

WILLAM A. McCLELLAN, general practitioner in Oxford, Ohio, for the past 7 years, has joined the staff of the University of Tennessee College of Medicine as assistant director of the department of general practice.

DAVID C. LEA has been appointed research and development manager of the Forest Products Division of Olin Mathieson Chemical Corporation, West Monroe, La. Lea formerly was with Potlatch Forests, Inc., Lewiston, Idaho, where he was technical director.

JOHN M. ERICKSON has been named associate professor of chemistry at South Dakota State College.

JEAN-PIERRE CORNAZ will spend a year with Stanford Research Institute's chemical engineering section, investigating new design techniques for ion-exchange columns. Cornaz formerly was scientific assistant with the Swiss Federal Institute of Technology at Zurich.

The Pittsburgh Section of the American Ceramic Society presented the ninth Albert Victor Bleining award for meritorious achievement in ceramics to **ARTHUR S. WATTS**. Watts, professor emeritus, Ohio State University, was honored for his long years of service as a ceramic educator and his many contributions in the field of ceramics.

HERBERT H. KENT, who was formerly chief of the physical medicine and rehabilitation department of the Illinois Veterans Administration Hospital, has been appointed associate professor of physical medicine at the University of Oklahoma.

WARREN L. BAKER has been appointed chief of the technical industrial relations division, a new office of the Air Research and Development Headquarters that has been created to help secure scientific and technical contributions from organizations that have not previously held ARDC contracts. Baker was formerly with the Socony Vacuum Oil Company, where he headed the aviation division.

Recent Deaths

EDWARD A. COLMAN, Berkeley, Calif.; 45; director of the forest service watershed conservation studies in California; 20 Mar.

CLAIR E. FOLSOME, Plainfield, N.J.; 53; director and professor of obstetrics and gynecology at New York Medical College; former vice president and executive director of the Ortho Research Foundation; 19 Mar.

IRENE JOLIOT-CURIE, Paris, France; 58; professor of physics at the Sorbonne and director of France's radium laboratory; 1935 joint winner with her husband of the Nobel Prize in chemistry for the discovery of artificially induced radioactivity; 17 Mar.

GEORGE W. MULLINS, Woodstock, Vt.; 75; professor emeritus of mathematics at Barnard College; executive secretary of the College Entrance Examination Board from 1933-46 and one of the founders of Educational Testing Service; 11 Mar.

WILLIAM H. OVER, Vermillion, S.D.; 89; retired director of the museum of the University of South Dakota; 20 Feb.

GEORGE M. PRICE, Syracuse, N.Y.; 91; professor emeritus of surgery at Syracuse University; 20 Mar.

GEORGE SARTON, Cambridge, Mass.; 71; professor emeritus of the history of science, at Harvard University; founder of *Isis* and *Osiris*; author of numerous books and papers on the history and philosophy of science; vice president AAAS Section L in 1935; 22 Mar.

Education

■ A grant of \$10,000 from the Fund for the Advancement of Education and the loan of equipment for a nominal fee by the Hi-Fidelity Center, Inc., Albany, N.Y., has made it possible for the Mount Pleasant High School in Schenectady to begin trying out instruction by use of closed-circuit television. The project will be expanded to provide for two studio classes and four served by television. The system permits students in the television classes to ask questions of the instructor. The first experiments were tried with advanced algebra and trigonometry classes; it is planned to extend the instruction to classes in science, French, and English. A maximum of 325 volunteer students will participate.

■ The Botanical Society of America will sponsor from 2 July to 11 Aug. a Summer Institute of Botany at Cornell University for 50 teachers from small colleges. The teachers will receive tuition, a stipend of \$300, and, in some cases, allotments of \$75 for each dependent.

The purpose of the institute is to give teachers the opportunity to learn of recent developments in their special fields of interest and to encourage them to start or continue research projects in their own departments. The institute is financed by a grant of \$31,400 from the National Science Foundation. Harlan P. Banks, head of Cornell's Botany Department, will direct the staff of twelve botanists from twelve universities.

■ The National Science Foundation and the Atomic Energy Commission are sponsoring a new program in aid of science teaching in secondary schools. The program will be administered by the Oak Ridge Institute of Nuclear Studies, which is owned by 34 southern universities. Eight or ten high-school teachers will be selected to participate; they will spend 3 months in training at Oak Ridge and 9 months traveling to various high schools, at each of which they will spend a week giving lectures and demonstrations. Each will be provided with a station wagon and equipment for demonstrations in physics and chemistry.

Grants, Fellowships, and Awards

■ The John and Mary R. Markle Foundation has announced the appointment of 23 scholars in medical science, all faculty members of medical schools in the United States and Canada. The fund appropriated \$690,000 toward the support of these doctors and their research, to be granted at the rate of \$6000 annually for 5 years to the 23 medical schools where they will teach and carry on research.

