

PRESIDENT'S REVIEW &  
ANNUAL REPORT  
1969

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PRINTED IN THE UNITED STATES OF AMERICA

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*April 1969—April 1970*

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*April 1969—April 1970*

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RICHARD DODSON *Information Associate*

<sup>1</sup> On study leave beginning October 1969.

<sup>2</sup> Resigned March 1969.

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THOMAS SOWELL, PH.D., *Consultant*<sup>2</sup>

<sup>1</sup> Resigned August 1969. Consultant beginning September 1969.

<sup>2</sup> Temporary appointment completed.

**MEDICAL AND NATURAL SCIENCES**

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**FIELD STAFF 1969**

**BRAZIL**

*Belém*

**VIRUS RESEARCH**

THOMAS H. G. AITKEN, M.D.  
JORGE BOSHELL, M.D.<sup>3</sup>  
JOHN P. WOODALL, PH.D.

**CHILE**

*Santiago*

**HUMANITIES AND SOCIAL SCIENCES**

JOHN P. HARRISON, PH.D., *Foundation Representative*  
DELBERT A. FITCHETT, PH.D.<sup>4</sup>

<sup>1</sup> Resigned September 1969.

<sup>2</sup> Beginning May 1969.

<sup>3</sup> Retired June 1969.

<sup>4</sup> Temporary appointment completed.

## COLOMBIA

### Bogotá

#### COLOMBIAN AGRICULTURAL PROGRAM

ROBERT K. WAUGH, PH.D., <i>Director</i>	HERBERT A. PAUL, M.S. <sup>4</sup>
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CHARLES H. MULLENAX, M.S., D.V.M. <sup>3</sup>	

#### VIRUS RESEARCH

RONALD B. MACKENZIE, M.D.

### Cali

#### INTERNATIONAL CENTER OF TROPICAL AGRICULTURE

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FRANCIS C. BYRNES, PH.D.	CHARLES H. MULLENAX, M.S., D.V.M. <sup>8</sup>
DALE D. HARPSTEAD, PH.D. <sup>5</sup>	NED S. RAUN, PH.D. <sup>8</sup>
PETER R. JENNINGS, PH.D.	EDGAR D. ROBERTS, D.V.M., PH.D. <sup>8</sup>
LOYD JOHNSON, M.S.	JAMES M. SPAIN, PH.D.
ANDRIES H. JONKERS, M.D. <sup>6</sup>	ROY L. THOMPSON, PH.D.

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#### MEDICAL AND NATURAL SCIENCES

PATRICK N. OWENS, D.ENG., *Foundation Representative*  
FARZAM ARBAB, PH.D.<sup>9</sup>  
JOEL E. GORDON, PH.D.<sup>4</sup>  
PERCY L. LILLY, PH.D.<sup>2</sup>

#### VIRUS RESEARCH

HAROLD TRAPIDO, PH.D.

<sup>1</sup> Through August 1969.

<sup>2</sup> Through January 1969.

<sup>3</sup> Through June 1969.

<sup>4</sup> Temporary appointment completed.

<sup>5</sup> Resigned June 1969.

<sup>6</sup> Beginning August 1969 on assignment in Bogotá.

<sup>7</sup> Beginning February 1969.

<sup>8</sup> Beginning July 1969.

<sup>9</sup> Beginning September 1969.

**ECUADOR**

*Quito*

**AGRICULTURAL SCIENCES**

**JACK DEE TRAYWICK, M.S.**

**INDIA**

*New Delhi*

**INDIAN AGRICULTURAL PROGRAM**

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**R. GLENN ANDERSON, PH.D.**

**PABLO E. SOTO, PH.D.<sup>2</sup>**

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**LELAND R. HOUSE, PH.D.**

**WILLIAM R. YOUNG, PH.D.**

**GORDON S. MINER, PH.D.<sup>1</sup>**

**HUMANITIES AND SOCIAL SCIENCES**

**CHADBOURNE GILPATRIC**

*Hyderabad*

**INDIAN AGRICULTURAL PROGRAM**

**WAYNE H. FREEMAN, PH.D.**

**JAMES S. QUICK, PH.D.<sup>3</sup>**

**ITALY**

*Bellagio (Lake Como)*

**VILLA SERBELLONI**

**JOHN MARSHALL, M.A., Director**

**KENYA**

*Muguga*

**AGRICULTURAL SCIENCES**

**ORDWAY STARNES, PH.D., Director, East African Agriculture and  
Forestry Research Organization**

<sup>1</sup> Beginning March 1969.

<sup>2</sup> Beginning December 1969.

<sup>3</sup> Resigned July 1969.

*Nairobi*

HUMANITIES AND SOCIAL SCIENCES

JAMES S. COLEMAN, PH.D., <i>Foundation Representative</i>	DANIEL Q. POSIN, JR., LL.B.
ROBERT H. JACKSON, M.A.	CARL G. ROSBERG, JR., PH.D. <sup>2</sup>
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*Mexico City*

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NORMAN E. BORLAUG, PH.D.	JOHN S. NIEDERHAUSER, PH.D.
JOHN W. GIBLER, PH.D. <sup>3</sup>	LOUIS T. PALMER, PH.D. <sup>4</sup>
ELMER C. JOHNSON, PH.D.	BILL J. ROBERTS, PH.D. <sup>5</sup>
REGGIE J. LAIRD, PH.D.	JOSEPH A. RUPERT, PH.D. <sup>6</sup>
NEIL B. MACLELLAN	

NIGERIA

*Ibadan*

INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE

ARTHUR D. LEACH, PH.D.

HUMANITIES AND SOCIAL SCIENCES

ALBERT J. NYBERG, PH.D.	
THOMAS G. RUSSELL, M.A. <sup>7</sup>	

VIRUS RESEARCH

DONALD E. CAREY, M.D., <i>Foundation Representative</i>	GRAHAM E. KEMP, D.V.M.
OTTIS R. CAUSEY, SC.D.	VERNON H. LEE, PH.D.

<sup>1</sup> Beginning March 1969.

<sup>2</sup> Temporary appointment completed.

<sup>3</sup> Resigned May 1969.

<sup>4</sup> Through November 1969.

<sup>5</sup> Resigned June 1969.

<sup>6</sup> On assignment in California.

<sup>7</sup> Beginning September 1969.

**Zaria**

**AGRICULTURAL SCIENCES**

**GLENN H. BECK, PH.D., Deputy Vice-Chancellor and Director of  
Agricultural Research Institute,  
Ahmadu Bello University**

**PHILIPPINES**

**Quezon City**

**HUMANITIES AND SOCIAL SCIENCES**

**ROBERT W. MILLER, M.A.<sup>1</sup>**

**MEDICAL AND NATURAL SCIENCES**

**LEROY R. ALLEN, M.D., Foundation Representative**

**LUCIEN A. GREGG, M.D.<sup>2</sup>**

**Los Baños**

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<b>RICHARD BRADFIELD, PH.D.</b>	

**ST. LUCIA**

**Castries**

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<b>OLIVER F. MORRIS<sup>7</sup></b>	

<sup>1</sup> Temporary appointment completed.

<sup>2</sup> Through May 1969.

<sup>3</sup> On assignment in Ceylon.

<sup>4</sup> On study leave beginning September 1969.

<sup>5</sup> Beginning May 1969.

<sup>6</sup> Beginning August 1969.

<sup>7</sup> Beginning September 1969.

**TANZANIA**

*Dar es Salaam*

**HUMANITIES AND SOCIAL SCIENCES**

**CARL G. ROSBERG, JR., PH.D.<sup>1</sup>**

**THAILAND**

*Bangkok*

**AGRICULTURAL SCIENCES**

<b>ERNEST W. SPRACUE, PH.D., <i>Project Leader</i></b>	<b>JAMES H. JENSEN, PH.D.<sup>3</sup></b>
<b>RICHARD R. HARWOOD, PH.D.</b>	<b>CHARLES L. MOORE, PH.D.</b>
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<b>BEN R. JACKSON, PH.D.</b>	

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<b>JOHN H. BRYANT, M.D.</b>	<b>WALTER S. ROOT, PH.D.<sup>1</sup></b>
<b>WILLIAM P. CALLAHAN, III, PH.D.</b>	<b>WILLIAM D. SAWYER, M.D.</b>
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<b>CLAUS LEITZMANN, PH.D.<sup>4</sup></b>	<b>VERNON L. YEAGER, PH.D.</b>
<b>F. ULRIKE LICHTI, PH.D.<sup>5</sup></b>	

**UNIVERSITY DEVELOPMENT—ADMINISTRATION**

**HENRY P. LANGE, JR.**

<sup>1</sup> Temporary appointment completed.

<sup>2</sup> Beginning September 1969.

<sup>3</sup> Beginning August 1969.

<sup>4</sup> Beginning June 1969.

<sup>5</sup> Beginning February 1969.

TRINIDAD

*Port-of-Spain*

VIRUS RESEARCH

ANDRIES H. JONKERS, M.D.<sup>1</sup>

UGANDA

*Kampala*

AGRICULTURAL SCIENCES

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CARLTON S. KOEHLER, PH.D.<sup>2</sup>

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BARTELL C. JENSEN, PH.D.<sup>2</sup>                    BERNARD OKUN, PH.D.<sup>2</sup>

UNITED STATES

*Berkeley, California*

VIRUS RESEARCH PROGRAM

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*Honolulu, Hawaii*

MEDICAL AND NATURAL SCIENCES

LUCIEN A. GREGG, M.D.<sup>3</sup>

*New Haven, Connecticut*

VIRUS RESEARCH

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CHARLES R. ANDERSON, M.D.                    ROBERT E. SHOPE, M.D.  
SONJA M. BUCKLEY, M.D.                    ROBERT W. SPEIR, M.D.  
JORDI CASALS-ARIET, M.D.

<sup>1</sup> Through June 1969.

<sup>2</sup> Temporary appointment completed.

<sup>3</sup> Beginning June 1969.

## **THE PRESIDENT'S REVIEW**



## THE CONGRESS AND FOUNDATIONS

The year 1969 has been a difficult one for philanthropic foundations: during most of this period, they came under the critical eye of the Congress. Ostensibly, the legislators were concerned by the multitude of "foundations" that have developed in the United States over the last several decades, and Congress felt it necessary to examine foundation structures, practices, and procedures in order to bring them under greater vigilance and control. In the process, the long-standing tax-exemption privilege of a foundation was brought into question, as was the length of time it should be permitted to exist. The latter consideration resulted in a Senate proposal to limit the life of a foundation to 40 years, but this was eliminated in the final legislation as being undesirable. Under the tax reform bill signed into law on December 30, 1969, a 4-percent excise was levied on the investment income of foundations.

The new law does essentially nothing to help foundations perform their function better. Hopefully, it may help to prevent the kind of abuses of the tax-exemption privilege which have occasionally been identified. It certainly makes the work of private philanthropy—which has been of such enormous value to so many people for so many years—a more difficult task, and subjects private foundations to discriminatory taxation.

For 1969, some significant progress can be recorded in all five major program areas—Equal Opportunity, Cultural Development, Population, the Conquest of Hunger, and University Development.

## EQUAL OPPORTUNITY FOR ALL

The struggle to insure equal opportunity for all Americans continues in the face of ignorance, poverty, and racial discrimination. Our public school system and our institutions of higher education still provide the principal means by which some of the fundamental inequalities of our society can be overcome. This past year, the Equal Opportunity Program of The Rockefeller Foundation concentrated its efforts on improving educational programs and particularly on identifying and demonstrating ways to help bring the school and the community closer together. Of particular interest is an educational internship program which teams together extremely able young minority-group educators and highly successful school administrators. Individuals trained in this program can be expected to assume leadership positions in some of the nation's most important school systems. On a broader basis, the Foundation has continued to be responsive to significant opportunities for disadvantaged students and to the need to support major organizations that play an important role in opening up such opportunities.

## CULTURAL DEVELOPMENT

In 1969, as in the entire decade, the arts bloomed in the United States—at a rate that is outrunning available private and public funding. While the primary concern of the Cultural Development Program of the Foundation was directed to the creative artist and those regional performance centers that produced the works of contemporary composers, playwrights, and choreographers, the Foundation also addressed itself to the problems of the development of widespread financial support for the arts and humanities. Such support hinges to a great extent on public understanding. Support for the arts and humanities from the private and public sectors is a necessity for the continuation of American culture. This can happen only when all become fully aware of the contribution that the arts and humanities make to society and the lives of its individual members.

## THE CONQUEST OF HUNGER

The "green revolution" has been a much talked about phenomenon, and, indeed, a few countries—notably Mexico, India, Pakistan, and the Philippines—have demonstrated that truly remarkable gains in food production can be achieved where there is a national determination to do what is necessary to effect this change. Nevertheless much more still remains to be done. Of the several food crops on which the world's population depends, only rice, wheat, and maize have benefited substantially from concerted efforts to improve yields by the introduction of improved varieties and better management practices. Furthermore, the concomitant problems of large-scale production still remain to be solved. These include more adequate storage facilities, improved marketing procedures, and price supports. And, finally, the benefits of the increased yields that have thus far accrued principally to the larger landholders must be more rapidly made available to the small traditional farmer practicing subsistence agriculture. The critical moment, when a great many hitherto apathetic people can, for the first time, see that their own lives can be improved, has now been reached. Unless these benefits and the knowledge of how to achieve them are soon made available to ever-larger numbers, it is possible that resentment and unrest will cancel out what has already been accomplished and stand in the way of further progress.

## POPULATION

In the field of population, there is a growing realization throughout the world that unchecked rates of population growth lie at the root of many of the most vexing problems of both the developed and the developing nations. However, those who had hoped that encouragement of family planning programs by national governments would within reasonable time produce statis-

tical evidence of declining birth rates have been disappointed. The Foundation continues its efforts to help develop medical centers conducting high-quality research in reproductive physiology in conjunction with the training of physicians. Continued support is also given to organizations here and abroad that are offering large-scale family planning programs.

## UNIVERSITY DEVELOPMENT

Under its University Development Program, the Foundation continues to assist in the development of selected institutions of higher education in Asia, Africa, and Latin America, with the ultimate goal of creating strong universities staffed largely by indigenous scholars whose teaching and research objectives are relevant to national and regional problems. The universities in whose development the Foundation is participating are each year providing increasing leadership in educating highly motivated young men and women who will hold positions of authority in the future. At the same time, these universities are building solid scientific competence to help solve local problems.

## QUALITY OF THE ENVIRONMENT

In December, 1969, the Foundation's Trustees gave their formal approval to a new field of interest—the Quality of the Environment—to be added to the five existing program areas. This action was significant in that it raised to full program status a concern for a serious problem to which the Foundation had given considerable thought and effort for some time.

Man is now degrading his environment at a terrifying rate. The cumulative effects of advancing technology, massive industrialization, urban concentration, and population growth have all combined during the last decades not only to create imminent danger to the quality of human life, but even to pose threats to life itself. The air over our cities and industrial areas is becoming each year more polluted, causing huge economic losses, contributing to such diseases as emphysema, lung cancer, and respiratory and other ailments, and otherwise endangering human life by contributing to increasing numbers of highway accidents and poor visibility over airports. Rivers, lakes, and oceans are becoming contaminated with agricultural and industrial chemicals and wastes and growing quantities of municipal sewage, and nature is no longer able to dispose of these by natural processes. The disposition of municipal rubbish of all kinds has become an almost insoluble problem for many cities.

Diseases such as infectious hepatitis appear to be directly related to contaminated drinking water. The concentration of lead is increasing in our air, water, and food. Our natural resources are being depleted, and in some

places the soil itself has suffered from the effects of pesticides and over-use of chemical fertilizers. Highway, airport, and other construction is undertaken with no thought of its ultimate effect on the landscape or human existence. A comparatively new threat, thermal pollution, is likely to endanger the ecological balance of our rivers and streams, causing certain species of marine life to disappear and lower forms to take over. We are just becoming aware, too, that the increasing noise associated with modern living may have deleterious physical and psychological effects on human beings. Urban and national planners thus far seem unable to foresee the ultimate effects of today's decisions on the environment of the future, and most policies are being adopted today without sufficient information regarding their eventual outcome.

The Foundation's newest program area has been established with a view toward helping to find some solutions to the general problem of environmental deterioration and toward discovering ways to restore in some measure the quality of the environment to acceptable standards. Because this program was formally adopted so recently, the grants awarded under the Quality of the Environment Program are not covered in a separate section in this year's *Annual Report*. For this reason, mention is made here of the appropriations made in this new program area.

In defining a program to contribute meaningfully to the improvement of environmental quality, the Foundation singled out for initial support areas where it believes assistance can make a significant difference and where public funds might not be easily obtainable. These are:

- Development at a limited number of universities of multidisciplinary research and graduate training capabilities in environmental quality;
- Analytical studies leading to experimental action programs on management of the total residuals problem in certain defined regions;
- Research on components of the total ecosystem designed to develop new concepts of management of environmental resources;
- Research toward establishing acceptable limits of air, soil, and water pollution and developing means of measuring contamination and monitoring levels of various pollutants;
- Development of prototype training capabilities and programs to provide personnel needed at all levels in public and private agencies;
- Initiation of activities designed to increase public awareness of environmental problems.

In 1969 the Foundation appropriated over \$2.1 million for programs within these areas.

It is important to involve the universities in research to solve the problems of environmental deterioration. The university, however, as a microcosm of the nation's intellectual resources, reflects the uncertainties experienced by society as a whole in responding to these complex new challenges. The problems of environmental quality, involving as they do a broad spectrum of disciplines, confront the traditional academic structure with a new set of demands.

Two of the grants made this year were aimed at helping academic institutions find means of responding flexibly to new configurations of needs. Grants to Williams College (\$200,000 through June, 1974) and to the University of Michigan (\$750,000 over a period of three years) are supporting inter-departmental research and teaching in environmental studies, with emphasis on problem-oriented projects that cut across disciplinary lines. Williams College is expanding the activities of its Center for Environmental Studies, for which the Foundation has provided support in the past. The University of Michigan, long known for its programs in conservation, is moving toward multidisciplinary programs in a number of fields related to environmental improvement, urban and regional planning, long-range detection of pollutants, and other areas. It now plans to establish a central structure for the integration of all studies related to environmental quality.

One of the most intractable elements of the waste-disposal problem is that matter cannot be destroyed. Reduction of pollution in one medium—air, for example—generally means dumping wastes into another. The ideal solution would be to convert residuals into useful materials, and in at least one area this approach is being pursued with success. Scientists at Louisiana State University have demonstrated a promising means of dealing with cellulosic wastes, such as agricultural residues, cardboard, and paper. A newly isolated strain of the microorganism *Cellulomonas* is capable under certain conditions of digesting a cellulosic substrate and turning out edible protein. This remarkable process is being further perfected at LSU, and tests with animal feed based on the protein product are being undertaken. Scientists believe that it can eventually be used in food for human beings. The Foundation made a grant of \$44,120 to LSU this year for support of this research over the coming year.

No such solution is in sight, however, for the bulk of urban and industrial wastes. There is a critical need for a comprehensive study of the total problem of residuals management, including its physical, biological, social, economic, and industrial dimensions. A grant of \$500,000 over a three-year period was made to Resources for the Future, a research group located in Washington, D. C., which is currently developing a program in waste disposal based on the concept of recycling of residuals through the production and

consumption processes. Both theoretical and empirical studies are being undertaken, based on a concept of the total integrity of the environment. Case studies in limited geographical areas are planned, to devise and test management strategies in cooperation with local groups.

No alternative is yet available to the use of pesticides and herbicides in food and animal production and in the control of vector-borne diseases, but scientists believe that something can be done to minimize the adverse effects of these substances. Funds were appropriated this year for future allocation by the Foundation for research on the development of selective, nonpersistent chemical pesticides; four laboratory groups—from the University of Illinois, Cornell University, and the University of California at Berkeley and at Riverside—will collaborate on the project.

Their goal is to develop chemicals that will poison only a target species of insect—through attacking vulnerable enzyme systems, for example—without harm to other insects or animals, and that will not remain in the environment in virulent form. The researchers hope to develop a product whose breakdown and clean-up can be controlled by the user. Each of the Universities involved has its own specialty in this field, and they hope through exchange of findings and interchange of graduate students and scientists to develop an integrated program.

An overview of the present state of environmental pollution seems to suggest that contamination has to reach intolerable levels before society moves to arrest it. A grant of \$50,000 over three years was made to Princeton University, where scholars at the Center for International Studies of the Woodrow Wilson School of Public and International Affairs are investigating society's response to ecological dangers. The researchers are seeking answers to one of the modern world's most troubling questions: in the pursuit of a better life, why do the most advanced technological societies on earth seem prone to degrade and poison their own habitat beyond reclamation? To what extent this is true of other societies and in other times, and what mechanisms can bring about action to preserve the environment, are being investigated in an effort to throw light on our apparent powerlessness to deal effectively with the problem.

Two smaller grants made this year also figure under the rubric Quality of the Environment: Columbia University received \$25,000 for use by its School of Engineering and Applied Science toward studies for a survey of environmental pollution being conducted by the New York City Science and Technology Advisory Council, and the University of Minnesota, Minneapolis, received \$15,000 toward the costs of research on participatory ecology to be undertaken by Professor Luther P. Gerlach of the Department of Anthropology.

## CONCLUSION

Over the years, the evolution of the Foundation's program has been toward identifying and attacking what are clearly some of the most serious problems that confront contemporary society. These problems are enormous, and some are becoming increasingly severe. Concerted effort will be required of all of the components of our society — both the public and private sectors — if we are to make constructive and reasonably rapid progress toward the solution of these major concerns.

J. GEORGE HARRAR  
*President, The Rockefeller Foundation*

## A NOTE CONCERNING THE ILLUSTRATIONS

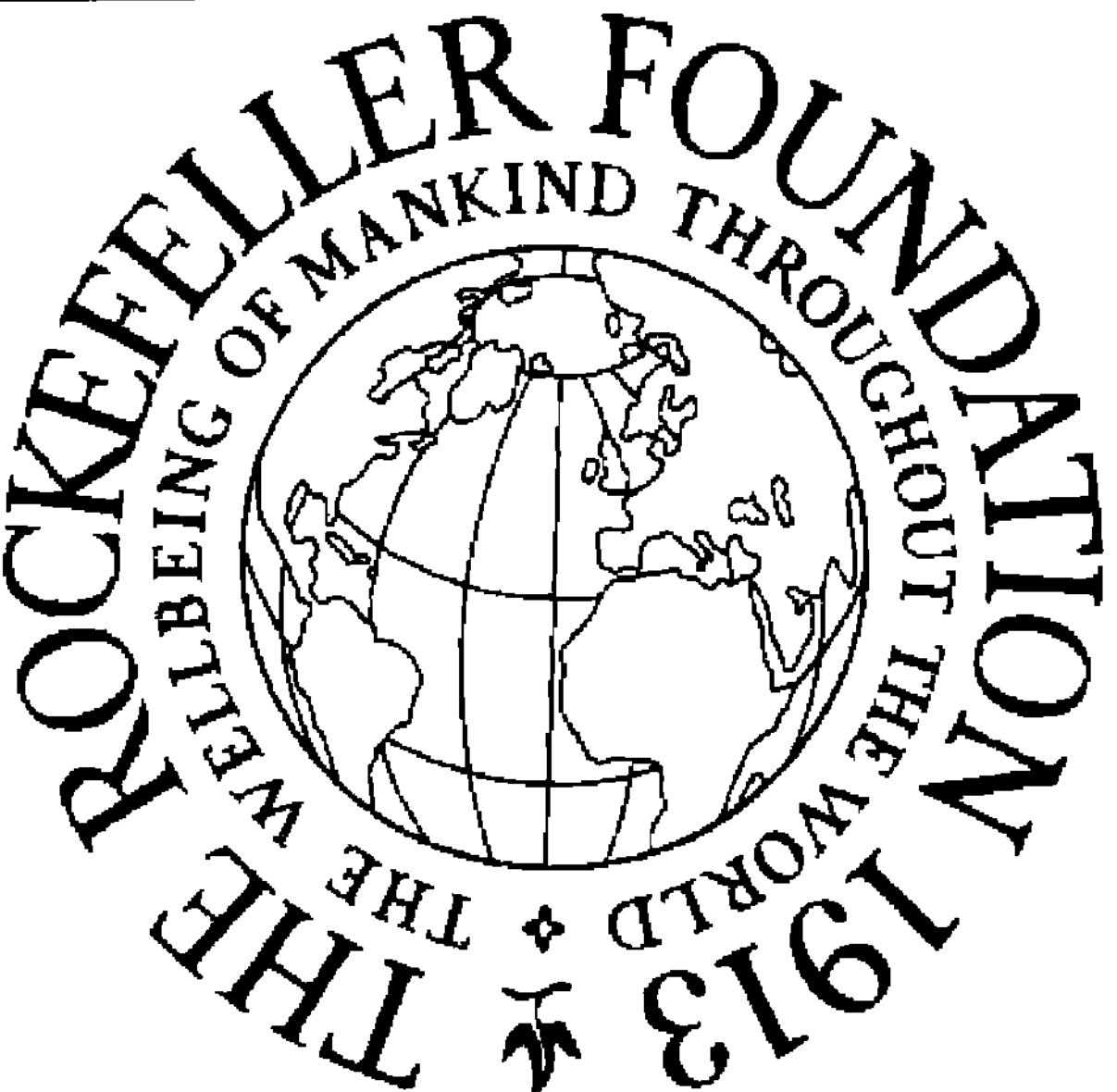
At the turn of the century, when the innovative idea of forming a private organization dedicated to improving life for people everywhere was first being considered, it was agreed that this could be best accomplished by supporting, today, men and women who are willing to dedicate their abilities to undertakings that might benefit others in the future. Much has happened in the intervening decades, but nothing has occurred to dispute the wisdom of this fundamental premise with which The Rockefeller Foundation began its work in 1913, and with which it operates today. The Foundation's *Annual Report* for the year 1969 is illustrated with portraits of a few of the men and women who are devotedly working for "the well-being of mankind," to revert to the words of the Foundation's charter. Most of the leaders pictured in this report stand out in fields that deal with some of the urgent problems and great opportunities we are facing in this country. Others are scientists and scholars of the developing world, whose work is likely to benefit large numbers of people in their own areas. A few are senior members of the Foundation's staff who have spent the better part of their lives in overseas assignments. Together these individuals are advancing the frontiers of knowledge and applying their skills, imagination, and energies to meeting some of the great challenges of our day.

J. G. H.

# EQUAL OPPORTUNITY FOR ALL



*major active grants for education, ◇  
career training, and  
leadership development*



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Ted Watkins is developing in Saugus a resident training center where young people from the Watts ghetto can learn paramedical and horticultural skills.

## **EMPHASIS ON THE INNER CITY**

In 1967 The Rockefeller Foundation made the decision to give central emphasis to projects that attack the problems of the inner city, particularly in the areas of public school-community relations, improvement of social services and employment opportunities, leadership development, participation of ghetto residents in decision making on issues that affect their communities, and research on basic problems of minorities. The majority of grants made by the Foundation in 1969 in its program for equal opportunity reflect these preoccupations.

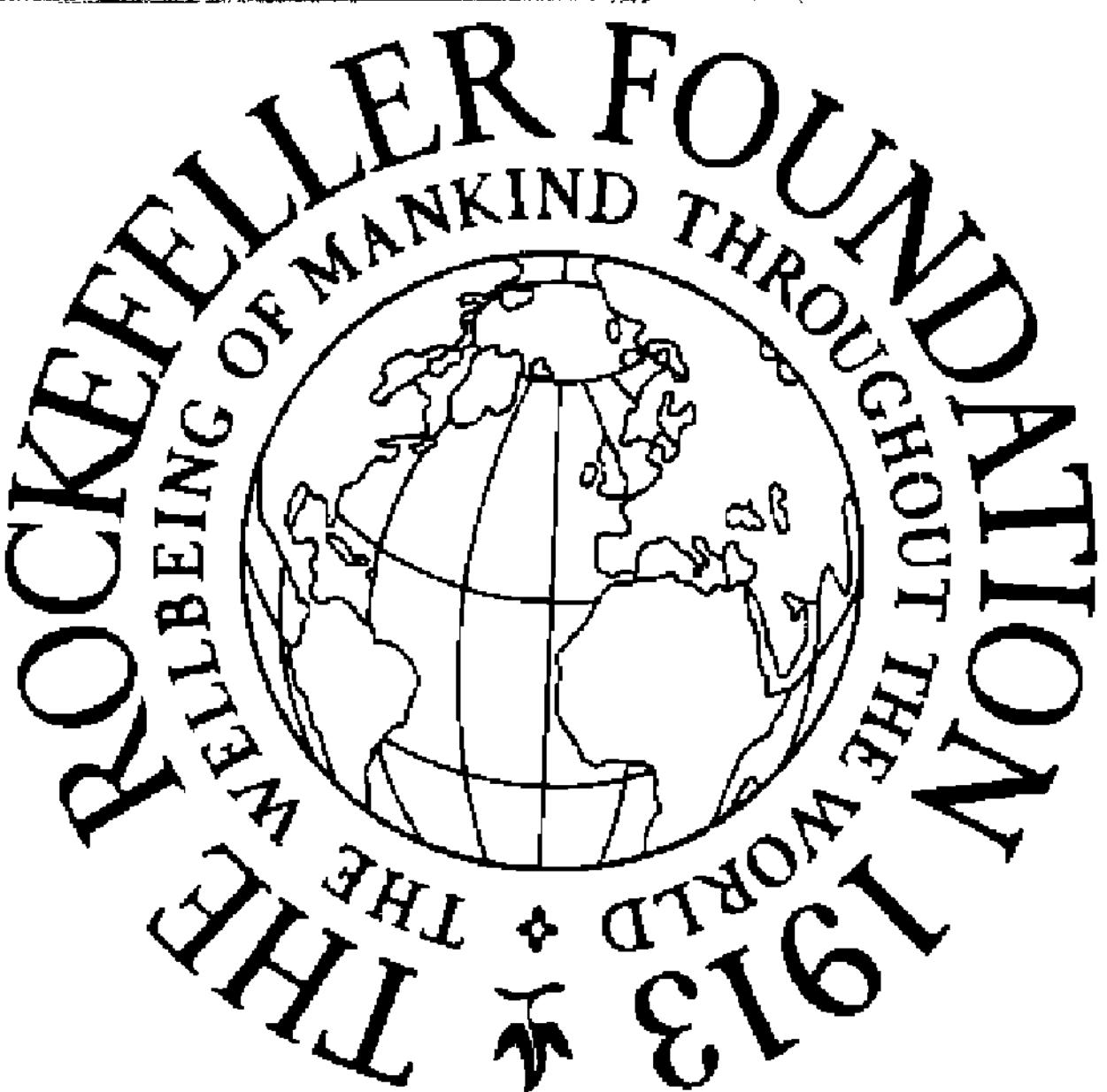
Programs aimed at creating more professional and vocational opportunities for minority-group members continued to receive support, and a pilot effort in assistance to a rural poverty area was launched.

## **COMMUNITY-PUBLIC SCHOOL PROGRAMS**

In 1969 a new community-school program was initiated in Gary, Indiana, while support continued for others already under way in St. Louis, Los Angeles, Cleveland, Minneapolis, and Philadelphia. In all of these efforts, the public school serves as a hub of neighborhood solidarity and of the community's participation in the education of its children and young people; the school-community center is also a resource for local residents seeking help with the many individual, family, and community problems that beset them. This new orientation of the public school is implemented in various ways, worked out by local leaders and school administrators in the light of neighborhood needs and resources.

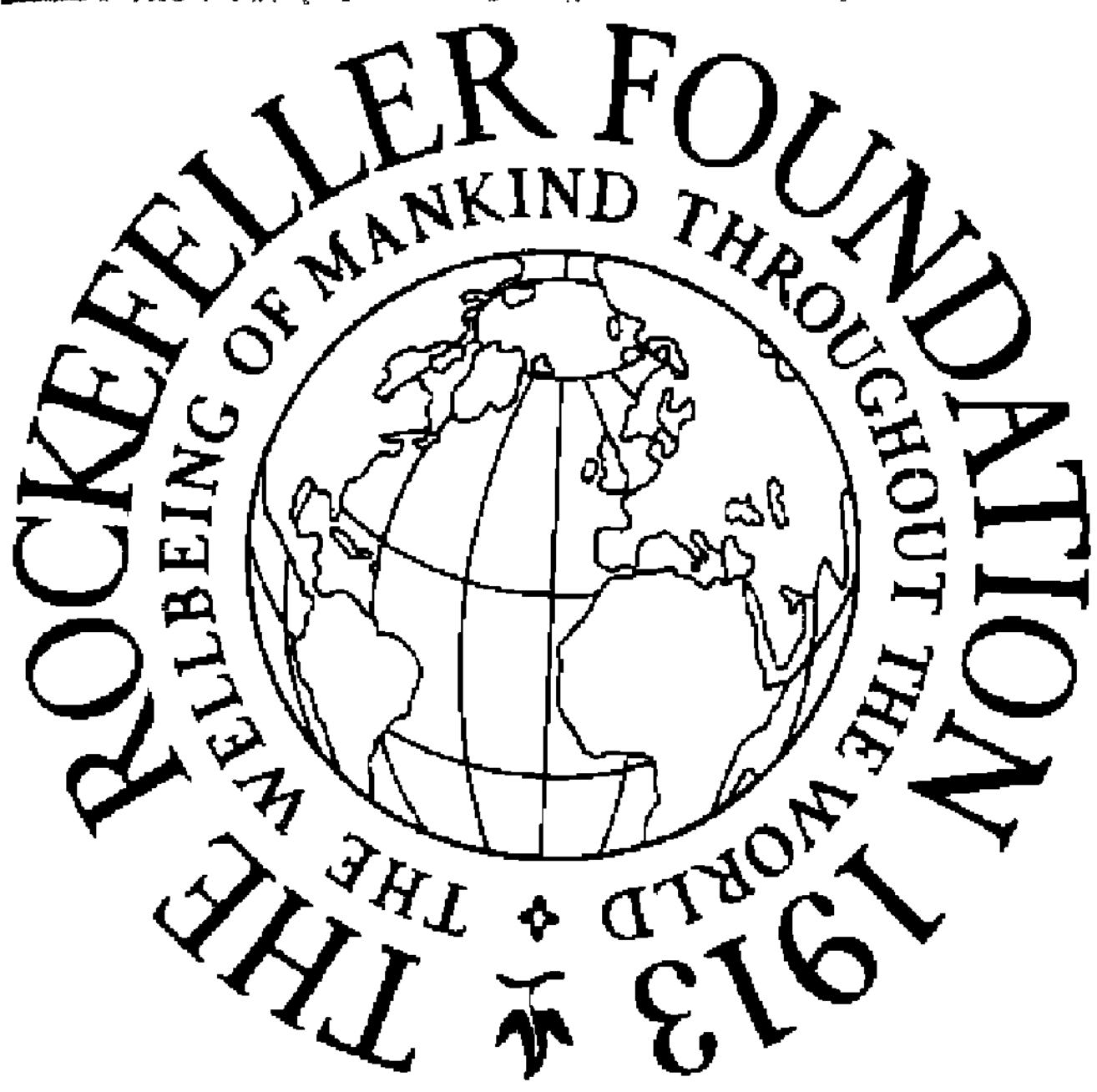
In Gary the school administration this year launched a Reciprocal Education Program, with a series of centers in ghetto neighborhoods staffed by teams of teachers, student teachers, parents, and social workers. These centers serve as clearinghouses for local problems and provide liaison between the community and the public schools, city agencies, and other organizations dealing with inner-city residents. The program is helping train more community workers to staff such centers.

Another type of effort to promote successful school-community cooperation is focused on the school principal. The principal who understands local problems and sympathizes with neighborhood people can do much toward making education more relevant to their needs. In order to train more principals capable of assuming an effective role in the community, a program of internships is being supported by The Rockefeller Foundation in Baltimore, Detroit, and Philadelphia. These cities have worked out systems whereby prospective inner-city school administrators spend a period of special on-the-job training; contact with community workers and with neighborhood and city agencies is emphasized along with professional experience



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Forrest Adams is director of Philadelphia's mini-school, a small community-oriented school within the city system.



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Gordon McAndrew, superintendent of schools in Gary, Indiana, is bringing trained people to neighborhood centers, to work with teachers and parents.

in supervisory and administrative duties. A future program is projected for similar training in a number of selected cities at the level of school supervisor.

A successful effort involving inner-city high school students was the New York Urban League-sponsored street workers program. In helping disruptive and alienated high school boys solve personal and scholastic problems, it has been effective in preventing violence and in combating the narcotics problem in these schools.

## GHETTO LEADERSHIP

An approach to giving inner-city groups a greater part in decision making is being made on a local basis by the Black Coalition of New Haven, with Foundation aid. The Coalition is training neighborhood leaders who can help ghetto dwellers articulate their needs and devise self-help programs, and who can also secure a stronger voice for the black minority in city affairs and local government.

Another leadership training program, of nationwide scope, is being operated by the OIC (Opportunities Industrialization Center) Institute in Philadelphia. OIC concentrates on job training for the hard-core unemployed; leaders skilled in management are needed for its more than 70 affiliates. The Institute is preparing candidates for posts in these centers, in order to maintain a strong network to carry out job training and counseling in the ghettos of major cities.

Minority-group leaders for the future are being recruited in California high schools in an internship program in public affairs operated by the Urban Affairs Foundation. The students gain experience in dealing with community problems and learn the working of local government at firsthand during a period of on-the-job training in the offices of minority-group public officials.

## OPPORTUNITIES IN THE PROFESSIONS

Professional opportunities exist in a number of fields that traditionally have attracted very few black or other minority-group candidates. Such students often are not aware of these possibilities or have not been motivated to seek them out. A number of efforts to recruit minority-group students into professional schools or graduate programs were supported this year by Rockefeller Foundation grants.

The programs, most of them at graduate level, were in such fields as agricultural sciences (at the University of Florida); international relations (at Johns Hopkins University); library science (part of a nationwide program of the Columbia Library Development Center); medicine and dentistry

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Dr. Robert H. Ebert, dean of the Harvard Medical School, is recruiting in imaginative ways increasing numbers of black medical students.

(at Harvard University); educational administration (at Harvard's Graduate School of Education); and nursing (at Baylor University and the New England Hospital in Roxbury, Massachusetts).

The various institutions differ in their approach to recruitment and assistance, but most offer a combination of academic and financial aid, along with career counseling.

### VOCATIONAL TRAINING

Vocational training to give unskilled young people better job prospects is also being supported. The Watts Labor Community Action Committee in Los Angeles received support for a program to train Watts residents in agricultural and horticultural skills and in care and operation of machines used in this type of work.

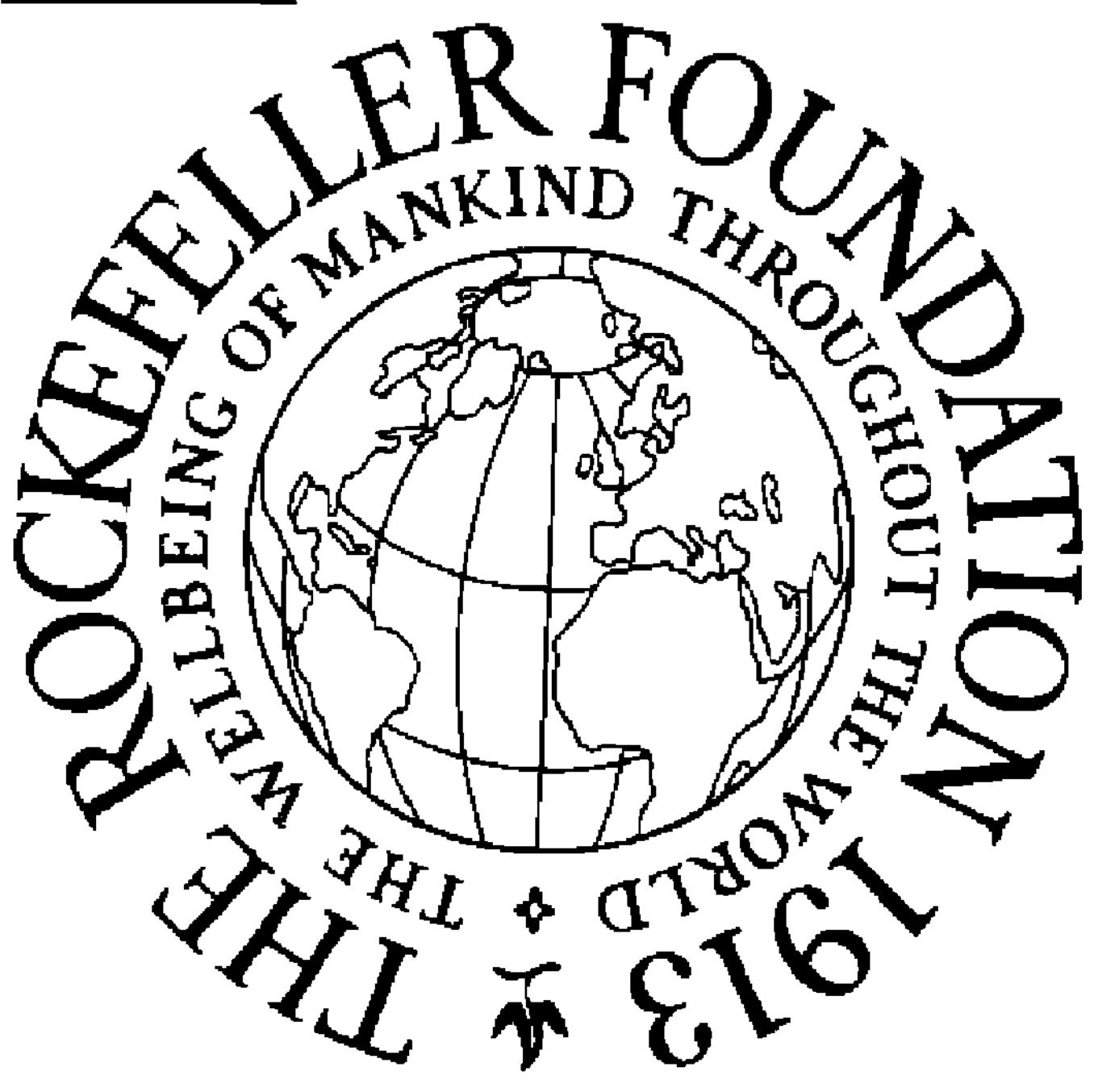
At the New England Hospital, an extensive program to prepare minority-group members for health careers and related occupations was launched with Foundation aid. Training covers a great many types of opportunity ranging from semiskilled to highly skilled work, and includes a program of nursing education.

### RURAL DEVELOPMENT

A project that may have widespread significance for the rural poor was initiated at the College of the Albemarle in North Carolina. The two-year College, located in a depressed agricultural area, hopes to demonstrate how an educational institution can provide leadership in the social, economic, and cultural development of a rural poverty area. The College plans, with Foundation assistance, to recruit students among the poor and offer them financial aid to study for a college degree or to take vocational courses; adult education courses are also being made available. It is hoped that the program will spearhead efforts on a broad scale to increase farm income and develop other economic resources for the region, with the help of local and Federal government funds.

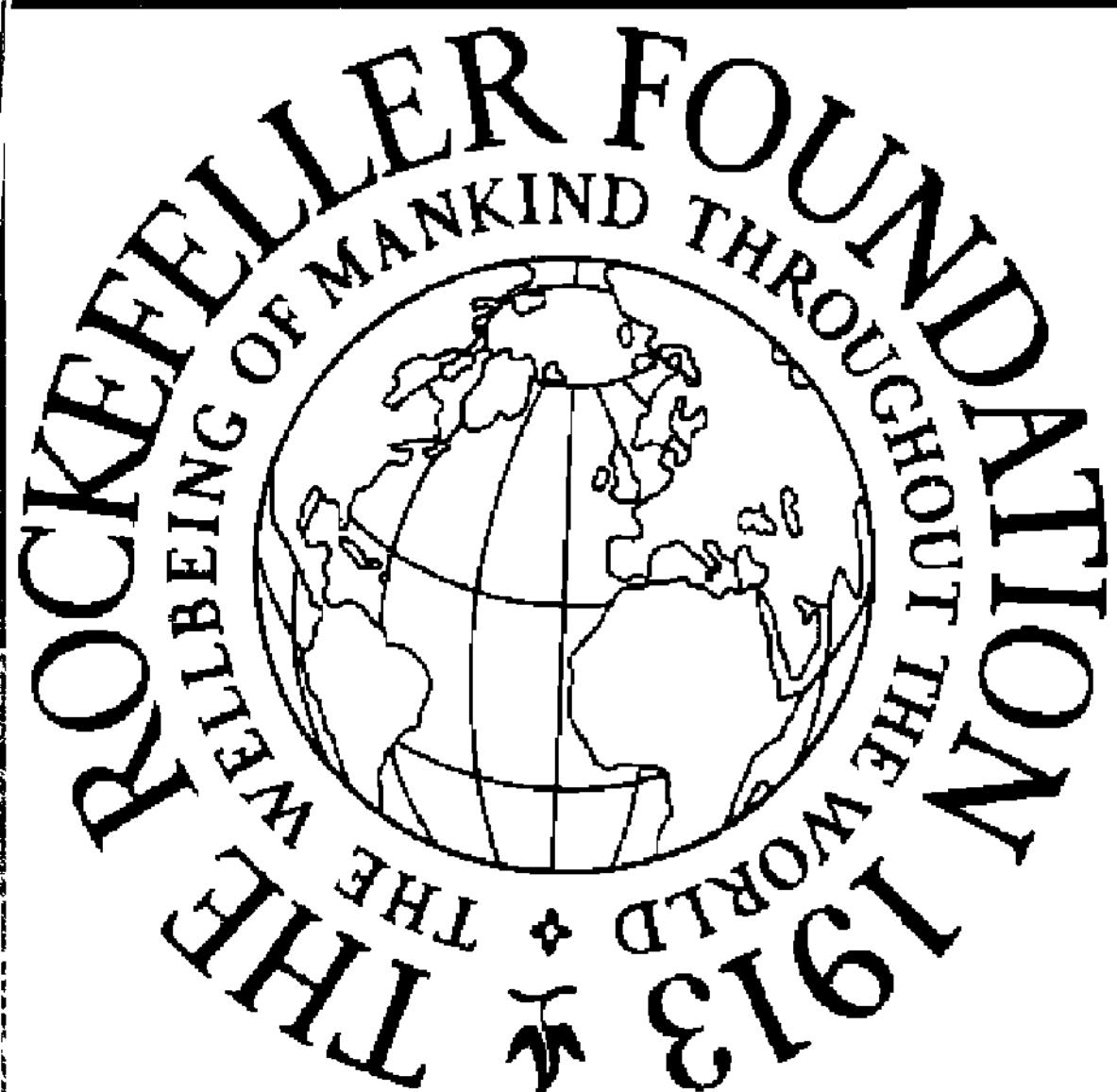
### RESEARCH

Questions about the structure and social dynamics of the ghetto, the psychological and sociological factors involved in its formation and its perpetuation, the complex nature of racial bias, the changing attitudes toward minority groups and their individual members by majority-group members—these and other aspects of the race problem in America still need intensive study. Programs in operation and plans for future efforts aimed at bringing about racial equality depend for their effectiveness on broadening the base of our knowledge about black identity, discrimination, poverty, and the attrition of



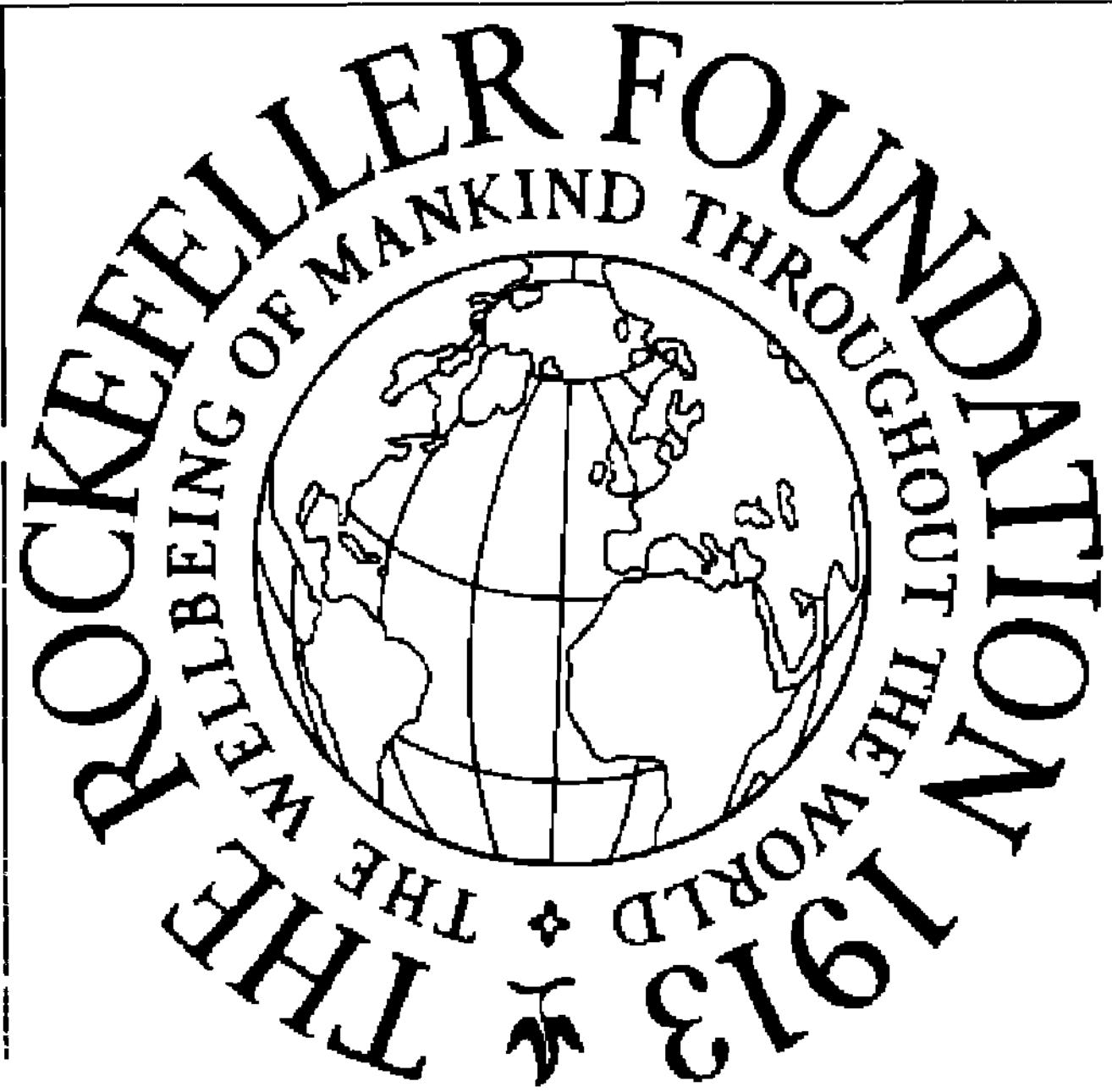
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S. Bruce Petteway, president of the College of the Albemarle, hopes to improve the educational and economic opportunities of its relatively stagnant rural communities.



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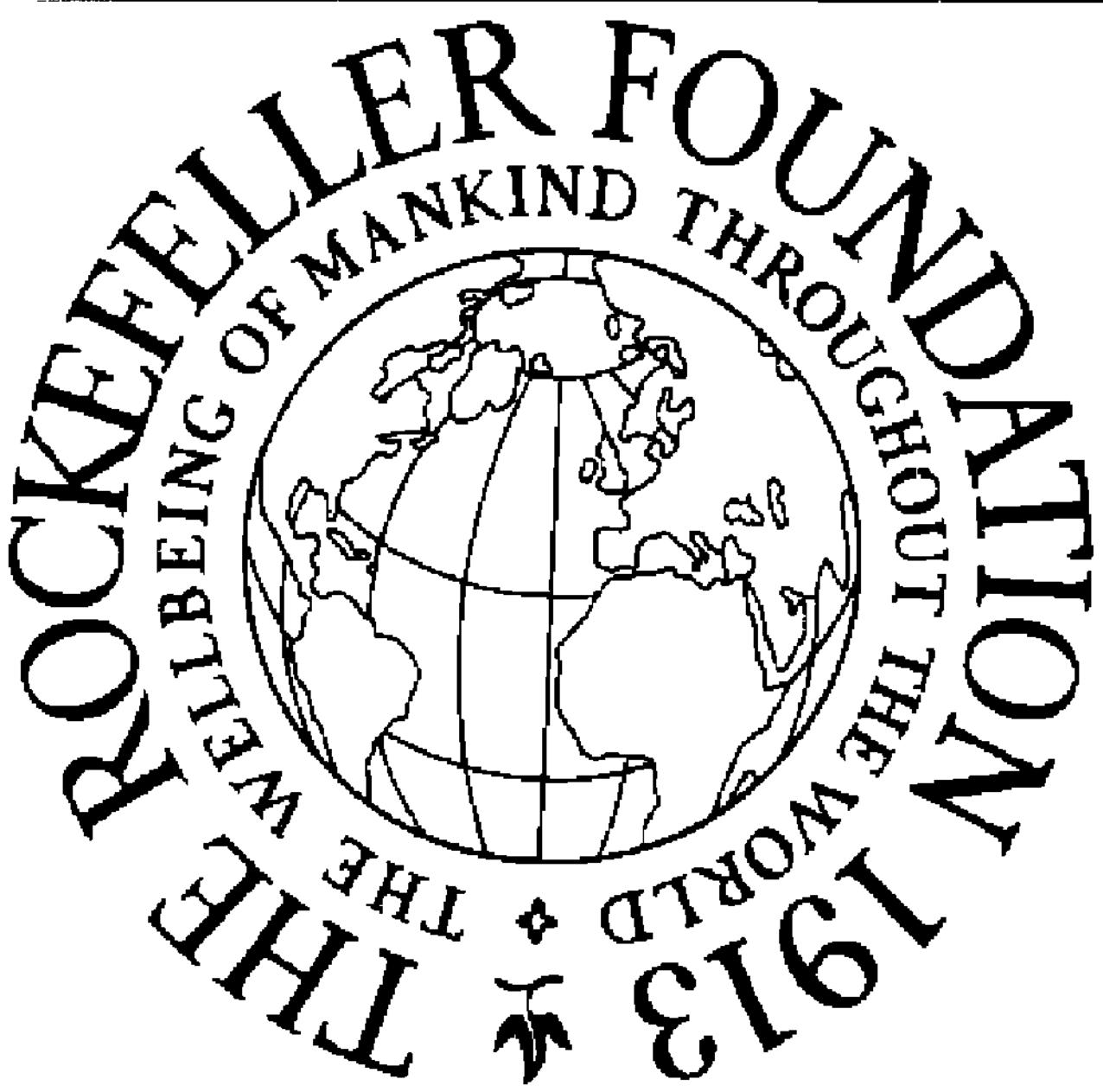
Kenneth B. Clark, of the Metropolitan Applied Research Center, is studying how ghettos are formed and perpetuated.



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William H. Hinton, president of Houston Baptist College, leads recruitment and training of disadvantaged students for nursing careers.



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William Piunderhughes, assistant superintendent of the Baltimore school system,  
trains potential school principals to be responsive to community needs.

inner-city life. Two studies supported this year are developing significant information in these areas: one, directed by Dr. Kenneth B. Clark of the Metropolitan Applied Research Center, is a detailed study of two city ghettos. The other, by Harvard social psychologist Dr. Thomas F. Pettigrew, examines voter attitudes toward black candidates for public office, in an attempt to assess, in various sectors of the population, the progress of efforts to eliminate racial bias.

