

# **ANNUAL REPORT**

## **1978**



**THE PRESIDENT'S REVIEW  
AND ANNUAL REPORT  
1978**

**THE ROCKEFELLER FOUNDATION**

**THE ROCKEFELLER FOUNDATION**  
**1133 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK 10036**  
**PRINTED IN THE UNITED STATES OF AMERICA**

## **CONTENTS**

<b>Trustees, Officers, and Staff</b>	<b>5</b>
<b>Organizational Information</b>	<b>15</b>
<b>THE PRESIDENT'S REVIEW</b>	<b>20</b>
<b>GRANTS AND PROGRAMS</b>	<b>31</b>
<b>Conquest of Hunger</b>	<b>32</b>
<b>Population and Health</b>	<b>41</b>
<b>Education for Development</b>	<b>53</b>
<b>International Relations</b>	<b>58</b>
<b>Equal Opportunity</b>	<b>64</b>
<b>Arts, Humanities and Contemporary Values</b>	<b>74</b>
<b>Quality of the Environment</b>	<b>95</b>
<b>Special Interests and Explorations</b>	<b>102</b>
<b>Fellowships</b>	<b>110</b>
<b>FINANCIAL STATEMENTS</b>	<b>117</b>
<b>Index</b>	<b>128</b>



# TRUSTEES AND TRUSTEE COMMITTEES

December 31, 1978

THEODORE M. HESBURGH *Chairman*

ROBERT V. ROOSA *Vice-Chairman*

## BOARD OF TRUSTEES

KENNETH N. DAYTON

JAMES C. FLETCHER

JAMES P. GRANT

CLIFFORD M. HARDIN

THEODORE M. HESBURGH

VERNON E. JORDAN, JR.

LANE KIRKLAND

JOHN H. KNOWLES

MATHILDE KRIM

RICHARD W. LYMAN

BILL MOYERS

JANE C. PFEIFFER

JOHN D. ROCKEFELLER IV

ROBERT V. ROOSA

HENRY B. SCHACHT

NEVIN S. SCRIMSHAW

ELEANOR B. SHELDON

BILLY TAYLOR

PAUL A. VOLCKER

CLIFTON R. WHARTON, JR.

## EXECUTIVE COMMITTEE

THE PRESIDENT *Chairman*

JAMES P. GRANT

THEODORE M. HESBURGH

JANE C. PFEIFFER

ROBERT V. ROOSA

ELEANOR B. SHELDON

PAUL A. VOLCKER

*Alternate Members*

KENNETH N. DAYTON

VERNON E. JORDAN, JR.

LANE KIRKLAND

MATHILDE KRIM

BILL MOYERS

## FINANCE COMMITTEE

ROBERT V. ROOSA *Chairman*

KENNETH N. DAYTON

CLIFFORD M. HARDIN

*Alternate Members*

HENRY B. SCHACHT

BILLY TAYLOR

## COUNSEL

PATTERSON, BELKNAP, WEBB & TYLER ROBERT M. PENNOYER

# OFFICERS AND STAFF IN NEW YORK

December 31, 1978

## ADMINISTRATION

JOHN H. KNOWLES *President*  
ELLSWORTH T. NEUMANN *Vice-President for Administration*  
STERLING WORTMAN *Vice-President*  
LAURENCE D. STIFEL *Vice-President and Secretary*  
THEODORE R. FRYE *Treasurer*  
HERBERT HEATON *Comptroller*  
ESTHER S. STAMM *Assistant Secretary*  
WEBB TRAMMELL *Assistant Treasurer*  
ALEXANDER DAUNYS *Assistant Comptroller*  
RAJARAM RAMANATHAN *Assistant Comptroller*  
LYNDA MULLEN *Assistant to the Secretary*  
ANNE E. NEWBERY *Editorial Associate*  
SUSAN GARFIELD *Program Associate*  
J. WILLIAM HESS *Archivist*  
J. GEORGE HARRAR *Consultant and Life Fellow*  
JOSEPH R. BOOKMYER *Manager, Fellowship Office*  
HENRY S. TARTAGLIA *Manager, Office Service Department*  
ADEL TACKLEY *Manager, Personnel Service*  
LOWRY B. ANDREWS *Manager, Purchasing and Shipping Department*  
FRANK WOLLING *Manager, Records Management and Library Service*  
FRANCES MULLIGAN *Manager, Travel Service*



## **AGRICULTURAL SCIENCES**

JOHN A. PINO, PH.D., *Director*  
JAMES E. JOHNSTON, PH.D., *Deputy Director*  
CLARENCE C. GRAY, III, PH.D., *Associate Director*  
CHARLES K. MANN, PH.D., *Associate Director*  
*(also assigned to Social Sciences)*  
JOHN J. MCKELVEY, JR., PH.D., *Associate Director*  
GARY H. TOENNIESSEN, PH.D., *Assistant Director*  
MARJORIE J. SCHAD, *Program Associate*

## **ARTS**

HOWARD KLEIN, M.S., *Director*  
GWENDOLYN T. BLACKSTONE, *Program Associate*

## **HEALTH SCIENCES**

KENNETH S. WARREN, M.D., *Director*  
KERR L. WHITE, M.D., *Deputy Director*  
EDITH E. KING, *Program Associate*

## **HUMANITIES**

JOEL COLTON, PH.D., *Director*  
D. LYDIA BRONTË, PH.D., *Associate Director*  
ANNE GARONZIK, M.A., *Program Associate*

## **INTERNATIONAL RELATIONS**

MASON WILLRICH, J.D., *Director*  
EDWIN A. DEAGLE, PH.D., *Deputy Director*  
JOHN STREMLAU, PH.D., *Assistant Director*  
CECILIA LOTSE, M.PHIL., *Program Associate*

## **POPULATION SCIENCES**

SHELDON J. SEGAL, PH.D., *Director*

## **SOCIAL SCIENCES**

RALPH K. DAVIDSON, PH.D., *Acting Director*

CHARLES K. MANN, PH.D., *Associate Director*  
(also assigned to *Agricultural Sciences*)

MARY M. KRITZ, PH.D., *Assistant Director*

BRUCE E. WILLIAMS, PH.D., *Assistant Director*

PATRICIA HARRIS, *Program Associate*

## **INFORMATION SERVICE**

HENRY ROMNEY, *Director*

RICHARD DODSON, *Program Associate*

BETH GREENFELD, *Program Associate*

## FIELD STAFF

*December 31, 1978*

### BRAZIL

#### *Salvador*

#### AGRICULTURAL SCIENCES

JEROME H. MANER, PH.D., *Foundation Representative*

KENNETH L. BUHR, PH.D.

EUGENIO MARTINEZ, PH.D.

#### HEALTH SCIENCES

WILLOUGHBY LATHAM, M.D.

#### SOCIAL SCIENCES

SUSAN W. ALMY, PH.D.

LUIS A. FUENZALIDA, M.A.

ALBERTO R. MUSALEM, PH.D.

### COLOMBIA

#### *Cali*

#### HEALTH SCIENCES

FARZAM ARBAB, PH.D., *Foundation Representative*

GABRIEL VELAZQUEZ, M.D.

#### INTERNATIONAL CENTER FOR TROPICAL AGRICULTURE (CIAT)

JOHNSON E. DOUGLAS, M.S.

ROLAND E. HARWOOD

(on assignment in Guatemala)

PETER R. JENNINGS, PH.D.

(on assignment in Costa Rica)

KENNETH O. RACHIE, PH.D.

JAMES M. SPAIN, PH.D.

ROBERT K. WAUGH, PH.D.

(on assignment in Guatemala)

## GUATEMALA

*Guatemala City*

### SOCIAL SCIENCES

PETER E. HILDEBRAND, PH.D.

## INDIA

*Hyderabad*

### INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS (ICRISAT)

LELAND R. HOUSE, PH.D.

## INDONESIA

*Yogyakarta*

### AGRICULTURAL SCIENCES

ANSON E. THOMPSON, PH.D.

ALLEN D. TILLMAN, PH.D.

### HEALTH SCIENCES

ROBERT S. NORTHRUP, M.D.

JON E. ROHDE, M.D.

### SOCIAL SCIENCES

ALBERT J. NYBERG, PH.D., *Acting Foundation Representative*

JOSEPH E. BLACK, PH.D.

DOUGLAS D. HEDLEY, PH.D.

B. COLIN MACANDREWS, PH.D.

## ITALY

*Bellagio (Lake Como)*

### THE BELLAGIO STUDY AND CONFERENCE CENTER

WILLIAM C. OLSON, PH.D., *Director*

MARY M. OLSON, *Assistant Director*

## KENYA

*Nairobi*

AGRICULTURAL SCIENCES  
ORDWAY STARNES, PH.D.

SOCIAL SCIENCES  
DAVID COURT, PH.D., *Foundation Representative*  
TYLER S. BIGGS, PH.D.

## MEXICO

*Mexico City*

AGRICULTURAL SCIENCES  
REGGIE J. LAIRD, PH.D.  
EDWIN J. WELLHAUSEN, PH.D.

## INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)

R. GLENN ANDERSON, PH.D.  
NORMAN E. BORLAUG, PH.D.  
ELMER C. JOHNSON, PH.D.  
ROBERT D. OSLER, PH.D.  
ERNEST W. SPRAGUE, PH.D.

## NIGERIA

*Ibadan*

SOCIAL SCIENCES  
MILTON M. SNODGRASS, PH.D., *Acting Foundation Representative*

## PHILIPPINES

*Quezon City*

SOCIAL SCIENCES  
HARRY T. OSHIMA, *Foundation Representative*

## ST. LUCIA

*Castries*

HEALTH SCIENCES  
PETER JORDAN, M.D., *Director, Research and Control Department*  
GUY BARNISH

RICHARD K. BARTHOLOMEW  
OLIVER F. MORRIS  
MICHAEL A. PRENTICE

## TAIWAN

*Shanhua*

ASIAN VEGETABLE RESEARCH AND DEVELOPMENT CENTER (AVRDC)  
JAMES C. MOOMAW, PH.D.

## THAILAND

*Bangkok*

### AGRICULTURAL SCIENCES

WILLIAM R. YOUNG, PH.D., *Foundation Representative*  
BEN R. JACKSON, PH.D.  
FRED E. NICHOLS  
BOBBY L. RENFRO, PH.D.  
DALE G. SMELTZER, PH.D.

### SOCIAL SCIENCES

GEORGE E. DELEHANTY, PH.D.

## UNITED STATES

*Morrilton, Arkansas*

WINROCK INTERNATIONAL LIVESTOCK RESEARCH AND TRAINING CENTER  
NED S. RAUN, PH.D.

*New Haven, Connecticut*

### CENTRAL ADMINISTRATION

ROBERT L. FISCHELIS, M.A.

*Atlanta, Georgia*

### SOCIAL SCIENCES

CHARLES H. SMITH, M.ED.

*New York, New York*

INTERNATIONAL AGRICULTURAL DEVELOPMENT SERVICE (IADS)

FRANCIS C. BYRNES, PH.D.

RALPH W. CUMMINGS, JR., PH.D.

WAYNE H. FREEMAN, PH.D.

(on assignment in Nepal)

ULYSSES J. GRANT, PH.D.

(on assignment in Ecuador)

LOYD JOHNSON, M.S.

(on assignment in Ecuador)

STEPHEN M. KATZ

A. COLIN MCCLUNG, PH.D.

BILL C. WRIGHT, PH.D.

*Chapel Hill, North Carolina*

HEALTH SCIENCES

GLADWIN N. UNRAU

*Bryan, Texas*

AGRICULTURAL SCIENCES

LEWIS M. ROBERTS, PH.D.

*Washington, D.C.*

HEALTH SCIENCES

STEPHEN J. PLANK, M.D.

ZAIRE

*Kinshasa*

SOCIAL SCIENCES

HOWARD J.C. ELLIOTT, PH.D., *Foundation Representative*

HASSOUNA MOUSSA, PH.D.

*Kisangani*

SOCIAL SCIENCES

WILLIAM J. OSBY, PH.D.





## **ORGANIZATIONAL INFORMATION**

### **TRUSTEES AND PRINCIPAL OFFICERS**

Ben W. Heineman, president and chief executive officer of Northwest Industries, resigned from the Board of Trustees, effective February 14. He was elected a trustee in 1972 and served for one and one-half years as a member of the Executive Committee, for two years as a member and one year as an alternate member of the Finance Committee, and for three years as a member of the Committee on Audit, for two of those years as its chairman.

James C. Fletcher, Whiteford Professor of Engineering at the University of Pittsburgh and a member of the Board of Directors of the Burroughs Corporation, was elected a trustee, effective February 6. He was president of the University of Utah from 1964 to 1971 and the administrator of the National Aeronautics and Space Administration from 1971 to 1977. He has been a member of numerous national committees, including the President's Science Advisory Commission and the President's Task Force on Higher Education.

James P. Grant, president of the Overseas Development Council, was elected a trustee, effective February 6. He has served as deputy secretary of state for Near Eastern and South Asian Affairs, director of U.S. Economic Aid Missions, and assistant administrator of USAID.

Eleanor B. Sheldon, president of the Social Science Research Council, was elected a trustee, effective February 6. She has held various teaching and research positions and has worked both with the United Nations and the U.S. Department of Agriculture. She serves as a director of the RAND Corporation, the Equitable Life Assurance Society, and Mobil Corporation and is a consultant to the President's Council of Economic Advisors.

Billy Taylor, jazz musician, was elected a trustee, effective February 6. He is a pianist, composer, arranger, and teacher who has written more than 300 songs and authored 12 books on the art of jazz piano. He serves as a member of the National Council on the Arts, the New York State Commission of Cultural Resources, and the New York City Cultural Council, and has served since its inception in 1965 as president of "Jazzmobile," a program that brings jazz artists and their music into American inner cities.

John D. Rockefeller IV, governor of West Virginia, was elected a trustee, effective April 5. He had been a trustee from July 1968 to January 1977.

Laurence D. Stifel, secretary of the Foundation since 1974, was elected vice-president and secretary, effective February 1.

Sheldon J. Segal, senior vice-president of the Population Council and director of its Center for Biomedical Research, was elected director for Population Sciences, effective May 1. He is adviser to the chairman of the Select Committee on Population of the U.S. House of Representatives and consultant to the United Nations Office of Science and Technology.

Ralph W. Richardson, Jr., took early retirement from his position as director for Natural and Environmental Sciences on June 30. He joined the

Foundation's field staff as a geneticist in the Mexican Agricultural Program in 1951, later becoming its assistant director and then director. He came to the New York office in 1963, where he has served as assistant director, associate director, and deputy director for Agricultural Sciences, and, since 1974, as director for Natural and Environmental Sciences.

Joseph E. Black, after 13 years as director for Social Sciences, resigned from this position, effective August 31, to undertake an assignment as visiting professor in the Social Science Faculty at Gadjah Mada University, Yogyakarta, Indonesia.

Bernard E. Anderson, associate professor of industry at the Wharton School of the University of Pennsylvania, was elected director for Social Sciences, effective February 1, 1979. He is commissioner of the National Committee on Employment and Unemployment Statistics and chairman of the National Council on Employment Policy.

**John D. Rockefeller 3rd**  
**1906-1978**

The death of John D. Rockefeller 3rd on July 10, 1978, has deprived our country and the world of one of its leading citizens and most valued counselors. A man of immense character and integrity, he spent his entire life facilitating the exchange of ideas and sustaining numerous humanitarian efforts to improve the lot of mankind. His commitment to philanthropic work was carried out quietly and with sensitivity, and those who knew him best inevitably used the words “shy,” “genuine,” “firm,” “gently humorous” to describe him. He had the great capacity to seize ideas, make them understandable, and then plan effective strategies to turn those ideas into action.

Mr. Rockefeller sustained the commitment of his family to improving the life of minority groups, to facilitating cultural and scientific exchange throughout the world, and to advancing knowledge through research. He was among the first—almost 40 years ago—to warn the world of the dangers of unchecked population growth and of despoliation of the environment.

Mr. Rockefeller was one of the great guiding spirits of The Rockefeller Foundation over a 47-year period, and was the chairman of the Board of Trustees from 1952 to 1971. During this period, the Foundation carried out a major part of its commitment to agricultural development and the conquest of hunger, resulting in the so-called Green Revolution. Another result of his prescience was the establishment of research programs in both population and environmental problems. Increased interest in the less-developed countries of the world resulted in the development of universities in Africa, Latin America, and Southeast Asia. The Foundation’s historic interest in equal opportunity for minority groups was affirmed and expanded.

His lifelong conviction that the arts are important to individual satisfaction and understanding encouraged the Foundation to adopt programs for the support of music, theatre, and the dance at a time when private funds were scarce and public funds nonexistent.

His colleagues, admirers, friends—men and women of all ages, races, and religions—share a profound feeling of respect, admiration, and love for this humble, self-effacing man of such fierce integrity and sustained commitment to meliorating human misery. His life and its work touched the lives of millions here and abroad, and affirmed the observation he himself made some years ago: “In this shrinking world, whatever each does touches the lives and destinies of all peoples.”

*John H. Knowles, M.D.*



**THE**  
**PRESIDENT'S**  
**REVIEW**

## Roots

The Rockefeller Foundation was established in 1913 to “promote the well-being of mankind throughout the world,” in the grandiloquently amorphous but prescient words of its charter. Born in the progressive era of our country, it institutionalized our faith in pluralism and voluntarism, in education and science, and in the rule of reason—articles of faith and values transported to our shores largely from England. (The word “voluntary” dates from 1725 with the founding of Guy’s Hospital and is defined in the *Oxford English Dictionary* as “free from state interference or control. . . supported largely by free will offerings.”)

It was also a typically pragmatic, American response to two problems: the Populist assault on the massive concentration of wealth in the hands of a few; and the honestly humanitarian, if somewhat guilt-laden, desire of the captains of industry—Carnegie and Rockefeller (and later Mellon and Ford)—to return at least part of their good fortune to the people of their country in the form of good works. The secular joined the sacred impulse, for Rockefeller was a devout Baptist and his adviser in all his philanthropies was Frederick T. Gates, a Baptist minister.

Gates read Sir William Osler’s *Principles and Practice of Medicine* and immediately convinced Rockefeller that there was nothing more important than health, and the best hope for helping mankind would be found through the eradication of disease and the advancement of medical science. Hookworm was rampant in the Southeastern U.S.A., and the Foundation established field-control programs and helped to build and support local public health units. By 1915, extensive field-control programs for malaria and yellow fever were initiated. (To this day, the members of the International Health division of The Rockefeller Foundation are remembered in the countries where they worked. When in Bahia, Brazil, last year, I was asked about Fred Soper, who directed the campaign against the *Anopheles gambiae* mosquito, transported from Africa to northeast Brazil—the carrier of the lethal, *falciparum* form of malaria.)

In 1916, the Foundation began its program of support for the development of schools and public health in the U.S.A.—Harvard, Johns Hopkins, Michigan, and many others—and abroad, whether in Yugoslavia or in England, where the Foundation provided the \$2 million for the building of the London School of Tropical Medicine and Hygiene in 1924. In 1921, the Peking Union Medical College was established, bringing Western medicine to China, and functioning to this day.

In 1932, the Foundation began to aid in the establishment of departments of psychiatry in American medical schools and teaching hospitals. The yellow fever vaccine was developed in 1935 by Max Theiler, a Rockefeller Foundation officer working in the laboratories of the Rockefeller Institute (now University), for which he received the Nobel Prize in 1951. In 1937, the field of molecular biology was stimulated in its development when Warren Weaver of the Foundation and Linus Pauling put their heads together. By the

1960's, the Arbovirus Unit of the International Health division was established at Yale, and the work on Lassa fever by the Rockefeller staff had attracted attention. In 1967, a field station was established in St. Lucia, West Indies, for the study of schistosomiasis.

Meanwhile, a new interest had developed in response to a study requested by the Foundation in the early 1940's. George Harrar, a biologist, was recruited and sent to Mexico to work in the field on problems of increasing food production for the world's rapidly expanding population. One of his first appointees was Norman Borlaug, who received the Nobel Peace Prize in 1970 for his development of high-yielding wheat (albeit water and fertilizer-intensive) in what is now one of the worldwide systems of international agricultural institutes (CIMMYT). High-yielding varieties of rice were developed at the International Rice Research Institute (IRRI) in the Philippines at Los Baños. Most recently, the Foundation has helped to establish the ninth such institute, the International Laboratory for Research on Animal Diseases (ILRAD) in Nairobi, Kenya, where a most important development has already taken place in the first year of its operation—the successful cultivation of trypanosomes *in vitro* by Hirumi and Doyle.

Because of the Green Revolution, per capita protein consumption kept pace with the doubling of populations in the less-developed countries (LDC's) which occurred between 1950 and 1975. But it was recognized by most, and certainly by the Foundation staff, that we were merely buying time, and that the geometric expansion of population had to be reduced lest the Malthusian prediction became true globally, as contrasted with just regionally, as now applies. In the 1960's, the Foundation established its interests in population problems, stressing, as always, the building of institutions and the advanced training and education of promising young people. In 1966, we initiated support for the development of centers for the study of reproductive biology, at Harvard, Yale, North Carolina, University of California at San Francisco, and the Salk Institute, where Roger Guillemain, one of our early awardees, has just received the Nobel Prize in Medicine. Support for the training of fellows from the LDC's, and for policy research by indigenous scholars in the LDC's (in conjunction with the Ford Foundation), is an important part of the strategy. Review of global activities in population problems at our Bellagio Study Center in Italy has been undertaken about every three years.

The Rockefeller Foundation does not have infinite resources, and as agricultural and population interests generated enthusiasm and excitement, health interests began to wither away. By 1972, the word "health" was no longer listed on our program statement, and the work in St. Lucia on schistosomiasis was listed at the end of our Annual Report as an "allied interest." Some work continued in our University Development program, initiated under Dean Rusk's presidency in the 1950's, much of it fieldwork, some fundamental research at the East African universities, the universities of Ibadan, Nairobi, del Valle (Colombia), Philippines, Mahidol (Bangkok), and, more recently, in Zaïre, Bahia, Brazil, and Yogyakarta, Indonesia. The

International Health division has been phased out and the Yale Arbovirus Unit was cut free. Even foundations reflect and follow their culture and do not always lead, and the lack of interest in health was equaled in the LDC's planning, which stressed economic development and not health, and their plans in turn reflected the World Bank—whose Pearson Report in 1969 did not even mention health as a prime variable in economic development nor its indirect effect on the inexorable expansion of population. The steadily growing number of developed countries' agencies for international development followed suit, and the World Health Organization struggled and straggled along.

## **Change**

Meanwhile, the world began to change remarkably, and the speed of change and the dire forebodings which accompany it leave us like a Greek chorus groaning at all that transpires. The news of guerrilla warfare and personal violence, hijackings and kidnappings, and ethnic strife in Ireland, Ethiopia, the Middle East, South Africa—coupled with the fact that the world expends \$300 billion annually for weapons of destruction, \$15 billion in aid, of which only \$700 million is for health and population problems—is cause for deep concern for the world's future. Environmental pollution and exhaustion of the world's nonrenewable resources, with particular reference to energy and oil, arouses alarm; the gap between north and south, developed and developing countries, is widening; human rights are violated and the possibility, as well as the actual occurrence, of conflict is steadily increasing.

The expansion of production and consumption of the developed countries proceeded at a phenomenal rate between 1950 and 1970, and with it a marked expansion of agencies for international development, of support for the United Nations and its agencies, and the World Bank and regional banks. The Rockefeller Foundation found itself no longer alone in the field, but was now joined by the substantial technical expertise and massive amounts of money of all these agencies. On the domestic scene, the National Institutes of Health and the Department of Health, Education, and Welfare, the National Academy of Science, the National Endowment for the Arts, and the National Endowment for the Humanities, to name but a few, are *de facto* foundations.

## **Introspection**

It is this great complexity that must be grappled with daily at The Rockefeller Foundation, and at the very least I try to simplify, then generalize, and then particularize in the quest to maintain and improve upon the record of the Foundation:

Q. Should the Foundation be maintained?

A. Yes.

Q. At the same level of expenditure?

A. Yes, roughly \$45 million annually.

Q. How much domestic versus international expenditure?



- A. About 33 percent is spent outside the U.S.A. and our interests are increasing in the international sphere.
- Q. How much direct (fieldwork and New York officers) versus indirect (grants and fellowships to others) expenditure?
- A. Keep indirect above 60 percent of our expenditure.
- Q. Are we too diffuse, because of the erosion of our assets both by inflation and the slowing of growth and capital expansion in the U.S.A.?
- A. Yes.
- Q. Then what should be phased out?
- A. University development in the LDC's, as we simultaneously invite specific grant applications from new-established universities in the LDC's, treating them like our own universities; and the quality of the environment—maintaining those relevant interests within our programs in agriculture, population, health, and international relations.
- Q. Can we and should we add anything?
- A. Yes, as strong a reentry into the field of international health as possible, with particular emphasis on the great neglected diseases of mankind, coordinating our efforts with other individuals and institutions, public, private, national, and international.
- Q. What are the fundamental elements of our strategy in all our programs?
- A. To advance knowledge and to be knowledgeable in advance, to strike at the roots of problems, to build and/or maintain institutions, to support promising young investigators and their institutions; to sustain commitments over time, to avoid the fallacies of reductionism and of dealing in absolutes; to collaborate with others and by the excellence and quality of our staff and their work, to lead and demonstrate to those politically constrained national and international organizations where they might place their billions without the risks we are still privileged to assume.
- Q. What are the most threatening problems, aside from destructive conflict?
- A. Global inflation and massive unemployment of youth, and the transformation of the ideas of progress and uncontrolled growth—whether that of populations or of industries. Special commissions should be structured to review these problems in the search for opportunities for the Foundation.
- Q. How do things look in the U.S.A.?
- A. Mixed. There has been a general erosion of confidence in leaders which began with Vietnam and has run right through Watergate to the present incumbent of the White House. In the latter instance, the liberals are dispirited and seem to have lost confidence—over quantity and quality in education, inflation, and unemployment, the plight of minorities (now adding a new and rapidly expanding Hispanic force), over the failure of legislation and money and good intentions. We seem to be stalled in diastole in the Age of Anxiety. Perhaps Schopenhauer was correct when he noted the two basic causes of unhappiness: not having what you want,

and having it. We are all worried about energy, and particularly oil.

Q. What is your prognosis?

A. Guarded but hopeful. The glass is half full, not half empty, but the cup is not running over. There are many opportunities for The Rockefeller Foundation in this great age of discontinuity, disjunction, and transformation of some of the greatest and most energizing ideas of Western civilization. What could be more important than to sustain and to try to improve upon our record in health, agriculture, population, and education—these interests, coupled with strong support for the arts and humanities while we look for new opportunities vis-à-vis minorities, ethnic strife, unemployment of youth.

Q. Well, after those generalizations, now be specific.

A. I will not repeat what I have written elsewhere, which I think is quite specific, nor bore you with the details of how we accomplished our reentry, except to say that (a) foundations themselves resist change and have powerful constituencies; (b) our resources are finite and expansion in one area has to be accompanied by contraction in another; and (c) the individual divisional director is the key to our past, present, and future, and the quality of that individual has been and always will be the key to our success or failure.

