Michigan State University
East Lansing, Michigan

New Castle County, Delaware, which includes the city of Wilmington, is to be the site of the country's first implemented metropolitan plan for school desegregation. A research team from MSU's College of Urban Development will conduct a five-year evaluation of the plan's impact which could also serve as a guide to other school systems facing similar problems.

\$368,300

GRANTS IN AID (\$35,000 or under):

DR. ALBERT E. MANLEY, Washington, D.C., for a research project on the effects of continuing social change on the life and growth of Spelman College in particular and the Atlanta University Center institutions in general.

\$18,000

MICHIGAN STATE UNIVERSITY, East Lansing, for a seminar concerning the strategies for the successful implementation of school desegregation.

\$15,000

STANFORD UNIVERSITY, California, for a research study on urban education in the United States by Norman Drachler.

\$20,000

SPECIAL PROGRAM FOR THE SOUTHEASTERN UNITED STATES

The Rockefeller Foundation has undertaken a special program in the southeastern United States which involves several of the Foundation's disciplines and major program areas. Supported projects are designed to improve minority group participation in the region's development, with particular emphasis on the problems of blacks in rural areas and small towns of the Southeast.

GRANTS:

Alabama Center for Higher Education
Birmingham, Alabama

ACHE, a consortium of eight of the state's leading, predominantly black senior colleges, is enlarging the outreach programs of its members in fifteen "black belt" counties in central and southern Alabama, so as to be of greater service to low income, rural communities.

\$171,300

Clemson University
Clemson, South Carolina

Coastal Plains Human Development Coordinating Council
Sullivan's Island, South Carolina

A long-range program of training and technical assistance is designed to upgrade and strengthen the operational capabilities of small, minority group, rural community-based cooperatives and self-help organizations in South Carolina.

\$112,081

Edison Little River Self Help Community Council

Miami, Florida

Through the Citizen Participation and Revitalization Training Program, selected groups of citizens from Dade and Broward counties are being enrolled in a twelve-week course designed to give them the skills to affect decisions which govern their lives.

\$138,000

Federation of Southern Cooperatives

Epes, Alabama

Organized in 1967, the Federation—which numbers 24 affiliated cooperatives with approximately 7,500 low income small farmers who own and operate over one million acres—is now enlarging its agricultural staff to include an Agricultural Technical Resource Team.

\$30,000

Interdenominational Theological Center

Atlanta, Georgia

The problem of reaching and influencing the lives of roughly four million scattered and isolated blacks in the rural South is a formidable one. ITC is developing a pilot program to train, mobilize, and utilize the black clergy for economic and social improvement in rural black communities.

\$88,533

Mississippi Action for Community Education

Greenville, Mississippi

With Foundation assistance, MACE, a community development corporation with a successful record of organizing self-help activities for the rural black poor in the Mississippi Delta, is expanding its training program and extending technical assistance outreach programs.

\$82,350

Mississippi Research and Development Center

Jackson, Mississippi

A “circuit-riding” team of professionals from the Center provides technical assistance and community development know-how to officials, employees, and citizen participation groups in six of Mississippi’s minority-managed towns.

\$146,820

North Carolina Central University

Durham, North Carolina

Chapters of the Student Committee on Land Loss of Blacks (SCOL-LOB) are being organized in black colleges of North Carolina to provide legal counsel and assistance to rural black land owners in the state.

\$25,900

Save The Children Federation

Westport, Connecticut

This year the Federation is engaged in planning and organizing for a multi-county community development organization in the Arkansas Delta region.

\$29,930

Southern University

Baton Rouge, Louisiana

Southern University is now conducting a feasibility study for an agriculturally-based rural development program in Louisiana, with special regard to the needs of small-scale limited resource farmers and rural residents.

\$25,000

Tuskegee Institute

Tuskegee, Alabama

Tuskegee Institute, founded in 1881 in one of the most impoverished, predominantly black rural areas of the United States and with a long history of providing support services to residents in such areas, is now studying the feasibility of the goat as an economic source of food and income for limited resource people.

\$31,500

Virginia Community Development Organization

Petersburg, Virginia

The Virginia Assemblies are effectively organizing the poor into community self-help groups in which they can articulate their needs, select representatives accountable to them, and build self-esteem through direct participation in community affairs.

\$149,500

Virginia State College

Petersburg, Virginia

Virginia State College personnel working with regular agricultural extension personnel are engaged in a program of community development planning in five eastern Virginia counties known as the Middle Peninsula Planning District.

\$34,822

GRANT IN AID (\$35,000 or under):

EDISON LITTLE RIVER SELF HELP COMMUNITY COUNCIL, Miami, Florida, for development of a statewide citizen participation and revitalization program.

\$17,000

BASIC RIGHTS

The search for exceptional challenges and opportunities must continue: several possibilities are being explored. Attention is also being given to the plans and objectives of the stable and effective organizations and institutions that have been in the forefront of the efforts in the equal opportunities field.

GRANTS:

American Indian Lawyer Training Project

San Francisco, California

An AILTP fellowship program begun in 1975 helps selected Indian attorneys over a two-year period to establish a law practice in an Indian community that is otherwise without access to legal help.

\$200,000

Children's Foundation

Washington, D.C.

Under the Southwestern Food Rights Project, two field advocates conduct workshops in six southwestern states to help low income native American, black, white, and Chicano communities to develop community-influenced food delivery systems.

\$75,605

Mexican American Legal Defense and Educational Fund

San Francisco, California

Since its founding in 1968, MALDEF has responded to the need for orderly social change and legal redress to expand and redress the civil rights of Mexican Americans. One example is its successful three-year internship program for Chicano lawyers, which provides training in civil rights litigation and placement in communities in need of legal services.

\$300,000

NAACP Special Contribution Fund

New York, New York

The fund is engaged in a systematic attack on school segregation patterns in urban centers of the North and West and also is continuing long-standing efforts to combat employment discrimination throughout the United States.

\$150,000

GRANT IN AID (\$35,000 or under):

WINROCK INTERNATIONAL LIVESTOCK RESEARCH AND TRAINING CENTER, Morrilton, Arkansas, for a feasibility study of various levels and systems of livestock production and merchandizing on the Navajo Indian Irrigation Project.

\$24,600

THE ARTS, THE HUMANITIES & CONTEMPORARY VALUES

The Rockefeller Foundation has a long history of support for the arts and the humanities. During the past decade, interest in the arts was maintained at a high level in large part because of the unprecedented vitality and variety of artistic expression. That same decade, however, brought to the fore in public and private life value issues and questions of judgment. In their 1974 policy statement, the trustees called for renewed attention to the humanities, along with an active arts program. "It is hoped," they wrote, "that encouragement may thus be given to the illumination that each brings to our understanding of human nature and destiny in the late 20th-century world."

THE ARTS

Even as the arts are perceived as essential grammar of our vocabulary today, artists occupy a fragile position in American life. The goal of the Foundation's program is to make visible the importance of creative artists and the institutions that encourage them, to the development of a mature society. In 1976, the main thrusts (carried out through institutional grants, individual awards, and goal-oriented conferences) toward this goal were:

- Assisting nonprofit arts institutions to solve the root problems—economic, administrative, and artistic—now afflicting them
- Support for the creative artist
- Explorations of how to make the arts more central to general education
- Explorations of the medium of television for work in the arts---a shared goal with the humanities.

STRENGTHENING ARTS INSTITUTIONS

During the 1960's, The Rockefeller Foundation was privileged to participate in the founding of a number of cultural institutions—ranging from national cultural complexes to regional dance companies and theatre groups—which have made substantial and recognized contributions to the arts in America. Today, in the stringent economic climate of the 70's, we recognize that our principal effort vis-à-vis institutions must be directed toward the basic problems affecting existing institutions. With one or two exceptions—as notable as they are exceptional—grants were made to existing, and usually previously supported, organizations which show promise of widening their range of support.

GRANT:

Original Ballets Foundation

New York, New York

In the two short years since its establishment, the Eliot Feld Ballet, a concert-size touring group, has shown itself to be among the country's foremost dance groups.

\$175,000

GRANTS IN AID (\$35,000 or under):

BUSINESS COMMITTEE FOR THE ARTS, New York, New York, for a study of the income possibilities for nonprofit performing groups in the commercial entertainment, recreation, and communications fields.

\$22,500

CHILDREN'S THEATER COMPANY AND SCHOOL, Minneapolis, Minnesota, for its development office.

\$27,000

COUNCIL ON FOUNDATIONS, New York, New York, for continuation of a project to develop a cultural advisory service for grant-making organizations.

\$10,000

HOSPITAL AUDIENCES, INC., New York, New York, for distribution of the film "People Who Care."

\$24,900

JOSE LIMON DANCE FOUNDATION, New York, New York, for rehearsal preparation for an instructional film on the Weidman technique.

\$3,000

JUST ABOVE MIDTOWN, New York, New York, for developmental costs of the gallery.

\$5,000

MUSICAL OBSERVATIONS, INC., New York, New York, for its projects to disseminate performance techniques of new music.

\$21,000

NATIONAL COMMITTEE FOR CULTURAL RESOURCES, New York, New York, for its study, "The National Report on the Arts."

\$10,000

ASSISTING THE CREATIVE PERSON IN THE ARTS

Today as in the past, America's creative artists support themselves most often with work at best only tenuously related to their field. In the Foundation's opinion, it continues to be essential to enable gifted individuals to concentrate on their work relatively free from outside pressures.

The current RF Fellowship Program for Playwrights—for which the trustees appropriated another \$150,000 this year—includes two categories

of annual awards. In the first, eight playwrights are selected on the basis of outside nominations and the recommendations of an independent committee of professionals to receive stipends of \$8,500 for a one-year period. That sum is administered by a producing theatre designated by the playwright with the agreement that he or she will spend a minimum of six weeks in residence. An additional \$1,000 is available to the theatre for pre-production costs of the playwright's work. (This sum will be increased to \$3,000 in 1977.) Women and minority group members have consistently made up a significant proportion of the award recipients.

The second category of awards consists of \$2,500 stipends to playwrights chosen by selected small, regional theatres, along with \$1,000 to the theatre for its related costs. This segment of the program emphasizes the discovery and nurturing of new artists outside the New York area.

In 1976 the trustees approved appropriations for two new arts fellowship programs: Competitive Fellowships for Performers of Contemporary American Music (\$200,000), in cooperation with the Kennedy Center for the Performing Arts in Washington, D.C.; and the Rockefeller Foundation Fellowships in American Art History (\$200,000), sponsored jointly by the Arts and the Humanities programs, and designed to stimulate scholarly research in pre-20th century American art on the part of doctoral candidates enrolled at ten selected American universities. The first awards under these programs will be made in 1977.

1976 PLAYWRIGHT AWARDEES

JULIE BOVASSO, New York: Circle Repertory Company, New York
CHARLES DIZENZO, New York: American Place Theatre, New York
CHRISTOPHER DURANG, New York: Arena Stage, Washington, D.C.
JOHN GUARE, New York: New York Shakespeare Festival
A. R. GURNEY, Newton, Massachusetts: Manhattan Theater Club, New York
ALBERT INNAURATO, New York: New York Shakespeare Festival
DAVID MAMET, New York: St. Nicholas Theater Company, Chicago
THEODORE WARD, Chicago: Free Southern Theater, New Orleans

1976 REGIONAL THEATRE AWARDS

ACTING COMPANY, New York
BLACK ARTS/WEST, Seattle
DASHIKI PROJECT THEATER, New Orleans
EAST/WEST PLAYERS, Los Angeles
HARTFORD STAGE COMPANY, Hartford
MARK TAPER FORUM, Los Angeles
MAGIC THEATRE, Omaha
MAGIC THEATRE, San Francisco
ORGANIC THEATER COMPANY, Chicago
SEATTLE REPERTORY THEATER, Seattle

GRANTS IN AID (\$35,000 or under):

AMERICAN DANCE FESTIVAL, New London, Connecticut, for its Theater Component, Music and Dance Project, and Television Total Theater Project.	\$15,000
AMERICAN PLACE THEATRE, New York, New York, for the mounting of a special production of Robert Lowell's "The Old Glory."	\$25,000
CHELSEA THEATRE CENTER, Brooklyn, New York, for the production of "The Boss."	\$10,000
CIRCLE REPERTORY COMPANY, New York, New York, for its Director's Workshop.	\$7,500
COMPOSERS FOR PEOPLE, New York, New York, for further development of the Composer's Forum project.	\$14,000
CUNNINGHAM DANCE FOUNDATION, New York, New York, for a Video-Dance project.	\$10,000
LA MAMA EXPERIMENTAL THEATRE CLUB, New York, New York, for Andrei Serban to devote time to creative work in theatre.	\$25,000
NATIONAL MUSIC COUNCIL, New York, New York, for a feasibility study on development of a competition for the performance of contemporary American music.	\$26,250
ROGER REYNOLDS, composer, San Diego, California, fellowship assistance to enable him to continue his study of Asian cultures.	\$16,000
HENRY SMITH, New York, New York, to enable him to devote time with members of the Solaris Dance-Theater Company to create a new work for that ensemble.	\$13,000
STATE UNIVERSITY OF NEW YORK, Buffalo, for use by the Center of the Creative and Performing Arts for fellowship assistance in interdisciplinary arts.	\$21,000
THEATRE OF LATIN AMERICA, New York, New York, for fellowship assistance to enable Leonora Carrington to participate in the production of her play, "Opus Siniestrus."	\$9,500
TIBET CENTER, New York, New York, for development of cultural programs.	\$5,000
WERNER TORANOWSKY, New Orleans, Louisiana, for preparation of his oratorio, "Ani Maamin."	\$4,000

ROBERT WARD, composer, Winston-Salem, North Carolina, for collaboration on an opera project with Daniel Lang.