## GRANTS 1969

### UNITED STATES

**ARIZONA STATE UNIVERSITY**, Tempe: for use by its College of Education in the development of educational programs for minority-group students; \$15,000;

**ASSOCIATED COLLEGES OF THE MIDWEST**: toward the cost of a Transitional-Year Program for disadvantaged high school graduates; \$25,000;

**ATLANTA UNIVERSITY CENTER CORPORATION**, Georgia:

University of Toronto, Canada; to enable Professor Romney Robinson to serve as visiting professor of economics; \$24,525;

To enable Dr. Benno D. Frank to serve as visiting professor of music and drama and to have the services of two musical assistants; \$22,000;

Smith College, Northampton, Massachusetts; expenses in connection with the appointment of Dr. Kenneth H. McCartney as visiting professor of economics; \$874;

**BALTIMORE CITY PUBLIC SCHOOLS**, Maryland: toward the costs of its Central City Administrative Internship Program; \$60,000;

**BOARD OF EDUCATION OF THE DISTRICT OF COLUMBIA**, Washington: toward the costs of the summer 1969 Urban Studies Program conducted by the Washington Integrated Secondary Education Project in collaboration with the office of the Assistant Superintendent for Secondary Schools and the Montgomery County Public Schools; \$23,000;

**CALIFORNIA INSTITUTE OF TECHNOLOGY**, Pasadena: for use by the Research Center of the Associated Students of the California Institute of Technology toward the cost of a "Summer Institute on Educational Change"; \$25,000;

**CALIFORNIA STATE COLLEGE AT LOS ANGELES**:

Support of a cooperative community-school relations program with Alain LeRoy Locke High School; \$43,000;

Toward the costs of developing a Child Growth and Development Center in cooperation with Alain LeRoy Locke High School; \$10,000 through June, 1971;

Toward a program of the Greater Los Angeles Consortium to meet the diverse needs of education for urban living; \$15,000;

**COLLEGE OF THE ALBEMARLE**, Elizabeth City, North Carolina: toward the costs of an experimental project in educational assistance to the rural poor and in economic and cultural development of a depressed rural area; \$440,000 through June, 1972;

**COLUMBIA UNIVERSITY**, New York:

Toward the establishment and operation of the Columbia Library Development Center; \$150,000 for a three-year period:

For use by its School of Architecture for two projects of the "Real Life Studio" in East Harlem; \$15,000;

To enable Ronald H. Coleman to continue his studies, primarily in mathematics; \$3,460;

**COMMUNITY RENEWAL SOCIETY**, Chicago, Illinois: toward the costs of a leadership training program for the Kenwood-Oakland Community Organization; \$200,000 through December, 1972;

**CORNELL UNIVERSITY**, Ithaca, New York:

Toward a summer training program in economics, directed by Dr. Gary W. Bickel, for advanced undergraduate students from predominantly Negro colleges and universities; \$25,000;

Toward costs of its 1969 Summer Work Scholarship Program for black students; \$10,000;

**DARTMOUTH COLLEGE**, Hanover, New Hampshire: to enable Dr. Errol Hill to undertake research in West Africa and the United Kingdom on African theatre, for use in black studies programs; \$1,400;

**DETROIT PUBLIC SCHOOLS**, Michigan: toward its Administrative Internship Program for school principals; \$65,000;

**EXPENSES OF A CONFERENCE** of the Rockefeller Foundation Rural Poverty Task Force; \$3,000;

**EXPENSES OF PARTICIPANTS** invited to The Rockefeller Foundation for discussions related to problems of rural poverty and equal opportunity; \$3,000;

**FISK UNIVERSITY**, Nashville, Tennessee:

Faculty appointments; \$130,000;

Salary supplements for selected senior faculty members; \$75,000 through June, 1973;

Toward the costs of two planning retreats for the University's new forward planning program; \$2,200;

**GARY COMMUNITY SCHOOL CORPORATION**, Indiana: toward the costs of a community-based Reciprocal Education Program; \$50,000;

**HARVARD UNIVERSITY**, Cambridge, Massachusetts:

Toward the costs of research, under the direction of Dr. Thomas F. Pettigrew, on racial attitudes in the United States and changes in these attitudes as manifested in responses to Negro candidacy for high political office; \$200,000 for a three-year period;

Toward costs of a Health Careers Summer Program for students from minority and underprivileged groups; \$150,000 for a three-year period;

For use by its Graduate School of Education toward the costs of a program to recruit and train minority-group students for positions of educational leadership; \$70,000 for a three-year period, payable in annual units of \$30,000, \$20,000, and \$20,000, upon receipt of evidence that matching funds have been secured from other sources for the same purpose;

For use by its Graduate School of Education toward the costs of the Collective Negotiations Institute, conducted as part of its 1969 summer program; \$10,000;

**HOUSTON BAPTIST COLLEGE**, Texas: scholarship assistance for 18 nursing candidates in the School of Nursing; \$18,000;

**HUMAN RELATIONS TASK FORCE**, Baltimore, Maryland: toward the operation of a pilot project of counseling and placement services by the Youth Placement Corps; \$23,500;

For use by its School of Architecture for two projects of the "Real Life Studio" in East Harlem; \$15,000;

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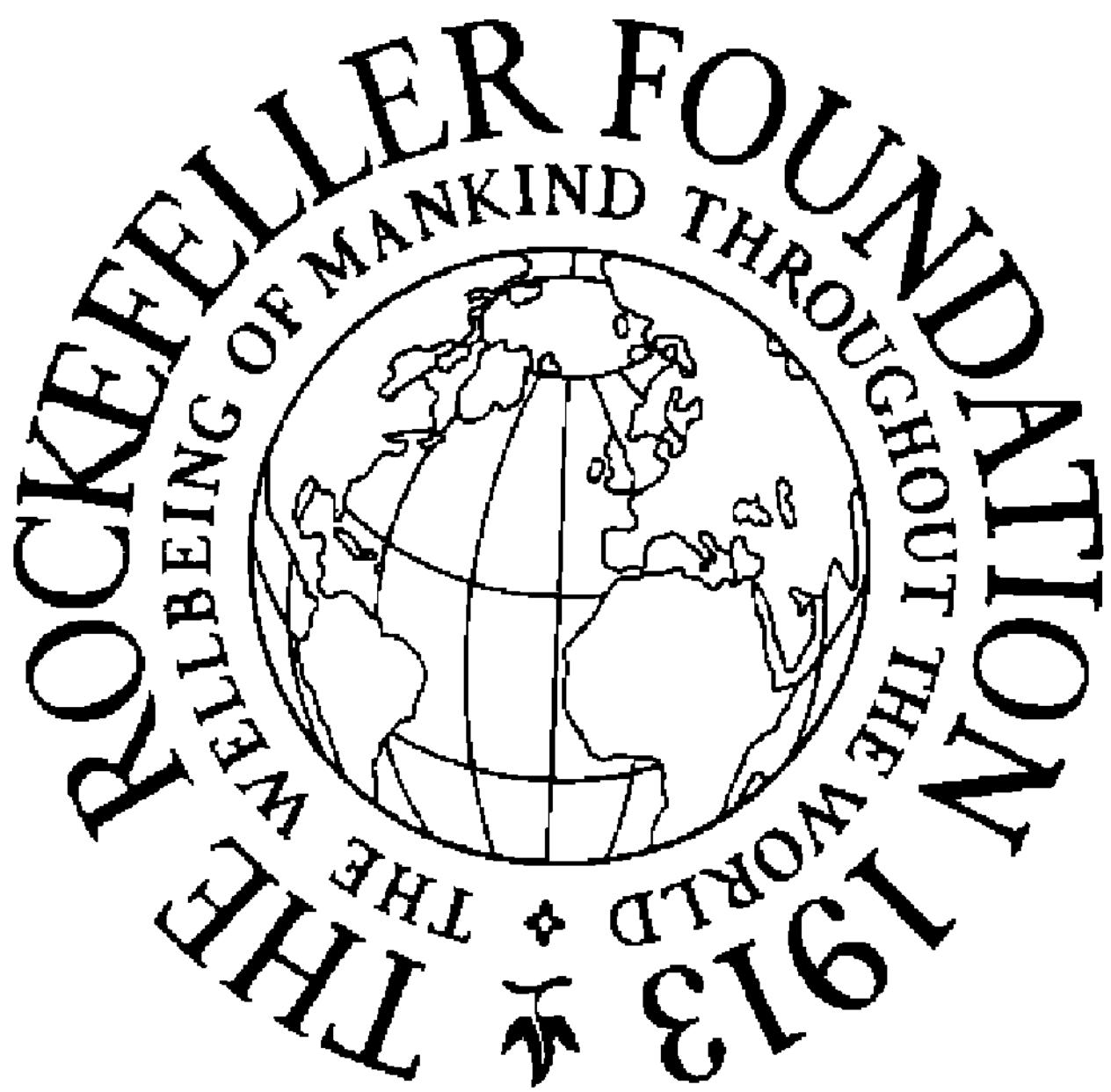
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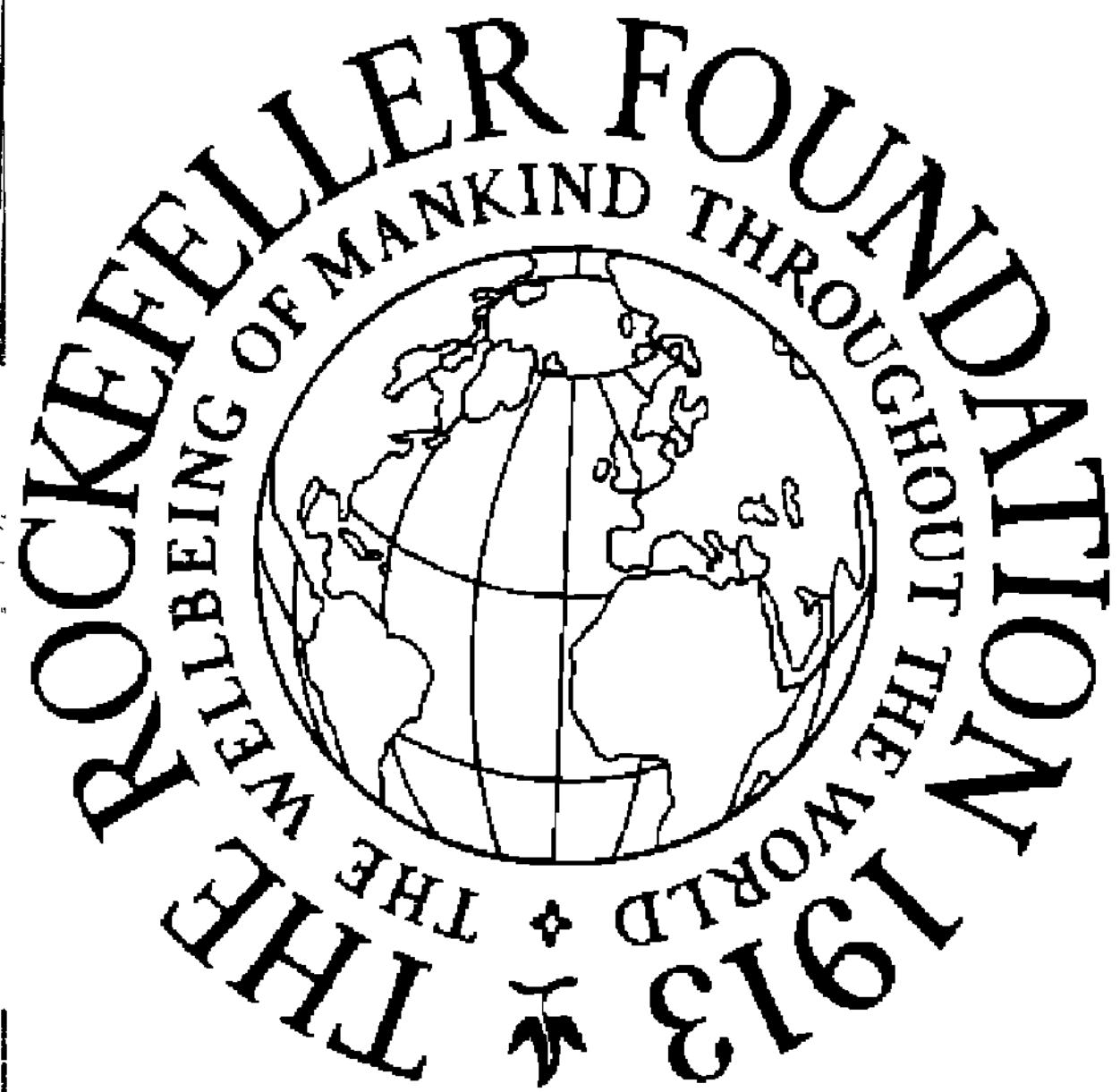
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Photograph Excised Here

Sterling Tucker is organizing the National Urban League's New Thrust in the black areas of major American cities.



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James R. Lawson is president of Fisk University, whose strong continued development is being assisted by the Foundation.



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Mary F. Malone directs Health Careers, a successful effort to prepare disadvantaged students for professional and semiprofessional careers.

**JOHNS HOPKINS UNIVERSITY**, Baltimore, Maryland: for use by its School of Advanced International Studies for a graduate training program in international relations for minority-group students; \$100,000 for a five-year period;

**METROPOLITAN APPLIED RESEARCH CENTER**, New York: for a study of the ghetto under the direction of Dr. Kenneth B. Clark; \$175,000;

**MOREHOUSE COLLEGE**, Atlanta, Georgia: to enable President Emeritus Benjamin E. Mays to complete an autobiographical social history of Negro-white relations in the South; \$13,150;

**NAVAHO COMMUNITY COLLEGE**, Many Farms, Arizona: appointment of a full-time coordinator for the College's development office; \$15,000;

**NEW ENGLAND HOSPITAL**, Roxbury, Massachusetts: development of a program to train disadvantaged students for various types of health careers; \$1,282,000 through December, 1971;

**NEW YORK URBAN LEAGUE**: toward the costs of a street workers program in New York City problem-area high schools; \$56,000;

**OBERLIN COLLEGE**, Ohio: for use toward the costs of the orderly termination of the College's summer school program for talented disadvantaged junior high school students; \$90,000 through June, 1973;

**OIC (OPPORTUNITIES INDUSTRIALIZATION CENTER) INSTITUTE**, Philadelphia, Pennsylvania: toward the costs of its managerial training program; \$115,000;

**PHILADELPHIA PUBLIC SCHOOLS**, Pennsylvania: toward the costs of its Administrative Internship Program for educational planners; \$65,000;

**PRINCETON UNIVERSITY**, New Jersey: toward the costs of its Afro-American Studies Program; \$215,000 through June, 1976;

**RESEARCH COUNCIL OF THE GREAT CITIES PROGRAM FOR SCHOOL IMPROVEMENT**, Chicago, Illinois: toward the cost of conferences and seminar workshops on the preparation and placement of educational leaders; \$12,000;

**SENCLAND COMMUNITY ACTION**, Whiteville, North Carolina: toward costs of developing management, production, and marketing skills for a newly organized farmers cooperative; \$15,000;

**UNIVERSITY OF CALIFORNIA**, Berkeley: research on the nutritional status of preschool minority-group children from poor families, under the direction of Dr. Robert B. Bradfield; \$13,200;

**UNIVERSITY OF CHICAGO**, Illinois:

Toward the operating expenses of the Cooperative Program for Educational Opportunity; \$10,000;

For completion, under the direction of Professor Robert J. Havighurst, of a study of American Indian education; \$2,500;

**UNIVERSITY OF FLORIDA**, Gainesville: toward the costs of a preparatory graduate education program in agriculture for black students; \$261,750 through February, 1972;

**UNIVERSITY OF MINNESOTA**, Minneapolis: toward the cost of a summer post-baccalaureate reinforcement program for disadvantaged students entering the University with graduate assistantships; \$18,000;

**UNIVERSITY OF PENNSYLVANIA**, Philadelphia: for use by its School of Medicine toward a summer education program for high school students and a summer research program for high school science teachers; \$25,000;



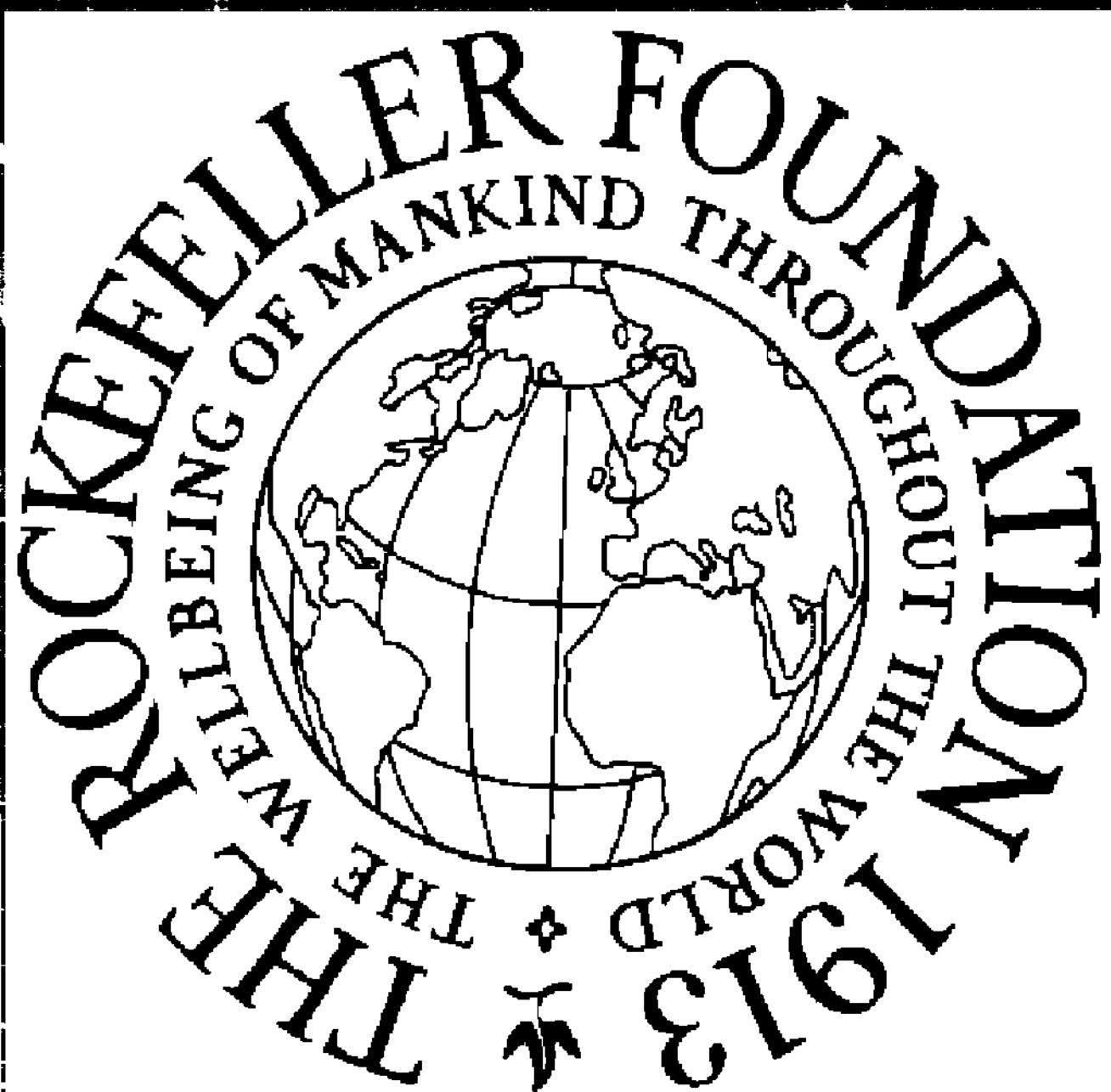
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Marvin A. Brooker of the University of Florida is training black students for careers in the agricultural sciences.



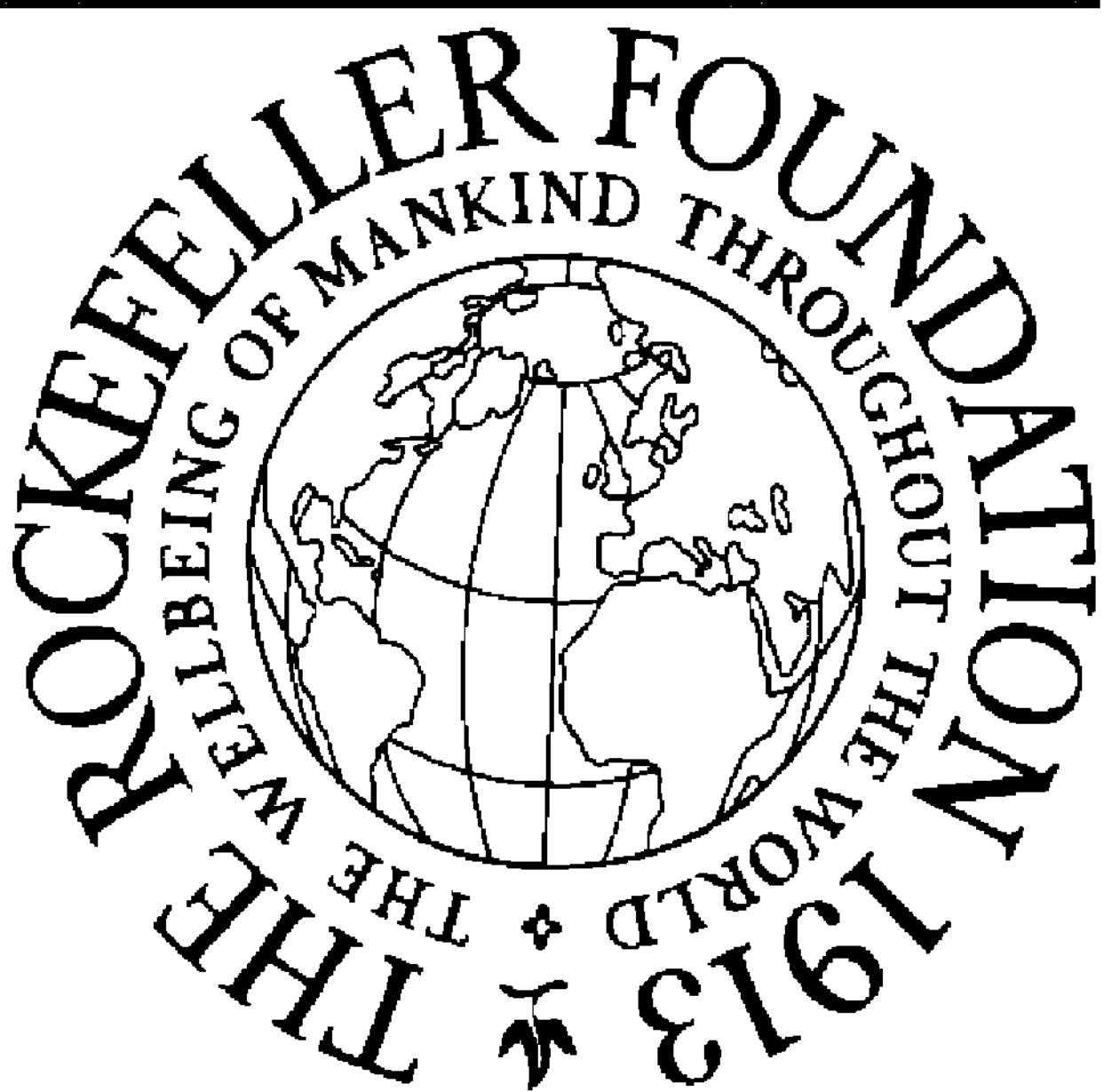
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Luther P. Jackson helps run a fellowship program at Columbia Graduate School of Journalism to promote aware, in-depth reporting of ghetto problems.



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Norman Drachler, superintendent of the Detroit public schools, is using administrative internships to give additional experience to inner-city school principals.



Photograph Excised Here

Prince E. Wilson, as the executive secretary of the Atlanta University Center, coordinates the development of six black educational institutions.

**UNIVERSITY OF WISCONSIN**, Madison: toward costs of the Follow-up Program of the Summer Laboratory School for elementary school children from culturally diverse backgrounds; \$2,400;

**URBAN AFFAIRS FOUNDATION**, Los Angeles, California: toward the costs of a pre-college leadership development program in the fields of public affairs and government; \$50,000 through September, 1972;

**WATTS LABOR COMMUNITY ACTION COMMITTEE**, Los Angeles, California: toward establishment of an urban residential center for agriculturally related vocational education at Saugus, California; \$207,840;

**WESTERN WASHINGTON STATE COLLEGE**, Bellingham: additional support for its program of educational stimulation and reinforcement for socially disadvantaged junior high school students from small towns and rural sections of the area; \$55,000 through June, 1973;

**WORKSHOP IN BUSINESS OPPORTUNITIES**, New York: toward preparation of instructional materials for training workshops for minority-group businessmen in low-income areas; \$25,000 through June, 1971;

**YALE UNIVERSITY**, New Haven, Connecticut:

To initiate a Black Studies Program and to engage in cooperative community development activities; \$200,000;

Support for the Leadership Development and Community Organization Project of the Black Coalition of New Haven; \$50,000;

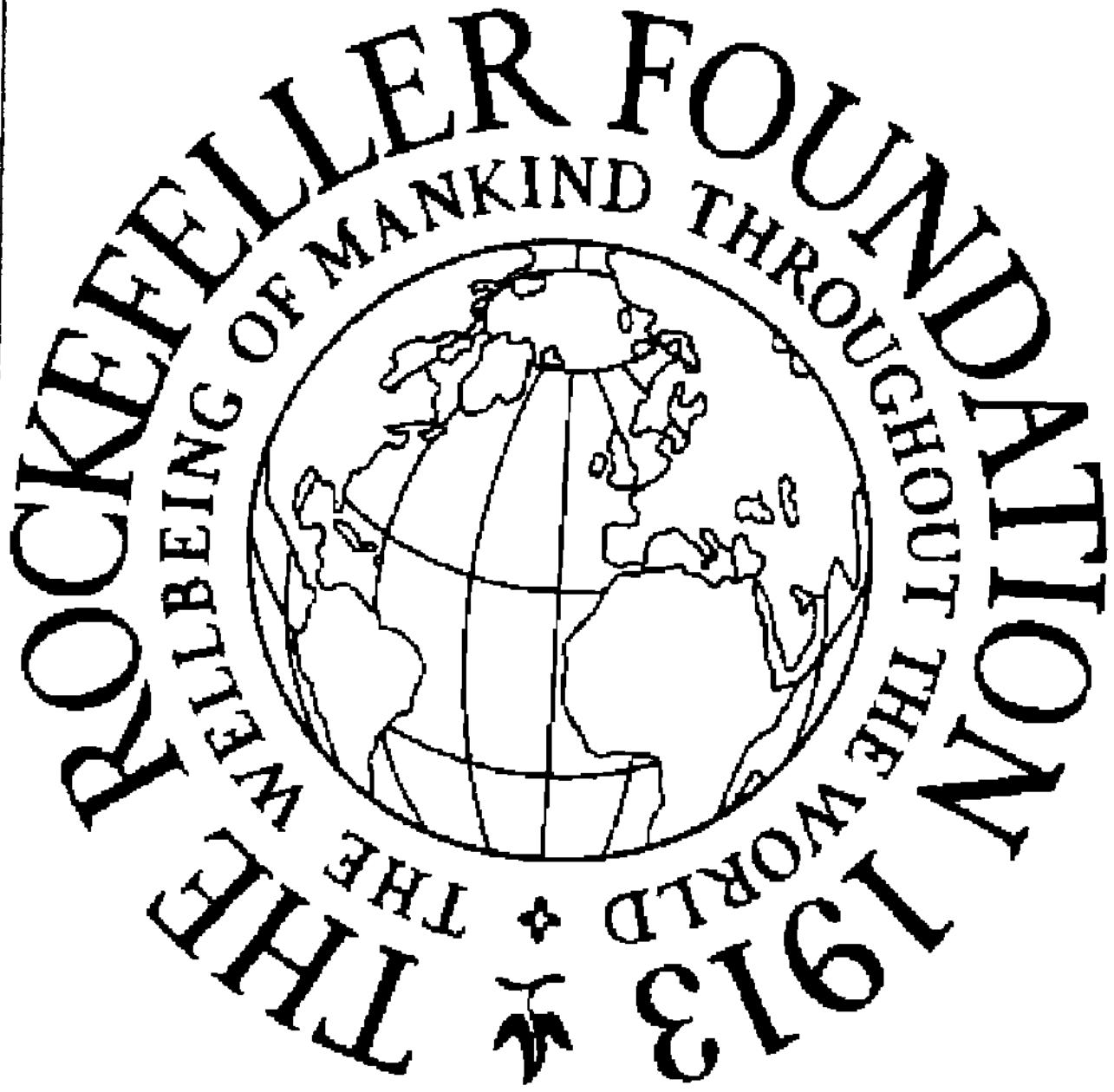
Toward the costs of its Transitional-Year Program for talented but disadvantaged high school graduates; \$25,000.



## CULTURAL DEVELOPMENT



*major active grants △*



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Gordon Hardy is dean of the Aspen Music School, where music teachers receive advanced performance training.

## NEW WORKS AND NEW AUDIENCES

The 1960's were an exceptionally creative time for the arts in America. Artists explored new territory, invented new forms, gained the interest of new audiences, and perhaps for the first time, collectively achieved popularity and prestige. But with rare exceptions, artists are still dependent on grants and endowments for financial survival. The Rockefeller Foundation has been placing special emphasis on support for the creation of new works and the encouragement of young artists, particularly in theatre, music, dance, and creative writing. Correlatively, it has supported groups that attract audiences to whom the performing arts were virtually unknown or inaccessible: a resident theatre for Harlem; professional drama productions or dance demonstration classes in high schools; professional dance companies for New England and for the Rocky Mountain states; contemporary music ensembles touring upstate New York or the Midwest — these Foundation-supported projects and others like them have broken ground for the building of new audiences.

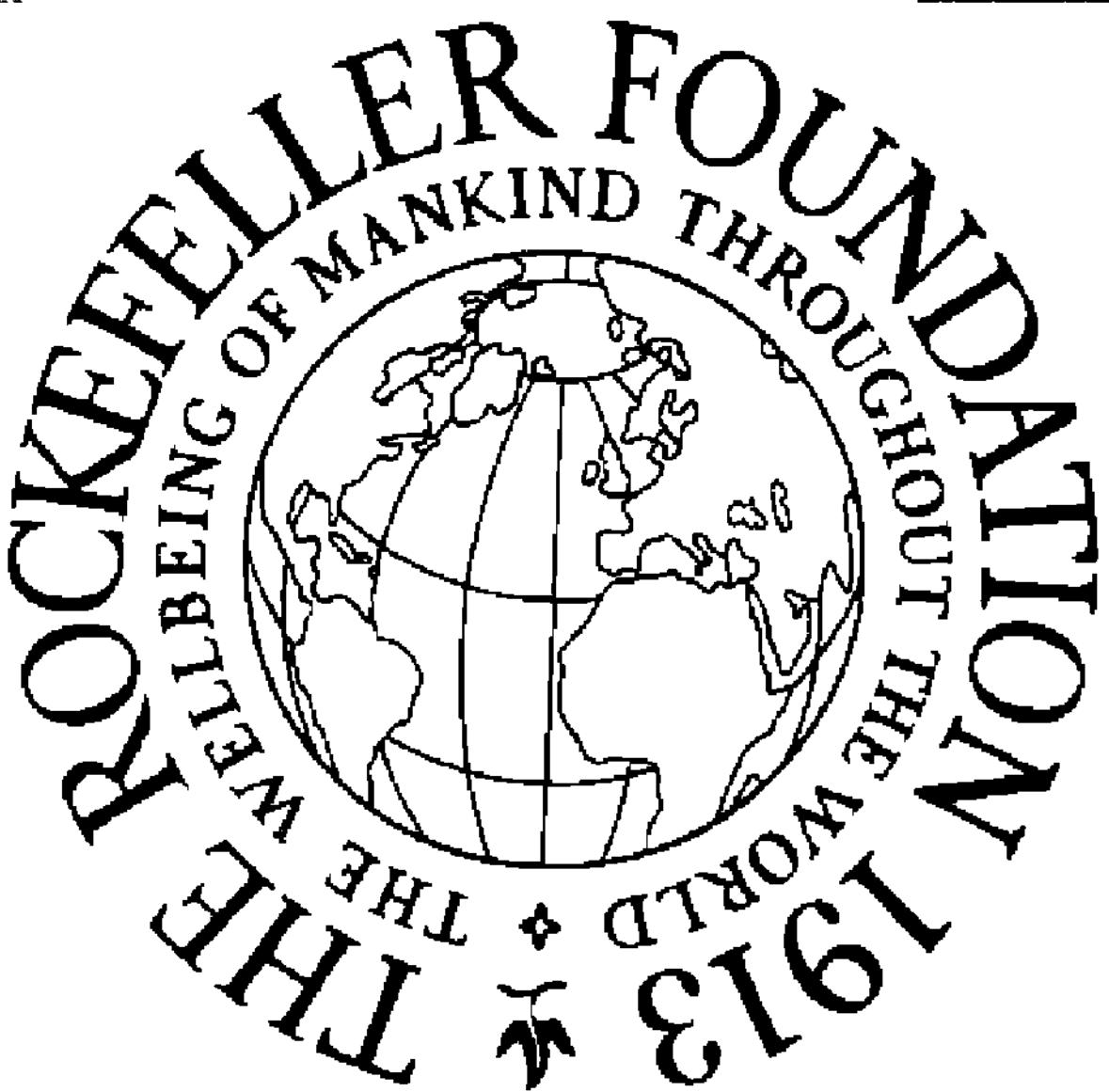
In 1969 the Foundation continued to support exploration and experimentation in the arts and to help establish groups who speak to and for new and newly aware audiences. A growing emphasis is being placed on dance, a field where creativity and interest are high and one that can be meaningful to a diversity of audiences.

The Foundation's concern with improving training in the performing arts, with supporting creative writers and literary scholars, and with seeking ways to meet the interests of students, were all reflected in this year's grants for cultural development.

## THEATRE

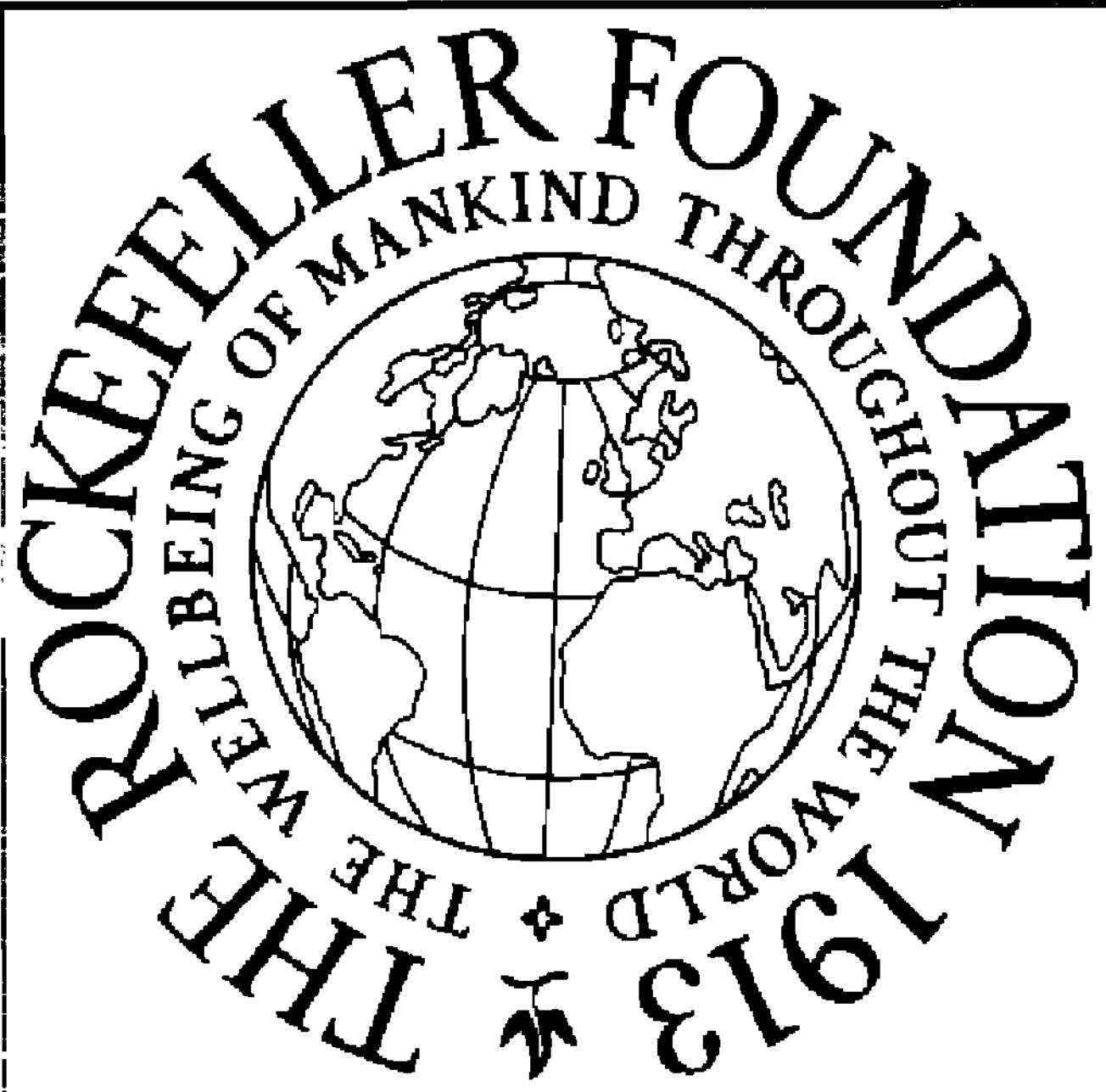
Over the past decade theatre has sunk roots in cities where previously it was a transient apparition — Los Angeles, Minneapolis, Washington, D.C., Seattle, among others — responding to specific local needs and opportunities. By attracting actors, directors, and designers from all over the country, and by inviting promising playwrights for periods of residence to develop their plays, these theatres function as creative centers, rather than passively playing host to New York-based touring companies as they did in the past.

Almost simultaneously, a counter-trend toward nationwide exchange and communication has developed. The most successful plays produced in one center are soon presented in others; new scripts are solicited and exchanged. A recent National Educational Television series supported by The Rockefeller Foundation televised a series of new plays produced in regional theatres.



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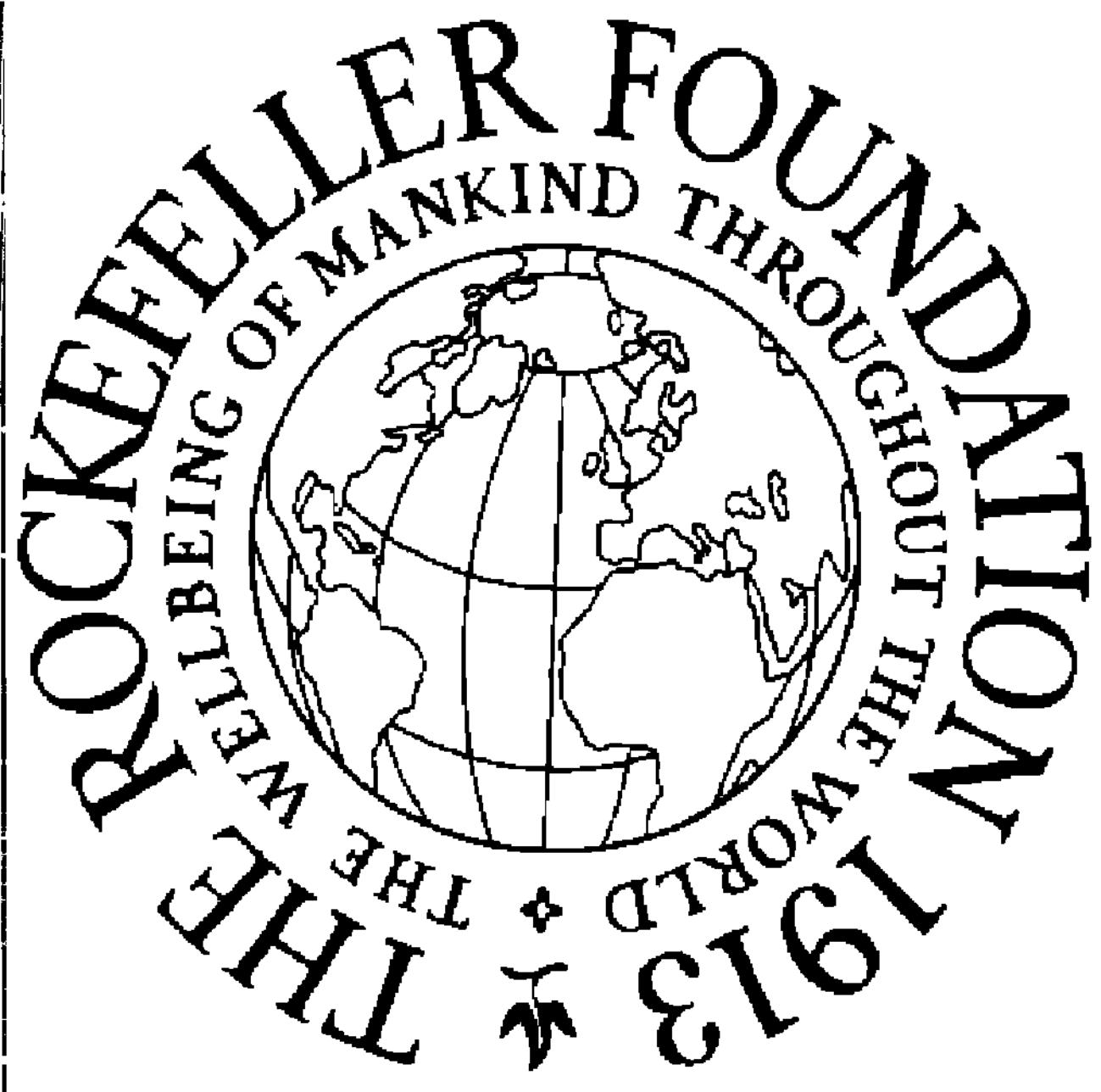
Judith Martin's Paper Bag Players -- a hit at New York's Lincoln Center and London's National Theatre -- bring fine children's theatre into city neighborhoods.



Photograph Excised Here

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Harvey Lichtenstein is turning Brooklyn's once-moribund Academy of Music into a hospitable environment for exceptionally creative groups in dance and theatre.



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Anna Sokolow's Lyric Theatre Company will train dancers, actors, and musicians to perform new, integrated art works.

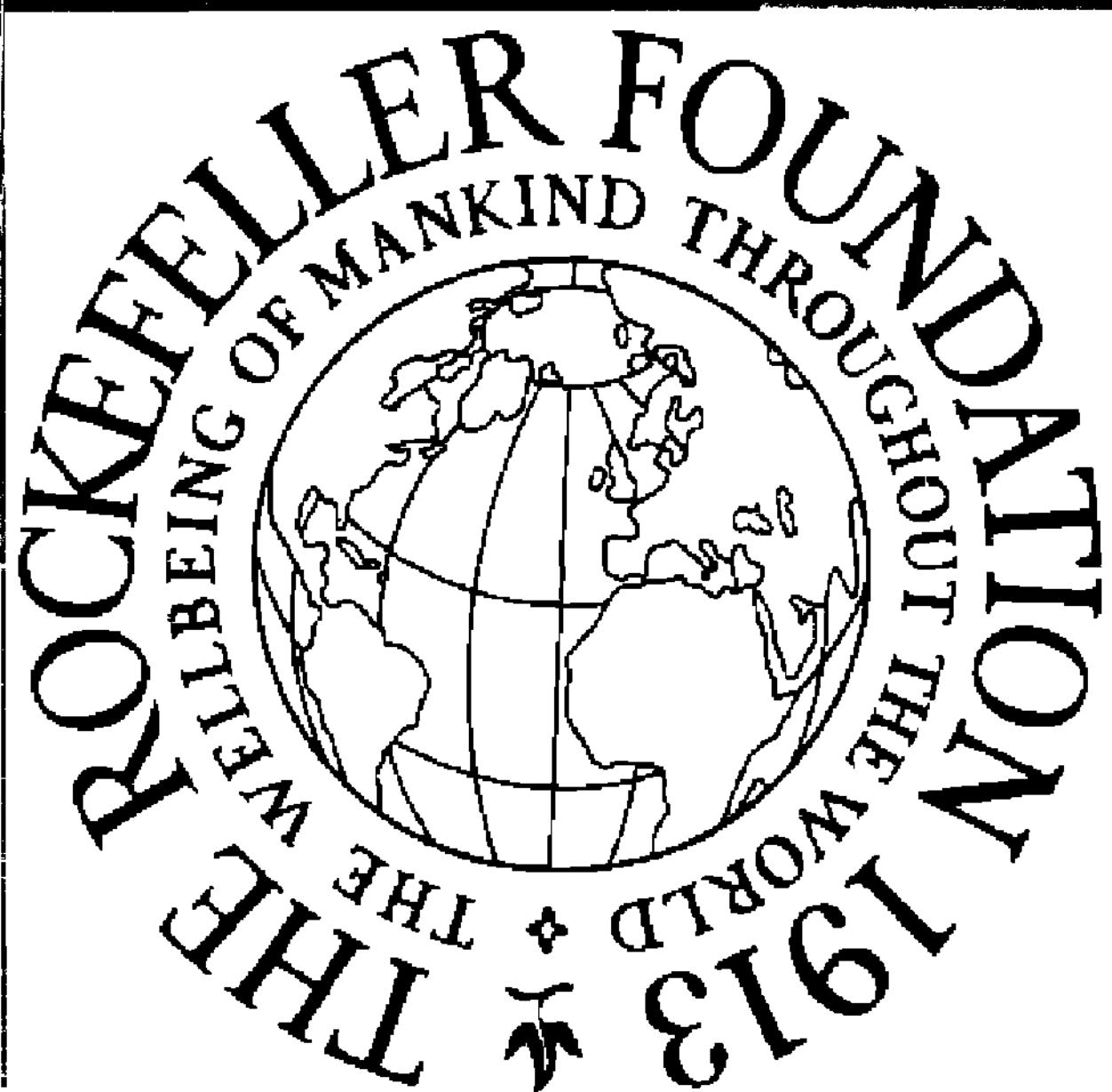
These two complementary movements have created a climate favorable to the development of new voices in American theatre, an environment relatively free from the success-or-failure syndrome, yet thoroughly professional. The Rockefeller Foundation has fostered these developments through grants to theatres and to playwrights, to university theatre departments and to experimental groups and workshops. Several successful playwright-development programs have been established in recent years with Foundation support; a notable example is the University of Minnesota's Office of Advanced Drama Research, which this year expanded to nationwide scale.

The traditional dichotomy of university studies in theatre and professional training for actors, directors, and designers, has often been scored for erecting false barriers and wasting both talent and resources. Several past Foundation grants have been designed to bring the two together in productive programs. This year a grant for this purpose was made to the University of Denver for development of professional programs in its Department of Theatre. Along the same lines, the Berkshire Theatre Festival instituted workshop programs at Smith College and other local institutions, and the Eugene O'Neill Memorial Theater Center is planning programs with several colleges in the Northeast.

#### MUSIC

In continuing its composer-in-residence program, initiated in 1964, The Rockefeller Foundation hopes to underscore the importance of the symphony orchestra as a living and creative element in American music at a time when too many critics are ready to relegate it to museum status. The program provides opportunities for composers to spend a year in close association with major symphony orchestras; 15 such appointments have been made thus far—five in 1969. Audiences responsive to new music are growing, too; several of the conductors and composers engaged in the program have undertaken community-oriented activities such as lectures and demonstration concerts to familiarize listeners with new idioms.

At a very basic level, the quality of a nation's music depends on the training available for musicians; the education of music teachers has long been recognized as a weak link in the chain, often because theory is over-emphasized at the expense of practice. Summer programs that stress the revival of performance skills and musicianship—like the highly successful Oberlin Summer Performance Institute—help balance the picture and, importantly, renew the teachers' musical vocation through contact with professional musicians and composers. The Aspen Music School, another outstanding summer institute for advanced musical training, this year received aid to allow public school music teachers to take part in its programs.



Photograph Excised Here

Eldon Elder is an experienced set designer who is training students -- some of them high-school dropouts -- as theatre technicians at Brooklyn College.



## Photograph Excised Here

Keith Botsford, who with Saul Bellow and others edited the *Noble Savage*, is the managing editor of a new journal of literature, art, and ideas.

## DANCE

Interest in the dance has never been more widespread or intense. New troupes are being established, new forms and new music are being created, new sources are being explored, and new media introduced. In expanding its support for dance companies and for dance programs in schools and universities, The Rockefeller Foundation stresses the creation of new works and support for young choreographers and experimental troupes. Bringing dance to new audiences is also a goal of the program.

Two grants made this year will help support black dance companies, both of which have a training component. The Elma Lewis School of the Arts which serves the Roxbury-Dorchester community in Boston, will add professional dancers to its teaching staff, with the eventual aim of forming resident companies. The Alvin Ailey American Dance Theater, in residence at the Brooklyn Academy of Music, hopes to establish a program to train children from the neighboring ghetto of Bedford-Stuyvesant.

The grant to the Brooklyn Academy also helps support two other outstanding dance companies in residence, the Merce Cunningham Dance Company and the troupe recently founded by choreographer Eliot Feld, the American Ballet Company. In their short period of residence, these troupes (and an experimental theatre group, the Chelsea Theater Center) have changed the artistic outlook for the Academy and for the entire neighborhood.

Foundation support was also given to the New York-based Paper Bag Players, a troupe of five dance and mime artists whose main audience is the very young. They have successfully composed educational programs that are both entertaining and artistic. The grant will enable them to create new works and to perform for ghetto children.

## CREATIVE WRITERS

In the past year the Foundation made 22 awards to creative writers and literary scholars. They were selected from all over the country from candidates proposed by a committee of consultants made up of writers, editors, critics, educators, and scholars. Established authors as well as new writers are considered for these awards; the Foundation's purpose has been to provide support at a moment in the writer's career when a period of concentrated work may make a crucial difference in the development of his writing.

## THE UNIVERSITY IN TRANSITION

The university of the future is being shaped today in an atmosphere of crisis; too often reforms are introduced to meet the exigencies of the hour. Educators and others concerned with the purposes, goals, and governance of the modern university, and its relation to a changing society, are taking steps

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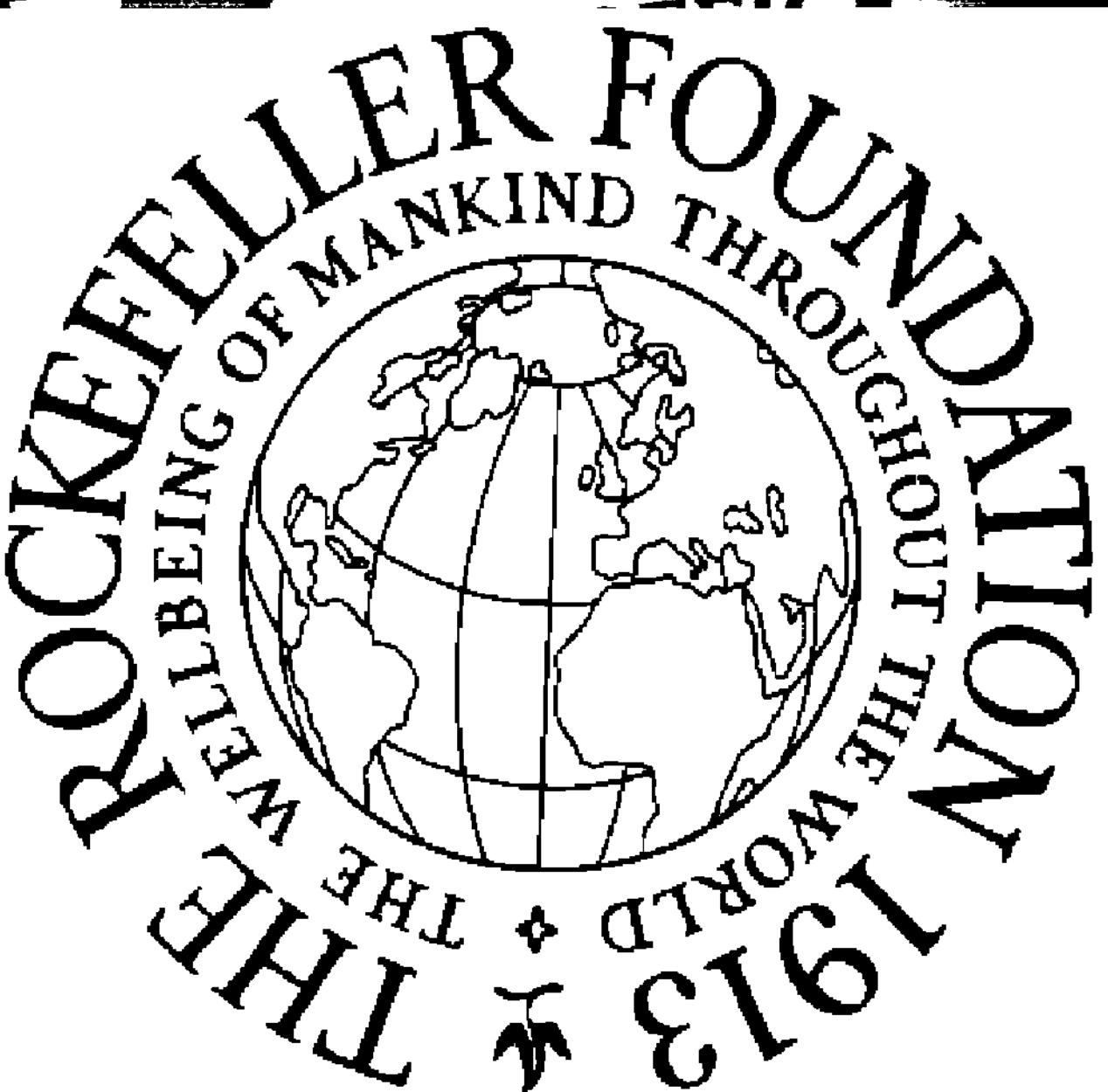
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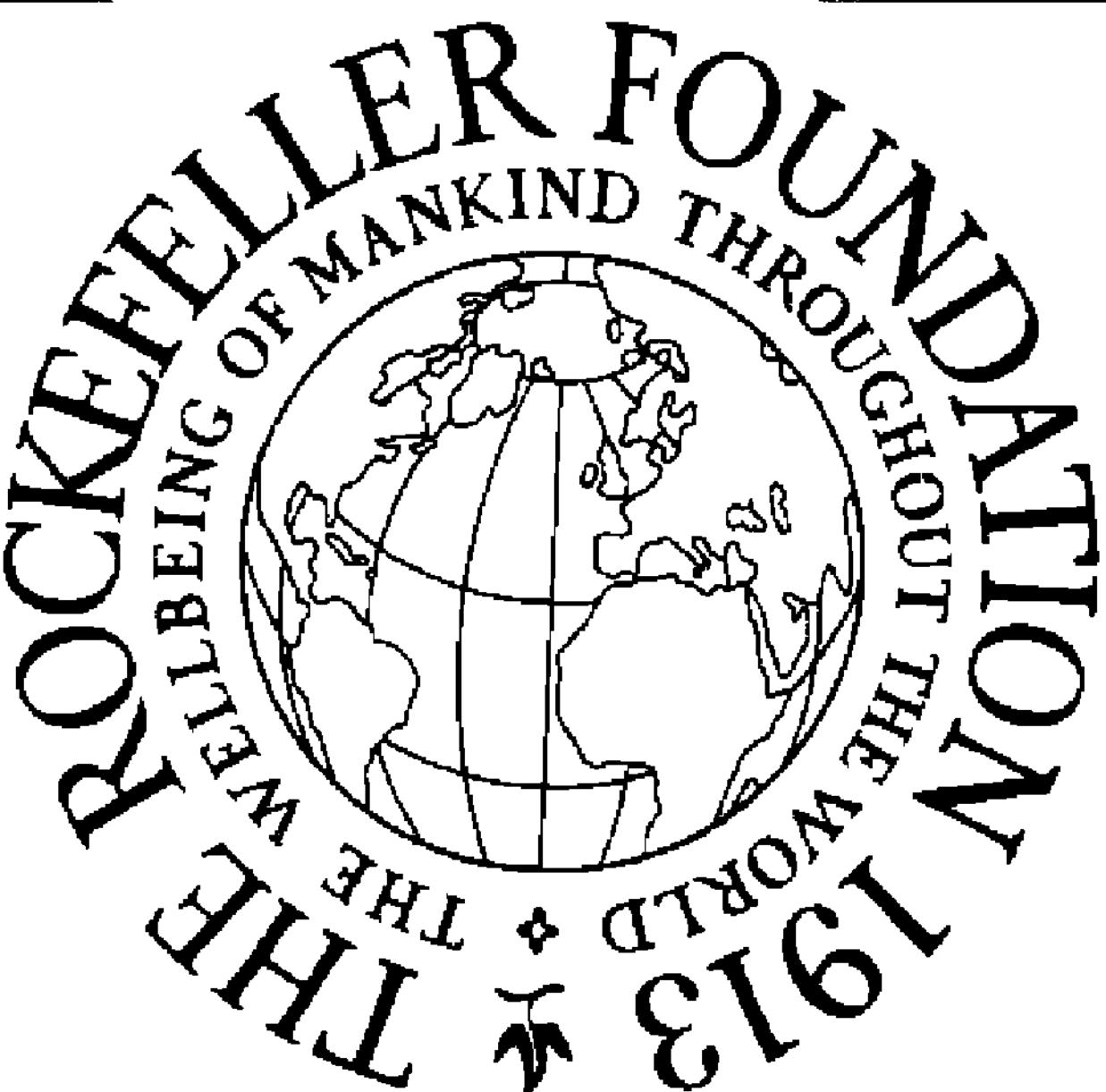
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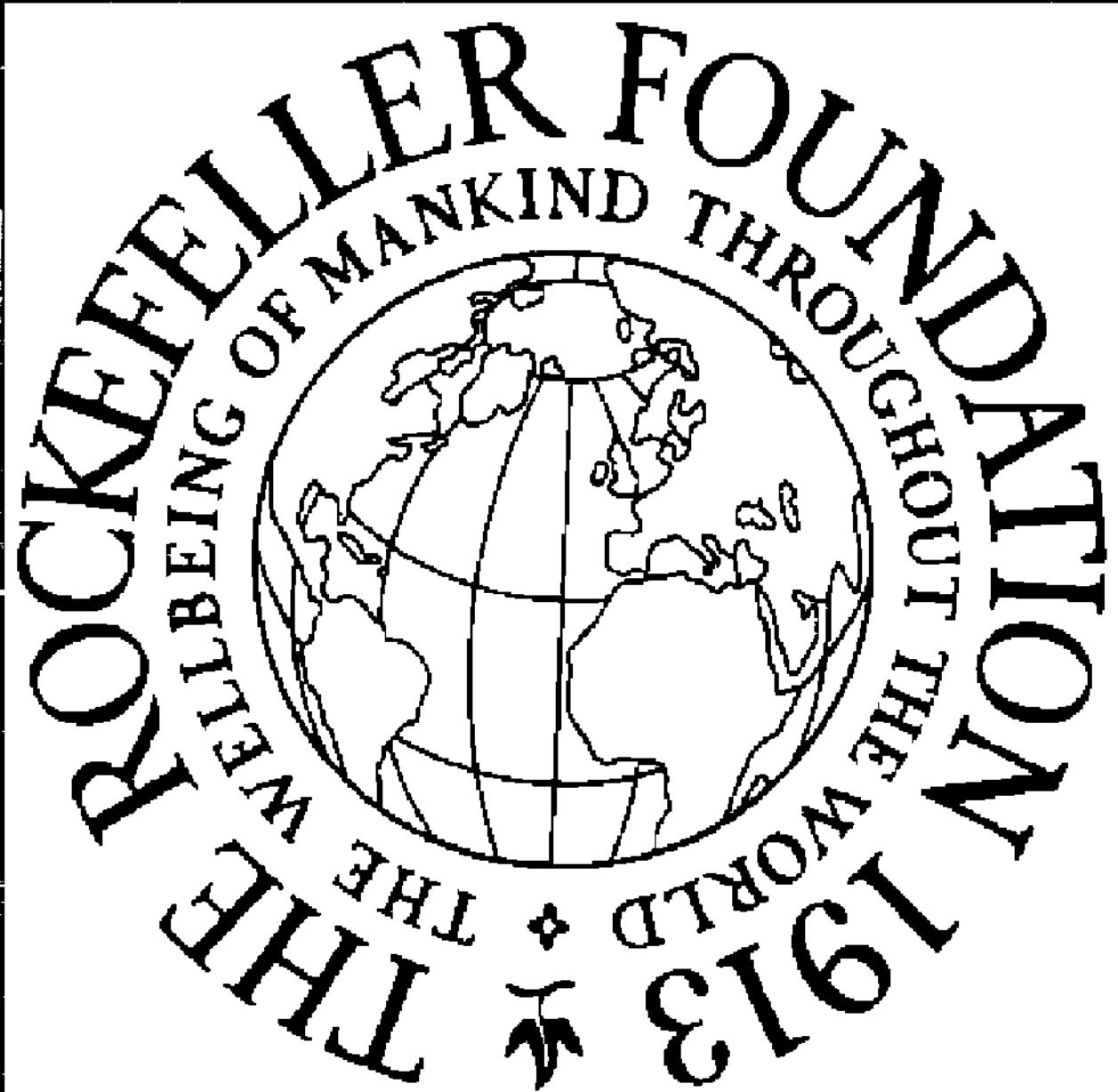
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T. J. Anderson is a distinguished American composer who is spending a year with the Atlanta Symphony Orchestra as composer-in-residence.



