systems. Robert R. Gilruth is the center's assistant director for manned satellites. At present he heads the Mercury manned space flight project. Michael J. Vaccaro, formerly assistant head of the administrative management office and personnel director at the Lewis Research Center, Cleveland, Ohio, has been appointed business manager. The head of technical services has not been announced.

News Briefs

The United States signed agreements this month with Great Britain and France providing for cooperation in the development of atomic weapons and nuclear-powered submarines. Under the provisions of the plan France will be able to buy enriched uranium for power plants. The separate U.S.-British pact will provide for exchange of designs for nuclear weapons, fissionable material for making weapons, and information on the construction of nuclear-powered submarines.

One of the principal objectives of the agreement is to help France in the development of an atomic submarine. It is expected that the enriched uranium will be used primarily for fueling a landbased prototype of a reactor for a French atomic submarine.

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According to a report in the New York *Times*, a special panel set up by the President's science advisory committee will report in the near future on improved methods for detecting earth-quakes. The group, the panel on seismic improvement, was set up partly to guide United States policy in the Geneva talks on banning nuclear tests. Some preliminary reports of the group were made public at the annual meeting of the American Geophysical Union.

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The Engineers Joint Council has become the sponsor for the United States Committee of the International Association for the Exchange of Students for Technical Experience, whose secretariat is now located in EJC's headquarters at 29 W. 39th St., New York 18, N.Y. The IAESTE is an international, nongovernmental, nonprofit organization founded at London University's Imperial College in 1948 for the purpose of providing onthe-job training in foreign industry for student engineers and scientists.

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The Public Health Service has embarked on a pilot study to record the heart sounds of 40,000 children from public elementary schools in Chicago. Purpose of the 18-month program is to test the practicability of mass screening as a method of finding individuals who should seek medical attention for possible heart defects. The heartbeat records will be made with specially constructed equipment, and each record will be listened to by at least two cardiologists.

The National Science Foundation's Office of Science Information Service has made a grant of \$7000 to help establish a high-energy physics newsletter. An equal amount was contributed to the project by the U.S.S.R. The newsletter is expected to begin publication shortly in Geneva, Switzerland, with the assistance of the International Union of Pure and Applied Physics and the European Organization for Nuclear Research (CERN). It will provide a rapid and economical means of exchange of information on nuclear structure, elementary particles, and accelerators among scientists of all nations.

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A \$50,000 grant to Yale University to seek a method of controlling space problems in large research libraries has been announced by Verner Clapp, president of the Council on Library Resources, Inc., of Washington, D.C., and James T. Babb, Yale librarian. The grant is one of a series given by the council since its establishment in 1956 through a grant from the Ford Foundation. The report of the Yale study, due in approximately 3 years, is expected to be of general use to libraries that are combatting the increasing problem of expanding collections and limited space. * *

The betatron that Enrico Fermi put into operation in 1950 at the University of Chicago is up for general sale. The asking price is \$100,000. "For sale" advertisements appeared in a number of the country's newspapers on 26 April, after negotiations conducted by the university with the Italian government came to a halt. University officials hope to find a home for the 200-ton machine in Western Europe or an underdeveloped country where it might be used as a training device. The betatron originally cost \$450,000.

Grants, Fellowships, and Awards

Essay competition. This year Research, published by Butterworth's Scientific Publications, London, England, is sponsoring the Waverley Gold Medal Essay Competition for the seventh year in succession. The competition is designed to encourage and promote improved and more effective reports of scientific and technical work.

The Waverley medal, together with $\pounds 100$, will be awarded for the best essay of about 3000 words that describes a

new scientific project or practical development, giving an outline of the scientific background, the experimental results, and the potential application of the project or process in industry. The essays will be judged for technical content by specialists in the subject, for clarity of presentation, and for style.

A second prize of $\pounds 50$ will be awarded and also a special prize of $\pounds 50$ for the best entry from a competitor under the age of 30 on 31 July 1959. If the first prize is awarded to a competitor under the age of 30, the special prize will go to the next best entry.

The competition is open only to persons engaged in scientific work from 1 January to 31 July 1959. All entries should be typewritten, double spaced, on one side of the paper only; diagrams and photographs may be included. All entries by overseas competitors must be submitted in English. Entries should be marked "under 30" if eligible for both sections of the competition. Names should not be written on the essays as they are not revealed to the judges. The name, present occupation, technical qualifications and age of the authorthe last only in the case of entries qualifying for the special prize-together with the title of the paper, should be written on a separate sheet and attached to the entry.

Entries should be posted to reach the Editor of *Research*, 4/5 Bell Yard, London, W.C.2, not later than 31 July. Entries will only be acknowledged if a stamped and addressed envelope for the purpose is enclosed.

History of science. The History of Science Society has announced this year's Ida and Henry Schuman Prize in the history of science. The award has been established by Henry and Ida Schuman of New York for an original prize essay in the history of science and its cultural influences. This competition is open to undergraduate and graduate students in any American or Canadian college, university, or institute of technology. Papers submitted for the prize competition should be approximately 5000 words in length, exclusive of footnotes, and thoroughly documented. It is hoped, that the prize-winning essay will be suitable for publication in Isis, the journal of the History of Science Society.

It is the wish of the donors that "History of Science and Its Cultural Influences" should be broadly interpreted. The papers—which should in each case be original contributions to learning may deal with the ideas and accomplishments of scientists in the past; they may trace the evolution of particular scientific concepts; or study the historical influences of one branch of science upon another. The phrase "cultural influences" is taken to include studies of the social and historical conditions that have influenced the growth of science, or the effects of scientific developments upon society in the realms of philosophy, religion, social thought, art and literature, economic progress, and so forth. Essays dealing with medical subjects are not acceptable, although papers dealing with the relations between medicine and the natural sciences will be welcomed.