I must decry what seems increasingly to be a combination of insensitivity, the ignorance of chauvinistic superspecialized idiots savants, and just plain political laziness—the phenomenon of forgetting the past or beating straw men, or pushing aside past or present efforts in the rush to the new, the exciting. The Rockefeller Foundation, in turning its attention to the creation of an international network of biomedical research groups to study the great neglected diseases of the developing world, is not turning its back on field experiments or traditional public health disciplines, and it is fully aware that while new knowledge and more effective technologies are needed, the old and existing methods and tools of public health are as important as ever and will be for the foreseeable future. It merely says that we believe our history, traditions, strategies, and present finite resources can be most fruitfully applied as described below. We understand as much as we can about the interdependent variables of food—nutrition—health—population—economic development in the quality-of-life equation, and we hope and expect to learn much more. We believe that all elements can and should be addressed simultaneously and we subscribe to the idea of meeting basic human needs rather than the trickle-down theory—which too often has meant a trickle down into the ruler's pockets or into weapons of destruction.

### **Particulars**

The following resolution was unanimously approved by our trustees on December 5, 1977:

*Great Neglected Diseases of the Developing World*

*Resolved* that the sum of Six hundred thousand dollars, or as much thereof as may

be necessary, be, and it hereby is, appropriated for allocation by the officers for the creation of an international network of biomedical research groups to study the great neglected diseases of the developing world.

*Summary:* The sophisticated biomedical research establishment of the industrialized nations has thus far largely ignored many of the diseases that afflict hundreds of millions of people in the developing world. These conditions include schistosomiasis, hookworm, malaria, sleeping sickness, amebic dysentery, and fatal diarrhea of infants. The Foundation renders valuable service by encouraging outstanding basic and clinical scientists to shift their attention to these great neglected diseases.

It is proposed, therefore, to create a network of high-quality investigators who would constitute a critical mass in this field, attract the brightest students, and conduct research of an excellence now rarely seen in this area. A significant part of the investigators' effort would be spent in applied collaborative research in developing countries. The overall result should be breakthroughs in diagnosis, treatment, and prevention, leading to more rapid and complete control of these widespread infections.

The officers envisage this network as consisting of up to 12 research units, each to be supported at the level of about \$150,000 annually for a maximum of eight years. The proposed grant would be allocated for initial support of the first seven centers. The funds would be used largely for the salaries of young professional personnel and for travel to collaborative centers in the developing world.

*Relationship to Program:* This proposal relates to the Foundation's traditional and now renewed interest in tropical medicine and to the schistosomiasis program.

*Previous Support:* During the period 1972-76, the St. Lucia project required the expenditure of \$2,382,497; support for schistosomiasis research projects, mainly in immunology, totaled \$1,237,700; and there were five grants totaling \$116,645 for basic research in onchocerciasis. In addition, in 1974, a grant of \$525,000 was made to develop a unit devoted to research on the great neglected diseases of the developing world in the Department of Medicine at Case Western Reserve University School of Medicine. Since 1971, under the Conquest of Hunger program, \$1 million has been provided for support of an animal-disease research and training laboratory in East Africa, and for cooperative immunological research related to trypanosomiasis and East Coast fever.

*Description:* During the present century, research in tropical diseases has been supported mainly by crash programs mounted by the Armed Forces during periods of war (Second World War, the Korean and Vietnam conflicts); during peacetime, there has been a marked decrease in interest and funding. Malaria has been the chief target of such research, and new insecticides and antimalarials have been developed. Unfortunately, both the mosquito and the malarial parasite have become resistant to these agents in many endemic areas. Large-scale epidemics of malaria are occurring again in Southeast Asia, Africa, and Latin America. In addition, cholera is spreading through the Middle East, and one of the principal means of controlling it is an inadequate vaccine offering only partial protection for limited periods. Other major diseases—including schistosomiasis, elephantiasis, African sleeping sickness, leprosy, and amebic dysentery—have received little attention from war-motivated research.

Recently, however, international agencies have become concerned about these neglected problems, which are perceived to be a significant hindrance to both economic development and acceptance of population control. The World Bank is expending \$120 million over the next 20 years in stop-gap measures to prevent river blindness in West Africa by insect control, despite little knowledge of the infection and no adequate drugs and vaccines. The World Health Organization has embarked upon a Special Programme for Research and Training in Tropical Diseases for which it now has commitments of \$22 million, largely from European countries. But WHO must work under several constraints: the necessity to distribute funding politically and geographically, and not purely on the basis of scientific excellence; the limitations of the tropical medicine establishment of the industrialized world, which suffers from decades of neglect; the lack of an infrastructure to administer a large granting establishment; and the uncertain future of support.

During the past 40 years, however, tremendous strides have been made in research methodology, instrumentation, and knowledge of biological systems. These techniques, if applied to the worm, protozoan, and bacterial infections of the developing world, should result in a series of breakthroughs of major practical significance. Contrast the World Bank's \$120 million for temporary suppression of the insect vectors of river blindness with the Foundation's investment of about \$200,000, which may already have produced a more effective means of treating this infection in man. Contrast the tens of millions of dollars being invested in partial control of schistosomiasis through dumping toxic snail-killing chemicals into vast bodies of water (e.g., the Nile, Lake Victoria) with the few hundreds of thousands of dollars which have already produced a rapid, cheap radioimmunoassay for the diagnosis of schistosomiasis, as well as new concepts of targeted mass treatment for controlling this great infection of mankind. Thus, a relatively small investment made in the right place can have an enormous impact on these diseases.

Highly competent basic biomedical and clinical investigators are developing an interest in the great neglected diseases of the developing world for both scientific and humanitarian reasons. Only an organization like the Foundation, which commands their confidence, can enable them to make a major commitment in time and energy to this area. The present proposal is aimed at the establishment of a network of research groups in a number of the best medical research institutes in the world, each led by outstanding scientists who will attract cadres of excellent students and young investigators. The rapid establishment of up to 12 of these groups should result in a critical mass of investigators with a high output, both quantitatively and qualitatively. Each of the groups from the developed countries would establish links with medical schools or research laboratories in the developing world. The network units organized in centers of excellence in less-developed countries would function as research and training centers for their own country, their region, and for investigators from the developed world.

*Evaluation:* The officers would evaluate the units individually on the basis of site visits, reviews of research work in progress, and scientific publications. In addition, the proposed annual meetings would permit evaluation of each team's research contributions by the other investigators; as well as an evaluation of the total program. The output of both practical results—such as new methods of diagnosis, treatment, and prevention—and applied operational research would be monitored.

*Comment:* The proposed new Foundation program in tropical disease research

would add a high level of quality to the recently established WHO Special Programme by stimulating some of the best basic scientists in the developed and less-developed world to turn their attention and expertise to the pressing disease problems of the tropics. New techniques, drugs, and vaccines produced in the sophisticated research laboratories of the industrialized world could be subjected to field testing and evaluation in conjunction with WHO-sponsored projects.

Since the trustees approved the program, 10 units have been established, 5 in geographic or tropical medicine, 3 in immunology, and 2 in pharmacology:

1. Division of Geographic Medicine, Department of Medicine, Case Western Reserve University: Dr. Adel A. F. Mahmoud, director. Research areas: immunity and immunopathology of schistosomiasis, trichinosis, filariasis, giardiasis; pathogenesis and therapy of Gram-negative bacterial infections; hemoglobinopathies; medical anthropology. Overseas collaborations: Kenya, Egypt, Sudan, India, Guatemala.

2. Division of Geographic Medicine, Department of Medicine, Tufts University: Dr. Gerald Keusch, director. Research areas: bacterial diarrheas, amebiasis, malnutrition. Overseas collaborations: Brazil, Guatemala.

3. Division of Geographic Medicine, Department of Medicine, University of Virginia: Dr. Richard Guerrant, director. Research areas: pathogenesis of *E. coli* diarrheas, amebiasis, field epidemiology. Overseas collaboration: Brazil.

4. Tropical Medicine Unit, Department of Medicine, Oxford University, U.K.: Dr. D. Weatherall, director. Research areas: hemoglobinopathies, malaria. Overseas collaborations: Malaysia, Gambia.

5. Biomedical Research Center for Infectious Diseases, Cairo, Egypt: Dr. Aziz El Kholy, director. Research areas: schistosomiasis, hepatitis, meningitis. Overseas collaborations: available to the entire network.

6. Immunoparasitology Research Unit, Department of Medicine, Robert B. Brigham Hospital, Harvard University: Dr. John David, director. Research areas: immunity in schistosomiasis, filariasis. Overseas collaborations: Kenya, Egypt, Indonesia.

7. Immunoparasitology Research Unit, the Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia: Dr. Graham Mitchell, director. Research areas: immunity in a variety of helminth and protozoan parasites. Overseas collaborations: western Pacific.

8. Molecular Biology of Parasitism Unit, the Weizmann Institute, Rehovot, Israel: Dr. Ruth Arnon, director. Research areas: immunochemistry of schistosomiasis, membrane receptors in bacteria and protozoa. Overseas collaborations: the Middle East, Africa.

9. Pharmacoparasitology Research Unit, Department of Pharmacology, Case Western Reserve University: Dr. L. T. Webster, Jr., director. Research areas: active drug metabolites for treatment of schistosomiasis, filariasis, American trypanosomiasis. Overseas collaboration: Kenya.

10. Pharmacoparasitology Research Unit, Section on Medical Biochemistry, Rockefeller University: Dr. Anthony Cerami, director. Research areas: biochemistry and treatment of trypanosomiasis and leishmaniasis. Overseas collaboration: Kenya.

### **Results**

The first annual meeting of the Great Neglected Diseases Network was held on November 12-17, 1978, at Rockefeller University. Several major findings were reported, among which were the induction of a high degree of non-specific immunity to schistosomiasis with simple chemical substances, the mechanism of action of *E. coli* heat stable enterotoxin and its blockade with pharmacological agents, the induction of complete immunity to the protozoan diarrhea giardiasis, and the mechanism by which sickle cell anemia protects against malaria. A four-day course in tropical medicine was then presented to all the members of the network and to an additional 300 invited participants and guests.

Solicitations for the three remaining places in the network were sent to 50 medical schools and research institutes and an Advisory Board was set up including representatives of medical schools—Ivan Bennett, provost, New York University Medical Center; research institutes—Joshua Lederberg, president, the Rockefeller University; government—Richard Krause, director, National Institute of Allergy and Infectious Diseases; philanthropy—James Henry, president, Center for Public Resources; industry—Irwin Lepow, president, Sterling-Winthrop Research Institute.

The relationship between the Great Neglected Diseases Network and the Tropical Diseases Programme of the World Health Organization has recently been cemented by the election of The Rockefeller Foundation to membership in the Joint Coordinating Board, the highest governing body of the Programme.

### **More Particulars**

As did the Health Sciences, other programs reviewed their opportunities, to focus on the most promising. Our new International Relations division, with the generously given advice of men and women in many fields, launched two commissions to address concerns of global importance:

A National Commission on U.S. Policy toward Southern Africa is being formed under the chairmanship of Franklin A. Thomas to conduct an assessment for U.S. private and national interests in southern Africa and to analyze and disseminate what choices we have toward formulating a national policy.

Dr. Johannes Witteveen, formerly managing director of the International Monetary Fund, has agreed to assume the chairmanship of a Consultative Group on International Economic and Monetary Affairs made up of leading bankers, officials, economists, and businessmen from the developed and developing worlds. Their objective is to help analyze, through scholarly inquiry and international consultations, some of the vexing economic and

monetary problems facing the world today, and to make their findings widely known.

Both commissions are of course in no way competitive with the extensive and intensive efforts carried on by governments. These are parallel undertakings that bring together in balanced fashion people from government, the academic world, and the private sector who are afforded few opportunities, if any, to examine fundamental issues jointly, free from the pressures of time and crises.

The Arts program, having successfully seen through the monumental task of recording the cultural history of America as evidenced in its music (7,000 sets of 100 records each have now been presented by the producer, New World Records, as gifts from the RF to conservatories, libraries, and colleges in the U.S. and abroad), organized this year the first international competition for pianists to perform the work of American composers. Eighty-nine professional pianists from 14 countries including the United States entered regional competitions held in the U.S. and Vienna; the finalists performed at the John F. Kennedy Center for an international jury and approving audiences and critics. Similar competitions will be held in 1979 and 1980, respectively for vocalists and instrumentalists. The Foundation's overriding interest is not so much the discovery of gifted performers as it is to make the works of American composers heard more widely.

Until this year, our health and population efforts were operated as complementary functions under one director. As the health sciences enter new fields, I am delighted to be able to report that the Foundation's work to help stabilize world population growth rates has been strengthened by the appointment of Dr. Sheldon J. Segal, a distinguished biomedical scientist, to direct a newly created division of Population Sciences. Dr. Segal brings a world of experience to this important Foundation undertaking from his long association with the Population Council as senior vice-president and director of its Center for Biomedical Research.

Fifteen years ago, a National Commission on the Humanities was formed under the auspices of the American Council of Learned Societies, the Council of Graduate Schools in the United States, and the United Chapters of Phi Beta Kappa to consider the state of the humanities in this country. The commission report, issued in 1964, in particular urged the creation of a National Endowment for the Humanities—a step subsequently taken by Congress.

The time now seems ripe for a new appraisal of the field. A Foundation-sponsored commission was therefore established in 1978 under the chairmanship of Richard W. Lyman, president of Stanford University, to explore the present state of scholarship and institutions involved in the advancement of the humanities and to recommend priorities deserving of national attention during the 1980's.

Finally, an important new initiative was undertaken in our Equal Opportunity program with the appropriation of more than \$1 million this

year to finance research into the complicated and poorly understood phenomenon of youth unemployment, particularly of young black and Hispanic people. The fact that we may be witnessing the maturing of a whole generation deprived of useful and self-sustaining work is one of the most troublesome aspects of life in contemporary America.

*John H. Knowles, M.D.*

### **References**

Knowles, J. H., "American Medicine and World Health." *Annals of Internal Medicine*, 48:483-85 (1976).

Knowles, J. H., "The President's Review." The Rockefeller Foundation President's Review and Annual Report (1977).



**GRANTS**

**AND**

**PROGRAMS**

## **CONQUEST OF HUNGER**

Foundation programs to assist developing nations to produce sufficient food for their own people reach back to 1943. Work which originated as a small cooperative project in Mexico 35 years ago has today evolved into an international system that emphasizes the creation of institutional, technological, and policy structures upon which poor countries can draw for agricultural development.

The program focuses on the following major areas:

- Increasing food production by strengthening international agricultural research and development systems
- Strengthening agricultural research
- Appropriate utilization of fragile environments and marginal lands such as tropical rain forests, arid lands, and hill areas
- Food policy for development

### **STRENGTHENING THE INTERNATIONAL AGRICULTURAL RESEARCH AND DEVELOPMENT SYSTEMS**

This area concentrates on three components: national research systems, the network of international agricultural research institutes, and the universities and agencies in the more affluent nations. Direct Foundation involvement in programs to improve national agricultural research and development systems is declining. Primarily, this reflects the establishment in 1975 of the International Agricultural Development Service (IADS), designed to assume these responsibilities.

The international agricultural research system is based on experience gained from early agricultural endeavors. The first of the centers, the International Rice Research Institute, was established in the Philippines in 1960 and served as the model for the present worldwide network of centers engaged in research, training, and development focused on the major crops and food production systems of the tropics and subtropics.

Since 1971, this network has been supported by a group of governments, assistance agencies, and foundations known as the Consultative Group on International Agricultural Research, chaired by the World Bank. In 1978, the group provided \$84 million for operational and capital costs of the following centers:

**INTERNATIONAL RICE RESEARCH INSTITUTE (IRRI), Los Baños, Philippines**

**INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT), Texcoco, Mexico**

**INTERNATIONAL CENTER FOR TROPICAL AGRICULTURE (CIAT), Palmira, Colombia**

**INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE (IITA), Ibadan, Nigeria**

**INTERNATIONAL POTATO CENTER (CIP), Lima, Peru**

INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS (ICRISAT), Hyderabad, India

INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES (ILRAD), Kabete, Kenya

INTERNATIONAL LIVESTOCK CENTER FOR AFRICA (ILCA), Addis Ababa, Ethiopia

INTERNATIONAL CENTER FOR AGRICULTURAL RESEARCH IN THE DRY AREAS (ICARDA), Beirut, Lebanon

WEST AFRICA RICE DEVELOPMENT ASSOCIATION (WARDA), Monrovia, Liberia

INTERNATIONAL BOARD FOR PLANT GENETIC RESOURCES (IBPGR), Rome, Italy

A recently established institute, though not a unit in the CGIAR network, is the International Center for Living Aquatic Resources Management. Initiated by The Rockefeller Foundation in 1977, ICLARM is designed to conduct research, training, and development programs to increase food production from the aquatic environment.

## GRANTS:

### **Association for the Advancement of Agricultural Sciences In Africa**

*Addis Ababa, Ethiopia*

Created in 1968, the AAASA is the only organizational link among agricultural scientists in French- and English-speaking Africa. It serves as a forum in which scientists deal with practical problems of agricultural development and influence administrators and scholars to apply scientific expertise to the problems of farmers.

\$50,000

International Research Centers:

### **International Center for Living Aquatic Resources Management (ICLARM)**

*Metro Manila, Philippines*

ICLARM's objective is to develop small-scale, labor-intensive fisheries and aquaculture systems adaptable to local environments and traditions as a means for improving health and nutrition in the Pacific Basin region.

\$600,000

### **International Center for Tropical Agriculture (CIAT)**

*Palmira, Colombia*

### **International Laboratory for Research on Animal Diseases (ILRAD)**

*Kabete, Kenya*

### **International Maize and Wheat Improvement Center (CIMMYT)**

*Texcoco, Mexico*

**International Rice Research Institute (IRRI)**

*Los Baños, Philippines*

These organizations form part of a worldwide agricultural network that continues to be one of the most effective operations in international cooperation and plays a vital role in meeting world food needs. In 1978, support was provided toward the operations of the four centers above.

\$1,250,000

**Mid-East Wheat Research and Training Program**

*Ankara, Turkey*

The wheat improvement program initiated by The Rockefeller Foundation in collaboration with national agencies has not only helped to increase wheat production in Turkey but has also strengthened the agricultural research capabilities of the region. This program is now phasing down.

\$23,620

**Oregon State University**

*Corvallis, Oregon*

The university, participating in a cooperative project in wheat improvement in the Near East and North Africa, has provided training to more than 40 young scientists. Sixty percent of them are from developing countries; all who have earned degrees in the project have returned to work in their national cereal programs.

\$62,650

**Postgraduate College of the National School of Agriculture**

*Chapingo, Mexico*

In 1969, the National School of Agriculture instituted the first Ph.D. program in agricultural sciences to be offered in Latin America. During 1978, the Foundation made grants to the Postgraduate College to promote research, training, and service capabilities and an agricultural outreach program from Mexico to the rest of Latin America.

\$364,380

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

ASSOCIATION OF FACULTIES OF AGRICULTURE IN AFRICA, Rabat, Morocco, for a "Postgraduate Training in Pest Management in Africa" seminar.

\$10,000

BOTANICAL SOCIETY OF AMERICA, Davis, California, for an exchange program of botanists with the People's Republic of China.

\$10,000

BRANDEIS UNIVERSITY, Waltham, Massachusetts, for a study on the feasibility of establishing an International Food Corps in East and West Africa.

\$35,000

BRAZILIAN SOCIETY FOR INSTRUCTION, Rio de Janeiro, Brazil, for a seminar, "Women in the Labor Force in Latin America."	\$15,600
COASTAL ENTERPRISES, INC., Bath, Maine, for a project to improve the technologies and livelihood of Mexican lagoon fishermen.	\$25,000
COUNCIL ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT, Washington, D.C., to conduct an independent assessment of the proposed Foundation for International Technological Cooperation.	\$19,000
FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Rome, Italy, for a conference on African swine fever.	\$4,000
INSTITUTO INTERAMERICANO DE CIENCIAS AGRICOLAS, Costa Rica, for a study entitled "National Agricultural Research Systems in Latin America: A Comparative Study of Human Research Resources in Selected Countries."	\$25,000
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT, Washington, D.C., for the preparation of the establishment of an international service for national agricultural research.	\$25,000
INTERNATIONAL CENTER FOR TROPICAL AGRICULTURE, Cali, Colombia, for a comprehensive monograph on bean diseases and their control.	\$31,550
INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS, Hyderabad, India, for research on human fertility in relation to agricultural development.	\$10,133
INTERNATIONAL FERTILIZER DEVELOPMENT CENTER, Muscle Shoals, Alabama, to enable Dr. Christina H. Gladwin to undertake research on small farmers in Guatemala.	\$11,870
INTERNATIONAL LABORATORY FOR RESEARCH ON ANIMAL DISEASES, Nairobi, Kenya, for a conference entitled "Beneficial Applications of <i>in vitro</i> Techniques to Health and Economy in Developing Nations."	\$25,000
NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for an exchange of scientists in the field of animal sciences between the U.S. and the People's Republic of China.	\$30,000
PENNSYLVANIA STATE UNIVERSITY, University Park, Pennsylvania, for research on methods for plant disease management.	\$35,000

ROYAL BOTANIC GARDENS, Kew, England, for an International Legume Conference.

\$4,000

UNIVERSIDAD NACIONAL AGRARIA, Lima, Peru, for the Eighth Meeting of Corn Specialists of the Andean Zone and the First Latin American Corn Conference.

\$13,000

UNIVERSITY OF HAWAII AT MANOA, Honolulu, Hawaii, for a tropical agricultural bibliographic information retrieval service.

\$25,000

## STRENGTHENING AGRICULTURAL RESEARCH

Considerable research effort is required just to maintain existing levels of productivity of food crops and animals, as biological, cultural, and technological systems are changing constantly. Basic research must be pursued to provide the tools for scientists and farmers to further enhance yields and to reduce production risks.

However, conventional approaches to broaden the food production base are not sufficient; pioneering research is essential if the world's population is to be fed adequately. A continuous effort is being made to identify innovative projects that could lead to significant improvement in the quantity, quality, and efficiency of agricultural production. Present areas of emphasis include the food legumes, hemoparasitic diseases of animals, aquatic species, and new dimensions of plant-breeding, physiology, and disease resistance.

### GRANTS:

#### ***Boyce Thompson Institute for Plant Research***

*Yonkers, New York*

The institute is conducting research to determine mechanisms responsible for vulnerability and tolerance in the complex reaction of plants to their pathogens.

\$22,000

#### ***Cornell University***

*Ithaca, New York*

The Department of Plant Breeding is carrying out research to understand better the biochemical mechanisms of plant resistance to pathogens through research on phytoalexins, the substances which act as a barrier to the invasion of fungi into its host plant.

\$87,991

**The International Centre of Insect Physiology and Ecology**

*Nairobi, Kenya*

The centre is continuing research on the salivary-gland physiology of the tsetse fly. It already has cultured *in vitro* *T. brucei* trypanosomes from tsetse flies. This will enable the institute to ascertain the influence of passage of the trypanosomes through the salivary glands upon the virulence of these organisms.

\$50,328

**University of Colorado**

*Boulder, Colorado*

The university is continuing its research on plant resistance to pathogens, particularly to determine the way phytoalexins inhibit the growth of microorganisms.

\$38,000

**University of Washington**

*Seattle, Washington*

Scientists at the university are examining alternative uses of juvenile hormones as safe and insect-specific pesticides.

\$22,234

**University of Wisconsin**

*Madison, Wisconsin*

The University of Wisconsin is conducting research to determine the way plant lectins prevent the initiation of infection in plants.

\$38,000

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

COUNCIL FOR AGRICULTURAL SCIENCE AND TECHNOLOGY, Ames, Iowa, for production of a directory of environmental scientists in agriculture (with the cooperation of the Quality of the Environment program).

\$5,000

MCGILL UNIVERSITY, Montreal, Canada, for research on identification and characterization of plant genes involved in the symbiotic relationship between rhizobia and leguminous plants making nitrogen fixation possible.

\$25,000

THE OCEANIC INSTITUTE, Waimanalo, Hawaii, for a project on the application of automated chemistry analysis to the health care of fishes.

\$25,000

OHIO STATE UNIVERSITY, Columbus, Ohio, for support of an International Conference on Malaria and Babesiosis.

\$35,000

ROCKEFELLER UNIVERSITY, New York, New York, for immunological research on trypanosomiasis.

\$15,000

UNIVERSITY OF CALIFORNIA, Berkeley, California, for studies on the role of insect pheromones in the biology of insect pests.

\$21,155

THE UNIVERSITY OF IOWA, Iowa City, Iowa, for research on the use of pheromones in the biological control of the cockroach.

\$11,878

### **APPROPRIATE UTILIZATION OF FRAGILE ENVIRONMENTS AND MARGINAL LANDS**

It has been estimated that more than 1 billion hectares of potentially arable land are underutilized and often essentially unused for agricultural production in the rain forests, semiarid regions, and hills of the tropics. Though such lands are environmentally fragile and only marginally productive on a yield/hectare basis, they represent a large portion of the earth's agricultural resource base, much of which is under pressure to be cultivated in order to serve many of the world's poorest people. There has been a rapid development of such lands in order to provide adequate food and fuel, but, unfortunately, inappropriate agricultural practices and inadequate soil utilization and water conservation procedures are leading to land deterioration and a resultant loss in the food-producing potential. However, it should be possible to reverse this trend and to bring new lands into production through the use of improved water resource management, combinations of existing and new crop species selected for their abilities to stabilize and restore fertility to soils, and an appropriate use and selection of livestock.

In 1978, the trustees allocated \$10,000 toward the costs of conferences and site evaluations for exploring the means to achieve environmentally sound and sustained food production on fragile and marginal lands. In addition, the following grants were made:

#### **GRANTS:**

##### ***North Carolina State University***

*Raleigh, North Carolina*

Forest areas in developing countries are being consumed rapidly, yet there are few reforestation programs. Research at NCU by Jesse P. Perry on the pines of Mexico and Central America is designed to increase awareness of forest resource losses in the tropics and to suggest possible methods of forest management programs.

\$14,100



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

**SOCIETY FOR RANGE MANAGEMENT**, Denver, Colorado, for the First International Rangeland Congress.

\$5,000

**UNIVERSITY OF ARIZONA**, Tucson, Arizona, for research on using enriched seawater to irrigate desert crops and plants.

\$24,805

**WINROCK INTERNATIONAL LIVESTOCK RESEARCH AND TRAINING CENTER**, Morrilton, Arkansas, for a planning study of a research, demonstration, and training program on the utilization of arid rangelands through livestock production.