Photograph Excised Here

Alvin Ailey's American Dance Theater, now resident at the Brooklyn Academy of Music, performs to Vivaldi, jazz, or spirituals; it is America's major black dance company.



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Joseph Papp, founder of the New York Shakespeare Festival, is also staging new plays  
in a disused, now renovated public library.

to provide a framework for reflection on these fundamental issues. A two-year program sponsored by the American Academy of Arts and Sciences, for which the Foundation made a grant this year, will involve a group of scholars, students, and citizens in nationwide analysis and discussion of the challenge before the university and possible ways of meeting it.

## GRANTS 1969

### UNITED STATES

ACADEMY OF AMERICAN POETS, New York: to establish the Advisory Council of Writers, Artists, and Editors to provide ongoing resources for in-service, adult, and high school education in New York schools; \$13,500;

ACTORS EXPERIMENTAL UNIT, New York: to provide Claude McNeal, playwright, with an uninterrupted period of writing; \$12,000;

ALLIED ARTS FOUNDATION, Seattle, Washington: to enable Peter Phillips to write music and develop educational materials in the arts for children; \$8,000;

AMERICAN ACADEMY OF ARTS AND SCIENCES, Boston, Massachusetts: toward the establishment of the Assembly on University Goals and Governance; \$100,000;

AMERICAN THEATRE LABORATORY, New York: for use by Miss Anna Sokolow toward costs of establishing her Lyric Theatre Company; \$21,900;

ASSOCIATION OF AMERICAN DANCE COMPANIES, New York: toward costs of operating its executive office; \$13,000;

BERKSHIRE THEATRE FESTIVAL, Stockbridge, Massachusetts: toward the costs of creative and educational theatre programs in the New England area; \$90,000;

GEORGE BIRIMISA, playwright, New York: travel to England and living expenses during the production of his play; \$804;

BRIARCLIFF COLLEGE, Briarcliff Manor, New York: to enable Day Tuttle to write a history of the golden age of the summer theatre movement in the United States during the decade of the 1930's; \$12,900;

BROOKLYN INSTITUTE OF ARTS AND SCIENCES, New York: for use by the Academy of Music toward the costs of creative activities of the Academy's resident professional performing companies; \$375,000;

BROOKLYN COLLEGE OF THE CITY UNIVERSITY OF NEW YORK: toward a program to train professional theatre technicians and artisans; \$25,000;

CARNEGIE-MELLON UNIVERSITY, Pittsburgh, Pennsylvania: toward a summer internship program for selected acting students in the University's Department of Drama in cooperation with the Stratford Festival Company of Canada; \$3,160;

CLEVELAND INSTITUTE OF MUSIC, Ohio: toward costs of establishing a Mixed Media Center as a further development of the University Circle Contemporary Chamber Music Ensemble and the Electronic Studio; \$10,000;

COLUMBIA UNIVERSITY, New York: support for its Group for Contemporary Music; \$15,000;

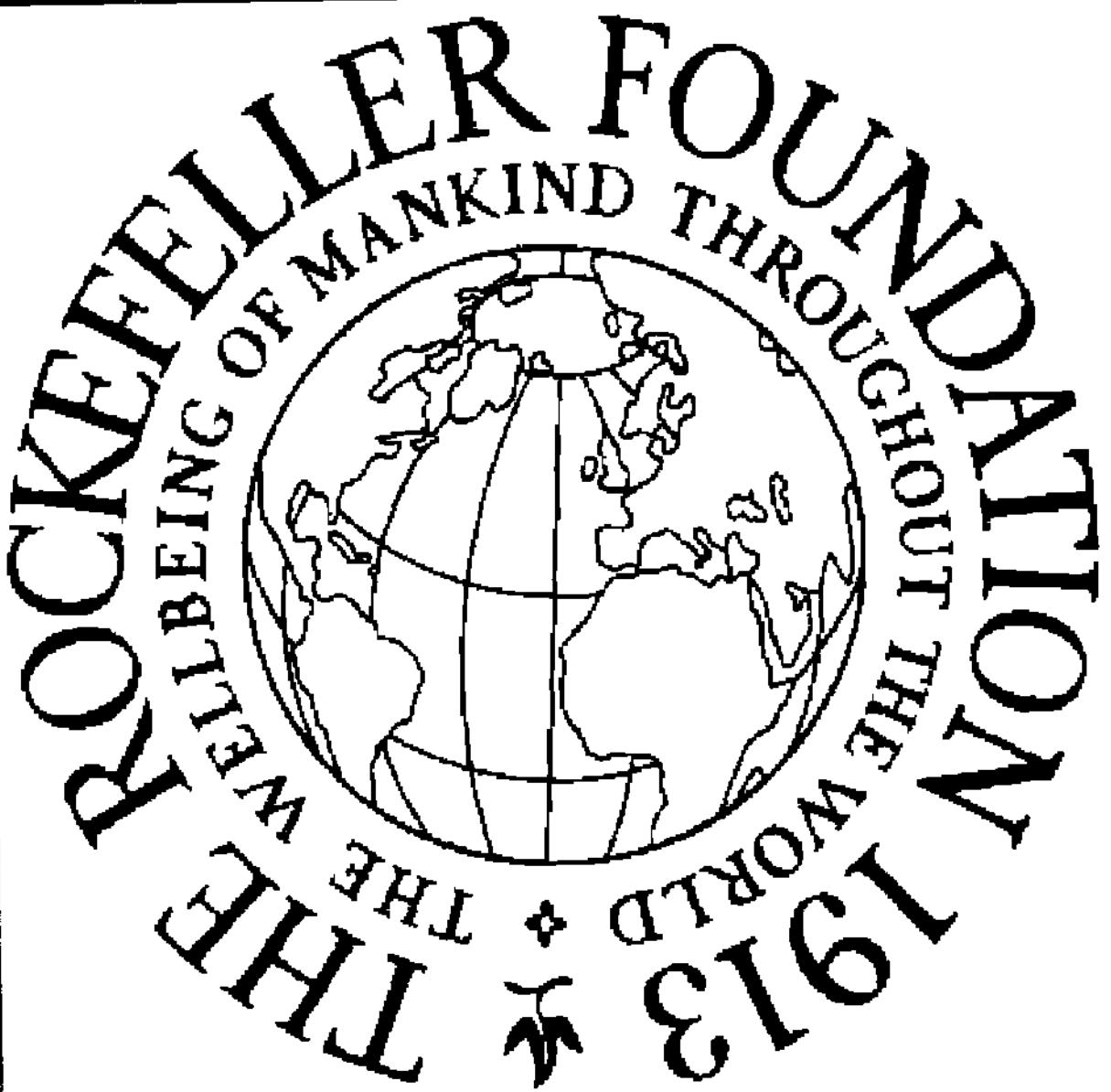
CONNECTICUT COLLEGE, New London:

Toward preparation by Ward Cannel of three film scripts on contemporary images of man; \$14,890;



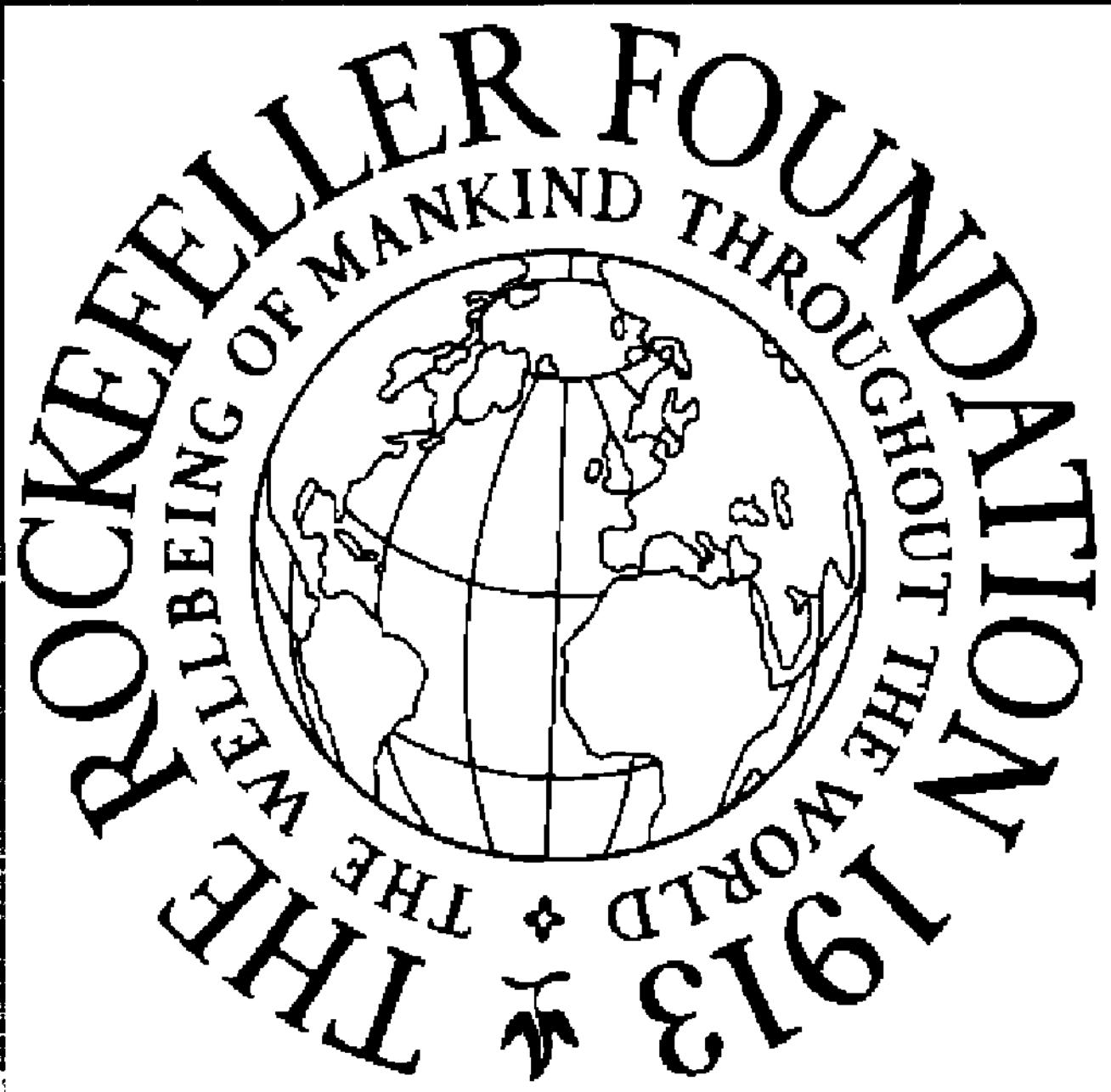
Photograph Excised Here

Elma Lewis is the founder of a school in Boston in which young people are trained in the performing arts through resident professional companies.



Photograph Excised Here

David Wheeler's Theatre Company of Boston is working with the New African Theatre, a new black theatre company, which will soon be operating fully on its own.



Photograph Excised Here

Arthur Penn, stage director (*The Miracle Worker*) and film maker (*Bonnie and Clyde*),  
is a participant in the Berkshire Theatre Festival.



Photograph Excised Here

Bruno D. Frank established the Lyric Theater at the Atlanta University Center, where he is serving as visiting professor of music and drama.

To enable Miss Selma Jeanne Cohen to complete research for a biography of Doris Humphrey; \$4,450;

CONNECTICUT PLAYERS FOUNDATION, New Haven: for use by the Long Wharf Theatre to provide Israel Horovitz, playwright, with an uninterrupted period of writing; \$3,000;

CULTURAL COUNCIL FOUNDATION, New York: for use by El Nuevo Teatro Pobre de América toward the costs of establishing its program on a year-round basis; \$13,500;

ELMA LEWIS SCHOOL OF FINE ARTS, Boston, Massachusetts: toward the costs of adding to its dance department teachers who will form and participate in resident professional companies; \$330,000 for a four-year period;

EUGENE O'NEILL MEMORIAL THEATER CENTER, Waterford, Connecticut: toward the establishment of a National Theater Institute to provide professional theatre training to undergraduates from selected colleges and universities and toward the continuation of the National Playwrights Conference; \$300,000 for a four-year period;

EXPENSES OF CONSULTANTS invited to The Rockefeller Foundation for discussions related to problems of universities in crisis; \$5,000;

GRINNELL COLLEGE, Iowa: cooperative educational program in theatre with the Milwaukee Repertory Theatre; \$15,000;

INDIANA UNIVERSITY, Bloomington: to enable Dr. Malcolm Brown to work on a critical biography and study of the music of Sergei Prokofiev; \$1,500;

INDIANA UNIVERSITY FOUNDATION, Bloomington: continuation of a historical study of the repertoires of major American symphony orchestras from their founding dates to 1970 by Professor Kate Hevner Mueller; \$4,000;

ADRIENNE KENNEDY, playwright: to devote full time to writing; \$4,000;

LA MAMA EXPERIMENTAL THEATRE CLUB, New York: to provide Miss Julie Bovasso, playwright, with an uninterrupted period of writing; \$6,450;

JACK LARSON, playwright, Los Angeles, California: to devote full time to writing; \$10,000;

MANHATTAN SCHOOL OF MUSIC, New York: to enable the Dance Theater Workshop to develop and perform works by young choreographers; \$12,400;

MUSIC ASSOCIATES OF ASPEN, Colorado: toward the costs of a program of advanced teacher training at the Aspen Music School; \$150,000 for a five-year period;

NATIONAL GUILD OF COMMUNITY MUSIC SCHOOLS, Evanston, Illinois: toward costs of operating its executive office; \$15,000;

NEW ENGLAND CONSERVATORY OF MUSIC, Boston, Massachusetts: to enable Donald Harris to complete work on a biography of the composer Alban Berg; \$5,400;

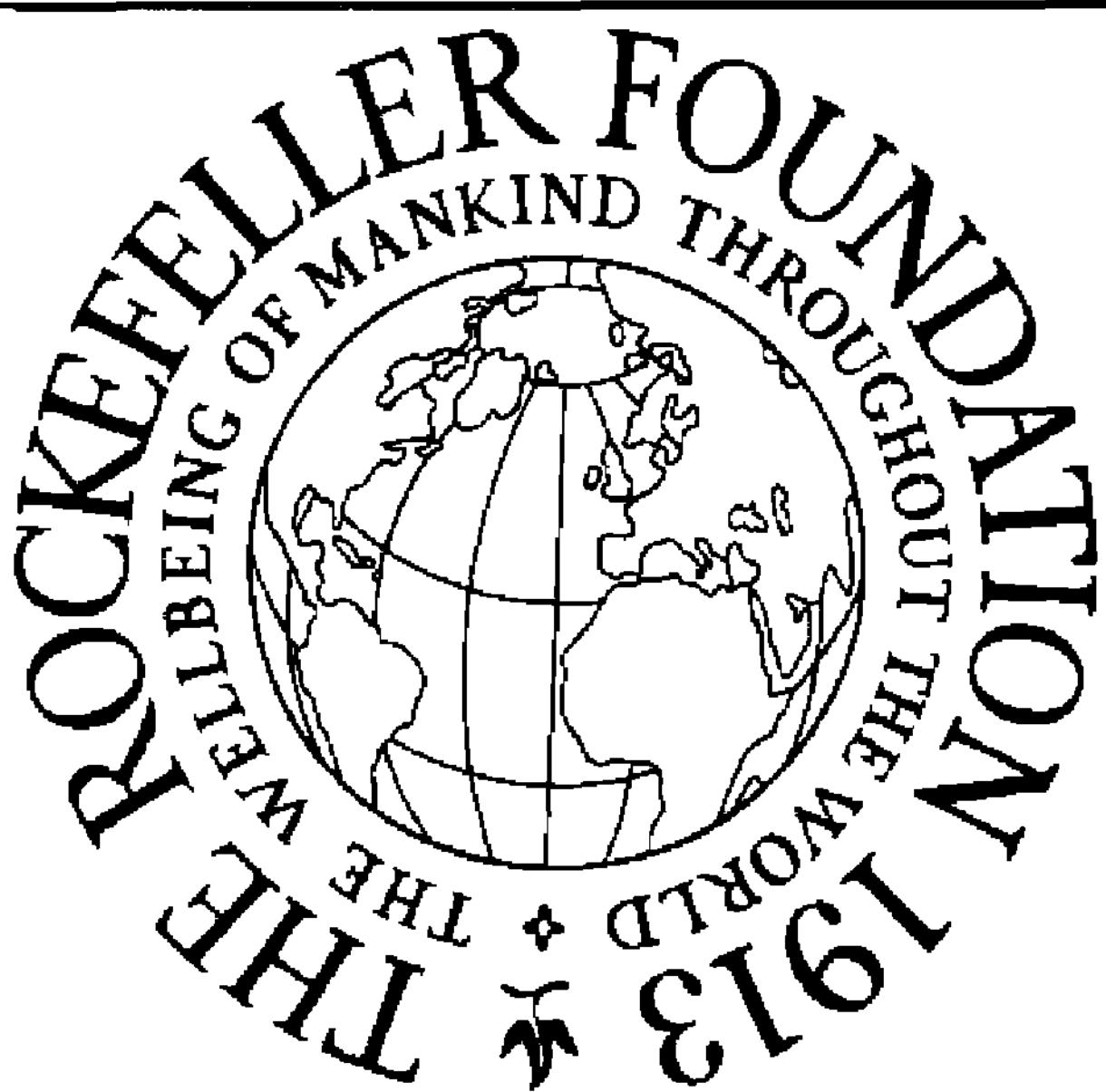
NEW LAFAYETTE THEATRE AND WORKSHOP, New York:

Toward its operating expenses; \$50,000;

To provide Ed Bullins, playwright-in-residence, with an uninterrupted period of writing; \$5,000;

NEW YORK SHAKESPEARE FESTIVAL: for use by the Public Theater toward the costs of productions at its experimental theatre and its new theatre for contemporary plays; \$400,000 through August, 1972;

NEW YORK UNIVERSITY: to enable William Bolcom, composer, to work on a project to explore new forms in musical theatre at the School of the Arts; \$6,000;



Photograph Excised Here

Robert Ward (right) directs the North Carolina School of the Arts, a unique state-sponsored residential training center for gifted youngsters.



Photograph Excised Here

Gregory A. Falls of the University of Washington runs a training program for actors, assisted by visiting professional directors.



Photograph Excised Here

Ross Lee Finney, an outstanding teacher and composer, is establishing a group for the performance of contemporary music at the University of Michigan.

**PAPER BAG PLAYERS**, New York: for the development of creative material and educational programs, and for performances for children in ghetto areas at minimal or no admission cost; \$72,600 for a three-year period;

**PRINCETON UNIVERSITY**, New Jersey: toward the costs of an educational program of humanistic studies in engineering; \$15,000;

**PRO ARTE ORCHESTRA ASSOCIATION**, Hempstead, New York: preparation of performances of new music by the Pro Arte Symphony; \$15,000;

**RUTGERS—THE STATE UNIVERSITY**, New Jersey: research by Dr. Gordon Myers on early American solo songs; \$3,452;

**WALTER SORELL**, dance critic and scholar, New York: travel and research for a study of dance and its relationship to allied arts; \$3,225;

**SOUTHEASTERN ACADEMY OF THEATRE AND MUSIC**, Atlanta, Georgia: toward maintaining the Academy Theatre's acting troupe; \$25,000;

**SOUTHERN UNIVERSITY**, Baton Rouge, Louisiana: to provide William Wellington Mackey, playwright, with an uninterrupted period of writing; \$5,000;

**THEATRE COMPANY OF BOSTON**, Massachusetts: toward the artistic and management costs of presenting two productions in cooperation with the New African Theatre; \$16,520;

**UNIVERSITY OF ALASKA**, College: to enable Dr. Charles Northrip to continue his work on behalf of the Alaska Educational/Public Broadcasting Commission toward the development of educational television in the state of Alaska; \$24,645;

**UNIVERSITY OF CALIFORNIA AT SAN DIEGO**: toward the cost of organizing a comprehensive exhibition of African art and its influences on European and American art, in collaboration with the La Jolla Museum of Art; \$15,000;

**UNIVERSITY OF CHICAGO**, Illinois: to appoint Keith Botsford as managing editor of a new journal of literature, art, and ideas; \$8,000;

**UNIVERSITY OF DENVER**, Colorado:

- Toward the development of professional programs in its Department of Theatre; \$400,000 for a five-year period;
- Toward a series of consultations regarding its proposed professional education program in theatre; \$2,700;

**UNIVERSITY OF IOWA**, Iowa City: toward creation of a pilot project aimed at establishing a Center for the New Performing Arts within the Division of Fine Arts; \$25,000;

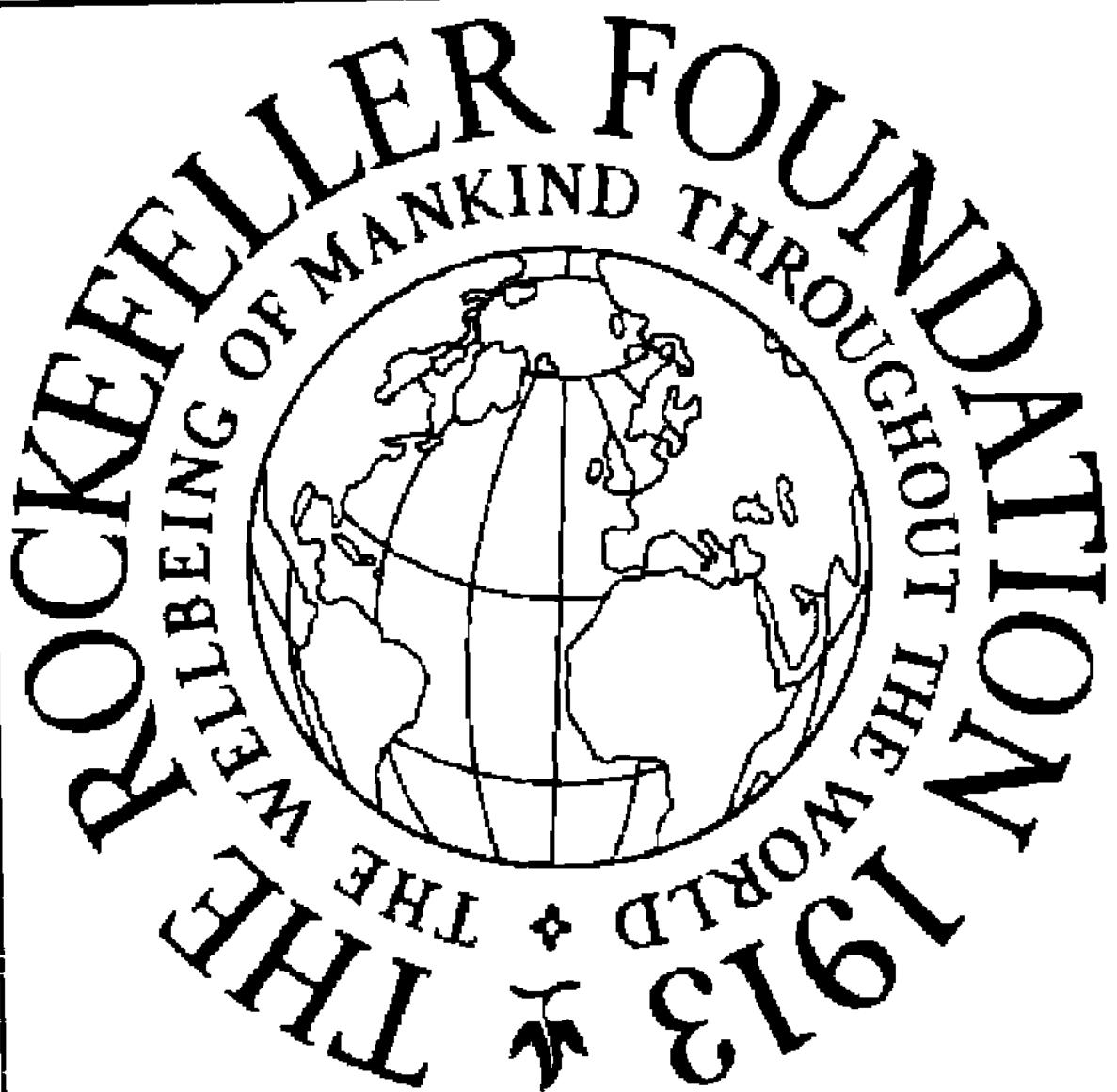
**UNIVERSITY OF MICHIGAN**, Ann Arbor: toward the continuation of the Project for the Performance of Contemporary Music; \$25,000;

**UNIVERSITY OF MINNESOTA**, Minneapolis: continuation and expansion of the activities of the Office for Advanced Drama Research; \$388,500 through June, 1972;

**UNIVERSITY OF NOTRE DAME**, Indiana: toward costs of an English translation of the proceedings of a seminar on monasticism, held in Thailand; \$6,000;

**UNIVERSITY OF UTAH**, Salt Lake City: for the Children's Dance Theatre, under the direction of Virginia Tanner, toward the costs of demonstration programs, particularly in elementary schools; of selecting additional boys for the training program; and of the Theatre's participation in workshop programs; \$15,000 for a two-year period;

**UNIVERSITY OF WASHINGTON**, Seattle: to enable the School of Drama to invite guest directors to participate in its new series of major dramatic productions; \$15,000 through June, 1971;



Photograph Excised Here

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Ellen Stewart has developed the experimental group she founded into an international force in the theatre.



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William Hibbard is musical director of the Center for the New Performing Arts at the University of Iowa.

UNIVERSITY OF WISCONSIN, Madison: to enable Professor Leon Epstein to undertake research on the problems of university government; \$13,000;

YALE UNIVERSITY, New Haven, Connecticut:

To enable the School of Drama to establish a research workshop in theatre under the direction of Robert Lewis; \$25,000;

To enable Miss Mary Pitlick to collaborate with Professor R. W. B. Lewis on the authorized biography of Edith Wharton; \$9,405.

### *Composers-in-residence Program*

In support of a program enabling composers to spend a year in residence with major symphony orchestras, a total of \$45,245 was appropriated. The following individual awards were made:

ATLANTA SYMPHONY ORCHESTRA, Georgia: to enable T. J. Anderson to serve as composer-in-residence;

MUSICAL ARTS ASSOCIATION, Cleveland, Ohio: to enable José Serebrier to serve as composer-in-residence with the Cleveland Orchestra;

NATIONAL SYMPHONY ORCHESTRA ASSOCIATION OF WASHINGTON, D. C.: to enable John Carter to serve as composer-in-residence with the Washington National Symphony;

NEW ORLEANS PHILHARMONIC SYMPHONY SOCIETY, Louisiana: to enable Russell Smith to serve as composer-in-residence;

OAKLAND SYMPHONY ORCHESTRA ASSOCIATION, California: to enable Edward Applebaum to serve as composer-in-residence.

### *Creative Writing and Literary Scholarship Program*

In support of creative writing and literary scholarship, a total of \$165,563 was appropriated. The following individual awards were made, to be administered by a college or university:

CLARENCE COOPER (Hofstra University, Hempstead, New York);

RONALD DUGGER (University of California, Los Angeles);

FREDERICK EXLEY (New York University);

WILLIAM GADDIS (Vassar College, Poughkeepsie, New York);

ERNEST J. GAINES (Stanford University, California);

JOHN A. GRAVES, III (Texas Christian University, Fort Worth);

JOHN IRVING (Windham College, Putney, Vermont);

JUNE MEYER JORDAN (Sarah Lawrence College, Bronxville, New York);

KEORAPETSE WILLIAM Kgositsile (Columbia University, New York);

PERRY LENTZ (Kenyon College, Gambier, Ohio);

JULIAN MAZOR (Austin College, Sherman, Texas);

JOSEPH PRINCE McELROY (Queens College, New York);

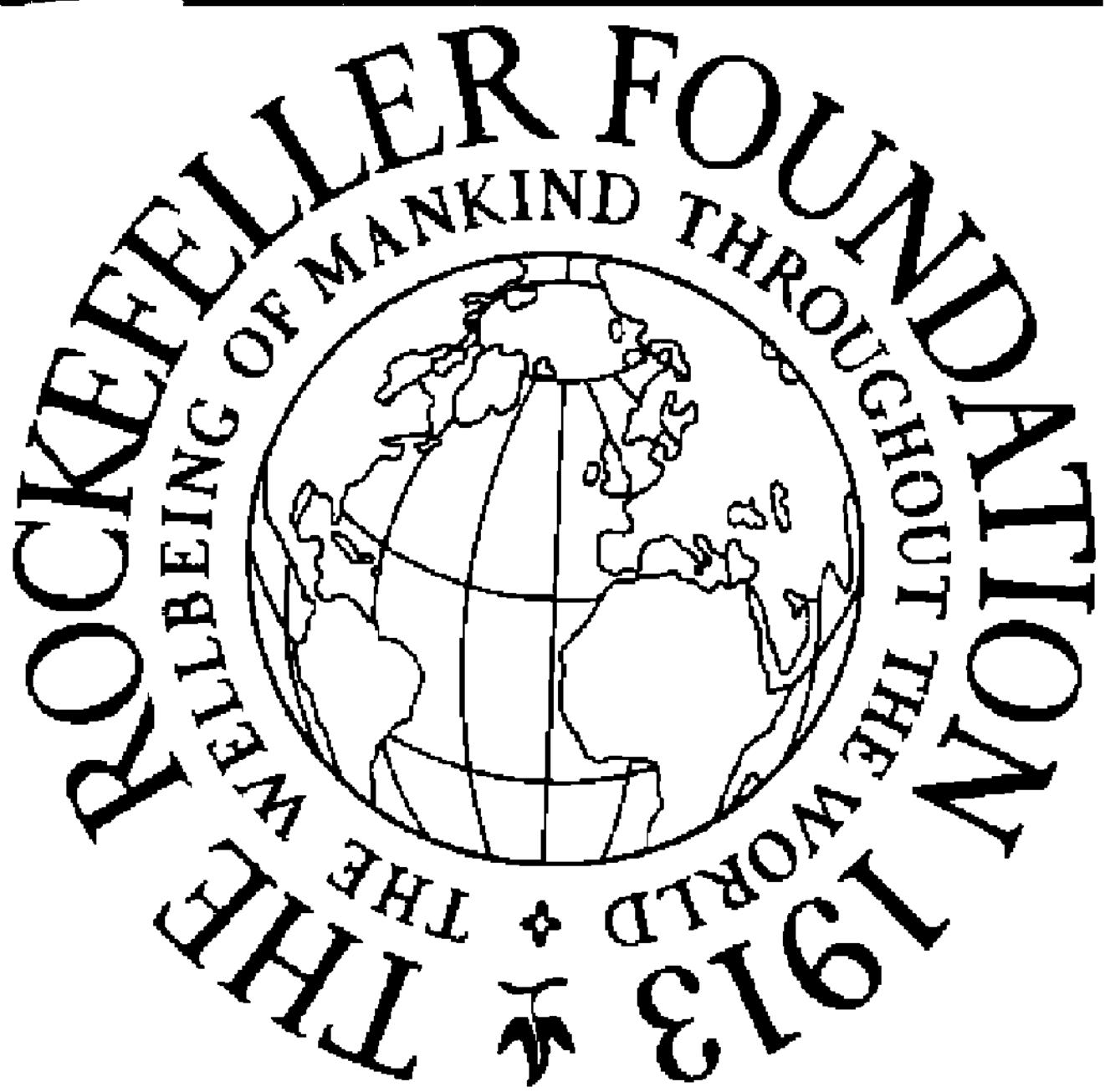
JAMES A. MCPHERSON (University of California, Santa Cruz);

EUGENE MIRABELLI (State University of New York at Albany);

ROBERT PHELPS (New School for Social Research, New York);

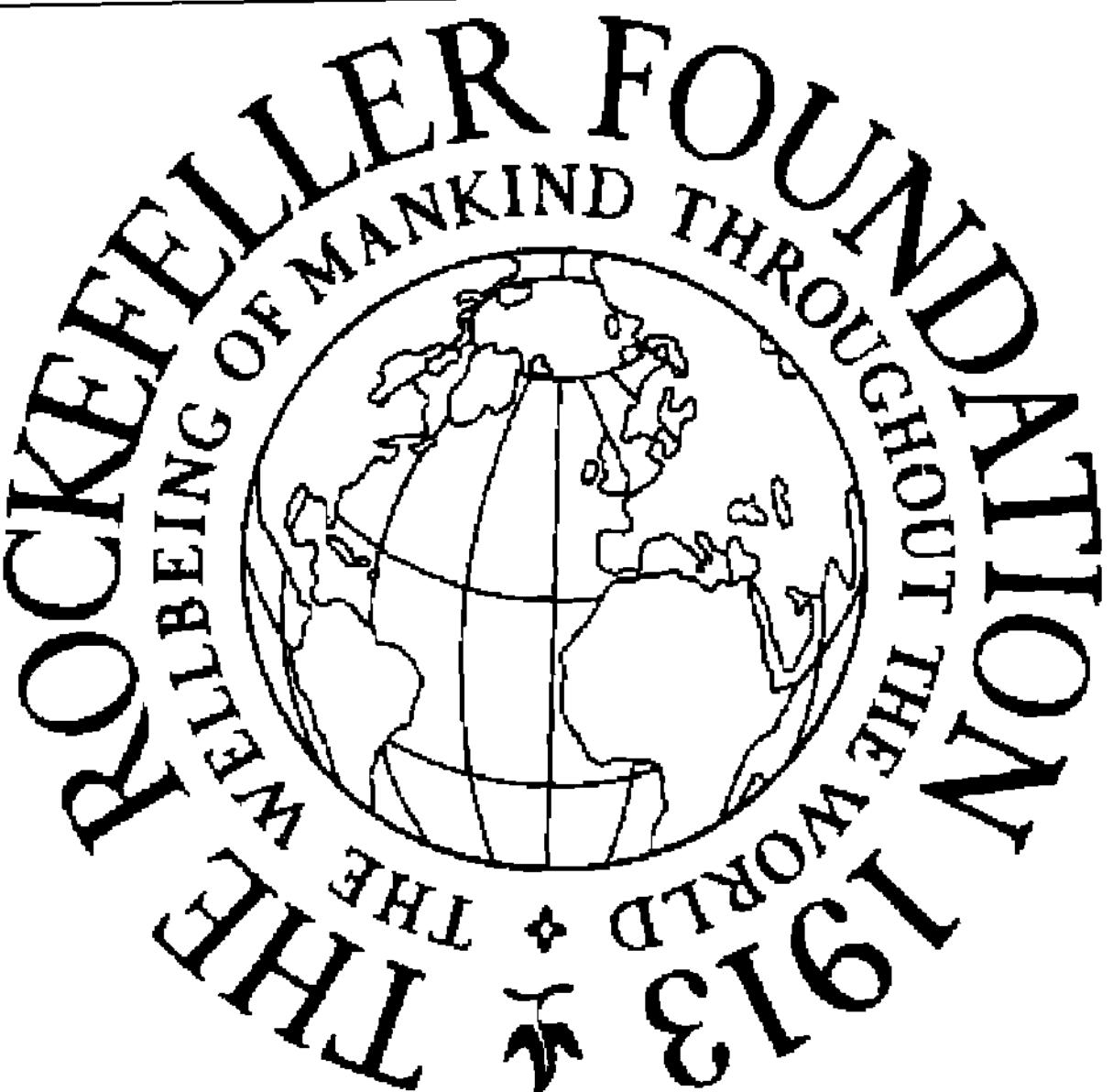
CARLENE H. POLITE (Rutgers—the State University, New Brunswick, New Jersey);

TIMOTHY REYNOLDS (University of Texas, Austin);



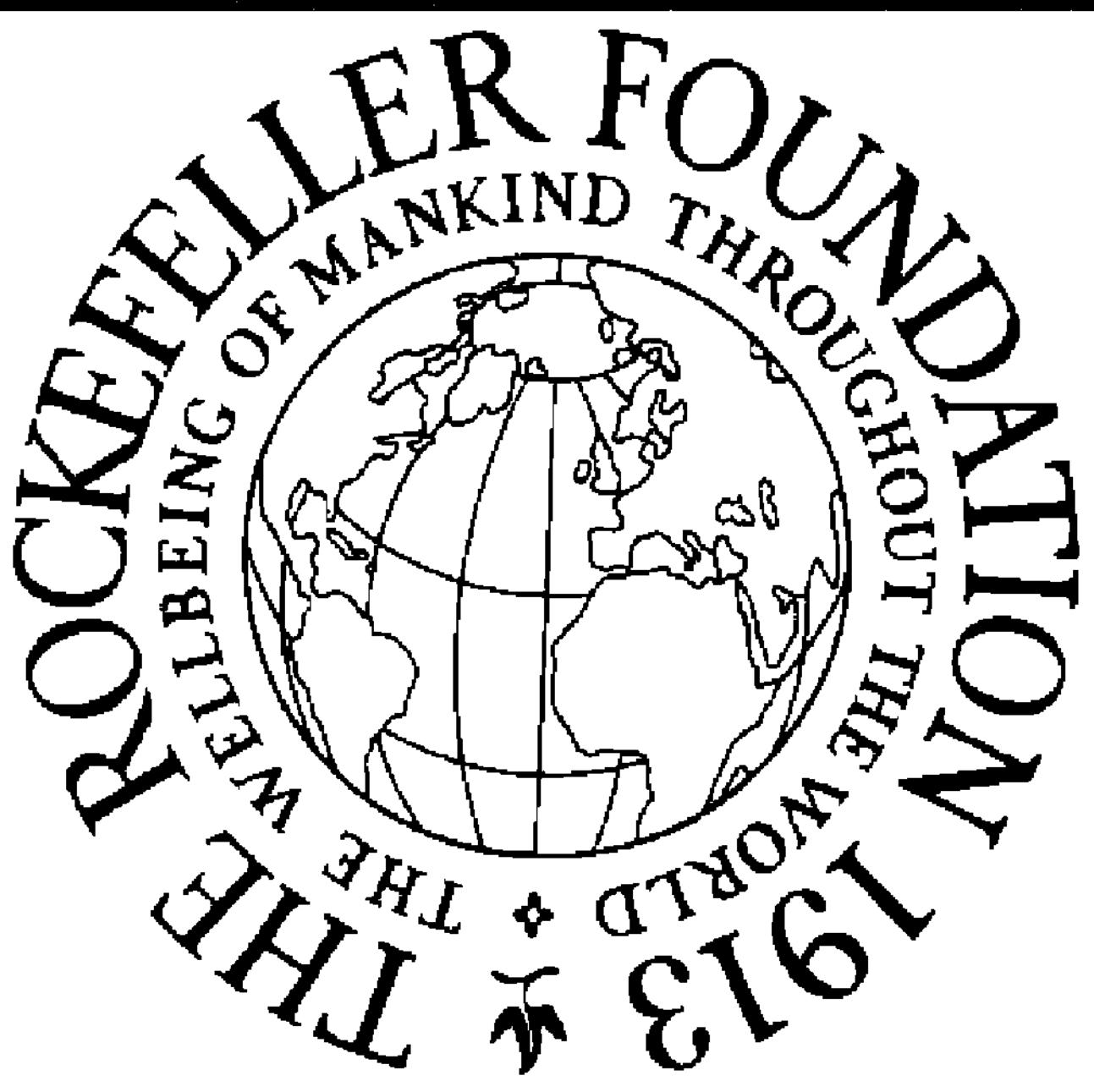
Photograph Excised Here

Gordon Davidson directs the creative work of Los Angeles' Mark Taper Forum, which includes the Playwright-Directors Development Program.



Photograph Excised Here

Arthur H. Ballet of the University of Minnesota has developed the discovery and production of new plays into a coordinated, nationwide effort.



Photograph Excised Here

William Gibson is the successful playwright (*Two for the Seesaw*) who is helping to develop the Berkshire Theatre Festival into a regional force.



Photograph Excised Here

R. Russell Porter, head of the University of Denver's Department of Theatre, is bringing professionals into an outstanding university group.

WILLIAM E. STAFFORD (Lewis and Clark College, Portland, Oregon);  
JOHN A. TAYLOR (Washington and Jefferson College, Washington, Pennsylvania);  
MICHAEL THELWELL (University of Massachusetts, Amherst);  
FRANK WATERS (Colorado State University, Fort Collins);  
JAMES WRIGHT (Hunter College, New York).



## PROBLEMS OF POPULATION



*major active grants ▽*

## POPULATION STRESS

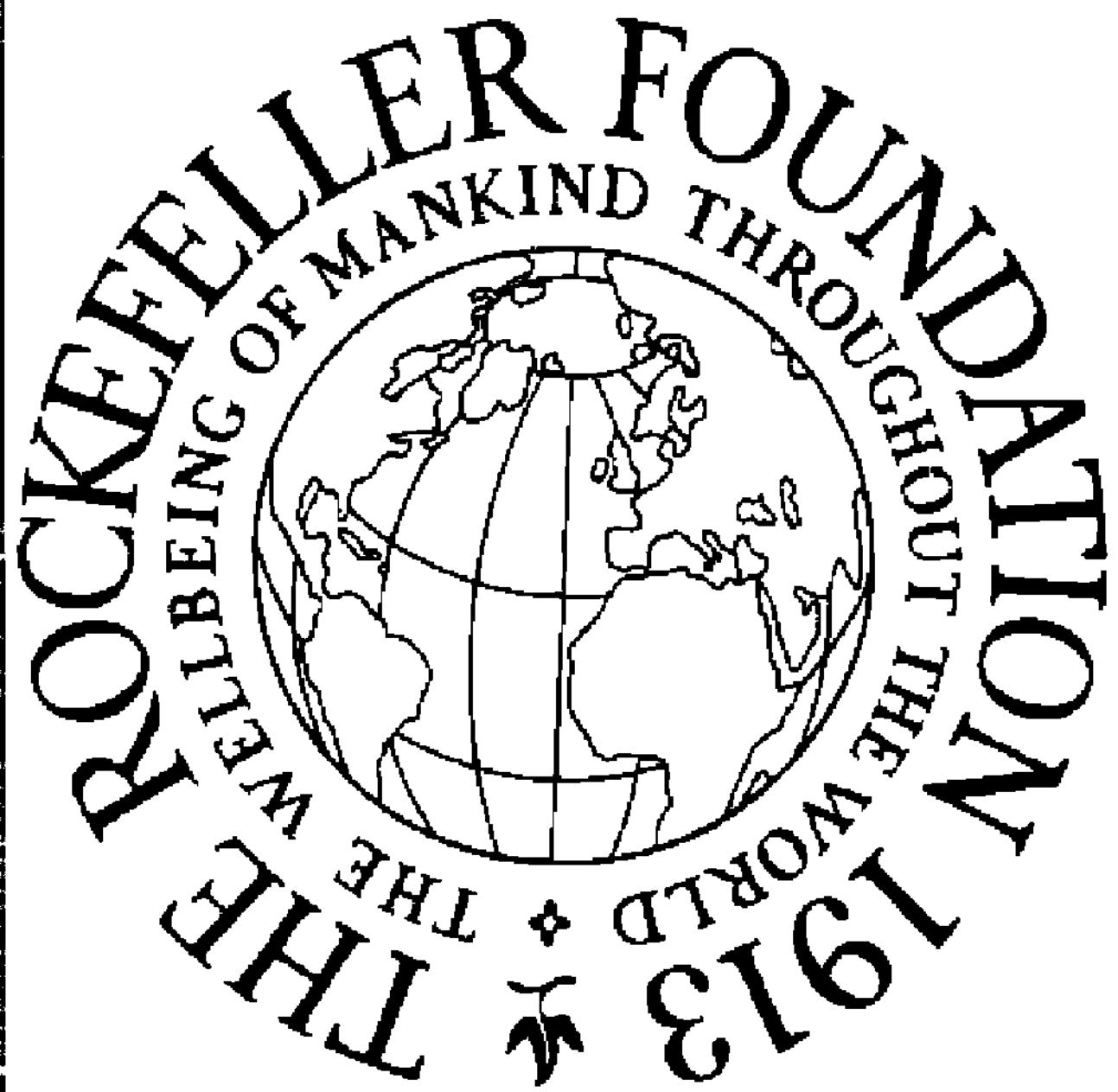
World population continued to increase in 1969 at an overall rate of about 2 percent, with the rate of growth in developing countries in sharp contrast with that of the developed nations. As against less than 20 births per 1,000 of population in the United States, Canada, Europe, and the U.S.S.R., there were 40 or more per 1,000 in Africa, the Middle East, South and Southeast Asia, and most of Latin America. This contrast has become increasingly pronounced over the past two decades, as death rates showed a downward trend in developing areas. The underproducers of food, the countries with the greatest social and economic problems, continue to show the highest population growth rates.

The developed nations, while they do not face a food crisis, are finding it harder and harder to provide adequate housing, schools, transportation, and social services, and to preserve the quality of life and of the environment under the stress of population increase, urban concentration, and the concomitant industrial expansion. President Richard M. Nixon in a special message to Congress this July warned that the time for planning ahead to meet the population crisis is growing very short.

For the past decade The Rockefeller Foundation has attempted, through a systematic program of grants to United States and foreign institutions, to contribute in strategic ways to the development of effective means of population control. Support has been given in a variety of fields: biomedical research aimed at development of effective means of contraception; aid to family planning programs; development of population study centers at major universities; training of population specialists at all levels; dissemination of information about family planning; and demographic research and training. In 1969 Foundation support continued to be concentrated in these areas; in addition a special program of biomedical fellowships was introduced to encourage young scientists of outstanding ability to enter the field of research in reproductive biology.

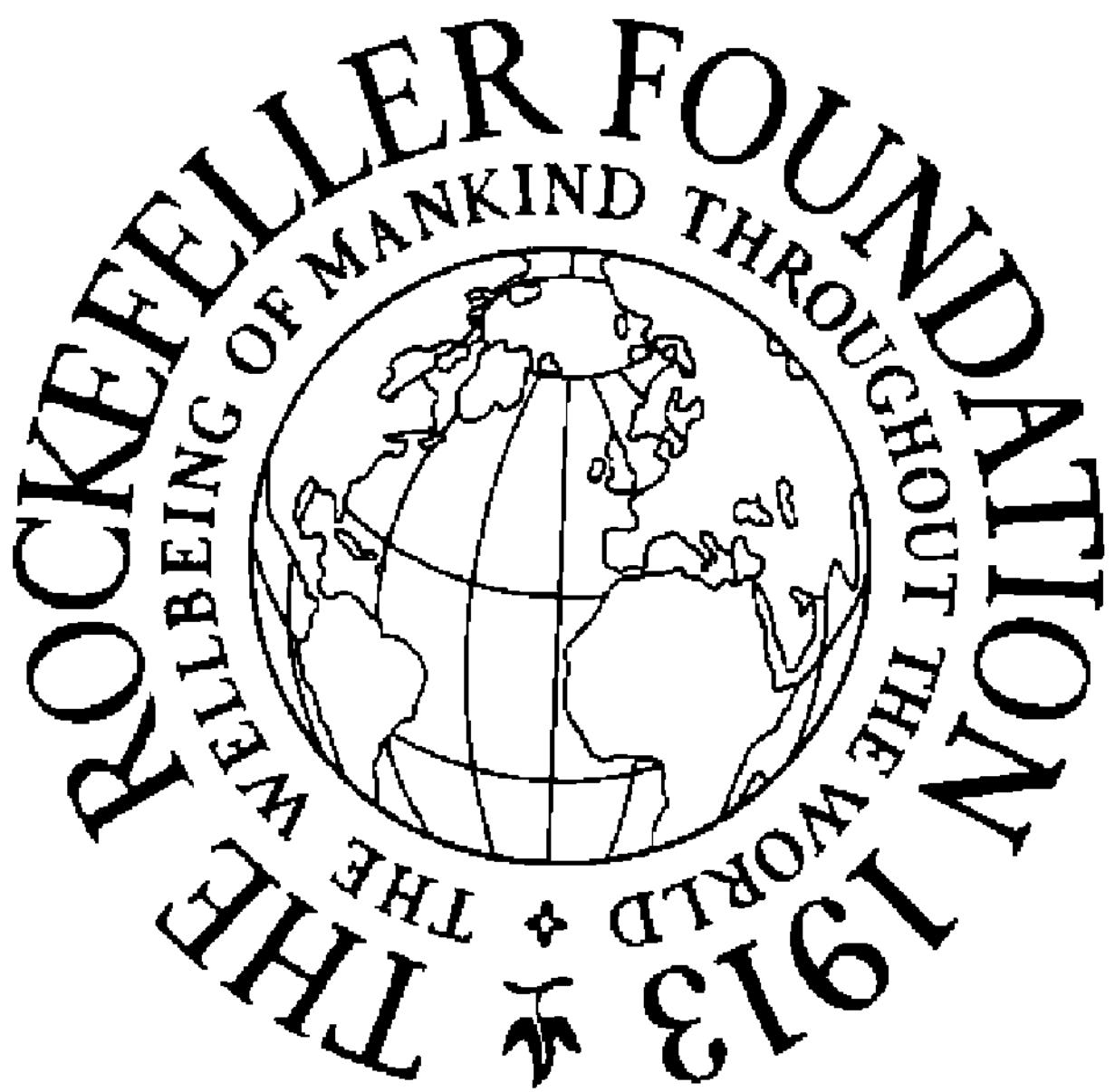
## SUPPORT FOR RESEARCH CENTERS

Development of a simple and safe means of controlling human fertility, one that would be inexpensive, easy to administer on a mass scale, and socially acceptable, is the object of intensive research at a number of major medical centers. The chief methods now in use—the oral pill and the intrauterine device—have serious drawbacks for large-scale programs. Harvard University this year broke ground for a new building to house its Laboratory of Human Reproduction and Reproductive Biology; a Rockefeller Foundation grant of \$2 million was made to help equip the Laboratory and to build up a high-powered staff over the next ten years.