\$5,500

YALE UNIVERSITY, New Haven, Connecticut, for use by the Yale Repertory Theater to enable Tom Skelton and Jeanne Button to be resident artists in creative design at the Theater.

\$18,900

MAKING THE ARTS MORE CENTRAL TO GENERAL EDUCATION

At present, this component mainly concerns itself with helping to restructure teacher education in the arts, to train school administrators in the arts, and to augment arts organizations as educational resources.

GRANTS IN AID (\$35,000 or under):

HOOSUCK COMMUNITY RESOURCES CORPORATION, North Adams, Massachusetts, for development of a Teaching and Learning Center at the Windsor Mill Guild School.

\$9,000

INSTITUTE FOR THE DEVELOPMENT OF EDUCATIONAL ACTIVITIES, Dayton, Ohio, for use by its Research Division, Los Angeles, for "A Study of the Arts in Precollegiate Education."

\$32,700

PENNSYLVANIA CENTER FOR THE ARTS, Harrisburg, for development of a program for leadership in arts in education.

\$19,000

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, New Brunswick, for the Graduate School of Education to further develop and strengthen its new Creative Arts Education Program.

\$13,500

TOUCHSTONE CENTER FOR CHILDREN, New York, New York, for continuation of its teacher training work during 1976-1977.

\$10,000

WORKING THEATRE, New York, New York, for development of its training program.

\$9,000

TELEVISION

In recent years, the Foundation has made some significant contributions to the experimental uses of video by artists and humanists; explorations continue on the uses of this powerful medium in relation to Foundation programs.

GRANTS:***Educational Broadcasting Corporation****New York, New York*

The WNET Television Laboratory, begun in 1971 with Foundation assistance, has established itself as an international center for experimentation with the concepts, programming, and technology of television.

\$200,000

WGBH Educational Foundation*Boston, Massachusetts*

The WGBH New Television Workshop is a major regional resource center where creative persons from several disciplines have the opportunity to test and develop new ideas in television.

\$182,000

GRANTS IN AID (\$35,000 or under):

STEPHEN BECK, Berkeley, California, for the acquisition of equipment to continue development of the video medium.

\$4,000

DANIEL DEL SOLAR, BROOKS JOHNSON, and JUDITH WILLIAMS, San Francisco, California, for a feasibility study of Bay Area video needs.

\$30,000

DAVID DOWE and JERRY HUNT, Dallas, Texas, for development of a Texas Experimental Television Network.

\$14,000

EDUCATIONAL BROADCASTING CORPORATION, New York, New York, for Ed Emshwiller to be an artist in residence at the Television Laboratory.

\$18,000

EDUCATIONAL BROADCASTING CORPORATION, New York, New York, for Nam June Paik to be an artist in residence at the Television Laboratory.

\$17,000

FILM ART FUND, New York, New York, for the video program of the Anthology Film Archives.

\$16,000

DONALD FORESTA, Kenmore, New York, for development of foreign cultures programming.

\$35,000

GLOBAL VILLAGE VIDEO RESOURCE CENTER, New York, New York, for a Ten Cities Public Television Workshop in video cassette systems.

\$20,000

KANSAS CITY ART INSTITUTE, Missouri, for a video curriculum development project.

\$24,500

KINETIC VIDEO, New York, New York, for expansion of the Let There Be Neon Workshop.

\$15,000

MINISTRY OF EDUCATION AND CULTURAL AFFAIRS, Honiara, Solomon Islands, for documentation of the Cultural Workshop for Melanesia.

\$3,000

CHARLOTTE MOORMAN, New York, New York, for creative work in the field of visual and performing arts.

\$4,000

RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK, Albany, for a study of the potential of the State University system to produce creative programming for television in the arts.

\$11,500

SOUTHERN METHODIST UNIVERSITY, Dallas, Texas, for development of a Texas Experimental Television Network.

\$6,000

BILL VIOLA, New York, New York, for recording and documentation of the Cultural Workshop for Melanesia.

\$850

WEST VIRGINIA EDUCATIONAL BROADCASTING AUTHORITY, Huntington, for use by Station WMUL for development of a pilot program on the musical culture of the upper southeastern and mountain states.

\$25,000

WGBH EDUCATIONAL FOUNDATION, Boston, Massachusetts, for video artists to collaborate on the project "Collisions."

\$35,000

WHITNEY MUSEUM OF AMERICAN ART, New York, New York, for expansion of its film exhibition program to include the works of video artists.

\$13,900

ROCKEFELLER FOUNDATION FELLOWSHIPS IN TRAINING IN MUSEUM EDUCATION

In the early 1970's as demand grew for greater public access to arts institutions, it became evident that there was a need for training programs which would blend the curatorial aspects of museum work with the sociological and educational aspects. The Foundation responded by devising, in 1972, a program of fellowships to train professionals in museum work. In 1976 the trustees appropriated \$440,000 to continue the program. As of this year, 57 fellows have been trained, and 37 have been placed with museums through the efforts of the four training institutions: The Metropolitan Museum of Art, New York; the Walker Art Center, Minneapolis; the Dallas Museum of Fine Arts; and the de Young Museum, San Francisco.

ROCKEFELLER FOUNDATION MUSEUM FELLOWS

Dallas Museum of Fine Arts (1976-77):

PAULA DOTY, Texas

JOANNE FARB HERNANDEZ, Illinois

de Young Museum (1975-76):

CLEVELAND BELLOW, California

SALLY CASSLER, Idaho

NANCY CHAMBERS, California

WANDA WON CHIN, California

TERRY PAUL DICKEY, Alaska

MARGARET GROMMER, Colorado

MERLEE KAY MARKISHTUM, Washington

MASASHI MATSUMOTO, California

LEON C. QUINTON, Kansas

MARY STOFFLET, California

Metropolitan Museum of Art (1975-76):

PAUL YIH CHEN, Hong Kong

SUSAN CONNOR, Massachusetts

HAFFIZ MOHAMMED, New York

DANIEL NADANER, Hawaii

HELEN SHANNON, Illinois

NIKKI SILVA, California

Walker Art Center (1975-76):

LISA LYONS, Minnesota

REX MOSER, California

A SPECIAL PROJECT: THE RECORDED ANTHOLOGY OF AMERICAN MUSIC, A BICENTENNIAL PROJECT

This major undertaking, in the planning for several years, came to fruition in 1976. New World Records, a nonprofit recording organization with its own board of trustees and professional staff, is supervising the production, manufacture, and distribution of a collection of one hundred records tracing the social and cultural history of the United States through its music. Two sets of ten discs have now been distributed to some 6,000 institutions—all the country's major music schools, music libraries, educational FM and public broadcasting stations, and USIS centers throughout the world—chosen because they will provide the widest possible access to those for whom the records will be significantly useful. Between now and the fall of 1978, the remaining eight sets of discs will be made available. The collection, produced at an eventual cost of almost four million dollars, is the Foundation's bicentennial gift to the American people. In 1976, \$1,450,000 was appropriated by the trustees for the project.

THE HUMANITIES AND CONTEMPORARY VALUES

The Foundation's fundamental objective in this program is to associate the humanities with deep human concerns and to help illuminate the values of contemporary society. The Foundation hopes to encourage the exploration of humanistic problems in these broad areas:

- The examination of values, beliefs, and ideas of contemporary society
- The encouragement of research into studies of the cultural heritage of America and the American cultural identity
- Attempts to reach neglected audiences, in part through television and film, and to tap new sources of humanistic creativity.

VALUES AND IDEAS

The Foundation's interest here is in the work of people of unusual intellectual capacity engaged in clarifying fundamental goals and values inherent in contemporary life. Such men and women are confined to no single country or tradition. Also, because collaboration between various disciplines is often required in such investigations, Foundation support is likely to be given to interdisciplinary projects.

GRANTS:

American Universities Field Staff

Hanover, New Hampshire

In collaboration with Brown University, AUFS researchers are studying the complex relationships between the cultural value systems of education in nine contemporary national societies in order to produce a model universally applicable to the study of educational processes in both industrial societies and the developing world.

\$140,000

Smithsonian Institution

Washington, D.C.

The Woodrow Wilson International Center for Scholars, a bureau of the Smithsonian Institution, was created by Congress in 1968 as a link between "the world of affairs and the world of ideas." Through open competition for its fellowships in the humanities, the Center seeks out the best minds in this country and abroad and offers awardees access both to the capital's rich documentary resources and to government policymakers.

\$70,000

Worcester Polytechnic Institute

Worcester, Massachusetts

The Institute, an independent, coeducational engineering college, is engaged in a transformation of its curriculum designed to provide students with technical training and an understanding of human values and the social implications of technology.

\$100,000

GRANTS IN AID (\$35,000 or under):

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for final plans for organizing a National Humanities Center.

\$35,000

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for an issue on contemporary scholarship to be published by its journal *Daedalus*.

\$10,000

COLUMBIA UNIVERSITY, New York, New York, for use by Alan Lomax to complete the writing of interpretive materials for a cross-cultural study of expressive behavior.

\$34,390

JOHN CROCKER, JR., Cambridge, Massachusetts, for support for a book on the ethics of science and technology.

\$8,250

MARY DALY, Brighton, Massachusetts, for completion of a book on the effects of women's experience upon ethical analysis in philosophy and theology.

\$25,000

DUKE UNIVERSITY, Durham, North Carolina, for a historical study of the interrelationships of economic and ethical thought by Joseph Spengler.

\$11,800

LIBRARY OF CONGRESS, Washington, D.C., for a study of past and present Library services and of future needs and opportunities for wider services to the library community and the nation.

\$10,000

MIAMI UNIVERSITY, Oxford, Ohio, for a conference, "Origins of Knowledge: The Relationships between the Sciences and the Humanities."

\$3,800

NATIONAL COUNCIL OF THE CHURCHES OF CHRIST IN THE UNITED STATES, New York, New York, for the 1976 Program for Inter-Religious Dialogue in the United States.

\$21,000

TRUSTEES OF AMHERST COLLEGE, Massachusetts, for use by the Folger Shakespeare Memorial Library, Washington, D.C., to establish a film and videotape archive.
\$34,400

UNIVERSITY OF AKRON, Ohio, for preparation and conduct of a model course by June Burton entitled "Human Rights: Ideas in History, Literature, and Philosophy."
\$20,500

WELLESLEY COLLEGE, Massachusetts, for a conference on women and development.
\$15,000

AMERICA'S CULTURAL HERITAGE AND THE QUEST FOR AMERICAN IDENTITY

Many of America's people and regions are inadequately represented in the national consciousness. With encouragement to be broader in their sympathies and outlook, scholars can enrich our understanding of our nation, draw upon overlooked cultural resources, and enhance the country's pride in its diversity as well as its unity.