\$10,000

## **FOOD POLICY FOR DEVELOPMENT**

The way most countries view their food sector has changed dramatically in the wake of the 1973-74 world grain shortfall and related developments. Balance of payments deficits soared under the double impact of high grain prices and OPEC-related energy and fertilizer price increases. High food prices sparked latent unrest resulting from long-standing problems of unemployment, high population growth, and a flood tide of rural migrants to urban centers. The locus of food policy shifted from ministries of agriculture to interministerial and supraministerial groups concerned with finance, labor, social welfare, commerce, trade, and industry. There grew a new appreciation of linkages between previously disparate policy concerns: urban food distribution; nutritional status of particular groups; the role of research and technological change; incentives to greater food production; security of international input and food supplies. Growing recognition of the complexity and interrelatedness of these issues has dramatized inadequacies in analytical capacity to address these difficult issues in a comprehensive yet comprehensible manner. One principal objective of the food policy and development component of the COH is to assist LDC's to strengthen their analytical capacity to address these issues and to relate the resulting analyses to the policy process. Recognizing that national and international trade and aid policy will influence the policy options facing LDC's, a second focus of this component is on these international linkages and issues and on the international implications of U.S. domestic food policy. A major element of this emphasis is the Foundation's substantial contribution to the International Food Policy Research Institute.

## **GRANTS:**

**International Food Policy Research Institute**  
*Washington, D.C.*

Created in 1975 and jointly funded by Canada's International Development Research Centre and the Rockefeller and Ford foundations, the International

Food Policy Research Institute promotes the adoption of national and international food policies that will facilitate increased production and more equitable distribution of food within and among countries.

\$300,000

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

HOWARTH EARLE BOUIS, Stanford, California, for a study, "Rice Policy in the Philippines."

\$2,700

CORNELL UNIVERSITY, Ithaca, New York, for a study by Ms. Chew Siew Tuan on the development of the "New Villages" of Malaysia. These villages—developed under an innovative integrated rural development program—will be compared with traditional villages to examine, among other things, the effects of government programs to increase crop yield.

\$4,000

INTERNATIONAL INSTITUTE OF RURAL RECONSTRUCTION, Silang, Cavite, Philippines, for studies on self-help efforts of the rural poor under different social and agricultural conditions.

\$35,000

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT), Texcoco, Mexico, for a seminar, "Socio-Economic Aspects of Agricultural Research in Developing Countries."

\$25,000

SALZBURG SEMINAR IN AMERICAN STUDIES, Cambridge, Massachusetts, for a seminar on nutrition, food, and population (with the cooperation of the Population and Health program).

\$5,000

UNIVERSIDAD DE LOS ANDES, Colombia, for a study, "Economic Policies for Agriculture in Colombia: Diagnosis and Suggestions for Future Action."

\$27,000

UNIVERSITY OF CHICAGO, Chicago, Illinois, for three interrelated projects to determine the effect of an international grain reserve on world grain prices; to explore ways to reduce the variability of LDC export earnings from agriculture; to analyze the effects of the European community's agricultural policies upon the stability of international agricultural prices.

\$14,950

# **POPULATION AND HEALTH**

## **THE POPULATION PROGRAM**

The Foundation formally adopted a Population program in 1963, although concern for the impact of rapid rates of population growth on the well-being of the world's people had prompted support of selected activities in the population field during earlier years. In the first decade of the new program, primary emphasis was placed on basic research in reproductive biology and applied contraception research. During the past six years, attention to the social science components of population policy studies has been increased.

Estimates of population growth suggest a world population of about 6 billion by the end of this century. With most of this growth occurring in the less-developed countries, the poor nations will have to provide for nearly 80 percent of the world's people, while still growing both numerically and proportionally through the next century. At the same time, changing social, economic, and cultural patterns have resulted in massive population shifts within and among countries, exacerbating already serious internal and international migration patterns.

The Foundation's program, therefore, emphasizes both activities that will have an impact on population growth reduction over the next two decades and special opportunities in social and economic demographic research.

The three main components of the program are:

- Research in reproductive biology;
- Research on new contraceptive technology;
- Policy studies.

### **RESEARCH IN REPRODUCTIVE BIOLOGY**

A greater understanding of the reproductive process is necessary for technological advances in fertility reduction, enhancement, or improvement. Since the advent of oral contraceptives and the intrauterine devices, the pace of scientific exploration applicable to fertility reduction has slowed; most current applications of basic knowledge have been in fields of fertility enhancement. Renewed attention will be given to those areas of reproductive research that hold the most promise for suitable application or that have been neglected in the past.

The program seeks to strengthen research both by supporting individuals presently engaged in significant work and by drawing new people of excellence into the field.

## GRANTS:

### **University of California**

*San Francisco, California*

The Reproductive Endocrinology Center at the School of Medicine concentrates research and training on problems in reproductive biology and fertility regulation.

\$288,750

### **University of Pennsylvania**

*Philadelphia, Pennsylvania*

The university's Department of Obstetrics and Gynecology is expanding its research and training program in reproductive biology and endocrinology to place major emphasis on the training of foreign scientists.

\$450,000

### **Weizmann Institute of Science**

*Rehovot, Israel*

The institute is developing an interdisciplinary research program on the physiological basis of fertility regulation.

\$250,000

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

ALL-INDIA INSTITUTE OF MEDICAL SCIENCES, New Delhi, India, for an international symposium on reproduction and the regulation of fertility.

\$10,000

HOWARD UNIVERSITY, Washington, D.C., for graduate students and junior faculty of predominantly black universities to attend a national conference on cell biology.

\$9,600

MARINE BIOLOGICAL LABORATORY, Woods Hole, Massachusetts, for planning a new program in developmental and reproductive biology.

\$35,000

POPULATION COUNCIL, New York, New York, for a summer employment program to enable minority youths to work in biomedical research laboratories.

\$30,000

SALK INSTITUTE, San Diego, California, for research on the development of peptides as fertility regulatory agents.

\$25,000

GEORGE E. SEIDEL, Colorado State University, Fort Collins, Colorado, for research in reproductive biology.

\$19,147

PAULO G. SPINOLA, Federal University of Bahia, Brazil, for research in reproductive biology.

\$19,000

TEMPLE UNIVERSITY, Philadelphia, Pennsylvania, for research in reproductive biology.

\$25,000

UNIVERSITY OF CALIFORNIA, San Diego, California, for support of a basic science research position in reproductive biology.

\$25,000

UNIVERSITY OF IDAHO, Moscow, Idaho, for a reproductive biology program in the departments of biological science and animal science.

\$25,000

### **RESEARCH ON NEW CONTRACEPTIVE TECHNOLOGY**

Recent studies concerning the safety and effectiveness of oral contraceptives and intrauterine devices have underscored the need to promote further research on new contraceptive technology suitable for fertility regulation. Support in this field has been given primarily to the International Committee for Contraception Research (ICCR), an organization administered by the Population Council and funded jointly by Canada's International Development Research Centre and the Ford and Rockefeller foundations. The ICCR conducts research on contraceptive mechanisms and also seeks to make acceptable contraceptive development methods available at reasonable costs to the public sector in developing countries.

A further aspect of this program component is the study of safety and health effects of fertility regulation that have not been emphasized previously.

#### **GRANTS:**

##### ***Population Council***

*New York, New York*

The council's International Committee for Contraception Research conducts a major international program of applied laboratory and clinical research to develop and test the effectiveness and safety of contraceptive methods and to determine their suitability for large-scale use.

\$1,000,000

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

NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for a symposium on contraceptive technology.

\$12,500

## POLICY STUDIES

Stabilization of the world's population growth requires not only safer and more effective contraceptive means, but also economic, social, and cultural conditions conducive to reduction in family size. Cultural and behavioral factors influence attitudes toward family planning techniques. A greater understanding of the socio-economic determinants and consequences of fertility, mortality, and migration is needed to provide the basic data required for the formulation of population policies.

Although much of this research is directed toward developing countries, scholars from both developing and developed countries are encouraged in their studies. Attention is given also to specialized population concerns in the United States, such as the increased incidence of adolescent pregnancy, or the implications of the shifting age structure of the overall population.

### GRANTS:

#### **Council for Asian Manpower Studies**

*Quezon City, Philippines*

This regional organization of economists, demographers, sociologists, and other scholars is emerging 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.

\$80,000

#### **The Population Council**

*New York, New York*

The council's International Programs division and Center for Policy Studies will be evaluating birth planning services, studying the demographic impact of fertility regulation programs, and examining population and development interactions through its regional offices in Latin America, Africa, and the Middle East.

\$300,000

#### **University of Pennsylvania**

*Philadelphia, Pennsylvania*

The Population Studies Center of the university is developing a new specialization emphasizing predoctoral and postdoctoral training for African students and research in African demography.

\$300,000

**Ford Foundation and Rockefeller Foundation Program on  
Population and Development Policy**

*New York, New York*

In 1970, the Ford and Rockefeller foundations initiated a competitive research program in the field of population policy in order to promote the study of population behavior, its determinants and consequences. During 1978, the following individuals were selected for Rockefeller Foundation awards:

FELIX J. AQUINO, Boston University: "Information and Migration: A Spanish Case."

HAROLD E. BANGUERO, Universidad de Los Andes, Colombia, and BOONE A. TURCHI, University of North Carolina: "Population Policy, Food and the Financial Cost of Children in Colombia."

HERNAN L. DELGADO, CHARLES TELLER, and ROBERT E. KLEIN, Instituto de Nutrición de Centro América y Panamá, Guatemala: "Seasonal Migration, Health and Nutritional Status in Indian Guatemalan Communities."

DAVID S. HARRISON, University of California, Los Angeles: "Household Decisions About Fertility and Children's Education: The Case of Malaysia."

TARSIS KABWEGYERE and GABRIEL M. B. KARIISA, University of Nairobi, Kenya: "Drought, Population Dynamics and Public Policy: a Socioeconomic Study of Kitui, Kenya."

SOO-KEUN KIM, YUNG-CHE KIM, TAE-KYUNG KANG, and MAL-NAM LEE, Keimyung University, Daegu, Korea: "Old-Age Pension as an Economic Incentive for Family Planning."

BEVERLY NAGEL LAUWAGIE, Stanford University: "The Impact of Rural Modernization and Migration to the U.S. on Migration Within Mexico."

KYONGHEE MIN, Fordham University: "Urban Growth, Migration and Labor Force Utilization in Korea, 1960-70."

KALYAN RAJ PANDEY and SHREEBATS PRASAD SHRESTHA, Ministry of Health, Nepal, SHARADA RAM SHRESTHA, Malaria Eradication Organization, Nepal, and RAMIRO DELGADO, Tulane University: "The Impact of Integrated Health/Family Planning Services on Fertility Behavior in Two Districts of Nepal."

ALI A. PAYDARFAR and NESIM TUMKAYA, Pahlavi University, Iran: "The Inter-relationship Between Migration and Fertility Within the Urban Population of Iran."

ROSEMARIE ROGERS, Tufts University: "Return Migration to Yugoslavia."

DAVID F. SLY, Florida State University, and J. N. MUINDE, University of Nairobi, Kenya: "The Formation of Migration Expectations."

H. YUAN TIEN, Ohio State University: "Accelerated Farm Mechanization and Rural Population Change in the People's Republic of China."

VUDHICHAI CHAMNONG, National Institute of Development Administration, Thailand: "Patterns of Support for and Resistance to Population Policy Among Interest Groups in Thailand."

IEDA SIQUEIRA WIARDA, University of Massachusetts, and ROSE MARIE MURARO, *Editora Vozes*, Brazil: "Women's Participation in Development: Influentials and Groups in the Diffusion of Family Planning in Brazil."

LAURIE S. ZABIN, The Johns Hopkins University: "Patterns of Adolescent Sexual Behavior in the U.S.: Implications for Policy and Program Intervention."

**Rockefeller Foundation Program for the Demographic Evaluation of Development Projects**

The evaluation of development programs for their impact on population growth and distribution is a relatively uncharted area. In order to encourage such research, the Foundation implemented a new program, beginning in 1976, to support demographic program assessment studies. In 1978, the following awards were made:

HARVARD UNIVERSITY, Cambridge, Massachusetts, for research by Dr. Robert Repetto, Center for Population Studies, and C. H. Shah and Vimal Shah, Gujerat Institute of Area Planning, on the effects of agricultural development on rural population dynamics in Gujerat, India.

ALEJANDRO N. HERRIN, Xavier University, Philippines, for research on rural electrification and fertility change in the southern Philippines.

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

ASSOCIATION FOR POPULATION/FAMILY PLANNING LIBRARIES AND INFORMATION CENTERS INTERNATIONAL, Clarion, Pennsylvania, for compiling information sources.  
\$5,500

EL COLEGIO DE MEXICO, Mexico City, for completion of the International Review Group's study of the policy relevance of social science research on population development.  
\$14,000

COLUMBIA UNIVERSITY, New York, New York, for preparation of a one-volume encyclopedia of population disciplines.  
\$24,500

CORNELL UNIVERSITY, Ithaca, New York, for a survey of breast-feeding practices in the developing world.  
\$24,955

FRONTIER NURSING SERVICE, Hyden, Kentucky, for an oral history project on primary health care (with the cooperation of the Arts, the Humanities and Contemporary Values program).  
\$18,000

HACETTEPE UNIVERSITY, Ankara, Turkey, for use by its Institute of Population Studies for research on the employment of children in Ankara.  
\$18,000

HARVARD UNIVERSITY, Cambridge, Massachusetts, for a study on health status and policies of developing countries (with the cooperation of the Health program).  
\$8,950

INTERNATIONAL UNION FOR THE SCIENTIFIC STUDY OF POPULATION, Liège, Belgium,



for scholars from developing countries to participate in a conference on economic and demographic change.	\$5,000
JOHN KNODEL, Ann Arbor, Michigan, for research on population patterns in German villages from the 17th century to the early 20th century.	\$18,984
ALISON MCINTOSH, Ann Arbor, Michigan, for research on population policy in industrialized democracies.	\$4,100
PONTIFICIA UNIVERSIDAD CATOLICA DEL PERU, Lima, Peru, for seven graduate social science fellowships in the area of population studies.	\$23,555
RAND CORPORATION, Santa Monica, California, for research on the determinants and consequences of contraceptive use and breast-feeding patterns in Malaysia.	\$29,889
SALZBURG SEMINAR IN AMERICAN STUDIES, Cambridge, Massachusetts, for a seminar on nutrition, food, and population (with the cooperation of the Conquest of Hunger program).	\$5,000
UNIVERSITY OF CHICAGO, Chicago, Illinois, for a study of the economic interdependence of schooling, health, fertility, and agricultural productivity, with special reference to India.	\$14,500
UNIVERSITY OF MICHIGAN, Ann Arbor, Michigan, for support of a postdoctoral research position at its Center for Population Planning.	\$25,000
UNIVERSITY OF WESTERN ONTARIO, London, Canada, for research on microtheories of behavior and decision-making in demography.	\$15,500
VRIJE UNIVERSITEIT BRUSSEL, Brussels, Belgium, for research on child-spacing behavior and fertility in tropical Africa.	\$35,000
MICHAEL WHITEFORD, Ames, Iowa, for research on the effects of rural-urban migration on nutritional well-being in a Costa Rican province.	\$24,979
YALE UNIVERSITY, New Haven, Connecticut, for research on trends and differences in size and structure of family households.	\$21,000
ZERO POPULATION GROWTH FOUNDATION, Washington, D.C., in support of its Population Education Project.	\$12,500

# THE HEALTH PROGRAM

The Foundation has had an historical commitment to improve the health of all people throughout the world. Recent considerations of global needs and Foundation interests have led to a renewed effort to confront major health problems under three program components.

## GREAT NEGLECTED DISEASES OF MANKIND

As approved by the trustees in December 1977, a network of high-quality investigators is being created to bring techniques of modern biomedical science to bear on the great neglected diseases of the less-developed, largely tropical countries. These diseases, which afflict hundreds of millions of people, include schistosomiasis, hookworm, malaria, sleeping sickness, amebic dysentery, and fatal diarrheas of infants. The network now comprises 10 units located at some of the world's leading medical research institutions. All are headed by outstanding scientists who are attracting cadres of excellent students and young investigators. The rapid establishment of these groups is resulting in a critical mass of investigators with a high output, both quantitatively and qualitatively. Each unit is forming links with medical schools or research laboratories in the developing world. This activity is closely related to Population objectives and to the research on parasitic diseases of domestic animals initiated under the Conquest of Hunger program.

### GRANTS: GND Network

#### **Affiliated Hospitals Center**

*Boston, Massachusetts*

The Robert B. Brigham Hospital, through its newly created Immunoparasitology Division, is expanding studies on the immunology of schistosomiasis as well as planning further research on the immunology of protozoa.

\$100,000

#### **Case Western Reserve University**

*Cleveland, Ohio*

With the goal of improved chemotherapy of tropical diseases, the Department of Pharmacology has added a Pharmacoparasitology Research Unit to study the metabolism of basic drugs in hosts and parasites.

\$150,000

#### **Walter and Eliza Hall Institute of Medical Research**

*Melbourne, Australia*

The aim of the institute's newly established Immunoparasitology Research Unit is to isolate antigens from parasites of medical importance as a step toward the development of reliable immunodiagnostic reagents and an examination of the feasibility of vaccines.

\$70,000

**Ministry of Health***Cairo, Egypt*

The Ministry of Health's Biomedical Research Center for Infectious Diseases will develop a research unit for parasitic infections that will serve as a center for all the collaborative field programs of the international network.

\$60,000

**Rockefeller University***New York, New York*

The Laboratory for Medical Biochemistry is establishing a Pharmacoparasitology Research Unit for the exploration of new methods for the treatment of protozoan infections.

\$100,000

**Tufts University***Boston, Massachusetts*

The newly established Division of Geographic Medicine in the Department of Medicine will study the basic pathogenic mechanisms of tropical diseases, focusing on an understanding of the presence, role, and specific biochemical mechanism of bacterial, helminthic, and protozoal pathogens in infectious enteric diseases, and the mechanisms by which malnutrition increases susceptibility to acute infections.

\$90,000

**University of Oxford***Oxford, England*

The creation of a Tropical Medicine Research Unit in the Nuffield Department of Clinical Medicine will promote research on thalassemia and hemoglobinopathies, major causes of disease in children in much of the tropics, and their relationship to malaria.

\$30,000

**University of Virginia***Charlottesville, Virginia*

The university's Department of Medicine is establishing a Division of Geographic Medicine that will conduct research on bacterial and protozoan diarrheal diseases, and study the epidemiology of enteric infections in developing countries.

\$140,000

**Weizmann Institute of Science***Rehovot, Israel*

The institute will develop a Unit for Molecular Biology of Parasitic Diseases to undertake research on the structure and function of parasite membranes and the molecular immunology of the parasite-host relationship.

\$150,000

## **GRANTS: Related**

### **Johns Hopkins University**

*Baltimore, Maryland*

The School of Medicine's research on ocular onchocerciasis has led to the discovery of a safe way to treat the disease with chemotherapy. Through future studies, researchers hope to ascertain the optimum dosages, to observe the immediate response to treatment, and to determine the effectiveness in preventing relapses and eliminating *Onchocerca volvulus*, the worm that causes the disease.

\$144,500

### **London School of Hygiene and Tropical Medicine**

*London, England*

Since the initiation in 1967 of a schistosomiasis research and control project on the island of St. Lucia, large amounts of clinical and research data have been collected. The London School of Hygiene and Tropical Medicine will construct a computer file of these epidemiological records, compatible with other international data banks, to facilitate further studies.

\$60,000

### **Rockefeller Foundation Research Career Development Fellowships in Geographic Medicine**

In mid-1978, the Foundation began a project of research career development awards for investigators interested in the great neglected diseases of mankind and, in particular, the tropical infectious diseases that fall under that category. The project, intended to provide a career incentive for young investigators in the field, is in the process of reviewing the qualifications of applicants. During 1978, it made the following award:

ANIL N. JAYAWARDENA, New Haven, Connecticut, for investigations on the immune response in malaria.

\$40,000

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

CASE WESTERN RESERVE UNIVERSITY, Cleveland, Ohio, for a conference, marking the 100th anniversary of Paul Ehrlich's naming of the eosinophil, to review current work on the biochemical, immunologic, pathologic, and pharmacologic aspects of the eosinophil, and to consider future directions for studies of allergic and infectious diseases.

\$25,000

CASE WESTERN RESERVE UNIVERSITY, Cleveland, Ohio, for experimental studies in mice of the mechanisms of penetration of cercariae, circulation of schistosomules, and development of immunity in schistosomiasis.

\$22,000

- CASE WESTERN RESERVE UNIVERSITY, Cleveland, Ohio, for use by its School of Medicine for research on nonspecific acquired resistance and specific immunity to schistosomiasis.  
\$25,000
- CENTER FOR PUBLIC RESOURCES, New York, New York, for a program to expand pharmaceutical industry resources for research and control of diseases of the developing world.  
\$25,000
- CORNELL UNIVERSITY, Ithaca, New York, for use by its Medical College in cooperation with the Columbia University College of Physicians and Surgeons and the New York University School of Medicine to develop a plan for teaching, research, and patient care in geographic medicine.  
\$8,000
- JEAN PAUL DESSAINT, Lille, France, for research on the immunosuppressive substance of schistosomes.  
\$7,800
- HARVARD UNIVERSITY, Cambridge, Massachusetts, for a study on health status and policies of developing countries (with the cooperation of the Population program).  
\$8,950
- HARVARD UNIVERSITY, Cambridge, Massachusetts, for analysis of data for use in determining improvements in the use of water and organic resources in rural areas of the developing world.  
\$3,815
- HEBREW UNIVERSITY OF JERUSALEM, Jerusalem, Israel, for use by its Hadassah Medical School for a study of antigens in *Schistosoma mansoni*.  
\$25,000
- JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland, for use by its Division of Geographic Medicine for research on diarrheal disease.  
\$19,575
- KAROLINSKA INSTITUTET, Stockholm, Sweden, for research on diarrheal diseases in the developing world.  
\$25,000
- NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for use by the Institute of Medicine for a meeting of scientists from Egypt, Israel, and the United States to consider initiatives to improve health in the Middle East.  
\$21,860
- NEW YORK UNIVERSITY, New York, New York, for research on the immunology of schistosomes.  
\$18,000
- ROCKEFELLER UNIVERSITY, New York, New York, for research on *Entamoeba histolytica*, the etiological agent of amebic or tropical dysentery and tropical abscess of the liver.  
\$25,000

ROCKEFELLER UNIVERSITY, New York, New York, for immunological research on trypanosomiasis (with the cooperation of the Conquest of Hunger program).

\$20,000

VANDERBILT UNIVERSITY, Nashville, Tennessee, for a collaborative research program between its Department of Microbiology and The Rockefeller Foundation's schistosomiasis project in St. Lucia, West Indies, to study immunologic responses during the course of *Schistosoma mansoni* infections.

\$25,000

YESHIVA UNIVERSITY, New York, New York, for use by the Liver Research Center of its Albert Einstein College of Medicine, for studies of collagenase in murine and human schistosomiasis.

\$25,000

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

RED CLOUD PRODUCTIONS, Cambridge, Massachusetts, for a documentary film, *Joan Robinson: One Woman's Story* (with the cooperation of the Humanities program).

\$10,000

YALE UNIVERSITY, New Haven, Connecticut, for a research project on medical behavior at Auschwitz (with the cooperation of the Humanities program).

\$10,000

## **CLINICAL EPIDEMIOLOGY**

While the traditional training of the physician is strongly oriented toward individual-based medicine, the nation is concerned with such population-based factors as the maldistribution of physicians, the high cost of health care, and the dearth of family and primary care practitioners. Under this program component, there would be explorations of means of promoting a quantitative population-based approach to medicine by including biometry, epidemiology, and demography as an integral part of clinical medical education.

## **HEALTH INFORMATION SYSTEMS**

With the exponential growth of biomedical information, it is becoming increasingly difficult to identify and utilize the relatively small proportion of the literature that is of quality and to aggregate health statistics into practical health indicators. The Foundation hopes to foster more effective health sciences and statistical information systems in international organizations, governments, industry, and universities, and to develop new basic and applied approaches to qualitative information systems.

## **EDUCATION FOR DEVELOPMENT**

In December 1977, the trustees made the decision to phase out Education for Development as a separate program, within the period necessary for responsible termination of current activities. The original objectives of the Education for Development program largely will have been realized with the completion, by 1983, of support for three major university projects now at the midpoint of the planned period of cooperation. In the future, universities in developing countries will be supported through the Foundation programs under which their projects fall.

The Foundation's Education for Development program (begun in 1963 under the title University Development) has had as its major objective the strengthening of selected universities in Latin America, Africa, and Asia, through the development of highly qualified indigenous scholars engaged in teaching and research relevant to national and regional needs. The universities that comprised this program are: Makerere University, Kampala, Uganda; University of Nairobi, Kenya; University of Dar es Salaam, Tanzania; University of Ibadan, Nigeria; University of the Philippines; Universidad del Valle, Cali, Colombia; and Thammasat, Kasetsart, and Mahidol universities in Bangkok, Thailand. Support to these universities was primarily for "institution-building," with the Foundation providing staff to serve as faculty members in key departments—especially departments of agriculture, public health, medicine, and the social sciences—and to work closely with local and national leadership in designing curricula and improving teaching and research. The Foundation provided fellowships for local staff to undertake advanced study and research abroad, and financial support for local graduate programs and the development of appropriate research institutes and programs.

The Foundation has shifted from the broad institutional support traditional in this program to specific projects in universities with creative local leadership. Special emphasis has been placed on areas of Foundation program interest that require interdisciplinary approaches to problem-solving.

### **CURRENT PROGRAMS**

In 1971, The Rockefeller Foundation and Gadjah Mada University in Yogyakarta, Indonesia, joined in a cooperative effort to strengthen the university. Major support has been given to a maternal/child health program, teaching and research in community medicine, agricultural research and development, and a social science complex that has been a significant influence in teaching and research responsive to national and regional needs.

The National University of Zaïre, seeking a complete reorganization of its system, joined the EFD sphere in 1971. With primary Foundation attention

directed toward the faculties of agricultural and social sciences, much of the leadership is now Zairian. Special programs for advanced study outside Zaïre and regular Foundation fellowships are also accelerating staff development.

Another institution, supported under the EFD program since 1973, is the Federal University of Bahia, in Salvador, Brazil. Through its innovative Program of Research and Education for Development (PROPED), substantial progress has been made in collaborative, developmental efforts among the university, the state of Bahia, the city of Salvador, and appropriate Brazilian federal agencies. University projects focus on agriculture, health, economics, management, and education.

In East Africa, Foundation assistance is supporting programs in the national universities of Kenya and Tanzania. The programs, conducted by various institutes and departments of the universities, are for the training of individuals who will apply social science techniques and perspectives to educational problems in the two countries. In addition, the University of Nairobi, Kenya, with Foundation assistance is implementing through its Faculty of Agriculture a program of research and training that is directed toward presenting farmers of small holdings with practical and economic solutions to the problems of pest and pathogen damage that can critically affect their livelihood.