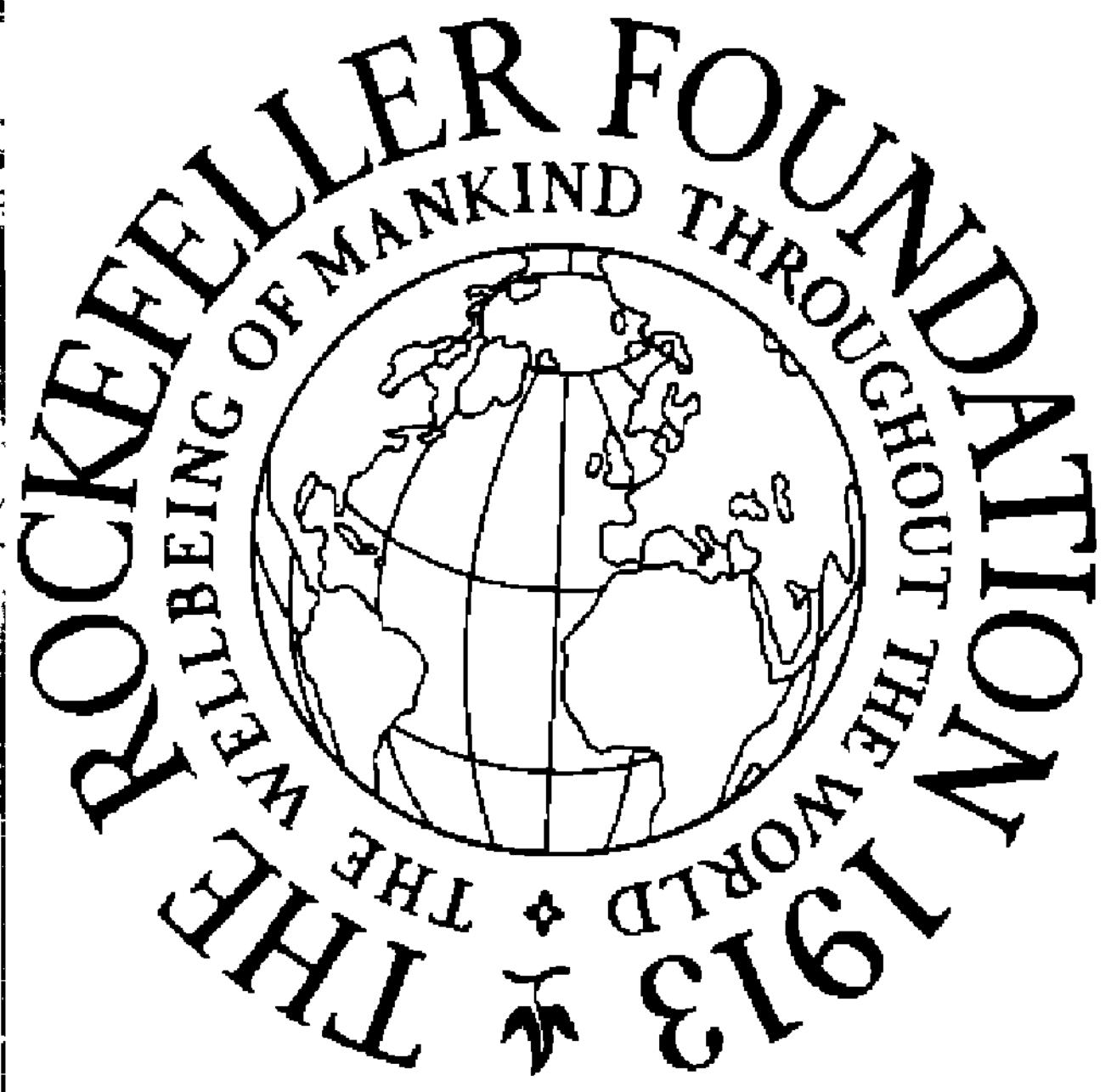
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Dr. Alan F. Guttmacher, a distinguished obstetrician, now is president of Planned Parenthood-World Population.



Photograph Excised Here

Dr. Schuyler G. Kohl, Dr. Louis M. Hellman, and Miss Marian Strachan train midwives from the developing world at the Downstate Medical Center in Brooklyn.



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Dr. Joseph T. DiBianco, psychiatrist, and Alma Young, social worker, help staff a special clinic for adolescents at Mount Sinai Hospital, headed by Dr. Saul Gusberg (right).

A grant of \$2 million was also made to the University of North Carolina, Chapel Hill, toward the operation of a research center in reproductive biology, associated with its Carolina Population Center. Here scientists working in cooperation with colleagues at North Carolina State and Duke Universities will apply the techniques of cellular and molecular biology to problems of fertility control.

Basic research in reproductive biology along these same lines of investigation is also going forward at the Salk Institute for Biological Studies in San Diego, California. A 1969 grant from the Foundation will support these studies as well as research into the possibilities for immunological control of fertility.

### FAMILY PLANNING PROGRAMS

While the laboratories pursue their search for better methods of limiting fertility, family planning programs based on use of currently available contraceptive techniques are being expanded, both in the United States and abroad. The Rockefeller Foundation has been instrumental in helping to develop a number of university-based programs that both train medical and paramedical personnel and serve local indigent populations. This year a grant was made to the University of Mississippi to support the family planning aspects of a comprehensive public health program in five rural counties of the Mississippi Delta. The University's Medical Center in Jackson is operating the program in cooperation with county health departments.

The University of Pennsylvania also received a grant to help expand the family planning and research programs carried out by its Department of Obstetrics and Gynecology; the clinic serves a segment of the low-income population of West Philadelphia.

The population work of Dr. Benjamín Viel of the University of Chile, which the Foundation has supported since 1965, has gained international recognition. This year the program was further expanded with the help of a Foundation grant. This program has been remarkably successful in lowering birth rates and induced abortion rates among the poor of Santiago as well as in the mining town of Calera and in a pilot rural district. Dr. Viel relies largely on a postpartum approach, using the intrauterine device.

### UNIVERSITY POPULATION CENTERS

In addition to spearheading family planning programs, the university can make a major contribution to raising the status of population studies as a professional field. The importance of developing university population centers that combine research, training, and clinical service has been stressed by the Foundation over the past four years, with the aim of establishing the



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Dr. Joseph D. Beasley, professor of pediatrics and maternal and child health at Tulane University, directs highly successful family planning programs in New Orleans.

field as an academic discipline of high prestige that can attract the most talented students. Several such centers in the United States have been successfully established with Foundation support, as have a small number in foreign universities.

This year a grant was made toward encouraging development of such a center at Mahidol University in Bangkok. The University of North Carolina, Chapel Hill, whose Carolina Population Center was founded in 1966 with Foundation aid, has been cooperating since 1967 in the establishment of the Center for Population and Social Research in Mahidol University's Faculty of Public Health. A grant made this year will enable the Carolina Center to continue this effort, which includes operation of family planning programs in two pilot districts as well as training of Thai staff. This program constitutes a promising nucleus for development of a university-wide population center in cooperation with the Faculty of Science at Ramathibodi Medical School and the social science departments of the Mahidol Faculty of Public Health.

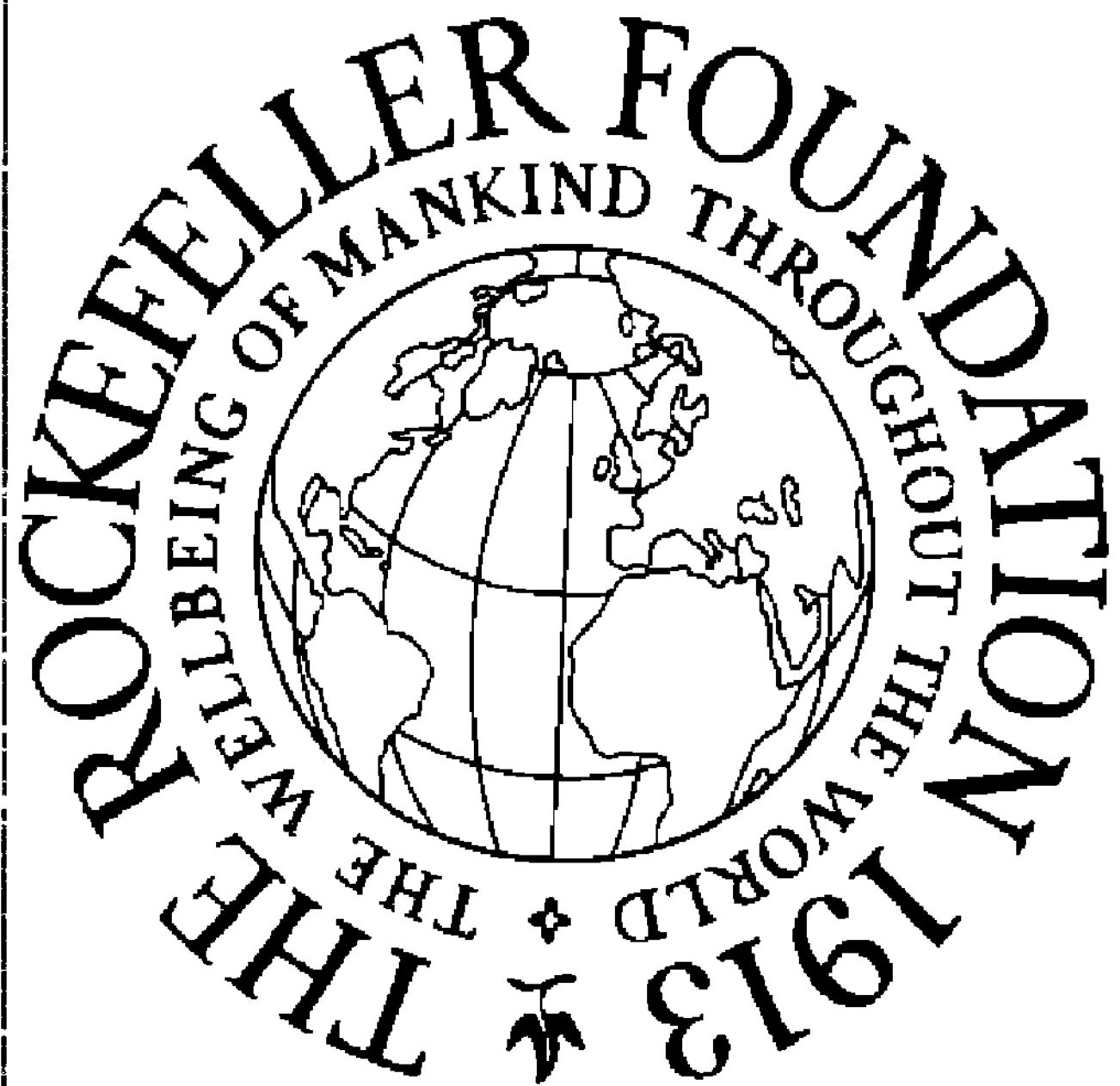
#### TRAINING OF SUBPROFESSIONAL PERSONNEL

Many different kinds of expertise are required to run a family planning program, and population specialists are agreed that subprofessional and auxiliary personnel must be trained in far greater numbers to staff centers both at home and abroad. Planned Parenthood of New York City this year received a Foundation grant to develop a center to train organizers, administrators, and other non-medical staff for family planning clinics; the center will also provide assistance to city agencies in setting up and operating new clinics.

Since 1966, nurse-midwives, chiefly from Asia and Africa, have been trained in population work in an intensive 12-week course at the Downstate Medical Center of the State University of New York, in Brooklyn. The Foundation has been providing scholarship aid for these candidates, who are selected by their governments or local medical institutions. The students learn to organize and run family planning clinics as well as to care for patients. They in turn are expected to train others in their home countries. A grant made this year will provide about 30 more such training scholarships.

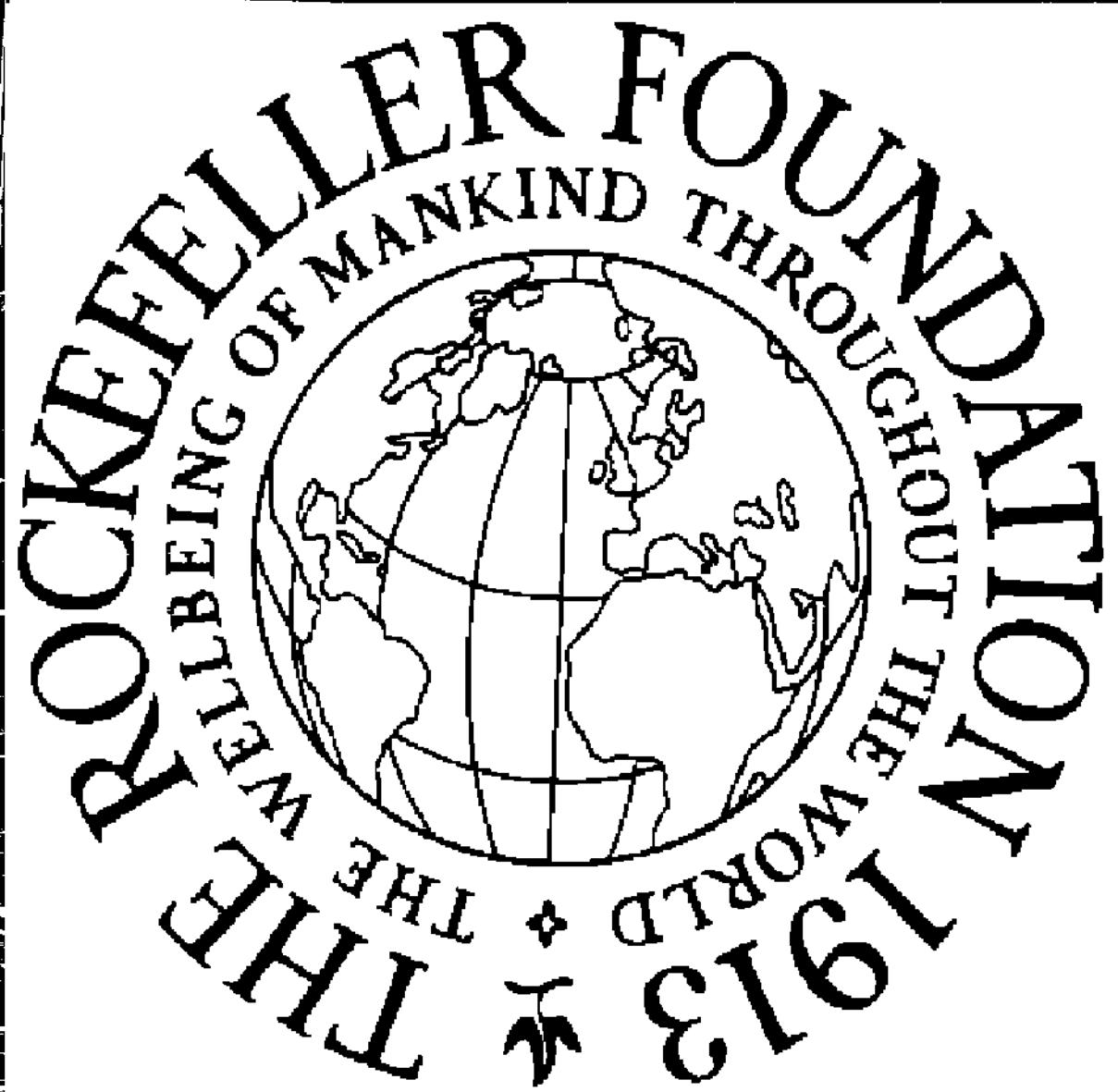
#### INFORMATION AND EDUCATION PROGRAMS

Two Foundation grants made in 1969 are designed to promote effective diffusion of information about population in Latin America and the Caribbean; one aims at the policy-making level and the communications media, the other, at the general population. The growth rate of this area of the



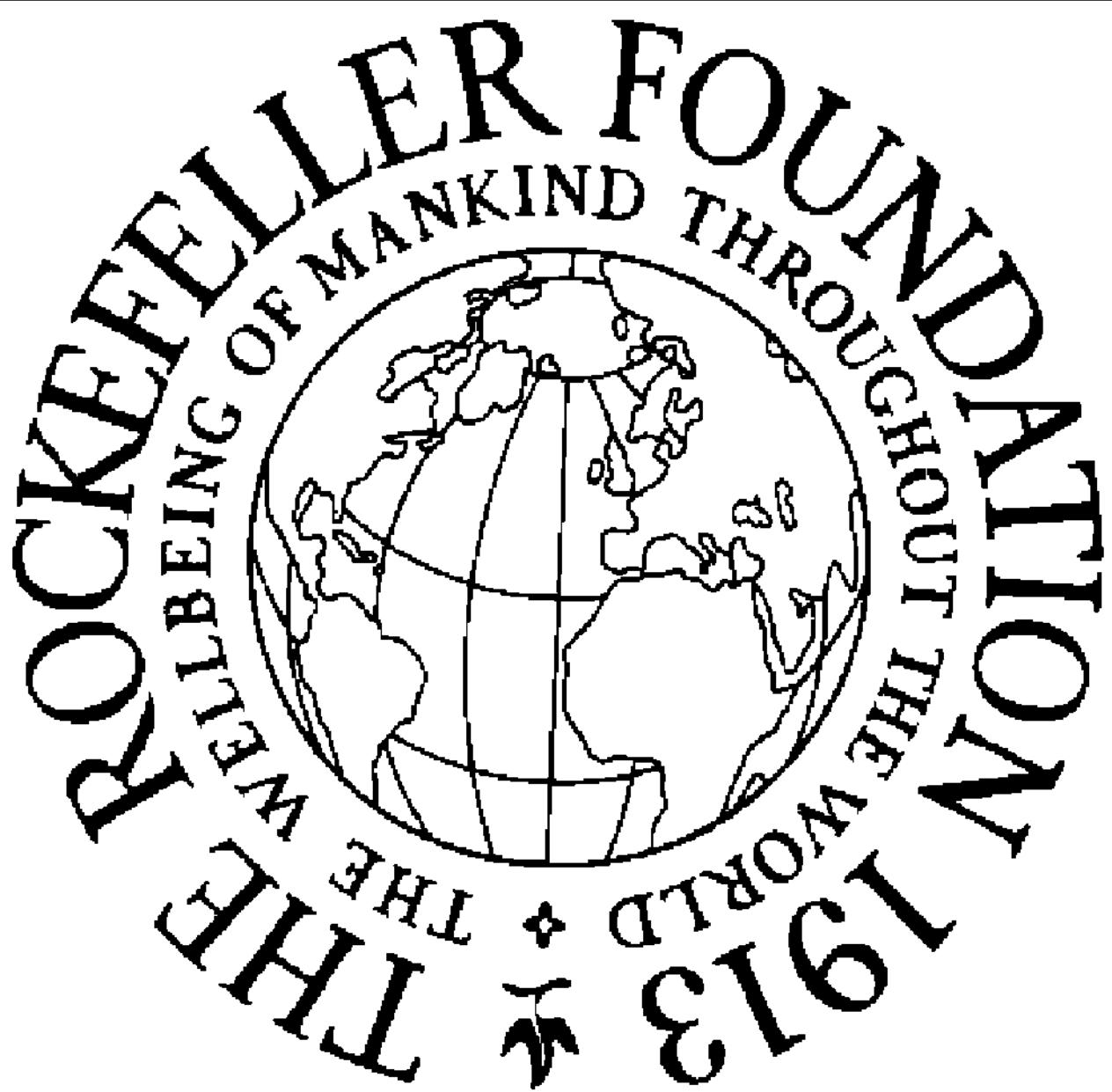
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Dr. Roy O. Greep is head of Harvard University's Laboratory of Human Reproduction and Reproductive Biology, soon to be housed in a new building.



Photograph Excised Here

Alfred F. Moran, executive director of Planned Parenthood of New York City, recruits and trains people as family planning workers in a newly established center.



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Bernard Berelson, a social scientist, is head of the Population Council, one of the most influential training and action groups working internationally.

world is higher than that of any other, almost 3 percent a year. In some countries it is close to 3.5 percent. About 42 percent of the total population is under 15 years old, a fact that poses crucial problems of how to create mass education programs, including approaches to illiterate and semi-literate groups.

The Population Reference Bureau, which has a 40-year history of reporting on population developments, is expanding the range of its activities, including those in Latin America. A 1969 Foundation grant made for support of the Bureau's operations gives special emphasis to the educational program for Latin America, which has received Foundation aid since 1964. This program is designed largely to reach educators, journalists, and officials who might influence public opinion and guide the making of policy.

Mass education is the aim of a program being launched with Foundation support by the International Planned Parenthood Federation-Western Hemisphere Region. The Federation hopes, with assistance from the Population Council, Cornell University, and Federation affiliates in Latin American countries, to develop educational materials for specific regions of Latin America and the Caribbean, adapted to their diverse needs and problems.

#### DEMOGRAPHY AND FORMULATION OF POLICY

Ideally demography offers a scientific basis on which the formulators of policy can rely in planning approaches to population control and in forecasting its economic and social consequences. In practice, however, mounting population pressures have frequently given action programs priority over scientific planning, leaving a great many troublesome questions unresolved. More accurate knowledge is needed about population growth, the effects of population programs and policies, relationships between population growth and social and economic development. The need is urgent for more trained demographers and for expanded demographic research in collaboration with other disciplines—economics, sociology, public health, nutrition, communications—so that orderly planning can be undertaken to meet the many specific problems within the overall population-explosion crisis.

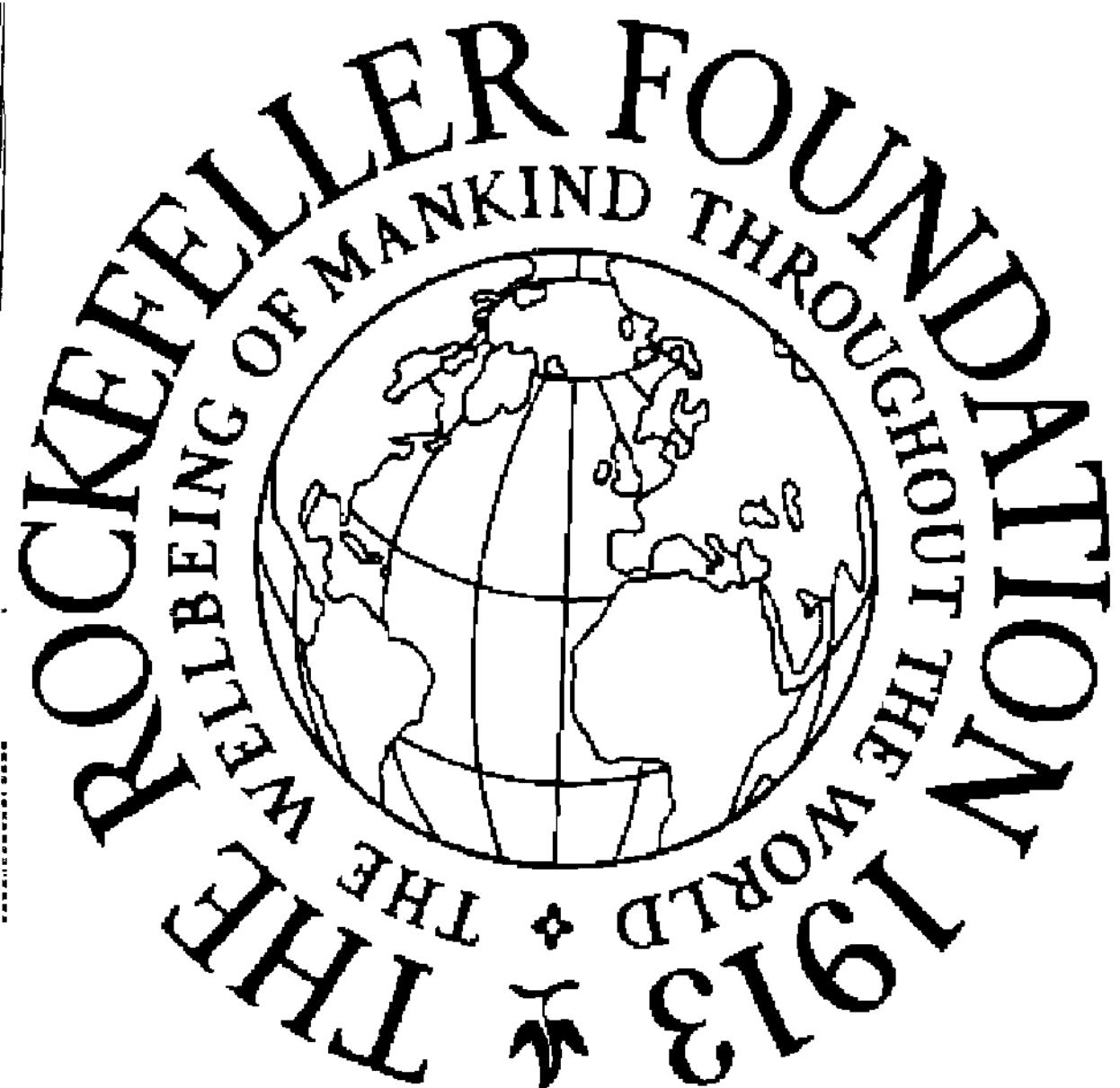
Two Foundation grants made this year are addressed to this need. One is to Princeton University's Office of Population Research, for expansion of its training program in demography and broadening of its range of research. The Office will triple its graduate course offerings and add staff specialists in fertility, economic demography, and mathematical demography.

The second award is a \$1-million grant to the Population Council to be used over a three-year period for general support of its work. The Council is launching a new program to attack the central questions affecting population policy. Studies will be focused on such problems as population shifts—



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Alvaro Garcia-Peña heads up the Population Reference Bureau's education and information efforts aimed at Latin America.



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Dr. Luigi Mastroianni (left), chairman of the University of Pennsylvania's Department of Obstetrics and Gynecology, built up research and family planning programs.



Photograph Excised Here

Dr. Robert E. Carter and Dr. James B. Moore (standing) of the University of Mississippi's Medical Center, supervise family planning for rural areas.

immigration and internal migration; the relative importance of population density and per capita energy consumption in environmental deterioration; the economic and social consequences of radical changes in age distribution within a population, resulting from rapid lowering of the birth rate; the social, economic, and psychological effects of the population "implosion" caused by unplanned mass migrations to urban centers; ways to influence traditional attitudes toward human fertility and family size. These and similar issues are of the most pressing importance in planning future population programs in both developed and developing areas.

A grant for population studies having a direct bearing on policy formulation in the Caribbean area went this year to the Pan American Health Organization for the establishment of a Population Nutrition Unit within the Caribbean Food and Nutrition Institute. The interdependence of efforts to maintain an adequate diet and attempts to limit population growth is particularly close in the Caribbean states; the problem is complicated by the very limited availability of land for agriculture and by social and economic conditions that are peculiar to the islands. This newly formed Unit is undertaking analyses of population growth, family structure, migration patterns, food habits, food availability, and other factors in an attempt to provide the information needed for sound policy making and for implementation of family planning programs in countries seeking aid.

## GRANTS 1969

### INTERNATIONAL

**INTERNATIONAL PLANNED PARENTHOOD FEDERATION—WESTERN HEMISPHERE REGION,** New York: toward a program of mass education in family planning in Latin America and the Caribbean; \$150,000 for a three-year period;

**INTERNATIONAL UNION FOR THE SCIENTIFIC STUDY OF POPULATION,** Liège, Belgium: toward the expenses of its General Conference, held in London; \$15,000;

**PAN AMERICAN HEALTH ORGANIZATION,** Washington, D. C.: for the costs of a Population Nutrition Unit in the Caribbean Food and Nutrition Institute; \$184,000 for a three-year period:

### CHILE

**UNIVERSITY OF CHILE,** Santiago: toward the costs of research and action programs in family planning under the direction of Dr. Benjamin Viel of the Department of Preventive Medicine; \$200,000;

### COLOMBIA

**UNIVERSITY OF VALLE,** Cali:

Population studies under the auspices of the University Committee for Population Studies (CUIP); \$60,000;



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Dr. Ronald J. Pion heads the Division of Family Planning and Education in the medical school of the University of Washington.

Dr. Edgard Cobo; to study research methods currently in use at the New York laboratories of the Population Council; \$2,261;

To enable Dr. Matilde de Bernal to learn new methods of steroid analysis in laboratories in the United States; \$1,900;

## MEXICO

COLEGIO DE MEXICO, Mexico City: toward the cost of a Latin American Regional Conference on Population to be held in Mexico City in August, 1970; \$10,000;

## THAILAND

MAHIDOL UNIVERSITY, Bangkok: to enable Dr. Vilai Benchakan, Ramathibodi Faculty of Medicine, to visit departments of obstetrics and gynecology and to observe programs in family planning and community medicine in Africa, Asia, and the Americas; \$4,000;

## UNITED STATES

CORNELL UNIVERSITY, Ithaca, New York: preparation, under the auspices of its International Population Program, of a book on the population problem of Latin America; \$25,000;

HARVARD UNIVERSITY, Cambridge, Massachusetts:

For use by its Medical School for the costs of fixed equipment and installations for its Laboratory of Human Reproduction and Reproductive Biology; \$500,000 as an outright grant; \$1,500,000 through September, 1979, for staff development for the Laboratory;

Study, under the auspices of its School of Public Health, of methods of provision of family planning services by rural health centers in Chile; \$25,000;

NEW HAVEN FOUNDATION, Connecticut: operating expenses of family planning clinics of the New Haven Department of Health; \$7,500;

PATHFINDER FUND, Boston, Massachusetts: toward expenses of a visiting lecturer in the Department of Preventive Medicine, Makerere University College Faculty of Medicine, Uganda; \$12,500;

PLANNED PARENTHOOD OF NEW YORK CITY: development of a family planning training center; \$500,000 for a five-year period;

POPULATION ASSOCIATION OF AMERICA, Washington, D. C.: travel costs to enable American scholars to participate in the General Conference of the International Union for the Scientific Study of Population, held in London; \$10,000;

POPULATION COUNCIL, New York: general costs of its programs in population; \$1,000,000 for a three-year period;

POPULATION REFERENCE BUREAU, Washington, D. C.: toward the costs of its education and information programs; \$100,000 through June, 1974;

PRINCETON UNIVERSITY, New Jersey: for use by the Office of Population Research toward the costs of expanding its training and research program; \$110,000;

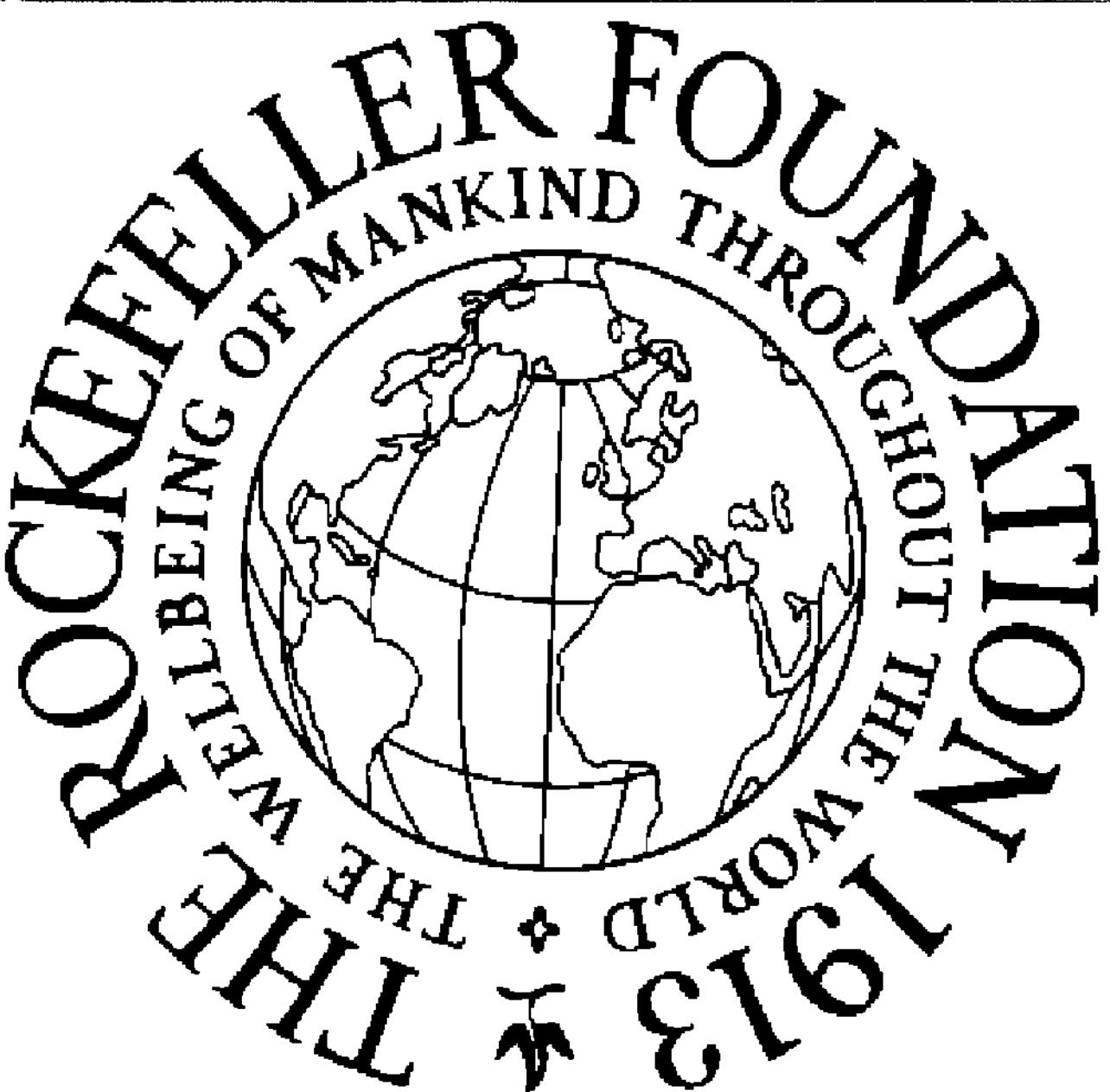
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK, Albany: scholarships to enable nurse-midwives to undertake training in family planning at the Downstate Medical Center of the State University, in Brooklyn; \$40,000;

SALK INSTITUTE FOR BIOLOGICAL STUDIES, San Diego, California: development of research in reproductive biology; \$750,000 for a five-year period;



Photograph Excised Here

Dr. Benjamin Viel has structured in Santiago, Chile, large-scale action programs that have attracted worldwide attention.



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Dr. Ramiro Delgado of the University of Valle Medical School works closely with national family planning programs in Colombia.

**STUDENT AMERICAN MEDICAL ASSOCIATION FOUNDATION**, Flossmoor, Illinois: toward the costs of the "Conference on the Population Explosion and the Developing Professional," organized by the Institute for the Study of Health and Society, Decatur, Georgia; \$20,000;

**UNIVERSITY OF MICHIGAN**, Ann Arbor: for use by the Population Studies Center toward the appointment of a postdoctoral research associate; \$15,000;

**UNIVERSITY OF MISSISSIPPI**, Oxford: toward the costs of a family planning program to be carried out in rural counties in the Mississippi Delta by its Medical Center, located in Jackson; \$33,333;

**UNIVERSITY OF NORTH CAROLINA**, Chapel Hill:

Toward the operating expenses of a center for research in basic reproductive biology; \$2,000,000 for a five-year period;

Cooperative program of population studies between its Carolina Population Center and the Center for Population and Social Research of Mahidol University, Bangkok, Thailand; \$100,000 through September, 1971;

**UNIVERSITY OF PENNSYLVANIA**, Philadelphia: toward construction of additional facilities needed for the community family planning programs of the Department of Obstetrics and Gynecology; \$500,000 as an outright grant, upon receipt of evidence that the additional funds required to complete the construction have been obtained from other sources;

**YALE ARBOVIRUS RESEARCH UNIT**, Yale University, New Haven, Connecticut: purchase of equipment for research in reproductive biology; \$3,500.



# CONQUEST OF HUNGER



*major active grants* ●  
*regional cooperative projects* ○  
*international research and training institutes* □

## CONTINUED PROGRESS

In 1969 The Rockefeller Foundation continued its increasingly rewarding work toward the conquest of world hunger. Major emphasis is on support of crop and livestock improvement programs, largely through international institutes, and on assistance with national and regional campaigns to increase production on both large farms and small landholdings. Training for agricultural scientists and development of institutions for agricultural research and education also received continuing support.

Forecasts of greatly increased crops of the major food grains, based on the widespread use of the high-yielding varieties developed at the International Rice Research Institute (IRRI), the International Maize and Wheat Improvement Center (CIMMYT), and other centers, are on the way to being fulfilled. Agricultural scientists are now attempting to combine high yields with increased protein content of high nutritional value. Wheat, corn, and rice yields have risen in many areas of the world where the new varieties are being used, but gains are small when balanced against population growth figures. World population continues to increase, and even greater advances in food production will have to be made as population stabilization efforts are strengthened.

The Foundation's agricultural program continued to move in the direction of support for highly specialized institutes that concentrate research on a narrow range of high-priority problems whose solutions are of international importance. Four such centers are now receiving Foundation support: IRRI, in the Philippines; CIMMYT, in Mexico; the International Center of Tropical Agriculture (CIAT), in Colombia; and the International Institute of Tropical Agriculture (IITA), in Nigeria. All four are dedicated to helping interested nations increase yields of their basic food crops, primarily through research and training programs.

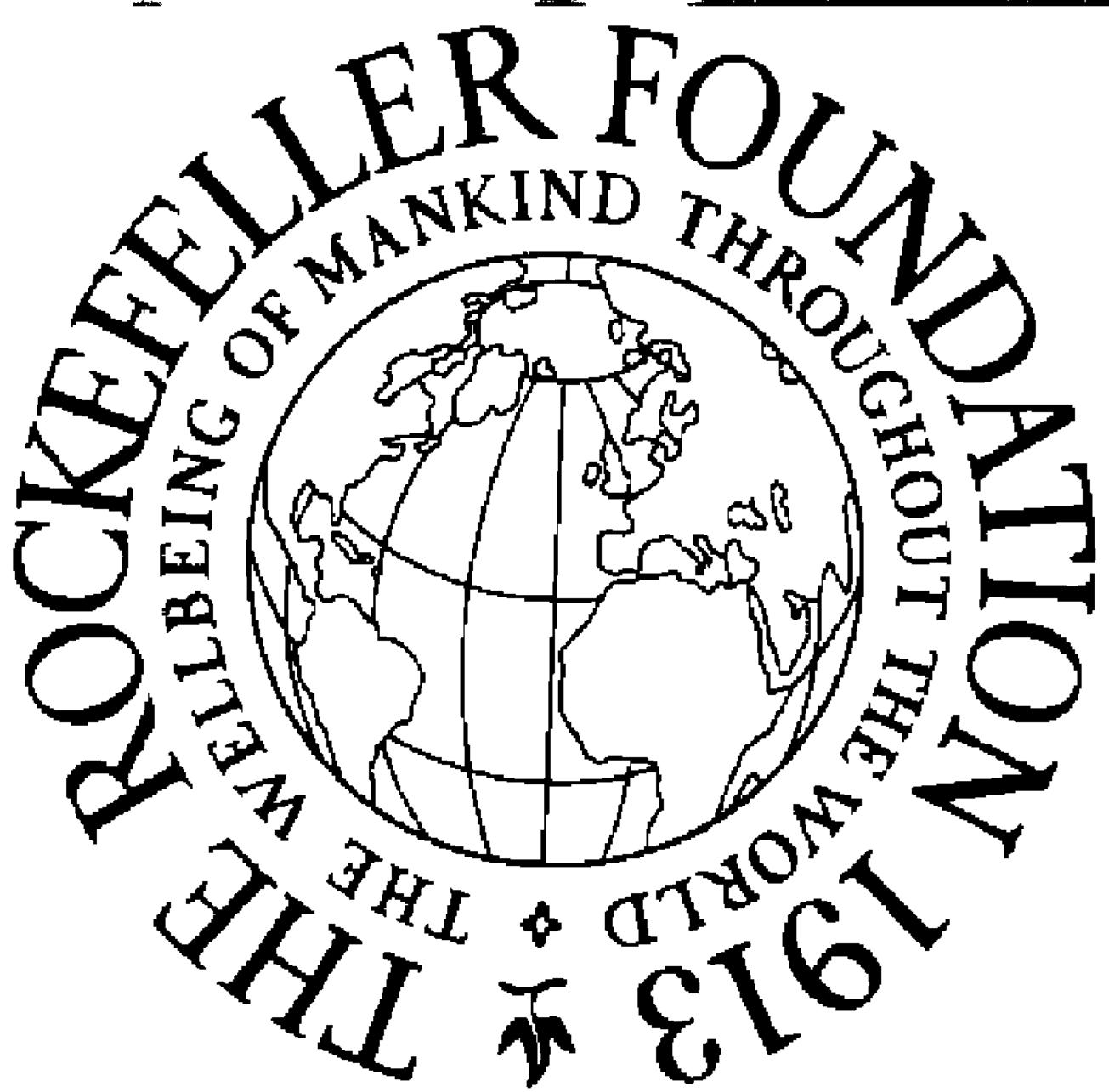
### IRRI

The International Rice Research Institute, the oldest of the international centers, is the only one dedicated to a single crop. In its seven years of operation, IRRI's achievements have been spectacular. The short, stiff-strawed, high-yielding varieties developed by Institute scientists are being widely planted, and improved strains of this type of rice are now being tested around the globe; some show promise of major improvement in grain quality and resistance to diseases and insect pests. Progress is also being made toward development of rice with higher protein levels. Under an AID contract, IRRI engineers have designed machinery for use on small farms, and this year saw a breakthrough in inexpensive weed control methods.



## Photograph Excised Here

Norman E. Borlaug has led the development of the dwarf wheat varieties that have revolutionized wheat production in many parts of the world.



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Stanley J. Peloquin, University of Wisconsin geneticist, leads research and training in potato diseases and systems of breeding.

## CIMMYT

The International Maize and Wheat Improvement Center, like IRRI supported by the Ford and Rockefeller Foundations, has played a major role in the much-publicized "green revolution" in Asia. The high-yielding, disease-resistant wheats developed in Mexico were widely planted again this year in India and Pakistan and were responsible for record harvests. New spring wheats were showing good results in Turkey, Tunisia, and a number of other nations. CIMMYT's research program, in cooperation with the National Institute of Agricultural Research (INIA) of Mexico, continued in 1969 to develop new varieties called "triple dwarf," which are very short, high-yielding, and disease-resistant.

New strains of Triticale, the man-made species obtained by crossing wheat and rye, were put in international trials for the first time. In comparison with wheat, this crop promises higher yields, higher levels of protein of good nutritional quality, and possibly greater resistance to drought.

New types of corn were put in tests by CIMMYT's International Maize Improvement Program; one very important characteristic being sought is insensitivity to day length. This would permit corn varieties to be planted over a much wider range of latitude. Progress with development of high-lysine corn is encouraging, and wide-scale production efforts are planned.

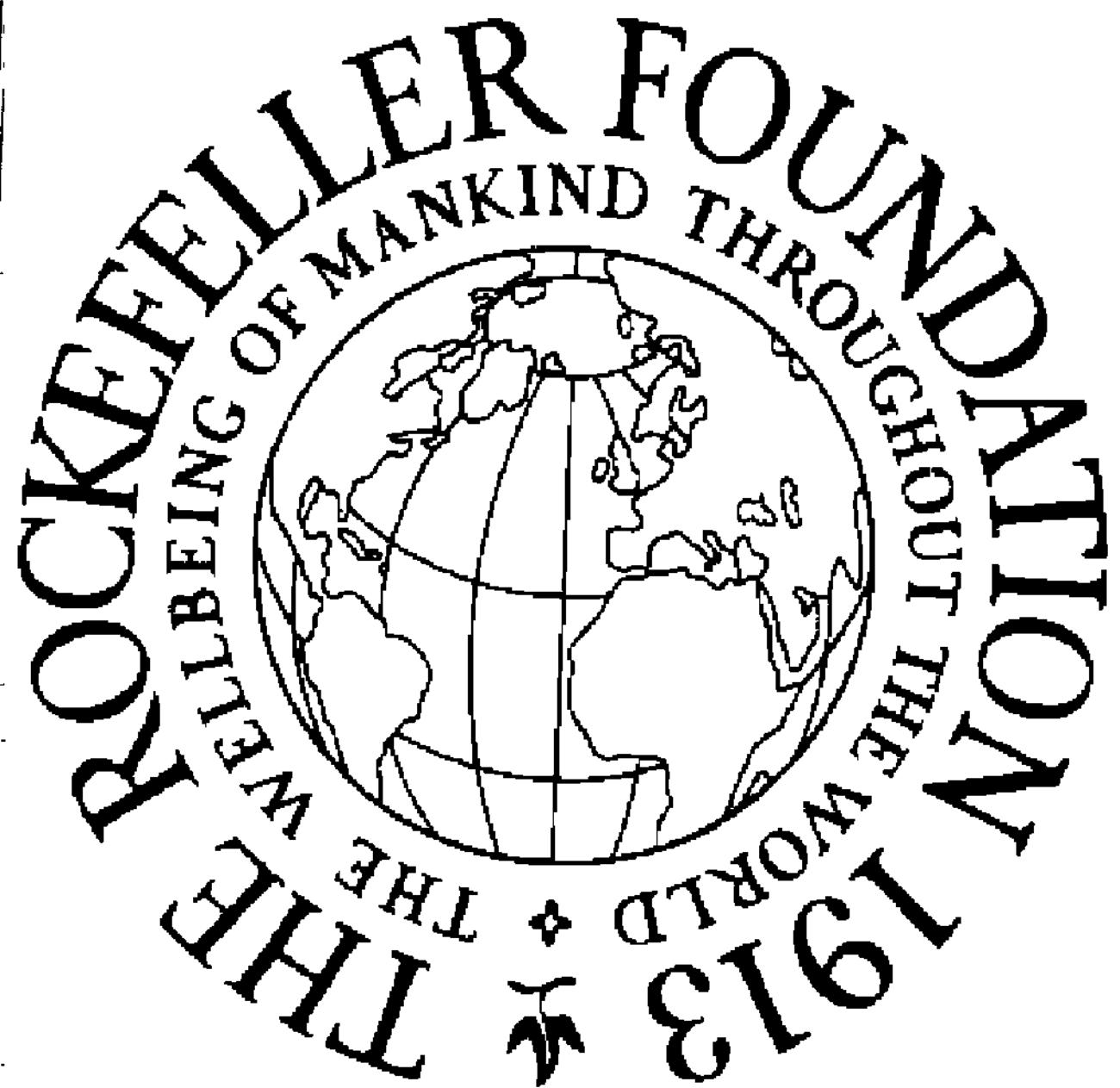
Increasing yields on small landholdings through improved techniques of planting and use of fertilizer on non-irrigated land is the goal of the Puebla Project, operated by CIMMYT specialists in the state of Puebla. (See "Aid to Small Farmers," page 97.)

A spring-winter wheat breeding program is in progress under the auspices of CIMMYT and the University of California, Davis, to develop spring wheat varieties more resistant to cold as well as improved winter types. This effort involves cooperation with Oregon State and Washington State Universities, as well as with the Foundation-supported program in Turkey.

The International Potato Improvement Project, headed by a Foundation specialist, is based at CIMMYT; it cooperates in research and training with INIA and with the Graduate School of the National School of Agriculture, both in Chapingo, and with national potato programs in the Americas and in Pakistan. Fourteen young scientists from Latin America and the Middle East participated in the potato training program in 1969.

## CIAT

The International Center of Tropical Agriculture in Colombia is concentrating research on developing more productive agricultural systems for the lowland tropics. Crops under study are rice, corn, root crops, and grain legumes.



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C. Subramaniam, India's Minister for Food and Agriculture at a crucial period, helped set the stage for today's record harvests.

Livestock improvement is likewise receiving major attention at CIAT. A program aimed at increasing beef production in Colombia, and by extension in similar tropical areas, includes research on grassland and forage improvement as well as work on animal health, nutrition, management, and herd improvement. The International Swine Improvement Project, based on a program formerly developed within the Colombian Institute of Agriculture under the leadership of a Foundation scientist, is being continued under the auspices of CIAT.

#### IITA

The International Institute of Tropical Agriculture in Ibadan, Nigeria, moved rapidly forward in 1969. Eleven senior staff members are now in residence and five more scientists have been recruited for 1970; when the Institute has reached full operation, the staff will number 33. A training program has been initiated for young agricultural scientists, and plans have been made for collection of germplasm of the important food crops of the humid tropics.

A rice research and production program for West Africa is projected, under the direction of a former IRRI staff member. The United Nations Development Programme, local governments, and other agencies will participate in this effort.

IITA's buildings and facilities are still under construction; funds totaling \$14.5 million from the Ford Foundation are supporting most of the costs. The Ford and Rockefeller Foundations will contribute equally to annual operating expenses. Other organizations have also shown an interest in providing partial support.

This double attack by IITA and CIAT on production problems of developing countries in the hot tropics should do much to help these areas realize their largely untapped agricultural potential.

#### NATIONAL PROGRAMS

The news that India has increased grain production to the point where sufficiency has been at least temporarily achieved was one of the most heartening reports in world agriculture in recent years. The massive efforts of the Indian Government and of Indian scientists and producers to take advantage of the new high-yielding varieties of wheat, corn, rice, sorghum, and the millets, in association with modern farming techniques, were rewarded with record harvests again this year. Since 1957 The Rockefeller Foundation has provided assistance to the Indian Government in agricultural research, training, and production, as well as in development of the Indian Agricultural Research Institute and the ten new state agricultural universities.

In 1969 new varieties of rice and modern technology were used on an estimated six million acres, and ten million acres of irrigated land were planted with the so-called "Mexican" dwarf wheats. Research continues with corn, sorghum, and the millets, to develop higher-yielding varieties that will resist insect pests and plant diseases. Promising hybrids of all three crops have been developed. Work continues on important diseases, such as wheat rust, downy mildew of corn, and sorghum ergot, and on such insect pests as the stem borers of corn and rice and the sorghum shoot fly.

Experiment station development and training of technical staff have been important Foundation contributions in India, particularly at the Indian Agricultural Research Institute and the Andhra Pradesh Agricultural University. Seed production has made great strides, especially since the introduction of the new crop varieties. Assistance is being provided by the Foundation to the National Seeds Corporation and other organizations in the training of seed specialists. About 700 persons have been trained since this effort began.

In Colombia, the agricultural program initiated by The Rockefeller Foundation in 1950 has largely accomplished its goals, and it is being phased out. This process was virtually completed in 1969. The Colombian Institute of Agriculture, which the Foundation helped to develop over the past 19 years, is one of the strongest of its kind in Latin America. It cooperates with the research, training, and extension programs of CIAT, to which Foundation support is now being provided.

Ecuador boasts a very effective agricultural research institute, the National Agricultural Research Institute (INIAP); experiment stations at high, middle, and low elevations deal with the diverse types of agriculture practiced in this mountainous country. Since 1962 the Foundation has provided modest support for INIAP's development; a Foundation staff member was posted in Ecuador during 1969 to assist with the development of experimental facilities, establishment of seed-production and seed-processing facilities, structuring of research programs, and organization of extension activities.

## EDUCATION IN THE AGRICULTURAL SCIENCES

The Rockefeller Foundation's international agricultural programs all include a strong educational component, running the gamut from in-service technical-training to Ph.D.-level study. The basic goal is establishment of strong indigenous institutions, staffed by local scientists, which can offer training at all levels to aspiring agricultural specialists. During the first phase of assistance, the Foundation's Scholarship and Fellowship Program helps to train young staff members by enabling them to take advanced degrees abroad. When these scholars return to staff local institutions, the Foundation offers advice and assistance in the development of advanced

degree programs. This year saw the initiation of the first Ph.D. program at the Graduate School of the National School of Agriculture in Chapingo, Mexico.

In Nigeria, a Foundation staff member is guiding development of the agricultural and veterinary studies at Ahmadu Bello University in Zaria, at both undergraduate and graduate levels. He is also working closely with the Agricultural Research Institute, with the agricultural extension activities of the University, and with University-affiliated schools of agriculture.

Institutional development in the fields of agricultural and veterinary education is also carried out under the Foundation's University Development Program (see page 123).

Fellows and scholars in the agricultural sciences in 1969 totaled 85.

#### AID TO SMALL FARMERS

Many of the great advances in agriculture have bypassed the small farmer. Large-scale programs designed to remedy massive national food deficits are necessarily geared to the farmer who can afford some investment in seed, fertilizer, and machinery. Reaching the thousands of subsistence farmers, many of them illiterate, and persuading them to change traditional methods, is now an absolutely essential undertaking. Two Foundation-supported projects are presently seeking to bring the subsistence farmer into the mainstream of modern farming.

One is the Puebla Project, in which techniques developed at CIMMYT are being tried on small farms in the state of Puebla. This program received a second Foundation grant in 1969. Harvests from the 1968 demonstration plots planted by 141 farmers showed double and treble the accustomed yields; in 1969 some 2,000 families cultivating 15,000 acres came into the Project. The goal is to reach 50,000 families, who till 300,000 acres, and to double the corn yields in the Project area by 1972. A consortium of Mexican government agencies and private businesses is backing the effort, which, it is hoped, will develop methods that can be used in other countries to raise production on small landholdings.

A similar project to help subsistence farmers has been developing on a small scale in El Salvador since 1961. Using substantially the same techniques as the Puebla Project, the program succeeded in raising corn yields as much as sixfold on farmers' plots. As the project gained momentum, its leaders could no longer fill all the requests they received for help. The Rockefeller Foundation this year made a grant to support substantial program expansion, including the establishment of a seed production center and a training program for more project leaders. Trainees from other Central American countries that have sought help will also be included.

## FISHERIES

In its effort to combat widespread protein malnutrition, the Foundation has supported a few selected centers engaged in research and training in marine biology and fishery management. To meet the need for greater numbers of trained people in this field for Chile and the rest of Latin America, a grant was made this year to support a training program for staff members of the School of Fisheries of the Catholic University of Valparaíso, Chile. Staff members of the School were enabled to study advanced techniques at the College of Fisheries of the University of Washington, Seattle, and faculty members from the University of Washington, to accept short-term visiting assignments at Valparaíso.

The research program on brackish-water and freshwater fish farming in progress at the Oceanic Foundation, Makapuu Point, Hawaii, continued to receive support. Promising work is under way on artificially induced spawning of food fishes and the rearing of larval fish; if successful, such techniques could eliminate the need to stock ponds with wild fry from the ocean, which are becoming increasingly scarce.

Similar research at the Taiwan Fisheries Research Institute, which also receives Foundation support, is reported making good progress.

## CROP RESEARCH GRANTS

In addition to support for the research budgets of the international centers and the universities that receive long-term assistance from the Foundation, grants are made for research on specific crop problems at leading institutions. Such support was given this year to the University of Minnesota for research on frost resistance in basic food crops, with special attention to potatoes; to the Kihara Institute for Biological Research, in Yokohama, for work on improvement of wheat and rice through formation of interspecific hybrids; and to the East African Agriculture and Forestry Research Organization in Kenya for its sorghum improvement project.

## CROP BIBLIOGRAPHIES

An effort to provide an overview of the results of worldwide research on the major grain crops for the use of agricultural scientists culminated this year with a grant for the completion of worldwide bibliographies on corn and on wheat. Already published are the *International Bibliography of Rice Research* (1963) with its yearly supplements, and bibliographies on sorghum and the millets. The very extensive works on corn and on wheat (an estimated 46,000 entries will fill six or seven large volumes) are scheduled for publication in 1970. This series is an important contribution to the internationalization of research.



Photograph Excised Here

Olga Lendvayova directed compilation of unique crop bibliographies by the Biological Sciences Communication Project of George Washington University.



Photograph Excised Here

Robert F. Chandler, Jr., heads the International Rice Research Institute, the organization responsible for developing the "miracle" rice strains.

## SCHISTOSOMIASIS RESEARCH AND CONTROL

Schistosomiasis is a debilitating parasitic infection widely and directly linked with agricultural work in the tropics and subtropics. The parasite matures in the body of a species of freshwater snail and enters human or animal hosts through contact with contaminated water; the disease thus spreads in the wake of irrigation and other water-resources projects. Lack of sanitary facilities is also a causal factor, since eggs of the parasite reach the water from human wastes.

Since 1967 a research and control program has been carried out by the Foundation in cooperation with the Government of St. Lucia, West Indies. Three approaches to controlling the disease have been designed: snail control; treatment of victims with a newly developed drug, hycanthone; and provision of a safe water supply. During the past year baseline data were collected as a necessary preliminary to launching the three projects.

