this program. They will be permitted to apply the funds to their normal operating expenses in areas where aid is most needed. In the main, each school selected to receive this support will be granted two equal contributions during the 5-year interval, 1955 to 1959. Each school will receive during this period support ranging from $3000 to $15,000.

Because continuing expansion of facilities to meet growing college enrollments will be required during the next 5 years, the foundation has allocated funds to assist schools with their building programs. The foundation also intends to contribute funds to colleges and universities for the purchase of laboratory equipment.

The final portion of the brochure describes the foundation's program for encouraging higher education: scholarships, fellowships, and professorships; the Westinghouse Science Talent Search; the farm and home electric program (National Committee on Boys' and Girls' Club Work, Inc.); the science teachers' summer programs; the George Westinghouse award in engineering education; the Future Farmers of America Foundation, Inc.; the George Westinghouse gold medal award; and the metals research program at the Institute for Nuclear Studies–University of Chicago.

■ Academic courses leading to the degree of master of science and doctor of philosophy in the basic medical sciences of anatomy, microbiology, biological chemistry, pathology, pharmacology, and physiology, have been established at Hahnemann Medical College and Hospital of Philadelphia. The graduate program is intended for qualified graduates who are planning for a career in teaching and research. Information may be obtained from the chairman of the graduate committee, Prof. M. John Boyd, Hahnemann Medical College, 235 N. 15 St., Philadelphia 2, Pa.

■ The University of Tennessee Medical Unit's new $731,000 medical-surgical building was turned over to the university on 23 Aug. The 7-floor structure adds 40,000 square feet of floor space to the Memphis Medical Center. The building is south of Gailor Memorial Hospital; and the first four floors connect by corridors with the hospital.

■ A center for the study of fossil spores and pollen is being established by New York University this month. Made possible by grants from the Socony Mobil Oil Co. and the Texas Co., this is thought to be the first academic center of its kind in the Western Hemisphere. Brooks Ellis, who is chairman of the department of geology at the Graduate School of Arts and Science, has stated that the facilities will be used "to train graduate students in the technique, application, and solution of problems in petroleum geology through the analysis of spores and pollen."

Lawrence R. Wilson of the University of Massachusetts, an authority on spores and pollen, will make weekly journeys to New York from Amherst, Mass., during 1955–56 to lecture and to supervise the work of graduate students. The American Museum of Natural History's department of micropaleontology, which is headed by Ellis, will provide the laboratory and classroom space.

Grants, Fellowships, and Awards

■ The University of Michigan has announced how it will use a grant of $220,250 from the Ford Foundation. The grant is for the development and improvement of work in the behavioral sciences—psychology, sociology, anthropology, and aspects of political science and economics.

Terminal support for three research and training programs over a period of 3 years makes up $115,500 of the grant. Of this sum, $42,000 is for the Detroit Area Study, which is being administered by an interdepartmental faculty committee with Ronald Freedman as chairman. A study of political behavior under the direction of Samuel Eldersveld will receive $31,500. Research on the application of mathematics to the behavioral sciences, to be directed by C. H. Coombs, will receive $42,000. These projects were part of the program of research in individual behavior and human relations inaugurated with a $300,000 grant from the Ford Foundation in 1950.

Other uses of the Ford grant will be as follows: (i) $20,000 for 10 graduate fellowships in the behavioral sciences (each at $1000 a year for 2 years) to be administered by the School of Graduate Studies; (ii) $30,000 for support of a field research training program in anthropology for a period of 3 years under the direction of the department of anthropology; (iii) $42,000 to cover released time for research by the behavioral science faculty members and of the staff of the Institute for Social Research, to be administered by the School of Graduate Studies at the rate of $14,000 annually for 3 years; (iv) $12,750 for five stipends at the rate of $850 a year for 3 years to permit research training in social psychology; this will be administered by the committee for doctoral training program in social psychology of which T. M. Newcomb is chairman.

■ On behalf of the James Picker Foundation, the National Academy of Sciences–National Research Council has announced the continued availability of funds in support of radiological research. Applications are reviewed by the committee on radiology of the Division of Medical Sciences. Final determination of awards is made by the foundation upon recommendation of the committee.