GRANTS:

Arkansas College

Batesville, Arkansas

Arkansas College, together with Arkansas State University, the University of Arkansas, and the Ozark Folk Center, has formed the Arkansas Folklore Education Consortium to coordinate and promote education programs related to the folk traditions of the Ozark region.

\$100,000

Center for Southern Folklore

Memphis, Tennessee

The Center is nearing completion of a three-year multimedia project to study and document folk culture through films, records, slides, tapes, and books which focus on the crafts, music, and folktales indigenous to the American South.

\$85,000

Florida State University

Tallahassee, Florida

The Center for the Study of Southern Culture and Religion, established in 1973 to explore the impact of religion on the political, cultural, and social life of the South, is expanding its research and its cross-disciplinary fellowships for doctoral and postdoctoral scholars.

\$104,000

Harvard University
Cambridge, Massachusetts

The Harvard Ethnic Encyclopedia, slated for publication in 1979, is to be a comprehensive guide to the history and heritage of the estimated 150 ethnic groups that make up the population of the United States.

\$179,775

Newberry Library

Chicago, Illinois

The Summer Training Institute in Family and Community History, which trains historians in the use of quantitative and computer techniques, is developing the field of family history as an important area for interdisciplinary study.

\$100,000

Radcliffe College

Cambridge, Massachusetts

The Schlesinger Library has undertaken a three-year project of interviews with selected American black women who in the years before the 1930's worked, in their communities and nationally, to improve educational, cultural, and social conditions for black people.

\$98,700

GRANTS IN AID (\$35,000 or under):

ANTI DEFAMATION LEAGUE OF B'NAI B'RITH, New York, New York, for a conference on adolescent prejudice and its implications for the schools.

\$12,000

BRYN MAWR COLLEGE, Pennsylvania, for the Berkshire Conference of Women Historians, for a conference on women's history.

\$8,500

CENTER FOR MIGRATION STUDIES, Staten Island, New York, for development of its archives on the immigrant experience in America.

\$29,985

CORNELL UNIVERSITY, Ithaca, New York, for production of a five-volume edition of the papers of the Marquis de Lafayette, entitled *Lafayette and the Age of the American Revolution*, edited by Stanley Idzerda.

\$17,200

FLORIDA STATE UNIVERSITY, Tallahassee, to enable William D. Miller to conduct an oral history relating to the founders of the Catholic Worker movement.

\$10,000

GEORGIA STATE UNIVERSITY, Atlanta, for use by its Southern Labor Archives for a Southern Labor History Conference.

\$15,000

GRADUATE CENTER OF THE CITY UNIVERSITY OF NEW YORK, New York, for an international symposium on philosophy for the bicentennial of the American Revolution.

\$17,000

JAMES A. HALSTED, Hillsdale, New York, for a study of the career of Harry L. Hopkins and the relationship of his health problems to his public career.

\$16,500

NEW YORK CENTER FOR ETHNIC AFFAIRS, New York, New York, for support of the Center for Cultural Diversity.

\$35,000

OCCIDENTAL COLLEGE, Los Angeles, California, to enable Mary Jane Hewitt to complete her study of folklorists Zora Neale Hurston and Louise Bennett-Coverley.

\$5,000

PENNSYLVANIA STATE UNIVERSITY, University Park, for a study by Roy C. Buck on the impact of tourism on an indigenous folk culture, a case study of the Amish in Lancaster County.

\$29,310

MARY L. PITLICK, Washington, D.C., for final editing and research on her manuscript, the *Selected Letters of Edith Wharton*.

\$18,245

POLISH INSTITUTE OF ARTS AND SCIENCES IN AMERICA, New York, New York, for development of an archive on Polish emigres active in political and labor reform.

\$32,090

SOUTH EAST MICHIGAN REGIONAL ETHNIC HERITAGE STUDIES CENTER, Detroit, for establishment of a working consortium for a multimedia ethnic studies project in Chicago, Cleveland, and Detroit.

\$30,000

UNIVERSITY OF KENTUCKY, Lexington, for planning of a Center and Program of Appalachian Studies.

\$35,000

UNIVERSITY OF TEXAS, Austin, for a project by Winedale Museum Fellows Wendy V. Watriss and Frederick C. Baldwin on the photographic and oral history of Grimes County, Texas.

\$10,000

UNIVERSITY OF WISCONSIN, Madison, for research and editing of the *History of the Serbs in the United States*, by Michael Petrovich.

\$20,000

WGBH EDUCATIONAL FOUNDATION, Boston, Massachusetts, for production of a documentary film by Tamara Hareven and Randolph Langenbach on the Amoskeag Manufacturing Company and the people whose lives were closely tied to it.

\$15,150

WISCONSIN ACADEMY OF SCIENCES, ARTS & LETTERS, Madison, for publication of an oral history of David H. Stevens, *A Time of Humanities*.

\$5,500

PUBLIC HUMANITIES: NEW AUDIENCES AND NEW SOURCES OF CREATIVITY

The Foundation hopes to reach neglected audiences by better integrating the humanities into education and daily living, thereby building a sense of human dignity and tapping new sources of creative energy. In addition the Foundation hopes to encourage efforts to help the humanities utilize film and television for the transmission of culture.

GRANTS:

American Humanist Association

San Francisco, California

The Association is preparing a new series of television programs, "Ethics and American Society," which will focus on key thinkers and issues of contemporary society and which would serve to stimulate the viewing public to make their own evaluations of the moral and ethical dilemmas of our time.

\$87,000

National Humanities Faculty

Concord, Massachusetts

The National Humanities Faculty was founded in 1968 to improve the teaching of the humanities in American secondary schools. Each year, from among its members—primarily university faculty—the NHF assigns teams to selected schools to work with local school faculty on specific humanities projects. The NHF is currently developing new interdisciplinary humanities programs, enlisting additional members, and conducting regional workshops for faculty at the community and junior college level.

\$100,000

University of California
Santa Barbara, California

Convinced that historians with specialized training can make a professional contribution to public life at local, state, and federal levels, the University is launching a graduate program in public historical studies, offering training in the special skills required for community-oriented research. It is making extensive use of internship experiences.

\$107,000

WGBH Educational Foundation
Boston, Massachusetts

Boston's public television station is preparing a series of ten programs dramatizing episodes in American labor history, from 1840 to 1940.

\$80,000

GRANTS IN AID (\$35,000 or under):

ASPEN INSTITUTE FOR HUMANISTIC STUDIES, New York, New York, for use by the Workshop on Television of its Program on Communications and Society to develop a television criticism curriculum.

\$25,000

CENTER FOR POLICY RESEARCH, New York, New York, for the research project by Amitai Etzioni, "The Ethical Preparation of the Next Generation of Americans: An Exploratory Study."

\$34,900

BENJAMIN DE MOTT, Amherst, Massachusetts, for the writing of a book on the open admissions policy of the City University of New York.

\$31,500

EDUCATION COMMISSION OF THE STATES, Denver, Colorado, for regional seminars for state legislators and higher educational faculty on the changing role and context of higher education.

\$25,000

HAMPSHIRE COLLEGE, Amherst, Massachusetts, for a Senior Fellows Emeriti Program.

\$31,780

MONTCLAIR STATE COLLEGE DEVELOPMENT FUND, Upper Montclair, New Jersey, for use by Matthew Lipman of the Institute for the Advancement of Philosophy for Children for a training workshop on the teaching of philosophy to children.

\$6,200

MEREDITH COLLEGE, Raleigh, North Carolina, for a series of seminars to develop career and professional interests of women studying the humanities.

\$25,000

UNIVERSITY OF FLORIDA, Gainesville, for the 1976-77 "Humanities and Medicine" program offered by its Department of Community Health and Family Medicine.

\$25,000

ROCKEFELLER FOUNDATION FELLOWSHIPS IN THE HUMANITIES

This program of individual awards, established in 1974, is designed to support the production of works of humanistic scholarship and reflection intended to illuminate and assess the values of contemporary society. In 1976 the trustees appropriated \$600,000 for continuation of the program, and the following awards were made at the recommendation of an outside panel composed of distinguished humanists.

BRUCE A. ACKERMAN, professor of law, Yale University, New Haven, Connecticut—philosophical analysis and the formation of constitutional law.

ROGERS G. ALBRITTON, professor of philosophy, University of California, Los Angeles—the idea of God in traditional and contemporary religious and philosophical thought.

JOHN W. ALDRIDGE, professor of English, University of Michigan, Ann Arbor—the American novel since 1945 in relation to American literary, social, and cultural traditions.

ALFRED APPEL, JR., professor of English, Northwestern University, Evanston, Illinois—an illustrated study of the American "dark cinema" a genre of realistic filmmaking, 1941-1964.

ANTHONY ASTRACHAN, research associate, Center for Policy Research, New York, New York—the male response to social changes associated with the women's movement.

ROBERT A. BURT, professor of law, Yale University, New Haven, Connecticut—legal-ethical issues in scientific therapy and experimentation on "dependent" subjects.

MARSHALL COHEN, professor of philosophy, Richmond College and Graduate School and University Center, City University of New York—the relationship of law, morality, and international conduct.

GEORGE R. COLLINS, professor of art history, Columbia University, New York, New York—visionary architectural thought and the planning of cities in the twentieth century.

WALTER L. CREESE, professor of architectural history, University of Illinois, Urbana-Champaign—the American landscape in American cultural and intellectual history.

RICHARD DANZIG, associate professor of law, Stanford Law School, California—the nature of decision making in the United States Supreme Court, 1939-1961.

ROBERT A. DIVINE, professor of history, University of Texas, Austin—a history of the nuclear test ban debate, 1954-1960.

LARRY W. EMERSON, Shiprock, New Mexico—a history of the northern Navajos and the Navajo nation.

PAULA S. FASS, assistant professor of history, University of California, Berkeley—the American high school as a social and cultural agency for change, 1870-1930.

JUNE GOODFIELD, professor of human medicine and philosophy, Michigan State University, East Lansing, and senior research fellow, Medical Research Center, University of Sussex, Brighton, England—a study of scientific creativity focusing on the biomedical sciences.

JAN GORECKI, professor of sociology, University of Illinois, Urbana-Champaign—the administration of criminal justice.

LOREN R. GRAHAM, professor of history, Columbia University, New York, New York—the epistemological and ethical crisis in the impact of science on thought in the twentieth century.

MARY T. HANNA, assistant professor of political science, State University of New York, Binghamton—ethnic organizations and their impact as political interest groups.

CAROLYN G. HEILBRUN, professor of English, Columbia University, New York, New York—psychoanalysis, the female identity, and the literary imagination.

FRANCES R. HILL, assistant professor of government, University of Texas, Austin—the changing roles of rural American women.

JAMES T. JOHNSON, assistant professor of religion, Douglass College, Rutgers, the State University of New Jersey, New Brunswick—"just war" and "limited war" theory in relation to military doctrine, 1200-present.

PAULA C. JOHNSON, associate professor of English, Yale University, New Haven, Connecticut—a critical analysis of the dialogue of comedy.

MARK KRAMER, Colrain, Massachusetts—the social and political effects of changing agricultural technology in the United States, as seen through four representative American farms.

EVERETT CARLL LADD, JR., professor of political science and director, Social Science Data Center, University of Connecticut, Storrs—scholarly norms and ideological commitments of the American middle class political ethos.

KARL A. LAMB, professor of politics, University of California, Santa Cruz—the content and influence of the American middle class political ethos.

GUENTER LEWY, professor of political science, University of Massachusetts, Amherst—the United States in Vietnam: myths and realities.

MICHAEL MANDELBAUM, assistant professor of government and research associate, Program for Science and International Affairs, Harvard University, Cambridge, Massachusetts—liberal domestic ideals and the practice of foreign policy.

WILLIAM H. MCNEILL, Robert A. Milliken Distinguished Service Professor of History, University of Chicago, Illinois—modernization in Greece since 1945.

DAVID L. PALETZ, associate professor of political science, Duke University, Durham, North Carolina—the American press: responsibility and the First Amendment.

CHARLES E. ROSENBERG, professor of history, University of Pennsylvania, Philadelphia—medical care in America, 1790-1914.

JAMES B. RULE, associate professor of sociology, State University of New York, Stony Brook—the usefulness of social science inquiry: possibilities and limitations.

THOMAS S. SCHROCK, associate professor of political science, University of California, Santa Barbara—modern individualism in its legal and philosophical dimensions.