## GRANTS:

### ***Federal University of Bahia***

*Salvador, Bahia, Brazil*

Since its initiation in 1973, the collaborative effort between the Foundation and the university has evolved into an innovative program, combining teaching and research relevant to the rural and urban needs of northeastern Brazil.

\$388,900

### ***Gadjah Mada University***

*Yogyakarta, Indonesia*

The university is developing programs in the health sciences, the agricultural sciences, and the social sciences to help Indonesia meet national goals.

\$425,322

### ***Kasetsart University***

### ***Mahidol University***

### ***Thammasat University***

*Bangkok, Thailand*

The cooperative effort of the three Thai universities and the Foundation, initiated in 1963, has resulted in a strong university system with a core of scholars engaged in teaching and research directed to national and regional needs.

\$340,093



**Ministry of Education**

*Dar es Salaam, Tanzania*

**Ministry of Education**

*Nairobi, Kenya*

**University of Dar es Salaam**

*Dar es Salaam, Tanzania*

As part of a program designed to develop local capacity for social science research and evaluation of educational issues in Kenya and Tanzania, the Foundation has provided support for training and research projects.

\$67,300

**National University of Zaire**

*Kinshasa, Zaire*

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

\$239,500

**University of Dar es Salaam**

*Dar es Salaam, Tanzania*

**University of Nairobi**

*Nairobi, Kenya*

With Foundation assistance, these national universities have established competent indigenous faculties, sound undergraduate teaching programs, and applied research efforts attuned to national and local development needs.

\$75,560

**University of Ibadan**

*Ibadan, Nigeria*

Continued support was given to the university in its role as contributor to the regional and national development needs of Nigeria.

\$55,763

**University of Nairobi**

*Nairobi, Kenya*

The University of Nairobi, with Foundation assistance, is strengthening, within its Faculty of Agriculture, teaching and research programs in pest management.

\$100,000

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

CLARK UNIVERSITY, Worcester, Massachusetts, for the assignment of a faculty member to conduct research and teach at the University of Nairobi's Institute for Development Studies.

\$32,287

FLORIDA STATE UNIVERSITY, Tallahassee, Florida, in support of its collaborative project with the National University of Zaïre to develop a library on the Kisangani campus.

\$500

GADJAH MADA UNIVERSITY, Yogyakarta, Indonesia, for the appointment of a visiting professor in the Faculty of Economics.

\$7,575

HARVARD UNIVERSITY, Cambridge, Massachusetts, for an Indonesian-language textbook on project evaluation.

\$17,500

INTERNATIONAL COUNCIL FOR EDUCATIONAL DEVELOPMENT, New York, New York, for distribution of a handbook for planners of higher education for development.

\$1,500

AHMED ISSA, Nairobi, Kenya, for research on education and training in pastoral areas of Kenya.

\$7,300

NATIONAL RESEARCH COUNCIL OF THAILAND, Bangkok, Thailand, for a seminar on rural development research in Thailand.

\$1,000

THAMMASAT UNIVERSITY, Bangkok, Thailand, for a study of American methods of planning and developing universities.

\$3,500

UNIVERSITY OF NAIROBI, Nairobi, Kenya, for staff development within its Institute for Development Studies.

\$7,140

UNIVERSITY OF NAIROBI, Nairobi, Kenya, in support of its M.A. program in economics.

\$1,840

UNIVERSITY OF NAIROBI, Nairobi, Kenya, for appointment of a social-science-oriented computer specialist in its Institute for Development Studies.

\$22,000

UNIVERSITY OF WISCONSIN, Madison, Wisconsin, for a study on political change in Zaïre.

\$2,925

WEST AFRICA RICE DEVELOPMENT ASSOCIATION, Monrovia, Liberia, for a socio-economic survey.

\$16,500

## **TRAINING FOR PUBLIC-SECTOR MANAGEMENT IN DEVELOPING COUNTRIES**

Though the challenge of training managers for public-sector responsibilities confronts most nations, it is especially severe for the less-advanced countries. Inadequate management is now emerging as a critical constraint in some development sectors, and there is a clear need for a diversity of programs beyond professional degrees in management.

## GRANTS:

### **Asian Institute of Management**

*Manila, Philippines*

### **Asociación para el Desarrollo**

*Santiago de los Caballeros, Dominican Republic*

### **Bogazici Universitesi**

*Istanbul, Turkey*

### **Consejo Latinoamericano de Escuelas de Administración**

*Bogotá, Colombia*

In response to the need for management training efforts in developing countries, the Foundation assisted in the establishment of programs to encourage local research and management for agricultural projects.

\$112,850

### **Panafrican Institute for Development**

*Geneva, Switzerland*

The institute, with its African base in Douala, Cameroon, trains African executives to manage social and economic development in rural areas, with a dynamic, pragmatic, and consolidated approach to problems and needs.

\$200,000

## PROGRAM REVIEW

In order to place the Education for Development program's specific experience within the broad framework of support to higher education in the developing world, the trustees of the Foundation have agreed that a review should be made of all the program's activities. This review, based upon data and analyses collected at the institutions that have received Foundation support and upon the historical records of the Foundation, will be directed by Professor James S. Coleman, chairman of the Committee on International and Comparative Studies at the University of California in Los Angeles and formerly a Foundation staff member working with the Education for Development program. One expected result of this review process is a record from which the Foundation and other organizations can derive useful lessons for continuing efforts to help strengthen educational institutions in the developing world.

# INTERNATIONAL RELATIONS

Recognizing the potential for conflict inherent in the growing interdependence of nations, the trustees established the International Relations program in 1973. In 1977, following a major review, a revised program was approved and launched. Further adjustments were made in early 1978. The new program now focuses on three areas:

- World energy
- International economic policy
- Regional conflicts and security arrangements

What decisions are made and how problems are managed, nationally and internationally, in each of these broad areas will affect immediate economic and political conditions as well as the future character of the interdependent world community.

Within each problem area, the primary objectives are:

- To identify core problems for which cooperative action is required for effective management, for avoidance or resolution of conflict;
- To assess such problems from a global perspective in order to develop and evaluate alternative courses of action and institutional arrangements for coping with them;
- To develop scholarly and professional competence in policy analysis;
- To increase public understanding of the context, issues, policy alternatives, and need for timely action.

## WORLD ENERGY

The world is now in the early stages of a painful, uncertain, and lengthy transition from primary reliance on low-cost oil to much higher cost energy alternatives. The transition may be managed smoothly or fitfully, equitably or unfairly, or it may prove ultimately to be unmanageable. In any event, the prospects of every citizen in every country will be affected by the outcome, and the process of shaping the outcome will be a central task in the coming decades.

### GRANTS:

#### **Harvard University**

*Cambridge, Massachusetts*

Harvard University is sponsoring a study of international institutional responses to the energy problems of less-developed countries.

\$36,471

#### **Oak Ridge Associated Universities**

*Oak Ridge, Tennessee*

The university held a seminar on Latin American energy analysis that

considered both an international and a regional perspective for national energy planning, analysis, energy demand, and supply projections, as well as alternative sources of energy and their environmental effects.

\$11,500

**Overseas Development Council**

*Washington, D.C.*

The council is preparing a manuscript entitled "Energy for Developing Countries," and a *Who's Who* of energy policymakers, analysts, and institutions in the developing world.

\$24,816

**Royal Institute for International Affairs**

*London, England*

In its role as co-sponsor of the International Consultative Group on Nuclear Energy, the institute is coordinating conferences and providing administrative support to the group.

\$115,000

**Tufts University**

*Medford, Massachusetts*

The university is conducting a study on the classification of developing countries for purposes of energy policy planning to better address energy needs.

\$14,000

**University of São Paulo**

*São Paulo, Brazil*

The university held a workshop to evaluate from a southern perspective the state of energy availability and needs in the less-developed countries.

\$35,000

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

ATLANTIC INSTITUTE FOR INTERNATIONAL AFFAIRS, Paris, France, for a project on energy and global security.

\$17,000

BROOKINGS INSTITUTION, Washington, D.C., for a study on the history of energy policy formulation in the United States.

\$17,500

EDWARD N. KRAPELS, Washington, D.C., for a study on strategic petroleum reserves.

\$20,575

OAK RIDGE ASSOCIATED UNIVERSITIES, Oak Ridge, Tennessee, for a comparison and evaluation of international energy studies and models.

\$25,000

RESOURCES FOR THE FUTURE, Washington, D.C., for a study of energy analysis and decision-making.

\$35,000

RUTH SIVARD, Washington, D.C., for a study on world energy resources and consumption.

\$35,000

JONATHAN P. STERN, London, England, to complete a study on Soviet natural gas exports.

\$6,160

## INTERNATIONAL ECONOMIC POLICY

The international economic system is not functioning well—as evidenced by slow economic growth, persistent unemployment, and high inflation in many countries, growing skepticism about the capacity of floating exchange rates to correct imbalances of payments, increasing fears of protectionism, and relatively little progress in meeting the needs of developing countries and the quarter of the world's population that is very poor.

In 1978, the International Relations program continued to concentrate on international economic policy and made plans to bring together a group of experts who will explore the functioning of the international economic system. Beginning with the subject of international monetary problems, the group intends to clarify the issues, identify policy choices for governments, and assess the consequences of alternative policies and institutional arrangements.

## REGIONAL CONFLICTS AND SECURITY ARRANGEMENTS

There are particular regions where political tensions among peoples and between nations appear most dangerous for the world community. The political approaches pursued in regions with high potential for conflict and escalation—by powers inside and outside—have major importance for international security. Peace-keeping and arms control arrangements in such regions are matters deserving high priority.

### GRANTS:

#### **Columbia University**

*New York, New York*

Columbia University's East Asian Institute is conducting research on U.S.-Japanese cooperation in principal multilateral institutions.

\$60,000

**Council on Foreign Relations**

*New York, New York*

The council's Africa Project analyzes emerging issues in Africa and assesses their significance for the United States.

\$60,000

**Lawyers' Committee for Civil Rights Under Law**

*Washington, D.C.*

The committee sponsored a conference in 1978 to discuss the international legal effects of the South African system of apartheid.

\$7,900

**National Commission on United States Policy Toward Southern Africa**

*New York, New York*

The commission, composed of leading United States citizens, will undertake a systematic inquiry into American interests and concerns in southern Africa, the policy alternatives available to the United States, and the consequences of policy choices.

\$195,000

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

AMERICAN LAW INSTITUTE, Philadelphia, Pennsylvania, for a revision of the Restatement of the Foreign Relations Law of the United States.

\$35,000

AMERICAN UNIVERSITIES FIELD STAFF, Hanover, New Hampshire, for a comparative study on the politics of food in developing countries.

\$15,980

ATLANTIC COUNCIL, Washington, D.C., for a project on the relationship of Japanese and East Asian security to Western security and NATO.

\$17,782

BROOKINGS INSTITUTION, Washington, D.C., for a study on global trends in food supply and demand.

\$7,500

CONCORDIA UNIVERSITY, Montreal, Canada, for a study on the economic relations between Quebec and other regions.

\$20,000

WAYNE A. CORNELIUS, Cambridge, Massachusetts, for a workshop on the changing role of Mexican labor in the U.S. economy.

\$2,800

COUNCIL ON FOREIGN RELATIONS, New York, New York, for preparation of its 1980's Project studies on foreign policy issues.

\$35,000

COUNCIL ON RELIGION AND INTERNATIONAL AFFAIRS, New York, New York, to complete the work of a task force on value systems and the world food crisis.

\$23,812

RICHARD R. FAGEN, Stanford, California, for studies on U.S.-Mexican relations.  
\$20,391

GEORGETOWN UNIVERSITY, Washington, D.C., for use by its Center for Strategic and International Studies for a study on security perceptions of the Arab/Moslem world in relation to Africa.  
\$7,700

INSTITUTE FOR WORLD ORDER, New York, New York, for leadership conferences, research colloquia, and curriculum dissemination in the field of world order studies.  
\$4,000

INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES, London, England, for preparatory work on a program of research on regional security and international order in the 1980's.  
\$17,000

INTERNATIONAL RESEARCH FUND, New York, New York, for use by the International Peace Academy for a colloquium on disarmament and arms control.  
\$4,500

CHARLES F. KETTERING FOUNDATION, Dayton, Ohio, toward the costs of Dartmouth Conference XII, composed of citizens from the Soviet Union and the United States.  
\$15,000

BORIS RABBOT, New York, New York, for a project on social research and management in the Soviet Union.  
\$8,000

TRUDY RUBIN, Cambridge, Massachusetts, for a study of the structure of Palestinian society.  
\$17,500

UNITED NATIONS ASSOCIATION OF THE UNITED STATES OF AMERICA, New York, New York, to organize a national panel on U.S.-Chinese relations.  
\$35,000

UNIVERSITY OF DELAWARE, Newark, Delaware, for its Center for the Study of Marine Policy to produce two volumes in the series International Straits of the World.  
\$8,500

UNIVERSITY OF LANCASTER, Lancaster, England, for research on arms sales and public accountability processes in Western European countries.  
\$9,000

UNIVERSITY OF MICHIGAN, Ann Arbor, Michigan, for use by its Center for Russian and East European Studies for a conference on key issues in East-West relations in the 1980's.  
\$9,300

**CONSULTANCIES, CONFERENCES, AND  
RELATED RESEARCH ACTIVITIES**

INTERNATIONAL CONSULTATIVE GROUP ON NUCLEAR ENERGY, for expenses incurred by participants or consultants.  
\$62,000



INTERNATIONAL ENERGY ASSOCIATES, for research on international cooperation among breeder reactor development programs, with special attention given to the impact of substantial changes in United States policy during 1977.

\$45,142

NUS CORPORATION and JUELICH NUCLEAR RESEARCH CENTER, to conduct studies of the factors determining lead times for bringing nuclear energy facilities into full operation.

\$29,500

U.S.-JAPAN JOINT PROJECT ON NUCLEAR POWER DEVELOPMENT IN THE ASIA-PACIFIC REGION, to investigate ways of institutionalizing cooperation in developing nuclear power in the Asia-Pacific region in order to assure availability of resources, technology, and services necessary for stable supplies of energy without undue risk of weapons proliferation.

\$20,000

### **ROCKEFELLER FOUNDATION FELLOWS IN INTERNATIONAL RELATIONS**

In 1978, the trustees appropriated \$300,000 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 1978:

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

MERON BENVENISTI, Jerusalem, Israel, to undertake a study on conflict resolution of issues relating to Jerusalem.

RICHARD GILMORE, Overseas Development Council, Washington, D.C., to study American and international food policy.

LOUIS WOLF GOODMAN, Social Science Research Council, New York, New York, for a study on bargaining between Third World nations and transnational corporations.

RAYMOND F. HOPKINS, Swarthmore College, Swarthmore, Pennsylvania, for a project on the political economy of international food assistance.

ROBERTO Y. HUKAI, Massachusetts Institute of Technology, Cambridge, Massachusetts, for a study on the risks and benefits of nuclear technology.

ROBERT J. LIEBER, Davis, California, for a study on international energy problems and advanced industrial societies.

WALTER MURGATROYD, Imperial College of Science and Technology, London, England, for an international comparison of institutional practices germane to cogeneration as an energy conservation option.

VRATISLAV PECHOTA, Columbia University Law School, New York, New York, for a study on human rights in the era of detente.

JAMES T. THOMSON, Lafayette College, Easton, Pennsylvania, for a study on international programs for food and renewable energy in the Sahel.

ALLEN S. WHITING, University of Michigan, Ann Arbor, Michigan, for a study on Siberian development and East Asia.

## EQUAL OPPORTUNITY

The program, formally adopted in 1963, grew out of the Foundation's historic concern for black people in America. Over the years, periodic review by trustees and staff has kept it consonant with changing needs; a 1978 evaluation resulted in a determined effort to investigate the issue of urban problems: youth employment. What has not altered is the program's overall goal of furthering a society that protects the basic rights of every individual.

The major components of the program today are:

- Urban problems: youth employment;
- Minority-group participation in the development of the Southeast;
- Leadership development;
- Securing and protecting basic rights.

### URBAN PROBLEMS: YOUTH EMPLOYMENT

Although considerable attention has been paid to the issue of minority-youth unemployment over the past 20 years, little is known about underlying structural causes, and the fact that teenage unemployment worsened over this period is indicative that it is not an easy problem to solve. Among the factors that have influenced this plight are racial discrimination, inadequate skills and education, location in economically depressed areas, intensified competition from an influx of white youth and women into the labor market, the business cycle, and government policies and regulations that have had a negative impact on minority youth. More and better data are required to adequately understand the scope of this problem and its possible solutions.

### GRANTS:

#### ***The Brookings Institution***

*Washington, D.C.*

The Brookings Institution has undertaken a study of the effects of prolonged and intermittent unemployment on later work performance of youth. It is also preparing recommended measures to improve the youth labor market.

\$82,530

#### ***Corporation for Public/Private Ventures***

*Philadelphia, Pennsylvania*

The corporation is evaluating government-financed private-sector programs for reducing youth unemployment.

\$79,400

**National Child Labor Committee**

*New York, New York*

Following a detailed comparison of summer youth programs in New York and Philadelphia, the committee is seeking to develop more effective summer employment programs for urban youth throughout the United States.

\$130,000

**University of Pennsylvania**

*Philadelphia, Pennsylvania*

Despite a decade of concern with youth labor market programs and the passage in 1977 of the Youth Employment and Demonstration Programs Act, available information is inadequate for supporting long-term efforts to reduce youth unemployment and improve the school-to-work transition. The Industrial Research Unit of the university's Wharton School is making a study of this issue in selected communities.

\$83,479

**Work in America Institute**

*Scarsdale, New York*

Currently, the institute is conducting research that focuses on the central issues of urban youth unemployment and analyzing recommended programs and policies for making work more available and relevant to youth through the development of small-scale local action programs.

\$200,000

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

THE HERITAGE FOUNDATION, Washington, D.C., for a study, "Restrictions on Employment Opportunities for Youth and Minorities."

\$25,000

NATIONAL OPINION RESEARCH CENTER, Chicago, Illinois, for research on minority-youth unemployment.

\$2,000

NORTHWESTERN UNIVERSITY, Evanston, Illinois, for a study on mobilization patterns and racial differences in male youth employment.

\$17,211

PACIFIC ACADEMY FOR ADVANCED STUDIES, Los Angeles, California, for a study, "Perspectives on Youth Employment with Emphasis on Effects of Minimum Wages."

\$29,750

THE UNIVERSITY OF WISCONSIN, Madison, Wisconsin, for studies on youth unemployment.

\$30,000

THE VOCATIONAL FOUNDATION, INC., New York, New York, for the planning stages of a study on the effectiveness of job training/counseling programs on unemployed and underemployed youths.

\$3,000

## MINORITY-GROUP PARTICIPATION IN THE DEVELOPMENT OF THE SOUTHEAST

In 1975, The Rockefeller Foundation initiated a special interdisciplinary program in the Southeastern United States. Supported projects are designed to improve minority-group participation in local affairs and enterprises, with particular regard to problems of minority groups in urban and rural areas of the Southeast, to promote the establishment and growth of community-based self-help organizations, and to assist public and private agencies in delivering needed services to these local organizations.

### GRANTS:

#### **Atlanta University Center**

*Atlanta, Georgia*

The center is strengthening its Offices of Institutional Research and Planning and of Development and Public Relations. Atlanta University Center is the largest nucleus of private higher education institutions for blacks in the U.S. and is responsible for many student services, a library, and various faculty and student research projects. It also has begun a fellows and interns program.

\$351,648

#### **Clark College**

*Atlanta, Georgia*

Clark College's Southern Center for Studies in Public Policy provides leadership training, conducts research, and prints publications on public issues from a minority-group perspective.

\$300,000

#### **Clemson University**

*Clemson, South Carolina*

A proposal has been developed at Clemson to provide economic and technical information to evaluate production and marketing alternatives for small, limited-access farmers in Beaufort County, South Carolina, which will in turn stimulate greater cooperation among land grant colleges in the state and minority-group community organizations.

\$32,805

#### **Clemson University**

*Clemson, South Carolina*

#### **Coastal Plains Human Development Coordinating Council**

*Charleston, 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.

\$38,953

**Emergency Land Fund**

*Atlanta, Georgia*

In conjunction with an organization that it established in 1976, the National Association of Landowners, the Emergency Land Fund is preparing an Evaluation and Management Plan for aiding black landholders in the rural Southeast.

\$15,000

**Mississippi Action for Community Education**

*Greenville, Mississippi*

The Mississippi Action for Community Education initiates and maintains community development activities in the Mississippi Delta region.

\$83,750

**Mississippi Research and Development Center**

*Jackson, Mississippi*

A "circuit-riding" team of professionals from the center provides technical assistance and community development skills to officials, employees, and citizen participation groups in six of Mississippi's minority-managed towns.

\$133,370

**Morhouse College**

*Atlanta, Georgia*

The college has assumed the sponsorship of two major journals of Afro-American studies, the *College Language Association Journal* and the *Journal of Negro History*, with the goal of making them self-supporting during the next three years.

\$138,400

**NAACP Special Contribution Fund**

*New York, New York*

The NAACP Fund is planning a citizenship education and leadership development program in South Carolina.

\$34,105

**National Rural Center**

*Washington, D.C.*

The National Rural Center monitors rural manpower and employment programs for the purpose of better understanding their impact on the formulation of public policy.

\$11,626

**Save the Children Federation**

*Westport, Connecticut*

The federation's Arkansas Delta Project is attempting to initiate commu-

nity-based integrated rural development programs in the Arkansas Delta, an area of great impoverishment and economic stagnation.

\$337,000

**Southern University**

*Baton Rouge, Louisiana*

The Food and Agricultural Act, effective October 1978, provides federal funding for agricultural extension and research by the 1890 land grant colleges. Southern University will establish, accordingly, an agriculturally based, rural development program in Louisiana in association with ongoing agricultural extension programs.

\$100,000

**University of Florida**

*Gainesville, Florida*

An anthropological research project at the university is underway with the intent to determine the capacity of elderly people to increase essential self-care through the use of community preventive health care learning programs.

\$3,000

**Urban League of Greater Little Rock**

*Little Rock, Arkansas*

The Urban League is directing an Arkansas minority community training and leadership development project in six counties.

\$134,924

**Virginia State College**

*Petersburg, Virginia*

The college has been successful in initiating, and will continue to support, community development planning in the Middle Peninsula Planning District of Virginia.

\$29,000

**Voter Education Project**

*Atlanta, Georgia*

Programs of the VEP encourage and support minority-group communities and individuals to exercise their suffrage rights.

\$25,000

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

ATLANTA UNIVERSITY CENTER, Atlanta, Georgia, for study of the political participation and the socioeconomic well-being of black citizens in the South.

\$22,900

## LEADERSHIP DEVELOPMENT

Special efforts must be made to overcome the effects of past discrimination. One way is to identify and train talented men and women from minority groups to help them to qualify for a variety of visible and responsible positions. This aspect of the program seeks to aid minority-group members in promoting the social and economic well-being of their communities through increased skills and more effective means of exercising influence in the communities.

### GRANTS:

#### **Alliance for Progress**

*Powellsville, North Carolina*

The alliance, a consortium of six poverty-stricken rural counties in northeastern North Carolina, in cooperation with the University of North Carolina's School of Education, developed a training program for the counties' school principals to promote a field-based approach to problem-solving in the schools. Current programs concentrate on assisting school superintendents, board members, and county commissioners in their roles as policymakers and managers and in seeking ways to replicate this program in other areas.

\$300,000

#### **ASPIRA of America**

*New York, New York*

ASPIRA of America maintains a leadership development training program for Puerto Rican educators.

\$210,330

#### **Atlanta University**

*Atlanta, Georgia*

Continued support for the university's leadership development program in educational administration, with a heavy emphasis on the recruitment of minority-group students, helps to insure educational opportunities for qualified candidates.

\$300,000

#### **George Washington University**

*Washington, D.C.*

The Institute for Educational Leadership awards one-year Educational Policy Fellowships to men and women to study educational administration at the federal or state level.

\$116,463

**Latino Institute**

Chicago, Illinois

The Latino Institute sponsors a leadership development training program.  
\$120,000

**New Mexico State University**

Las Cruces, New Mexico

The state university conducts a special graduate program in educational management to increase the number of American Indians qualified to serve as elementary school principals in tribal school districts of the Intermountain/Southwest region.

\$162,500

**Rockefeller Foundation Fellowships in Administration of Early Childhood and Exceptional Children Education Programs**

There is a dearth of minority-group educators in the areas of learning disabilities and education of the very young. Many such educators have been unable to assume positions in these fields due to lack of advanced training. This fellowship program provides selected candidates with the opportunity for graduate studies in education and educational administration. In 1978, the trustees allocated \$156,454 for the following awards:

NELVIA M. BRADY, Minneapolis, Minnesota  
JOHN M. CHAVEZ, San Bruno, California  
CHARLENE COOPER, Baltimore, Maryland  
JACQUELINE G. HOUSTON, New Orleans, Louisiana  
STEPHEN J. MIYASATO, Vermillion, South Dakota  
ROSA A. SMITH, St. Paul, Minnesota  
CAROL J. WALLINGTON, Columbia, Maryland  
VELMA G. WATTS, Winston-Salem, North Carolina

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

The aim of this fellowship program is to increase the number of minority-group individuals in finance and management in public schools and black colleges in order to improve the quality of financial administration. In 1978, a total of \$247,300 was allocated as awards to the following individuals, or as grants for fellowship training programs to the following institutions:

COLUMBIA UNIVERSITY, New York, New York  
DEBORAH A. ISOM, Chicago, Illinois  
SHARON JOHNSON, Colonia, New Jersey  
FIDEL LOPEZ, Highland Park, Illinois  
STANFORD UNIVERSITY, Stanford, California  
UNIVERSITY OF MIAMI, Coral Gables, Florida



**Rockefeller Foundation Fellowships in Higher Education  
Administration for Minority Group Educators**

Initiated in 1974, this program offers minority-group educators opportunities to gain the experience and skills necessary to assume positions of importance in educational administration in the nation's colleges and secondary schools: \$298,050 was allocated to the following:

AMERICAN COUNCIL ON EDUCATION, Washington, D.C.  
CLARK COLLEGE, Atlanta, Georgia  
BEATRICE COSSEY, Sunnyvale, California  
FLORIDA STATE UNIVERSITY, Tallahassee, Florida  
HARVARD UNIVERSITY, Cambridge, Massachusetts  
KALAMAZOO COLLEGE, Kalamazoo, Michigan  
UNIVERSITY OF MASSACHUSETTS, Amherst, Massachusetts  
UNIVERSITY OF MIAMI, Coral Gables, Florida

**Western Service Systems**

*Lakewood, Colorado*

The Chicano Education Project provides a community education/leadership development program for Mexican-Americans.

\$300,000

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

BARBARA BLACKWELL, for an educational/leadership development internship to be administered by the University of Connecticut.

\$14,998

COLUMBIA UNIVERSITY, New York, New York, for its Library Development Center.

\$7,500

FORDHAM UNIVERSITY, New York, New York, for a graduate training program in public social services for minority-group social workers.

