grants of \$400,000 and \$300,000, respectively, to these institutions in 1956.

The appropriation of \$700,000 to strengthen facilities and organizations in Washington, D.C., concerned with the reception of foreign leaders, scholars, and students will be divided as follows: \$500,000 will be used for the purchase and furnishing of a large estate, Meridian House, as headquarters for the Washington International Center, and \$200,000 will assist agencies receiving nongovernmental visitors.

The Congress for Cultural Freedom, a world-wide organization of scientists, philosophers, and writers, received \$750,000 to support for 3 years its program of international conferences, study groups, and exchange in Europe, Asia, Africa, and the Americas. The foundation made a grant of \$500,000 to the congress in 1957.

The Pakistani government's pilot centers, one in West Pakistan and one in East Pakistan, will develop and demonstrate efficient small industries based on rural resources and skills. The new grant, which follows an earlier grant to the Stanford Research Institute to help plan the centers, provides for continuation of Stanford's advisory services and for equipment and training for Pakistani staff members.

U.S. Scientists Participate in International Space Symposium

Approximately 65 United States scientists participated in the first International Space Science Symposium that took place in Nice, France, 11–15 January under the auspices of COSPAR, the Committee on Space Research of the International Council of Scientific Unions. This country's participation in the symposium was coordinated by the Space Science Board of the National Academy of Sciences, which is the U.S. member of COSPAR. Scientists from universities, government laboratories, and private research organizations delivered 47 papers.

The symposium dealt with all scientific problems specifically connected with space science. Subject matter of the papers ranged from the earth's atmosphere to the possibilities of life on other planets.

A total of some 100 papers from nine countries were presented, and more than 250 persons from at least 17 countries participated in the meeting. Countries represented included Argentina, Australia, Belgium, Canada,

France, the German Federal Republic, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, China (Taiwan), the Union of South Africa, the U.S.S.R., the United Kingdom, and the United States.

COSPAR was established in October 1958 to coordinate scientific research internationally in the field of rockets and satellites. National membership is open to all national scientific institutions adhering to ICSU that are actively engaged in space research. Nine International Scientific Unions also participate in COSPAR.

Virology Conference To Have Outstanding Participants

A conference on Perspectives in Virology will be held in New York at the Park Sheraton Hotel, 25–26 January. Symposium participants will include public health administrators and heads of schools of public health from every section of the United States and from Europe, Africa, Southeast Asia, Japan, South America, and Australia. The public health authorities are expected to make up more than a quarter of the invited audience of 125.

The list of foreign visitors to the meeting includes Alick Isaacs of the National Institute for Medical Research, London, who will report on the first antiviral substance to be found in human body cells, and Gerhard Schramm of the University of Tübingen, Germany, who will report on the transformation of viruses from one type to another. Seven Nobel Prize winners will take part in the symposium: John P. Enders, Harvard Medical School; Severo Ochoa, New York University; Frederic C. Robbins, Western Reserve University; Wendell M. Stanley, University of California; Max Theiler, Rockefeller Foundation; Sellman A. Waksman, Institute of Microbiology, Rutgers University; and Thomas Weller, Harvard School of Public Health.

The symposium is the second of a biennial series. The first meeting, held in February 1958, marked out several new areas for laboratory exploration. It also stimulated a new awareness, at the state and local levels, of the significance of work now going on in the field and led to expanded virus research programs in cancer and childhood diseases.

Gustav Stern, philanthropist and retired industrialist of New York, is the sponsor of the symposium. Stern also was responsible for the 1958 meeting

and for two earlier meetings, on psittacosis, a virus disease of birds to which human beings are susceptible. Director of the symposium is Morris Pollard, professor of Preventive Medicine and Public Health at the University of Texas, Medical Branch, Galveston.

Graduate Fellowships Awarded under Education Act

The U.S. Office of Education has announced approval of 406 programs of graduate study involving 1500 3-year fellowships authorized by the National Defense Education Act. The fellowship awards, provided under Title IV of the National Defense Education Act, are for study at 136 graduate schools during the 1960–61 academic year. One thousand graduate students are already working under National Defense Fellowships that were awarded last May. A total of 5500 3-year fellowships are authorized under the Act over a 4-year period.

The programs that have just been announced were selected from 918 proposals submitted by 155 institutions which requested 5370 fellowships. A 12-member advisory committee of educators from colleges and universities and a panel of five consultants from graduate schools reviewed the proposals and made recommendations. All the approved programs lead to the doctoral degree and, as required by the act, either establish new or expand existing graduate facilities.

Most of the 123 institutions that participated in the graduate fellowship program last year received additional fellowships. Of the 406 programs just announced, 202 include new fellowship allotments for programs approved a year ago.

The 136 participating graduate schools will receive up to \$2500 per year for the cost of educating each fellow. The fellow will receive \$2000 for the first year of study, \$2200 for the second, and \$2400 for the third, together with an allowance of \$400 for each dependent.

Graduate schools with approved programs will submit student applications for fellowships to the Commissioner of Education by 5 March. The awards will be announced shortly thereafter. All but 150 of the fellowships will go to students who have had no more than one semester of graduate study in the field in which they intend to earn their doctoral degree.