ROBERT SKLAR, professor of history, University of Michigan, Ann Arbor, and visiting professor of American studies, Bard College, Annandale-on-Hudson, New York—the historical development and cultural influence of American television.

PEARL CHESLER SOLOMON, assistant professor of English, City College, City University of New York—a study of American industrial capitalism through the lives of Mark Twain and Andrew Carnegie.

SAM BASS WARNER, JR., William Edwards Huntington Professor of History and Social Science, Boston University, Massachusetts—Boston in the twentieth century.

VIRGINIA YANS-MCLAUGHLIN, professor of history, Sarah Lawrence College, Bronxville, New York—an interpretive social history of American family traditions.

QUALITY OF THE ENVIRONMENT

Two major worldwide developments will continue to have significant bearing on environmental quality in the United States and other nations. The first is the broad public realization, resulting primarily from the energy crisis, that certain natural resources exist in finite quantities and are concentrated in specific regions of the world. This limited, uneven distribution, combined with economic and political realities, has led the United States to a policy of expanded exploitation of its own natural resources and of encouraging their conservation through more efficient use.

A second development which has a significant impact on the environmental movement is the economic outlook. More than ever before the costs of environmental improvements and their impact on national and local economies are brought under scrutiny. The public and their representatives have had to make hard choices concerning the value of environmental improvement regulations and programs relative to numerous other demands on public and private dollars. In many ways the desire to maintain environmental quality has matured under this pressure to become an integral component of our public and private objectives even in direct competition with other public and private goals.

The goal of the Foundation's program is to help develop an improved understanding of and solutions to important environmental problems and, in so doing, to assist in the creation of institutional capabilities to deal with them and to build a better base for public understanding of environmental issues.

Work toward this goal is carried out through six thrusts:

- Assisting universities and other institutions which, in cooperation with state and federal environmental agencies, undertake research on specific environmental problems having significant biological and social components
- Testing alternative approaches to comprehensive, integrated, regional environmental analysis and management
- Developing environmentally attractive alternatives for the management of major pollutants, particularly waste nutrients, pesticides, and heavy metals
- Assisting with the development and testing of new, environmentally improved approaches to natural resources management
- International collaboration on environmental problems
- Developing an improved understanding of the nature and sources of public perceptions of environmental problems.

CENTERS FOR INTERDISCIPLINARY STRENGTH

One of the earliest strategies of this program, and a continuing one, is to assist in the building of centers of interdisciplinary strength which can address major national and regional environmental problems in comprehensive ways.

The inherent complexity of our environment and of the problems we face is becoming better understood. We have learned that most environmental problems require the effective collaboration of several disciplines for their full understanding and resolution.

Another basic strategy of this thrust is to encourage the development of close working relationships between research organizations such as universities, and those public action agencies which should be the beneficiaries and utilizers of research results. The Foundation and its officers often play a direct role in establishing such relationships, in some cases making the appropriate initial contacts with action agencies.

GRANTS:

Pennsylvania State University

University Park, Pennsylvania

The Center for the Study of Environmental Policy is assisting state policymakers to develop alternative environmental policies for the location of new energy facilities that are compatible with local and regional priorities.

\$260,000

SIAM Institute for Mathematics and Society

Philadelphia, Pennsylvania

The SIAM Institute, in collaboration with Stanford and Columbia Universities, has initiated a research and graduate training program which is developing new and more effective statistical methodologies specifically designed to more accurately determine the relationships between environmental contamination and human health.

\$75,000

State University of New York

Stony Brook, New York

A group of scientists and environmental managers with extensive experience in the Chesapeake region are working together to develop a zoning plan for rehabilitation and management of the Bay.

\$70,000

GRANTS IN AID (\$35,000 or under):

INSTITUTE OF ECOLOGY, Logan, Utah, for travel associated with a conference on developing new approaches and clearer understandings of the discipline of ecology.

\$3,000

INSTITUTE ON MAN AND SCIENCE, Rensselaerville, New York, for an investigation of the economics of environmental impact statements.

\$20,000

OAK RIDGE ASSOCIATED UNIVERSITIES, Tennessee, for support of the international participation in and publication costs of a conference on future strategies of energy development.

\$8,000

UNIVERSITY OF COLORADO, Boulder, for research on and initiation of a program for environmental conciliation in the Rocky Mountain region.

\$20,000

UNIVERSITY OF DENVER, Colorado, for research on more effective approaches to providing sound resource and environmental information to state governments in the Rocky Mountain region.

\$15,000

REGIONAL ENVIRONMENTAL ANALYSIS AND MANAGEMENT

Since the inception of the program, concerted efforts have been made to determine the effectiveness and utility of a comprehensive integrated approach to environmental management within defined geographical regions. Given the interrelated characteristics of most major environmental problems and the desirability of research and development strategies which can be broadly applied, we have believed that effective coordination of special talents and experience in universities and research institutions might be more effectively marshaled for problem resolution and development of alternative solutions having regional rather than local application. Several tests of this strategy have been undertaken. The first of these involves the comprehensive analysis of the Hudson Basin region which was completed in 1976. A final report and ten task force group reports resulting from this study are being distributed to appropriate user groups. A second involves support and assistance in the establishment of a Rocky Mountain Institute for Policy Research. The difficulties of gathering and coordinating expert talents and funds for such efforts are not underestimated. The potential advantages, however, of more effectively addressing very complex regional environmental problems and concurrently strengthening regional institutional capabilities argue strongly for the regional approach.

GRANT:**American Arbitration Association**

New York, New York

Professionals from the American Arbitration Association, the State of New Jersey Department of Environmental Protection, and Rutgers University are developing an innovative information system for coastal zone management that will be of direct use to New Jersey and also transferable to other regions.

\$58,750

GRANTS IN AID (\$35,000 or under):

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D.C., for development of its environmental research and education programs.

\$10,000

CORNELL UNIVERSITY, Ithaca, New York, for an environmental impact statement assessment program.

\$21,000

CORNELL UNIVERSITY, Ithaca, New York, for use by the Department of Rural Sociology for videotape productions made on the Hudson Basin Project.

\$4,000

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, Albany, for a planning conference on development of a coordinated interdisciplinary Hudson River research program.

\$5,000

OREGON STATE UNIVERSITY, Corvallis, for presentation of the results of the "Man and His Activities as Related to Environmental Quality" research program at the International Congress on Simulation of Systems.

\$1,000

OREGON STATE UNIVERSITY, Corvallis, for research on alternative approaches to enhanced environmental quality and economic growth in the state of Oregon combined with the development of a liaison between University scientists and state agencies with effective implementation of University research results.

\$30,000

RESOURCES FOR THE FUTURE, Washington, D.C., for research evaluating U.S. environmental policy.

\$20,000

APPROACHES TO CRITICAL PROBLEMS

The strategy of supporting the development of ecologically sound approaches to pest control and to the management of waste materials, heavy metals, and synthetic chemicals, aims directly at improving our health and welfare. Problems being addressed are associated with economic development and a technological society's tendency to overburden natural ecosystems.

GRANTS:**Case Western Reserve University***Cleveland, Ohio*

The Complex Systems Institute is developing an innovative computer-based planning and decision making tool for water quality management, which promises to greatly assist resolution of regional environmental problems.

\$10,000

Cornell University*Ithaca, New York*

Researchers at the New York State Agricultural Experiment Station, Geneva, have made the first discovery of anti-juvenile hormones, an achievement which should lead the way to development of a "fourth generation" of safe and insect specific pesticides.

\$28,800

Mississippi State University*Mississippi State, Mississippi*

Researchers continue to explore the biochemical and morphological characteristics that confer resistance in cotton to its major insect pests.

\$46,603

State University of New York*Stony Brook, New York*

The Marine Science Research Center is studying the effects of persistent chemical pollutants on marine plankton populations. The findings will enable federal and state agencies to act more effectively in regulating the discharge of chemicals identified as having a substantial adverse impact on the ecology of coastal waters.

\$45,000

Texas A & M University*College Station, Texas*

Scientists are studying glandless and nectariless cotton lines in an attempt to produce pest-resistant cottons whose seeds may be consumed by humans and nonruminant animals without special processing.

\$94,500

University of California*Davis, California*

Scientists at the University have developed several genotypes of glandless cotton equal to their glanded parental types in yield and fiber quality but highly resistant to lygus bugs.

\$23,750

University of Massachusetts
Amherst, Massachusetts

When laying her eggs, the female apple maggot marks the area on an apple with a pheromone that deters other female apple maggots from laying eggs in that area. Scientists hope to isolate, produce, and apply this pheromone in a manner that will be useful in controlling the apple maggot.

\$9,700

University of Wisconsin
Madison, Wisconsin

Researchers have successfully demonstrated the use of pheromones to disseminate highly pathogenic diseases for insect control. Further testing is now under way to ensure mammalian safety and to reduce the cost of the treatment.

\$19,605

GRANTS IN AID (\$35,000 or under):

CORNELL UNIVERSITY, Ithaca, New York, for dissemination of the results of interdisciplinary investigations on the nutrients phosphorus and nitrogen.

\$18,000

PENNSYLVANIA STATE UNIVERSITY, University Park, for research on further development of practical procedures for testing noise susceptibility.

\$25,000

UNIVERSITY OF ARIZONA, Tucson, for research on the use of *Acinetobacter phosphadevorus* to improve biological wastewater treatment processes.

\$23,000

UNIVERSITY OF COLORADO, Boulder, for research on selenium and human health.

\$11,000

UNIVERSITY OF NORTH CAROLINA, Chapel Hill, for research on the effects of exposure to high noise levels on employees in industrial environments.

\$22,481

NATURAL RESOURCES MANAGEMENT

An increasing number of environmental problems being brought to the attention of the Foundation are directly associated with expanding demand for natural resources. Earlier or existing practices of extraction and utilization of minerals, fossil fuels, forest products, and related land use practices have placed unnecessary and, in some instances, harmful burdens on the natural environment and human health. The Foundation is selectively supporting research which can assist in formulating effective resource management strategies designed to minimize environmental and social disruption and adverse effects on human health.

GRANTS:**Boyce Thompson Institute for Plant Research***Yonkers, New York*

In 1970 a major research program on the structure and function of the Hudson River estuary was begun. In addition to continuing basic research on the biotic community of the estuary, the Institute is engaged in the transfer of this information to decision making channels, where it can contribute to the effective management of a valuable natural resource.

\$30,000

Massachusetts Audubon Society*Lincoln, Massachusetts*

Wetlands are essential to the hydrologic cycle, serve as wildlife habitats, insure adequate water supplies, and are crucially important in flood control. The Audubon Society is developing technical and educational materials and consultative services for community organizations designated to manage wetlands areas throughout New England.

\$33,000

Massachusetts Institute of Technology*Cambridge, Massachusetts*

Two postdoctoral teams whose fellows have been trained in urban land planning and in social systems analysis are completing research on water resources planning for southeastern New England. The results will be utilized by the New England River Basins Commission in regional planning and development.

\$50,000

University of California*Los Angeles, California*

In cooperation with the Las Virgenes Municipal Water District, scientists at UCLA are developing a pilot plant facility to utilize effluent water for hydroponics and freshwater aquaculture.

\$63,000

University of Florida*Gainesville, Florida*

Investigators have reached the final stages of a project to develop and implement a system of recycling partially treated sewage effluent through cypress wetlands.

