the Royal Society as a completely independent body governed by its president and council and, unlike the French Academy, without any subsidy from the government. The names of some of its 17th-century presidents—such as Pepys and John Evelyn—show that the fellowship then included amateurs. Their interest and financial support were of great help to the society in those difficult early days. The amateurs continued to have a considerable influence on the affairs of the society until 1847, but since that date election to membership has been dependent on scientific merit and is a much-sought privilege.

As today's president, Sir Cyril Hinshelwood, has said, "the choice of its Fellows is in many ways the most important of the activities of the Society, just as Nature places the perpetuation of the species as a first charge on most of her business." In 1900, 15 fellows were elected each year, but the number has now been raised to 25. In 1958 there were 655 fellows, including 61 foreign members.

Contributions to Progress in Science

In looking back over the history of science since 1660 the society has every reason to be proud of the contribution of its members, particularly of the part they have played in many of the major episodes of scientific progress when some new break-through has changed men's outlook.

The names of Newton, Dalton, Faraday, Darwin, J. J. Thomson, and Rutherford are all associated with milestones in the progress of ideas. Less spectacular but perhaps no less important has been the steady contribution of the society throughout its life to the growing stream of scientific knowledge. And here it has played a notable part with its publications. The *Philosophical Transactions*, which was started in 1665, is the oldest of the existing scientific journals, and since 1832 an even larger volume of papers has been published in the *Proceedings*, one section of which appears every two weeks. The meetings of the society are devoted mainly to discussions of the papers submitted for publication and to symposia on topics of current interest.

Thanks to the bequests it has received and to regular government grants which the society is entrusted to administer, it is able to support the scientific publications of numerous societies, to endow a number of research appointments, and to make grants to support the work of scientific investigators. The administration of its funds and of its other activities is in the hands of a number of expert committees of the fellows, who deal with problems arising in their particular spheres and give advice to the government, when, as often happens, such advice is requested.

In the reign of Queen Anne the society was made responsible for supervising the work of the Royal Greenwich Observatory, a duty which it now shares with the Royal Astronomical Society; it also appoints most of the members of the governing body of Britain's National Physical Laboratory and has representatives on about 100 other public bodies. Recently it administered a large government grant in support of the British activities during the International Geophysical Year, including an expedition to Antarctica.

In addition, it carries responsibility for British participation in the field of international relations in science through its membership in various international unions which are members of the International Council of Scientific Unions. It also provides advice to the government on the natural sciences program for the United Nations' Educational, Scientific, and Cultural Organization.

However, in the words of the president, "Whatever the importance of its corporate activities, the most significant contribution it makes is simply the sum total of innumerable individual contributions made in very varied ways by the Fellows in their own right. They are, of course, free and independent agents, but the Society provides them with the means of publication, on occasion with financial help, and with an elaborate and sensitive mechanism for consultation and exchange of views on every kind of scientific matter. It constitutes in a way a kind of central nervous system of science in Britain."

The society's tercentenary celebrations will occupy a two-week period, starting 18 July. The opening ceremony and the president's tercentenary address will be in the Royal Albert Hall, London. The days that follow will be devoted to scientific lectures by a number of fellows and to social gatherings and visits to Oxford and Cambridge and other centers of interest. The celebrations will be attended not only by the fellows and foreign members but by delegates from national academies of science and from universities throughout the world.

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Royal Society of London,
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Ford Foundation Aids New French Center for Human Sciences

The Ford Foundation has announced an appropriation of $1 million to strengthen the facilities and programs of a new Center for the Human Sciences being established in Paris. In addition to this appropriation in the social sciences, the foundation has awarded two grants to stimulate international cooperation in the natural sciences: $500,000 to the European Nuclear Research Center (CERN), Geneva, and $300,000 to Niels Bohr's Institute for Theoretical Physics, Copenhagen.

These actions were among several announced by the foundation to promote international understanding and to assist educational and research institutions in Europe, Asia, and the Near East. Others included: a $700,000 appropriation to expand facilities for receiving foreign visitors in Washington, D.C.; a grant of $750,000 to the Congress for Cultural Freedom, Paris, for international activities; and a $600,000 grant to the government of Pakistan for two pilot centers to develop rural industries.

French Center Described

Shepard Stone, director of the foundation's International Affairs Program, pointed out that the action of French authorities in establishing a new Center for Human Sciences in Paris reflects growing French interest in the social sciences. The center will group together institutes in international relations, anthropology, sociology, psychology, economics, geography, social mathematics, and statistics.

The French Government has budgeted $2 million to build the center and is providing additional funds for its operation and development. The Ford appropriation will make it possible for the center to draw on American and other foreign experts in developing its program, will help expand the center's library resources, and will finance fellowships for the exchange of research scholars with other countries.

The grant to CERN, the nuclear-research center supported by 12 European governments, will enable scientists, particularly from the United States and Asian countries, to participate in the high-energy experimental work at Geneva. The grant to the Institute for Theoretical Physics in Copenhagen will make possible an increase in the number of foreign scientists participating in its program. The foundation made

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.