\$12,350

ALBERT E. MANLEY, for a research project on the effects of social change on Spelman College in particular and the Atlanta University Center institutions in general.

\$20,000

THE NATIONAL URBAN COALITION, Washington, D.C., for developing a collaborative program for urban schools in selected cities.

\$16,310

NATIONAL URBAN LEAGUE, New York, New York, for the costs of a training program for its education specialists.

\$12,454

NEW YORK UNIVERSITY, New York, New York, for the costs of the School of Law's summer program of internships in public interest law for minority students.

\$27,000

UNIVERSITY OF CALIFORNIA, Berkeley, California, for support of a study, "Educational Leadership Development: A Forecast of Future Needs."

\$35,000

UNIVERSITY OF CHICAGO, Chicago, Illinois, for an occupational analysis of the school superintendency.

\$8,571

THE UNIVERSITY OF NORTH CAROLINA, Chapel Hill, North Carolina, for a study of leadership training programs for school principals in the United States.

\$6,000

## SECURING AND PROTECTING BASIC RIGHTS

In an effort to further basic rights for all, this component focuses on support for research and action on problems of persistent racism, support for advocacy and litigation to secure the rights of disadvantaged groups, and humanistic studies of issues specifically involving minority groups. The principal new undertaking consists of national fellowships for minority-group scholars to undertake policy-oriented research designed to influence the understanding and resolution of minority-group issues.

### GRANTS:

#### ***The Children's Foundation***

*Washington, D.C.*

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

\$94,265

#### ***NAACP Legal Defense and Educational Fund***

*New York, New York*

With black unemployment twice as high as that of whites, support has been given to the fund's Employment Litigation Program for continuation of its class-action employment litigation designed to overcome the present effects of past discriminatory labor practices.

\$400,000

#### ***Puerto Rican Legal Defense and Education Fund***

*New York, New York*

The fund has established a graduate internship program under which Puerto Rican law school graduates will be assigned for one year to the fund's national office and for a second year to an outside firm or agency.

\$127,322

**University of Pennsylvania**

*Philadelphia, Pennsylvania*

The grant will enable Judge A. Leon Higginbotham, Jr., a distinguished black legal scholar and adjunct professor at the university, to carry out further historical research on race and the American legal process and to offer training in this field to associated graduate research assistants. The first volume of Judge Higginbotham's work, *In the Matter of Color*, was published to critical acclaim in 1978.

\$147,265

**Washington Research Project**

*Washington, D.C.*

The Washington Research Project maintains the Children's Defense Fund, whose purpose—by means of publications, litigation, and monitoring of federal administrative policy—is to help policymakers, the adult population at large, and social agencies understand and better serve the needs of all children.

\$400,000

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

BLACK CHILD DEVELOPMENT INSTITUTE, INC., Washington, D.C., in support of its public policy community training and monitoring activities.

\$25,000

BOSTON UNIVERSITY, Boston, Massachusetts, for fellowships in its Afro-American Journalism Program.

\$25,000

JONATHAN KOZOL, Boston Massachusetts, for a research project on desegregation in city schools.

\$18,000

THE MINORITY RIGHTS GROUP, London, England, for a study on the Chicano/Mexican-American.

\$7,450

PHELPS STOKES FUND, New York, New York, in support of its Native American Philanthropic News Service.

\$25,000

STIMULI, INC., Cincinnati, Ohio, for planning a television series, "The Continuity of African Culture in the Western Hemisphere."

\$25,000

YALE UNIVERSITY, New Haven, Connecticut, for a study, "Inflation and Deprivation: A Political Analysis."

\$26,678

# **THE ARTS, THE HUMANITIES & CONTEMPORARY VALUES**

The Rockefeller Foundation continues to maintain its long-time interest in the arts and the humanities. Its program in these fields is based upon the recognition of the humanities as a discipline that serves to clarify the role of human values in contemporary society and of the arts as a vital expression of those values.

## **THE ARTS**

The Foundation's program in the arts has as its most central focus the opportunities for creative individuals to produce artistic works. Consonant with this interest is the attempt to explore the relationship of art and the society at which it is directed, and the promotion of creative works and the performing arts to both a national and an international public. In 1978, the basic emphases of the program were:

- Support of the creative individual;
- Increasing international opportunities for the arts;
- Exploration of issues involving the arts and American society.

### **SUPPORT OF THE CREATIVE INDIVIDUAL**

The central figure in the arts is the creative person. Most current funding for the arts, however, provides support to the growing needs of institutions. Relatively few programs in government or private agencies directly aid the artists, who therefore must spend a large portion of their time in jobs at best only tenuously related to their talents. In making its grants, the Foundation has sought to enable gifted individuals to concentrate on their art for a period of time relatively free from outside pressures.

### **FELLOWSHIP PROGRAM FOR PLAYWRIGHTS**

This mechanism for identifying and promoting talented new writers includes two basic categories of awards. In the first, playwrights are selected on the basis of outside nominations and the recommendations of an independent committee of professionals to receive stipends of \$9,000 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 \$4,000 is available to the theatre for preproduction costs of the playwright's work.

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

## 1978 Playwright Awardees

JOHN ASHBERY, New York

ANNE COMMIRE, New York: McCarter Theatre Company, Princeton, New Jersey

GUS EDWARDS, New York: Negro Ensemble Company, New York, New York

HARVEY FIERSTEIN, Brooklyn, New York: La Mama Experimental Theatre Club,  
New York, New York

CORINNE JACKER, New York: Yale Repertory Theatre, New Haven, Connecticut

RICHARD LEES, Los Angeles: Guthrie Theater, Minneapolis, Minnesota

RICHARD NELSON, Brooklyn, New York: Arena Stage, Washington, D.C.

MARSHA NORMAN, Louisville, Kentucky: Actors Theatre of Louisville, Louisville,  
Kentucky

## 1978 Regional Theatre Awards

ACTORS THEATRE OF LOUISVILLE, Louisville, Kentucky

BROOM STREET THEATER, Madison, Wisconsin

DALLAS THEATER CENTER, Dallas, Texas

EAST WEST PLAYERS, Los Angeles, California

FRANK SILVERA WRITERS' WORKSHOP, New York, New York

INTAR, International Arts Relations, New York, New York

LEXINGTON CONSERVATORY THEATER, Lexington, New York

NEW PLAYWRIGHTS' THEATRE OF WASHINGTON, D.C., Washington, D.C.

OMAHA MAGIC THEATRE, Omaha, Nebraska

PROVISIONAL THEATRE, Los Angeles, California

## GRANTS:

### **Bay Area Video Coalition**

*San Francisco, California*

The coalition provides postproduction and editing equipment, links the work of independent video producers to broadcast outlets, and is a central source of news and cultural programming for television in the region.

\$60,000

### **Kansas City Art Institute**

*Kansas City, Missouri*

The institute is developing a consortium of 10 educational institutions to promote creative work by younger video artists, the exchange of students' works, and publication and distribution of printed and video materials.

\$130,000

### **KQED**

*San Francisco, California*

This PBS station is developing a 90-minute weekly program called "Screening Room," a showcase for works of independent video-tape and film makers.

\$35,000

**North Carolina School of the Arts  
Southeastern Center for Contemporary Art  
Wake Forest University**

*Winston-Salem, North Carolina*

Jointly administered by the three Winston-Salem institutions, this cooperative artists-in-residence program is designed to benefit students and residents, in addition to promoting the works of the artists selected.

\$74,000

**Paperback Television**

*San Francisco, California*

A pilot program is currently being developed for a series of independently produced "magazine format" shows dealing with various topics and cultural events.

\$80,000

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

AMERICAN DANCE FESTIVAL, Durham, North Carolina, for its Dance Television Workshop Project: Music and Dance, and Choreographers and Composers Workshop for Young Professionals.

\$12,000

AMERICAN PLACE THEATRE, New York, New York, to initiate a program in musical theatre.

\$23,500

ROBERT ASHLEY, composer, San Francisco, California, to enable him to devote time to the development of a work for television.

\$10,000

ROS BARRON, video artist, Brookline, Massachusetts, for her creative work in video.

\$9,000

ED BOWES, New York, New York, to enable him to pursue his creative work in video art.

\$1,400

BYRD HOFFMAN FOUNDATION, New York, New York, to enable Robert Wilson to pursue his creative work in theatre.

\$35,000

CABLE ARTS FOUNDATION, New York, New York, for promotion and publicity of a television series focusing on noncrisis aspects of foreign culture.

\$24,000

CABLE ARTS FOUNDATION, New York, New York, for the costs of a television program, "Group Portrait: Six Video Artists."

\$5,000

JANETTE CARTER, Hiltons, Virginia, to continue her creative work in music.

\$5,000

DARTMOUTH COLLEGE, Hanover, New Hampshire, to enable Professor Charles Hamm to devote time to a textbook on the history of the United States as seen through its music.

\$22,500

HERMINE FREED, New York, New York, for her creative work in video.	\$9,000
RON HAYS, Los Angeles, California, to enable him to devote time to his creative work in video.	\$35,000
JOSHUA HOFFMAN, sculptor, Chicago, Illinois, to enable him to devote time to his creative work.	\$23,100
JOHN KENDRICK, playwright and poet, New York, New York, to enable him to devote time to his writing.	\$2,500
LEE KONITZ, composer and musician, New York, New York, to enable him to devote time to his creative work in music.	\$25,000
ROBERT MACBETH, theatre artist and writer, New York, New York, to enable him to devote time to his writing about theatre.	\$5,000
MAGIC THEATRE, San Francisco, California, for the costs of developing new works in the theatre.	\$25,000
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts, for artists' fellowships at the Center for Advanced Visual Studies.	\$25,000
MUSEUM OF HOLOGRAPHY, New York, New York, for the costs of preparing its permanent exhibition.	\$25,000
MUSICAL OBSERVATIONS, New York, New York, for developing and testing prototypes of a programmable metronome.	\$15,000
NATIONAL BLACK THEATRE WORKSHOP, New York, New York, for its development activities.	\$20,000
NEGRO ENSEMBLE COMPANY, New York, New York, for the production of new works.	\$20,000
NEW ENGLAND CONSERVATORY OF MUSIC, Boston, Massachusetts, for the costs of a competition for American composers of opera.	\$33,500
NORTH CAROLINA DANCE THEATRE, Winston-Salem, North Carolina, for the costs of its development office.	\$20,000
JENS NYGAARD, conductor, New York, New York, to enable him to devote time to research and the performance of musical works.	\$15,000
NAM JUNE PAIK, New York, New York, to enable him to devote time to his creative work in video.	\$18,000

**PHELPS STOKES FUND**, New York, New York, to assist Marta Vega in the further development of the Visual Arts Research and Resource Center Relating to the Caribbean.

\$5,000

**LEONIE ROSENSTIEL**, New York, New York, for the research and writing of a biography of Nadia Boulanger (with the cooperation of the Humanities program).

\$5,000

**SOLARIS DANCE-THEATRE**, New York, New York, for the costs of a video-dance project.

\$5,000

**MORTON SUBOTNICK**, composer, Valencia, California, for his creative work in music.

\$3,500

**IRVING TARAN**, painter, Michigan, to enable him to devote time to his creative work.

\$9,000

**MICHAEL TILSON THOMAS**, composer, Buffalo, New York, to enable him to do preliminary research for and development of an American music project for television.

\$25,000

**FREDERICK TILLIS**, composer, Amherst, Massachusetts, to enable him to devote time to his creative work in music.

\$10,000

### **INCREASING INTERNATIONAL OPPORTUNITIES**

Artistic creativity, displayed abroad, is not only emblematic of the vitality of the artist's or performer's own society, but also a potential stimulation to creativity in other cultures. At the same time, artists or troupes performing abroad often enhance their reputations and thereby win increased support in their home countries.

Currently, there is a considerable demand by foreign nations for the cultural products of America, as there is an interested audience in the United States for artistic contributions from abroad. Interchange is inhibited, however, by a variety of problems, one of which is the initial cost of travel—traditionally an unpopular expense for funding agencies to assume. The Foundation has thus undertaken to support creative artists and organizations to increase the flow of performances between the United States and other countries.

### **GRANTS:**

#### ***African-American Institute***

*New York, New York*

The institute is developing a program of workshop tours of the U.S. by African artists who blend traditional forms with contemporary styles in music, theatre, and dance.

\$122,000



**Chelsea Theater Center***New York, New York*

The center will develop a repertory of international theatre works having relevance to contemporary life.

\$100,000

**La Mama Experimental Theatre Club***New York, New York*

To further stimulate international artistic collaboration, the La Mama has developed a program of residencies for foreign theatre artists and troupes.

\$75,000

**Rockefeller Foundation***New York, New York*

The first round of the John F. Kennedy Center-Rockefeller Foundation International Competitions for Excellence in the Performance of American Music, a program designed to encourage the performance of music often neglected in the standard repertory, was held at the Kennedy Center in September 1978. This first set of competitions was devoted to pianists.

\$62,000

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

AMERICAN CENTER FOR STUDENTS AND ARTISTS, Paris, France, for its administrative costs.

\$20,000

ATLAS THEATRE COMPANY, New York, New York, for an experimental theatre project involving international artists.

\$10,000

CABLE ARTS FOUNDATION, New York, New York, to visually document the 1978 John F. Kennedy Center-Rockefeller Foundation International Piano Competition for Excellence in the Performance of American Music.

\$10,000

CENTER FOR THEATRE PRACTICE, New York, New York, to initiate its program of workshops and small productions.

\$24,000

CHIMERA FOUNDATION FOR DANCE, New York, New York, to enable the Murray Louis Dance Company to undertake an international tour.

\$10,000

CORPORATION FOR PUBLIC BROADCASTING, Washington, D.C., for the costs of an international screening conference, INPUT.

\$25,000

## THE ARTS AND AMERICAN SOCIETY

The program also makes grants to support conferences, publications, and projects that explore ways in which the arts can be utilized practically or educationally. As an example, one conference and its resulting publication examined the effect of artistic efforts and arts therapies on people in restricted environments, such as homes for the aging, prisons, and mental institutions.

### GRANTS:

#### **Metropolitan Museum of Art**

*New York, New York*

The training program in museum education aims to educate art majors seeking to relate museums to diverse communities, as well as community-oriented persons needing education in art history and exposure to museum practices.

\$20,000

#### **New World Records**

*New York, New York*

The Foundation made its final grant on a project initiated in 1976 as a bicentennial gift to the American public. New World Records carried out the production and manufacture of a collection of 100 records tracing the social and cultural history of the United States through its music, and distributed them to major music schools, libraries, and FM and public broadcasting stations across America.

\$550,000

#### **Rockefeller Foundation**

*New York, New York*

Meetings are held at the Foundation to evaluate the program of training in museum education. Participants come from the four museums originally involved in the program, in addition to outside evaluators.

\$5,100

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

AMERICAN SHAKESPEARE FESTIVAL THEATRE AND ACADEMY OF CONNECTICUT, Stratford, Connecticut, for the costs of audience development of its new year-round operation.

\$20,000

BLACK THEATRE ALLIANCE, New York, New York, for renovating its new building, which includes performance space.

\$20,000

GLOBAL VILLAGE VIDEO RESOURCE CENTER, New York, New York, for a series of regional public television workshops in video cassette systems.

\$10,000

HUNTER COLLEGE OF THE CITY UNIVERSITY OF NEW YORK, New York, New York, for the costs of curriculum planning and development in the fine and performed arts.

\$5,000

NALANDA FOUNDATION, Boulder, Colorado, for use by the Naropa Institute to implement an arts-in-education teacher-training program.

\$35,000

NEW YORK UNIVERSITY, New York, New York, for implementing a graduate program in interactive telecommunications at its School of the Arts.

\$35,000

### **ROCKEFELLER FOUNDATION FELLOWSHIPS IN AMERICAN ART HISTORY**

In 1976, the Foundation's trustees approved a program for Fellowships in American Art History, sponsored jointly by the Arts and Humanities programs. The purpose of these fellowships is to stimulate research in pre-20th-century American art on the part of doctoral candidates enrolled at a selected group of 10 universities. The following individuals have received support under this program since its inception. The grants provided for major fellowship awards and smaller grants for research assistance and travel at each of the following 10 institutions:

#### ***Boston University***

##### *Major Fellowship Awards*

TREVOR FAIRBROTHER—John Singer Sargent: sources, influences, and development, 1870-1900.

#### ***City University of New York***

##### *Major Fellowship Awards*

LOIS DINNERSTEIN—Mariana Griswold Van Rensselaer: critical writings in art and architecture.

PHOEBE L. JACOBS—Death in 19th-century American painting.

ANNE G. TERHUNE—Thomas Hovenden (1840-95) and late-nineteenth-century American genre painting.

BRUCE WEBER—Robert Blum (1857-1903) and his milieu.

##### *Research and Travel Awards*

LOIS MARCUS—studies in 19th-century American sculpture: Augustus Saint-Gaudens.

BARBARA MICHAELS—Gertrude Kasebier.

JACQUELYN D. SERWER—the American artistic poster of the 1890's.

BETH ANN H. TREADWAY—research on American artists in Venice, 1874-86.

**Columbia University**

*Major Fellowship Awards*

OCTAVIA HUGHES—Benjamin Champney.

KENNETH MADDOX—intruder into Eden, a study of the iconological significance of the train in American art.

*Research and Travel Awards*

FRED ADELSON—Alvan Fisher (1792-1863) and modern painting and architecture.

MARIA CHAMBERLAIN HELLMAN—Thomas Eakins: his teaching and his students.

ALICE VAN BUREN—the image of youth in American art.

**University of California**

*Major Fellowship Awards*

ANN S. LEWIS—Samuel Colman (1832-1920).

*Research and Travel Awards*

SERGE GUILBAUT—French influences in American painting from 1900 to 1950.

JUDY LARSON—humor and fantasy in 19th-century American children's books.

PATRICIA TRENTON—evolution of landscape painting in Colorado.

**University of Delaware**

*Major Fellowship Awards*

NICHOLAS CLARK—17th-century Dutch influences on American 19th-century genre painting.

ELLEN LANDAU—paintings of Lee Krasner.

WILLIAM OEDEL—paintings of Washington Allston.

*Research and Travel Awards*

MARJORIE BALGE—Ordway Partridge, American sculptor.

MARGARET CLUNIE—Futurism in America.

MELVIN LADER—Peggy Guggenheim and her influence on American art.

GILBERT VINCENT—consciousness of colonial values in 19th-century American painting.

**University of Michigan**

*Major Fellowship Awards*

CARLA BRADSHER—problems in the interrelationship of American and British painting.

BEVERLY ORLOVE—the artistic reflection of American ceremonies and festivals, 1780-1825.

DIANE ROBBINS—Edith Gregor Halpers (1900-70) and the Downtown Gallery, a study in patronage.

SUSAN RYAN—a survey of Yale's architectural development from 1717 to the present.

JULIE WORTMAN—progressive in the genteel tradition: the architectural criticism of Russell Sturgis (1836-1909).

*Research and Travel Awards*

KENNETH BREISCH—theoretical bases for the Gothic revival in America.

TOM WALTERS—Hiram Power and William Rimmer.

**University of North Carolina**

*Major Fellowship Awards*

DAWN GLANZ—various aspects of imagery in 19th-century American art: themes of Western expansion.

CLAUDIA ROBERTS—American architecture: Richmond, Baltimore, Charleston, Columbia, domestic architecture of Robert Mills.

*Research and Travel Awards*

ROBERT JACKSON—20th-century art history, museums in Washington and New York.

**University of Pennsylvania**

*Major Fellowship Awards*

DAVID BAHLMAN—research on competition for the building for the Centennial Exposition in Philadelphia in 1976.

PAUL STAFFI—the paintings of S.F.B. Morse.

*Research and Travel Awards*

JEFFREY COHEN—the West Philadelphia Roadhouse.

DIANE KARP—Arshile Gorky: an iconographic study.

THERESE O'MALLEY—research on picturesque gardens and horticultural gardens in 19th-century America.

**University of Texas**

*Major Fellowship Awards*

SUSAN CARMALT—modern art and criticism in New York in the 1920's.

PETER BACON HALES—photographic archival centers in the United States.

**Yale University**

*Major Fellowship Awards*

ANNA CHAVE—Mark Rothko's paintings: the problem of subject matter.

DAVID CURRY—the Connecticut state capitol at Hartford.

MARY ALICE HINSON—a study of the architecture of the American Second Empire, 1860-1976.

CHRISTOPHER WILSON—the life and work of John Quidor.

*Research and Travel Awards*

HENRY ADAMS—the opalescent mind: a study of John La Farge.

HELEN COOPER—Winslow Homer's watercolors: a study in theme and style.

KEVIN STAYTON—investigation of interiors and furniture designed by Henry Hobson Richardson.

**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 that 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. As of this year, 78 fellows have been trained and 53 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**

### **de Young Museum (1978-79)**

**RANDOLPH HOLLIDAY**, Utah  
**SUSAN KARE**, New York  
**JOHN MAXEDON**, California  
**JESSE MCELROY**, California  
**MICHAEL MILLIGAN**, Ohio  
**LORI STARR**, New York

### **Metropolitan Museum of Art (1977-78)**

**ANN H. BRUBAKER**, Connecticut  
**BETSEY FEELEY**, Massachusetts  
**SUZANNE GELLER**, New York  
**HELEN HUBBARD MARR**, New York  
**BARBARA E. POLLARD**, New York  
**RICHARD J. POWELL**, Washington, D.C.  
**LEE A. RANSAW**, Georgia

### **Walker Art Center (1978-79)**

**ANNETTE CARLOZZI**, Minnesota  
**MARIE CIERI**, California  
**MAUD LAVIN**, Massachusetts

## **THE HUMANITIES AND CONTEMPORARY VALUES**

The overarching concern of the Foundation's work in the humanities is to further the illumination of contemporary human and social values. The program encourages humanists in their efforts to increase our understanding of the past, assess the ideals and goals of the world in which we live, explore ethical values, and preserve and revitalize the American cultural heritage.

The major program areas are:

- Contemporary values;
- Contemporary issues in humanistic perspective;
- American cultural heritage.

### **CONTEMPORARY VALUES**

The major emphasis of the Humanities program is on contemporary values—the clarification of the fundamental goals, beliefs, and values of a changing society—with particular reference to the moral and ethical dilemmas of present-day culture. Other special concerns include the transformation of the idea of progress, ongoing definitions of the concept of human rights, and the impact of modernization on the traditional values of various cultures.

## GRANTS:

### ***Asia Society***

*New York, New York*

The Asia Society's China Council conducts research and prepares and distributes materials to increase awareness in America of life and values in contemporary China.

\$112,400

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

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts, for commissioning papers and holding a conference entitled "The Transformation of the Idea of Progress."

\$35,000

AMERICAN DANCE GUILD, New York, New York, for costs and honoraria to participants in a conference on Asian and Pacific dance forms in the 20th century.

\$15,600

AMERICAN PHILOSOPHICAL ASSOCIATION, Newark, Delaware, for use by its Committee on International Cooperation for planning several international conferences in philosophy and related activities.

\$25,000

BARNARD COLLEGE, New York, New York, for a conference on programs for women in higher education.

\$20,000

GRADUATE SCHOOL AND UNIVERSITY CENTER OF THE CITY UNIVERSITY OF NEW YORK, New York, New York, for a conference on contemporary citizenship.

\$12,830

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

\$35,000

HARVARD UNIVERSITY, Cambridge, Massachusetts, for use by Dr. Robert Coles for a study of how children acquire political convictions.

\$35,000

HARVARD UNIVERSITY, Cambridge, Massachusetts, for use by the Institute of Politics in the preparation of essays and case studies on the ethical dimensions of public policy decisions.

\$25,000

LINDISFARNE ASSOCIATION, New York, New York, for its educational program.

\$35,000

MIDDLEBURY COLLEGE, Middlebury, Vermont, for incidental expenses involved in the U.S.-UNESCO symposium honoring Claude Lévi-Strauss.

\$3,000

NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for United States participation in the Sixth International Congress and General Assembly of the Division of the Logic, Methodology, and Philosophy of Science under the auspices of the International Union of the History and Philosophy of Science.

\$12,200



LEONIE ROSENSTIEL, New York, New York, for the research and writing of a biography of Nadia Boulanger (with the cooperation of the Arts program).

\$5,000

SOCIETY FOR VALUES IN HIGHER EDUCATION, New Haven, Connecticut, for an institute to study ethical decisions in the management of public and private institutions.

\$20,000

STATE UNIVERSITY OF NEW YORK, Albany, New York, for symposia in religious studies and contemporary human problems.

\$22,400

## CONTEMPORARY ISSUES IN HUMANISTIC PERSPECTIVE

This aspect of the program focuses on providing a philosophical, historical, and cultural perspective on serious issues confronting society now and in the near future. In seeking to bring a humanistic dimension to some of the prominent issues of our time, projects are often supported that reinforce and complement other Foundation programs. Examples of such topics include welfare reform, energy policy, human rights, biological experimentation on human beings, and racial discrimination.

### GRANTS:

#### **Aspen Institute for Humanistic Studies**

*Aspen, Colorado*

The institute brings together established and emerging leaders from all sectors of society to discuss and ultimately to help shape policy recommendations on contemporary issues.

\$150,000

#### **Duke University**

*Durham, North Carolina*

The Institute of Policy Sciences and Public Affairs is continuing the development of a program that will enrich its public policy curriculum with a humanistic dimension.

\$125,000

#### **National Humanities Center**

*Research Triangle Park, North Carolina*

The center, created to develop a broader role for the humanities in America, offers fellowships to scholars. The Foundation is providing support for a number of the center's fellowships that relate to projects on the cultural, social, and political issues of our times.

\$300,000

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

ACADEMY OF JUDAIC, CHRISTIAN AND ISLAMIC STUDIES, Anaheim, California, for the costs of its Program for Inter-Religious Dialogue.

\$21,000

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF THE HUMANITIES, Washington, D.C., for its activities in its first year of operation.

\$35,000

BRANDEIS UNIVERSITY, Waltham, Massachusetts, for a conference on the history of public policy.

\$4,000

GEORGIA STATE UNIVERSITY, Atlanta, Georgia, for a conference entitled "Southern Labor History."

\$9,950

MICHAEL SCAMMEL, Surrey, England, to enable him to complete a biography of Alexander Solzhenitsyn.

\$12,000

SMITHSONIAN INSTITUTION, Washington, D.C., for a conference entitled "History as an Instrument of Policy Analysis."

\$12,000

TUFTS UNIVERSITY, Medford, Massachusetts, for a conference entitled "The International News Media and the Developing World: Prospects for Cooperation."

\$4,000

UNIVERSITY OF CALIFORNIA, SANTA BARBARA, California, for a national conference on public historical studies.

\$18,800

UNIVERSITY OF MARYLAND, College Park, Maryland, for a study of the conceptual and moral problems underlying welfare reform.

\$18,500

YALE UNIVERSITY, New Haven, Connecticut, for a research project entitled "Medical Behavior at Auschwitz" (with the cooperation of the Population and Health program).