\$137,778

GRANTS IN AID (\$35,000 or under):

ACADEMY OF NATURAL SCIENCES, Philadelphia, Pennsylvania, for a major publication on river ecosystems.	\$25,000
AMERICAN GEOGRAPHICAL SOCIETY, New York, New York, for research on remote sensing and the development of vegetation maps for protected areas.	\$10,000
COLLIER COUNTY CONSERVANCY, Naples, Florida, for research on water quality and coastal zone management associated with the channelization of coastal wetlands.	\$10,000
INSTITUTE ON MAN AND SCIENCE, Rensselaerville, New York, for examination of research priorities in land use management.	\$15,000
HARVARD UNIVERSITY, Cambridge, Massachusetts, for documentation of the development and operation of the Harvard Community Assistance Programs.	\$4,000
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, for research assessing the strengths and weaknesses of the Massachusetts Growth Policy Development Act.	\$20,000
NEW YORK UNIVERSITY, New York, for use by its Graduate School of Business Administration for travel associated with an international conference on the comparative economic dimensions of waste recycling and reuse.	\$4,200
STATE OF WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES, Charleston, for research on skyline cable logging.	\$15,000
STATE UNIVERSITY OF NEW YORK, COLLEGE OF ENVIRONMENTAL SCIENCES AND FORESTRY, Syracuse, for research on emerging land use concepts such as transfer of development rights.	\$10,500
UNIVERSITY OF DENVER, Colorado, for research on the socioeconomic and environmental impact of energy resource development in the Rocky Mountain West.	\$25,000
WESTERN PENNSYLVANIA CONSERVANCY, Pittsburgh, for research on land use management in north central Pennsylvania.	\$15,000
YALE UNIVERSITY, New Haven, Connecticut, for a training and research program on tropical forest ecosystems.	\$9,400

INTERNATIONAL COLLABORATION

A growing pool of expertise and knowledge is being developed at selected institutions throughout the world which can be useful to other nations in

research on their environmental problems and in the training of their nationals.

The Foundation has made contact with many international leaders of environmental programs and with scientists engaged in research on problems of global significance. Modest, nongovernmental funding may be particularly valuable in convening multinational expertise for transferring information and in devising cooperative research on old and new problems.

Through these and other projects supported by the Foundation, a small yet significant international component is developing. Intensification of granting activity is not planned.

GRANTS:

American Universities Field Staff

Hanover, New Hampshire

AUFS is sponsoring a study of the underlying tensions and prospects for greater cooperation between Egypt and Sudan in light of their mutual need to manage the Nile River system to benefit their burgeoning populations and new development projects. (Jointly with the Conflict in International Relations program)

\$12,000

Duke University

Durham, North Carolina

An international program at the Duke University Marine Laboratory, designed for young scientists from developing countries, offers formal training and research experience related to marine environmental problems occurring in the coastal zone.

\$148,000

University of British Columbia

Vancouver, Canada

Researchers are conducting a review and evaluation of the work of the International Joint Commission, in particular its successful experience in cooperative management of international water resources. (Jointly with the Conflict in International Relations program)

\$20,000

GRANTS IN AID (\$35,000 or under):

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D.C., for the development and operation of the Interciencia Association.

\$12,000

BROOKINGS INSTITUTION, Washington, D.C., for research to examine alternative approaches for financing international environmental programs.

\$20,000

NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for printing of additional copies of the report *Early Action on the Global Environmental Monitoring System*.

\$1,000

UNITED NATIONS ASSOCIATION OF THE UNITED STATES OF AMERICA, New York, New York, for the international correspondence network of the Center for International Environmental Information.

\$10,000

UNIVERSITY OF MAINE, Orono, for use by its Institute for Quaternary Studies for the development of international collaboration on climatic research.

\$6,000

UNIVERSITY OF MICHIGAN, Ann Arbor, for participation in the inter-American Programma Flora Project and the development of an inventory and assessment of the botanical resources of Brazil.

\$4,400

UNIVERSITY OF SHEFFIELD, England, for the First International Conference on the History of Urban and Regional Planning.

\$5,000

UNIVERSITY OF WISCONSIN, Madison, for a planning workshop in Mexico for a project on integrated design and management of regional energy/environment systems in developing countries.

\$20,000

ENVIRONMENTAL PERCEPTIONS

Foundation officials believe that an improved understanding of the nature and sources of public perceptions of environmental problems, through careful, sharply focused opinion studies, is vital for the achievement of sustained, mature interest in environmental affairs. The results of studies funded this year by the Foundation should assist many agencies and officials in identifying major gaps in public understanding and enable public agencies to pursue activities leading to a better informed citizenry.

GRANT:

State University of New York
Buffalo, New York

The Social Science Research Institute is investigating the environmental perceptions and beliefs of the public and leaders in New York's Erie and Niagara counties for incorporation into two physical efforts now underway in the Niagara frontier region.

\$78,750

ROCKEFELLER FOUNDATION FELLOWSHIPS IN ENVIRONMENTAL AFFAIRS

One final strategy which is employed in nearly all activities of the Quality of the Environment program is to provide opportunities for highly qualified individuals to receive training in environmental affairs.

The most recent direct use of this strategy is through the new Rockefeller Foundation Fellowships in Environmental Affairs approved by the trustees early in 1974.

These awards are intended to enable highly qualified individuals to broaden their knowledge and enhance their capacity for leadership in the area of environmental affairs. Thus far, 50 fellowship awards—for periods of up to one year—have been made. In 1976, \$300,000 was appropriated by the trustees for continuation of the program and the following 30 awards were made:

EDWARD ALLEN, assistant professor of political science, Utah State University—a renewal of his fellowship to enable him to document the results of his research on front-end financing for energy boom towns in the Rocky Mountain West.

GARY BELL, graduate student at the Harvard School of Design and with prior experience as a professional planner—to develop a Natural Resources Inventory Kit providing instructional materials which would enable small and moderate size communities to conduct and utilize natural resource inventories.

WENDY BELL, formally trained in European literature with additional capabilities in linguistics and history—to conduct research on historical weather mapping at the University of East Anglia.

GORDON L. BRADY, instructor in economics, Virginia Polytechnic Institute—to examine the influence of citizen interest groups as bargaining agents and enforcers of environmental regulations, while a visiting investigator at the Center for Studies in Law and Economics at the University of Miami Law School.

PHILIP M. BURGESS, political scientist with the Federation of Rocky Mountain States—to identify alternatives for increasing the capacity of state governments and multi-state regional mechanisms to use science and technology in environmental problem-solving and policymaking, using selected Rocky Mountain states and the Federation of Rocky Mountain States as case studies.

LAURENCE M. FROMMHAGEN, virologist associated with the University of California, Los Angeles Wastewater Management program—a renewal of his fellowship to enable him to document the results of his research on viral contamination associated with innovative forms of wastewater disposal.

JOHN G. GISSBERG, lawyer with a Ph.D. in fisheries—a renewal of his fellowship to enable him to document the results of his research on Japanese land use planning, being conducted as a component of the International Comparative Land Use Program of the Conservation Foundation.

EUGENE HARGROVE, recent Ph.D. graduate in philosophy from the University of Missouri—to conduct research on the development and nature of American environmental ethics focusing on the opening of the American West as a particularly significant historical period.

CHINWEIZU IBEKEWE, Nigerian historian with training in economics and political science—to conduct research on techniques for integrating environmental considerations into economic theory relevant to developing nations.

GLEN P. JUDAY, Ph.D. candidate in botany at Oregon State University—to investigate and test alternative strategies for implementation of Oregon's Natural Area Preserves Program in cooperation with the Oregon Division of State Lands.

PETER KAKELA, associate professor of geography, Sangamon State University—to conduct a detailed energy analysis of the taconite-to-steel production system, as a visiting investigator at the Center for Advanced Computation at the University of Illinois.

JANE KAPLAN, clinical psychologist—to investigate alternative approaches for including greater human and psychological perspectives in environmental planning and management while associated with the City of San Diego Environmental Quality Division.

KENNETH J. KLINGENSTEIN, assistant professor of mathematics, University of California, Santa Barbara—to develop mathematical and computer models for natural resources management, as a visiting investigator with the Regional Systems Program at Colorado State University.

JENNIFER LOGAN, physical chemist—to investigate the modifications of natural chemical balances which occur in the atmosphere due to industrial emissions, while associated with the Center for Earth and Planetary Physics at Harvard University.

DAVID MAIDMENT, civil engineer with the New Zealand Ministry of Works and Development—to conduct research on the development of methodologies for the forecasting and control of water resources systems, as a visiting investigator with the International Institute for Applied Systems Analysis in Austria.

MARTIN V. MELOSI, instructor in history, Texas A & M University—to conduct research on the history of urban environmental pollution control and municipal reform, using New York City as a case study.

ROBERT M. M'GONIGLE, lawyer—to investigate the role of transnational non-governmental organizations in international environmental regulatory processes, while associated with the Institute of International Relations of the University of British Columbia.

STERLING MILLER, predoctoral zoology student at the University of Washington—a renewal of his fellowship to enable him to complete research on the history of land use practices in Chile with particular reference to their effects on wild mammals, while associated with the Corporación Nacional Forestal in Chile.

SARAH PESKIN, recent graduate in urban and regional planning from Columbia University and presently with the Massachusetts Audubon Society—to investigate and test alternative strategies for the development of community growth strategies required by the Massachusetts Growth Policy Development Act.

ALICIAN V. QUINLAN, assistant professor of environmental science and engineering.

Massachusetts Institute of Technology—to conduct research on, and to publish and present, a seminar series concerning interdisciplinary approaches to complex environmental problems.

CLAIR REINIGER, graduate student at the Harvard School of Design—to develop and test alternative methods for including social and cultural factors in environmental planning and decision making.

JOANN ROSKOSKI, forest ecologist—to conduct research on nitrogen fixation in the humid tropics, while associated with the Instituto de Investigaciones sobre Recursos Bioticos in Jalapa, Mexico.

JAMES S. SAGNER, associate professor of business and public administration, Southern Illinois University—to examine the impact of environmental law on transportation and energy policy, as a visiting investigator at the Washington University School of Law.

ROY D. SJOBLAD, agronomist—to conduct research on the effects of pollutants on chemotactic responses in microorganisms, while associated with the Division of Engineering and Applied Physics at Harvard University.

DAVID M. TAUB, anthropologist—to serve as a postdoctoral investigator on a United Nations team developing criteria for the selection of national park sites in Morocco.

JOEL TEITELBAUM, anthropologist—to serve as a postdoctoral investigator on interdisciplinary projects at the University of North Carolina School of Public Health which assists in the development of environmental management and protection programs for poor rural communities in the southeastern United States.

DONALD TILTON, ecologist—to serve on an interdisciplinary research team at the University of Michigan which is examining the feasibility of using freshwater wetlands as sewage effluent disposal sites.

FRANK P. TULLY, chemist—to participate in a research program at Michigan State University that will utilize an analytical instrument he helped develop to study the chemical reactions of air pollutants.

ALICE WHITTEMORE, associate professor of mathematics, Hunter College—to join the statistics department of Stanford University as a visiting scientist and to participate in a multiuniversity research program seeking the development of new and improved statistical methods for determining the relationships between environmental pollutants and human health.

JAMES ZUCCHETTO, ecologist—to participate in a University of Stockholm investigation of the relationship between natural ecosystems and fossil energy supplied by man using the Island of Gotland as a case study.

SPECIAL INTERESTS AND EXPLORATIONS

Very occasionally, grants are made not directly associated with any existing program but of special interest to the Foundation as a whole. Such activities would be designed to study and pursue new possibilities, for example, public policy and administration, and cultural and scientific exchange with China.

Under this rubric also fall grants related to the special interests of the Foundation as an institution, e.g., the Council on Foundations, and support for the Rockefeller Archive Center and the Bellagio Study and Conference Center.

GRANTS:

Boston University

Boston, Massachusetts

Foundation support will enable the Center for Latin American Development Studies to involve increased numbers of visiting professors and graduate students from Latin America in its program of research in Latin American development economics.

\$60,000

Foundation Center

New York, New York

The Foundation Center is the only independent, not-for-profit organization in the United States dedicated entirely to the gathering, analysis, and dissemination of factual information on philanthropic foundations.

\$90,000

Rockefeller Archive Center

Pocantico Hills, New York

The Rockefeller Archive Center of Rockefeller University was established in 1974 to serve as a research facility and as a permanent repository for the archival material of the Rockefeller Foundation, the University, the Rockefeller Brothers Fund, the Rockefeller family, and the philanthropic organizations which they have created or supported. The Foundation's 1976 appropriation of \$176,000 was for

direct costs of the Foundation's archival activities and to Rockefeller University for costs allocable to the operation of the Foundation's archives at the Center.

\$212,265

GRANTS IN AID (\$35,000 or under):

COMMISSION ON PRIVATE PHILANTHROPY AND PUBLIC NEEDS (FILER COMMISSION), Washington, D.C., for the final stage of its research and information program.

\$10,000

JOHN D. ROCKEFELLER 3RD YOUTH AWARD, 1975, for presentation to Charles D. Bannerman, for his unusual entrepreneurial skills in developing programs and mobilizing support for the poor and disadvantaged in the Mississippi Delta.