## THE SOCIAL SCIENCES

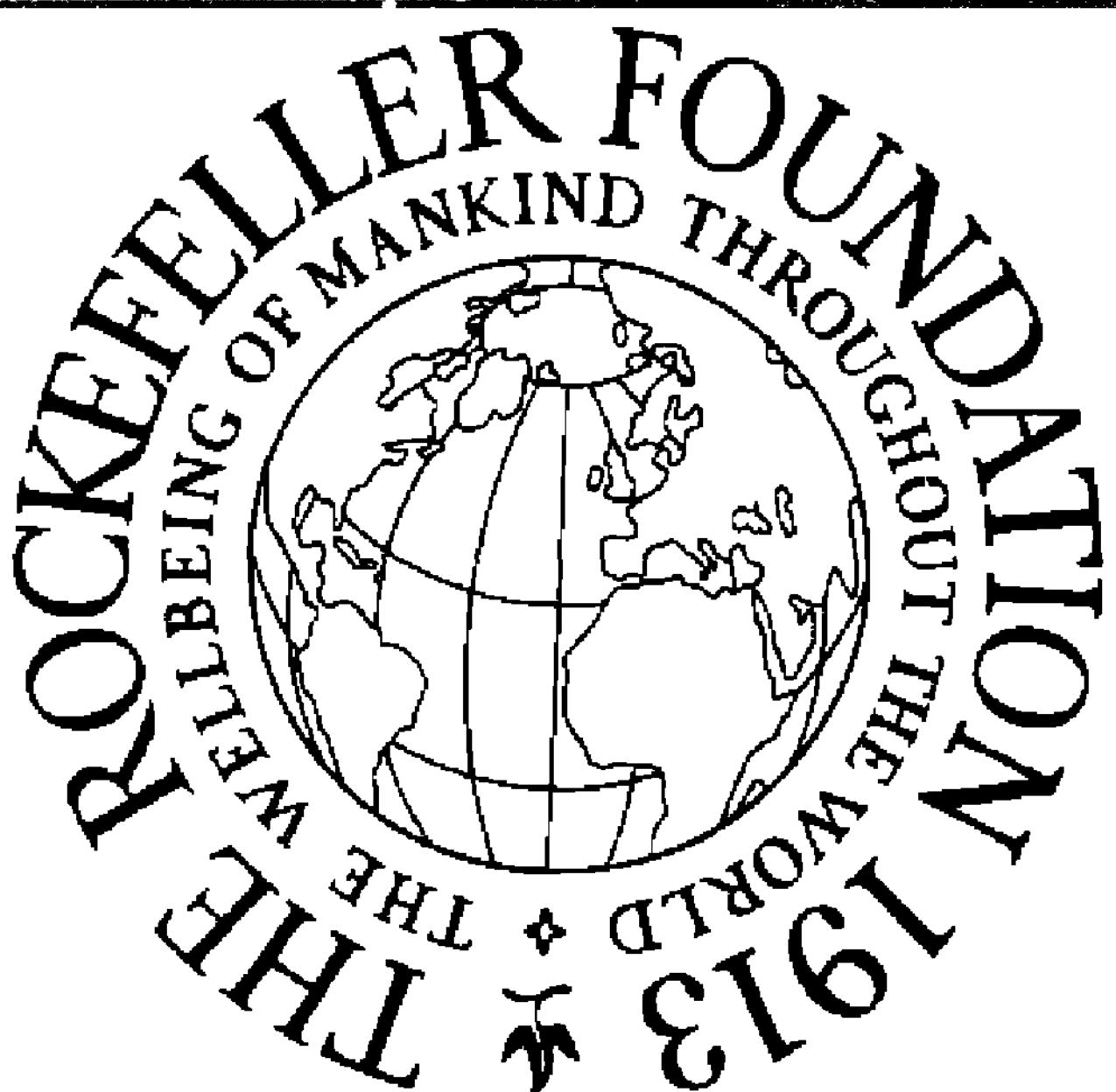
The revolution taking place in agricultural production is closely bound up with local and overall economic development and with people's attitudes, habits, decisions, and expectations. Planning for higher crop yields must include a component of social science research in such fields as economics, agricultural economics, economic geography, communications, sociology, anthropology, and other related fields.

The international agricultural institutes supported by the Foundation have active departments of agricultural economics and communications and offer training in these fields; in addition, grants are made by the Foundation for special projects and for international conferences bearing on economic and social problems associated with the conquest of hunger.

One such project supported this year is a study being made by Dr. Robert E. Huke of Dartmouth College on the changes in land use in Philippine *barrios* following the use of the new high-yielding rice varieties.

Another important research program has been launched under the auspices of Stanford University's Food Research Institute on the interactions of agricultural development and growth of small and medium-scale industries. Centering on farm demand and local manufacture of implements in West Pakistan, the study, by Professors Bruce F. Johnston and Peter Kilby, aims to formulate guidelines for the growth of agriculture-related industries that require a small amount of capital, so as to minimize the need for foreign exchange and contribute to the increase of output, employment, diffusion of technical knowledge, and development of entrepreneurship.

A study of Chilean farmers' attitudes toward risk, made by Dr. John L. Dillon, former visiting professor at the Catholic University of Chile, is aimed



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Edwin J. Wellhausen, director general of the International Maize and Wheat Improvement Center, is rapidly extending the influence of this remarkable institute.

at providing information that may help government planners trying to induce farmers to use new inputs and try new methods.

An important international seminar was held this year, with Foundation aid, by the Press Foundation of Asia. Journalists and broadcasters from all over South and Southeast Asia met to hear agriculturists and national planners discuss the agricultural revolution and its impact on Asian development.

## GRANTS 1969

### INTERNATIONAL

#### ROCKEFELLER FOUNDATION International Program in Agricultural Sciences:

##### *International Agricultural Institutes*

International Rice Research Institute, Philippines	\$ 750,000
Staff on assignment	\$256,000
Supporting grants	494,000
International Maize and Wheat Improvement Center, Mexico	1,018,000
Staff on assignment	295,000
Supporting grants	723,000
International Center of Tropical Agriculture, Colombia	568,000
Staff on assignment	315,700
Supporting grants	252,300
International Institute of Tropical Agriculture, Nigeria	320,000
Staff on assignment	92,700
Supporting grants	227,300
<b>Total</b>	<b><u>\$2,656,000</u></b>

##### *Special Cooperative Projects in the Agricultural Sciences*

Indian Agricultural Program	524,700
Staff on assignment	323,000
Project support	201,700
Colombian Agricultural Program	38,100
Staff on assignment	25,900
Project support	12,200
Ecuadorian Cooperative Project	36,600
Staff on assignment	24,600
Project support	12,000
Middle Eastern Wheat Program	43,300
Institutional Leadership	97,900
Staff on assignment	84,600
Project support	13,300
Consultants and staff for special assignment	74,575
Postdoctoral internships	138,500
<b>Total</b>	<b><u>\$ 953,675</u></b>

ROCKEFELLER FOUNDATION International Program in Field Research in Medical and Natural Sciences:

Schistosomiasis research and control project, St. Lucia	\$303,200
Staff on assignment	162,600
Project support	140,600

INTERNATIONAL CONFERENCE on East Coast fever and trypanosomiasis of cattle, at the Villa Serbelloni Conference and Study Center, Bellagio, Italy; \$15,000;

AUSTRALIA

UNIVERSITY OF NEW ENGLAND, Armidale: analysis, by Professor John L. Dillon, Faculty of Agricultural Economics, of attitudes to risk of Chilean farmers and land settlers; \$1,626;

BERMUDA

BERMUDA BIOLOGICAL STATION FOR RESEARCH, St. George's West: toward costs of constructing a library building; \$25,000;

CHILE

UNIVERSITY OF CHILE, Santiago: research on protein malnutrition in infants and preschool children, under the direction of Dr. Fernando Mönckeberg; \$15,000;

COLOMBIA

COLOMBIAN INSTITUTE OF AGRICULTURE, Bogotá:

Equipment, supplies, and books for its library; \$25,000;

Support of David J. Lee as librarian in charge of its library; \$18,550;

For the purchase of equipment to establish an English language laboratory at Tibaitatá; \$15,200;

Toward the costs of a study of agricultural library resources currently available in Colombia as a basis for establishing a strong national agricultural library service; \$10,575;

Additional funds to provide equipment for eight new regional seed laboratories; \$2,350;

To enable Dr. Carl H. Noller, Department of Animal Sciences, Purdue University, to visit Colombia to consult on the animal science teaching and research program; \$725;

INTERNATIONAL CENTER OF TROPICAL AGRICULTURE:

Rockefeller Foundation International Program in Agricultural Sciences; see *International, above*;

Toward costs of constructing, furnishing, and equipping its headquarters facilities at Palmira; \$373,667;

Toward development of its headquarters at Palmira; \$39,000 through March, 1971;

To permit the presentation of research results at the International Congress of Nutrition, Prague, Czechoslovakia; \$3,015;

DR. FERNANDO MONGE, Inter-American Institute of Agricultural Sciences, Bogotá: to study computer techniques for library and documentation services at West Virginia University and to undertake in-service training at the National Agricultural Library, Washington, D. C.; \$1,860;



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Malik Khuda Bakhsh Bucha, West Pakistan's former Minister for Food, Agriculture and Cooperation, decisively influenced Pakistan's successful agricultural policies.

NATIONAL INSTITUTE OF NUTRITION, Bogotá: toward costs of a study of the value of opaque-  
2 corn as a protein source in human nutrition; \$26,000;

ROCKEFELLER FOUNDATION International Program in Agricultural Sciences: Colombian  
Program; *see International, above*;

## COSTA RICA

HERNAN A. FONSECA, University of Costa Rica, San José: to visit selected animal science  
research centers in Latin America; \$830;

## ECUADOR

ROCKEFELLER FOUNDATION International Program in Agricultural Sciences: Ecuadorian  
Cooperative Project; *see International, above*;

## EL SALVADOR

FOUNDATION FOR THE DEVELOPMENT OF COOPERATIVES IN EL SALVADOR, San Salvador:  
support of a program for increasing agricultural productivity among low-income farmers  
with small landholdings; \$90,000;

## ETHIOPIA

HAILE SELASSIE I UNIVERSITY, Addis Ababa: to recruit a malacologist for the schisto-  
somiasis research program; \$15,000;

## GUATEMALA

OSCAR NERY SOSA, Agricultural Research and Extension Department, Guatemala City: to  
study the organization and structure of the Colombian Institute of Agriculture; \$550;

UNIVERSITY OF SAN CARLOS, Guatemala City:

René Castañeda; to study the organization and structure of the Colombian Institute of  
Agriculture; \$550;

Dr. Victor M. Orellana; to visit the International Center of Tropical Agriculture (CIAT),  
Bogotá, Colombia, to explore the possibilities of establishing an exchange program be-  
tween CIAT and the Faculty of Veterinary Medicine of the University of San Carlos;  
\$550;

## INDIA

INDIAN AGRICULTURAL RESEARCH INSTITUTE, New Delhi:

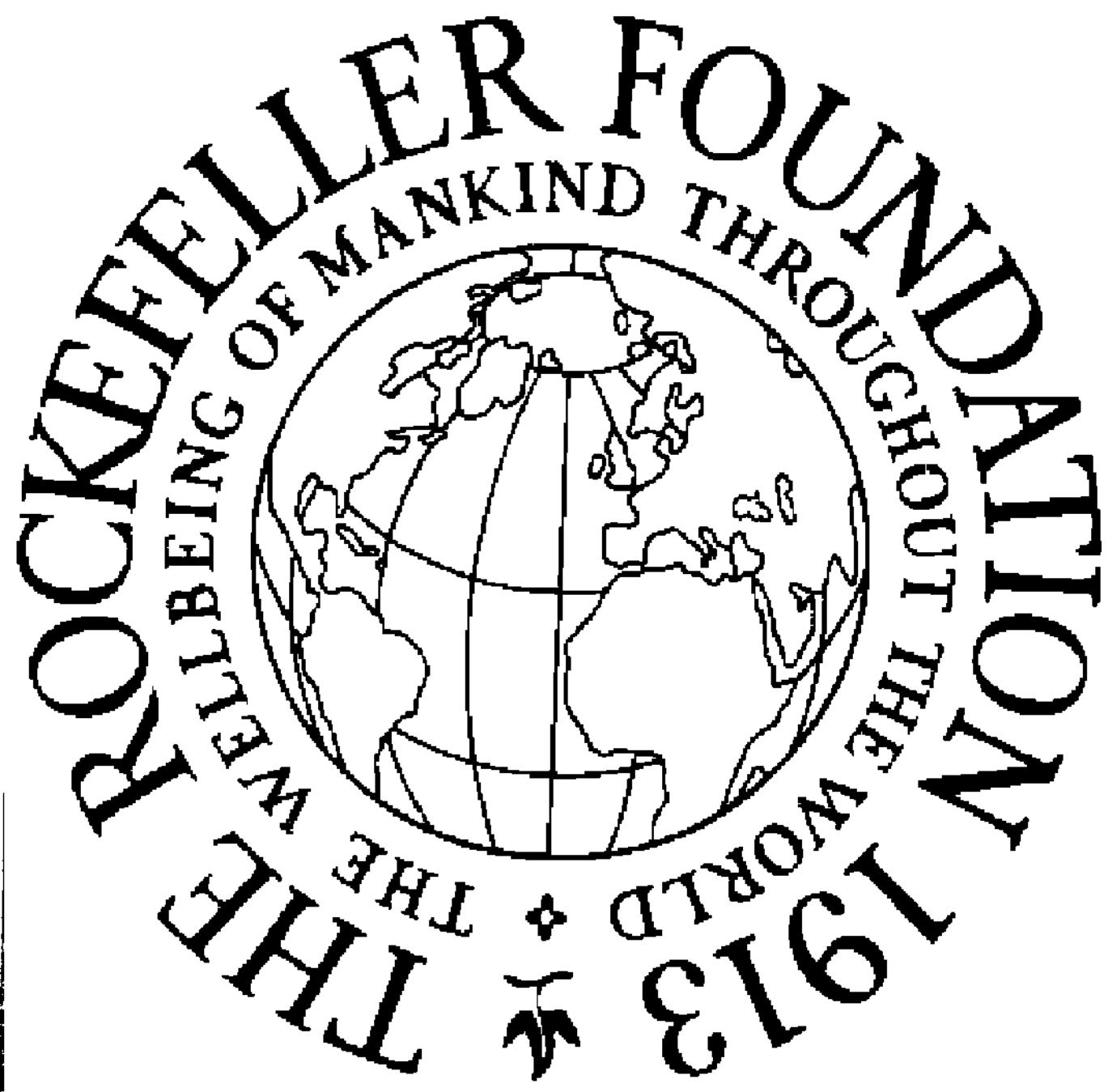
V. S. Mathur; to study techniques and methodology in wheat breeding at selected uni-  
versities and research institutions in the United States, Canada, and Mexico; \$4,675;

Dr. Vinodchandra Harakhchand Shah; to observe recent advances in maize agronomy  
and irrigation technology in Thailand, the Philippines, the United States, and Mexico;  
\$4,405;

S. B. P. Rao; to study cereal-crop improvement techniques in the Philippines, the United  
States, and the United Kingdom; \$4,300;

Dr. M. G. Jotwani; to observe work in control of cereal crop pests at centers in the  
United States and Thailand; \$2,820;

N. Ganga Prasada Rao; to participate in a symposium on crop yield at the University of  
Nebraska and to visit centers of sorghum research in the United States and Puerto Rico;  
\$2,130;



Photograph Excised Here

Richard Bradfield, a distinguished soil scientist, is pioneering multiple cropping schemes that could add substantially to world food supplies.



Photograph Excised Here

Ulysses J. Grant, director of the International Center of Tropical Agriculture, will spearhead campaigns to make tropics more productive.

**ROCKEFELLER FOUNDATION** International Program in Agricultural Sciences:

Indian Program; *see International, above;*

Toward project expenses of the Indian Agricultural Research Institute, the all-India crop improvement programs in maize, rice, wheat, and sorghum, and the Indian Agricultural Program of The Rockefeller Foundation; \$78,000;

Purchase by the Foundation's Indian Agricultural Program of farm machinery needed for improvement of facilities for the all-India crop improvement schemes and Indian Agricultural Research Institute; \$50,000;

**UTTAR PRADESH AGRICULTURAL UNIVERSITY**, Pantnagar:

Dr. Y. L. Nene; to study modern techniques used in serology of plant viruses at the University of Nebraska, to visit virology centers in the United States, and to visit the International Rice Research Institute, Philippines, to observe rice virus work; \$5,195;

Dr. V. L. Asnani; for advanced training in maize breeding in the United States, Mexico, and Thailand; \$4,775;

Mahesh C. Pandey, University of Minnesota, St. Paul; to return to India to a position with the Inter-Asian Corn Program at Uttar Pradesh Agricultural University, traveling via Mexico, England, and the Netherlands to observe centers of plant pathology; \$1,585;

**DHANI RAM VASUDEVA**, Punjab Agricultural University, Hissar: to study techniques and methodology in wheat breeding at institutions in the United States, Canada, and Mexico; \$4,675;

**JAPAN**

**HOKKAIDO UNIVERSITY**, Sapporo: studies on the physiology of corn by Dr. Akira Tanaka, Faculty of Agriculture; \$5,700;

**KIHARA INSTITUTE FOR BIOLOGICAL RESEARCH**, Yokohama: support for a research program for the improvement of wheat and rice through formation of hybrids and through inter-specific crosses; \$47,400 for a five-year period;

**KENYA**

**EAST AFRICAN AGRICULTURE AND FORESTRY RESEARCH ORGANIZATION**, Muguga:

Support of its sorghum research program in Uganda; \$22,000;

Toward the costs of doctoral research on supplementary feeding techniques, to be undertaken by C. N. Karue; \$15,000;

**EAST AFRICAN COMMUNITY**, Nairobi: for use by the East African Agriculture and Forestry Research Organization for an expanded information resources and services program; 113,053 East African shillings (about \$15,900);

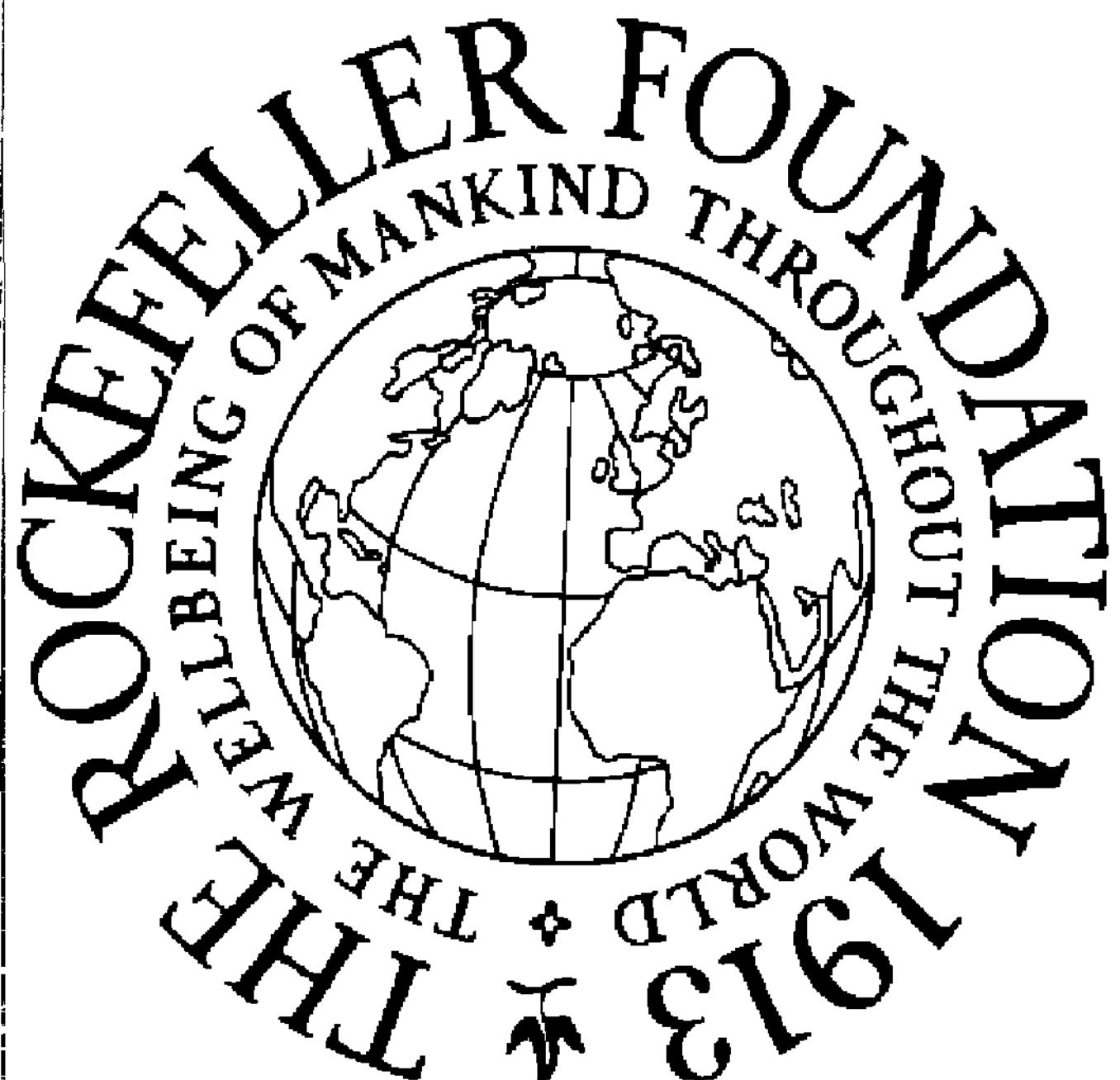
**MINISTRY OF AGRICULTURE AND ANIMAL HUSBANDRY** of the Kenyan Government, Nairobi: toward costs of equipment for the library block at the Animal Health and Industry Training Institute, Kabete; \$5,000;

**UNIVERSITY COLLEGE**, Nairobi (University of East Africa): toward costs of planning for the establishment of a faculty of agriculture at the University College; \$15,000;

**MEXICO**

**INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER (CIMMYT)**, Chapingo:

Rockefeller Foundation International Program in Agricultural Sciences; *see International, above;*



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Carl N. Hedges of the University of Arizona helped develop a totally enclosed system of greenhouses linked to a desalting unit, that provides food, power, and fresh water.

Continued support of a program for the promotion of increased production of maize in the area of high population density in the state of Puebla; \$86,890;

Toward the costs of an accelerated potato production program in West Pakistan and a related in-service training program in Mexico; \$56,305;

Toward costs of equipment and furnishings for its headquarters; \$50,000;

Operating costs of its Protein Quality Laboratory; \$22,500;

In support of the work of the regional coordinator of a regional maize improvement program centered in Kenya; \$15,000;

To enable Dr. Gonzalo Granados to work with Dr. E. W. Sprague in the Foundation's program in Thailand on maize insect problems; \$12,500;

Toward the costs of an in-service training program in potato production in Mexico; \$9,500;

For support of potato research and training by the experiment station of Toluca Valley in cooperation with the International Potato Program; \$5,000;

**NATIONAL INSTITUTE OF AGRICULTURAL RESEARCH, Chapingo:** for support of potato research and training in cooperation with the International Potato Program based at CIMMYT; \$7,600;

**NATIONAL SCHOOL OF AGRICULTURE, Chapingo:**

For use by its Graduate School toward the initiation of a Ph.D. program in agricultural sciences; \$40,000;

University of Wisconsin, Madison; to enable Dr. Richard D. Powers, Department of Agricultural Communications, to assist in the development of a graduate program in communications at the Graduate School; \$25,000;

For use by its Graduate School in support of activities in potato research and training in cooperation with the International Potato Program based at CIMMYT; \$15,350;

To enable Heriberto Cuanalo to complete his Ph.D. degree in soil science at the University of Oxford; \$2,400;

**TECHNOLOGICAL INSTITUTE OF MONTERREY:**

To enable Dr. Jesús de la Fuente, School of Agriculture, to observe systems of agricultural planning, marketing, credit, and management, in the United States; \$2,000;

University of California, Riverside; to enable Everardo Villarreal, prospective staff member of the Technological Institute of Monterrey, to conduct doctoral research on dry-land sorghum production in Mexico; \$1,875;

Manuel Rojas Garcidueñas; to participate in the Third Latin American Symposium on Plant Physiology, in Chile, and to visit institutions in Peru, Chile, and Colombia; \$880;

**NIGERIA**

**AHMADU BELLO UNIVERSITY, Zaria:**

Toward expenses of five participants in a conference on West African livestock improvement, held at the University in June; \$7,690;

Near East Foundation, New York; toward a survey of the livestock industry in West Africa, to be conducted by Warren C. Putman on behalf of Ahmadu Bello University; \$6,000;

**INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE, Ibadan:**

Rockefeller Foundation International Program in Agricultural Sciences; *see International, above*;

Toward its operating expenses; \$278,412;

**PARAGUAY**

**LUIS ALBERTO ALVAREZ**, Ministry of Agriculture and Livestock, Asunción: to visit selected agricultural research and extension centers in Latin America and the United States; \$630;

**DR. EDUARDO RUIZ ALMADA**, National University of Asunción: to visit selected centers of agricultural and veterinary research in Latin America and the United States; \$750;

**PERU**

**DR. MANUEL MORO** and **DR. ELMO DE LA VEGA**, University of San Marcos, Lima: to visit veterinary research centers in South America; \$2,600;

**PHILIPPINES**

**INTERNATIONAL RICE RESEARCH INSTITUTE, Los Baños:**

Rockefeller Foundation International Program in Agricultural Sciences; *see International, above*;

Cooperative research project on rice genetics with the Academia Sinica, Taiwan; \$7,500 for a three-year period;

**ADRIANO A. NAVARRO**, Central Luzon State University, Munoz, Nueva Ecija: travel to Florida to accept an assistantship to study for the M.S. degree in horticulture at the University of Florida; \$725;

**PRESS FOUNDATION OF ASIA**, Manila: seminar for senior journalists and broadcasters on "Communicating Agricultural Research"; \$14,700;

**ST. LUCIA**

**ILLINOIS STATE UNIVERSITY**, Normal: toward the costs of studies of possible mammal host reservoirs of *S. mansoni* on St. Lucia, under the direction of Dr. Harry W. Huizinga; \$4,800;

**ROCKEFELLER FOUNDATION** cooperative projects in schistosomiasis research and control; *see International, above*;

**UNIVERSITY OF VALLE**, Cali, Colombia: to enable students in the Faculty of Sanitary Engineering to provide technical assistance for the schistosomiasis control project, Castries; \$12,180;

**TAIWAN (NATIONAL REPUBLIC OF CHINA)**

**JOINT COMMISSION ON RURAL RECONSTRUCTION**, Taipei:

Development of the research program in brackish-water fish pond ecology and management at the Taiwan Fisheries Research Institute; \$75,000;

Study of the effect of protein supplementation of the diet of undernourished women during pregnancy and lactation; \$25,000;

Continuation of the study of downy mildew of corn by members of the Corn Research Center; \$5,500;



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Leobardo Jiménez is the coordinator of Mexico's Puebla Project, a significant demonstration of how "green revolution" benefits can be brought to small farmers.

## THAILAND

MAHIDOL UNIVERSITY, Bangkok: applied nutrition research program in the Department of Biochemistry, Faculty of Science; \$15,000;

SAINT LOUIS UNIVERSITY, Missouri: equipment for the Anemia and Malnutrition Research Center, University of Chiang Mai; \$158,300;

TOWARD OPERATING EXPENSES of rice and corn-sorghum programs in Thailand; \$50,000;

DR. YONGYUT CHIEMCHAISET, Kasetsart University, Bangkok: to learn amino-acid and protein analytical techniques at the International Maize and Wheat Improvement Center in Mexico; \$2,850;

## TRINIDAD

DR. HOLMAN E. WILLIAMS, University of the West Indies, St. Augustine: to consult with the staff at the International Center of Tropical Agriculture, the Colombian Institute of Agriculture, and Texas A & M University concerning livestock development programs and animal health work; \$1,010;

## UGANDA

DR. HUGH DOCGETT, East African Agriculture and Forestry Research Organization, Soroti: to visit selected sorghum research centers in Puerto Rico and to attend a sorghum conference at Mayaguez, Puerto Rico; \$1,750;

## TURKEY

ROCKEFELLER FOUNDATION International Program in Agricultural Sciences: Middle Eastern Wheat Program; see *International, above*;

## UNITED KINGDOM

DR. IAN MCINTYRE, University of Glasgow, Scotland:

To visit centers of research in protozoan immunity, in the United States and Colombia; \$1,835;

To visit centers of research in East Africa and the Food and Agriculture Organization of the United Nations in Rome, Italy, in preparation for a conference on East Coast fever and trypanosomiasis; \$1,350;

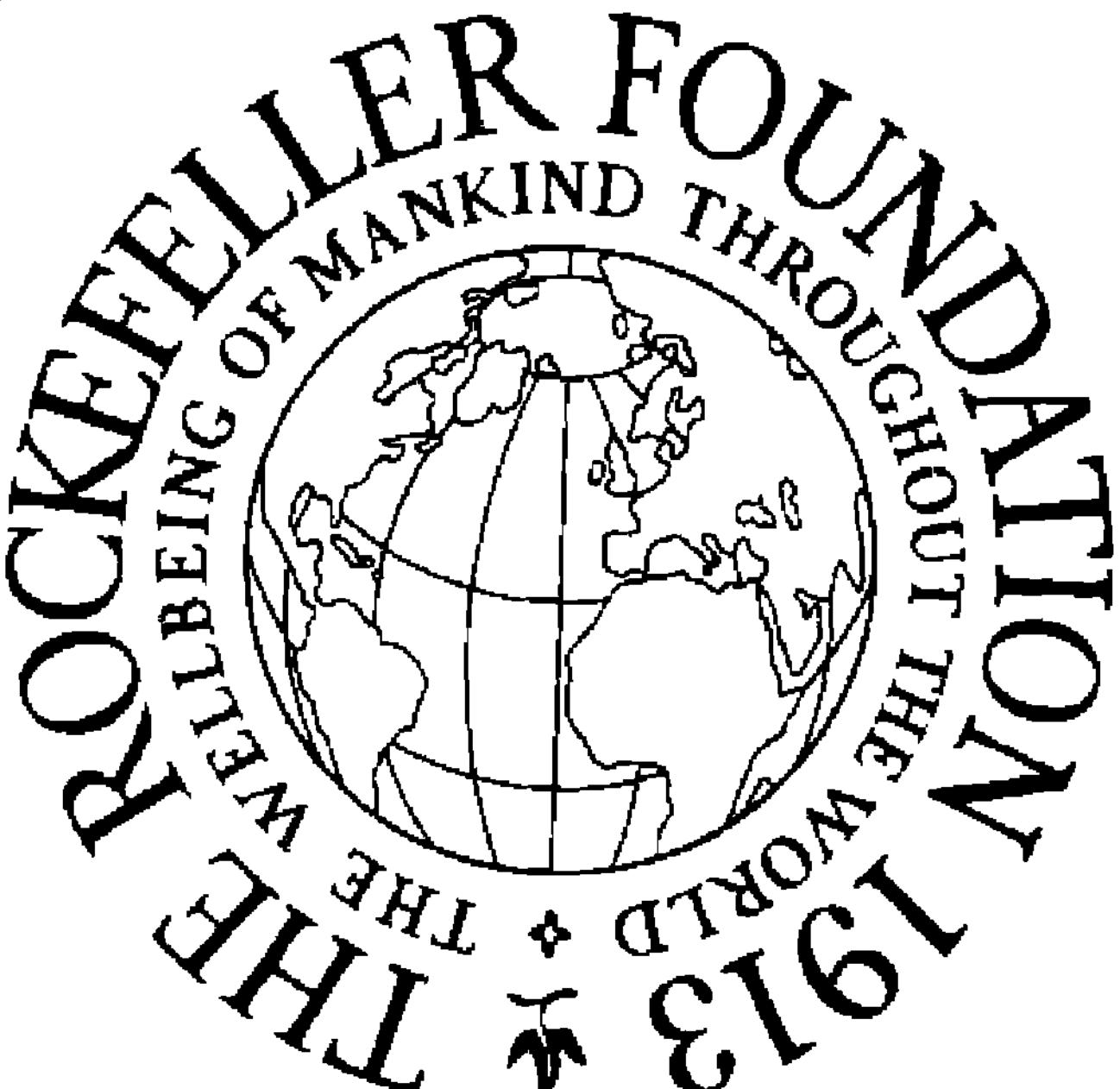
OVERSEAS DEVELOPMENT INSTITUTE, London, England: research on rural development; \$12,950;

## UNITED STATES

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, Pennsylvania: toward the expenses of Dr. Ruth Patrick's visits to Thailand and Malaysia to carry out a field biological survey and evaluate fish culture programs; \$4,650;

AGRICULTURE COUNCIL, New York: study of marketing and related production problems of food grains in Pakistan; \$20,000;

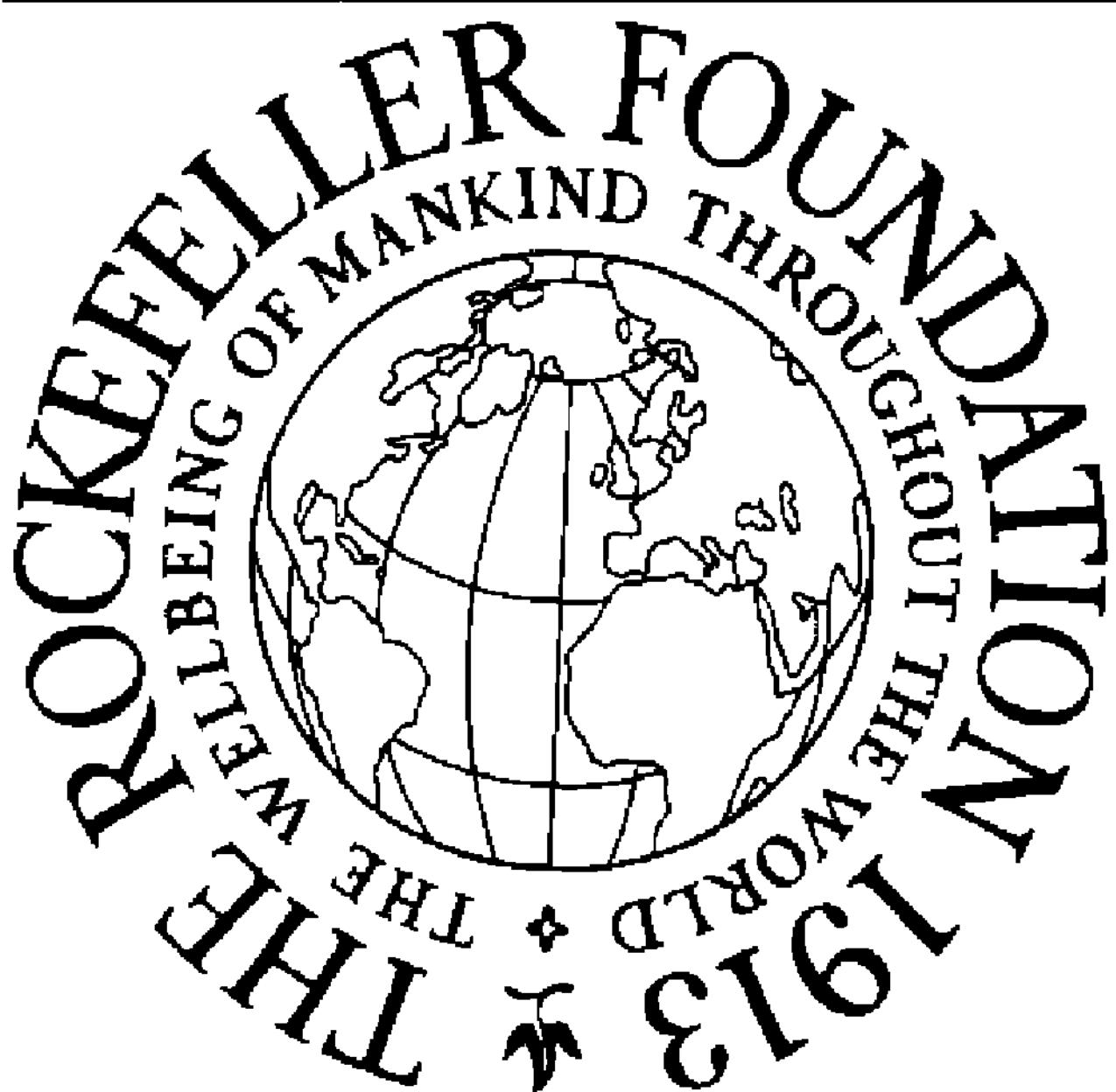
AMERICAN FORAGE AND GRASSLAND COUNCIL, State College, Pennsylvania: to enable a group of young American scientists to attend the 11th International Grassland Congress; \$7,000;



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K. C. Naik leads one of India's outstanding agricultural institutions-- the Mysore University of Agricultural Sciences.



Photograph Excised Here

Fred D. Maurer heads a program of veterinary medicine at Texas A & M University that specializes in the problems of the tropics.

CASE WESTERN RESERVE UNIVERSITY, Cleveland, Ohio: to enable Dr. Abdel Wahab, lecturer in tropical medicine, Cairo University, to study developments in schistosomiasis in the School of Medicine; \$2,400;

CATHOLIC RELIEF SERVICES-UNITED STATES CATHOLIC CONFERENCE, New York: for use by the Federation of Organizations for Social and Educational Assistance, Sergipe, Brazil, for the establishment of a model farm; \$10,000;

CORNELL UNIVERSITY, Ithaca, New York: toward support of travel in South America by Dr. Robert L. Plaisted to collect potato germplasm and to arrange cooperative work on resistance to the golden nematode; \$1,375;

DARTMOUTH COLLEGE, Hanover, New Hampshire: research, by Dr. Robert E. Huke, on the impact of new rice strains on village communities in the Philippines, to be carried out at the International Rice Research Institute; \$18,000;

FOOD, NUTRITION, AND HEALTH, Washington, D. C.: toward the costs of the White House Conference on Food, Nutrition, and Health; \$100,000;

GEORGE WASHINGTON UNIVERSITY, Washington, D.C.: for use by its Biological Sciences Communication Project toward the costs of production of selected bibliographies on maize and wheat; \$57,000;

GULF COAST RESEARCH LABORATORY, Ocean Springs, Mississippi: toward the costs of construction of a small research building for use in the field of marine science; \$20,000;

JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland: toward publication of a monograph entitled "The Ecology of the Lesser Bandicoot Rat in Calcutta," by Dr. J. Juan Spillet; \$2,600;

NATIONAL ASSOCIATION OF STATE UNIVERSITIES AND LAND-GRANT COLLEGES, Washington, D. C.: toward the expenses of two major speakers at the Working Conference of the Organization on Higher Agricultural Education of the Organization for Economic Cooperation and Development, to be held in April, 1970, in Paris; \$2,100;

NORTH CAROLINA STATE UNIVERSITY, Raleigh:

Toward costs of a conference on "Concepts of Pest Management" to be held in April, 1970; \$15,000;

Toward support of the research project "Evolutionary Pathways in *Tripsacum*," under the direction of Dr. David H. Timothy, Department of Crop Science; \$10,000;

OCEANIC FOUNDATION, Makapuu Point, Hawaii: research in the Brackish-Water Fish Culture Laboratory; \$50,000;

PAN AMERICAN DEVELOPMENT FOUNDATION, Washington, D. C.: toward the establishment of national development foundations in several Latin American countries; \$15,000 for a three-year period;

PURDUE UNIVERSITY, Lafayette, Indiana: to enable Dr. Leland R. House to complete projects associated with the development of an international sorghum program; \$2,000;

STANFORD UNIVERSITY, California: toward costs of research, by Professors Bruce F. Johnston and Peter Kilby, Food Research Institute, on agricultural strategy and industrial growth in developing countries; \$13,038;

UNIVERSITY OF AKRON, Ohio: toward the costs of research, under the direction of N. F. Cardarelli, on the development of molluscicide formulations; \$8,000;

UNIVERSITY OF CALIFORNIA:

*Berkeley*

To enable Terrence Veeman to undertake doctoral research in agricultural economics at the Indian Agricultural Research Institute, under the direction of Dr. W. David Hopper; \$11,000;

*Davis*

To enable Dr. James F. Harrington, Department of Vegetable Crops, to direct a study on seed storage and packaging in India; \$15,000;

To enable Dr. R. S. Dewan, Indian Agricultural Research Institute, to take a course in pesticide residue analysis at the Riverside campus and to visit selected pesticide residue laboratories; \$5,050;

*Riverside*

Study of soil environmental conditions in wheat production by the Department of Soils and Plant Nutrition; \$12,500;

Research by Dr. B. L. Johnson on the gene contribution of the wild wheat species *Triticum* and *Aegilops* to the cultivated wheat varieties of the world; \$3,829;

UNIVERSITY OF CHICAGO, Illinois: to enable Miss Pamela Moriearty, Ph.D. candidate in the Pritzker School of Medicine, to conduct research on manifestations of immediate hypersensitivity in human beings with schistosomiasis, at Makerere University College, Kampala, Uganda; \$1,585 for a two-year period;

UNIVERSITY OF GEORGIA, Athens: to enable Dr. Glenn Burton, Georgia Coastal Plain Experiment Station, Tifton, to consult with staff of Rockefeller Foundation programs abroad and to visit other institutions important in international agricultural development; \$3,422;

UNIVERSITY OF HAWAII, Honolulu: to enable Dr. Richard A. Hamilton, College of Agriculture, to observe horticulture programs in the Far East and to consult with staff of Kasetsart University and government officials in Thailand; \$1,675;

UNIVERSITY OF ILLINOIS, Urbana:

Toward the initial costs of its Program for International Research, Improvement, and Development of Soybeans; \$25,000;

Partial support of a long-range project to collect and maintain sorghum germplasm by the Crop Evolution Laboratory; \$13,000;

UNIVERSITY OF MINNESOTA:

*Minneapolis*

Research by Dr. Yujiro Hayami of Tokyo Metropolitan University on "Agricultural Growth in an International Perspective"; \$15,000;

*St. Paul*

Toward support of research on frost resistance in basic food crops, with particular reference to the potato; \$118,000 for a five-year period;

For use by the Department of Agronomy to expand and accelerate its research in applied crop physiology and breeding of small grains; \$25,000;

To enable Surjit S. Sidhu, Ph.D. candidate in the Department of Agricultural Economics, to conduct thesis research in India; \$5,800;

UNIVERSITY OF NEBRASKA, Lincoln: to enable Dr. Jerry D. Eustin, College of Agriculture, to visit rice and sorghum research centers in Japan and the Philippines; \$1,950;

**UNIVERSITY OF WASHINGTON**, Seattle: for use by its College of Fisheries for the further development of a program for the training of staff members from the School of Fisheries of the Catholic University of Valparaíso, Chile; \$50,000;

**UNIVERSITY OF WISCONSIN**, Madison:

Toward the cost of research on economic and social implications of disease control in St. Lucia, West Indies; \$25,000;

Toward the cost of a Center for Research on the Economic and Social Impact of Disease; \$12,935;

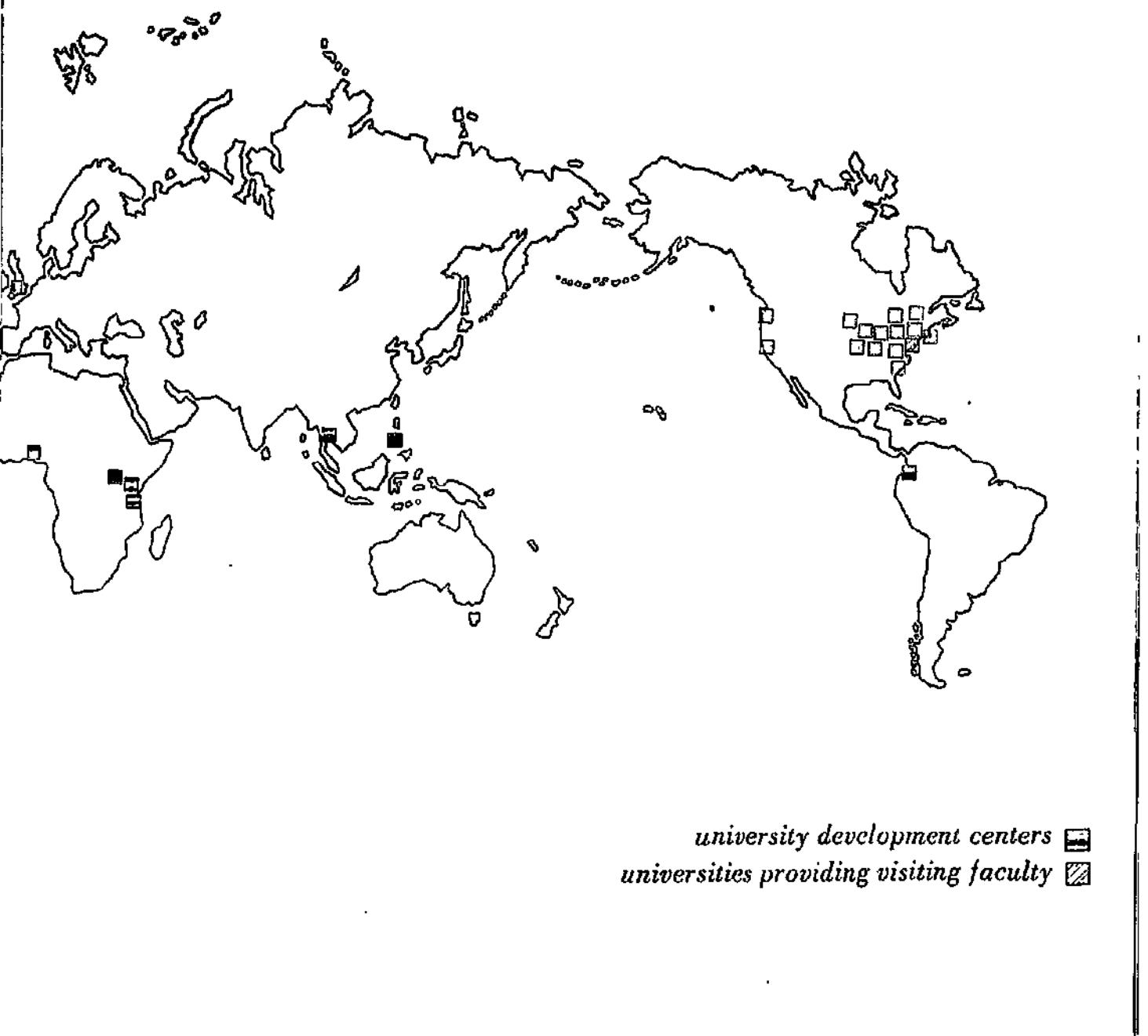
**VOLUNTEERS FOR INTERNATIONAL TECHNICAL ASSISTANCE (VITA)**, Schenectady, New York: to undertake a cooperative developmental program with VITA-Philippines; \$25,000;

**WASHINGTON STATE UNIVERSITY**, Pullman: for use by the Department of Agronomy toward support of the Second International Barley Genetics Symposium, held in July; \$3,840;

**WEST VIRGINIA UNIVERSITY FOUNDATION**, Morgantown: toward development of a computer-based bibliography of plant sciences in East Africa; \$10,000.



# UNIVERSITY DEVELOPMENT





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Dean Peter Nderito has led the remarkable growth of the University of East Africa's Faculty of Veterinary Sciences.

## NEW UNIVERSITY GOALS

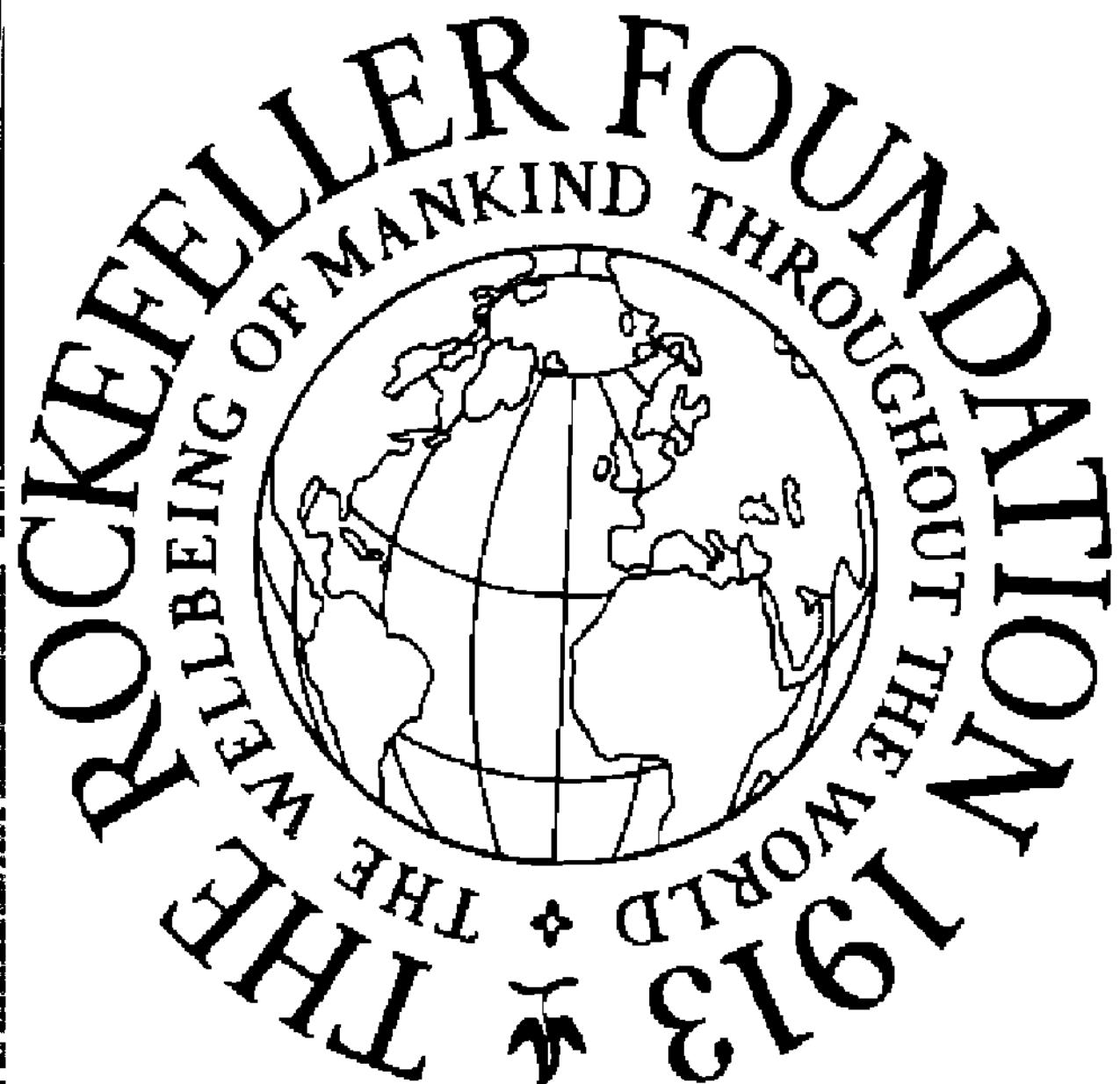
In many countries of the developing world, old established universities traditionally prepared a small elite for leadership in government and the professions; a few privileged scholars went abroad for advanced studies. Today the demand is for more broadly based admission related to national and regional needs, for practical, career-oriented curricula, for institutions that provide education and research relevant to national social and economic goals, and for an end to reliance on foreign educational institutions.

The basic needs of universities in much of the developing world include the rapid development of an indigenous teaching and research staff; larger and more modern facilities; expanded departments in the traditional disciplines; creation of professional schools; introduction of graduate programs and postgraduate research and training. And importantly, higher education and research has to be made responsive to national and regional development.

The discovery and application of knowledge to the urgent social and economic needs of developing nations is of course a growing concern of all universities. Within the developing countries the demand is for institutions engaged in the kinds of teaching and research required for transition from traditional to modern ways of life and for enlarging the opportunities for human welfare. It is through education geared to national needs while striving simultaneously for excellence that national leaders are formed. It is through research that a university comes to grips with problems of national and regional concern and imparts relevance to the teaching of highly motivated teacher-scholars.

When, in 1963, the Foundation adopted its University Development Program, it drew on over 50 years of experience with assistance to education here and abroad. The Foundation was thus in a position to know well that accepting an invitation to help new universities realize new goals is not an undertaking for the fainthearted. Such undertakings require dedicated people, patient commitment, and time. Men are more important than dollars: it takes ten years for a recently graduated Ph.D. to become a full-fledged scholar and educator. The Foundation has provided substantial sums for equipment of laboratories, for libraries, for building teaching facilities, student centers, and hostels, for development of experimental farms, and the like. But its massive investment—in time, effort, and funds—has been in helping to train people who in turn would train others.

The Foundation has concentrated its assistance within seven institutions that seemed to have the potential for developing into strong centers of learning and research, institutions whose leadership recognized the dynamic possibilities of the modern university and who welcomed change. The hope was



## Photograph Excised Here

Ben R. Jackson helps lead Thailand's rice program; its influence extends to other nations in Southeast Asia.

that such institutions could serve as pace-setters to stimulate revitalization of their sister universities; that their strongest departments would develop into regional centers for advanced training and research serving a large geographical area and drawing support from a correspondingly broad base; that a strong corps of scholars would be developed at such centers, to which other institutions could turn for their staffing needs as well as for consultation on research, administration, curriculum development, and other problems.

These expectations are well on the way to being fulfilled in the universities in which the Foundation currently has University Development Programs. These are the University of Valle, in Cali, Colombia; the University of Ibadan in Nigeria; the University of the Philippines; the University of East Africa, with its three constituent colleges in Kenya, Tanzania, and Uganda; and three institutions in Bangkok: Kasetsart University, Thammasat University, and Mahidol University (formerly called the University of Medical Sciences).

#### THE UNIVERSITY OF VALLE

The University of Valle, selected in 1961 for long-term support by the Foundation, has developed into a pace-setting institution for Latin America; its General Studies program has been emulated in Colombian and other Latin American universities, and its graduate programs are attracting wide regional attention. In 1963-64, the University offered 33 programs of study; by the end of 1969, it was offering 55. Graduate programs, particularly in the fields of health, the social sciences, economics, and education, have increased in number significantly. Over the past six years enrollment has grown from 1,441 to 3,600; full-time teaching staff has increased from 249 to 382. A recent overall administrative reorganization has streamlined the University's internal operations; its achievements in this area led the Organization of American States to sponsor a six-week summer course in Cali in 1969, attended by 30 administrators from 14 Colombian and 16 other Latin American universities.

The medical school, which from the outset was the University's most outstanding division, is now generally regarded as one of the best in Latin America. High-quality research is being carried out in the Division of Health Sciences, and strong emphasis is given to integrating medical and nursing training with community service in public health and family planning in both urban and rural centers.

The Division of Engineering also has a strong community orientation, offering, in addition to its teaching and research programs, consultation services to managers of local enterprises in the rapidly developing Cauca valley.

The University of Valle will soon move to a spacious new campus on the city's outskirts, where buildings are being constructed with the help of a loan from the Inter-American Development Bank; all the divisions except Health Sciences will eventually be based at the new site.

### THE UNIVERSITY OF IBADAN

The University of Ibadan, the strongest institution of higher learning in Nigeria, has continued to expand and to place emphasis on developing into a center of excellence and a model, as well as a source of faculty training, for the nation's other universities. In 1968, at the end of a six-year national development plan, the University had a total staff of 520, nearly double the number in 1962; it has plans to add another 150 faculty members. About half of the present academic staff are Nigerians — an impressive accomplishment in a nation torn by civil strife.