Papers submitted for competition should be sent *before 1 July* to the chairman of the prize committee, Professor A. H. Dupree, Department of History, University of California, Berkeley 4, Calif.

Science teaching. The National Science Foundation has announced that proposals are now being accepted for the support of summer institutes in 1960 for the supplementary training of secondaryschool and college science and mathematics teachers and for college teachers of engineering. Proposals are also being accepted for summer institutes for staff members of technical curricula in junior colleges and technical institutes. Universities and colleges which wish to sponsor such institutes are invited to request information and the necessary forms from the Program Director for Summer Institutes, National Science Foundation, Washington 25, D.C. The deadline for the submission of proposals in final form is 1 August 1959.

Approximately 350 institutes are scheduled for the summer of 1959. They will be held in the District of Columbia, Puerto Rico, and all 50 states. The National Science Foundation expects to provide financial support for a similar number of summer institutes in 1960.

The specific objective of the institutes is to improve the subject-matter mastery of the participating teachers. Nearly all of the institutes are planned and conducted by colleges or universities, and they commonly last from 6 to 16 weeks. It is hoped that a considerable number of the institutes in 1960 will be specifically designed for teachers who have the capacity to benefit from additional training but who have meager backgrounds in subjects they are required to teach.

Foundation funds enable sponsoring colleges and universities to pay stipends to participating teachers, plus allowances for dependents and travel. The participants are exempt from payment of tuition and fees, since the foundation pays the principal operating costs of the institutes.

The number of participants varies from institute to institute, but averages about 50. Participants are chosen by the host institution in each case. Teachers submit their applications directly to the sponsoring institution, rather than to the foundation.

Scientists in the News

The \$2500 Albert Lasker Medical Journalism Awards for distinguished reporting of major developments in medical research and public health programs during 1958 have been presented to the following.

JOSEPH KAHN of the New York Post, for a series of articles on the controversy over contraceptive counseling in New York municipal hospitals, published from May to October 1958.

FRANCIS BELLO of *Fortune* magazine, for his article, "The murderous riddle of coronary disease," published in September 1958.

The radio-television program "Today," for its day-to-day coverage over the National Broadcasting Company television network of the significant events in public health and medical research during 1958, including its notable mental health program on the Central Islip State Hospital, New York, 8 October 1958.

AL WASSERMAN was given a special citation for his two programs on narcotics addiction, presented in the series, "The Twentieth Century," over the Columbia Broadcasting System television network, 30 November and 7 December 1958.

FRANCIS CRICK of the Medical Research Council Unit for Molecular Biology, Cavendish Laboratory, Cambridge, England, and visiting professor of chemistry at Harvard University, and JAMES WATSON, associate professor of biology at Harvard University, delivered the Massachusetts General Hospital's Warren Triennial Prize Lectures in Boston on 18 May.

EMA HOLECKOVA and MILENA RYCHLIKOVA of the Biological Institute at the Czechoslovak Academy of Sciences will be in this country for 6 months under an exchange agreement with the Czechoslovak Academy of Sciences and the Waldemar Medical Research Foundation of Port Washington, N.Y. They will study problems of tumor immunity and the pathophysiology of the host-tumor relationship in collaboration with the Waldemar staff.

WILLIAM J. ROBBINS, former director of the New York Botanical Garden, has been appointed executive officer of the American Philosophical Society. He succeeds LUTHER P. EISEN-HART, who retired on 1 May.

NORBERT WIENER, mathematician at Massachusetts Institute of Technology, has been appointed an institute professor. A member of the department of mathematics for 40 years, Wiener now becomes one of four institute professors whose advanced teaching and research are carried on without regard to departmental boundaries. Although his work in mathematics covers a wide range, Wiener is perhaps best known as the founder of cybernetics.

The annual science awards of the U.S. Naval Research Laboratory's branch of the Scientific Research Society of America were presented to the following NRL scientists.

JEROME KARLE, head of the electron diffraction section, and HERBERT HAUPTMAN, physicist, received the Pure Science Award for their work on a method for the direct determination of crystal structure from x-ray diffraction data.

JAMES A. MILLER, JR., professor of anatomy, and FAITH S. MILLER, instructor in anatomy, both at Emory University, Ga., have received the research prize of the Association of Southeastern Biologists.

LEONARD W. FROMM, Jr., head of the water reactors section of Argonne National Laboratory's Reactor Engineering Division, left 12 May for Norway to help a group of scientists put into operation the boiling heavy water reactor (HBWR) at Halden, Norway. He will spend 6 to 12 months on the project, investigating the performance of HBWR components and materials under a variety of operating conditions. He also will assist in specifying materials for the second reactor core. JAMES A. DESHONG, Jr., another Argonne engineer in Norway, has been working on the Halden reactor for the past 6 months. He has been preparing to run stability (safety) tests during start-up and initial operation of the Halden plant.

Five United States scientists left Washington on 10 May to spend a month in the Soviet Union surveying developments in endocrinology. The trip is sponsored by the Public Health Service's National Institute of Arthritis and Metabolic Diseases. A Russian team of three endocrinologists spent a month this spring visiting American research institutions for the same purpose.

The scientists are DeWITT STET-TEN, Jr., and J. E. RALL, both of the National Institute of Arthritis and Metabolic Diseases, Bethesda, Md.; DWIGHT J. INGLE of the Ben May Laboratory, University of Chicago; RACHMIEL LEVINE of Michael Reese Hospital and the University of Chicago; and EDWIN B. ASTWOOD of the New England Medical Center and Tufts Medical School, Boston.