\$25,000

**AMERICAN CULTURAL HERITAGE**

Many of America's regions and people—especially black Americans and Hispanics—are inadequately represented in the national consciousness. With encouragement to be broader in their sympathies and outlook, scholars can enhance our understanding of the nation, draw upon overlooked cultural resources, and create a body of humanistic research to serve as a guide to contemporary issues based upon the country's diversity as well as its unity.

## GRANTS:

### **Center for Southern Folklore**

*Memphis, Tennessee*

The Center for Southern Folklore was founded to preserve the South's disappearing rural culture through various media: film, records, photographs, radio, tape and slide programs, and illustrated books. The folk traditions of the rural South are preserved for local community use as well as for students of folklore throughout the nation.

\$100,000

### **Columbia University**

*New York, New York*

The university's Oral History Research Office has undertaken an oral history research project for the *Dictionary of American Biography*, obtaining oral histories from distinguished American men and women.

\$150,000

### **Ethnic Archives of American Immigrant Groups**

In 1977, the trustees appropriated \$250,000 for a two-year program of grants to universities and other institutions to support the development of ethnic archives of American immigrant groups. The following are grants that were made in 1978:

KENT STATE UNIVERSITY, Kent, Ohio, for the collection and cataloguing of ethnic materials of the Baltic peoples from Finland, Estonia, Latvia, and Lithuania.

\$21,400

POLISH INSTITUTE OF ARTS AND SCIENCES IN AMERICA, New York, New York, for an archival development project on Polish émigrés active in political and labor reform.

\$38,500

TEMPLE UNIVERSITY, Philadelphia, Pennsylvania, for the university's National Immigration Archives, which is computerizing and organizing data on more than 25 million immigrants.

\$15,080

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

ALICE LLOYD COLLEGE, Pippa Passes, Kentucky, for development of a photographic archive for its Oral History Project.

\$18,800

AMERICAN UNIVERSITY, Washington, D.C., for the costs of publication of selected papers of Frederick Law Olmsted.

\$20,000

MARY ELLEN BUTE, New York, New York, for research and creative development of a film on Walt Whitman.

\$5,000

DUKE UNIVERSITY, Durham, North Carolina, for a symposium on the rights and treatment of dissidents in the United States, Europe, and the U.S.S.R.

\$4,250

FORMER MEMBERS OF CONGRESS, Washington, D.C., for an oral history project on women in Congress.

\$14,000

FOXFIRE FUND, Rabun Gap, Georgia, for developing an archive of the Foxfire collection.

\$6,870

FRONTIER NURSING SERVICE, Hyden, Kentucky, for an oral history project (with the cooperation of the Population and Health program).

\$2,000

GEORGE WASHINGTON UNIVERSITY, Washington, D.C., for preparing a book on the works of Harlem photographer James Van DerZee.

\$35,000

STANLEY I. KUTLER, Madison, Wisconsin, and MORTON PARKER, New York, New York, for the research and writing for a television series on the lives of ordinary people throughout American history.

\$31,000

WILLIAM PHILLIPS, New York, New York, for a memoir on the history of the *Partisan Review* as it relates to American intellectual and literary life.

\$15,000

RUTGERS UNIVERSITY, New Brunswick, New Jersey, for a conference, "Women, the Arts, and the 1920's in Paris and New York."

\$15,000

SEVEN SPRINGS FARM CENTER, Mt. Kisco, New York, for a conference on comparative frontier history.

\$15,000

SMITH COLLEGE, Northampton, Massachusetts, for a conference, "The New Labor History and the New England Working Classes."

\$8,000

TRUSTEES OF AMHERST COLLEGE, Amherst, Massachusetts, for establishing a film and video-tape archive at the Folger Shakespeare Memorial Library in Washington, D.C.

\$11,650

UNIVERSITY OF CHICAGO, Chicago, Illinois, for research on the history of foundations and public policy formulation in the United States from 1890 to 1970.

\$35,000

UNIVERSITY OF MICHIGAN, Ann Arbor, Michigan, for a research project, "The Twentieth Century Trade Union Woman: Vehicle for Social Change."

\$35,000

UNIVERSITY OF SOUTHWESTERN LOUISIANA, Lafayette, Louisiana, for establishing a Center for Acadian and Creole Studies.

\$8,150

## TELEVISION AND FILM

A modest effort is made to support work in television and film for cultural and educational projects related to Humanities objectives, and also the study of television and film as a social and cultural force.

### GRANTS:

#### **Yale University**

*New Haven, Connecticut*

The Media Design Studio at Yale University is devoted to the scholarly communication of ideas in a wide range of fields through the use of film and television.

\$150,000

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

AMERICAN FILM INSTITUTE, Washington, D.C., to introduce to the technical processes of filmmaking younger humanities faculty members who teach film.

\$31,500

HUDSON RIVER FILM COMPANY, Garrison, New York, for completing a film documentary of the Hudson River.

\$25,000

RED CLOUD PRODUCTIONS, Cambridge, Massachusetts, for a documentary film, *Joan Robinson: One Woman's Story* (with the cooperation of the Population and Health program).

\$25,000

UNIVERSITY FILM ASSOCIATION, Richmond, Virginia, for an International Congress of Schools of Television and Cinema.

\$10,000

### ROCKEFELLER FOUNDATION FELLOWSHIPS IN THE HUMANITIES

Established in 1974, the Humanities fellowships awards are designed to support the production of works of humanistic scholarship and reflection intended to clarify and assess the values of contemporary society. In 1978, the trustees appropriated \$700,000 for continuation of the program. At the recommendation of an outside panel of distinguished humanists, the following awards were made:

LOIS W. BANNER, lecturer in history, Princeton University—women and the “culture of beauty” from the colonial period to the present.

BETH BETHEL, associate professor of sociology, Lander College—black identity in the rural South, 1871-1977.

AUDREY BORENSTEIN, visiting assistant professor of sociology, State University of New York at New Paltz—the older woman as seen through literature and social science.

MICHAEL CONFINO, professor of history, Tel-Aviv University—the historian's craft in contemporary culture and society.

NANCY COTT, assistant professor of American studies and history, Yale University—women and feminism in 20th-century United States.

CHARLES DEBENEDETTI, associate professor of history, University of Toledo—the antiwar movement in America, 1961-75.

WILLIAM FERRIS, associate professor of American and Afro-American studies, Yale University—a study of the folktale and its relation to rural black folk culture in the Mississippi Delta.

RAYMOND GAVINS, associate professor of history, Duke University—Southern black ideology and strategy in the age of segregation, 1915-55.

CHARLES HAMPDEN-TURNER, director, Interdisciplinary Studies, The Wright Institute, California—cultural perspectives on economic problems in Great Britain.

THOMAS L. HASKELL, associate professor of history, Rice University—changing American attitudes toward moral responsibility for criminal acts.

LARRY HIRSCHHORN, assistant professor of city and regional planning, University of Pennsylvania—work, the life cycle, and social policy: new dimensions of social development.

ANTON KAES, associate professor of German and comparative literature, University of California, Irvine—the impact of American popular culture on Germany in the 1920's.

ANNETTE KOLODNY, associate professor of English, the University of New Hampshire, Durham—the responses of pioneer women to American frontiers (1700-1870).

MURRAY KRIEGER, university professor of English, University of California, Irvine—art and artifact in a commodity culture.

DAN L. LEMAHIEU, assistant professor of history, Lake Forest College—the relationship between high culture and popular culture in Britain between the wars.

HOWARD LESNICK, professor of law, University of Pennsylvania—the democratization of advocacy.

MIRA LIEHM, Philadelphia, Pennsylvania—Italian film since World War II.

DAVID S. LOVEJOY, professor of history, University of Wisconsin, Madison—the role of religion in American society as seen through early American radical religious groups.

JOHN McDONALD, associate professor of English, University of Notre Dame—American sculpture and literature: toward a unified aesthetic.

ROBERT MEISTER, assistant professor of politics, University of California, Santa Cruz—institutions and individual rights: morality, politics, and law.

NICOLAUS MILLS, professor of literature, Sarah Lawrence College—the crowd in literature: the American experience.

TERRY NARDIN, associate professor of political science, State University of New York at Buffalo—international law and the moral structure of world politics.

JEROME NEU, assistant professor of philosophy, University of California, Santa Cruz—the mental element in the law: psychological concepts and the interpretation of legal principles.

BARRY O'CONNELL, assistant professor of English and American studies, Amherst College—coal miners and the life of the nation, 1930-60.

ELAINE H. PAGELS, professor of religion, Barnard College—politics and religion: the origins of Christianity.

ROBERT O. PAXTON, professor of history, Columbia University—Vichy France and the Jews, 1940-44.

RUTH ROSEN, assistant professor of history, University of California, Davis—a history of prostitution in American culture and society.

MICHAEL ROSENTHAL, associate dean, Columbia University—youth movements in the early 20th century: Lord Baden-Powell and the origin and development of the Boy Scouts in England.

MARTIN J. SHERWIN, lecturer in history, Princeton University—science, scientists, and national security as seen through the life of J. Robert Oppenheimer.

MILTON SINGER, Paul Klapper professor of the social sciences and professor of anthropology, University of Chicago—diversity and unity in a changing American identity, a comparative cultural study.

DAVID SPITZ, professor of political science, Hunter College and Graduate Center, City University of New York—toward a contemporary theory of liberalism.

SARAH J. STAGE, assistant professor of history and American civilization, Williams College—women and the progressive impulse in American history.

**ROBERTO O. MANGABEIRA UNGER**, professor of law, Harvard University—social theory: the possible and the necessary in politics.

**JONATHAN M. WIENER**, associate professor of history, University of California, Irvine—modernization theory, comparative history, and social change in the developing world.



# QUALITY OF THE ENVIRONMENT

The Foundation's Quality of the Environment program was established in 1969 to improve the understanding of environmental issues. Toward this end, the program has assisted institutions and provided research fellowships, contributing significantly to the amelioration of critical environmental problems in the United States and abroad. Having determined that it has met the initiated goals and that its existing projects can be administered effectively by other Foundation divisions, the trustees, in a 1977 review, decided on the orderly termination of the program as of June 30, 1978. A comprehensive evaluation and history of the program is being prepared.

The major accomplishments of the Quality of the Environment program during the past five years have been concentrated in the following components, under which ongoing grants, begun before the termination of the program, are still being carried out:

- Water quality management
- Wastewater management
- Regional environmental planning
- Alternatives to highly toxic pesticides

## WATER QUALITY MANAGEMENT

Foundation grants in support of research on water quality management, with emphasis on contamination of ground and surface water by fertilizer application and agricultural runoff, have yielded important results. These include new policies and improved practices with regard to nitrogen fertilizer usage in the Midwest and the publication of a definitive text that has influenced practices and regulations concerning agricultural and waste material disposal in the Northeastern United States.

### GRANTS:

#### **Charles F. Kettering Foundation**

*Dayton, Ohio*

In collaboration with other institutions, the Charles F. Kettering Research Laboratory is conducting research leading to the development of a nitrogen fertilizer generator for on-farm use.

\$51,700

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

JOHN MUIR INSTITUTE, Napa, California, for research on the relationship between surface water and groundwater in the Western United States.

\$24,310

## WASTEWATER MANAGEMENT

Programs conducted by various institutions have demonstrated successfully the value of biological approaches to wastewater management and recycling. Among these institutions are the University of Florida, Woods Hole Oceanographic Institute, Michigan State University, the University of California at Los Angeles, the Associated Universities' Brookhaven Laboratory, and the City University of New York. In addition, improved practices and official state guidelines on the subject are now in use in Florida, and new techniques are gaining professional and public acceptance elsewhere.

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

UNIVERSITY OF ARIZONA, TUCSON, ARIZONA, for research and testing of the biological waste treatment potential of the bacterium *Acinetobacter phosphadevorus*.

\$20,000

## REGIONAL ENVIRONMENTAL PLANNING

Since its inception, the Quality of the Environment program has recognized the interrelated characteristics of most major environmental problems and has made efforts to provide funding of a regional rather than a local nature. Such support has resulted in successful environmental planning and management projects in the Hudson Basin region. The findings of research done by Oregon State University were implemented through development of a statewide energy policy, and initiatives undertaken by the Rocky Mountain Institute have contributed to the reorganization of agencies throughout an eight-state region. Activities concerned with coastal zone management have also produced useful and promising results.

### GRANTS:

#### **Academy of Natural Sciences**

*Philadelphia, Pennsylvania*

The academy is conducting research and writing a treatise on river ecosystems for students, engineers, planners, industrialists, government officials, and lay people.

\$75,000

#### **Institute for Policy Research**

*Denver, Colorado*

The institute is designing and producing a regional workshop and development plan for the adoption of appropriate technology in natural resources management.

\$48,329

**Massachusetts Institute of Technology**

*Cambridge, Massachusetts*

MIT is conducting research and training to enhance the practice of environmental impact assessment.

\$211,894

**North Carolina State University**

*Raleigh, North Carolina*

In cooperation with the University of North Carolina at Chapel Hill, the State University is involved in research on the effects of continuous noise on employees in industrial environments.

\$80,000

**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 that is developing new and more effective statistical methodologies designed to determine more accurately the relationships between environmental contamination and human health.

\$60,000

**University of British Columbia**

*Vancouver, Canada*

The university's Westwater Research Centre is conducting studies of river basin management in African areas easily affected by dramatic fluctuations in their regional politics and international relations (with the cooperation of the International Relations program).

\$6,250

**University of Washington**

*Seattle, Washington*

The Institute of Marine Sciences is conducting research to improve the management of resources in the North Pacific.

\$66,667

**University of Wisconsin**

*Madison, Wisconsin*

In collaboration with the Instituto Tecnológico y de Estudios Superiores de Monterrey, the University of Wisconsin is undertaking a case study of Mexico. The institutions will analyze the environmental situation and develop models of alternative energy and environmental policies for Mexico.

\$79,800

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

ACADEMY OF NATURAL SCIENCES, Philadelphia, Pennsylvania, for completion of a project on river ecosystems.

25,000

BRONX FRONTIER DEVELOPMENT CORPORATION, Bronx, New York, for development of a composting and gardening program in the South Bronx.

\$19,575

CONNECTICUT EDUCATIONAL TELECOMMUNICATIONS CORPORATION, Hartford, Connecticut, for a pilot film on problems of the American environment.

\$17,000

CONSERVATION FOUNDATION, Washington, D.C., for a report on the California Coastal Zone Commission.

\$15,000

CORNELL UNIVERSITY, Ithaca, New York, for disseminating research on public participation in environmental disputes.

\$11,450

COUNCIL FOR AGRICULTURAL SCIENCE AND TECHNOLOGY, Ames, Iowa, for production of a directory of environmental scientists in agriculture (with the cooperation of the Conquest of Hunger program).

\$5,000

DUKE UNIVERSITY, Durham, North Carolina, for use by its Marine Laboratory for research on marine environmental problems.

\$15,000

HUGH GARDNER, Denver, Colorado, for a study on decentralization processes in the United States.

\$12,150

WALTER HOLLANDER, Baltimore, Maryland, for completion of an oral history of Dr. Abel Wolman and his work in the environmental sciences.

\$17,000

INFORM, New York, New York, for work on an educational handbook on environmental planning in the land development industry.

\$6,116

NATIONAL ACADEMY OF SCIENCES, Washington, D.C., for an international forum on the safety evaluation of chemicals.

\$20,000

NEW YORK ACADEMY OF MEDICINE, New York, New York, for a symposium on the environmental effects of sulfur oxides and related particulates.

\$5,350

NEW YORK UNIVERSITY, New York, New York, for a comparative study of the management of environmental conflicts in the United States, Germany, and England.

\$25,000

POLICY STUDIES ORGANIZATION, Urbana, Illinois, for a symposium on environmental policy.

\$2,700

RESOURCES FOR THE FUTURE, Washington, D.C., for completing a book on current issues of U.S. environmental policy, with an emphasis on air and water pollution control and toxic substances legislation.

\$25,000

SCENIC HUDSON FOUNDATION, New York, New York, for an educational project about the Hudson River.

\$5,000

SMITH COLLEGE, Northampton, Massachusetts, for a symposium on energy and the environment.

\$5,000

SOUTHERN GROWTH POLICIES BOARD, Research Triangle Park, North Carolina, for a scholar-in-residence program on alternative Southern growth policies.

\$22,000

UNIVERSITY OF DENVER, Denver, Colorado, for research by its Center for Public Issues on the formulation of environmental policy alternatives to various issues in the Rocky Mountain region.

\$25,000

UNIVERSITY OF EAST ANGLIA, Norwich, England, for an international conference on climate and history.

\$15,000

UNIVERSITY OF MICHIGAN, Ann Arbor, Michigan, for an international review of scientific research on the buildup of carbon dioxide in the atmosphere.

\$7,500

UNIVERSITY OF TORONTO, Toronto, Canada, for its Institute for Environmental Studies to develop a program on environmental monitoring.

\$30,000

UNIVERSITY OF WASHINGTON, Seattle, Washington, for research and preparation of a study on biogeochemical cycles.

\$25,000

UTAH STATE UNIVERSITY, Logan, Utah, for research on the management of drought effects in the United States.

\$34,699

## ALTERNATIVES TO HIGHLY TOXIC PESTICIDES

Through its Quality of the Environment and Conquest of Hunger programs, the Foundation has supported research on alternatives to highly toxic pesticides. Among the breakthroughs that have resulted is the development of a series of biodegradable analogs of DDT and the discovery of pheromones and juvenile hormones that have demonstrated their effectiveness in managing agricultural pests and human disease vectors.

### GRANTS:

#### **Cornell University**

*Ithaca, New York*

The university is working on research to improve methods of pest control. Its research involves interactions among soils, insects, microorganisms, and plants. One result is the isolation and identification of microbes that will act as inhibitors to plant disease and insect attack.

\$54,000

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

**CORNELL UNIVERSITY**, Ithaca, New York, to undertake projects on the costs of pesticide use and the importance of various biota in the maintenance of a quality environment.

\$30,000

**ROCKEFELLER FOUNDATION**, New York, New York, for a conference held for investigators and funding agencies to expand research on the problems of pest control.

\$6,000

### **ROCKEFELLER FOUNDATION FELLOWSHIPS IN ENVIRONMENTAL AFFAIRS**

The Rockefeller Foundation's Fellowships in Environmental Affairs provide opportunities for independent research, leadership development, and public service to qualified men and women. In 1978, the following awards were made:

**DAVID B. BROOKS**, an economist who served as director of the Office of Energy Conservation in the Canadian Department of Energy, Mines and Resources—to conduct research and prepare publications on the role of energy conservation and renewable energy resources in alternative energy policies for Canada.

**ROBERT N. COATS**, recent Ph.D. graduate in forestry and conservation from the University of California, Berkeley—to develop improved methods for evaluating the cumulative environmental impact of timber harvests and for incorporating these methods into the California State Board of Forestry's assessment and decision-making processes while associated with the John Muir Institute for Environmental Studies, Napa, California.

**JOHN CROWTHER**, physicist from the University of Strathclyde in Scotland—to evaluate the applicability of systems analysis to the design, operation, and maintenance of sewage treatment plants while a visiting investigator in the Environmental Systems Department of Harvard University.

**ANNE DESJARDINS**, recent Ph.D. graduate in biochemistry from Emory University—to investigate the molecular basis of highly evolved plant-pathogen systems as a component of a major research program at the University of Colorado seeking development of environmentally improved pathogen control strategies.

**GERALD T. GARDNER**, associate professor of psychology at the University of Michigan—to apply experimental psychology to the study of human cognitive and perceptual processes that contribute to problems of overpopulation, excess energy use, and environmental pollution while a visiting investigator at Yale University.

**MICHAEL GERRARD**, a lawyer who has served with the Natural Resources Defense Council—to conduct research on the relationships between environmental pollution and employment.

R. KENNETH GODWIN, associate professor of political science at Oregon State University—to examine the usefulness of the “commons” paradigm in understanding environmental issues and its value in environmental policy formation while a visiting investigator at Resources for the Future.

ROBERT D. HAMRIN, economist from the Joint Economic Committee of the U.S. Congress—to conduct research on America’s long-term economic growth and to prepare a publication to be entitled *U.S. Economic Growth from 1976-1986: Prospects, Problems, and Patterns*.

MARK E. HANSON, recent Ph.D. graduate in systems analysis from the University of Wisconsin—to develop procedures for the improved assessment of long-term factors affecting the relationships between energy supply and use and associated environmental impacts while associated with the International Institute for Applied Systems Analysis in Austria.

WILLIAM KAHRL, historian—to conduct research and prepare a major publication on the exploitation of the water resources of Owens Valley, California, by the City of Los Angeles.

BRIAN MARTIN, geochemist who served as the scientific adviser for UNEP’s global and environmental monitoring system—to conduct research on the costs associated with marine environmental monitoring and assessment while a visiting investigator at the Center for International Studies of the Massachusetts Institute of Technology.

JOSEPH NALVEN, recent Ph.D. graduate in anthropology from the University of California, San Diego—to study the policymaking and planning processes in the Tijuana region of Mexico as they relate to the San Diego County Air Pollution Control District’s efforts to develop a coordinated regional air quality management program for the San Diego-Tijuana region.

ERNEST PARTRIDGE, philosophy instructor at Weber State University—to investigate the present generation’s duty to posterity and the relationship of this philosophical problem to environmental management.

ROBERT W. RISEBROUGH, ecologist at the Bodega Marine Laboratory of the University of California—to investigate the political and economic aspects of krill harvesting in the Antarctic with particular reference to the Soviet Union and Eastern European countries that plan to exploit krill resources.

JOANN ROSKOSKI, recent Ph.D. graduate in ecology from Yale University—to conduct research on nitrogen fixation in the humid tropics while associated with the Instituto de Investigaciones sobre Recursos Bioticos in Jalapa, Mexico.

HILLEL SHUVAL, professor of environmental health at Hebrew University, Jerusalem—to participate in an interdisciplinary research program at the University of Michigan seeking to develop an improved cost effectiveness methodology for environmental health planning in developing countries.

RICKIE STERNE, assistant professor of plant pathology at the University of Arkansas—to develop in cooperation with the investigators from Michigan State University a plant disease component for an integrated pest management system for cotton.

## SPECIAL INTERESTS AND EXPLORATIONS

The Foundation, through the SIE program, makes occasional grants to support activities of importance that are not covered by existing programs. For example, grants have been made to Support Services Alliance, an organization that considers the role of the small-business owner, and to the newly created Commission on the Humanities.

Grants related to the special interests of the Foundation as an institution, and support for the Rockefeller Archive Center and the Bellagio Study and Conference Center, also fall within this program.

### GRANTS:

#### **Columbia University**

*New York, New York*

Little research attention has been given to problems of youth employment and unemployment on an international, comparative basis. The university is undertaking such a study to achieve a better understanding of the changing attitudes of young people in selected industrialized countries, including the United States.

\$300,000

#### **Commission on the Humanities**

*Stanford, California*

The Rockefeller Foundation-sponsored Commission on the Humanities will assess the present state of the humanities in America and recommend priorities for the country's attention in the coming decade.

\$400,000

#### **Overseas Development Council**

*Washington, D.C.*

The Overseas Development Council analyzes development policy issues and disseminates information through publications and meetings. It educates the public to increase American understanding of development problems and processes in the poor countries of Latin America, Asia, and Africa.

\$300,000

#### **Rockefeller University**

*New York, New York*

The Rockefeller Archive Center, established in 1974, serves as a research facility and a permanent repository for the archival material of Rockefeller University, the Rockefeller Foundation, the Rockefeller Brothers Fund, members of the Rockefeller family, and the philanthropic organizations that they have created or supported. The Foundation's grant to the university was for costs for the operation of the Foundation's archives at the center. In 1978,



a total of 59 scholars visited the center to use Foundation records or collections.

\$264,900

**Support Services Alliance**

*New York, New York*

SSA's purpose is to provide people who are self-employed or in small organizations (both business and nonprofit) with access to goods and services on the same basis as they are available to people in large organizations.

\$250,000

**Winrock International Livestock Research and Training Center**

*Morrilton, Arkansas*

The principal mission of the center, established in 1975, is to increase the contribution of animal agriculture to human well-being and nutrition. The Foundation's grant provides support for the center to further carry out its mission at home and abroad.

\$150,000

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

CH'ANG-TU HU, New York, New York, for research on recent educational developments in the People's Republic of China.

\$4,000

COLUMBIA UNIVERSITY, New York, New York, for a conference on Italy in the 1970's and its prospects for the 1980's.

\$6,500

EDUCATIONAL FACILITIES LABORATORIES, New York, New York, for a study on educational and economic assessment of the City University of New York.

\$10,000

NATIONAL EXECUTIVE SERVICE CORPS, New York, New York, for development of its program on the management of educational, health, arts, and social service organizations.

\$35,000

HILARY NG'WENO, Nairobi, Kenya: the John D. Rockefeller 3rd Youth Award, 1977, of \$10,000, for leadership in the establishment of independent journalism in Africa.

\$13,875

RENAULT A. ROBINSON, Chicago, Illinois: the John D. Rockefeller 3rd Youth Award, 1978, of \$10,000, for leadership to end racial discrimination and abuse.

\$11,000

UNITED NATIONS ASSOCIATION OF THE UNITED STATES OF AMERICA, New York, New York, for institutional support.

\$35,000

UNIVERSITY OF CHICAGO, Chicago, Illinois, for work by the Center for the Study of Welfare Policy on critical issues in the development of domestic urban policy.

\$35,000

UNIVERSITY OF NOTRE DAME, Notre Dame, Indiana, for a study of the Eisenhower administration's record in civil rights.

\$35,000

UNIVERSITY OF NOTRE DAME, Notre Dame, Indiana, for institutional support.

\$3,000

DONALD WOODS, Cambridge, Massachusetts, for a fellowship at Harvard University's Neiman Foundation for Journalism.

\$25,000

WORLDWATCH INSTITUTE, Washington, D.C., for an international study on the interaction of employment needs and resource availabilities.

\$35,000

### **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 Third World countries. All conferences held at the center are related in some way to the Foundation's own programs. Each year, the Foundation invites a number of persons or organizations outside the Foundation who have so requested 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 four weeks each, to scholars, writers, and composers engaged in major writing projects. During 1978, the center was able to accommodate 72 men and women of recognized distinction from 14 countries.

The center is administered from the Foundation's New York office by a committee of which Dr. John J. McKelvey, Jr., is currently the chairman.

The following conferences were held at the center during 1978:

*Medical Termination of Pregnancy*—Harriet F. Pilpel, Chairperson, Law Panel, and Dr. G.T.M. Cummins, Chairperson, International Medical Advisory Panel, International Planned Parenthood Federation. Physicians, lawyers, international civil servants, law professors, and IPPF staff

conducted a comparative study of the existing national legislation and customs with regard to the medical termination of pregnancy. Participants came from Nigeria, Ghana, Tanzania, Gambia, Malaysia, the Philippines, Yugoslavia, Italy, Bangladesh, India, Lebanon, Sudan, Canada, Brazil, the U.K., and the U.S.