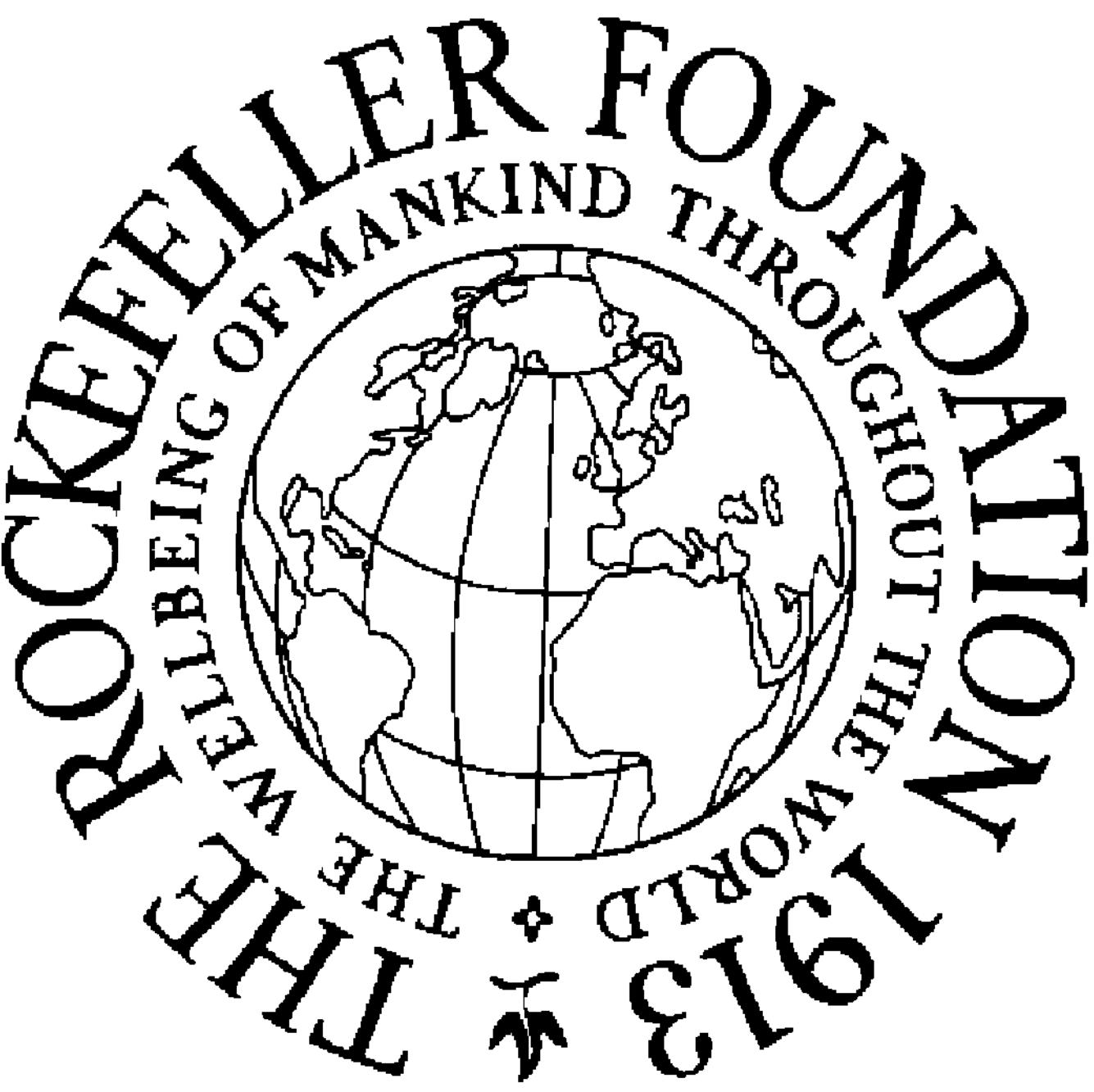
Graduate programs are being developed in many fields, to serve Nigeria and possibly a broad area of West Africa. Ties are also being formed with Makerere University College of the University of East Africa, in Uganda, for cooperation in the area of research on African history and culture. Cooperation with the Ford and Rockefeller Foundation-sponsored International Institute of Tropical Agriculture, being established in Ibadan, will lend an international dimension to agricultural studies at the University. A strong community-service orientation continues in force in every area of teaching and research.

### THE UNIVERSITY OF THE PHILIPPINES

The University of the Philippines is nearing its goal of becoming a key center of teaching and research for Southeast Asia. The School of Economics, with its outstanding faculty, already serves as a regional training center and as a source of consultation for planning agencies of the Philippine Government.

The College of Agriculture in Los Baños is likewise attaining an international reputation; it was recently officially designated by the Southeast Asian Ministry for Education as its postgraduate training center for agriculture. Significant research programs are under way on corn and sorghum and on plant diseases. Cooperation with the International Rice Research Institute, also at Los Baños, buttresses its rice programs.

The College of Medicine has pioneered a program in rural health serving a population of 14,000 in the municipality of Bay, Laguna; plans are now being made to expand its activities into three adjacent municipalities with a combined population of about 60,000. The expanded program will draw on other University departments.



Photograph Excised Here

Dr. T. O. Ogunlesi directs a rural health and training center associated with the University of Ibadan in Nigeria.

## THE UNIVERSITY OF EAST AFRICA

The University of East Africa is rapidly becoming one of the great centers for the study of development and of the nature of new societies. It is building up African leadership in the social sciences at all three colleges and has developed research institutes that have contributed to the solution of economic and social problems faced by the East African governments.

Another major accomplishment has been the establishment of the Faculty of Veterinary Sciences at Nairobi, Kenya; this Faculty offers a degree equivalent to a D.V.M. and is developing postgraduate studies and research on animal diseases common in the region.

The Faculty of Agriculture of Makerere University College, Uganda, has established an undergraduate program attracting students from other countries of Africa and has developed a wide base of support from international sources. Its college farm is rapidly reaching the status of an agricultural experiment station, and research has been initiated on locally important food crops and on livestock improvement.

From the outset, Africanization of the faculty has been a high-priority effort throughout the University. With the aid of the Foundation-supported Staff Development Program, the percentage of East Africans has been increased from 9 percent in 1963 to about 30 percent at the present time.

The University of East Africa has expanded rapidly in response to the growing manpower needs of the three East African nations. The current three-year plan, which terminates in June, 1970, will see the fulfillment of many of the goals articulated in 1961 when the three new nations first joined forces to create the Provisional Council for the University. Eventually each nation is expected to develop the local University College into a full-fledged university with graduate faculties and professional schools. Each will be the stronger for the experience gained and the ties forged during this crucial time of East African history.

## UNIVERSITIES IN BANGKOK

In Thailand, three universities have received Foundation aid over the past six years, and each has developed strong programs in its area of specialization. Kasetsart University, Thailand's top agricultural university, has undertaken studies in rice, corn, and sorghum improvement and has begun to turn its agricultural experiment station, Farm Suwan, into a first-rate research and training center.

At Thammasat University, economics has been the major focus of Foundation attention. Strong undergraduate studies have been established, and an English-language, M.A.-level program has been inaugurated.

Mahidol University's Faculty of Science and the Ramathibodi Faculty of Medicine have given new impetus to scientific and medical studies in Thailand. A vital, new program stressing social relevance, innovation, creativity, and scientific inquiry is emerging. A program in community medicine is being launched as a joint project of the Ramathibodi Faculty and the Thai Ministry of Health.

## METHODS OF UNIVERSITY DEVELOPMENT

The means through which The Rockefeller Foundation assists the development of a university vary from one center to another, but certain basic methods have proven universally effective. Continuity of program and orderly administration are primary; these have been assured by the long-term assignment of a Rockefeller Foundation staff member to each university center, to work closely with the university's leadership in defining needs and in drawing plans for development. This resident representative serves as visiting professor in his own field and coordinates Foundation aid throughout the university.

Two complementary efforts have been the mainstay of the University Development Program: one is provision of advanced training abroad through fellowships for local faculty members, and the other, assignment of visiting faculty from universities in the developed countries, as requested by the institutions assisted. Together these programs constitute the greatest contribution the Foundation has made.

Requests for visiting faculty to fill in for scholars on leave as well as to assist with administration, curriculum development, design of teaching materials, and initiation of research have been filled by the Foundation from three sources: the Foundation's own professional staff, visiting professors recruited through special arrangement with their home institutions, and visiting appointments made directly by universities that have received Foundation grants for that purpose. To date a number of American, Canadian, and British universities have received grants to support visiting faculty programs.

In addition to general faculty and program development, various research and training projects receive direct Foundation support. These projects very often have a component of service to the community or a relevance to national planning needs. Research in community health or population control (at the University of the Philippines, the University of Valle, the University of Ibadan, and Mahidol University, for example) is linked with medical care and maternal and child health programs in urban and rural districts. Research in economics and the social sciences provides information useful to government bureaus and regional planning agencies (the Makerere Institute of Social Research, the Institute for Development Studies at the University

College, Nairobi, the Economic Research Bureau at Dar es Salaam, and the Nigerian Institute of Social and Economic Research carry on such studies). Agricultural and veterinary degree candidates work with laboratory researchers, farmers, and extension agents on local crop and livestock problems. This emphasis on community involvement has proven its worth in all the institutions receiving Foundation aid; the need for trained manpower and the desire of the academic world to be responsive to rapidly evolving societies have both been served.

#### BUILT-IN OBSOLESCENCE

University Development, like many of the Foundation's programs, has a built-in obsolescence factor—the ultimate goal is to make the program unnecessary. This point is in sight in most of the institutions being aided today. Many of the research and teaching programs initially financed by the Foundation have already been absorbed into university or national budgets or given support from other local sources. Visiting professors, too, are gradually being replaced by returning scholars and by graduates of local universities, where advanced-degree programs are being offered in an increasing number of fields.

Foundation funds are currently being channeled toward highly specialized training; toward continuing support for ongoing research and training programs, particularly where these are developing into regional centers for advanced study; and toward expansion of graduate study programs. During 1969 several score of visiting professors served abroad under Foundation auspices; the Foundation's field staff engaged in University Development Programs numbered 60 (this figure includes agricultural scientists who are dividing their time between teaching at Kasetsart University and working with the Thai Ministry of Agriculture); and six grants were made to universities in developed countries for overseas assignments of staff. The total number of fellows and scholars from the Program centers was 78.

#### GRANTS 1969

##### INTERNATIONAL

###### ROCKEFELLER FOUNDATION University Development Program Centers:

University of Valle, Colombia		\$ 441,000
Staff on assignment and visiting faculty	\$ 291,500	
Project support	149,500	
University of Ibadan, Nigeria		265,800
Staff on assignment and visiting faculty	236,800	
Project support	29,000	



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Y. K. Lule, formerly Uganda's Minister for Rural Development, is the principal of the University of East Africa's Makerere University College.

<b>University of East Africa</b>	<b>723,500</b>
Staff on assignment and visiting faculty	641,000
Project support	82,500
<b>Universities in Bangkok, Thailand</b>	<b>1,604,200</b>
Staff on assignment and visiting faculty	1,358,000
Project support	246,200
<b>University of the Philippines</b>	<b>119,700</b>
Staff on assignment and visiting faculty	84,000
Project support	35,700
<b>Total</b>	<b><u>33,154,200</u></b>

## COLOMBIA

**ROCKEFELLER FOUNDATION** International Program in University Development: Colombian program; *see International, above:*

### UNIVERSITY OF VALLE, Cali:

Rockefeller Foundation International Program in University Development; visiting faculty requested by the University of Valle; *see International, above:*

Dr. Jean-M. François Bucher; to continue as visiting professor, Department of Literature;

Rolando Castañeda, University of Puerto Rico; visiting professor, Department of Economics;

Support for the Division of Health Sciences; \$303,000;

General support for the University; \$75,000;

Equipment for Central Administration; \$46,600;

Postgraduate training awards to enable non-Colombians to study at the University; \$45,000 through December, 1971;

For use by the Division of Social Sciences and Economics toward the costs of developing teaching materials in economics; \$42,485;

Equipment for the Biology Department; \$22,654;

Toward the cost of a research project on voter attitudes in 1970 and future Colombian elections by the Division of Social Sciences and Economics; \$15,400;

Equipment and supplies for research in biochemical pharmacology and for the establishment of a toxicology laboratory under the direction of Dr. Antonio Guerra; \$15,000;

Equipment and supplies for research in biochemistry under the direction of Dr. Carlos Corredor; \$14,000;

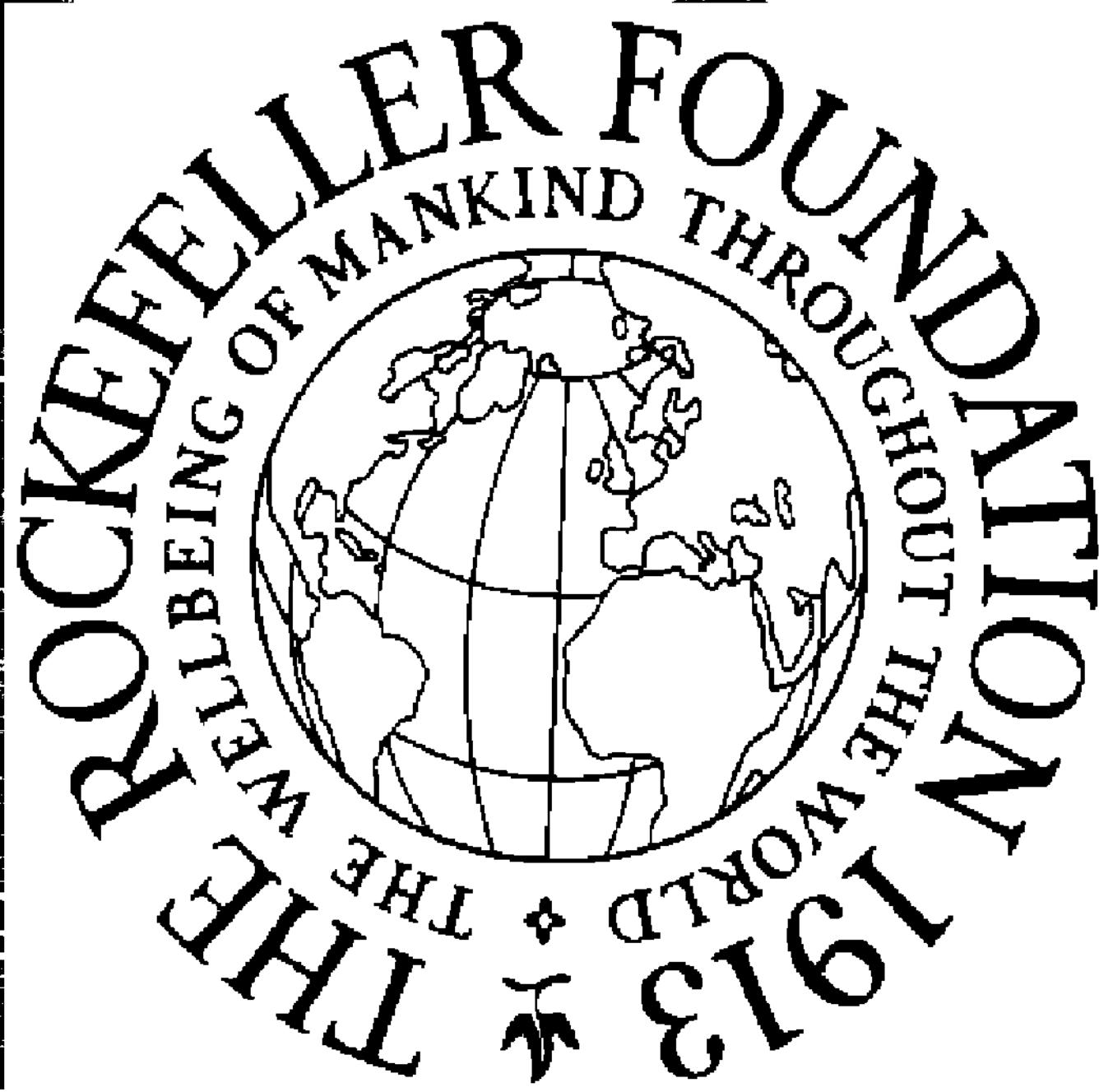
Toward the costs of the First Inter-American Course on Administration for University Development; \$13,990;

To enable Peter J. Murphy to continue as visiting professor in the Division of Engineering; \$10,265;

Studies on the quality of medical care in rural areas of Colombia, to be conducted by Dr. Vicente Borrero. Faculty of Medicine; \$10,000;

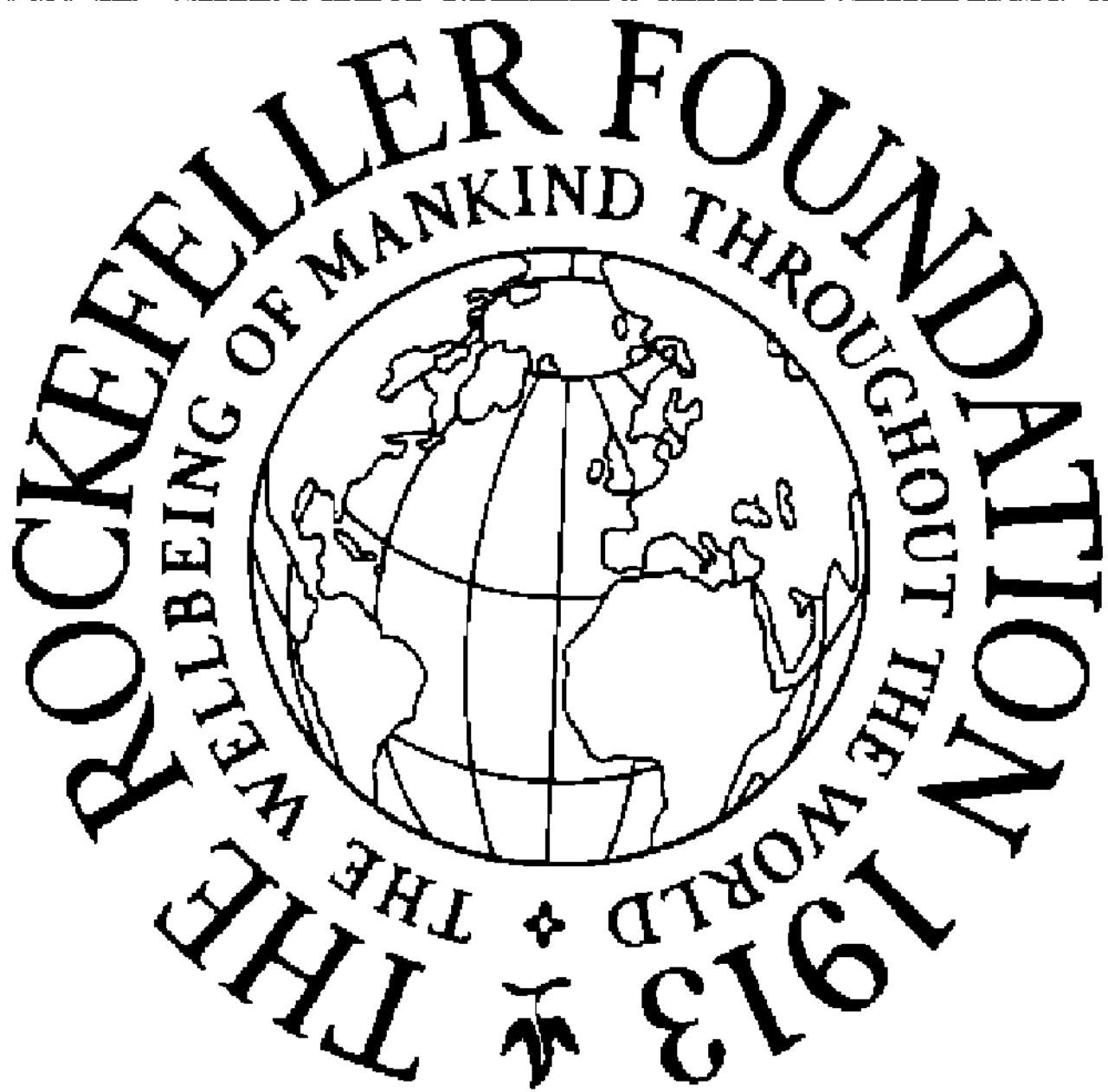
Toward publication costs of *The Effect of Climate on Architecture in Colombia*; \$7,500;

Toward establishment of a graduate program in the School of Nursing; \$4,200;



Photograph Excised Here

Dale D. Harpstead and Dr. Alberto G. Pradilla demonstrated the value of opaque-2 corn with critically malnourished children at Valle.



Photograph Excised Here

Dr. Antonio G. Tan and his medical group serve isolated villages under the University of the Philippines' community health program.

To enable Dr. Gabriel Velázquez Palau, dean of the Faculty of Medicine, to spend his sabbatical year as visiting professor at Harvard Medical School; \$4,000;

To enable Professor Alfredo López to pursue advanced studies in soil mechanics at Harvard University; \$2,675;

Cornell University, Ithaca, New York; to enable four faculty members of the Division of Biological Sciences to visit the University of Valle for consultations about a possible exchange program in the biological sciences; \$2,480;

Miami University, Oxford, Ohio; to enable Dr. Read R. Nielson, associate professor of zoology and physiology, to spend his sabbatical year as visiting professor in the Division of Physiological Sciences at the University of Valle; \$2,075;

Equipment for the Central Library; \$1,800;

Miss Lucero Ospina; to learn advanced techniques in the use of radioisotopes at the Mayo Clinic, Rochester, Minnesota; \$1,700;

Dr. Gildardo Agudelo; to attend a seminar on perinatology, in Mexico City, and to observe new developments in the care of premature and newborn babies in the United States; \$1,565;

Miss Sonia Laverde Eastman and Hernán Poveda; to attend a Seminar on the Acquisition of Latin American Library Materials, in San Juan, Puerto Rico; \$1,150;

To enable Mrs. Ceneyda Montes de Jaimes, School of Nursing, to participate in the International Congress on Obstetrics, held in Santiago, Chile, and to observe the family planning programs of the University of Chile; \$800;

Johns Hopkins University, Baltimore, Maryland; to enable Dr. Vicente Navarro to teach a two-week course on operations research as applied to community health program problems and to consult with faculty at the University of Valle; \$755;

## KENYA

ROCKEFELLER FOUNDATION International Program in University Development: East African program; *see International, above*;

UNIVERSITY COLLEGE, Nairobi (University of East Africa—*see also Tanzania and Uganda*):

Rockefeller Foundation International Program in University Development; visiting faculty requested by the University College; *see International, above*;

Dr. Zevedei Barbu, University of Sussex, Brighton, England; visiting professor of sociology;

Dr. Robert Chambers, Institute of Development Studies, University of Sussex, England; senior research fellow, Social Science Division, Institute for Development Studies;

Dr. Robert K. Davis, economic advisor, Ministry of Tourism and Wildlife, Nairobi; visiting senior research fellow, Social Science Division, Institute for Development Studies;

Dr. Mitchell Harwitz, State University of New York at Buffalo; visiting professor, Department of Economics;

Nathan H. Shapira, University of California, Los Angeles; head, Department of Design;

H. C. A. Somerset, Institute of Community Studies, Kenya; senior research fellow, Social Science Division, Institute for Development Studies;

Dr. Joseph E. Stiglitz, Yale University, New Haven, Connecticut; senior research fellow, Institute for Development Studies;

Bernard Wasow, University of British Columbia, Vancouver, Canada; visiting assistant lecturer, Department of Economics;

Support for the activities of the Social Science Division, Institute for Development Studies; \$98,000;

Support for research in the Cultural Division, Institute for Development Studies; \$22,500;

Scholarships for prospective East African academic staff members enrolled in the B.Phil. program in economics; \$15,000;

Toward the expansion of facilities for the Social Science Division, Institute for Development Studies; \$14,000;

Support for three East African graduate assistants in the Department of Economics; \$11,300;

Stanford University; to enable Peter N. Hopcraft, Kenyan doctoral candidate in agricultural economics, to accept a two-year appointment as junior research fellow in the Institute for Development Studies; \$8,660 for a two-year period; return travel to Kenya for Mr. Hopcraft; \$2,475;

Toward the expenses of a comparative study of the functional morphology of the digestive and reproductive systems of ruminants, directed by Dr. R. R. Hofmann; \$8,000 through December, 1971;

To enable Dr. Richard S. Odingo to study new techniques of geographical research in Great Britain and the United States; \$5,200;

To enable Dr. John J. Okumu, Department of Government, to conduct research and to visit university political science departments in the United States; \$4,000;

Dr. Carl K. Eicher and Dr. Carl E. Liedholm, Michigan State University, East Lansing; travel to Africa to consult with staff members of the Institute for Development Studies; \$3,170;

To enable Dr. Victor P. Diejomaoh, University of Lagos, to serve as visiting research fellow in the Social Science Division, Institute for Development Studies; \$2,500;

To provide five second-year students from Tanzania and Uganda in the Department of Government with experience in public administration during the summer of 1969; \$1,200;

To enable Professor Bethwell A. Ogot, Department of History, to visit selected centers of African studies in the United States; \$1,035;

Acquisition of library materials in survey methodology for the Social Science Division, Institute for Development Studies; \$300;

## NIGERIA

ROCKEFELLER FOUNDATION International Program in University Development: Nigerian program; *see International, above*;

## UNIVERSITY OF IBADAN:

Rockefeller Foundation International Program in University Development; visiting faculty requested by the University of Ibadan; *see International, above*;

Dr. Ralph A. Austen, University of Chicago, Illinois; visiting lecturer, Department of History;

Dr. Archibald Callaway; to continue as associate member, Nigerian Institute of Social and Economic Research;

Dr. William J. Chambliss, University of California, Santa Barbara; visiting professor of sociology;

Dr. Don J. DeVoretz, Simon Fraser University, British Columbia, Canada; visiting lecturer in economics;

Toward costs of the arbovirus program in the Faculty of Medicine; £32,820 (about \$92,000);

Support for its School of Drama; \$50,000;

Community mental health project in the Department of Psychiatry and Neurology; \$31,150;

Support of research fellowships in the Department of Veterinary Medicine; £9,391 (about \$26,306);

Support of a study of the pathogenesis of trypanosomiasis in the albino rat and the goat; \$22,000 through June, 1971;

Pasture and fodder research in the Department of Agronomy; \$20,000 for a three-year period;

Toward support of research in histochemistry, under the direction of Dr. T. A. I. Grillo, Department of Anatomy; \$20,000 through June, 1971;

Toward support of a lectureship in nematology; \$18,000 for a three-year period;

To enable Professor E. W. Foss, Cornell University, Ithaca, New York, to serve as visiting professor in the Faculty of Agriculture; \$15,210;

Appointment of a biostatistician in the Department of Preventive and Social Medicine; \$14,000;

To enable three senior staff members of the Faculty of Agriculture, Forestry, and Veterinary Science to study in the United States; \$13,000;

Research on hemoglobins in the Department of Chemistry; \$12,000 through June, 1971;

To enable Dr. J. A. Atanda, Department of History, to teach and conduct research at the University of Chicago; \$11,600;

Purchase of audiovisual teaching equipment for use in the basic science departments; \$11,700 through June, 1971;

Study of contemporary Nigerian legal systems by the Department of Sociology; \$10,100;

Support of two research appointments in the Department of Animal Science and one research appointment in the Department of Agricultural Biology; \$7,970;

Support of the salary of a medical librarian; \$7,000 through June, 1971;

To enable Dr. Jack Hirst, Department of Chemistry, to visit the United States to engage in research and consultation at the University of California, Santa Cruz; \$4,700;

Equipment for neurosurgical research, under the direction of Dr. E. L. Odeku; \$4,300 through June, 1971;

Research and demonstration project of rural water supply at the Igbo-Ora rural health training and teaching center under the direction of P. O. Oluwande; \$4,100 through June, 1971;

State University of New York at Buffalo; to enable Gordon Idang, prospective faculty member of the University of Ibadan, to complete his research on the Anglo-Nigerian Defence Agreement; \$4,020;

State University of New York at Buffalo; to enable Omonhiomwan Omoruyi, prospective faculty member of the University of Ibadan, to complete his dissertation on "Social Integration and the Plural Society"; \$3,450;

Special field operations in the arbovirus research program, under the direction of a Foundation staff member; \$3,000;

Dr. C. Renate Barber, University of Oxford, England; travel to Africa to evaluate the sociologic and demographic data obtained on the Ibarapa Project in Epidemiology and Community Medicine; \$2,450;

Enitan A. Bababunmi; to visit biochemical laboratories in the United States and France; \$2,400;

For use by the Department of Economics toward the costs of a study of migration within Nigeria; \$1,860;

Dr. Warren H. Vincent, Michigan State University, East Lansing; travel to Nigeria in connection with program development in agricultural economics at the University of Ibadan; \$1,310;

## PHILIPPINES

ROCKEFELLER FOUNDATION International Program in University Development: Philippine program; *see International, above*;

### UNIVERSITY OF THE PHILIPPINES:

#### *Los Baños*

Equipment and operating costs of the corn and sorghum training and research project in the College of Agriculture; \$35,000;

Support of the scholarship program for Southeast Asian students in the College of Agriculture; \$30,000;

To enable Dr. Virgilio R. Carangal, College of Agriculture, to visit the International Maize and Wheat Improvement Center in Mexico; \$1,605;

To enable Dr. Ricardo M. Lantican to travel to India, Thailand, and Taiwan to attend soybean conferences and the Inter-Asian Corn Conference; \$1,150;

To enable Dr. Arturo A. Gomez, College of Agriculture, to visit the national sorghum program in Thailand; \$620;

To enable Dr. Leonila Corpuz-Raros to return to the Philippines to assume a position in the Department of Entomology, College of Agriculture; \$555;

#### *Quezon City*

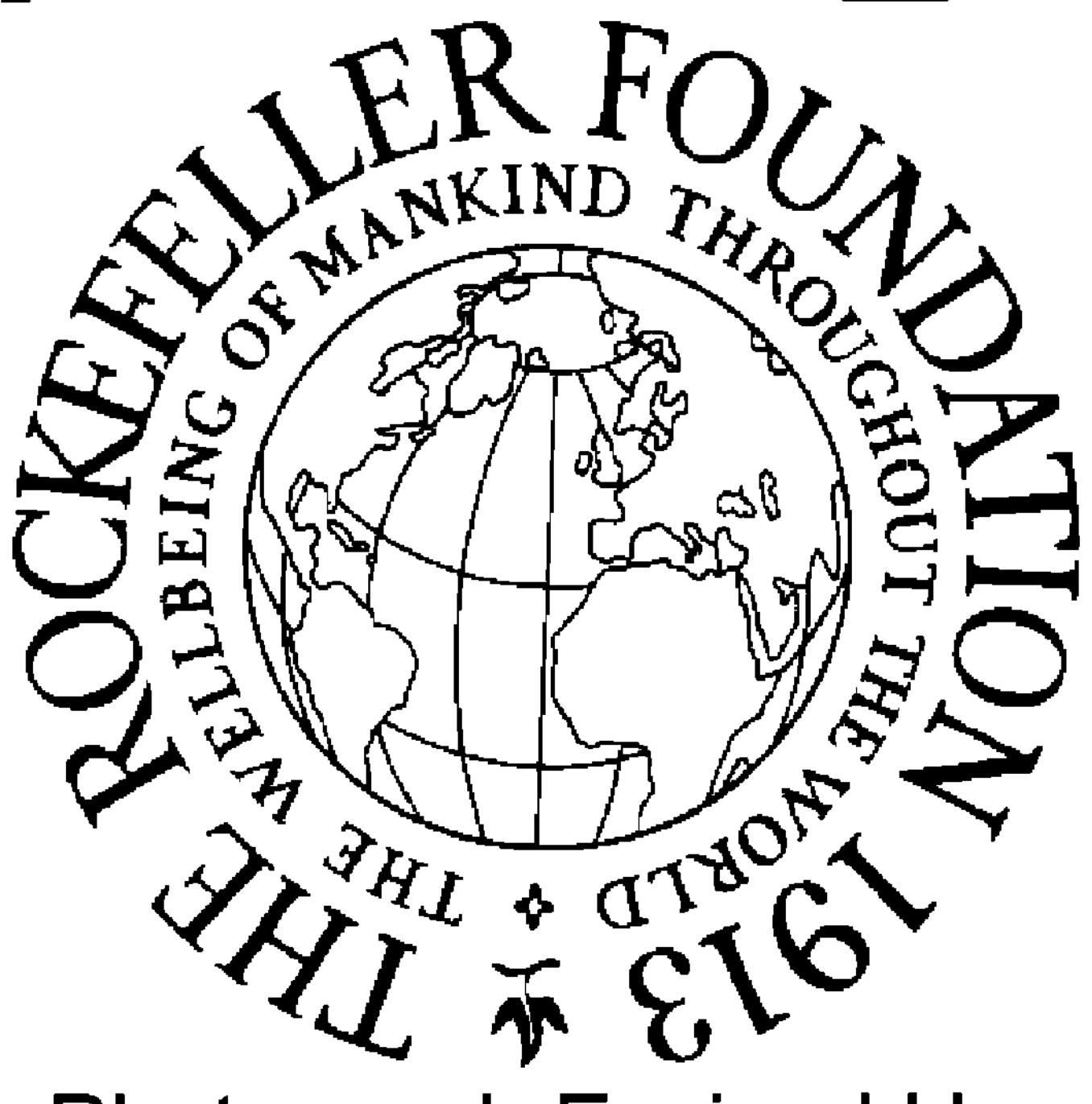
Rockefeller Foundation International Program in University Development; visiting faculty requested by the University of the Philippines; *see International, above*;

Dr. Donald F. Gordon, University of Rochester, New York; visiting professor, School of Economics;

Dr. John H. Power; to continue as visiting professor, School of Economics;

Dr. Dean A. Worcester; to continue as visiting professor of economics;

Continued support for the Comprehensive Community Health Program; \$65,500;



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Alfonso Ocampo, rector of the University of Valle in Colombia, has brought sound administration to an academically distinguished university.



Photograph Excised Here

H. M. A. Omitiri is director of the Nigerian Institute of Social and Economic Research at the University of Ibadan.

Toward the costs of further development and expansion of the Comprehensive Community Health Program; \$44,500;

Graduate scholarships in the College of Arts and Sciences; \$25,000;

Conference on Indonesian stabilization at the School of Economics; \$15,000;

Graduate scholarships in the School of Economics; \$15,000;

University of Wisconsin, Madison; to enable Dr. José Encarnación to conduct research on development economics with special reference to the Philippines; \$13,000;

For use by the School of Economics for library acquisitions essential to the initiation of a doctoral program; \$7,000 through June, 1971;

Research equipment for the Institute of Hygiene; \$5,500;

Completion of the Flow-of-Funds Project and interpretation of its findings; \$4,155;

To enable Joel Eliseo Rocamora, Institute of Asian Studies, to complete doctoral research in Indonesia; \$2,250;

Rockefeller Foundation International Program in University Development; to enable Dr. Edward P. Dozier, University of Arizona, Tucson, to conduct research in the Philippines;

#### TANZANIA

ROCKEFELLER FOUNDATION International Program in University Development: East African program; *see International, above*;

UNIVERSITY COLLEGE, Dar es Salaam (University of East Africa—*see also Kenya and Uganda*):

Rockefeller Foundation International Program in University Development; visiting faculty requested by the University College; *see International, above*;

Leonard Berry, Clark University, Worcester, Massachusetts; director, Bureau of Resource Assessment and Land Use Planning;

F. Seth Singleton, Yale University, New Haven, Connecticut; visiting lecturer in political science;

Research and teaching in geography in its Bureau of Resource Assessment and Land Use Planning; \$81,900;

Support of developmental programs in the Departments of Political Science and History; \$16,036;

Program in management and administration; \$11,285;

#### THAILAND

##### INSTITUTIONS IN BANGKOK:

Equipment, supplies, and other expenses connected with the development of an agricultural experiment station; \$13,365;

##### Kasetsart University

Toward the cost of an international training facility at Farm Suwan; \$105,000;

To enable three members of the Kasetsart University Planning Team to study campus plans at selected institutions in the United States; \$6,825;

To enable three members of the administrative staff to observe university development programs in India; \$2,625;

Rapee Sakarik; to visit selected universities and international organizations in the United States; \$1,275;

*Mahidol University* (formerly University of Medical Sciences)

Rockefeller Foundation International Program in University Development; visiting faculty requested by Mahidol University; see *International, above*;

Adrian J. Lamb, Monash University, Clayton, Australia; research associate, Department of Biochemistry, Faculty of Science;

Dr. John J. McMonigle; to continue as research associate, Department of Pharmacology, Faculty of Science;

Dr. Hideo Negoro; to continue as research associate, Department of Anatomy, Faculty of Medical Science;

Purchase of teaching, research, and library equipment and supplies for the Faculty of Science; \$135,000;

Equipment, supplies, and research materials for the Departments of Biochemistry and Microbiology, Faculty of Science; \$46,000;

Library acquisitions for the Faculty of Science; \$25,000 through June, 1973;

Purchase of medical textbooks for use by the Ramathibodi Faculty of Medicine; \$4,000;

Dr. Anong Nondasuta, Ramathibodi Faculty of Medicine; to visit cytogenetic laboratories in the United States; \$3,875;

Miss Marjorie Muecke, University of California, Los Angeles; to visit the Ramathibodi Faculty of Medicine as an advisor in the School of Nursing; \$3,500;

Toward expenses of the summer student program in community health at the Ramathibodi Faculty of Medicine; \$1,500;

*Thammasat University*

Rockefeller Foundation International Program in University Development; visiting faculty requested by Thammasat University; see *International, above*;

Dr. K. Laurence Chang; to continue as visiting professor, Faculty of Economics;

Dr. James C. Ingram, University of North Carolina, Chapel Hill; visiting professor, Faculty of Economics;

Dr. William A. McCleary, Williams College, Williamstown, Massachusetts; visiting professor, Faculty of Economics;

To enable Dr. Neon Snidvongs to utilize materials recently made available on the Chakri period of Thai history, while serving as a visiting lecturer at the University of Michigan; \$8,350;

To enable Pramote Nakornthab, Faculty of Political Science, to conduct field research for his doctoral dissertation entitled "Centralism and Local Development: A Study of Urban Local Government in Thailand"; \$6,500;

Grants for two staff members who are M.A. candidates, to study economics in the Southeast Asian program at the University of the Philippines; \$5,000 for a three-year period;

ROCKEFELLER FOUNDATION International Program in University Development: Thai program; see *International, above*;



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James S. Dinning, head of the Foundation's staff in Thailand, has helped structure university curricula and research in the medical and natural sciences.

## UGANDA

ROCKEFELLER FOUNDATION International Program in University Development: East African program; *see International, above*;

UNIVERSITY OF EAST AFRICA, Kampala (*see also Kenya and Tanzania*):

Support for the Staff Development Plan in its three constituent colleges; \$307,155;

Support for the work of the Councils for Agricultural Education, Medical Education, and Veterinary Education, the Social Science Council, and other academic groups; \$30,000;

Toward costs of the appointment of an assistant liaison officer; \$19,640;

Conference of East African university administrators, held in Kampala; \$4,000;

Dr. Philip W. Bell, Merrill College, University of California, Santa Cruz; to participate in a conference, held at the University College, Dar es Salaam, on the teaching of economics in Africa, and to consult with staff members at Makerere University College, Kampala, and the University College, Nairobi; \$1,840;

Dr. Gerald K. Helleiner, University of Toronto, Canada; to participate in a conference, held at the University College, Dar es Salaam, on the teaching of economics in Africa, and to consult with staff members at Makerere University College, Kampala, and the University College, Nairobi; \$1,605;

Toward costs of reorganization of the *East African Economic Review* into *The Eastern African Economic Review*; \$1,300 for a two-year period;

MAKERERE UNIVERSITY COLLEGE, Kampala (University of East Africa):

Rockefeller Foundation International Program in University Development; visiting faculty requested by Makerere University College; *see International, above*;

Dr. John C. Dawson, Grinnell College, Iowa; senior lecturer, Department of Economics;

Locksley G. E. Edmondson; to continue as visiting lecturer in international organization and special areas;

Oliver C. Grannis, University of Michigan, Ann Arbor; visiting lecturer in linguistics;

Dr. Mark A. Haskell, New York University; senior lecturer, Department of Economics;

Toward support of faculty development and research in the Faculty of Agriculture; \$125,606;

Support of research and teaching in the Department of Economics; \$46,500;

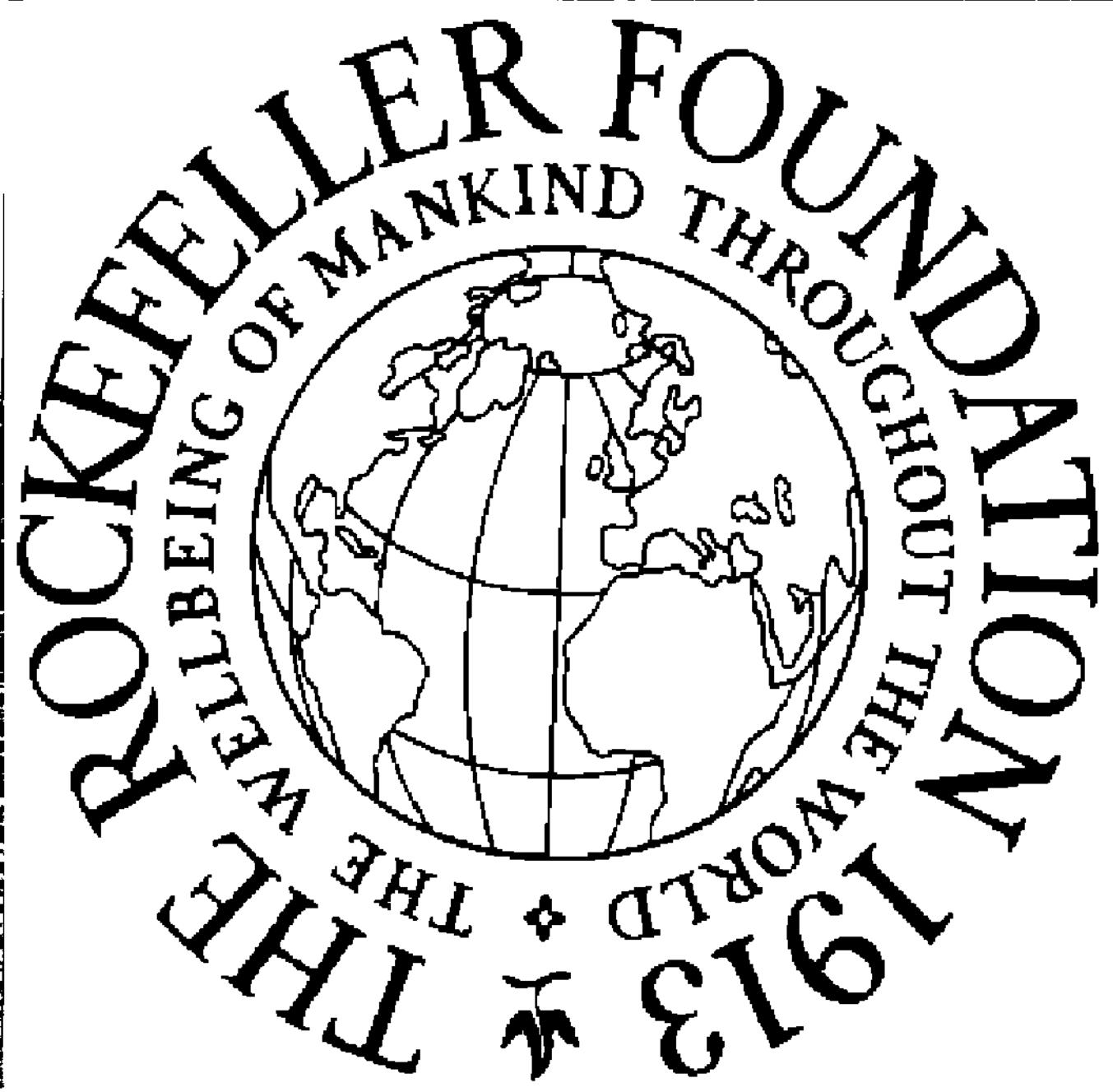
Toward research, teaching, and graduate studies in political science; \$45,220;

Toward the purchase of equipment and supplies and toward travel costs for the Faculty of Agriculture; \$14,500;

Support for a program of teaching through research, in the Department of History; \$8,100;

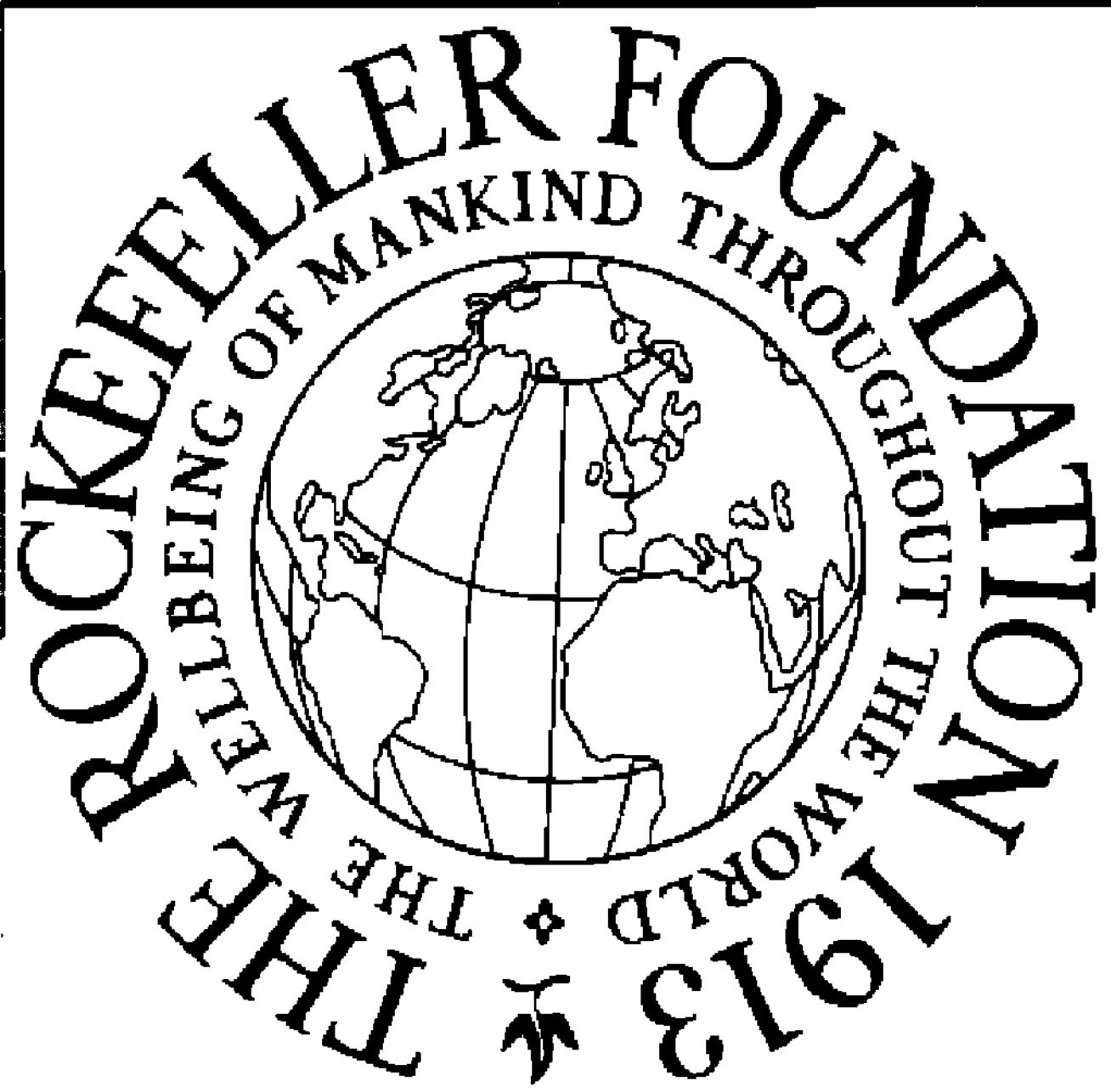
Toward the costs of workshops held at the Makerere Institute of Social Research; \$7,000;

Dr. Kristian Oland and E. S. H. Barlow; to visit agricultural universities and institutes and Foundation agricultural programs in Asia; \$3,740;



Photograph Excised Here

Dr. T. Adeoye Lambo, a psychiatrist of international reputation, is vice-chancellor of the University of Ibadan in Nigeria.



Photograph Excised Here

Dr. Gabriel Velázquez gave outstanding leadership to the development of a first-rate, regionally influential medical school at the University of Valle.

Toward an appointment in creative writing; \$2,500;  
To enable Professor Asivia Wandira, Faculty of Education, to visit educational institutions in the United States; \$2,025;  
Robert Holliday; to attend a symposium in Lincoln, Nebraska, on the physiological aspects of crop yield; \$1,610;

## RELATED GRANTS

### COLOMBIA

UNIVERSITY OF THE ANDES, Bogotá: toward the costs of training and research in political science; \$12,000;

### NIGERIA

UNIVERSITY OF IFE, Ile-Ife: conference on "Trends in University Teaching and Research in Public Administration in Africa," sponsored by its Institute of Administration; \$15,000;

### TANZANIA

EAST AFRICAN COMMUNITY, Arusha: for use by the East African Veterinary Research Organization, Muguga, Kenya, for an integrated teaching and research program with the Faculty of Veterinary Science at University College, Nairobi; \$17,200;

### UNITED KINGDOM

LIVERPOOL SCHOOL OF TROPICAL MEDICINE, England: to enable Dr. Herbert Gilles to advise on health programs at Ibadan and Zaria, Nigeria; \$2,225;

### UNITED STATES

UNIVERSITY OF CALIFORNIA, Davis: to enable scholars in the social sciences and humanities to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$200,000 through June, 1974;

UNIVERSITY OF IOWA, Iowa City: to enable scholars in the social sciences and humanities to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$200,000 through June, 1974;

UNIVERSITY OF NOTRE DAME, Indiana: to enable scholars in the social sciences and humanities to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$290,000 through June, 1975;

UNIVERSITY OF WASHINGTON, Seattle: to enable scholars in the social sciences and humanities to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$300,000 through June, 1974;

WILLIAMS COLLEGE, Williamstown, Massachusetts: to enable scholars in the social sciences to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$300,000 through June, 1975;

YALE UNIVERSITY, New Haven, Connecticut: to enable scholars in the social sciences and humanities to accept assignments for teaching and research in selected institutions in Africa, Asia, and Latin America; \$290,000 through June, 1975.



## **ALLIED INTERESTS**

## GRANTS 1969

MNS: Medical and Natural Sciences; AS: Agricultural Sciences;  
HSS: Humanities and Social Sciences; IP: Inter-Program

### INTERNATIONAL

#### ROCKEFELLER FOUNDATION International Program in Virus Research:

Yale Arbovirus Research Unit	\$178,300
Belém, Brazil	129,300
Staff on assignment	\$ 61,700
Project support	67,600
Berkeley, California	51,600
Staff on assignment	23,800
Project support	27,800
Total	<u>\$359,200 (MNS)</u>

#### ROCKEFELLER FOUNDATION International Centers:

International Development Center—Chile	\$ 59,700
Staff on assignment	36,200
Project support	23,500
Villa Serbelloni Conference and Study Center	233,400
Staff on assignment	22,500
Project support	210,900
Total	<u>\$293,100 (IP)</u>

#### INTERNATIONAL PROGRAM publications

\$ 55,300

#### ROCKEFELLER FOUNDATION unallocated contingency reserve for International Programs

\$350,000

SUPPORT OF OVERSEAS PRIMARY AND SECONDARY SCHOOLS attended by children of Foundation field staff; \$25,000;

### BARBADOS

MINISTRY OF EXTERNAL AFFAIRS, Bridgetown: purchase of a collection of basic works in international relations; \$4,200; (HSS)

### BRAZIL

AFLATOXIN STUDIES at the Belém Virus Laboratory, under the direction of Dr. Jorge Boshell; \$12,000; (MNS)

BRAZILIAN SOCIETY OF GENETICS, São Paulo: development of research and training in genetics in Brazil; \$3,767; (MNS)

FACULTY OF VETERINARY MEDICINE AND AGRONOMY OF JABOTICABAL, São Paulo: research equipment and teaching materials for the Cytology and Genetics Section; \$2,000; (MNS)

FACULTY OF PHILOSOPHY, SCIENCE, AND LETTERS OF RIO CLARO: research equipment and supplies for the Department of General Biology; \$1,600; (MNS)

FEDERAL RURAL UNIVERSITY OF RIO GRANDE DO SUL, Pelotas: laboratory equipment for the Eliseu Maciel Faculty of Agronomy; \$2,000; (MNS)

FEDERAL UNIVERSITY OF PARA, Belém: equipment for the Laboratory of Genetics; \$2,350; (MNS)

INSTITUTO BUTANTAN, São Paulo: equipment and supplies for research in genetics; \$2,050; (MNS)

ROCKEFELLER FOUNDATION International Program in Virus Research: Belém Virus Laboratory; *see International, above*;

RURAL UNIVERSITY OF THE STATE OF MINAS GERAIS, Viçosa: research equipment and supplies for the Genetics Section, Institute of Biology and Chemistry, Graduate School of Agriculture; \$725; (MNS)

FEDERAL UNIVERSITY OF RIO DE JANEIRO: purchase of laboratory equipment for the Institute of Biophysics; \$2,500; (MNS)

UNIVERSITY OF PARANA, Curitiba: equipment for the Laboratory of Human Genetics; \$900; (MNS)

UNIVERSITY OF SANTA MARIA, Rio Grande do Sul: laboratory equipment for the Department of Plant Breeding; \$200; (MNS)

UNIVERSITY OF SAO PAULO: laboratory equipment for the Laboratory of Human Genetics; \$2,000; (MNS)

## CHILE

ROCKEFELLER FOUNDATION INTERNATIONAL PROGRAM CENTER: International Development Center, Santiago; *see International, above*;

UNIVERSITY OF CHICAGO, Illinois: to enable Professor H. Gregg Lewis to teach and assist graduate students with their thesis work at the School of Economics of the Catholic University of Chile during the summer; \$1,922; (HSS)

## COLOMBIA

UNIVERSITY OF VALLE, Cali:

Toward costs of constructing and equipping a building for the Department of Preventive Medicine; \$25,000; (MNS)

Toward the cost of an experimental program in health care; \$15,000; (MNS)

## GHANA

UNIVERSITY OF GHANA, Legon, Accra: purchase of laboratory equipment for research on hemoglobin S disease being conducted by Dr. Stephen K. Addae; \$12,500; (MNS)

## ITALY

VILLA SERBELLONI CONFERENCE AND STUDY CENTER, Bellagio; *see International, above*;

## MALTA

MINISTRY OF COMMONWEALTH AND FOREIGN AFFAIRS, Valletta: purchase of a collection of basic works in international relations; \$4,200; (HSS)

## MAURITIUS

MINISTRY OF FOREIGN AFFAIRS, Port Louis: purchase of a collection of basic works in international relations; \$4,200; (HSS)

## NIGERIA

UNIVERSITY OF IBADAN: to enable its International School to improve its science laboratory facilities; \$15,000; (IP)

## SWAZILAND

DEPARTMENT OF FOREIGN AFFAIRS, Mbabane: purchase of a collection of basic works in international relations; \$4,200; (HSS)

## UNITED KINGDOM

DITCHLEY FOUNDATION, Enstone, England: toward the costs of conferences on the university crisis and problems of youth and society, general international problems, and problems of particular geographic areas; \$15,000 for a three-year period; (IP)

UNIVERSITY OF SUSSEX, Brighton, England: for research and conferences by the British Committee on the Theory of International Politics; £5,000 (about \$12,000) for a five-year period; (HSS)

## UNITED STATES

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D.C.: toward costs of televising parts of its 1969 annual meeting; \$5,000; (IP)

AMERICAN UNIVERSITIES FIELD STAFF, Hanover, New Hampshire: toward expenses of an international conference on the humanities, arts, and letters, to be held at the Villa Serbelloni Conference and Study Center, Bellagio, Italy, in April, 1970; \$12,000; (HSS)

COLUMBIA UNIVERSITY, New York: toward costs of preparation by Dr. Curt Wormann, director of the Jewish National and University Library of Israel, of a history of libraries and special lectures on comparative librarianship; \$13,000; (AS)

DARTMOUTH COLLEGE, Hanover, New Hampshire: to enable Professor Richard W. Sterling to complete his study on macropolitics; \$6,380; (HSS)

EXPENSES OF A CONFERENCE on community medicine held at The Rockefeller Foundation; \$2,900; (MNS)

EXPENSES OF A CONFERENCE on the quality of the human environment held at The Rockefeller Foundation; \$3,500; (MNS)

EXPENSES OF TWO MEETINGS, held at The Rockefeller Foundation, on the problem of insect and mite control as it relates to the quality of the human environment; \$5,600; (IP)

HARVARD UNIVERSITY, Cambridge, Massachusetts:

Toward a study by Professor Louis Hartz, Department of Government, on the impact of European culture in Africa and Asia; \$12,000; (HSS)

Professor Stanley Hoffmann; to complete research in France on French politics between 1934 and 1944; \$1,500; (HSS)

JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland:

Toward support of programs in health care research, to be conducted by the Office of Health Care Programs of the School of Medicine and the School of Hygiene and Public Health; \$300,000 for a three-year period; (MNS)

For use by its School of Advanced International Studies for a program of seminars for young foreign service officers from developing countries stationed in Washington, D.C.; \$62,500 through June, 1972; (IUS)

NATIONAL ACADEMY OF SCIENCES, Washington, D.C.: for use by the Environmental Studies Board for partial support of the Summer Study on environmental problems, to be held at Stanford University; \$25,000; (IP)

NEW SCHOOL FOR SOCIAL RESEARCH, New York: to enable Professor Hannah Arendt to complete a major work on the Western humanistic tradition; \$10,000; (HSS)

OVERSEAS DEVELOPMENT COUNCIL, Washington, D.C.: toward support of a continuing program of reappraisal, research, and education on the problems and needs of the less developed countries; \$125,000; (IP)

PREPARATION OF THE MEMOIRS OF MISS FLORA M. RHIND, a retired officer of the Foundation, by the Oral History Research Office, Columbia University, New York; \$5,000; (IP)

PRINCETON UNIVERSITY, New Jersey:

To enable Rajeshwar Dayal to spend a period of residence at Princeton doing background research and writing a book on United Nations peace-keeping activities; \$15,000; (HSS)

Toward the costs of research by Dr. James H. Billington, Woodrow Wilson School of Public and International Affairs, in 17th-century Russian history; \$14,300; (HSS)

To enable a three-man team, headed by Professor Frederick H. Harbison, to investigate the possibility of establishing cooperative programs with the University of Botswana, Lesotho, and Swaziland; \$5,000; (HSS)

THE ROCKEFELLER ARCHIVES AND RESEARCH CENTER, New York: toward costs of planning, construction, and organization; \$50,000; (IP)

ROCKEFELLER FOUNDATION INTERNATIONAL PROGRAM in Virus Research: virus studies in Berkeley, California; *see International, above*;

SCIENCE SERVICE, Washington, D.C.: toward support of its Science Youth Activities Program; \$25,000; (IP)

STATE UNIVERSITY COLLEGE AT BROCPORT, New York: to enable Professor Henry L. Bretton to undertake research on government and economics in tropical Africa; \$10,000; (HSS)

UNIVERSITY OF CALIFORNIA, Davis: to enable Dr. Charles M. Hardin to complete his research on presidential confrontation; £2,000; (HSS)

UNIVERSITY OF MICHIGAN, Ann Arbor:

To enable Dr. John F. Weeks, Center for Research on Economic Development, to continue research on urban-rural wage differentials in Nigeria while teaching at Ahmadu Bello University; \$8,000 for a two-year period; (HSS)

Preparation of a book on modern Southeast Asian history by the Center for South and Southeast Asian Studies; \$2,700; (HSS)

UNIVERSITY OF TEXAS AT AUSTIN: to enable Professor Stanley R. Ross to complete the updating of his documentary history of 20th-century Mexico; \$4,500; (HSS)

UNIVERSITY OF WISCONSIN, Madison: to enable Dr. Delbert Smith, Space Science and Engineering Center, to do research in Geneva, Switzerland, on the international legal and political implications of international weather modification and control; \$2,000; (HSS)

WAYNE STATE UNIVERSITY, Detroit, Michigan: to enable Professor Maurice Waters to continue his study entitled "Foreign Policies of Newly Independent Caribbean States"; \$5,550; (HSS)

**YALE UNIVERSITY, New Haven, Connecticut:**

To enable Dr. Peter Gay to write a comprehensive history of the Weimar Republic; \$12,000 beginning in July, 1970; (HSS)

Dr. Richard S. Miller; to visit the Belém Virus Laboratory, Brazil, to advise on bird and mammal ecological investigations; \$1,070; (MNS)

Yale Arbovirus Research Unit; see *International, above*;

Dr. Pierre Ardoin; to visit virus laboratories in the West Indies; \$850. (MNS)

## **STUDY AWARDS**

The Rockefeller Foundation's study awards are integrated with its main areas of interest. Through its fellowships and scholarships, the Foundation seeks to train personnel and to advance knowledge in the medical and natural sciences, the agricultural sciences, the humanities and social sciences, and the arts, with the aim of bringing highly trained human resources to bear on the basic problems which limit man's well-being. Awards are made on an international basis to outstanding men and women who have shown promise of making important contributions to their fields of study in their native countries.