The interests of the foundation are oriented toward, but not necessarily limited to, the diagnostic aspects of radiology. Awards are not restricted to citizens of the United States. Applications for the fiscal year 1956–57 *must be submitted on or before 1 Dec.* to the Division of Medical Sciences, National Academy of Sciences–National Research Council, 2101 Constitution Ave. NW, Washington 25, D.C.

Grants-in-aid are designed to encourage research offering promise of improvement in radiological methods of diagnosis or treatment of disease.

Grants for Scholars are a transitional form of support, designed to bridge the gap between the completion of fellowship training and the period when the young scientist has thoroughly demonstrated his competence as an independent investigator. A grant of $6000 per year will be made directly to the scholar's institution as a contribution toward his support, or his research, or both. Initial grants are limited to 1 year, but renewal may be recommended. Applications should be submitted by the institution on behalf of the candidate.

Fellowships in Radiological Research, available under the program of the Foundation, have been announced separately [*Science* **122**, (16 Sept. 1955)].

In the Laboratories

■ Effective 30 Nov., the Atomic Energy Commission will discontinue its program for the processing and distribution of cyclotron-produced radioisotopes because private industry appears to be prepared to assume this function. The decision will not affect the commission's program for the production and distribution of reactor-produced radioisotopes and electromagnetically concentrated stable isotopes. The bulk of the radioisotopes distributed by the AEC has been produced in reactors. The commission will also continue to perform, upon payment of applicable charges, service irradiations in its cyclotrons.

The AEC began the production, processing, and distribution of cyclotron-produced radioisotopes in 1949. The purpose of the program was to assist medical and biological research by providing radioisotopes that could not be produced in a nuclear reactor or could not be prepared from reactor-produced radioisotopes to meet activity specifications. The more important of these radioisotopes

are beryllium 7, sodium 22, arsenic 73 and 74, iron 59, zinc 65, and iodine 125.

A total of 793 shipments of cyclotron-produced radioisotopes with a total activity of 4065 millicuries was distributed from June 1949 through June 1955.

■ The Nuclear Science and Engineering Corp. of Pittsburgh, Pa., is the first private American firm to produce radioisotopes in cyclotrons in order to supply industrial and medical users. Under the new program the company will produce, on request, any isotope that can be made with a cyclotron; in addition, long-lived isotopes for which a demand exists will be stockpiled. At present, prices are comparable to Atomic Energy Commission rates. A catalog of current radioisotopes can be obtained by writing to the firm at Box 10901, Pittsburgh 36, Pa.

■ Consolidated Engineering Corp.'s systems division has moved into new and larger quarters in Pasadena, Calif. The division has leased 4200 square feet of a new $75,000 building near the company's main plant for its engineering and administrative operations. Formed only 18 months ago, the division has expanded its engineering staff fivefold in that time. Following careful study of customer requirements, systems engineers assume full responsibility for engineering, building, installing, and servicing automatic data-processing and industrial control systems.

■ The United Transformer Co., New York, has announced the start of operations at its new UTC-Pacific Division plant, located at 4008 W. Jefferson Blvd., Los Angeles, Calif. The plant is equipped with modern production facilities for the manufacture of all types of transformers, reactors, solenoids, variable-voltage transformers, control reactors, high-Q coils, and filters. Complete laboratory and test facilities have been provided.

■ Smith, Kline and French Laboratories will add a $2,487,000 wing to the firm's present building in Philadelphia, Pa. This structure will complete the company's $8-million expansion program started in 1954. The new wing will be completed by late 1956.

Miscellaneous

■ *Behavioral Science,* a new quarterly journal, official publication of the new Mental Health Research Institute at the University of Michigan, will begin appearing in Jan. 1956. It will contain articles on general theories of behavior and on empirical research specifically oriented toward such theories. An interdisciplinary approach to problems of behavior will be stressed. Although the scope of the journal will include all aspects of behavior which can be subsumed under broadly general interdisciplinary theory, in the field of application special emphasis will be placed on contributions relating to research in mental health and disease.