\$10,500

JOHN D. ROCKEFELLER 3RD YOUTH AWARD, 1976, for presentation to Ernesto Gomez and Vilma Martinez for leadership of the El Centro del Barrio and the Bilingual-Bicultural Teaching-Learning Center in San Antonio, Texas and of the Mexican-American Legal Defense and Educational Fund, San Francisco, California, respectively.

\$25,000

THE BELLAGIO STUDY AND CONFERENCE CENTER

The Villa Serbelloni, an historic estate in the Italian Alps, is located high on the promontory that divides Lake Como and overlooks the town of Bellagio; it was bequeathed to the Foundation in 1959. The Center has since evolved into a unique meeting place for conferences attended by scholars from many parts of the world who meet at Bellagio to examine major human problems. "Bellagio Conferences" have been the modest beginnings of now worldwide cooperative undertakings in agricultural research, population stabilization efforts, and the development and strengthening of universities and training institutes in the Third World countries. All conferences held at the Center must be related in some way to the Foundation's own programs, and the Foundation has recently been increasing its own use of the Center's conference facilities. However, each year a number of persons or organizations outside the Foundation receive invitations to use the Center for conferences of clearly international dimensions and importance.

In addition to conferences at Bellagio, the Foundation offers residencies, generally for about one month each, to eminent scholars, writers, and composers engaged in major writing projects. During 1976, the Center was

able to accommodate 76 men and women of recognized distinction from 13 countries.

The Center is administered from the Foundation's New York office by an interdisciplinary committee of which Dr. Ralph W. Richardson, Jr. is currently the chairman and Dr. Jane Allen, the coordinator. Dr. William C. Olson is the Center's resident director.

The following conferences were held at the Center during 1976:

The Organization of the European University Institute, in Florence, Italy—Max Kohnstamm, European University Institute, Florence. A meeting of professors, librarians, and administrative staff of the newly established Institute determined what research programs and seminars would be offered at the Institute.

Exploring Israeli and Palestinian Perceptions of Crucial Middle East Issues—Larry Fabian, Carnegie Endowment for International Peace, Washington, D.C. A meeting of influential Israeli leaders, drawn primarily from the private sector, explored mutual accommodation concerning certain Middle East issues on which they differ.

Educating Women for Leadership—Joel Colton and D. Lydia Brontë, The Rockefeller Foundation. A group of twenty men and women from four countries examined and analyzed the changes in higher education for women that have come about in the last ten years. The participants evaluated the present status of women's education in the United States, United Kingdom, France, and Sweden and attempted to anticipate its future direction. Specific issues considered included the value of coeducation vs. one-sex education, the similarities and differences of women's and men's educational needs, the influence of sex role stereotyping within educational systems, and the relationship of work opportunities for women to educational training.

International Straits: Conflict or Cooperation?—Gerard Mangone, College of Marine Studies, University of Delaware. A group of scholars from Canada, the United Kingdom, Sweden, Iran, Israel, Japan, India, Germany, Singapore, and the United States came together to organize in detail a series of five regional studies involving ten international straits. They examined the legal, institutional, and political problems involved in dealing with these critical areas in the future with a view to anticipating any possible international conflict

regarding these strategic waterways. (The study is also being supported by a grant of \$120,000 from the RF's Conflict in International Relations program.)

Cooperative Federalism—Antonio La Pergola, Director, Institute for Regional Studies, Rome. A group of political scientists from Italy, Switzerland, Germany, Austria, Australia, Yugoslavia, the United Kingdom, and the United States examined cooperative federalism at two levels: interstate and multistate companies, agencies, and authorities; and central governments.

The Use of Mathematical Modeling in Schistosomiasis Investigations—J. Stauffer Lehman, Jr., Edna McConnell Clark Foundation. This conference brought together four different types of investigators in the field of schistosomiasis: biologists currently using mathematical modeling for research on schistosomiasis; biologists using such modeling for research on diseases other than schistosomiasis; mathematicians with experience in drawing up mathematical models for investigation of disease; and schistosomiasis investigators with no experience in mathematical modeling. Participants came from the United States, the United Kingdom, Kenya, Sweden, South Africa, Australia, and West Germany.

Women in the Power Structure in Eastern and Western Europe, U.S.A., and the Mediterranean Area—Paola Coppola Pignatelli, University of Rome. A group of European women who have already achieved considerable distinction in their professions met to make a comparative study of the positions of women now working at higher professional levels. The professions that received primary attention were medicine, engineering, architecture, and academic teaching. Countries represented were Italy, Germany, the United Kingdom, Israel, France, Libya, Norway, Poland, Hungary, Sweden, the Netherlands, and Belgium.

Human Chorionic Gonadotropin—Sheldon Segal, Population Council, and Allan C. Barnes, The Rockefeller Foundation. A group of researchers and investigators in the field of reproductive physiology met and examined new developments in the field of human chorionic gonadotropin, a substance secreted by the human placenta which shows promise as a possible immunizing agent against pregnancy. Participants came from South America, Europe, India, the Dominican Republic, Canada, and the United States.

Conference/ Meeting of the International Committee for Contraception Research (ICCR)—Sheldon Segal, Population Council, and Allan C. Barnes, The Rockefeller Foundation. This was a meeting of the international committee organized in 1971 to examine, review, and evaluate the most recent developments in biomedical research on contraception and fertility control. Participants came from South America, Central America, Europe, India, and the United States.

International Trade Reform #1 (Subsidies to Industry by National Governments)—Hugh Corbet, Trade Policy Research Centre, London. The first of two conferences organized by Dr. Corbet, this one brought together the principal negotiators engaged in the Tokyo round of multilateral trade negotiations conducted in Geneva under the auspices of GATT. They represented the industrialized countries of the United States, the United Kingdom, Australia, Germany, Canada, Denmark, Japan, Sweden, France, Italy, and Switzerland. The purpose of the conference was to bring together representatives of those nations in favor of a liberalization of international trade within an accepted framework of rules.

Science, Technology, and Society—Thomas F. Malone, Holcomb Institute, Butler University, Indianapolis. This conference brought together the planners of the third part of a bicentennial symposium scheduled for late 1976 as part of the General Assembly of the International Council of Scientific Unions (ICSU). Scientists and science administrators from the United States, France, the United Kingdom, the Netherlands, the Soviet Union, Australia, Ghana, West Germany, Sweden, and Japan produced a paper presented at the ICSU Symposium in October 1976 in Washington, D.C., providing guidelines which scientific institutions throughout the world can follow in drawing up future plans.

New Communications Technology and Intellectual Property Rights—Edward W. Ploman, International Broadcast Institute, London. The conference brought together a group of twenty participants from nine countries to examine various legal problems having to do with the technologies relating to television communications satellites, cable TV, video cassettes, and lightweight video equipment. The changing legal situation with regard to these technologies and national legislation having to do with communications were reviewed, and recommendations were made for future studies and research in this field. Participants included communications practitioners, users of

the new communications technologies, legal experts in the field of communications technology, and academic scholars. Participants came from the United States, Canada, the United Kingdom, Sweden, France, Germany, Spain, Australia, and Japan.

Developing Economies in Agrarian Regions: A Search for Methodology—*Susan W. Almy and Joseph E. Black, The Rockefeller Foundation*. This conference focused on the problem of adapting methods useful for the development of one agrarian region to the development of other regions. Conference participants were social scientists and others currently involved in rural development projects in Sierra Leone, Colombia, Costa Rica, Guatemala, El Salvador, Kenya, Tanzania, Sri Lanka, Malaysia, Indonesia, the Philippines, and Nigeria.

Public Management Education—*Joseph E. Black, Laurence D. Stifel, James S. Coleman, The Rockefeller Foundation, and Frank Sutton, Ford Foundation*. A group of representatives from foundations, the World Bank, the International Agricultural Development Service, and the governments of less-developed countries evaluated past and present efforts in public management education in Third World countries. The agenda included a critical examination of the character of existing management education programs in the developing countries (including their teachers and administrators), the methods of evaluation of effectiveness, and the problems of institutionalization. The conference sought to illuminate possible ways in which highly selective external assistance may be focused upon the strategic aspects of this critical problem. Participants came from the United States, Jamaica, Tanzania, Nigeria, Ethiopia, Egypt, India, the Philippines, and Thailand.

International Trade Reform #2 (Agricultural Trade)—*Hugh Corbet, Trade Policy Research Centre, London*. The second conference of two organized by Dr. Corbet focused on the subject of world food security. Participants, from the United Kingdom, Australia, Germany, Canada, Japan, the Netherlands, New Zealand, and the United States, were agricultural economists, national representatives to international organizations, elected government officials, agricultural administrators, and international civil servants. The main items examined were post-war trends in the farm-support policies of the major developed countries; import levies and import quotas; export subsidies and export controls; side-effects of health standards and other technical

barriers; the possibility of establishing an international system of nationally-held grain reserves; and methods of negotiating levels of farm support.

The Role of the Mass Media in Enlisting Public Support for Marginal Groups—Franz Pavelka, European Centre for Social Welfare Training and Research, Vienna. This conference brought together a group of sociologists, journalists, and others working in the field of social welfare in Germany, the United Kingdom, Belgium, Denmark, Austria, Italy, Switzerland, France, and the United States. Participants sought to determine what the communications media can do to call public attention to the plight of marginal groups, i.e., segments of the society that are socially, economically, culturally, and politically deprived and in no position to adequately articulate their needs and demands. This includes migrant workers, ethnic minorities, and other indigenous groups finding themselves in a marginal social position.

Opportunities for Philanthropy, 1976—Robert F. Goheen, Chairman, Council on Foundations, New York. This conference enabled the presidents or other executive officers of a number of European and American foundations to come together to examine selected topics of common interest such as social injustice, food and hunger, the city, quality of life, etc. Papers commissioned from leading authorities in their fields served as the basis of discussion.

The European World Economy and the Rise of the National State—Stein Rokkan, University of Bergen, Norway, and President, International Social Science Council, Paris. This was the first in a series of conferences being organized by the International Council of Social Sciences, composed primarily of distinguished European historians, political scientists and economists. The conference focused on the political consequences of the extraordinary changes brought about in Europe and across the world through the emergence of merchant capitalism and the explosive expansion of a new world economy within a framework of protracted competition among several centers of territorial power. Participants consisted of economists, anthropologists, and historians from Italy, Finland, Germany, France, Poland, Sweden, Venezuela, Senegal, and the United Kingdom.

Political Systems of the USSR and China—Renato Mieli, Secretary General, Study and Research Center on Socio-Economic Problems, Milan, Italy. Scholars from Italy, the United Kingdom, West Germany, France, and the United States discussed papers and exchanged information to acquire a better knowledge of two political systems that appear to be structurally different from those of the West. Several Italian diplomats and journalists were also invited. The conference was particularly important to political leaders in Italy, a country with a sizable Communist Party, in understanding the problems that both the Soviet and Chinese systems have in modernizing their countries economically and politically.

International and Comparative Dimensions of Recycling—Ingo Walter, New York University Graduate School of Business Administration; Michel Potier, OECD, Paris; and David Pearce, University of Leicester, England. This conference brought together participants from Switzerland, Canada, the United Kingdom, West Germany, France, Greece, and the United States to examine, on a comparative basis, the various methods now being utilized for waste recycling and reuse. Attention was paid both to resource conservation and to protection of the environment. Most participants were currently involved in research on the different types of waste recycling and reuse policies in effect in European countries.

Funding for the International Agricultural Development Service—John A. Pino and Sterling Wortman, The Rockefeller Foundation. This meeting appraised the future financial needs of the newly established International Agricultural Development Service. Participants were representatives of large bilateral donor organizations in the United States, Switzerland, Norway, Germany, the Netherlands, the United Kingdom, Belgium, Sweden, and Canada, as well as several officers of the International Agricultural Development Service and The Rockefeller Foundation.

Urban Waste Management and Air Pollution Control—Sponsored by The Rockefeller Foundation and the U.S. Consulate in Milan. Principal Organizers: Thomas Fina and Umberto Pellegrini. A group of Italian leaders from the area of the Po Valley participated in a conference-seminar with Richard Sullivan (formerly with the Department of Environmental Conservation, State of New Jersey) for the purpose of examining and comparing some of the internal problems of a modern democratic industrial state, particularly the

day-to-day administrative problems faced by local and state governments in providing services to individuals. Participants included two representatives from each of the geographic regions of the Po Valley and two representatives from each of the major cities of the area—one representative a civil servant, the other, an elected official.