During 1969 a total of 556 persons held Foundation fellowships and scholarships; 401 awards that began in previous years continued active in 1969, and 155 new awards became active during the year. Their distribution by program is as follows:

	STUDY AWARDS FROM PREVIOUS YEARS CONTINUED INTO 1969	NEW AWARDS IN 1969	NUMBER OF AWARDS ACTIVE IN 1969
Agricultural Sciences	168	85	253
Humanities and Social Sciences	140	46	186
Medical and Natural Sciences	93	24	117
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	401	155	556

In addition to the fellowships and scholarships awarded and administered by The Rockefeller Foundation, several organizations have awarded similar fellowships with funds contributed in 1969 and previous years by the Foundation. The following organizations administered a total of 49 fellowships that were provided for by Foundation funds during 1969:

The Population Council		
Demographic		15
Bio-Medical		3
Technical Assistance		4
Social Science Research Council	27	
	<hr/>	
		49

Rockefeller Foundation fellows and scholars in 1969 came from 33 countries:

	PREVIOUS AWARDS	NEW AWARDS		PREVIOUS AWARDS	NEW AWARDS
Argentina	1	1	Nigeria	25	21
Bolivia	—	1	Pakistan	1	—
Brazil	18	7	Paraguay	—	1
Ceylon	2	1	Peru	21	8
Chile	34	7	Philippines	64	8
Colombia	51	20	Sudan	8	—
The Republic of the Congo	2	—	Taiwan	4	—
Costa Rica	2	1	Tanzania	5	12
Ecuador	11	4	Thailand	70	22
Ethiopia	2	3	Trinidad	1	—
Ghana	—	2	Turkey	—	5
Guatemala	3	—	Uganda	16	9
Honduras	4	—	United Arab Republic	1	1
India	21	6	United States	1	—
Kenya	12	4	Uruguay	1	1
Korea	—	1	World Health Organization	1	—
Mexico	19	8		—	—
Nicaragua	--	1		401	155

For its fellowship and scholarship activities The Rockefeller Foundation made available a total of \$4,300,000 for allocation during 1969; of this sum \$150,000 was earmarked for a special program of research grants in reproductive biology initiated this year. A total of \$4,050,000 was made available for allocation during 1970. From these funds, allocations totaling \$597,000 were made in 1969 in the form of unrestricted grants to 92 institutions in the United States and foreign countries where Foundation fellows and scholars are engaged in study and research. Recognizing that the disparity between universities' expenses and their income from tuition and fees is most apparent at the level of graduate study, the Foundation currently makes available funds to be disbursed in units of \$1,500 for each full year a fellow spends at a university and \$750 for each half year. The grants are in addition to tuition and other fees paid by the Foundation through its fellowship and scholarship awards. The Foundation has made a practice of contributing to universities' costs in this way since 1958.

Fellows and scholars whose awards became active in 1969 are listed by name and country on the following pages.

## FELLOWS AND SCHOLARS

*F: Fellow; S: Scholar; AS: Agricultural Sciences;  
HSS: Humanities and Social Sciences; MNS: Medical and Natural Sciences*

### ARGENTINA

JULIO ALBERTO GARCIA-TOBAR M.S., University of California, Davis, 1966. Animal Science.  
Appointed from University of Buenos Aires. Place of study: U.S.A. s-as

### BOLIVIA

JOSE AMURRIO ROCHA Engineer, University of San Simón de Cochabamba, 1963. Soil Science.  
Appointed from University of San Simón de Cochabamba. Place of study: Mexico.  
s-as

### BRAZIL

CELSO BOIN Eng. Ing., University of São Paulo, Piracicaba, 1966. Forage Preservation—  
Animal Science. Appointed from Center of Animal Nutrition and Forages, Nova Odessa,  
São Paulo. Place of study: U.S.A. s-as

ALENCASTRO VALLE DE CARVALHO B.S., Federal University of Minas Gerais, 1965. Physics.  
Appointed from Federal University of Minas Gerais. Place of study: U.S.A. s-mns

TEOFILO ANDRE DA COSTA CRUZ D.V.M., Federal University of Minas Gerais, 1961. Veterinary  
Physiology. Appointed from Federal University of Minas Gerais. Place of study:  
U.S.A. s-as

ABEL LAVORENTI Eng. Agr., University of São Paulo, Piracicaba, 1964. Animal Science.  
Appointed from University of São Paulo. Place of study: U.S.A. s-as

JOSE FRANCISCO VALENTE MORAES Eng. Agr., Rural University of Rio Grande do Sul,  
1964. Soil Science. Appointed from Instituto de Pesquisas e Experimentação Agropecuárias  
do Sul. Place of study: Mexico. s-as

ANTONIO SIDNEY POMPEU Eng. Agr., University of São Paulo, Piracicaba, 1961. Plant  
Science. Appointed from Institute of Agronomy of the State of São Paulo, Campinas.  
Place of study: U.S.A. s-as

OTTONI DE SOUSA ROSA Agronomist, Rural University of Rio Grande do Sul, 1959. Plant  
Breeding. Appointed from Instituto de Pesquisas e Experimentação Agropecuárias do  
Sul. Place of study: Mexico. s-as

### CEYLON

SARATH LAL AMARASIRI M.S., Colorado State University, 1969. Soil Science. Appointed  
from Central Agricultural Research Institute, Peradeniya. Place of study: U.S.A. s-as

### CHILE

PRIMO L. ACCATINO Ing. Agr., Catholic University of Chile, 1961. Plant Pathology. Appointed  
from Agricultural Research Institute. Place of study: U.S.A. s-as

FRANCISCO JOSE BEZANILLA MENA Ph.D., Catholic University of Chile, 1968. Biophysics.  
Appointed from Catholic University of Chile. Place of study: U.S.A. f-mns

MILAN CAGLEVIC DRAGICEVIC M.S., University of Wisconsin, 1959. Plant Pathology. Appointed from Agricultural Research Institute. Place of study: U.S.A. s-as

ALBERTO DAVIDOVICH Lic. Med. Vet., University of Chile, 1964. Animal Science. Appointed from Agricultural Research Institute. Place of study: U.S.A. s-as

JUAN JOSE ROMERO M.S., University of California, Davis, 1965. Animal Science. Appointed from Agricultural Research Institute. Place of study: U.S.A. s-as

SIEGFRIED SIMPFENDORFER M.S., Kansas State University, 1963. Animal Science. Appointed from University of Concepción, Chillán. Place of study: U.S.A. s-as

HERNAN TEJEDA SANHUEZA M.S., Iowa State University, 1966. Agronomy. Appointed from Agricultural Research Institute. Place of study: U.S.A. s-as

## COLOMBIA

HUMBERTO ALVAREZ LOPEZ Ing. For., National University of Colombia, Medellín, 1966. Ecology and Evolutionary Biology. Appointed from University of Valle. Place of study: U.S.A. s-mns

JOSE ALONSO ALVAREZ RODRIGUEZ Ing. Agr., University of Medellín, 1967. Entomology. Appointed from Colombian Institute of Agriculture. Place of study: Mexico. s-as

FERNANDO ARBOLEDA-RIVERA M.S., University of Nebraska, 1966. Agronomy and Plant Breeding. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. s-as

GUSTAVO ARGAEZ GOMEZ Lic., University of the Andes, 1966. Economics. Appointed from University of Valle. Place of study: U.S.A. s-hss

HORACIO J. AYALA M.S., Texas A & M University, 1968. Animal Science. Appointed from Colombian Institute of Agriculture, Palmira. Place of study: U.S.A. s-as

ELKIN BUSTAMANTE ROJAS M.S., Iowa State University, 1967. Plant Pathology. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. s-as

EDCAR CHARRY RODRIGUEZ Ing. Electromecanico. University of Valle, 1962. Electrical Engineering. Appointed from University of Valle. Place of study: Mexico. s-mns

LUIS ALFONSO ELVIRA MEJIA Ing. Electromecanico. University of Valle, 1962. Electrical Engineering. Appointed from University of Valle. Place of study: Mexico. s-mns

CARLOS ALBERTO FRANCO M.S., Carnegie Institute of Technology, 1966. Electrical Engineering. Appointed from University of Valle. Place of study: U.S.A. s-mns

LUIS FERNANDO GUTIERREZ Chem. Eng., University of Valle, 1968. Operations Research. Appointed from University of Valle. Place of study: U.S.A. s-mns

JOSE IVAN JIMENEZ PEREZ D.V.M., University of Caldas, 1965. Animal Science. Appointed from Colombian Institute of Agriculture, Palmira. Place of study: U.S.A. s-as

LUIS ENRIQUE LEMA M. Chem. Eng., Massachusetts Institute of Technology, 1968. Chemical Engineering. Appointed from University of Valle. Place of study: U.S.A. f-mns

LUIS ALFONSO LOPEZ M.S., University of Notre Dame, 1966. Chemical Engineering. Appointed from University of Valle. Place of study: U.S.A. s-mns

GUSTAVO MANRIQUE LONDONO M.S., University of Wisconsin, 1967. Veterinary Science—Microbiology. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. s-as

OTTO MARIO MARIN RAMIREZ M.S., University of California, Davis, 1967. Poultry Science. Appointed from Colombian Institute of Agriculture. Place of study: U.S.A. s-as

**ELIZABETH MESA-PEREZ** Lic., Pedagogical and Technical University of Colombia, Tunja, 1960. Linguistics. Appointed from University of Valle. Place of study: U.S.A. s-HSS

**ANTONIO NAVARRETE** M.A., University of Texas, 1966. Linguistics. Appointed from University of Valle. Place of study: U.S.A. s-HSS

**RUBEN DARIO NIETO CEBALLOS** Lic., Pedagogical and Technological University of Colombia, Tunja, 1962. Mathematics. Appointed from University of Valle. Place of study: U.S.A. s-MNS

**CARLOS ENRIQUE RESTREPO** Lic., University of Valle, 1968. Literature. Appointed from University of Valle. Place of study: U.S.A. s-HSS

**CARLOS ALBERTO VALENCIA ROA** Ing. Electromecanico, University of Valle, 1968. Industrial Engineering. Appointed from University of Valle. Place of study: U.S.A. s-MNS

## **COSTA RICA**

**ORLANDO ARBOLEDA-SEPULVEDA** Lic., University of Antioquia, Medellín, Colombia, 1962. Library Science. Appointed from Inter-American Institute of Agricultural Sciences, Turrialba. Place of study: U.S.A. s-AS

## **ECUADOR**

**GUSTAVO MELITON CHUNG SANG** Ing. Agr., University of Guayaquil, 1965. Agronomy. Appointed from National Agricultural Research Institute. Place of study: Colombia. s-AS

**WASHINGTON BEJARANO ENRIQUEZ** Ing. Agr., Central University of Ecuador, 1962. Plant Breeding and Soils. Appointed from National Agricultural Research Institute. Place of study: Mexico. s-AS

**MARIO LENIN LALAMA HIDALGO** Ing. Agr., Central University of Ecuador, 1964. Plant Science. Appointed from National Agricultural Research Institute. Place of study: Mexico. s-AS

**JOSE EDUARDO HOMERO VILLACIS SANTOS** Ing. Agr., University of Guayaquil, 1963. Entomology. Appointed from National Agricultural Research Institute, Portoviejo. Place of study: Mexico. s-AS

## **ETHIOPIA**

**MENGISTU HULLUKA** M.S., University of Minnesota, 1966. Plant Pathology. Appointed from Haile Sellassie I University. Place of study: U.S.A. s-AS

**HAILE-MICHAEL KIDANE-MARIAM** M.S., University of California, Davis, 1965. Horticulture. Appointed from Haile Sellassie I University. Place of study: U.S.A. s-AS

**TESFAYE TESEMMA** M.Sc., New Mexico State University, 1963. Agronomy. Appointed from Haile Sellassie I University. Place of study: U.S.A. s-AS

## **GHANA**

**JOHN A. DADSON** M.A., Harvard University, 1961. Agricultural Economics. Appointed from University of Ghana. Place of study: U.S.A. s-HSS

**HENRY BENJAMIN ODENG** M.S., Iowa State University, 1956. Soil Science. Appointed from Ghana Academy of Sciences. Place of study: U.S.A. s-AS

## INDIA

- R. SESHADRI AVYANGAR M.Sc., University of the Philippines, Los Baños, 1967. Agronomy. Appointed from All-India Coordinated Rice Improvement Program, Hyderabad. Place of study: U.S.A. s-as
- SYED HAFEEZULLAH HUSSAINI M.Sc.Agr., Indian Agricultural Research Institute, 1962. Plant Breeding and Genetics. Appointed from Millet Research Station, Vizianagram. Place of study: U.S.A. s-as
- MAHESH PRASAD JANORIA M.Sc.Agr., Jabalpur University, 1964. Plant Science. Appointed from Agricultural University, Jabalpur. Place of study: U.S.A. s-as
- SHASHI KANT NICAM M.Sc., Vikram University, 1961. Agronomy. Appointed from Agricultural University, Jabalpur. Place of study: U.S.A. s-as
- YOGENDRA SINGH RATHORE M.Sc., Vikram University, 1963. Entomology. Appointed from Uttar Pradesh Agricultural University. Place of study: U.S.A. s-as
- RAMESHWAR SINGH M.S., Uttar Pradesh Agricultural University, 1966. Agronomy. Appointed from Uttar Pradesh Agricultural University. Place of study: U.S.A. s-as

## KENYA

- SHEM ARUNGU OLENDE Ph.D., University of London, 1968. Economics. Appointed from University College, Nairobi. Place of study: U.S.A. f-hss
- SAMSON GOMBE M.R.C.V.S., University of London, 1967. Animal Science. Appointed from University College, Nairobi. Place of study: U.S.A. s-as
- CYRUS ANTHONY KAMUNDIA D.d'Univ. Université d'Aix-Marseille, France, 1968. Political Science. Appointed from University College, Nairobi. Place of study: U.S.A. s-hss
- ANTHONY PHILIP KNIGHT B.V.Sc., University College, Nairobi, 1968. Veterinary Medicine. Appointed from University College, Nairobi. Place of study: U.S.A. s-as

## KOREA

- DUK-BOK KIM B.A., Korea University, 1968. Agronomy. Appointed from Korea University. Place of study: U.S.A. s-as

## MEXICO

- MANUEL ANAYA-GARDUNO M.S., National School of Agriculture, 1967. Soil Science. Appointed from National School of Agriculture. Place of study: U.S.A. s-as
- HORACIO HERNANDEZ-HERNANDEZ M.S., North Dakota State University, 1966. Cereal Technology. Appointed from International Maize and Wheat Improvement Center. Place of study: U.S.A. s-as
- URIEL MALDONADO AMAYA M.S., Iowa State University, 1965. Plant Breeding. Appointed from National Institute of Agricultural Research. Place of study: U.S.A. s-as
- ANTONIO MORILLA-GONZALEZ D.V.M., National University of Mexico, 1966. Veterinary Science. Appointed from National Institute of Agricultural Research. Place of study: U.S.A. s-as

MARCO ANTONIO QUINONES LEYVA M.Sc., University of Manitoba, 1968. Plant Science. Appointed from International Maize and Wheat Improvement Center. Place of study: Canada. s-as

FEDERICO A. SANCHEZ-CARRILLO D.V.M., National University of Mexico, 1969. Animal Science. Appointed from Instituto Nacional de Investigaciones Pecuarias. Place of study: U.S.A. s-as

JUAN DONALD VEGA GUTIERREZ M.S., Technological Institute of Monterrey, 1968. Irrigation. Appointed from Technological Institute of Monterrey. Place of study: U.S.A. s-as

JOEL RODRIGUEZ VELEZ M.S., University of Hawaii, 1964. Entomology. Appointed from National Institute of Agricultural Research, Ciudad Obregon. Place of study: U.S.A. s-as

## NICARAGUA

JULIO SEQUEIRA FERNANDEZ M.S., University of Florida, 1967. Entomology. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as

## NIGERIA

OLADIPUPO O. ADAMOLEKUN D.P.A., University of Ife, 1969. Public Administration. Appointed from University of Ife. Place of study: England. s-hss

ADENIYI A. ADEDEJI B.Sc., University of Ibadan, 1968. Political Science. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

JOEL ADEBAYO ADEKSON B.Sc., University of Ibadan, 1967. Political Science. Appointed from University of Ife. Place of study: U.S.A. s-hss

WILLIAMS AJEIGBE AJIBOLA B.Sc., University of Ibadan, 1968. Political Science. Appointed from University of Ibadan. Place of study: England. s-hss

ISAAC OJO BOLARINWA BALOGUN B.A., University of Ibadan, 1966. Education. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

VICTOR BOWERSON-CHASE BRAIDE D.V.M., Cornell University, 1965. Veterinary Science. Appointed from University of Ibadan. Place of study: U.S.A. s-as

ANTHONY ADETUNJI COKER M.Sc., University of Ibadan, 1968. Political Science. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

EBENEZER IKECHUKWU ENWEMNWA B.Sc., University of Ibadan, 1968. Sociology. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

MATHEW OLUFEMI EPEROKUN B.A., University of Ibadan, 1960. Education. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

GEORGE JOSEPH FOLAYAN ESAN M.B.B.S., University of London, 1962. Hematology. Appointed from University of Ibadan. Place of study: U.S.A. f-mns

SEIBU TALE FALANA Dip.Ed., University of Lagos, 1968. Medical Parasitology. Appointed from Nigerian Institute for Trypanosomiasis Research, Kaduna. Place of study: England. s-as

ABIODUN IJOSE B.A., University of Ibadan, 1955. Public Administration. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

JOHNSON OLUYEMI KAYODE B.Sc., University of Ibadan, 1968. Sociology. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

OLASUPO OYETORO LADIPO M.S., Cornell University, 1966. Agricultural Economics. Appointed from University of Ife. Place of study: U.S.A. s-as

ERIC AKIN LEWIS M.R.C.P., University of Edinburgh, 1965. Gastroenterology. Appointed from University of Ibadan. Place of study: U.S.A. s-mns

JOHNSON ADEBAYO ODEBIYI B.S., University of Ibadan, 1969. Entomology. Appointed from University of Ibadan. Place of study: U.S.A. s-as

OLABI SI OCUNFOWORA M.S., University of Reading, England, 1966. Agricultural Economics. Appointed from University of Ibadan. Place of study: U.S.A. s-as

GABRIEL BABATUNDE OGUNMOLA Ph.D., University of Ibadan, 1968. Chemistry. Appointed from University of Ibadan. Place of study: U.S.A. f-mns

JOHNSON ADE OYELABI M.A., Columbia University, 1967. Economics. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

AKINADE OLUMUYIWA SANDA B.Sc., University of Ibadan, 1968. Sociology. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

APOLABI SOYODE B.Sc., University of Ibadan, 1968. Economics. Appointed from University of Ibadan. Place of study: U.S.A. s-hss

## PARAGUAY

EMILIANO ALARCON LOPEZ Ing. Agr., National University of Asunción, 1964. Plant Breeding. Appointed from National University of Asunción. Place of study: Mexico. s-as

## PERU

OSCAR RAFAEL DE CORDOVA DIANDERAS M.S., University of Nebraska, 1966. Genetics. Appointed from Agrarian University. Place of study: U.S.A. s-as

CESAR JUVENAL ESQUERRE D.V.M., University of San Marcos, 1965. Animal Science. Appointed from University of San Marcos. Place of study: U.S.A. s-as

WALTER ANTONIO FECAN Ing. Agr., Agrarian University, 1960. Plant Science. Appointed from Agrarian University. Place of study: Mexico. s-as

MARCIAL JARA-ALMONTE ZAVALLOS M.S., North Carolina State University, Raleigh, 1965. Animal Science. Appointed from Agrarian University. Place of study: U.S.A. s-as

ENRIQUE RAUL LA HOZ BRITO Ing. Agr., Agrarian University, 1966. Animal Science. Appointed from Agrarian University. Place of study: Colombia. s-as

JOSE EDUARDO MENDOZA PANZO Ing. Agr., Agrarian University, 1960. Plant Pathology. Appointed from Agricultural Research and Extension Service. Place of study: Mexico. s-as

RODOLFO VACCARO CHUQUIZUTA M.S., North Carolina State University, Raleigh, 1965. Animal Science. Appointed from Agrarian University. Place of study: U.S.A. s-as

CARLOS VISE APARICIO Ing. Agr., Agrarian University, 1960. Plant Pathology. Appointed from Agricultural Research and Extension Service. Place of study: Mexico. s-as

## PHILIPPINES

TEODORO ABOGADO AMILAY M.S., University of the Philippines, Los Baños, 1968. Animal Husbandry. Appointed from University of the Philippines. Place of study: U.S.A. s-as

- RUPERTO PASCUAL ALONZO** M.A., University of the Philippines, Quezon City, 1969. Economics. Appointed from University of the Philippines. Place of study: U.S.A. s-HSS
- DAVID BUENVIAJE BARADAS** M.A., University of Chicago, 1965. Anthropology. Appointed from University of the Philippines, Quezon City. Place of study: U.S.A. s-HSS
- ILDEFONSO TOLENTINO CRUZ** M.S., North Carolina State University, Raleigh, 1965. Biostatistics. Appointed from University of the Philippines, Manila. Place of study: U.S.A. s-MNS
- RANDOLF S. DAVID** A.B., University of the Philippines, Quezon City, 1965. Sociology. Appointed from University of the Philippines. Place of study: England. s-HSS
- MELY CONSOLACION MATA DE LEON** B.S.N., University of the Philippines, Quezon City, 1961. Pediatric Nursing. Appointed from University of the Philippines. Place of study: U.S.A. s-MNS
- EDWIN D. MAGALLONA** M.S., University of the Philippines, Los Baños, 1968. Entomology. Appointed from University of the Philippines. Place of study: U.S.A. s-AS
- JOEL ELISEO ROCAMORA** A.B., University of the Philippines, Quezon City, 1963. Political Science. Appointed from University of the Philippines. Place of study: U.S.A. s-HSS
- TANZANIA**
- ISRAEL K. KATOKE** M.A., Boston University, 1966. History. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- HARMAS LAIT KIWIA** M.Sc., Leningrad A. A. Zhdanov State University, U.S.S.R., 1968. Physical Chemistry. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-MNS
- PAUL S. MARO** B.A., University College, Dar es Salaam, 1969. Geography. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- ADOLFO CARIDADE MASCARENHAS** M.A., University of California, Los Angeles, 1966. Geography. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- SHEM EDWIN MICOT-ADHOLLA** B.A., University College, Dar es Salaam, 1969. Sociology. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- ALEXANDER SIMON MOSHA** B.Sc., Makerere University College, 1966. Plant Breeding. Appointed from Ministry of Agriculture, Dar es Salaam. Place of study: India. s-AS
- CELASE ROGERS MUTAHABA** B.A., University College, Dar es Salaam, 1969. Political Science. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- BISMARCK U. MWANSASU** M.A., University of Sussex, 1967. Political Science. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- DINGURI N. MWANIKI** M.Sc., San Diego State College, 1965. Education. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- HAROLD R. NSEKELA** LL.B., University College, Dar es Salaam, 1968. Law. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- ISSA MCHOLO OMARI** B.A., University College, Dar es Salaam, 1968. Psychology. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS
- JUSTINIAN F. RWEYEMAMU** M.A., Harvard University, 1967. Economics. Appointed from University College, Dar es Salaam. Place of study: U.S.A. s-HSS

## THAILAND

- APHIRAT ARUNIN M.S., Oregon State University, 1962. Entomology. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as
- CHIRA HONGLADAROM M.A., University of Wisconsin, 1969. Economics. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- DAMKHEONG CHANDRAPANYA M.S., Oklahoma State University, 1965. Agronomy. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as
- KASEM CHUNKAO M.S., Colorado State University, 1965. Forestry. Appointed from Kasetsart University. Place of study: U.S.A. s-as
- KUNCHIT KURMAROHITA M.S., University of Hawaii, 1964. Soil Science. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as
- LADAWAN SRITHAVAJ NA AYUDHAYA A.B., Chulalongkorn University, 1957. Library Science. Appointed from Mahidol University. Place of study: U.S.A. s-mns
- LILY KOSIYANON B.Sc., University of London, 1967. Economics. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- MONTRI UMAVIJANI M.A., Northwestern University, 1966. Literature. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- PHaisal SUPHARNGKASEN M.S., Texas A & M University, 1968. Entomology. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as
- SAMAIUSKH SOPHASAN B.S., University of Medical Sciences, 1967. Physiology. Appointed from University of Medical Sciences. Place of study: U.S.A. s-mns
- SAVITRI GARNJANA-GOONCHORN A.B., Chulalongkorn University, 1967. Economics. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- SIRIPATH WATTHANA-KASETR M.D., Chulalongkorn University, 1959. Epidemiology. Appointed from Mahidol University. Place of study: U.S.A. s-mns
- SOMJATE JANTAWAT B.S., Kasetsart University, 1960. Soil Science. Appointed from Kasetsart University. Place of study: U.S.A. s-as
- SOMPORN PATAKAMJORN M.S., University of the Philippines, Los Baños, 1965. Entomology. Appointed from Kasetsart University. Place of study: U.S.A. s-as
- SOMSAK TAMBUNLERTCHAI A.B., Thammasat University, 1968. Economics. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- SUPOT FAUNGFUPONG B.S., Kasetsart University, 1966. Agronomy. Appointed from Kasetsart University. Place of study: U.S.A. s-as
- TAWIN KRUTKUN M.S., University of the Philippines, Los Baños, 1966. Soil Science. Appointed from Kasetsart University. Place of study: U.S.A. s-as
- THAK CHALOEMTIARANA M.A., Occidental College, 1968. Political Science. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- VINIT PHINIT-AKSON B.A., Australian National University, 1966. Linguistics. Appointed from Thammasat University. Place of study: U.S.A. s-hss
- VETHAVAS KHONGKHAKUL M.S., Kansas State Teachers College, 1962. Social Science. Appointed from Chulalongkorn University. Place of study: U.S.A. s-hss
- EDWARD SUJATI UPATHAM M.S., University of Michigan, 1968. Parasitology. Appointed from University of Michigan. Place of study: U.S.A. s-mns

WIBOON BOONYATHAROKUL B.S., Kasetsart University, 1967. Irrigation Engineering. Appointed from Kasetsart University. Place of study: U.S.A. s-as

## TURKEY

EROL YASAR ALKUS B.S., Aegean University, 1964. Agronomy. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as

BASRI DEVECIOGLU Ph.D., Ankara University, 1959. Agronomy. Appointed from Agricultural Research and Introduction Center, Izmir. Place of study: Mexico. f-as

YUSUF ERGUN B.S., University of Ankara, 1962. Agronomy. Appointed from Agricultural Research Institute. Place of study: U.S.A. s-as

NEDRET SUKRU OZSABUNCU B.S., University of Ankara, 1965. Agronomy. Appointed from Crop and Agricultural Research Center, Izmir. Place of study: U.S.A. s-as

ERGIN UNVER B.S., University of Ankara, 1963. Cereal Technology. Appointed from Ministry of Agriculture. Place of study: U.S.A. s-as

## UGANDA

BABWEBONA KAROMBA ELDAD JOHN BANDA B.Sc., Makerere University College, 1969. Physics and Astronomy. Appointed from Makerere University College. Place of study: U.S.A. s-mns

CHUKUEMENA P. EZEIFI B.S., University of Ibadan, 1964. Economics. Appointed from Makerere University College. Place of study: U.S.A. s-hss

BWOGI RICHARD KANYEREZI M.R.C.P., Royal College of Physicians, London, 1967. Rheumatology and Immunology. Appointed from Makerere University College. Place of study: U.S.A. f-mns

DAVID BENJAMIN KYEGOMBE M.B.Ch.B., Makerere University College, 1968. Pharmacology. Appointed from Makerere University College. Place of study: England. s-mns

SAMWIRI ZIRYABAREDA MUKURU B.Sc., Makerere University College, 1968. Agronomy. Appointed from East African Agriculture and Forestry Research Organization, Soroti. Place of study: U.S.A. s-as

JAMES MULIRA B.A., Makerere University College, 1969. History. Appointed from Makerere University College. Place of study: U.S.A. s-hss

THERESA MUSOKE Post Graduate Certificate. Royal College of Art, London, 1967. Fine Arts. Appointed from Makerere University College. Place of study: U.S.A. s-hss

PATRICK RUTIMBANZIGU RUBAIHAYO M.S., Makerere University College, 1969. Plant Science and Agronomy. Appointed from Makerere University College. Place of study: U.S.A. s-as

PETER K. TIBENDERANA B.A., Makerere University College, 1969. History. Appointed from Makerere University College. Place of study: Nigeria. s-hss

## UNITED ARAB REPUBLIC

ABDEL SALAM AHMED GOMAA M.Sc., Ain Shams University, 1964. Agronomy. Appointed from Department of Agriculture of the Government of the United Arab Republic. Place of study: U.S.A. s-as

**URUGUAY**

**WALTER COUTO BALINO** Ing. Agr., University of the Republic, 1961. Soil Fertility. Appointed from Center for Agricultural Research, La Estanzuela. Place of study: Mexico.  
S-AS



## **ORGANIZATIONAL INFORMATION**

## MEETINGS

The annual meeting of the Corporation and a regular stated meeting of the Board of Trustees were held on April 2; a stated meeting of the Board of Trustees was held on December 1 and 2. Four regular meetings and one special meeting of the Executive Committee of the Trustees were held to take actions within the general policies approved by the Board.

## TRUSTEES

Dr. Clifford M. Hardin, who had served as a Trustee since July 1, 1961, resigned as of January 17, 1969, when he became Secretary of Agriculture. He also resigned the chancellorship of the University of Nebraska, a post he had held since 1954. Earlier in his career, Dr. Hardin, an agricultural economist, taught at the University of Wisconsin and at Michigan State College, where he became Dean of Agriculture.

Mr. Bill Moyers was elected a Trustee at the April meeting, to succeed Dr. Hardin, effective immediately. He is Vice-President and Publisher of *Newsday* in Garden City, New York. Prior to joining the staff of *Newsday*, Mr. Moyers had been Associate and then Deputy Director for Public Affairs of the Peace Corps from 1961 to 1963; between 1963 and 1967, he was a special assistant to, and then Press Secretary for, President Lyndon B. Johnson.

## **FINANCIAL STATEMENTS 1969**

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## FINANCIAL SUMMARY FOR 1969

The Trustees of The Rockefeller Foundation make appropriations each year to authorize all expenditures by the Foundation. These include: (1) appropriations for direct grants, which are announced when made, (2) appropriations for future allocation by officers, which are announced when the allocation occurs, (3) appropriations for fellowships and scholarships, which are reported when the individual study grants are made, and (4) appropriations to provide for New York program expenses and for general administrative expenses in the following year. The Trustees appropriated the following amounts during 1969:

Grants	\$23,495,635
Grants for future allocation	14,271,510
Fellowships and scholarships	3,850,870
New York Program expenses	2,754,630
General Administrative Costs	<u>2,902,670</u>
	47,275,315
Less refunds and lapses	450,338
	<u>\$46,824,977</u>

In addition to 1969 appropriations of \$23,495,635, for direct grants, \$10,296,972 was allocated during the year from appropriations previously approved by the Trustees. These amounts, totaling \$33,792,607, were distributed among the Foundation's major areas of interest as follows:

Quality of the Environment	\$ 1,584,120
Equal Opportunity for All	5,006,299
Cultural Development	3,394,709
Population	7,878,994
Conquest of Hunger	6,627,924
University Development	7,350,297
Allied Interests	<u>1,950,264</u>
	<u>\$33,792,607</u>

Payments on programs and grants of \$36 million and for general administrative expenses of \$2.7 million totaled \$38.7 million, of which \$32 million was paid from income on investments and \$6.7 million was paid from principal.

During the 56 years of its existence The Rockefeller Foundation has appropriated a total of \$1 billion 39 million. Total payments during this period were \$950 million, of which \$792 million was paid from income, while \$158 million was paid from principal.

The financial statements and the opinion of Haskins & Sells, independent public accountants, are presented in the following pages.

ACCOUNTANTS' OPINION

HASKINS & SELLS  
CERTIFIED PUBLIC ACCOUNTANTS

TWO BROADWAY  
NEW YORK 10004

February 16, 1970

Board of Trustees,  
The Rockefeller Foundation,  
111 West 50th Street,  
New York 10020.

Dear Sirs:

We have examined the balance sheet of The Rockefeller Foundation, including the schedule of marketable securities, as of December 31, 1969 and the related statement of income and appropriations, statement of principal fund, summary of appropriations and payments, and summary of transactions in marketable securities for the year then ended. Our examination was 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 accompanying financial statements and schedule present fairly the financial position of the Foundation at December 31, 1969 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Yours truly,

*Haskins & Sells*

BALANCE SHEET—DECEMBER 31, 1969

*ASSETS*

MARKETABLE SECURITIES—at cost or market value at date of gift or receipt (quoted market value, \$755,586,442)	\$371,590,850
CASH ON HAND AND ON DEPOSIT	754,747
ADVANCES AND ACCOUNTS RECEIVABLE	685,833
PROPERTY—at nominal or depreciated amount	61,166
<b>TOTAL</b>	<b><u>\$373,092,596</u></b>

*FUNDS AND OBLIGATIONS*

PRINCIPAL FUND	\$284,219,222
UNPAID APPROPRIATIONS	88,560,617
ACCOUNTS PAYABLE	251,591
PROPERTY FUND	61,166
<b>TOTAL</b>	<b><u>\$373,092,596</u></b>

# STATEMENT OF INCOME AND APPROPRIATIONS

FOR THE YEAR ENDED DECEMBER 31, 1969

## INCOME:

Dividends	\$ 29,886,994
Interest	<u>2,302,260</u>
	32,189,254
Less investment expenses	212,188
Income from investments	<u>31,977,066</u>

## APPROPRIATIONS:

During the year	\$ 47,275,315
Less refunds and lapses of unexpended balances	<u>450,338</u>
EXCESS OF APPROPRIATIONS OVER INCOME FOR THE YEAR CHARGED TO PRINCIPAL FUND	<u>\$ 14,847,911</u>

## STATEMENT OF PRINCIPAL FUND

FOR THE YEAR ENDED DECEMBER 31, 1969

BALANCE, JANUARY 1, 1969	\$247,548,218
<b>ADD:</b>	
Excess of proceeds from sales of securities over ledger amount	51,493,814
Contributions received	<u>25,101</u>
	299,067,133
<b>DEDUCT:</b>	
Excess of appropriations over income for the year	<u>14,847,911</u>
BALANCE, DECEMBER 31, 1969	<u>\$284,219,222</u>

## SUMMARY OF APPROPRIATIONS AND PAYMENTS

FOR THE YEAR ENDED DECEMBER 31, 1969

UNPAID APPROPRIATIONS, JANUARY 1, 1969	\$ 80,456,379
<b>APPROPRIATIONS:</b>	
During the year	\$ 47,275,315
Less refunds and lapses of unexpended balances	<u>450,338</u>
	127,281,356
<b>PAYMENTS:</b>	
For programs and grants	36,068,493
Less refunds on closed appropriations	<u>50,296</u>
	36,018,197
For general administrative expenses	<u>2,707,542</u>
UNPAID APPROPRIATIONS, DECEMBER 31, 1969	<u>\$ 88,560,617</u>

# SUMMARY OF TRANSACTIONS IN MARKETABLE SECURITIES

FOR THE YEAR ENDED DECEMBER 31, 1969

Ledger amount of securities, January 1, 1969		\$327,960,673
Purchased	\$117,153,353	
Otherwise acquired	1,035,344	118,188,697
		<hr/>
Sold	50,732,688	
Redeemed at maturity	22,725,694	
Otherwise disposed of	1,035,344	
Amortization of bond premiums	64,794	74,558,520
		<hr/>
Ledger amount of securities, December 31, 1969		<u><u>\$371,590,850</u></u>

## TRANSACTIONS IN MARKETABLE SECURITIES

FOR THE YEAR ENDED DECEMBER 31, 1969

PURCHASED:		LEDGER AMOUNT
\$ 26,000,000	U. S. Treasury Bonds (under Repurchase Agreements)	\$ 26,000,000
	Cleveland Electric Illuminating Company Notes	
1,000,000	due July 22, 1969	990,604
1,500,000	due August 11, 1969	1,478,672
1,000,000	Duke Power Company Note due January 12, 1970	991,979
1,000,000	Greyhound Corporation Note due March 31, 1969 (under Repurchase Agreement)	996,250
500,000	Greyhound Corporation Note due April 23, 1969	498,754
1,000,000	Marathon Oil Company Note due July 10, 1969	993,354
	The Mountain States Telephone & Telegraph Company Notes	
1,000,000	due October 10, 1969	993,251
1,000,000	due October 31, 1969	988,368
1,000,000	due November 12, 1969	985,576
1,500,000	New York Telephone Company Note due June 9, 1969	1,482,500
	The Pacific Telephone & Telegraph Company Notes	
1,000,000	due December 1, 1969	990,229
1,000,000	due December 19, 1969	986,042
1,000,000	due January 5, 1970	993,924
1,000,000	due January 21, 1970	990,035
1,000,000	due January 26, 1970	989,062
1,000,000	due January 28, 1970	988,576
1,000,000	due February 4, 1970	986,875
	Philadelphia Electric Company Notes	
1,000,000	due August 4, 1969	987,625
1,000,000	due August 26, 1969	982,583

TRANSACTIONS IN MARKETABLE SECURITIES *continued*

FOR THE YEAR ENDED DECEMBER 31, 1969

<i>PURCHASED: concluded</i>		LEDGER AMOUNT
\$ 1,000,000	Savings Banks Trust Company (New York) Note due May 12, 1969 (under Repurchase Agreement)	\$ 988,375
1,000,000	Savings Banks Trust Company (New York) Note due May 19, 1969	987,063
1,000,000	Southern Bell Telephone & Telegraph Company Note due April 30, 1969 (under Repurchase Agreement)	990,625
1,000,000	Uniroyal Inc. Note due March 28, 1969	996,813
31,400	shares American Standard Inc.	1,264,938
900	" Aqua-Chem, Inc.	43,486
26,400	" Armstrong Cork Company	1,556,740
15,000	" Armstrong Rubber Company	615,320
2,000	" Bristol-Myers Company	109,500
57,000	" Burlington Industries Inc.	2,281,416
70,000	" Carrier Corporation	4,978,451
3,700	" Computer Sciences Corporation	105,519
110,930	" Consumers Power Company	4,498,316
17,500	" Control Data Corporation	2,228,578
25,000	" Denny's Restaurants Inc.	996,219
118,800	" Diamond International Corporation	5,981,273
125,000	" Fairchild Camera & Instrument Corporation	8,959,099
46,850	" Hanna Mining Company	1,905,858
15,000	" International Telephone & Telegraph Corporation Convertible Preferred Series "K"	1,401,294
71,000	" International Telephone & Telegraph Corporation	3,605,356
18,000	" Lucky Stores, Inc.	982,931
15,000	" MacDermid, Inc.	812,530
40,000	" Rohr Corporation	1,077,272
185,000	" Sperry Rand Corporation	8,508,106
27,000	" U. S. Pipe & Foundry Company	1,035,344
166,500	" U. S. Plywood-Champion Papers Inc.	6,567,122
80,200	" Upjohn Company	4,571,717
15,000	" Xerox Corporation	3,809,830
		<u><u>\$117,153,353</u></u>

<i>OTHERWISE ACQUIRED:</i>		LEDGER AMOUNT
88,200	shares Armstrong Cork Company received in a stock split on 88,200 shares owned of record May 9, 1969	—
25,700	" Burroughs Corporation received in a stock split on 25,700 shares owned of record March 28, 1969	—

**TRANSACTIONS IN MARKETABLE SECURITIES *continued***

FOR THE YEAR ENDED DECEMBER 31, 1969

OTHERWISE ACQUIRED: <i>concluded</i>		LEDGER AMOUNT
140,000	shares Carrier Corporation received in a stock split on 140,000 shares owned of record March 3, 1969	—
3,890	" Columbia Broadcasting System, Inc. received as a stock dividend on 194,536 shares owned of record November 24, 1969	—
300,000	" Continental Oil Company received in a stock split on 300,000 shares owned of record March 3, 1969	—
94,075	" Hanna Mining Company received in a stock split on 94,075 shares owned of record April 11, 1969	—
27,000	" Jim Walter Corporation, \$1.60 Cumulative Convertible Voting Fourth Preferred, received in exchange for 27,000 shares of U. S. Pipe & Foundry Company Common pursuant to terms of merger	\$ 1,035,344
540	" Lucky Stores, Inc. received as a stock dividend on 18,000 shares owned of record June 6, 1969	—
18,540	" Lucky Stores, Inc. received in a stock split on 18,540 shares owned of record September 5, 1969	—
15,000	" MacDermid, Inc. received in a stock split on 15,000 shares owned of record July 21, 1969	—
70,000	" U. S. Plywood-Champion Papers Inc. received in a stock split on 70,000 shares owned of record May 9, 1969	—
74,000	" Xerox Corporation received in a stock split on 37,000 shares owned of record May 16, 1969	—
<hr/>		<hr/>
		<hr/> <u>\$ 1,035,344</u>

SOLD:		PROCEEDS	LEDGER AMOUNT
\$ 19,250,000	U. S. Treasury Bonds (under Repurchase Agreements)	\$ 19,250,000	\$ 19,250,000
2,750,000	U. S. Treasury Notes (under Repurchase Agreements)	2,750,000	2,750,000
825,000	U. S. Treasury 6% Note due August 15, 1969	823,904	823,066
3,000,000	Federal Home Loan Banks 5 $\frac{3}{8}$ % Bond due March 25, 1969	2,994,688	3,000,638
1,000,000	Greyhound Corporation Note due March 31, 1969 (under Repurchase Agreement)	996,250	996,250
1,000,000	Marathon Oil Company Note due July 10, 1969	993,354	993,354
1,000,000	Savings Banks Trust Company (New York) Note due May 12, 1969 (under Repurchase Agreement)	988,375	988,375
500,000	Scott Paper Company Note due January 28, 1969	495,831	495,831
1,000,000	Southern Bell Telephone & Telegraph Company Note due April 30, 1969 (under Repurchase Agreement)	990,625	990,625

**TRANSACTIONS IN MARKETABLE SECURITIES *continued***

**FOR THE YEAR ENDED DECEMBER 31, 1969**

<b>SOLD: concluded</b>		<b>PROCEEDS</b>	<b>LEDGER AMOUNT</b>
19,300	shares Burlington Industries, Inc.	\$ 684,174	\$ 815,995
100,000	" Continental Oil Company	3,650,072	305,696
71,000	" International Telephone & Telegraph Corporation	4,039,580	3,605,356
102,000	" Monsanto Company	4,508,950	3,587,400
26,250	" National Cash Register Company	3,498,250	1,785,892
114,900	" National Steel Corporation	5,391,751	5,284,256
84,000	" Peoples Gas Company	2,911,326	1,057,373
293,300	" Standard Oil Company (Indiana)	18,360,954	2,080,189
371,400	" Standard Oil Company (New Jersey)	28,782,301	1,922,369
	Fractional shares	23	23
		<b><u>\$102,110,408</u></b>	<b><u>\$ 50,732,688</u></b>

<b>REDEEMED AT MATURITY:</b>		<b>PROCEEDS</b>	<b>LEDGER AMOUNT</b>
\$ 3,000,000	Federal Land Banks Bonds 4 1/4% due October 20, 1969	\$ 3,000,000	\$ 2,925,000
	Federal National Mortgage Association Debentures		
2,000,000	4 3/8% due April 10, 1969	2,000,000	1,965,000
500,000	5 1/8% due July 10, 1969	500,000	493,906
3,000,000	6% due December 12, 1969	3,000,000	3,000,000
1,000,000	Bethlehem Steel Corporation Note due January 16, 1969	993,705	993,705
	Cleveland Electric Illuminating Company Notes		
1,000,000	due July 22, 1969	990,604	990,604
1,500,000	due August 11, 1969	1,478,672	1,478,672
500,000	Greyhound Corporation Note due April 23, 1969	498,754	498,754
	The Mountain States Telephone & Telegraph Company Notes		
1,000,000	due October 10, 1969	993,254	993,254
1,000,000	due October 31, 1969	988,368	988,368
1,000,000	due November 12, 1969	985,576	985,576
1,500,000	New York Telephone Company Note due June 9, 1969	1,482,500	1,482,500
	The Pacific Telephone & Telegraph Company Notes		
1,000,000	due December 1, 1969	990,229	990,229
1,000,000	due December 19, 1969	986,042	986,042
	Philadelphia Electric Company Notes		
1,000,000	due August 4, 1969	987,625	987,625
1,000,000	due August 26, 1969	982,583	982,583

**TRANSACTIONS IN MARKETABLE SECURITIES *concluded***  
**FOR THE YEAR ENDED DECEMBER 31, 1969**

<b>REDEEMED AT MATURITY: <i>concluded</i></b>		<b>PROCEEDS</b>	<b>LEDGER AMOUNT</b>
\$ 1,000,000	Savings Banks Trust Company (New York) Note due May 19, 1969	\$ 987,063	\$ 987,063
1,000,000	Uniroyal Inc. Note due March 28, 1969	996,813	996,813
		<u>\$ 22,841,788</u>	<u>\$ 22,725,694</u>

<b>OTHERWISE DISPOSED OF:</b>		<b>PROCEEDS</b>	<b>LEDGER AMOUNT</b>
27,000	shares U. S. Pipe & Foundry Company Common exchanged for 27,000 shares Jim Walter Corporation, \$1.60 Cumulative Conver- tible Voting Fourth Preferred, pursuant to terms of merger	\$ 1,035,344	\$ 1,035,344

**SCHEDULE OF MARKETABLE SECURITIES**

DECEMBER 31, 1969

<b>FIXED INCOME SECURITIES</b>	<b>LEDGER AMOUNT</b>	<b>MARKET VALUE</b>
U. S. Government Obligations	\$ 11,073,438	\$ 10,930,313
U. S. Government Agency Obligations	23,323,837	22,483,125
Corporate Obligations	<u>7,895,451</u>	<u>7,645,451</u>
	<u>42,292,726</u>	<u>41,058,889</u>
<b>PREFERRED STOCKS</b>	<b>2,436,638</b>	<b>2,437,500</b>
<b>COMMON STOCKS</b>	<u>326,861,486</u>	<u>712,090,053</u>
	<u>329,298,124</u>	<u>714,527,553</u>
<b>TOTAL</b>	<b><u>\$371,590,850</u></b>	<b><u>\$755,586,442</u></b>

<b>FIXED INCOME SECURITIES</b>	<b>PAR</b>	<b>LEDGER AMOUNT</b>	<b>MARKET VALUE</b>
<i>U. S. Government Obligations:</i>			
Bonds			
4%—August 15, 1970	\$ 2,000,000	\$ 1,934,375	\$ 1,945,625
4%—February 15, 1972	1,500,000	1,436,250	1,372,500
4½%—November 15, 1973	1,000,000	952,813	862,188
(Under Repurchase Agreements)			
4¼%—May 15, 1974	2,750,000	2,750,000	2,750,000
4%—August 15, 1973	4,000,000	4,000,000	4,000,000
	<u>11,250,000</u>	<u>11,073,438</u>	<u>10,930,313</u>

**SCHEDULE OF MARKETABLE SECURITIES *continued***

**DECEMBER 31, 1969**

**FIXED INCOME SECURITIES *concluded***

<i>U. S. Government Agency Obligations:</i>	PAR	LEDGER AMOUNT	MARKET VALUE
Export-Import Bank Participation Certificates 6½%—September 19, 1971	\$ 3,000,000	\$ 3,045,833	\$ 2,887,500
Federal Home Loan Banks Bonds 5.80%—May 25, 1970	3,000,000	3,000,000	2,962,500
Federal Land Banks Bonds 6%—October 20, 1971	1,000,000	1,001,875	950,000
5.70%—February 15, 1972	1,000,000	1,000,000	937,500
 Federal National Mortgage Association			
Debentures			
6.60%—June 10, 1970	5,875,000	5,889,301	5,816,250
6%—March 11, 1971	2,000,000	1,998,750	1,932,500
Participation Certificates			
6%—February 1, 1971	4,375,000	4,376,828	4,221,875
5.20%—January 19, 1972	3,000,000	3,011,250	2,775,000
	<hr/> <u>23,250,000</u>	<hr/> <u>23,323,837</u>	<hr/> <u>22,483,125</u>

**Corporate Obligations:**

**Notes**

Duke Power Company 8¾%— January 12, 1970	1,000,000	991,979	991,979
The Pacific Telephone & Telegraph Company			
8¾%—January 5, 1970	1,000,000	993,924	993,924
8¾%—January 21, 1970	1,000,000	990,035	990,035
8¾%—January 26, 1970	1,000,000	989,062	989,062
8¾%—January 28, 1970	1,000,000	988,576	988,576
8¾%—February 4, 1970	1,000,000	986,875	986,875
 Bonds			
General Motors Acceptance Corporation 5%—August 15, 1977	1,000,000	975,000	805,000
International Bank for Reconstruction and Development 3½%—October 15, 1971	1,000,000	980,000	900,000
	<hr/> <u>8,000,000</u>	<hr/> <u>7,895,451</u>	<hr/> <u>7,645,451</u>
<b>TOTAL FIXED INCOME SECURITIES</b>	<b><u>\$ 42,500,000</u></b>	<b><u>\$ 42,292,726</u></b>	<b><u>\$ 41,058,889</u></b>

**SCHEDULE OF MARKETABLE SECURITIES *continued***

**DECEMBER 31, 1969**

<b>PREFERRED STOCKS</b>	<b>SHARES</b>	<b>LEDGER AMOUNT</b>	<b>MARKET VALUE</b>
International Telephone & Telegraph Corporation Convertible Preferred Series "K"	15,000	\$ 1,401,294	\$ 1,458,750
Jim Walter Corporation \$1.60 Cumulative Convertible Voting Fourth Preferred	27,000	1,035,344	978,750
<b>TOTAL PREFERRED STOCKS</b>		<b><u>2,436,638</u></b>	<b><u>2,437,500</u></b>

**COMMON STOCKS**

American Electric Power Company, Inc.	135,701	1,074,595	4,087,993
American Home Products Corporation	106,200	3,628,841	7,633,125
American Standard Inc.	31,400	1,264,938	1,079,375
American Telephone & Telegraph Company	175,926	4,636,063	8,554,402
Aqua-Chem, Inc.	900	43,486	54,000
Armstrong Cork Company	184,600	7,093,897	6,530,225
Armstrong Rubber Company	15,000	615,320	585,000
Boeing Company	177,000	13,055,840	4,978,125
Bristol-Myers Company	75,000	5,101,184	5,625,000
Burlington Industries, Inc.	210,700	8,908,302	7,190,137
Burroughs Corporation	51,400	4,994,176	8,089,075
Carrier Corporation	280,000	10,383,158	10,710,000
Central Illinois Public Service Company	140,000	2,829,415	2,467,500
Columbia Broadcasting System, Inc.	198,426	9,998,057	9,698,106
Computer Sciences Corporation	3,700	105,519	125,337
Consumers Power Company	210,000	8,979,982	7,035,000
Continental Oil Company	500,000	1,528,472	13,250,000
Control Data Corporation	21,000	2,795,070	2,436,000
Corning Glass Works	42,000	6,803,589	10,689,000
Denny's Restaurants Inc.	25,000	996,219	584,375
Diamond International Corporation	118,800	5,981,273	4,781,700
DuPont (E. I.) de Nemours and Company	53,000	10,039,968	5,565,000
Eastman Kodak Company	237,200	7,790,263	19,539,350
Fairchild Camera & Instrument Corporation	125,000	8,959,099	11,593,750
Firestone Tire & Rubber Company	207,900	9,673,965	10,628,888
Ford Motor Company	492,891	22,948,266	20,270,142
General Electric Company	189,000	11,631,709	14,647,500
General Motors Corporation	195,532	10,481,427	13,516,149
Hanna Mining Company	235,000	6,283,435	9,752,500
Hartford Fire Insurance Company	165,000	2,933,753	7,610,625
Hewlett-Packard Company	16,900	1,261,751	1,740,700
International Business Machines Corporation	104,356	10,240,105	38,037,762
International Nickel Company of Canada, Ltd.	437,500	8,496,169	19,031,250
International Paper Company	300,000	4,620,039	11,137,500