The editorial board will include Franz Alexander (psychoanalysis), Alex Bavelas (social psychology), David Easton (political science), Ralph W. Gerard (neurophysiology), Donald G. Marquis (psychology), James G. Miller (psychology and psychiatry), Jacob Marschak (economics), Anatol Rapoport (mathematical biology), Ralph W. Tyler (education), and Raymond W. Waggoner (psychiatry).

Subscriptions will be $6 a year. Manuscripts and subscription orders may be sent to Dr. James G. Miller, Mental Health Research Institute, University of Michigan, Ann Arbor, Mich.

■ *Medical Horizons,* a television series on accomplishments in medical research, presented the first of some 26 half-hour programs on 12 Sept. This initial production of the Monday evening series, which is being sponsored by CIBA Pharmaceutical Products, Inc., of Summit, N.J., in cooperation with the American Medical Association, showed a demonstration of the heart-lung "by-pass" machine recently developed at the Mayo Clinic; this instrument facilitates surgery on the interior of the human heart.

The program will present live telecasts featuring outstanding leaders in clinical and experimental medicine; it will be telecast from major medical centers throughout the country. The next six programs will emanate from the State University of New York College of Medicine of New York City; the Kessler Institute, West Orange, N.J.; the Sloan-Kettering Institute; Memorial Center for Cancer and Allied Diseases, New York; Georgetown University Hospital, Washington, D.C.; University of Pennsylvania School of Medicine, Philadelphia, Pa.; and Johns Hopkins Hospital, Baltimore, Md.

■ A weekly series of 40 television programs dealing with vital problems in the fields of medicine and community health will be telecast beginning this fall over Station WGBH-TV, Boston, Mass., as a result of an educational grant made jointly to Harvard University and the Lowell Institute by the John Hancock Mutual Life Insurance Co. The series, entitled *The Facts of Medicine,* will originate in the department of preventive medicine at the Harvard Medical School. The first program will be presented on 6 Oct. at 8:30 p.m.

The selection of medical topics and their treatment as significant matters of public interest will be the responsibility of David D. Rutstein, head of the department of preventive medicine. The purpose of the series will be to provide accurate, up-to-date, and useful information about the newer developments in medical research and their applications.

■ *Frontier to Space,* a new series of 26 programs dealing with the fundamentals of rocketry and space exploration, has been accepted for national distribution by the Educational Television and Radio Center, Ann Arbor, Mich. The series was released the week of 18 Sept. and is available to all 14 educational television stations now broadcasting.

Intended to acquaint viewers with the basic problems of jet propulsion and the capabilities and limitations of rockets in their present state of development, the series was produced by the physical science laboratory of the New Mexico College of Agriculture and Mechanical Arts. Two of the programs deal with the development and the reasons for launching artificial earth satellites.

The series features discussions of rocketry by an authority on upper air research, R. K. Sherburne of the physical science laboratory of New Mexico A. and M. Sherburne is narrator for all 26 programs, which include demonstrations of rocket launching.

Frontier to Space was filmed with the assistance of the White Sands Proving Ground in Fort Bliss, Tex.; the Applied Physics Laboratory of Johns Hopkins University; the Naval Research Laboratory; the Upper Air Research Center of Sunspot, N.M.; and Holloman Air Force Base. Producers of the show are Paul Rader and Fred Lawrence and the director is Joe Lacovic. The Educational Television and Radio Center later will offer *Frontier to Space* to schools, colleges, and universities and other community organizations through its extended services program.

■ A survey of the scientific literature on radiation sterilization is contained in four Federal Government research reports recently made available to industry by the Office of Technical Services, U.S. Department of Commerce. The reports were prepared by Quartermaster Food and Container Institute for the Armed Forces.

Experimental treatment of foods such as meat, dairy products, vegetables, and flour with low doses of radiation has resulted in extended storage life of the foods. Meat can be stored for several weeks after such treatment. The radiations also serve as growth inhibitors that eliminate or delay potato and onion sprouting.