The graduate fellowship program is headed by Henry Bent, who is on leave from his position as dean of the graduate faculty and professor of chemistry at the University of Missouri.

News Briefs

Radiobiology. The third Australasian Conference on Radiobiology will take place at the University of Sydney in Australia, 15-18 August 1960. Titles of papers to be presented must be submitted before the end of February 1960 to the convener, Dr. Peter Ilbery, Department of Preventive Medicine, University of Sydney, New South Wales. Summaries (250 words) must be sent in by the end of March. Papers should be of radiobiological interest but they may cover the wide fields of biology, biochemistry, biophysics, genetics, immunology, radiation protection and health physics, and so forth.

Electron microscopy. Under the auspices of the International Federation of Electron Microscope Societies, the Nederlandse Vereniging voor Electronenmicroscopie is organizing a European Regional Conference on Electron Microscopy. The conference is to be held at Delft, 28 August-3 September. Information may be obtained from the secretary, A. L. Houwink, Julianalaan 67 A, Delft, Holland.

Physics students. The first student section of the American Institute of Physics composed entirely of women has been established at Smith College. The purpose of the sections is to encourage the study of physics and to develop professional pride and responsibility in those students who elect to become physicists. Typically, the sections sponsor talks in physics and other sciences, hold special meetings, and encourage the discussion of the role and scope of physics in our society.

Thomas C. Mendenhall, president of Smith, said: "We hope that this participation of our undergraduates in the new A.I.P. student section will help to explode the myth that there is little interest in studying physics among college women."

Indirect cost policy. In connection with its programs for the support of basic research, the National Science Foundation has followed the policy of permitting institutions to apply for and receive, as an indirect cost allowance, up to 15 percent of the total direct costs involved in approved grant proposals. Pending completion of a study of the entire problem of indirect costs, the foundation has announced that, effective 1 January 1960, it will permit institutions to request up to 20 percent of total direct costs as the allowance for indirect costs in approved research proposals.

Grants, Fellowships and Awards

Educational media. A new smallgrants program to encourage graduate students and teachers to conduct research in educational uses of mass media in elementary and secondary schools, colleges, and universities has been announced by the U.S. Office of Education. The initial amount available will come from a total of \$300,000 to be used for research grants between now and 30 June 1960 under Title VII of the National Defense Education Act.

The new program will provide an unusual opportunity for promising young researchers to engage in a year of exploratory studies. It is hoped that these studies will lead to projects of greater scope. The researcher may study methods for utilizing all or any of the media. These include motionpicture films, television, radio, recordings, filmstrips, language laboratories, and teaching machines. Applications for grants not to exceed \$2500 should be filed before 1 February with the Educational Media Branch, Office of Education, U.S. Department of Health, Education, and Welfare, Washington 25, D.C.

General. The American Academy of Arts and Sciences invites applications for grants from its research funds. Awards are made in support of research in any field of science whatsoever, in amounts that ordinarily do not exceed \$1500. Applications for grants to be made in the spring should be filed by 1 February on forms that may be obtained from: The Chairman, Committees on Research Funds, American Academy of Arts and Sciences, 280 Newton St., Brookline 46, Mass.

Special consideration will be given to projects on new frontiers of science; to those that lie between, or include, two or more of the classical fields; and to those proposed by investigators who may be on the threshold of investigational careers or who are handicapped by inadequate resources and facilities. The committees do not provide fellowship or scholarship support, nor do they ordinarily approve grants for research the results of which constitute partial fulfillment of requirements for an academic degree.

Medical journalism. The Albert and Mary Lasker Foundation has announced the 11th annual Albert Lasker Medical Journalism Awards for outstanding medical news reporting in newspapers, magazines, and broadcasting during 1959. Stories, articles, and programs which dealt with the major killing or crippling diseases, and with public health problems in these same areas, should be submitted to the foundation (Chrysler Building, New York 17, N.Y.) before 8 February.

Each award includes an honorarium of \$2500, an engraved citation, and a silver statuette of the Winged Victory of Samothrace (which symbolizes victory over death and disease). Three winners are customarily chosen each year on the recommendation of an advisory board of physicians and journal-

Areas in which the foundation seeks especially to foster public understanding are heart disease, cancer, mental illness, arthritis, and neurological disease. Articles and scripts should demonstrate skill in arousing and holding the average person's interest. They will also be judged on the basis of accuracy, significance, timeliness, and proficiency in the transmission of technical information in lay language.

Miniaturization. Nominations for the 1959 Miniaturization Award competition will close on 20 January. The award is presented annually in recognition of outstanding contributions to the advancement of the field of miniaturization. In addition to the top award, ten certificates of excellence are given each year. The competition was established in 1957 by Miniature Precision Bearings, Inc.

Participants may be individuals, companies, or organizations that have (i) broadened the horizons of miniaturization by creating better understanding and use of miniaturization through education, research, engineering, or standardization, or (ii) that have developed products, components, or assemblies which show ingenuity in the solution of miniaturization problems.

Selection is made by an independent committee of miniaturization experts representing industry, government, and education. Entries should be sent to the Miniaturization Awards Committee, Box 604, Keene, N.H.