SCHEDULE OF MARKETABLE SECURITIES *concluded*

DECEMBER 31, 1969

COMMON STOCKS <i>concluded</i>	SHARES	LEDGER AMOUNT	MARKET VALUE
Lucky Stores, Inc.	37,080	\$ 982,931	\$ 1,191,195
MacDermid, Inc.	30,000	812,530	1,005,000
Marathon Oil Company	424,482	3,708,384	15,228,292
Minnesota Mining & Manufacturing Company	100,000	6,312,717	10,962,500
Mobil Oil Corporation	600,000	7,778,152	27,600,000
Public Service Electric & Gas Company	90,000	2,886,217	2,396,250
Rohr Corporation	40,000	1,077,272	935,000
Sav-A-Stop, Inc.	19,000	509,967	695,875
Southern Company (The)	342,000	8,853,096	8,721,000
Sperry Rand Corporation	185,000	8,508,106	6,868,125
Standard Oil Company (Indiana)	1,706,700	12,104,529	81,921,600
Standard Oil Company (New Jersey)	3,334,500	17,259,393	205,905,375
Texas Instruments Inc.	73,000	7,354,669	9,106,750
Trans Union Corporation	300,000	2,561,013	10,350,000
U. S. Plywood-Champion Papers Inc.	280,000	10,148,658	8,785,000
Upjohn Company	177,000	9,994,707	9,425,250
Xerox Corporation	111,000	9,823,800	11,738,250
<b>TOTAL COMMON STOCKS</b>		<b>326,861,486</b>	<b>712,090,053</b>
<b>TOTAL STOCKS</b>		<b><u>329,298,124</u></b>	<b><u>714,527,553</u></b>

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### INTERNATIONAL

#### Cooperative programs of The Rockefeller Foundation

Conquest of Hunger—field staff in the Agricultural Sciences	\$1,876,122
University Development—field staff	1,822,725
Virus Research Program—field staff	320,719
Field Research in Medical Sciences—field staff	141,149
International Development and Conference Centers—field staff	107,478
Support for international schools	12,617
Preparation and distribution of publications	120,213

#### Organization of American States

<i>Inter-American Institute of Agricultural Sciences, Costa Rica</i>	
Training program for Brazilian agricultural librarians	15,000
Support for the secretariat of the Inter-American Association of Agricultural Librarians and Documentalists	4,500
Support of a conference on agricultural education	(2,517)
Conference of the Inter-American Association of Agricultural Librarians and Documentalists	2,331
Meeting of the organizing committee of a conference on agricultural education	(293)
Travel of a staff member to Michigan State University	700

#### United Nations

<i>Food and Agriculture Organization of the United Nations</i>	
Training awards for Middle Eastern wheat specialists	33,300
Travel expenses of participants in a symposium	(2,697)

#### Conferences at the Villa Serbelloni Conference and Study Center

Seminars and conferences held on agricultural development in emerging nations, East Coast fever and trypanosomiasis of cattle, and the university's response to student needs	7,388
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### ARGENTINA

#### Torcuato di Tella Institute

Support of the Latin American Center for Advanced Musical Studies	3,023
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#### University of Cuyo

Support of the Faculty of Medical Sciences	18,375
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#### Other support

Fellowships and scholarships for individuals	10,243
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### AUSTRALIA

#### University of New England

Study of Chilean farmers' attitudes to risk	1,626
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#### Other support

Fellowships and scholarships for individuals	3,700
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# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## **BARBADOS**

### **Ministry of External Affairs**

Purchase of a collection of basic works in international relations 3,414

## **BELGIUM**

### **International Union for the Scientific Study of Population**

Toward expenses of a conference 15,000

## **BERMUDA**

### **Bermuda Biological Station for Research**

Toward costs of a library building 25,000

## **BOLIVIA**

Purchase and distribution of a book on Bolivian plants 289

### **Other support**

Fellowships and scholarships for individuals 3,431

## **BRAZIL**

Aflatoxin studies in Brazil 4,887

### **Brazilian Society of Genetics**

General support 5,050

### **Faculty of Philosophy, Science, and Letters of Rio Claro**

Equipment and supplies for the Department of General Biology 1,562

### **Faculty of Veterinary Medicine and Agronomy of Jaboticabal**

Equipment for the Cytology and Genetics Section 1,985

### **Federal University of Minas Gerais**

General development 21,941

Research in the Faculty of Medicine 11,360

### **Federal University of Rio de Janeiro**

Equipment for research in genetics 781

### **Instituto Butantan**

Equipment and supplies for research in genetics 1,162

### **Rural University of the State of Minas Gerais**

Contribution toward fellowship operations 2,250

Development of its School of Domestic Science and study of native plants 7,837

Equipment for genetics research in the Graduate School of Agriculture 724

Purchase of library materials 3,860

### **University of Bahia**

Support of the Laboratory of Human Genetics 3,514

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **BRAZIL (cont'd)**

#### **University of Paraná**

    Research in the Laboratory of Human Genetics                           2,161

#### **University of Rio Grande do Sul**

    Research in the Laboratory of Animal Genetics                       7,910

    Research in the Laboratory of Human Genetics                       1,049

#### **University of São Paulo**

    Research equipment for the Department of Genetics               6,843

    Research in the Laboratory of Animal Genetics                       4,647

    Research at the School of Agriculture, Piracicaba               18,754

#### **Cooperative program**

    Belém Virus Laboratory   63,567

#### **Other support**

    Fellowships and scholarships for individuals                       153,678

### **CAMEROOUN**

Travel grants to individuals   2,246

### **CANADA**

#### **McGill University**

    Contribution toward fellowship operations                       6,000

    Visiting faculty assignments in Africa, Asia, and Latin America   80,780

#### **University of Guelph**

    Consultation by a faculty member with directors of Foundation programs in Latin America   700

#### **University of Manitoba**

    Research on wheat-rye hybrids                                       28,851

#### **University of Toronto**

    Contribution toward fellowship operations                       1,500

    Appointment of a visiting professor in economics at the Atlanta University Center   24,525

    Visiting faculty assignments in Africa, Asia, and Latin America   35,327

#### **Other support**

    Travel grants to individuals   1,352

### **CEYLON**

Fellowships, scholarships, and travel grants to individuals           16,736

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### CHILE

Agricultural Research Institute	
General support	82,489
Catholic University of Chile	
Equipment for the Conjunto de Musica Antigua	750
Support of the Faculty of Agronomy	25,943
Support of the Laboratories of Neurophysiology and of Electron Microscopy	3,779
Sociedad Chilena de Planificación y Desarrollo	
Conference on graduate social science programs	2,800
University of Chile	
Equipment, supplies, and library materials for research in reproductive biology	5,320
Protein malnutrition study	15,000
Research equipment for the Department of General Biochemistry	682
Support of the Center of Research on American History	21,653
Support of the Faculty of Sciences	60,902
Support for the Graduate School of Economics and the Institute of Economics	4,985
Research and action programs in family planning	293,828
University of Concepción	
Field and laboratory equipment	(20)
Cooperative program	
International Development Center, Santiago	26,067
Other support	
Fellowships and scholarships for individuals	234,086
COLOMBIA	
Colombian Association of Faculties of Medicine	
Support of its program	37,600
Colombian Institute of Agriculture	
Contribution toward fellowship operations	3,750
General support	1,532
Teaching, research, and extension programs	269,060
International Center of Tropical Agriculture	
Toward the costs of constructing and equipping its headquarters facilities at Palmira	373,667
Presentation of findings at the International Congress of Nutrition in Czechoslovakia	1,340
Program in tropical agriculture	2,909
Toward costs of establishing the Center	252,331
General support	292,300
Inter-American Swine Program	16,100

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### COLOMBIA (*cont'd*)

#### National Institute of Nutrition

Nutrition study using high-lysine corn 9,000

#### University of the Andes

Research and training in political science 29,419

Support of the Department of Biology and the premedical program 52,500

#### University of Antioquia

Support of the School of Library Science 52,610

#### University of Valle

Contribution toward fellowship operations 1,500

Cooperation with the schistosomiasis control project in St. Lucia 12,180

Construction of an addition to the Central Library (1,692)

Development of bibliographic and library services 8,880

Development of teaching materials in economics 35,000

Equipment for Central Administration 39,111

Equipment for the Central Library 3,059

Equipment and supplies for the Department of Physiological Sciences, Faculty of Medicine 24,025

Equipment and structural changes in laboratories for its Faculty of Architecture 4,264

Equipment for biochemical research in the Faculty of Medicine 12,769

Experimental program in health care 15,000

Faculty assignment to the Harvard Medical School 4,000

General support 67,023

Improvement of student services 14,114

Laboratory equipment for nutrition 65

Population studies and development of the University Hospital and Medical School 40,020

Postgraduate training awards for non-Colombians 45,000

Publication of a book by the Division of Architecture 7,500

Purchase of equipment for the Biology Department 17,229

Research in grains and other products in cooperation with the Colombian Institute of Agriculture and the Palmira experiment station 74,103

Research programs in the Faculty of Philosophy, Letters, and History 1,088

Research project by the Division of Social Sciences and Economics 15,400

Research on protein malnutrition and study of food plants 599

Research in reproductive biology 20

Research and teaching equipment for the Division of Pharmacology 10,112

Study in soil mechanics at Harvard University by a faculty member 2,675

Support of the Division of Health Sciences 335,950

Support of the Faculty of Medicine 2,028

Support of the language laboratory 1,664

Studies on the quality of medical care in rural areas 10,000

Support of the University Hospital 5,709

Toward costs of a building for virologic and other programs 24,600

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## **COLOMBIA (cont'd)**

Toward costs of a course on administration for university development	13,990
Toward costs of research on production economics and farm management in the Cauca Valley	14,050
To enable a School of Nursing staff member to attend a family planning congress in Chile	1,200
Toward a graduate program in the School of Nursing	4,434
Toward staff salaries in the Faculty of Philosophy, Letters, and History	3,464

## **Cooperative programs**

Colombian Agricultural Program	51,158
University Development Program Center (University of Valle)	88,738
Virus laboratory, Cali	88,362
Visiting faculty (University of Valle)	59,105

## **Other support**

Fellowships, scholarships, and travel grants to individuals	363,105
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## **CONGO**

### **Lovanium University**

Tutorial program	87,500
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## **Other support**

Fellowships and scholarships for individuals	6,924
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## **COSTA RICA**

### **University of Costa Rica**

Equipment for bean virus research	3,394
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## **Other support**

Fellowships, scholarships, and travel grants to individuals	11,596
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## **ECUADOR**

### **National Agricultural Research Institute**

Development of a rice program	4,478
Development of its experiment stations and strengthening of research and training	105,967

## **Cooperative program**

Cooperative project in agriculture	16,299
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## **Other support**

Fellowships and scholarships for individuals	65,696
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## **EL SALVADOR**

### **Foundation for the Development of Cooperatives**

Program for increasing agricultural productivity	20,860
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **ETHIOPIA**

#### **Haile Selassie I University**

Evaluation of the culture and productivity of teff	1,231
Staff development	3,132

#### **Other support**

Fellowships and scholarships for individuals	16,292
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### **FRANCE**

#### **International Council on Archives**

Study of the archival situation in selected African countries	6,500
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### **GHANA**

#### **University of Ghana**

Laboratory equipment for the Medical School	12,297
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#### **Other support**

Fellowships and scholarships for individuals	10,929
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### **GUATEMALA**

Fellowships, scholarships, and travel grants to individuals	16,124
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### **GUYANA**

#### **Ministry of External Affairs**

Purchase of a collection of basic works in international relations	76
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### **HONDURAS**

#### **Pan American Agricultural School**

General development	12,001
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#### **Other support**

Fellowships and scholarships for individuals	22,919
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### **HONG KONG**

#### **Chinese University of Hong Kong**

Study of the population of Hong Kong	(4,274)
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### **INDIA**

#### **All India Institute of Medical Sciences**

Support of the teaching hospital	10,839
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#### **Central Rice Research Institute**

Equipment expenses	2,516
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **INDIA (*cont'd*)**

Indian Agricultural Research Institute	
General support	<b>44,153</b>
Indian Council of Medical Research	
Equipment and supplies for Council-sponsored projects	2,876
Equipment and supplies for the Virus Research Centre, Poona	9,300
University of Delhi	
Advanced library training	13,527
Comparative studies of Western and Indian music	7,132
Research on economic development in Africa	(35)
Support of the Department of Botany	6,832
Uttar Pradesh Agricultural University	
Experiment station development	2,271
Hostel for foreign agricultural students	15,000
Seth Gordhandas Sunderdas Medical College	
Teaching and research	5,414
Cooperative programs	
Ballabghar Rural Health Centre	1,371
Indian Agricultural Program	455,555
Laboratory for grain research at the Indian Agricultural Research Institute	6,199
Virus Research Centre, Poona	109
Other support	
Fellowships, scholarships, and travel grants to individuals	179,178

### **ISRAEL**

Hebrew University of Jerusalem	
Comparative analysis of processes and problems of modernization	1,000
Travel for conference participants	(557)

### **ITALY**

Villa Serbelloni Conference and Study Center	
Activities of the Center	226,293
University of Rome	
Contribution toward fellowship operations	1,500

### **JAMAICA**

University of the West Indies	
Support of the Faculty of Medicine	15,836

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### JAPAN

Kihara Institute for Biological Research	
Wheat and rice research program	9,780
Hokkaido University	
Studies on the physiology of corn	5,700
Other support	
Travel grants to individuals	(44)

### KENYA

East African Community	
<i>East African Agriculture and Forestry Research Organization</i>	
Doctoral research by a staff member	15,000
Sorghum research program	44,906
General support	25,138
Teaching and research in veterinary science	36,000
Ministry of Agriculture and Animal Husbandry	
Support of the Agricultural Education Commission	1,115
Support of the Plant Breeding Station	6,175
University of East Africa	
<i>University College, Nairobi</i>	
Acquisition of library materials	372
Activities of the Cultural Division of the Institute for Development Studies	97,967
Appointment of a deputy director of the Social Science Division, Institute for Development Studies	1,911
Appointment of a visiting research fellow in the Institute for Development Studies	2,500
Expansion of facilities for the Social Science Division of the Institute for Development Studies	14,000
Library materials for the Department of Sociology	2,847
Observation of centers of African studies in the United States by a faculty member	1,035
Planning costs of establishing a Faculty of Agriculture	13,670
Research in the Cultural Division of the Institute for Development Studies	22,500
Research on the tsetse fly	10,000
Study of geographical research techniques by a faculty member	5,200
Study of political science in the United States by a staff member	4,000
Study of ruminant animals	8,000
Support of the Department of Government and Administration	680
Support for three East African graduate assistants in economics	11,300
Toward scholarships for B.Phil. candidates in economics	15,000
Training in public administration for students from Tanzania and Uganda	1,200
Other support	
Fellowships, scholarships, and travel grants to individuals	80,406

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### LEBANON

#### American University of Beirut

Books and equipment for a neuropathology laboratory 7,426

#### Other support

Fellowships and scholarships for individuals 514

### MAURITIUS

#### Ministry of Foreign Affairs

Purchase of a collection of basic works in international relations 3,420

### MEXICO

#### Colegio de México

Research in demography 45,000

#### Inter-American Scholarly Book Center

Toward its operating expenses 15,000

#### International Maize and Wheat Improvement Center

General support 453,000

International Potato Improvement Project 42,246

Spring-Winter Wheat Breeding Program 34,000

Central American Food Crop Improvement Program 15,000

Construction and equipment 6,202

Maize improvement program in Kenya 17,280

Pilot program in corn production 95,414

Potato production program in West Pakistan, and related training in Mexico 62,428

Protein quality laboratory 32,027

Work of the coordinator of a regional maize improvement program 15,000

Work project in Thailand for a staff entomologist 12,500

#### Mexican Center of Writers

Creative writing programs 1,500

#### National Institute of Agricultural Research

Coordinated potato research and training program 7,600

#### National School of Agriculture

Contribution toward fellowship operations 17,250

Potato research in cooperation with the International Potato Program 15,350

Initiation of a Ph.D. program in the Graduate School 40,000

Ph.D. studies at the University of Oxford by a faculty member 2,400

#### National University of Mexico

Graduate training in chemistry and biochemistry 6,506

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### MEXICO (*cont'd*)

<b>Technological Institute of Monterrey</b>	
Contribution toward fellowship operations	2,250
Extension of graduate studies in the School of Agriculture	56,999
Study of agricultural planning in the United States by a faculty member	2,000
 <b>University of Sonora</b>	
Arid-lands research in cooperation with the University of Arizona	12,600
 <b>Other support</b>	
Fellowships, scholarships, and travel grants to individuals	94,701

### NATIONAL REPUBLIC OF CHINA, TAIWAN

<b>Joint Commission on Rural Reconstruction</b>	
Fish culture research	75,000
Nutritional study of pregnant women	25,000
Study of downy mildew of corn	9,503
 <b>Other support</b>	
Fellowships, scholarships, and travel grants to individuals	24,587

### NEW ZEALAND

<b>University of Otago</b>	
Fiji virus research program	91

### NICARAGUA

<b>Fellowships and scholarships for individuals</b>	
	2,397

### NIGERIA

<b>Ahmadu Bello University</b>	
Expenses of participants in a conference on livestock improvement	5,956
 <b>International Institute of Tropical Agriculture</b>	
Toward operating expenses	400,000
 <b>University of Ibadan</b>	
Appointment of a biostatistician in the Department of Preventive and Social Medicine	14,000
Arbovirus research	24,112
Community mental health project	31,150
Completion of doctoral research by a faculty member	950
Development of the medical library	7,929
Development of the nutrition center	43,500
Teaching assignment in the United States for a faculty member	6,740
Improvement of science laboratory facilities for its International School	15,000
Lectureship in agricultural economics	1,859

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **NIGERIA (cont'd)**

Medical training posts	12,721
Pasture and fodder research	8,056
Research fellowship in the Department of Veterinary Medicine	15,075
Research on hemoglobins	8,893
Research project in the Department of Agricultural Economics	2,799
For research in the social sciences	(12,352)
Rural water supply project at Igbo-Ora	1,046
Special field operations in virology	65,856
Study leaves for three senior staff members	9,733
Study of trypanosomiasis in albino rats and goats	22,000
Support of the Department of Nursing	16,266
Support of the Department of Psychiatry, Neurology, and Neurosurgery	35,700
Support for entomological studies of legumes	9,100
Support of a lectureship in nematology	18,000
Support for its School of Drama	50,000
Toward the salary of a medical librarian	7,000
Travel of a faculty member to the United States	3,700

### **Cooperative programs**

University Development Program Center (University of Ibadan)	29,181
Visiting faculty (University of Ibadan)	130,610
Project support for staff assigned to Ahmadu Bello University	11,291

### **Other support**

Fellowships, scholarships, and travel grants to individuals	213,507
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### **PAKISTAN**

#### **Central Institute of Islamic Research**

Support of research	815
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### **Other support**

Fellowships and scholarships for individuals	8,712
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### **PARAGUAY**

Fellowships, scholarships, and travel grants to individuals	4,378
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### **PERU**

#### **Agricultural Research and Extension Service**

Cooperative program with the Agrarian University	28,798
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#### **Agrarian University**

Cooperative program with the Agricultural Research and Extension Service	29,077
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Equipment for the Department of Nutrition	21,994
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Research and teaching in agricultural economics and rural sociology	59,423
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### PERU (*cont'd*)

#### University of San Marcos

Equipment and supplies for an arbovirus research program	659
Support for an international graduate program in the Faculty of Veterinary Medicine	37,718

#### Other support

Fellowships and scholarships for individuals	176,450
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## PHILIPPINES

#### International Rice Research Institute

General support	642,000
Rice hybridization project in cooperation with the Academia Sinica, Taiwan	7,500
Equipment for studies in protein quality in rice	(48,055)

#### Philippine Fisheries Commission

Fish culture research	(60,616)
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#### Press Foundation of Asia

Seminar on communicating agricultural research	14,700
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#### University of the Philippines

Conference on Indonesian economic stabilization	15,000
Corn and sorghum research and training project at its College of Agriculture	66,080
Development of the Social Sciences and Humanities Center	58,490
Support of the Department of Biochemistry, College of Medicine	25,723
Equipment for the Institute of Hygiene	1,411
Equipment and supplies for the Department of Anatomy, College of Medicine	13,014
Establishment of a graduate program in physiology in the College of Medicine	169
Faculty development in the Division of Natural Sciences	7,073
Graduate scholarships in the College of Arts and Sciences	25,000
Graduate scholarships in the School of Economics	15,000
Individual research project in Indonesia	2,250
Individual research project on international trade	1,336
Individual research project in Philippine history	1,116
Library acquisitions in economics	7,000
Rural community health teaching service	55,596
Scholarship program in the College of Agriculture	15,000
Support of the University Press	5,594
Toward the costs of constructing and equipping a hostel and training center for the College of Agriculture	112,493
Travel of an agronomist to professional meetings	1,165
Visit of a corn production specialist to Mexico	1,605
Visit to the national sorghum program in Thailand by a faculty member	620

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### PHILIPPINES (*cont'd*)

#### Cooperative Programs

Comprehensive Community Health Program	21,361
University Development Program Center (University of the Philippines)	27,463
Visiting faculty (University of the Philippines)	153,452

#### Other support

Fellowships, scholarships, and travel grants to individuals	361,042
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### RHODESIA

#### University College of Rhodesia and Nyasaland

Research on tsetse metabolism	2,933
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### ST. LUCIA

#### Ministry of Health, Education, and Social Affairs

Training for a senior public health inspector and a laboratory assistant	1,585
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#### Cooperative program in schistosomiasis research and control

167,179

#### Other support

Travel grants to individuals	799
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### SUDAN

#### University of Khartoum

General development	80
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#### Other support

Fellowships, scholarships, and travel grants to individuals	24,317
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### SWAZILAND

#### Department of Foreign Affairs

Purchase of a collection of basic works in international relations	3,432
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### SWEDEN

#### Travel grants to individuals

630

### SWITZERLAND

#### Graduate Institute of International Studies

Training and research in international organization and relations	35,835
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### TANZANIA

#### Ministry of Health and Labour

Training program for rural physicians	163
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### TANZANIA (*cont'd*)

#### University of East Africa

##### *University College, Dar es Salaam*

Developmental programs in the Departments of Political Science and History	16,019
Economic research	16,044
Program in management and administration	11,285
Research and teaching in geography	1,400
Acquisition of bindery equipment for the library	(15)
Visiting research professor in economics	1,775

#### Other support

Fellowships, scholarships, and travel grants to individuals	66,109
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### THAILAND

#### Kasetsart University

Experiment station development	26,422
Purchase of equipment for the Veterinary School	1,533
Toward an international training facility at Farm Suwan	33,472
Scientific equipment	8,590
Study of protein quality and quantity of rice	2,793
Travel to United States campuses for three members of the University Planning Team	5,669
Travel to India for three administrators	1,646

#### Local Consulting Committee

Consultation on graduate training in nutritional sciences	1,420
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#### Mahidol University

Appointment of a laboratory director at the Faculty of Medical Sciences	3,000
Applied nutrition research program	2,873
Equipment and supplies for the Department of Pathology, Faculty of Science	14,800
Equipment and supplies for the Faculty of Medical Sciences	201,967
Equipment and supplies for research in the Faculty of Science	89,298
Expenses of the summer student program in community health	1,500
Teaching, research, and library equipment and supplies for the Faculty of Science	28,519
Textbooks for the Ramathibodi Faculty of Medicine	3,763

#### Social Science Association of Thailand

Toward publication of social science textbooks in Thai	10,000
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#### Thammasat University

Library development in the Faculty of Economics	679
Study grants for M.A. candidates	5,000
Research by a faculty member on urban local government	6,500

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### THAILAND (*cont'd*)

#### Cooperative programs

Inter-Asian Corn Program	26,154
Rice and corn-sorghum research programs in Thailand	52,994
University Development Program Center (Universities in Bangkok)	225,482
Visiting faculty (Universities in Bangkok)	164,466

#### Other support

Fellowships, scholarships, and travel grants to individuals	475,616
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### TRINIDAD

#### University of the West Indies

Expenses of participants in a symposium on nematodes of tropical crops	(302)
Food crop research and postgraduate program	85,624
Support of the Trinidad Regional Virus Laboratory	49,770

#### Other support

Fellowships, scholarships, and travel grants to individuals	8,435
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### TURKEY

#### Hacettepe Science Center

Development of family planning clinics	99,000
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#### Other support

Fellowships and scholarships for individuals	14,772
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### UGANDA

#### University of East Africa

Africanization of staff	307,155
Appointment of an assistant liaison officer	19,640
Conference of East African university administrators	4,000
Support for <i>The Eastern African Economic Review</i>	1,300
Support for the work of academic councils	30,000

#### Makerere University College

Expenses of a consultant for the African culture program	350
Faculty development and research in the Faculty of Agriculture	113,606
Graduate training program in the Department of Medicine	2,708
Observation of educational institutions in the United States by a faculty member	2,025
Political science research at the East African Institute of Social Research	42,420
Research on economic development problems of East Africa	91,499
Research, teaching, and graduate studies in political science	45,220
Support of the Faculty of Agriculture	42,901
Teaching post in international relations	12,192
Teaching program in the Department of History	8,100
Toward a creative writing appointment	2,500
Workshops held at the Makerere Institute of Social Research	7,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **UGANDA (cont'd)**

#### **Cooperative programs**

University Development Program Center, Entebbe	89,589
Visiting faculty (University of East Africa)	407,751

#### **Other support**

Fellowships, scholarships, and travel grants to individuals	133,924
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### **UNITED ARAB REPUBLIC**

Fellowships and scholarships for individuals	8,200
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### **UNITED KINGDOM**

#### *England*

##### **Ditchley Foundation**

Conference on the needs of developing countries	2,182
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##### **Institute for Strategic Studies**

Research on strategic problems in non-Atlantic areas, 1964-1970	14,332
Study of modern warfare	(3,235)

##### **Overseas Development Institute**

Research on rural development	15,000
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##### **University of Birmingham**

Contribution toward fellowship operations	1,500
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##### **University of Cambridge**

Contribution toward fellowship operations	6,000
Research in sensory physiology of vertebrate animals	(992)

##### **University of Essex**

Contribution toward fellowship operations	1,500
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##### **University of London**

Contribution toward fellowship operations	14,250
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##### **University of Oxford**

Contribution toward fellowship operations	1,500
Visiting fellows and scientists at St. Catherine's College	11,234

##### **University of Sussex**

Contribution toward fellowship operations	6,000
Research in Tanzania by a faculty member	750

##### **Victoria University of Manchester**

Contribution toward fellowship operations	2,250
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# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## UNITED KINGDOM (*cont'd*)

Other support	
Travel grants to individuals	4,742
<i>Scotland</i>	
University of Edinburgh	
Contribution toward fellowship operations	6,000
University of Glasgow	
Contribution toward fellowship operations	1,500
Other support	
Travel grants to individuals	2,692

## UNITED STATES

<i>Alabama</i>	
Auburn University	
Research on freshwater pond fish culture	149,480
<i>Arizona</i>	
Navaho Community College	
Appointment of a coordinator	15,000
University of Arizona	
Arid lands research in cooperation with the University of Sonora, Mexico	70,800
Individual research project on personnel systems and the culture of poverty	732
Research on water resources	5,209
<i>California</i>	
Berkeley Unified School District	
In-service training in problems of multiracial education	100,000
California Institute of Technology	
Contribution toward fellowship operations	1,500
Toward the cost of a Summer Institute on Educational Change	25,000
California State College at Los Angeles	
Cooperative program with Alain LeRoy Locke High School	153,487
Educational program of the Greater Los Angeles Consortium	15,000
Support of its Community Relations Office	24,350
Center Theatre Group of Los Angeles	
Playwright-Directors Development Program of the Mark Taper Forum	70,000
Claremont Graduate School	
Contribution toward fellowship operations	3,000
Douglass House Foundation	
Toward costs of the Watts Writers Workshop	6,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### Mills College

Development of a center for the creative and performing arts 46,000

#### Oakland Symphony Orchestra Association

Composer-in-residence with the Oakland Symphony Orchestra 8,826

#### Occidental College

Discovery and support of talented minority-group students 93,682

#### Stanford University

Contribution toward fellowship operations 12,750

Establishment of a professional theatre and a program for the M.F.A. degree 31,928

Research by its Food Research Institute 13,038

Support of the School of Medicine 396,302

Study of the determinants of change in tropical African agriculture 15,624

#### University of California

##### *Berkeley*

Contribution toward fellowship operations 68,250

Exchange program in maternal health services with Makerere University College 46,948

For use by its Department of Political Science (217)

Individual doctoral project in India 11,000

Nutritional study of poor children 13,200

##### *Davis*

Appointment of a faculty member to direct a study of seed storage in India 15,000

To enable an Indian scientist to visit pesticide residue laboratories in the United States 5,050

Research project on presidential confrontation 2,000

Research on rat control 20,506

##### *Los Angeles*

Improvement of language teaching in the Philippines (588)

Research on the role of the Diet in Japanese politics 1,055

Support of its Educational Opportunities Program 27,449

Toward costs of developing the actor training program 14,987

##### *Riverside*

Activities of the Dry-Lands Research Institute 132,075

Research project on dry-land sorghum production in Mexico 1,875

Research on soil conditions in wheat production 22,500

##### *San Diego*

Exhibition of African art 15,000

#### University of Southern California

Contribution toward fellowship operations 2,250

Training for music critics 88,333

**1969 PAYMENTS ON PROGRAMS AND GRANTS**

**UNITED STATES (cont'd)**

**Urban Affairs Foundation**

Precollege leadership development program	16,750
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**Watts Labor Community Action Committee**

Agricultural vocational education center	207,840
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**Cooperative program**

Research in virology	27,953
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**Colorado**

**Colorado State University**

Contribution toward fellowship operations	2,250
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**Music Associates of Aspen**

Program of advanced teacher training	40,000
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**University of Colorado**

Contribution toward fellowship operations	4,500
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**University of Denver**

Assignment of social science scholars to universities abroad	19,975
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Consultations for a program in theatre	2,700
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**Connecticut**

**Connecticut College**

Creative project in choreography	3,000
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Experimental summer school program for talented disadvantaged high school graduates	20,000
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Preparation of three film scripts	14,890
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**Connecticut Players Foundation**

Individual creative project	3,000
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**Hotchkiss School**

Summer school program for talented disadvantaged high school students	15,000
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**New Haven Foundation**

Support for family planning clinics	7,500
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**University of Connecticut**

Contribution toward fellowship operations	1,500
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**Wesleyan University**

Theatre program with the Eugene O'Neill Memorial Theater Center	113,750
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**Yale University**

Contribution toward fellowship operations	4,500
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Collaborative literacy project	9,405
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Collaborative research in arbovirology	10,000
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### *Yale University (cont'd)*

Initiation of a Black Studies program and a cooperative community development activities program	104,871
Program for the completion of scholarly works by senior faculty members	67,450
Research on the history of the British Parliament	2,100
Research on problems of conflict, consensus, and pluralistic democracy	20,187
Research project on the role of agriculture in economic growth	7,500
Transitional-year program for talented disadvantaged high school graduates	62,500

#### *District of Columbia*

#### American Association for the Advancement of Science

Expenses of four symposium speakers	(2,427)
Toward televising their annual meeting	5,000
Toward an international conference on arid lands	7,247

#### Catholic University of America

Contribution toward fellowship operations	6,000
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#### Georgetown University

Contribution toward fellowship operations	3,000
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#### George Washington University

Contribution toward fellowship operations	1,500
Preparation of corn and wheat bibliographies	56,486

#### National Academy of Sciences

Summer study on environmental problems	25,000
Studies in water resource problems in Africa	16,665
Exploratory studies in the Division of Biology and Agriculture	7,500
Publications on pest control	10,000

#### National Association of State Universities and Land-Grant Colleges

Expenses of two speakers at an international conference	2,100
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#### National Symphony Orchestra Association of Washington, D. C.

Composer-in-residence with the Washington National Symphony	2,369
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#### Overseas Development Council

Support of a program of research and education	125,000
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#### Pan American Development Foundation

Assistance with national development foundations in Latin America	15,000
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#### Pan American Health Organization

Population-nutrition studies in the Caribbean area	32,150
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#### Population Association of America

Travel of American specialists to an international conference	9,550
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# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## **UNITED STATES (*cont'd*)**

<b>Population Reference Bureau</b>	
Latin American educational program	30,000
<b>Science Service</b>	
Support for its Science Youth Activities Program	25,000
<b>Urban Coalition</b>	
National and regional meetings of youth leaders	5,889
<b>Washington Urban League</b>	
Support of new appointments	78,086
<b>White House Conference on Food, Nutrition, and Health</b>	
Costs of the conference	100,000
<b><i>Florida</i></b>	
<b>University of Florida</b>	
Contribution toward fellowship operations	14,250
Assignment of scholars to universities abroad	35,939
Exchange of doctors and nurses with the University of Valle	(185)
Preparatory graduate education program for black students	40,448
<b>University of Miami</b>	
Travel of a group to Nigeria	(974)
<b><i>Georgia</i></b>	
<b>Atlanta Symphony Orchestra</b>	
Composer-in-residence	10,950
<b>Atlanta University Center Corporation</b>	
For strengthening of faculties, development of educational programs, and coordination of activities	22,000
General development	100,000
Support of the post of executive secretary	12,500
Support of the School of Library Service	64,810
<b>Emory University</b>	
Student assistance program	76,135
<b>Mercer University</b>	
Discovery and support of talented minority-group students	52,500
<b>Southeastern Academy of Theatre and Music</b>	
Support for its acting troupe	25,000
<b>Southern Regional Council</b>	
General support	40,000
<b>Student American Medical Association Foundation</b>	
Conference on the population explosion	20,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### *Hawaii*

##### Oceanic Foundation

Research in its Brackish-Water Fish Culture Laboratory 50,000

#### University of Hawaii

Contribution toward fellowship operations 3,000

Travel of a professor of horticulture to centers in the Far East 1,453

#### *Illinois*

##### Association of American Medical Colleges

Toward costs of an Institute on Medical Education and Family Planning 23,000

##### Association of American Universities

Conference with British university leaders (1,377)

##### Chicago Urban League

Activities on Chicago's West Side 100,000

##### Community Renewal Society

Leadership training program 34,775

##### Ecumenical Institute

Support of its Academy for Urban Leadership Training 150,000

#### Illinois State University

Studies of wild and domestic animals in connection with schistosomiasis research 4,800

#### Industrial Areas Foundation

Training Institute program for community organizers 75,000

#### National Guild of Community Music Schools

Toward costs of operating its executive office 15,000

#### Northwestern University

Contribution toward fellowship operations 3,000

#### Research Council of the Great Cities Program for School Improvement

Conference on workshops on educational leadership 12,000

#### Southern Illinois University

Contribution toward fellowship operations 1,500

Performances of new works by the St. Louis Symphony Orchestra (146)

#### University of Chicago

Contribution toward fellowship operations 14,250

Appointment of a managing editor for a new quarterly magazine 8,000

Development of a family planning service 58,806

Editing of the papers of James Madison 9,600

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## **UNITED STATES (*cont'd*)**

Program to foster the composition and performance of contemporary music	55,000
Research on economic effects of national agricultural policies	24,000
Research on poverty	45,200
Toward operating expenses of the Cooperative Program for Educational Opportunity	10,000
The university orchestra program with the Chicago Symphony Orchestra	20,000
Research project on schistosomiasis at Makerere University College	1,585
Visiting assignment to the School of Economics of the Catholic University of Chile	1,922
 <b>University of Illinois</b>	
Contribution toward fellowship operations	12,750
Soybean improvement program	25,000
Sorghum germplasm project by the Crop Evolution Laboratory	13,000
Travel in the United States for an Indian agricultural scientist	380
 <b>Indiana</b>	
<b>Earlham College</b>	
Prefreshman and freshman reinforcement program	15,000
<b>Gary Community School Corporation</b>	
Support for its Reciprocal Education Program	50,000
 <b>Indiana University</b>	
Contribution toward fellowship operations	5,250
Preparation of a critical biography of Sergei Prokofiev	1,500
 <b>Purdue University</b>	
Contribution toward fellowship operations	30,750
Development of an international sorghum program	2,000
 <b>University of Notre Dame</b>	
Assignment of scholars to universities abroad	16,250
 <b>Iowa</b>	
<b>Grinnell College</b>	
Cooperative program in theatre with the Milwaukee Repertory Theatre	15,000
Discovery and support of talented minority-group students	91,648
Support of the Lenox String Quartet as a group-in-residence	10,000
 <b>Iowa State University of Science</b>	
Contribution toward fellowship operations	19,500
 <b>University of Iowa</b>	
Establishment of a Center for the New Performing Arts	12,500
 <b>Kansas</b>	
<b>University of Kansas</b>	
Contribution toward fellowship operations	3,000

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## UNITED STATES (*cont'd*)

### *Kentucky*

#### University of Kentucky

Contribution toward fellowship operations 750

### *Louisiana*

#### Free Southern Theater

Support of free public performances 15,000

#### New Orleans Philharmonic Symphony Society

Composer-in-residence 8,500

#### Louisiana State University

Contribution toward fellowship operations 1,500

#### Tulane University

Contribution toward fellowship operations 4,500

Latin American legal and social science research and training 6,927

### *Maine*

#### Bowdoin College

Recruitment and assistance of talented minority-group students 13,200

### *Maryland*

#### Human Relations Task Force

Operation of a pilot project of counseling and placement services 23,500

#### Johns Hopkins University

Contribution toward fellowship operations 8,250

Graduate training program in international relations for minority-group students 10,300

Research in schistosomiasis 3,707

Research in the School of Advanced International Studies 44,043

Seminars for young diplomats 10,392

#### University of Maryland

Contribution toward fellowship operations 1,500

### *Massachusetts*

#### American Academy of Arts and Sciences

Assembly on university goals and governance 100,000

#### Berkshire Theatre Festival

Theatre programs in the New England area 90,000

#### Boston College

Health careers training for the disadvantaged 14,998

#### Boston Symphony Orchestra

Fellowship and scholarship program of the Berkshire Music Center 40,000

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## **UNITED STATES (*cont'd*)**

### **Boston University**

Contribution toward fellowship operations 6,750

### **Brandeis University**

Faculty appointment in the Department of Theatre Arts 2,000

### **Harvard University**

Contribution toward fellowship operations 18,750

Family planning program in Chile 25,000

Fixed equipment and installations in the Laboratory of Human Reproduction and Reproductive Biology 500,000

Health Careers Summer Program for minority-group students 50,000

International legal studies and advanced training for Africans 28,044

Leadership training program in the Graduate School of Education 35,000

Programs in community health 100,000

Research on the biology of the corn plant 8,895

Research on racial attitudes in the United States 32,967

Research and training in radiobiology 27,953

Study on the impact of European culture in Africa and Asia 12,000

Toward costs of the Collective Negotiations Institute 10,000

### **Independent Schools Talent Search Program**

ABC summer programs 150,000

### **Massachusetts Institute of Technology**

Contribution toward fellowship operations 12,750

### **New England Community Development Corporation**

Business ownership program in a ghetto area 30,000

### **New England Conservatory**

Preparation of a biography of Alban Berg 5,100

### **New England Hospital**

Health careers training for the disadvantaged 382,000

### **Pathfinder Fund**

Partial support for a visiting lecturer at Makerere University College Faculty of Medicine 12,500

### **Smith College**

Visiting appointment in economics at the Atlanta University Center 374

### **Theatre Company of Boston**

Toward presentation of two productions in cooperation with the New African Theater 16,520

### **Williams College**

Activities of the Center for Environmental Studies 45,000

Program in music education and performance 6,500

University development assignments 50,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **UNITED STATES (cont'd)**

#### *Michigan*

##### **Higher Education Opportunities Committee**

Student counseling and college assistance programs in Detroit's inner-city schools                    20,000

##### **Michigan State University**

Contribution toward fellowship operations	24,000
Appointment of a research assistant to the University of Valle	(211)
Economic research in Tanzania	(1,100)

##### **University of Michigan**

Contribution toward fellowship operations	13,500
Support of overseas faculty assignments	45,974

##### **Wayne State University**

Contribution toward fellowship operations	6,750
Individual project on foreign policies of Caribbean states	5,550

#### *Minnesota*

##### **Carleton College**

Discovery and support of talented minority-group students	81,973
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##### **Minneapolis Public Schools Special School District No. 1**

Expansion of its community-school centers program	19,733
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##### **University of Minnesota**

Contribution toward fellowship operations	13,500
Advanced creative work in theatre	127,500
Preparation of a book on grain storage	(3,354)
Research in applied crop physiology and breeding of small grains	25,000
Research on frost resistance in basic food crops	11,906
Research in India by a graduate student	5,800
Research project on agricultural growth in an international perspective	15,000
Summer program for disadvantaged graduate students	18,000
Support of overseas faculty assignments	27,283

#### *Mississippi*

##### **Gulf Coast Research Laboratory**

Estuarine ponds studies	7,180
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##### **Mississippi State University**

Contribution toward fellowship operations	750
Travel by an Indian scientist to seed centers in the United States	500

##### **University of Mississippi**

Family planning program	33,333
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### *Missouri*

Board of Education of the City of St. Louis  
 School-community programs in ghetto areas 190,000

St. Louis University  
 Contribution toward fellowship operations 1,500  
 Development of the Anemia and Malnutrition Research Center,  
 Chiang Mai, Thailand 13,782

University of Missouri  
 Contribution toward fellowship operations 4,500

Washington University  
 Contribution toward fellowship operations 3,000  
 Work-study program for high school graduates 39,606

*Nebraska*  
 Creighton University  
 Conference on teaching family planning and population dynamics 6,737

University of Nebraska  
 Contribution toward fellowship operations 1,500  
 Research on modification of tropical corn germplasm 12,500  
 Research on sorghum improvement 57,476  
 Visits to rice and sorghum centers in the Far East by a faculty member 1,950

*New Hampshire*  
 American Universities Field Staff  
 Conference on the humanities, arts, and letters 12,000

Dartmouth College  
 ABC programs in public high schools 19,000  
 Research project on African theatre 1,212  
 Research by a faculty member on the impact of new rice strains 9,000

*New Jersey*  
 Princeton University  
 Contribution toward fellowship operations 1,500  
 Assignment of scholars to universities abroad 35,067  
 Expenses of participants in a population conference (427)  
 Research in ecology 6,555  
 Research on the economic effects of patent protection in developing countries (123)  
 Research project in 17th-century Russian history 14,300  
 Support of the Princeton Cooperative Schools Program 88,000

Rutgers, the State University  
 Contribution toward fellowship operations 3,000  
 Musical research project 3,452

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **UNITED STATES (*cont'd*)**

<b>Woodrow Wilson National Fellowship Foundation</b>	
Graduate fellowship program for Negro veterans	144,490
Teaching internship program	65,366
 <b>New Mexico</b>	
<b>Opera Association of New Mexico</b>	
Apprentice Program for Young Singers	20,000
 <b>New York</b>	
<b>Actors Experimental Unit</b>	
Individual creative project	12,000
 <b>Agribusiness Council</b>	
Study of food grain problems in Pakistan	20,000
 <b>Albarwild Theatre Arts</b>	
Playwright training and production of new plays	5,000
 <b>American Place Theatre</b>	
Support of its activities	45,000
 <b>Associated Councils of the Arts</b>	
Research on the relationship of government to the arts	11,000
 <b>Association of American Dance Companies</b>	
Administrative costs	9,500
 <b>Ballet Theatre Foundation</b>	
Development program for young choreographers	4,000
 <b>Briarcliff College</b>	
Individual project on the summer theatre movement	3,225
 <b>Brooklyn College of the City University of New York</b>	
Individual project on African theatre	4,000
Training program for theatre technicians	25,000
 <b>Brooklyn Institute of Arts and Sciences</b>	
Dance and theatre programs at the Academy of Music	25,000
Toward activities of resident performing companies	75,000
 <b>Business Committee for the Arts</b>	
Development of support for the arts	75,000
 <b>Carnegie Endowment for International Peace</b>	
Training program for foreign service officers	249,999
 <b>Catholic Relief Services — United States Catholic Conference</b>	
Establishment of a model farm project in Brazil	10,000

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## UNITED STATES (*cont'd*)

### Columbia University

Contribution toward fellowship operations	5,250
Comparative study of libraries	13,000
Costs in connection with a visiting professorship at the University College in Tanzania	110
Health services training program for Urban League staff members	(2,437)
Individual study project in mathematics	3,460
Preparation of the memoirs of a retired Foundation officer	10,663
Program in the Graduate School of Journalism on urban racial problems	65,800
Survey on environmental pollution	25,000
Urban planning project in Harlem	15,000
Toward costs of publishing a thesis	(102)

### Cornell University

Contribution toward fellowship operations	34,500
Cooperation with the University of the Philippines in the humanities and social sciences	45,538
Development of a family planning clinic	312,000
New York State College of Agriculture training program in plant breeding	2,005
Political science training for a Thai scholar	(245)
Purchase of an automobile for the use of visiting professors at the University of the Philippines	(59)
Travel of four faculty members of the Division of Biological Sciences to the University of Valle	2,480
Support for its 1969 Summer Work Scholarship Program	10,000

### Cultural Council Foundation

Activities of El Nuevo Teatro Pobre de América	13,500
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### Education and World Affairs

Study of talent migration	64,742
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### *Encyclopaedia of the Social Sciences*

(4,533)

### Fordham University

Contribution toward fellowship operations	1,500
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### Institute of International Education

International education program	60,000
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### Juilliard School of Music

Support of the American Opera Center for Advanced Training	175,000
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### LaMama Experimental Theatre Club

Support for a playwright	4,830
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### Manhattan School of Music

Performances of new works by the Dance Theater Workshop	12,400
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

Metropolitan Applied Research Center	
Study of urban ghettos	312,500
NAACP Legal Defense and Educational Fund	
Development of its Community Service Division	102,400
NAACP Special Contribution Fund	
Support of the NAACP Leadership Development Program	272,285
National Educational Television and Radio Center	
Programs on regional theatre	50,000
National Urban League	
New Thrust Program	415,774
Near East Foundation	
Survey of the livestock industry in West Africa	5,844
New Lafayette Theatre and Workshop	
Support for its activities	60,000
Support for a playwright-in-residence	5,000
New School for Social Research	
Completion of a work on the Western humanistic tradition	10,000
New York Pro Musica Antiqua	
Presentations of music composed before 1700	2,250
New York Shakespeare Festival	
Activities of the Public Theater	87,500
New York University	
Professional training and creative work in theatre arts	130,000
Individual graduate work in school administration	10,500
New York University Medical Center	
Production of an English-Spanish correlation index to biomedical library classification schemes	(2,554)
New York Urban League	
Program of street workers for problem-area high schools	156,000
New York Zoological Society	
Research and scientific equipment	(106)
Paper Bag Players	
Preparation of programs for ghetto children	20,000
Planned Parenthood of New York City	
Development of a family planning training center	61,500
Planned Parenthood Federation of America	
Toward costs of its Center for Family Planning Program Development	187,500

# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## UNITED STATES (*cont'd*)

### Population Council

Fellowship program for technical assistance personnel	175,000
Support of its Technical Assistance Division	300,000

### Repertory Theater of Lincoln Center

Activities of the Forum theatre	150,000
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### Research Foundation of the State University of New York

Contribution toward fellowship operations	3,000
Training grants for foreign nurse-midwives	75,962

### Sarah Lawrence College

Investigation of a new education program for disadvantaged students	(1,147)
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### Society for Strings

Summer program for string teachers	7,590
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### State University of New York at Buffalo

Individual research project on Nigerian policy	3,070
Research project by a Nigerian scholar	4,550
Completion of doctoral dissertation by a University of Ibadan faculty member	2,400

### Syracuse University

Contribution toward fellowship operations	4,500
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### Theater in the Street

Free outdoor dramatic productions	12,500
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### University of Buffalo Foundation

Support of the Creative Music Associates	50,963
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### University of Rochester

Contribution toward fellowship operations	1,500
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### Volunteers for International Technical Assistance

Cooperative program in the Philippines	25,000
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### Workshop in Business Opportunities

Preparation of instructional materials	25,000
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### Conferences

Conferences held on community medicine, pest control, problems of rural poverty and equal opportunity, quality of the human environment, and universities in crisis	17,476
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### Rockefeller Archives and Research Center

Toward costs of establishing the Center	36,447
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# 1969 PAYMENTS ON PROGRAMS AND GRANTS

## UNITED STATES (*cont'd*)

Rockefeller Foundation — New York program costs	
Medical and Natural Sciences	472,675
Agricultural Sciences	449,459
Humanities and Social Sciences	459,702
Arts	150,934
Inter-Program	884,109
 <i>North Carolina</i>	
College of the Albemarle	
Experimental project in education and development in a depressed rural area	87,825
Duke University	
Contribution toward fellowship operations	3,750
Visiting faculty assignments overseas	64,282
North Carolina School of the Arts	
Establishment of the Piedmont Chamber Players	66,000
Expenses of members of the performing arts departments	750
North Carolina State University	
Contribution toward fellowship operations	12,750
Plant collecting project in South America	(1,289)
Support of the research project "Evolutionary Pathways in <i>Tripsacum</i> "	10,000
Sencland Community Action	
Development costs for a new farmers' cooperative	15,000
University of North Carolina	
Contribution toward fellowship operations	2,250
Toward operating expenses of a center for research in reproductive biology	16,050
North Dakota	
North Dakota State University	
Contribution toward fellowship operations	10,500
Ohio	
Antioch College	
Discovery and support of talented minority-group students	17,116
Case Western Reserve University	
Contribution toward fellowship operations	4,500
Research on schistosomiasis	16,667
Teaching and research program in population	81,826
To enable an Egyptian specialist to study schistosomiasis in its School of Medicine	2,400
Cleveland Institute of Music	
Toward establishment of a Mixed Media Center	10,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### **UNITED STATES (*cont'd*)**

#### **Cleveland Public Schools**

Community activities in the Glenville area 15,155

#### **Miami University**

Visiting faculty member at the University of Valle 2,075

#### **Musical Arts Association**

Composer-in-residence with the Cleveland Orchestra 8,600

#### **Oberlin College**

Discovery and support of talented minority-group students 95,118

Summer workshops for public school music teachers 104,513

#### **Ohio State University**

Contribution toward fellowship operations 4,500

#### **Ohio University**

Contribution toward fellowship operations 1,500

#### **University of Akron**

Research on the development of molluscicide formulations 5,610

#### **Oklahoma**

##### **Oklahoma State University**

Contribution toward fellowship operations 1,500

Research on the nutrition of ruminant animals (372)

#### **Oregon**

##### **Oregon State University**

Contribution toward fellowship operations 9,000

Study project in weed control for a Turkish Ph.D. candidate 635

#### **Reed College**

Discovery and support of talented minority-group students 89,733

#### **University of Oregon**

Contribution toward fellowship operations 1,500

#### **Pennsylvania**

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

Research in freshwater ecology 69,532

Travel of a staff member to Thailand 4,650

#### **American Forage and Grassland Council**

Attendance of American scientists at an international congress 7,000

#### **American Friends Service Committee**

Overseas family planning programs 126,515

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (cont'd)

<b>Bryn Mawr College</b>		
Contribution toward fellowship operations		1,500
<b>Carnegie-Mellon University</b>		
Summer intern program for selected acting students		3,160
<b>Friends Neighborhood Guild</b>		
Counseling and assistance for youth in disadvantaged neighborhoods		5,413
<b>Haverford College</b>		
Post-baccalaureate program		18,250
<b>Jefferson Medical College of Philadelphia</b>		
Contribution toward fellowship operations		750
<b>Lincoln University</b>		
Discovery and support of talented disadvantaged students		60,000
Special program for entering students		31,500
<b>OIC (Opportunities Industrialization Center) Institute</b>		
Managerial training program		114,858
<b>Pennsylvania State University</b>		
Contribution toward fellowship operations		1,500
Research on goals of disadvantaged youth		(2,061)
<b>Philadelphia Public Schools</b>		
Internship program for minority-group school administrators		65,000
<b>School District of Philadelphia</b>		
Support for school-community programs		71,500
<b>Swarthmore College</b>		
Discovery and support of talented minority-group students		42,000
<b>University of Pennsylvania</b>		
Contribution toward fellowship operations		7,500
Attendance of an agricultural scientist at a professional meeting		945
Summer science program for high school students and teachers		25,000
Maintenance of the Penn Contemporary Players as a group-in-residence		16,650
<b>University of Pittsburgh</b>		
Contribution toward fellowship operations		8,250
English language program at universities in Bangkok		57,500
Training in demographic economics for a Thai scholar		(506)
Research and training in radiation health		50,000
<b>Villanova University</b>		
Playwright training		8,600

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### *Puerto Rico*

##### University of Puerto Rico

Contribution toward fellowship operations 1,500

#### *Tennessee*

##### Fisk University

Program in sociology in cooperation with Vanderbilt University 6,189

#### University of Tennessee

Contribution toward fellowship operations 1,500

Exchange program with the Faculty of Medicine at the University of Valle 55,000

#### Vanderbilt University

Contribution toward fellowship operations 3,000

Development of community support of the arts in Nashville 25,000

Graduate training program in economics and business administration 3,478

Student assistance program 106,000

#### *Texas*

##### Baylor University

Family planning program in its College of Medicine 93,000

##### Houston Baptist College

Scholarships for nursing candidates 9,000

##### Rice University

Reproduction of a dissertation on the Kenyan coffee industry 364

##### Southern Methodist University

Contribution toward fellowship operations 1,500

Research on production functions and income distribution in agriculture and industry 8,000

##### Texas A & M University

Contribution toward fellowship operations 3,750

Research and training in tropical veterinary medicine 60,147

##### Texas Technological College

Seminars on arid-lands studies by a visiting scholar 583

#### University of Texas

Contribution toward fellowship operations 1,500

Completion of a documentary history of Mexico 4,500

#### *Utah*

##### Utah State University

Contribution toward fellowship operations 6,000

## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### *University of Utah*

Dance training for boys	7,500
Modern dance repertory company	100,000

#### *Vermont*

##### **Marlboro School of Music**

Contemporary music program	16,317
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#### *Virginia*

##### **University of Virginia**

Overseas faculty assignments	43,494
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#### **Virginia Polytechnic Institute**

Contribution toward fellowship operations	3,750
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#### *Washington*

##### **Allied Arts Foundation**

Individual music project	8,000
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#### **University of Washington**

Contribution toward fellowship operations	3,000
Activities of the Contemporary Performing Group	57,567
Actor training program with the Seattle Repertory Theatre	21,500
Development of a Division of Family Planning and Education	79,416
Guest directors program at the School of Drama	5,000
Training for staff members of the School of Fisheries, Catholic University of Valparaiso, Chile	6,530

#### **Washington State University**

Contribution toward fellowship operations	1,500
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#### **Western Washington State College**

Educational program for disadvantaged junior high school students	44,795
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#### *West Virginia*

##### **West Virginia University**

Contribution toward fellowship operations	750
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#### **West Virginia University Foundation**

Computer-based bibliography of agricultural sciences in East Africa	10,000
Feasibility study for a development program	8,600

#### *Wisconsin*

##### **Agronomic Science Foundation**

Attendance of two Colombian scientists at professional meetings in the United States	(60)
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#### **Marquette University**

Contribution toward fellowship operations	750
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## 1969 PAYMENTS ON PROGRAMS AND GRANTS

### UNITED STATES (*cont'd*)

#### University of Wisconsin

Contribution toward fellowship operations	24,000
Economics research by a Philippine scholar	13,000
Follow-up program of its Summer Laboratory School	14,397
Individual study project on political violence	8,600
Performances of new works by the Milwaukee Symphony Orchestra	4,000
Research on the problems of university government by a faculty member	13,000
Research on international implications of weather control	2,000
Research on the social implications of disease control	42,924
Research and training in the breeding, genetics, and pathology of the potato	49,631
Residence for a four-week period of the Dance Theater Workshop	8,370
Toward research on economic and social implications of disease control in St. Lucia, West Indies	25,000
Visiting faculty assignments in Africa, Asia, and Latin America	32,500
Visiting faculty assistance in communications at the Graduate School of the National School of Agriculture of Mexico	25,000

#### *United States — General*

Fellowships, scholarships, and travel grants to individuals	94,120
Support of work in the creative arts	308,005

#### URUGUAY

Fellowships and scholarships for individuals	12,776
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#### VENEZUELA

Travel grants to individuals	675
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**TOTAL — 1969 Net Payments on Programs and Grants** \$ 36,013,197

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