*The Impact of Automation on Workers' Motivation II*—Betty M. Jacob, the Research Corporation of the University of Hawaii. Participants did the final editing of a multivolume, five-year study entitled *The Impact of Technological Change on Workers' Motivation*, which compares workers' attitudes toward automation and other technological changes in 16 industrialized countries of Europe and North America.

*Industrial Policy in the 1980's*—William Diebold and Edward Morse, Council on Foreign Relations, New York City. International industrialization, one of the 12 general subjects under examination in the 1980's project, was discussed by a group of scholars and government officials from Germany, the U.K., France, Sweden, Canada, Japan, and the U.S.

*European Educational Reforms Regarding U.S. and Foreign Student University Admission*—Joan H. Joshi, Vice-President for Educational Services, Institute of International Education, New York, and Barbara Burn, Director of International Programs, University of Massachusetts, Amherst. Participants considered higher educational reforms in the following countries: Germany, Spain, Italy, the U.K., France, Scandinavia, the Netherlands, and Belgium.

*Genetics in Relation to Insect Management*—John J. McKelvey, Jr., The Rockefeller Foundation, and Carl Koehler, University of California at Berkeley. A group of international scientists met to review the past and present state of the field of insect genetics as related to insect management; to define objectives and goals that appear within reach during the next decade; and to identify the benefits for mankind of such goals. Participants came from Brazil, Canada, Japan, Kenya, Switzerland, Australia, and the U.S.

*The Future of Community Medicine*—Willoughby Lathem, The Rockefeller Foundation. An international group of experts in the field of community medicine reviewed and evaluated the activities and past accomplishments of university-based community medicine and described future needs and requirements. The participants came from the U.S., the U.K., Guatemala, Colombia, Nigeria, Kenya, Cameroon, Ghana, the Philippines, Brazil, and New Zealand. Some medical officers of the Foundation and some field staff members also attended.

*Financial Problems of City Governments in Western Europe*—Kenneth Newton, Nuffield College, Oxford University, England. A group of

Europeans, all of whom were doing research into the fiscal problems of one or more European cities—in the U.K., Italy, Norway, West Germany, and Denmark—worked on a report to analyze the problems of urban finance.

*Nuclear Proliferation: Prospects and Policies*—Christoph Bertram, Director, International Institute for Strategic Studies, London, and William Kincade, Executive Director, Arms Control Association, Washington, D.C. Leading young scholars, selected from a pool of nominees whose names were solicited by IISS and ACA from a broad range of academic and research institutes in Canada, the U.S., Western Europe, Asia, and Africa, discussed nuclear proliferation and arms-control issues.

*A Typology of Cultural Agreements and an Assessment of Their Efficiency*—Professor Jacques Freymond, Graduate Institute of International Studies, Geneva. Officials and scholars from countries of Eastern and Western Europe who were signatories to the Helsinki Agreement of 1975 met to discuss ways of implementing the “Final Act” of the Helsinki Agreement, which called for the strengthening of peace and understanding among peoples by increased cultural and educational exchanges, broader dissemination of information, and more contact among people working toward the solution of humanitarian problems.

*The Impact of Economic Development on Cultural Values in Developing Countries*—Joel Colton, The Rockefeller Foundation. A group of scholars and international field staff from the U.S., Europe, Africa, Latin America, and Asia examined the effects of economic development on the transformation of values in Third World countries.

*International Forum on Safety Evaluation of Chemicals*—Philip Handler, President, National Academy of Sciences, Washington, D.C., and Norton Nelson, Professor and Chairman, Institute of Environmental Medicine, New York University Medical Center, New York. Many countries over the past several decades have developed chemical-control legislation aimed at minimizing health and environmental effects. Members of the Forum proposed that a continuing international forum be established to provide a setting in which scientific and technical aspects can be discussed to improve approaches to safety evaluation and for the exchange of new and developing knowledge in this field.

*Tsetse Fly/Trypanosomiasis Task Force*—John J. McKelvey, Jr., The Rockefeller Foundation. The objective of this task force was to advise USAID and, in a broader sense, donor agencies and African governments concerned about tsetse fly/trypanosomiasis problems about those priorities in research and control where they might best make their investments. At this final meeting of the task force, individual reports of members and

consultants were organized into a cohesive report with recommendations from the group.

*New Conceptual Approaches to Migration in the Context of Urbanization—Peter A. Morrison, The Rand Corporation.* Participants in this seminar focused on the role of urbanization as a basic determinant of contemporary migration patterns in both developed and less-developed countries. The participants came from Nigeria, Argentina, Israel, Italy, Japan, India, Ghana, Canada, Hungary, the U.K., and the U.S.

*Religion, Anti-Slavery, and Reform—Roger T. Anstey, University of Kent, Canterbury, England.* A group of historians, primarily from Europe, met to examine and compare the various antislavery movements in Europe and the United States during the 100-year period 1775 to 1875. Participants came from the U.K., France, the Netherlands, Denmark, Finland, and the U.S.

*Principles and Guidelines for the Discharge of Specific Wastes in the Mediterranean—Eugenio de Fraja Frangipane, Institute of Sanitary Engineering, Milan, Italy.* The Institute of Sanitary Engineering in Milan was charged by the World Health Organization (Geneva), together with the United Nations Environment Programme (Nairobi), to prepare, in collaboration with international experts, a report on the guidelines for the discharge of specific wastes in the Mediterranean, and to organize in Italy an international meeting to discuss and review the report.

*Political Clienteleism and Development in the Non-Western World—Rene Lemarchand, University of Florida.* A group of international scholars examined the phenomenon of “clienteleism,” the various types of patron-client ties, forms of patronage, and ritual kinship patterns which have developed in traditional societies and which are then carried over into the political arena in Third World countries, even after the countries achieve independence and have made substantial progress toward modernization. The participants came from Italy, France, Canada, the U.K., Israel, and the U.S., as well as from several African countries.

*Higher Education and Political Development—James S. Coleman and Joseph E. Black, The Rockefeller Foundation.* Participants in this conference focused directly on the relationships between higher education and political development in Africa. They paid particular attention to the growth of national universities, with special emphasis on how these institutions have affected the development of political systems and how, in turn, the universities have been affected by political developments. Participants came from Nigeria, Zaïre, Tanzania, Kenya, Sudan, Canada, the U.S., Belgium, and the U.K.

*Methods of Fostering More Quality-of-Life Research—Lester Milbrath, State University of New York at Buffalo.* An international group of social scientists involved in furthering international research on the ecological aspects of the quality of life met to determine what specific steps should be taken to foster such research on an international level and what direction this research should take.

*Power, Rationality, and Democracy—Roberto M. Unger, Harvard University Law School.* Participants reexamined some of the dominant economic, political, and social theories with a view to their applicability to problems of governance in Third World countries, particularly in Latin America.

*Parasites of the Gut—Kenneth S. Warren, The Rockefeller Foundation.* Government officials, international civil servants, and researchers focused on ways in which more international support and effort can be directed toward the control of intestinal helminths and protozoa, which cause such diseases as ascariasis, hookworm, strongyliasis, tapeworm, trichuriasis, enterobiasis, giardiasis, and amebiasis.

*Nigerian/American Relations—John Stremiau, The Rockefeller Foundation and Bolaji Akinyemi, Director General, Nigerian Institute of International Affairs.* Participants examined the conflict in southern Africa, the world energy situation, and the world trade in arms. An effort was made to set forth both U.S. and Nigerian policy perspectives with a view to better understanding the likely course of relations between these two countries and how they may interact within the more general framework of African regional politics and the north/south dialogue.

*Integrated Crop and Animal Production to Optimize Resource Utilization on Small Farms in Developing Countries—James E. Johnston, The Rockefeller Foundation, and R. E. McDowell, Professor of Animal Husbandry, Cornell University, Ithaca, New York.* Participants in this conference objectively evaluated the pros and cons of new approaches to small farms development that will improve the efficiency of utilization of available resources through the use of integrated crop-animal production systems.

*Appropriate Technology for the Development of Third World Countries—Liberio Della Briotta, Luciano Vernetti, and Giorgio de Luca, Agenzia Terzo Mondo, Milan, Italy.* Representatives from 13 African countries and five Italian universities met to establish better contacts between the European community and the Third World, and also to discuss various scientific and academic areas, particularly the area of advanced technology.

*Higher Education and Development in the Arab World—Khosrow Mostofi,*

*Middle East Center, University of Utah, Salt Lake City.* Twenty educators, about half from the Arab world and half from various areas in the United States, met to assess development of higher education institutions in the Arab world and to consider means for expansion of cooperative efforts in the future.

*Cotton Development International—John A. Pino, The Rockefeller Foundation.* A prospectus for the establishment of Cotton Development International, an effort to strengthen the production and utilization research relative to cotton and cotton fibers, was published in June 1977. Although the response was generally encouraging, some countries took no clear position on CDI. Therefore, an informal meeting was held to help to work out some of the complex issues holding up the process of having governments convene to take action on the proposal.

## FELLOWSHIPS

During 1978, a total of 213 persons held general Foundation fellowships, 5 held postdoctoral fellowships in the Social Sciences and 3 in the Agricultural Sciences under the Conquest of Hunger program, and 14 held visiting research fellowships.

Of the general fellowship awards, 165 that began in previous years continued active in 1978, and 48 new awards became active during the year. Their distribution is as follows:

	<i>Study awards from previous years continued into 1978</i>	<i>New awards in 1978</i>	<i>Number of awards active in 1978</i>
<b>AGRICULTURAL SCIENCES</b>	<b>62</b>	<b>23</b>	<b>85</b>
<b>NATURAL AND ENVIRONMENTAL SCIENCES</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>HEALTH SCIENCES</b>	<b>22</b>	<b>6</b>	<b>28</b>
<b>POPULATION DIVISION</b>		<b>1</b>	<b>1</b>
<b>SOCIAL SCIENCES</b>	<b>72</b>	<b>11</b>	<b>83</b>
<b>HUMANITIES</b>	<b>8</b>	<b>6</b>	<b>14</b>
	<b>165</b>	<b>48</b>	<b>213</b>

For 1978, the trustees approved a fund of \$3,375,000 for the three types of fellowships mentioned above. A fund of \$3,465,000 was approved for allocation during 1979.

Rockefeller Foundation fellows in 1978, under the general fellowship program, came from the following countries:

	<i>Previous awards</i>	<i>New awards</i>		<i>Previous awards</i>	<i>New awards</i>
<b>Brazil</b>	<b>8</b>	<b>2</b>	<b>Nigeria</b>	<b>6</b>	<b>2</b>
<b>Chile</b>	<b>1</b>		<b>Paraguay</b>	<b>1</b>	
<b>Colombia</b>	<b>10</b>	<b>1</b>	<b>Peru</b>	<b>2</b>	
<b>Costa Rica</b>	<b>2</b>		<b>Philippines</b>	<b>7</b>	<b>1</b>
<b>Dominican Republic</b>	<b>1</b>		<b>Portugal</b>		<b>1</b>



<b>Ecuador</b>	<b>1</b>		<b>Tanzania</b>	<b>8</b>	<b>1</b>
<b>El Salvador</b>	<b>1</b>		<b>Thailand</b>	<b>31</b>	<b>7</b>
<b>Ethiopia</b>	<b>1</b>	<b>1</b>	<b>Tunisia</b>	<b>1</b>	
<b>Guatemala</b>	<b>5</b>	<b>1</b>	<b>Turkey</b>		<b>3</b>
<b>Indonesia</b>	<b>19</b>	<b>6</b>	<b>Uganda</b>	<b>4</b>	
<b>Kenya</b>	<b>10</b>	<b>2</b>	<b>United States</b>	<b>23</b>	<b>16</b>
<b>Lebanon</b>	<b>2</b>		<b>Zaire</b>	<b>16</b>	<b>3</b>
<b>Mexico</b>	<b>5</b>	<b>1</b>			
				<b>165</b>	<b>48</b>

## 1978 GENERAL FELLOWSHIP AWARDS

*Key to abbreviations in the following section:*

*F—Fellow, GND—Great Neglected Diseases, RB—Reproductive Biology, AS—Agricultural Sciences, HS—Health Sciences, SS—Social Sciences, HUM—Humanities, NES—Natural and Environmental Sciences, PD—Population Division.*

### CONQUEST OF HUNGER

#### **Colombia**

LOBO ARIAS, MARIO, M.S., National University of Colombia, 1973. Genetics and breeding. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. F-AS

#### **Ethiopia**

TAREKE BERHE, M.S., Washington State University, 1974. Genetics and breeding. Appointed from Addis Ababa University. Place of study: U.S.A. F-AS

#### **Guatemala**

RUANO ANDRADE, SERGIO, B.A., University of San Carlos, 1975. Agricultural economics. Appointed from Institute of Science and Agricultural Technology. Place of study: U.S.A. F-SS

## **Mexico**

ORTEGA MARTINEZ, ENRIQUE I., M.S., Kansas State University, 1975. Agronomy. Appointed from International Maize and Wheat Improvement Center. Place of study: U.S.A. F-AS

## **Nigeria**

LAWANI, STEPHEN MAJEBI, M.S., Columbia University, 1968. Library science. Appointed from International Institute of Tropical Agriculture, Ibadan. Place of study: U.S.A. F-AS

## **Portugal**

PEGO, SILAS ESTEVES, M.S., Instituto Superio de Agronomia, 1971. Genetics and breeding. Appointed from National Institute of Agrarian Research, Lisbon. Place of study: U.S.A. F-AS

## **Thailand**

BOONRUKSA TUISIRI, M.S., North Carolina State University, 1976. Soil science. Appointed from Department of Agriculture, Bangkok. Place of study: U.S.A. F-AS

SOMPOP KASSUMMA, M.S.A.H., Araneta University, Philippines, 1971. Animal breeding. Appointed from Office of Livestock Development Project, Bangkok. Place of study: U.S.A. F-AS

## **Turkey**

EKSE, ALI OSMAN, B.S., Ege University, 1965. Genetics and breeding. Appointed from Ege Regional Agricultural Research Institute. Place of study: U.S.A. F-AS

SAKAR, DOGAN, B.S., Aegean University, 1971. Genetics and breeding. Appointed from Wheat Research and Training Center, Ankara. Place of study: U.S.A. F-AS

SENEL, ATILA HUSEYIN, B.S., Ankara University, 1972. Agronomy. Appointed from Agricultural Research Institute, Adapassari. Place of study: U.S.A. F-AS

## **United States**

CALDWELL, JOHN STEPHEN, M.A., University of Tokyo, 1975. Horticulture. Appointed from Louisiana State University. Place of study: Taiwan, Philippines. F-AS

HAUGLAND, RICHARD ALAN, Ph.D., Ohio State University, 1978. Genetics and breeding. Appointed from Ohio State University. Place of study: Canada. F-AS

LEVINE, JOEL MARTIN, M.S., Oregon State University, 1977. Animal science. Appointed from Oregon State University. Place of study: Colombia, U.S.A. F-AS

MACKILL, DAVID JAMES, M.S., University of California, Davis, 1978. Genetics and

breeding. Appointed from University of California, Davis. Place of study: Philippines. F-AS

PAULSON, JO ANN, M.S., University of Minnesota, 1978. Agricultural economics. Appointed from Rockefeller Foundation Visiting Research Fellow Program. Place of study: U.S.A. F-AS

TILTON, VARIEN RUSSELL, Ph.D., Iowa State University, 1978. Genetics and breeding. Appointed from University of Minnesota. Place of study: U.S.A. F-AS

## **POPULATION AND HEALTH**

### ***Brazil***

SADIGURSKY, MOYSES, M.D., Federal University of Bahia, 1971. Biochemistry-immunology. Appointed from Federal University of Bahia. Place of study: U.S.A. F-HS

### ***Kenya***

KIBUA, THOMAS NZIOKI, M.A., University of Nairobi, 1976. Population economics. Appointed from University of Nairobi. Place of study: U.S.A. F-SS

### ***United States***

GLABE, CHARLES GORDON, Ph.D., University of California, Davis, 1978. Reproductive biology. Appointed from University of California, Davis. Place of study: U.S.A. F-HS-RB

NICKELL, STEVEN PATRICK, B.A., University of California, Berkeley, 1975. Immunoparasitology. Appointed from Johns Hopkins University. Place of study: U.S.A. F-HS

SACKS, DAVID LAWRENCE, D.Sc., Harvard University, 1978. Immunoparasitology. Appointed from Harvard University. Place of study: United Kingdom. F-PD-GND

SCHACKMANN, ROBERT WAYNE, Ph.D., Rice University, 1976. Biochemistry-physiology of fertilization. Appointed from University of Washington. Place of study: U.S.A. F-HS

## **ARTS, HUMANITIES AND CONTEMPORARY VALUES**

### ***United States***

BRONNER, SIMON JOSEPH, M.A., State University of New York, Binghamton, 1977. Literature-folklore. Appointed from Indiana University. Place of study: U.S.A. F-HUM

EFF, ELAINE, M.A., State University of New York, Oneonta, 1976. Literature-folklore. Appointed from University of Pennsylvania. Place of study: U.S.A. F-HUM

FREDERICKSON, MARY EVANS, B.A., Emory University, 1971. Modern history. Appointed from University of North Carolina. Place of study: U.S.A. F-HUM

JANIEWSKI, DOLORES ELIZABETH, M.A., University of Oregon, 1974. History. Appointed from Duke University. Place of study: U.S.A. F-HUM

STRICKLAND, JOHN SCOTT, A.B., University of North Carolina, 1970. History. Appointed from University of North Carolina. Place of study: U.S.A. F-HUM

## **QUALITY OF THE ENVIRONMENT**

### ***United States***

COHEN, STEVEN ALAN, M.A., State University of New York, Buffalo, 1977. Environmental policy and implementation. Appointed from State University of New York, Buffalo. Place of study: U.S.A. F-NES

## **EDUCATION FOR DEVELOPMENT**

### ***Brazil***

ALMEIDA, NAOMAR MONTEIRO DE, M.D., Federal University of Bahia, 1976. Sociology of medicine. Appointed from Federal University of Bahia. Place of study: U.S.A. F-HS

### ***Indonesia***

DEPARI, EDUARD, B.A., Gadjah Mada University, 1969. Sociology-communications. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

DJAUHAR, ISMAIL, M.D., Gadjah Mada University, 1970. Community medicine. Appointed from Gadjah Mada University. Place of study: U.S.A. F-HS

MOHTAR MAS'OEED, B.A., Gadjah Mada University, 1972. International relations. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

NASRULLAH, B.S., Gadjah Mada University, 1971. Agronomy. Appointed from Gadjah Mada University. Place of study: Philippines. F-AS

SUPRODJO PUSPOSUTARDJO, M.E., Asian Institute of Technology, Bangkok, 1977. Irrigation engineering. Appointed from Gadjah Mada University. Place of study: U.S.A. F-AS

WIDODO PRIYODIPRODJO, M.S., Syracuse University, 1978. Computer science. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

### ***Kenya***

CHWEYA, JAMES AYUKA, M.S., University of Nairobi, 1977. Horticulture. Appointed from University of Nairobi. Place of study: U.S.A. F-AS

### ***Nigeria***

GIWA, FAYAYI BABAFUNDE AKANNI, Ph.D., University of London, 1965. Geosciences. Appointed from University of Ibadan. Place of study: U.S.A. F-AS

## **Philippines**

MEDALLA, FELIPE, M.A., University of the Philippines, 1976. Transportation economics. Appointed from University of the Philippines. Place of study: U.S.A. F-SS

## **Tanzania**

RASHIDI, IDRIS MDERI, M.A., University of Manchester, England, 1975. Economics. Appointed from Gadjah Mada University. Place of study: U.S.A. F-SS

## **Thailand**

AKWUT THASANASONGCHAN, M.S., University of the Philippines, 1976. Crop physiology. Appointed from Kasetsart University. Place of study: U.S.A. F-AS

ARKOM SANGVARANOND, B.S., Kasetsart University, 1976. Veterinary entomology. Appointed from Kasetsart University. Place of study: U.S.A. F-AS

BUNDIT JARIMOPAS, M.E., Asian Institute of Technology, Bangkok, 1976. Agricultural engineering. Appointed from Kasetsart University. Place of study: Israel. F-AS

CHUCHEEP PIPUTSITEE, M.A., University of the Philippines, 1976. Industrial economics. Appointed from Kasetsart University. Place of study: U.S.A. F-SS

TIRAPORN BUNNAG, M.A., University of Leeds, England, 1975. Linguistics. Appointed from Thammasat University. Place of study: U.S.A. F-HUM

## **Zaire**

NGAY, ABEN, M.A., University of Dar es Salaam, 1977. Education. Appointed from National University of Zaire. Place of study: U.S.A. F-SS

NGOKWEY NDOLAMB, Licence, National University of Zaire, 1975. Rural sociology. Appointed from National University of Zaire. Place of study: U.S.A. F-SS

TSHIMPE, CHRISTOPHER DITUMBULE, M.P.A., Syracuse University, 1974. Mathematical economics. Appointed from National University of Zaire. Place of study: U.S.A. F-SS

The postdoctoral awards in the Social Sciences and the Agricultural Sciences that were made in 1978 under the Conquest of Hunger program were as follows:

GASBARRE, LOUIS C.—an immunologist conducting research on the cellular mechanisms responsible for the generalized immunosuppression occurring during the experimental trypanosomiasis in mice, in the WHO Immunology Research Training Centre, Lausanne, and Geneva, Switzerland. (AS)

SANDER, WILLIAM HENRY, III—-an economist conducting research on the impact of electrification on agricultural and rural development as part of project being

conducted at the School of Economics, University of the Philippines (Diliman Campus). (SS)

SOUTHERN, JOSEPH W.—a plant pathologist conducting research in Thailand on the downy mildew disease of corn. (AS)

TRIPP, ROBERT BURNET—an anthropologist assisting CIMMYT's Economics staff, primarily to: (a) assess the potential impact on nutrition of changes in farming methods and technologies; and (b) improve presurvey and survey techniques for assembling data on small farmer circumstances, production methods, and general economic strategies for use in designing effective programs for the transfer of new technologies. (SS)

In 1977, the Foundation established a new program that permits young scholars, known as visiting research fellows, to be assigned to the New York office for limited periods of time. The fellows' responsibilities are divided about equally between a defined research project or projects directly related to one of the Foundation's stated program objectives and program internship activities intended to contribute to their professional development and understanding of the Foundation.

Nine visiting research fellows were appointed during 1978.

### ***Agricultural Sciences***

MOCK, CHRISTOPHER ALDEN—research on food policy, with particular reference to developing countries.

### ***Health Sciences***

BRUER, JOHN THOMAS—research on ethical issues in international health.

WALSH, JULIA ANN—research on methods of control and treatment of infections most prevalent in less-developed countries.

### ***Humanities***

BENSON, PETER—research on the influence of 19th- and 20th-century American intellectual and cultural journals.

### ***International Relations***

MOSSAVAR-RAHMANI, BIJAN—research on energy policies of oil-producing countries, with special reference to Iran.

NUKAZAWA, KAZUO—research on global economic problems and potential conflicts.

### ***Social Sciences***

CULP, JEROME MCCRYSTAL, JR.—research on economic and legal appraisal of race, tenure, and seniority in the American labor market.

MALVEAUX, JULIANNE MARIE—research on the causes of unemployment differentials between whites and minorities.

UNDERWOOD, JOHN MCPHERSON—research on world food policy and food security.

**FINANCIAL**

**STATEMENTS**

## SUMMARY

The grants announced, program costs incurred, and expenditures in 1978 are summarized as follows:

GRANTS AND PROGRAMS	GRANTS ANNOUNCED AND PROGRAM COSTS INCURRED	EXPENDITURES
Arts, Humanities and Contemporary Values	\$ 5,697,746	\$ 6,036,310
Conquest of Hunger	6,201,586	6,922,852
Educational Publishing	591,790	567,708
Education for Development	7,864,419	6,944,387
Equal Opportunity	6,679,624	5,827,153
International Relations	2,582,506	3,211,961
Population and Health	6,970,713	8,941,093
Quality of the Environment	1,804,684	2,314,001
Special Interests and Reversions	2,789,819	1,769,823
Deduct: Lapses, refunds, and savings	<u>(671,831)</u>	<u>                    </u>
<b>TOTAL GRANTS AND PROGRAMS</b>	<b><u>\$40,511,056</u></b>	<b>42,535,288</b>
General administrative expenditures		3,516,216
Capital expenditures		154,000
Federal excise tax paid		<u>1,590,160</u>
<b>TOTAL</b>		<b><u>\$47,795,664</u></b>

The market value of the Foundation's investments at December 31, 1978 was approximately \$10 million higher than a year ago. The allocation between equity and fixed income investments remained approximately 76 percent-24 percent. Increases in both income and dividends, especially the latter, raised total income on investments to over \$44 million, compared with slightly more than \$41 million in 1977. With net investment income after federal excise tax almost \$4 million higher than in 1977, and with payments on current and prior years' grants and programs some million and a half lower, net disinvestment required to cover cash payments was \$1.6 million.

There was no change in the management of the assets. Two bond funds of \$98 million and \$58 million, and two equity funds of \$52 million and \$31 million were managed by independent investment managers on a full discretion basis. The balance of the funds, approximately \$500 million, chiefly in equities, continued to be managed internally, with the assistance of professional investment counsel. Total return on overall investments was 8.3 percent, compared with 6.4 percent on the S&P 500, 2.5 percent on the DJIA, and a decline of .1 percent in the Salomon Brothers bond index. Both bond funds showed positive results, significantly



outperforming the bond indexes. One of the managed equity funds, as well as the internally managed portfolio, significantly outperformed the S&P 500; the other fund was slightly below that index.

Diversification out of the oil stocks continued with close to \$14 million in sales. Exxon, the Foundation's largest holding, was reduced from 18 percent to 17 percent of total investments.

Since its founding in 1913, The Rockefeller Foundation has paid out approximately \$1 billion 374 million, of which \$1 billion 91 million came from income and \$283 million came from principal.