Parks and Natural Preserves: The American Experience—Sponsored by The Rockefeller Foundation and the U.S. Consulate in Milan. Principal Organizers: Thomas Fina and Paolo Schmidt di Friedberg.

A group of Italian leaders from the area of the Po Valley participated in a conference-seminar with Roderick Nash of the Department of History, University of California at Santa Barbara, for the purpose of sharing with local and regional Italian officials his knowledge and experience in the field of U.S. policies with regard to national parks, regional parks, nature protection, local and regional scenic and recreational resources, and nature preservation outside of parks.

THE ROCKEFELLER FOUNDATION ARCHIVES

Use of the Archives by the Public

A total of 49 scholars made 118 research visits to the Rockefeller Archive Center to use Rockefeller Foundation records or collections held by the Foundation. Of these, 26 were college or university faculty members, 17 were graduate students, three were undergraduate students, and three were independent scholars. The most frequently used materials were Foundation projects files and the General Education Board and Laura Spelman Rockefeller Memorial collections. The most frequent topics of research were the history of science and medicine, medical education, education at all levels, and the role of philanthropy in American life.

STUDY AWARDS

During 1976 a total of 272 persons held Foundation fellowships; 218 awards that began in previous years continued active in 1976, and 54 new awards became active during the year. Their distribution by program is as follows:

	<i>Study awards from previous years continued into 1976</i>	<i>New awards in 1976</i>	<i>Number of awards active in 1976</i>
AGRICULTURAL SCIENCES	85	18	103
NATURAL AND ENVIRON- MENTAL SCIENCES	3	1	4
HEALTH SCIENCES	45	17	62
SOCIAL SCIENCES	75	17	92
HUMANITIES	10	1	11
	<hr/>	<hr/>	<hr/>
	218	54	272

For 1976 the Trustees approved a fund of \$3,000,000 for fellowships. A fund of \$3,200,000 was approved for allocation during 1977.

Rockefeller Foundation Fellows in 1976 came from the following countries:

	<i>Previous Awards</i>	<i>New Awards</i>		<i>Previous Awards</i>	<i>New Awards</i>
Brazil	6	1	Nigeria	12	3
Canada	1		Paraguay		1
Chile	3	1	Peru	6	
Colombia	18	4	Philippines	6	2

Costa Rica	2	St. Lucia	1
Ecuador	1	Sri Lanka	1
El Salvador	4	Tanzania	10 2
Guatemala	6	Thailand	50 9
Honduras	1	Tunisia	1
Indonesia	19	Turkey	3
Kenya	12	Uganda	10
Lebanon	3	United States	26 10
Mexico	7	Zaire	12 5
			—————
			218 54

1976 AWARDS

The following listing is arranged according to Rockefeller Foundation program areas. Key to abbreviations in the following section: F—Fellow, T—Trainee, RB—Reproductive Biology, AS—Agricultural Sciences, HS—Health Sciences, SS—Social Sciences, NES—Natural and Environmental Sciences, HUM—Humanities, CIAT—International Center for Tropical Agriculture, IRRI—International Rice Research Institute.

CONQUEST OF HUNGER

Chile

CAFATI, CLAUDIO M.S., University of Sao Paulo, Brazil, 1971. Plant Pathology. Appointed from Institute of Agricultural Research, Chile. Place of study: U.S.A. F-AS

Colombia

CANO GALLEGOS, JAIRO M.S., National School of Agriculture, Mexico, 1971. Sociology-Public Opinion and Communication. Appointed from CIAT. Place of study: U.S.A. F-SS.

FORERO MARTINEZ, ORLANDO M.S., National University of Colombia, 1973. Genetics and Breeding. Appointed from CIAT. Place of study: U.S.A. F-AS

LASCANO, CARLOS E. M.S., University of Arizona, 1970. Nutrition and Physiology. Appointed from CIAT. Place of study: U.S.A. F-AS

MENDOZA, PABLO E. M.S., University of Florida, 1974. Agronomy. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. F-AS

Costa Rica

MATEO, NICOLAS M.S., University of Costa Rica, 1976. Plant Science. Appointed from University of Costa Rica. Place of study: U.S.A. F-AS

RAMIREZ MARTINEZ, CARLOS M.S., University of Costa Rica, 1975. Agronomy. Appointed from University of Costa Rica. Place of study: U.S.A. F-AS

Guatemala

DEL VALLE, RICARDO Agr. Ing., University of San Carlos, Guatemala, 1972. Soil Science. Appointed from Institute of Science and Agricultural Technology. Place of study: Mexico. F-AS

REICHE CAAL, CARLOS ENRIQUE B.A., University of San Carlos, Guatemala, 1975. Agricultural Economics. Appointed from Institute of Science and Agricultural Technology. Place of study: U.S.A. F-SS.

VELASQUEZ MORALES, ROBERTO RENE Ing. Agr., National School of Agriculture, Mexico, 1973. Genetics and Breeding. Appointed from Institute of Science and Agricultural Technology. Place of study: Colombia. F-AS

Nigeria

ADEGBOLA, ANTHONY AFOLABI Ph.D., University of California, Riverside, 1965. Nutrition and Physiology. Appointed from University of Ife. Place of study: Colombia. F-AS

Paraguay

ALARCON LOPEZ, EMILIANO M.S., National School of Agriculture, Mexico, 1971. Genetics and Breeding. Appointed from National University of Asuncion, Paraguay. Place of study: U.S.A. F-AS

Philippines

PALADA, MANUEL C. M.S., University of the Philippines, 1970. Agronomy. Appointed from IRRI. Place of study: U.S.A. F-AS

Thailand

VICHEN PETPISIT M.S., University of the Philippines, 1974. Genetics and Breeding. Appointed from Ministry of Agriculture. Place of study: U.S.A. F-AS

Tunisia

HARRABI, MONCEF MOHAMED B.S., Western Illinois University, 1970. Plant Science. Appointed from Ministry of Agriculture. Place of study: U.S.A. F-AS

United States

MALMBERG, RUSSELL LUTHER Ph.D., University of Wisconsin, 1976. Plant Science.
Appointed from University of Wisconsin. Place of study: U.S.A. F-AS

RITTERBUSH, STEPHEN M.S., University of Hawaii, 1974. Marine Resources.
Appointed from International Center for Living Aquatic Resources Management,
Hawaii. Place of study: U.S.A. F-AS

POPULATION AND HEALTH

Brazil

TAVARES NETO, ARMANDO M.D., Federal University of Bahia, 1976. Microbiology.
Appointed from Laboratorio Central Goncalo Muniz, Bahia. Place of study: U.S.A.
F-HS

Indonesia

POERWONO RAHARDJO M.D., Gadjah Mada University, 1970. Public Health.
Appointed from Gadjah Mada University. Place of study: England. F-HS

SOETRISNO, RACHMAT M.D., Gadjah Mada University, 1972. Public Health.
Appointed from Gadjah Mada University. Place of study: England. F-HS

United States

HUPPERT, LEONORE M.D., University of Pennsylvania, 1972. Reproductive Biology.
Appointed from University of Pennsylvania Hospital. Place of study: U.S.A. F-HS-RB

KELSOE, GARNETT HERREL M.Sc., Harvard University, 1975. Public Health.
Appointed from Harvard University. Place of study: U.S.A. F-HS

LIEBERMAN, MARA E. Ph.D., Weismann Institute of Science, Israel, 1976.
Reproductive Biology. Appointed from University of Wisconsin. Place of study:
U.S.A. F-HS-RB

POWERS, ROBERT DOUGLAS Ph.D., Syracuse University, 1975. Reproductive
Biology. Appointed from Harvard University. Place of study: U.S.A. F-HS-RB

SCHATTEN, GERALD Ph.D., University of California, Berkeley, 1975. Reproductive
Biology. Appointed from University of California, Berkeley. Place of study:
U.S.A. F-HS-RB

WILKES, MAHLON McGREGOR Ph.D., California Institute of Technology, 1975.
Reproductive Biology. Appointed from California Institute of Technology. Place of
study: U.S.A. F-HS-RB

Zaire

CHAPONNIERE, PAULETTE B.S., Columbia University, 1971. Public Health Nursing.
Appointed from Mama Yemo Hospital, Zaire. Place of study: U.S.A. F-HS

EDUCATION FOR DEVELOPMENT

Indonesia

GAFFAR, AFAN M.A., Gadjah Mada University, 1969. Political Science. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

HAKIMI, MOHAMMAD Doktor, Gadjah Mada University, 1971. Reproductive Biology. Appointed from Gadjah Mada University. Place of study: U.S.A. F-HS

RAHARDJO Doctorandus, Gadjah Mada University, 1967. Rural Sociology. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

SADJIMIN, TONNY M.D., Gadjah Mada University, 1970. Public Health. Appointed from Gadjah Mada University. Place of study: U.S.A. F-HS

SOESANTO TJOKROSONTO M.D., Gadjah Mada University, 1975. Public Health. Appointed from Gadjah Mada University. Place of study: England. F-HS

SUKANTO REKSOHADIPRODJO M.S., University of Illinois, 1964. Economics. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

Kenya

MBINDYO, JOSEPH MWOLLO M.A., University of Nairobi, 1975. Sociology. Appointed from University of Nairobi. Place of study: U.S.A. F-SS

MWABU, GERMANO MWIGA M.A., University of Nairobi, 1976. Agricultural Economics. Appointed from University of Nairobi. Place of study: U.S.A. F-SS

Nigeria

ARIYO, FESTUS ADEMOLA B.Sc., University of Ibadan, 1974. Economics. Appointed from University of Ibadan. Place of study: U.S.A. F-SS

GOJE, SAIDU B.Sc., Ahmadu Bello University, 1974. Political Science. Appointed from Ahmadu Bello University. Place of study: U.S.A. F-SS

Philippines

REMOLONA, ELI MENDIOLA M.A., University of Hawaii, 1976. Economics. Appointed from University of the Philippines. Place of study: U.S.A. F-SS

Tanzania

AMANI, HAIDARI K. RAMDHANI M.A., University of Dar es Salaam, 1976. Agricultural Economics. Appointed from University of Dar es Salaam. Place of study: U.S.A. F-SS

MMBAGA, MARGARET THOMAS M.S., University of Dar es Salaam, 1975. Plant Pathology. Appointed from University of Dar es Salaam. Place of study: U.S.A. F-AS

Thailand

BOONANAN CHAICHALOR M.A., Chulalongkorn University, 1975. Business Administration-Accounting. Appointed from Kasetsart University. Place of study: U.S.A. F-SS

JUTAMAAD SATAYAVIVAD Ph.D., Mahidol University, 1974. Pharmacology. Appointed from Mahidol University. Place of study: U.S.A. F-HS

NARONG TIENSONG M.A., Missouri State Teachers College, 1967. Adult Education. Appointed from Mahidol University. Place of study: U.S.A. F-HS

PRASERT SOBHON Ph.D., University of Wisconsin, 1970. Histology. Appointed from Mahidol University. Place of study: U.S.A. F-HS

RUNGCHAROEN KANCHANOMAI D.V.M., Kasetsart University, 1966. Veterinary Medicine. Appointed from Kasetsart University. Place of study: U.S.A. T-AS

SANTHAT SERMSRI M.A., Chulalongkorn University, 1972. Interdisciplinary Medicine. Appointed from Mahidol University. Place of study: U.S.A. F-HS

SOMNUK TUBPUN M.A., Thammasat University, 1974. Agricultural Economics. Appointed from Thammasat University. Place of study: U.S.A. F-SS

SRINIVES PEERASAK M.S., Kasetsart University, 1974. Plant Science. Appointed from Kasetsart University. Place of study: U.S.A. F-AS

Zaire

BAKONZI AGAYO Licence, National University of Zaire, 1972. Political Science. Appointed from National University of Zaire. Place of study: U.S.A. F-SS

BIFUKO-BAHARANYI Licence, National University of Zaire, 1972. Political Science. Appointed from National University of Zaire. Place of study: Tanzania. F-SS