The financial statements for 1978 and 1977 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, 1978 and 1977 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, 1978 and 1977, 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*

February 15, 1979

**STATEMENT OF ASSETS, OBLIGATIONS, AND PRINCIPAL FUND  
DECEMBER 31, 1978 AND 1977**

<i>ASSETS</i>	<i>1978</i>	<i>1977</i>
Marketable securities, at quoted market value (Note 6)	\$745,387,625	\$735,543,614
Cash	378,792	361,785
Accounts receivable and advances	1,412,368	1,414,160
Dividends and interest receivable	4,813,469	5,223,572
Property—at depreciated cost	<u>1,919,244</u>	<u>1,880,137</u>
Total assets	<u>\$753,911,498</u>	<u>\$744,423,268</u>
 <i>OBLIGATIONS AND PRINCIPAL FUND</i>		
Accounts payable and accrued liabilities	\$3,182,233	\$ 967,782
Federal excise tax payable (Note 2)	858,374	1,572,501
Deferred federal excise tax (Note 2)	1,548,599	2,558,069
Appropriations by the trustees, announced and released for specific purposes but not yet paid (Note 4)	<u>27,147,247</u>	<u>29,224,141</u>
Total obligations	<u>32,736,453</u>	<u>34,322,493</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 (Note 4)	48,030,655	44,992,983
Unappropriated	<u>673,144,390</u>	<u>665,107,792</u>
Total principal fund	<u>721,175,045</u>	<u>710,100,775</u>
Total obligations and principal fund	<u>\$753,911,498</u>	<u>\$744,423,268</u>

*See accompanying notes.*

**STATEMENT OF OPERATIONS AND CHANGES IN PRINCIPAL FUND  
YEARS ENDED DECEMBER 31, 1978 AND 1977**

	<i>1978</i>	<i>1977</i>
Investment income:		
Dividends	\$28,593,612	\$26,186,119
Interest	15,566,545	15,106,835
Other	<u>198,990</u>	<u>114,496</u>
	44,359,147	41,407,450
Less: investment expenses	<u>879,265</u>	<u>877,425</u>
Investment income before federal excise tax	43,479,882	40,530,025
Less: provision for federal excise tax (Note 2)	<u>780,564</u>	<u>1,603,311</u>
Net investment income	<u>42,699,318</u>	<u>38,926,714</u>
Grants announced and program costs incurred during the year	40,511,056	39,415,573
General administrative expenses	<u>3,578,447</u>	<u>3,448,357</u>
	<u>44,089,503</u>	<u>42,863,930</u>
Excess of grants announced and program costs and general administrative expenses incurred over net investment income	(1,390,185)	(3,937,216)
Principal fund at beginning of year	710,100,775	802,569,955
Increase (decrease) in unrealized appreciation on marketable securities net of reduction in deferred federal excise tax — 1978: \$914,000; 1977: \$3,680,000	7,465,050	(92,236,212)
Realized gain on sale of marketable securities (Note 2)	4,966,783	3,624,153
Contributions to the Foundation	<u>32,622</u>	<u>80,095</u>
Principal fund at end of year	<u>\$721,175,045</u>	<u>\$710,100,775</u>

*See accompanying notes.*

**STATEMENT OF CHANGES IN FINANCIAL POSITION  
YEARS ENDED DECEMBER 31, 1978 AND 1977**

	1978	1977
<b>Sources of funds:</b>		
Investment income before federal excise tax	\$ 43,479,882	\$ 40,530,025
<b>Securities and repurchase agreement transactions:</b>		
Proceeds from sales	2,081,715,383	2,630,278,835
Less: purchases	<u>2,080,041,562</u>	<u>2,615,532,433</u>
	1,673,821	14,746,402
Net change in accounts receivable, advances, dividends and interest receivable, accounts payable and accrued liabilities	2,626,346	(6,365,610)
Cash contributions to the Foundation	<u>32,622</u>	<u>80,095</u>
	<u>47,812,671</u>	<u>48,990,912</u>
<b>Application of funds:</b>		
<b>Expenditures for grants and programs:</b>		
Arts, Humanities and Contemporary Values	6,036,310	6,073,642
Conquest of Hunger	6,922,852	7,523,299
Educational Publishing	567,708	530,247
Education for Development	6,944,387	7,242,916
Equal Opportunity	5,827,153	6,848,351
International Relations	3,211,961	3,199,153
Population and Health	8,941,093	8,290,397
Quality of the Environment	2,314,001	2,989,361
Special Interests and Explorations	<u>1,769,823</u>	<u>1,491,424</u>
	42,535,288	44,188,790
General administrative expenditures	3,516,216	3,382,750
Capital expenditures	154,000	15,000
Federal excise tax paid	<u>1,590,160</u>	<u>1,580,885</u>
	<u>47,795,664</u>	<u>49,167,425</u>
Increase (decrease) in cash	17,007	(176,513)
Cash balance at beginning of year	361,785	<u>538,298</u>
Cash balance at end of year	<u>\$ 378,792</u>	<u>\$ 361,785</u>

*See accompanying notes*

**NOTES TO FINANCIAL STATEMENTS**  
**DECEMBER 31, 1978 AND 1977**

*1. Summary of significant accounting policies*

Marketable securities are reported on the basis of quoted market value and investment income and expense 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 on a straight-line basis over the lives of the respective assets or amortized over the term of the lease. Total depreciation and amortization expense amounted to \$114,893 in 1978 and \$121,385 in 1977.

Federal excise tax is accrued on investment income less investment expenses, and on net realized tax basis gains from securities sales. Deferred federal excise tax arises from timing differences between financial and tax reporting relating to investment income and the change between 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 Federal excise tax on investment income less investment expenses, and on net realized taxable gains on securities transactions. The excise tax rate was reduced under the Revenue Act of 1978, from 4 percent to 2 percent, effective for years beginning after September 30, 1977.

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. In 1977 and 1978, there were no net realized taxable gains on the disposition of securities. The basis for calculating taxable gains of securities held at December 31, 1978 is approximately \$672,000,000.

*3. Pension plan*

The Foundation has a noncontributory pension plan with vesting for regular salaried employees who are at least 25 years old and 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 10 years. Pension expense under this plan, including charges for current service and amortization of unfunded prior service costs, amounted to \$1,432,000 in 1978 and \$1,420,000 in 1977. The actuarially computed value of vested benefits at the latest

valuation date exceeded the market value of the pension fund assets by approximately \$2,088,000.

At December 31, 1978, the premiums payable through March 1, 1982 to complete the purchase of annuities for personnel who retired under a prior plan were approximately \$755,000.

#### 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, 1978	\$74,217,124	\$29,224,141	\$44,992,983
Appropriations by the trustees	47,387,437	12,285,781	35,101,656
Less: lapses and refunds reversions	(221,155)	(220,846)	(309)
		(450,985)	450,985
Released from prior years' appropriations		32,514,660	(32,514,660)
Expenditures for grants, program costs, administrative expenses, and capital items	<u>(46,205,504)</u>	<u>(46,205,504)</u>	
Balance, December 31, 1978	<u>\$75,177,902</u>	<u>\$27,147,247</u>	<u>\$48,030,655</u>

#### 5. Long-term leases

Minimum rental commitments under noncancellable leases, principally for headquarters office space, at December 31, 1978 aggregate approximately \$11,000,000 and are payable approximately \$720,000 annually until 1994. The Foundation also is required to pay additional amounts for maintenance and taxes for the headquarters office. Rental expense included in the statement of operations was approximately \$878,000 in 1978 and \$894,000 in 1977.

#### 6. Marketable securities

	December 31, 1978		December 31, 1977	
	Ledger Amount*	Quoted Market Value	Ledger Amount*	Quoted Market Value
U.S. government obligations	\$93,625,775	\$90,677,867	\$115,185,751	\$112,030,485
Certificates of deposit	50,641,702	50,630,000	44,773,781	44,762,496
Corporate obligations	46,064,859	45,046,463	38,569,202	37,807,157
Other investment	<u>1,296,910</u>	<u>960,930</u>	<u>1,296,910</u>	<u>960,930</u>
	<u>191,629,246</u>	<u>187,315,260</u>	<u>199,825,644</u>	<u>195,561,068</u>
Convertible bonds	3,152,687	3,194,485	2,767,063	2,810,355
Preferred stock	3,763,079	2,197,750	3,763,079	2,625,500
Common stocks	<u>320,819,411</u>	<u>552,680,130</u>	<u>309,715,676</u>	<u>534,546,691</u>
	<u>327,735,177</u>	<u>558,072,365</u>	<u>316,245,818</u>	<u>539,982,546</u>
Total	<u>\$519,364,423</u>	<u>\$745,387,625</u>	<u>\$516,071,462</u>	<u>\$735,543,614</u>

\*Fair market value at date of gift or purchase cost.

During 1978, the Foundation commenced a securities lending program under which the Foundation, through its custodian bank, loans its securities to various securities dealers.

The securities dealers are required to deposit with the custodian and maintain collateral equal to at least 100 percent of the market value of the securities loaned. The Foundation retains title to the securities loaned and dividends or other distributions generated from such securities. Cash collateral received is invested by the Foundation in interest-bearing instruments.

At December 31, 1978, securities with a market value of approximately \$46,000,000 (ledger amount—\$40,000,000) were on loan, and against these loans the Foundation held collateral with a market value of approximately \$48,000,000.



# INDEX

- Academy of Judaic, Christian and Islamic Studies 88
- Academy of Natural Sciences 96, 97
- Affiliated Hospitals Center 48
- African-American Institute 78
- Alice Lloyd College 89
- All-India Institute of Medical Sciences 42
- Alliance for Progress 69
- Almy, Susan W. 9
- American Academy of Arts and Sciences 86
- American Association for the Advancement of the Humanities 88
- American Center for Students and Artists 79
- American Dance Festival 76
- American Dance Guild 86
- American Film Institute 90
- American Law Institute 61
- American Philosophical Association 86
- American Place Theatre 76
- American Shakespeare Festival Theatre and Academy of Connecticut 80
- American Universities Field Staff 61
- American University 89
- Anderson, Bernard E. 16
- Anderson, R. Glenn 11
- Andrews, Lowry B. 6
- Arbab, Farzam 9
- Arizona, University of 39, 96
- Arts, Humanities and Contemporary Values, RF program in 29, 74-94
- Arts 29, 74-85, fellowships in:
- American art history 81-84, playwright awardees 75, regional theatre awards 75, training in museum education 84-85
- Humanities 29, 85-94, fellowships 113-14, 116
- Ashley, Robert 76
- Asia Society 86
- Asian Institute of Management 57
- Asociación para el Desarrollo 57
- Aspen Institute for Humanistic Studies 87
- ASPIRA of America 69
- Association for the Advancement of Agricultural Sciences in Africa 33
- Association for Population/Family Planning Libraries 46
- Association of Faculties of Agriculture in Africa 34
- Atlanta University 69
- Atlanta University Center 66, 68
- Atlantic Council 61
- Atlantic Institute for International Affairs 59
- Atlas Theatre Company 79
- Barnard College 86
- Barnish, Guy 11
- Barron, Ros 76
- Bartholomew, Richard K. 12
- Bay Area Video Coalition 75
- Bellagio Study and Conference Center 104-109
- Biggs, Tyler S. 11
- Black, Joseph E. 10, 16
- Black Child Development Institute 73
- Black Theatre Alliance 80
- Blackstone, Gwendolyn T. 7
- Blackwell, Barbara 71
- Bogazici Universitesi 57
- Bookmyer, Joseph R. 6
- Borlaug, Norman E. 11
- Boston University 73, 81
- Botanical Society of America 34
- Bouis, Howarth Earle 40
- Bowes, Ed 76
- Boyce Thompson Institute for Plant Research 36
- Brandeis University 34, 88
- Brazilian Society for Instruction 35
- Brontë, D. Lydia 7
- Bronx Frontier Development Corporation 98
- Brookings Institution 59, 61, 64
- Buhr, Kenneth L. 9
- Bute, Mary Ellen 90
- Byrd Hoffman Foundation 76
- Byrnes, Francis C. 13
- Cable Arts Foundation 76, 79
- California, University of 82
- Berkeley 38, 72
- San Diego 43
- San Francisco 42
- Santa Barbara 88
- Carter, Janette 76
- Case Western Reserve University 48, 50, 51
- Center for Public Resources 51
- Center for Southern Folklore 89
- Center for Theatre Practice 79
- Ch'ang-tu hu 103
- Charles F. Kettering Foundation 62, 95
- Chelsea Theater Center 79
- Chicago, University of 40, 47, 72, 90, 104
- Children's Foundation 72
- Chimera Foundation for Dance 79
- City University of New York 81
- Clark College 66
- Clark University 55
- Clemson University 66
- Coastal Enterprises, Inc. 35
- Coastal Plains Human Development Coordinating Council 66
- Coles, Robert 86
- Colorado, University of 37
- Colton, Joel 7
- Columbia University 46, 60, 71, 82, 89, 102, 103
- Commission on the Humanities 102
- Concordia University 61

- Connecticut Educational  
Telecommunications Corporation 98
- Conquest of Hunger, RF program in 21,  
32-40,  
fellowships 111-13, 116
- Consejo Latinoamericano de Escuelas  
de Administración 57
- Conservation Foundation 98
- Cornelius, Wayne A. 61
- Cornell University 36, 40, 46, 51, 98  
99, 100
- Corporation for Public Broadcasting 79
- Corporation for Public/Private  
Ventures 64
- Council for Agricultural Science  
and Technology 37, 98
- Council for Asian Manpower Studies 44
- Council on Foreign Relations 61
- Council on Religion and International  
Affairs 61
- Council on Science and Technology  
for Development 35
- Court, David 11
- Cummings, Ralph W., Jr. 13
- Dar es Salaam, University of 55
- Dartmouth College 76
- Daunys, Alexander 6
- Davidson, Ralph K. 8
- Dayton, Kenneth N. 5
- de Young Museum 84, 85
- Deagle, Edwin A. 7
- Delaware, University of 62, 82
- Delehanty, George E. 12
- Denver, University of 99
- Dessaint, Jean Paul 51
- Dodson, Richard 8
- Douglas, Johnson E. 9
- Duke University 87, 90, 98
- East Anglia, University of 99
- Education for Development, RF program  
in 21, 53-57,  
fellowships 114-15
- Educational Facilities Laboratories 103
- Egypt, Ministry of Health 49
- El Colegio de Mexico 46
- Elliott, Howard J.C. 13
- Emergency Land Fund 67
- Equal Opportunity, RF program in  
29-30, 64-73, fellowships in:  
administration of early childhood and  
exceptional children educational  
programs 70, finance and  
management in higher and secondary  
education for minority group  
educators 70, higher education  
administration for minority group  
educators 71
- Ethnic Archives of American Immigrant  
Groups 89
- Fagen, Richard R. 62
- Federal University of Bahia 54  
fellowships in: agriculture 111-13,  
115-16; arts 74-75, 81-85; education  
for development 114-15;  
environmental affairs 100-101, 114;  
equal opportunity 70-71; health 50,  
116; humanities 91-94, 113-14, 116;  
international relations 63;  
population 45-46, 113; foundation  
visiting research program 116;  
social sciences 116
- Fischelis, Robert L. 12
- Fletcher, James C. 5, 15
- Florida, University of 68
- Florida State University 56
- Food and Agriculture Organization  
of the United Nations 35
- Fordham University 71
- Former Members of Congress 90
- Foxfire Fund 90
- Freed, Hermine 77
- Freeman, Wayne H. 13
- Frontier Nursing Service 46, 90
- Frye, Theodore R. 6
- Fuenzalida, Luis A. 9
- Gadjah Mada University 54, 56
- Gardner, Hugh 98
- Garfield, Susan 6
- Garonzik, Anne 7
- George Washington University 69, 90
- Georgetown University 62
- Georgia State University 88
- Global Village Video Resource Center 81
- GND Network 48
- Graduate School and University Center  
of the City University of New  
York 86
- Grant, James P. 5, 15
- Grant, Ulysses J. 13
- Gray, Clarence C. III 7
- Greenfeld, Beth 8
- Hacettepe University 46
- Walter and Eliza Hall Institute of  
Medical Research 48
- Hampshire College 86
- Hardin, Clifford M. 5
- Harrar, J. George 6
- Harris, Patricia 8
- Harvard University 46, 51, 56, 58, 86
- Harwood, Roland E. 9
- Hawaii, University of Manoa 36
- Hays, Ron 77
- Heaton, Herbert 6
- Hebrew University of Jerusalem 51
- Hedley, Douglas D. 10
- Heineman, Ben W. 15
- Heritage Foundation 65
- Hesburgh, Theodore M. 5
- Hess, J. William 6
- Higginbotham, A. Leon, Jr. 73
- Hildebrand, Peter E. 10
- Hoffman, Joshua 77

- Hollander, Walter 98  
House, Leland R. 10  
Howard University 42  
Hudson River Film Company 90  
Hunter College 81
- Ibadan, University of 55  
Idaho, University of 43  
INFORM 98  
Institute for Policy Research 96  
Institute for World Order 62  
Instituto Interamericano de Ciencias  
Agrícolas 35  
International Agricultural Development  
Service (IADS) 32  
International agricultural research  
institutes 32-33  
International Bank for Reconstruction  
and Development 35  
International Center for Living Aquatic  
Resources Management  
(ICLARM) 33  
International Center for Tropical  
Agriculture (CIAT) 33, 35  
International Centre of Insect  
Physiology and Ecology 37  
International Consultative Group on  
Nuclear Energy 62  
International Council for Educational  
Development 56  
International Crops Research Institute  
for the Semi-Arid Tropics  
(ICRISAT) 35  
International Energy Associates 63  
International Fertilizer Development  
Center 35  
International Food Policy Research  
Institute (IFPRI) 39  
International Institute of Rural  
Reconstruction 40  
International Institute for Strategic  
Studies 62  
International Laboratory for Research on  
Animal Diseases (ILRAD) 33, 35  
International Maize and Wheat  
Improvement Center (CIMMYT)  
33, 40  
International Relations, RF program in  
28-29, 58-63, fellowships 63  
International Research Fund 62  
International Rice Research Institute  
(IRRI) 34  
International Union for the Scientific  
Study of Population 46  
Iowa, University of 38  
Issa, Ahmed 56
- Jackson, Ben R. 12  
Jennings, Peter R. 9  
John Muir Institute 95  
Johns Hopkins University 50, 51  
Johnson, Elmer C. 11  
Johnson, Loyd 13  
Johnston, James E. 7
- Jordan, Peter 11  
Jordan, Vernon E., Jr. 5
- Kansas City Art Institute 75  
Karolinska Institutet 51  
Kasetsart University 54  
Katz, Stephen M. 13  
Kendrick, John 77  
Kent State University 89  
Kenya, Ministry of Education 55  
King, Edith E. 7  
Kirkland, Lane 5  
Klein, Howard 7  
Knodel, John 47  
Knowles, John H. 5, 6  
Komitz, Lee 77  
Kozol, Jonathan 73  
KQED 75  
Krapels, Edward N. 59  
Krim, Mathilde 5  
Kritz, Mary M. 8  
Kutler, Stanley I. 90
- Laird, Reggie J. 11  
La Mama Experimental Theatre Club 79  
Lancaster, University of 62  
Lathem, Willoughby 9  
Latino Institute 70  
Lawyers' Committee for Civil Rights  
Under Law 61  
Lindisfarne Association 86  
London School of Hygiene and  
Tropical Medicine 50  
Los Andes, Universidad de 40  
Lotse, Cecilia 7  
Lyman, Richard W. 5
- MacAndrews, B. Colin 10  
Macbeth, Robert 77  
Magic Theatre 77  
Mahidol University 54  
Maner, Jerome H. 9  
Manley, Albert E. 71  
Mann, Charles K. 7, 8  
Marine Biological Laboratory 42  
Martinez, Eugenio 9  
Maryland, University of 88  
Massachusetts Institute of  
Technology 77, 97  
McClung, A. Colin 13  
McGill University 37  
McIntosh, Alison 47  
McKelvey, John J., Jr. 7  
Metropolitan Museum of Art 80, 84, 85  
Michigan, University of 47, 62, 83, 90, 99  
Middlebury College 86  
Mid-East Wheat Research and Training  
Program 34  
Minority Rights Group 73  
Mississippi Action for Community  
Education 67  
Mississippi Research and Development  
Center 67  
Moomaw, James C. 12

- Morehouse College 67  
 Morris, Oliver F. 12  
 Moussa, Hassouna 13  
 Moyers, Bill 5  
 Mullen, Linda 6  
 Mulligan, Frances 6  
 Musalem, Alberto R. 9  
 Museum of Holography 77  
 Musical Observations 77
- NAACP Legal Defense and Educational Fund 72  
 NAACP Special Contribution Fund 67  
 Nairobi, University of 55, 56  
 Nalanda Foundation 81  
 National Academy of Sciences 35, 43, 51, 86, 98  
 National Black Theatre Workshop 77  
 National Child Labor Committee 65  
 National Commission on United States Policy Toward Southern Africa 61  
 National Executive Service Corps 103  
 National Humanities Center 87  
 National Opinion Research Center 65  
 National Research Council of Thailand 56  
 National Rural Center 67  
 National University of Zaïre 55  
 National Urban Coalition 71  
 National Urban League 71  
 Negro Ensemble Company 77  
 Neumann, Ellsworth T. 6  
 Newbery, Anne E. 6  
 New England Conservatory of Music 77  
 New Mexico State University 70  
 New World Records 80  
 New York Academy of Medicine 98  
 New York University 51, 71, 81, 98  
 Ng'weno, Hilary 103  
 Nichols, Fred E. 12  
 North Carolina, University of 83  
 North Carolina Dance Theatre 77  
 North Carolina School of the Arts 76  
 North Carolina State University 38, 72, 97  
 Northrup, Robert S. 10  
 Northwestern University 65  
 Notre Dame, University of 104  
 NUS Corporation and Juelich Nuclear Research Center 63  
 Nyberg, Albert J. 10  
 Nygaard, Jens 77
- Oak Ridge Associated Universities 58, 59  
 Oceanic Institute 37  
 Ohio State University 37  
 Olson, Mary M. 10  
 Olson, William C. 10  
 Oregon State University 34  
 Osby, William J. 13  
 Oshima, Harry T. 11  
 Osler, Robert D. 11  
 Overseas Development Council 59, 102  
 Oxford, University of 49
- Pacific Academy for Advanced Studies 65  
 Paik, Nam June 77
- Panafrican Institute for Development 57  
 Paperback Television 76  
 Patterson, Belknap, Webb & Tyler 5  
 Pennoyer, Robert M. 5  
 Pennsylvania, University of 42, 44, 65, 73, 83  
 Pennsylvania State University 35  
 Perry, Jesse P. 38  
 Pfeiffer, Jane C. 5  
 Phelps Stokes Fund 73, 78  
 Phillips, William 90  
 Pino, John A. 7  
 Plank, Stephen J. 13  
 Policy Studies Organization 98  
 Polish Institute of Arts and Sciences in America 89  
 Pontificia Universidad Católica del Peru 47  
 Population and Health, RF program in 24-28, 29, 41-52, fellowships: general 113, 116; for demographic evaluation of development projects 46;  
 Ford-Rockefeller Foundations' research program in population 45-46; in geographic medicine 50  
 Population Council 42, 43, 44  
 Postgraduate College of the National School of Agriculture 34  
 Prentice, Michael A. 12  
 Puerto Rican Legal Defense and Education Fund 72
- Quality of the Environment, RF program in 95-101, fellowships 100-101, 114
- Rabbot, Boris 62  
 Rachie, Kenneth O. 9  
 Ramanathan, Rajaram 6  
 Rand Corporation 47  
 Raun, Ned S. 12  
 Red Cloud Productions 52, 90  
 Renfro, Bobby L. 12  
 Resources for the Future 60, 98  
 Richardson, Ralph W., Jr. 15  
 Roberts, Lewis M. 13  
 Robinson, Renault A. 103  
 Rockefeller, John D. 3rd 17  
 Rockefeller, John D. IV 5, 15  
 Rockefeller Archive Center 102  
 Rockefeller University 38, 49, 51, 52, 102  
 Rohde, Jon E. 10  
 Romney, Henry 8  
 Roosa, Robert V. 5  
 Rosenstiel, Leonie 78, 87  
 Royal Botanic Gardens 36  
 Royal Institute for International Affairs 59  
 Rubin, Trudy 62  
 Rutgers University 90
- Salk Institute 42  
 Salzburg Seminar in American Studies 40, 47

- São Paulo, University of 59  
 Save the Children Federation 67  
 Scammel, Michael 88  
 Scenic Hudson Foundation 98  
 Schacht, Henry B. 5  
 Schad, Marjorie J. 7  
 Scrimshaw, Nevin S. 5  
 Segal, Sheldon J. 8, 15  
 Seidel, George E. 42  
 Seven Springs Farm Center 90  
 Sheldon, Eleanor B. 5, 15  
 SIAM Institute for Mathematics and Society 97  
 Sivard, Ruth 60  
 Smeltzer, Dale G. 12  
 Smith, Charles H. 12  
 Smith College 90, 99  
 Smithsonian Institution 88  
 Snodgrass, Milton M. 11  
 Society for Range Management 39  
 Society for Values in Higher Education 87  
 Solaris Dance-Theatre 78  
 Southeastern Center for Contemporary Art 76  
 Southern Growth Policies Board 99  
 Southern University 68  
 Southwestern Louisiana, University of 90  
 Spain, James M. 9  
 Special Interests and Explorations, RF program in 102-104  
 Spinola, Paulo G. 43  
 Sprague, Ernest W. 11  
 Stamm, Esther S. 6  
 Starnes, Ordway 11  
 State University of New York 87  
 Stern, Jonathan P. 60  
 Stifel, Laurence D. 6, 15  
 Stimuli, Inc. 73  
 Stremiau, John 7  
 Subotnick, Morton 78  
 Support Services Alliance 103  
  
 Tackley, Adel 6  
 Tanzania, Ministry of Education 55  
 Taran, Irving 78  
 Tartaglia, Henry S. 6  
 Taylor, Billy 5, 15  
 Temple University 43, 89  
 Texas, University of 84  
 Thammasat University 54, 56  
 Thomas, Michael Tilson 78  
 Thompson, Anson E. 10  
 Tillis, Frederick 78  
 Tillman, Allen D. 10  
 Tocniessen, Gary H. 7  
  
 Toronto, University of 99  
 Trammell, Webb 6  
 Trustees of Amherst College 90  
 Tufts University 49, 59, 88  
  
 United Nations Association of the United States of America 62, 104  
 Universidad Nacional Agraria 36  
 University Film Association 90  
 Unrau, Gladwin N. 13  
 Urban League of Greater Little Rock 68  
 U.S.-Japan Joint Project on Nuclear Power Development in the Asia-Pacific Region 63  
 Utah State University 99  
  
 Vanderbilt University 52  
 Velazquez, Gabriel 9  
 Virginia, University of 49  
 Virginia State College 68  
 Vocational Foundation 65  
 Volcker, Paul A. 5  
 Voter Education Project 68  
 Vrije Universiteit Brussel 47  
  
 Wake Forest University 76  
 Walker Art Center 84, 85  
 Warren, Kenneth S. 7  
 Washington, University of 37, 97, 99  
 Washington Research Project 73  
 Waugh, Robert K. 9  
 Weizmann Institute of Science 42, 49  
 Wellhausen, Edwin J. 11  
 West Africa Rice Development Association 56  
 Western Ontario, University of 47  
 Western Service Systems 71  
 Wharton, Clifton R., Jr. 5  
 White, Kerr L. 7  
 Whiteford, Michael 47  
 Williams, Bruce E. 8  
 Willrich, Mason 7  
 Wisconsin, University of 37, 39, 56, 97, 103  
 Wolling, Frank 6  
 Woods, Donald 104  
 Work in America Institute 65  
 Worldwatch Institute 104  
 Wortman, Sterling 6  
 Wright, Bill C. 13  
  
 Yale University 47, 52, 73, 84, 88, 90  
 Yeshiva University 52  
 Young, William R. 12  
  
 Zero Population Growth Foundation 47