ILUMBE ITOYA-NYOKA Licence, National University of Zaire, 1974. Political Science. Appointed from National University of Zaire. Place of study: Switzerland. F-SS

MUSHI MUGUMORHAGERWA Licence, National University of Zaire, 1974. Political Science. Appointed from National University of Zaire. Place of study: U.S.A. F-SS

ARTS, HUMANITIES AND CONTEMPORARY VALUES

United States

WILLIAMS, JOHN RODGER M.A., University of Kentucky, 1973. Literature. Appointed from Lees Junior College. Place of study: U.S.A. F-HUM

QUALITY OF THE ENVIRONMENT

United States

SODERLUND, DAVID M. Ph.D., University of California, Berkeley, 1976. Entomology. Appointed from University of California, Berkeley. Place of study: England. F-NES

**FINANCIAL
STATEMENTS**

SUMMARY

The grants announced and program costs, as well as expenditures, incurred in 1976, including expenditures on prior years' grants, are summarized as follows:

GRANTS AND PROGRAMS	GRANTS ANNOUNCED AND PROGRAM COSTS INCURRED	EXPENDITURES ON CURRENT AND PRIOR YEARS' GRANTS AND PROGRAMS
Arts, Humanities, and Contemporary Values	\$ 6,852,306	\$ 6,862,751
Conflict in International Relations	2,419,345	2,397,554
Conquest of Hunger	9,599,183	8,827,513
Education for Development	8,200,048	8,501,769
Equal Opportunity	5,895,944	7,091,562
Population and Health	6,853,448	8,264,351
Quality of the Environment	2,693,464	3,244,250
Special Interests and Explorations	1,067,621	1,732,083
Deduct: Lapses, refunds and savings	(719,385)	
TOTAL GRANTS AND PROGRAMS	<u>\$42,861,974</u>	<u>46,921,833</u>
General administrative expenses		3,863,742
Capital items on headquarters relocation		209,319
Federal excise tax paid		1,340,280
TOTAL		<u>\$52,335,174</u>

Since its founding in 1913, The Rockefeller Foundation has paid out approximately \$1 billion 280 million, of which \$1 billion 10 million came from income and \$270 million came from principal.

The financial statements for 1976 and 1975 and the opinion of Arthur Young & Company, certified public accountants, are presented on the following pages.

ACCOUNTANTS' OPINION

ARTHUR YOUNG & COMPANY

277 PARK AVENUE
NEW YORK, N.Y. 10017

The Board of Trustees
The Rockefeller Foundation

We have examined the accompanying statement of assets, obligations and principal fund of The Rockefeller Foundation at December 31, 1976 and 1975 and the related statements of operations and changes in principal fund and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the financial position of The Rockefeller Foundation at December 31, 1976 and 1975 and the results of operations, changes in principal fund and changes in financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis during the period.

Arthur Young & Company

March 3, 1977

STATEMENT OF ASSETS, OBLIGATIONS AND PRINCIPAL FUND
DECEMBER 31, 1976 AND 1975

<i>ASSETS</i>	<i>1976</i>	<i>1975</i>
Marketable securities, at quoted market value (fair market value at date of gift or purchase cost 1976: \$527,193,711; 1975: \$528,218,180) (Note 6)	\$842,582,075	\$734,851,102
Cash	538,298	1,404,718
Accounts receivable (primarily security sales) and advances	10,643,503	5,628,209
Dividends and interest receivable	5,150,706	3,483,130
Property—at depreciated cost	1,986,522	1,885,099
Total assets	<u>\$860,901,104</u>	<u>\$747,252,258</u>

OBLIGATIONS AND PRINCIPAL FUND

Accounts payable (primarily security purchases) and accrued liabilities	16,489,869	2,919,713
Federal excise tax payable (Note 2)	1,580,884	1,363,092
Deferred federal excise tax (Note 1)	6,207,259	1,629,967
Appropriations by the Trustees, announced and released for specific purposes but not yet paid (Notes 1 and 4)	<u>34,053,137</u>	<u>38,164,354</u>
Total obligations	<u>58,331,149</u>	<u>44,077,126</u>
Principal fund:		
Appropriations by the Trustees not yet released for specific grantees, and appropriations for program costs and general administrative expenses for the following year (Notes 1 and 4)	41,423,840	44,269,532
Unappropriated	<u>761,146,115</u>	<u>658,905,600</u>
Total principal fund	<u>802,569,955</u>	<u>703,175,132</u>
Total obligations and principal fund	<u>\$860,901,104</u>	<u>\$747,252,258</u>

See accompanying notes.

STATEMENT OF OPERATIONS AND CHANGES IN PRINCIPAL FUND
YEARS ENDED DECEMBER 31, 1976 AND 1975

	<i>1976</i>	<i>1975</i>
Investment income:		
Dividends	\$ 23,440,896	\$ 23,825,823
Interest	16,238,405	11,436,566
Other	118,517	122,479
	39,797,818	35,384,868
Less: investment expenses	923,494	1,048,331
Investment income before federal excise tax	38,874,324	34,336,537
Less: provision for federal excise tax (Note 2)	1,512,880	1,330,024
Net investment income	37,361,444	33,006,513
Grants announced and program costs incurred during the year	42,861,974	40,746,314
General administrative expenses	3,920,280	3,577,133
Headquarters moving expenses	262,044	
	46,782,254	44,585,491
Excess of grants announced and program costs and general administrative expenses incurred over net investment income	(9,420,810)	(11,578,978)
Principal fund at beginning of year	703,175,132	574,007,472
Increase in unrealized appreciation on marketable securities (net of deferred federal excise tax 1976: \$4,550,000; 1975: \$ 1,510,000) (Note 2)	104,205,442	127,028,558
Realized gain on sale of marketable securities (less provision for federal excise tax 1976: \$53,281; 1975: None) (Note 2)	4,570,674	10,433,784
Contributions to the Foundation	39,517	3,284,296
Principal fund at end of year	\$802,569,955	\$703,175,132

See accompanying notes.

STATEMENT OF CHANGES IN FINANCIAL POSITION

YEARS ENDED DECEMBER 31, 1976 AND 1975

	<i>1976</i>	<i>1975</i>
Sources of funds:		
Investment income before federal excise tax	\$ 38,874,324	\$ 34,336,537
Securities transactions:		
Proceeds from sales	2,038,443,535	876,825,205
Less: purchases	<u>2,032,795,111</u>	<u>860,280,809</u>
	5,648,424	16,544,396
Net change in accounts receivable, advances, dividends and interest receivable, accounts payable and accrued liabilities	6,887,286	(5,461,078)
Federal excise tax refund	19,203	
Cash contributions to the Foundation	<u>39,517</u>	<u>2,891,296</u>
	51,468,754	48,311,151
Application of funds:		
Expenditures for grants and programs:		
Arts, Humanities, and Contemporary Values	6,862,751	6,200,132
Conflict in International Relations	2,397,554	1,857,444
Conquest of Hunger	8,827,513	7,813,566
Education for Development	8,501,769	7,976,319
Equal Opportunity	7,091,562	5,516,853
Population and Health	8,264,351	8,513,718
Quality of the Environment	3,244,250	2,749,081
Special Interests and Explorations	<u>1,732,083</u>	<u>2,227,531</u>
	46,921,833	42,854,644
General administrative expenses	3,863,742	3,501,992
Headquarters relocation:		
Capital items	209,319	1,747,506
Moving expenses		262,044
Federal excise tax paid	<u>1,340,280</u>	<u>1,350,896</u>
	52,335,174	49,717,082
Decrease in cash	(866,420)	(1,405,931)
Cash balance at beginning of year	<u>1,404,718</u>	<u>2,810,649</u>
Cash balance at end of year	<u>\$ 538,298</u>	<u>\$ 1,404,718</u>

See accompanying notes.

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 1976 AND 1975

1. Summary of significant accounting policies

Marketable securities are reported on the basis of quoted market value and investment income and expenses are reported on an accrual basis.

Appropriations by the Trustees are charged to operations when grants are announced and released for specific grantees. Program costs and general administrative expenses are charged to operations when incurred. Appropriations made but not released for specific grantees and program costs and general administrative expenses for the following year are considered as appropriated principal fund.

Expenditures for capital items and major improvements are included in the property account and depreciated over the lives of the respective assets or amortized over the term of the lease. Total depreciation and amortization expense amounted to \$107,896 in 1976 and \$144,934 in 1975.

Federal excise tax on net investment income and realized tax basis gains on securities transactions is accrued as incurred. Deferred federal excise tax arises from timing differences between financial and tax reporting relating to investment income and the tax basis and market value of marketable securities.

2. Federal excise tax

The Foundation qualifies as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code and accordingly is not subject to federal income tax. However, the Foundation is classified as a private foundation and as such, under the Tax Reform Act of 1969, is subject to a 4 percent excise tax on investment income less investment expenses and net realized gains on securities transactions. Not less than the fair market value at December 31, 1969 of securities owned at that date is used as the basis for determining taxable gains on subsequent sales of such securities. There were no taxable gains in 1975 on disposition of securities. In 1976 net gains on disposition of securities in the amount of \$1,332,027 were subject to federal excise tax. The basis for calculating taxable gains of securities held at December 31, 1976 is approximately \$691,000,000.

3. Pension plan

The Foundation has a non-contributory pension plan with immediate vesting for regular salaried employees who are at least 25 years old with one

year's service or have attained the age of 40. It is the Foundation's policy to fund all current pension obligations as incurred and to amortize unfunded past service costs over a period of ten years. Plan costs, including charges for current service and amortization of unfunded prior service costs, amounted to \$1,259,000 in 1976 and \$1,030,000 in 1975. The actuarially computed value of vested benefits as of December 31, 1976 exceeded the market value of the pension fund assets by approximately \$2,250,000.

At December 31, 1976 the premiums payable through March 1, 1982 to complete the purchase of annuities for personnel who retired prior to July 1, 1966 was approximately \$1,150,000.

4. Appropriations and expenditures

Appropriations and expenditures for the year are summarized as follows:

	TOTAL APPROPRIATED	ANNOUNCED AND RELEASED	APPROPRIATED BUT NOT RELEASED
Balance, January 1, 1976	\$82,433,886	\$38,164,354	\$44,269,532
Appropriations by the Trustees (including capital items of \$94,000)	44,273,750	15,454,605	28,819,145
Less: lapses and refunds savings	(235,765)	(205,493)	(30,272)
Released from prior years' appropriations (including capital items of \$115,319)		32,148,457	(32,148,457)
Expenditures for grants, program costs, administrative expenses and capital items	(50,994,894)	(50,994,894)	
Balance, December 31, 1976	<u>\$75,476,977</u>	<u>\$34,053,137</u>	<u>\$41,423,840</u>

5. Long terms leases

Minimum rental commitments under non-cancellable leases, principally for headquarters office space, at December 31, 1976 aggregate \$12,590,000 and are payable approximately \$700,000 annually until 1994. The Foundation also is required to pay additional amounts for maintenance and taxes for the headquarters office.

6. Summary of Marketable Securities—December 31, 1976 and 1975

	1976		1975	
	Ledger Amount*	Quoted Market Value	Ledger Amount*	Quoted Market Value
U.S. Government Obligations	\$151,437,471	\$156,570,023	\$ 54,987,958	\$ 55,491,685
Canadian Government Obligations	—	—	2,965,062	2,898,156
Certificates of Deposit	29,780,285	29,766,000	21,278,849	21,274,000
Corporate Obligations	54,643,031	56,627,747	95,610,631	95,973,815
Other Investment	1,296,910	960,930	1,296,910	960,930
	<u>237,137,697</u>	<u>243,924,700</u>	<u>176,139,410</u>	<u>176,598,586</u>
Convertible Bonds	1,968,125	2,240,580	4,803,324	4,289,580
Preferred Stocks	3,646,739	3,676,500	1,167,833	1,210,000
Common Stocks	284,421,150	592,740,295	346,107,613	552,752,936
	<u>290,036,014</u>	<u>598,657,375</u>	<u>352,078,770</u>	<u>558,252,516</u>
Total	<u><u>\$527,193,711</u></u>	<u><u>\$842,582,075</u></u>	<u><u>\$528,218,180</u></u>	<u><u>\$734,851,102</u></u>

*Fair market value at date of gift or purchase cost, on an average cost basis.

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