The scholars were selected from 49 candidates nominated by deans of medical schools, each of whom presented a 5-year program for advancing the scholar in his academic career. The scholars and their fields are Alfred Jay Bollet, internal medicine; Clement E. Brooke, pediatrics; Nicholas P. Christy, internal medicine; Charles F. Crampton, biochemistry; Joseph Dancis, pediatrics; Vincent C. Diraimonda, internal medicine; Merlin D. DuVal, Jr., surgery; Frederic L. Eldridge, internal medicine; Henry A. Harbury, biochemistry; David T. Karzon, pediatrics and virology; Robert F. Kibler, internal medicine; David M. Kipnis, internal medicine; Ernest Knobil, physiology; Robert I. Merritt, obstetrics and gynecology; Ashton B. Morrison, pathology; Robert E. Parks, Jr., pharmacology; David M. Prescott, microscopic anatomy; Henry Z. Sable, biochemistry; Belding H. Scribner, internal medicine; Frank C. Spencer, surgery; Peter A. Stewart, physiology; Judson J. Van Wyk, pediatrics; W. Dean Warren, surgery.

■ The College Entrance Examination Board has invited social scientists who are interested in investigating the non-intellectual aspects of college success to submit short preliminary statements. Research plans should include: (i) a statement of the factors to be studied, the hypotheses involved, the criteria of college success to be employed, and the approximate study design to be followed, (ii) an estimate of the cost of preparing

a detailed research proposal in this area, (iii) an estimate of the total cost of the study that would be proposed, and (iv) a statement concerning the research personnel and facilities that would be available for such a study and the schedule that would be observed.

The board is seeking research that results in instruments that will predict college success, as measured by intellectual or nonintellectual criteria, or both, and which will be suitable for mass administration to high school students.

Address correspondence to Dr. Joshua A. Fishman, Research Associate, College Entrance Examination Board, 425 West 117th Street, New York 27.

■ The number of students who have received grants for foreign study under the Fulbright program has increased steadily, except in 1952–53, from 22 during the initial year, 1948–49, to 979 in 1954–55. There was a slight decrease in the year 1955–56 to 956. The total number of students who have participated in the program is 5549. Of these, the largest number studied in France (1681, or about 30 percent). The figures and approximate percentages for some of the other countries are United Kingdom, 1147 (21 percent); Italy, 750 (14 percent); Germany, 615 (11 percent); Austria, 236 (4 percent); Netherlands, 199 (4 percent); Norway, 149 (3 percent); Belgium and Luxembourg, 132 (2 percent); Australia, 117 (2 percent).

Germany did not receive any Fulbright students until 1953–54. In 1955–56 France still has the most Fulbright students (257), but Germany has moved into second place with 221.

Twenty grants were made for study in China in 1948–49, but only half of the grantees went there, owing to the change of government. None has gone to China since.

■ The Sapelo Marine Laboratory of the University of Georgia, which is supported by the R. J. Reynolds Foundation, has completed its second year of operation. Four full-time research men are in residence—Robert Ragotzkie, Larry Pomeroy, John Teal, and Richard Dugdale. These men, and G. H. Boyd, E. P. Odum, R. B. McGhee, D. C. Scott, and P. R. Burkholder of the Athens campus make up the operational committee. Research is centered around, but not restricted to, the problems of the biological productivity of estuarine waters. Graduate student assistantships are available. Address inquiries to the Graduate School, University of Georgia, Athens.

■ The amount of the grant for the Kimble Methodology research award [*Science* 123, 455 (16 Mar. 1956)] has been increased from \$500 to \$1000.

■ The National Science Foundation has awarded 775 predoctoral graduate fellowships in the natural sciences and allied fields for the academic year 1956–57. Successful fellows were selected from 2892 applicants from all parts of the continental United States, Alaska, Hawaii, and Puerto Rico. Honorable mention was accorded 1366 applicants.

In addition to the predoctoral fellowships awarded, the foundation also awarded 80 postdoctoral fellowships.

Of the predoctoral fellowships, 296 awards were made to first-year graduate students, 302 awards were made to graduate students in the intermediate years, and 177 awards to terminal-year predoctoral students. Recipients include 264 persons who have been NSF fellows during the current academic year.

The largest group of predoctoral fellowships, 182, was awarded in chemistry. In other fields the number of awards were as follows: physics 165, engineering sciences 190, mathematical sciences 67, zoology 58, earth sciences 40, psychology 26, biochemistry 25, microbiology 20, botany 16, medical sciences 14, agriculture 11, anthropology 11, genetics 7, astronomy 7, general biology 3, biophysics 3. In addition, 11 awards were made in areas where the natural sciences converge with the social sciences.

Of the postdoctoral awards, 29 were made in the life sciences, 19 in chemistry, 13 in the mathematical sciences, 9 in physics and astronomy, 5 in the earth sciences, and 2 in the engineering sciences.

Predocctoral applicants were required to take examinations for scientific aptitude and achievement. These tests were administered by the Educational Testing Service, Princeton, N.J. The test scores, academic record, and recommendations regarding each candidate's abilities were then considered by panels of outstanding scientists in the respective fields of the candidates. This part of the selection procedure was carried out for the National Science Foundation by the National Research Council.

Candidates for the foundation's postdoctoral fellowships were judged on academic and research records and recommendations by panels of scientists in each field. The review of applications was conducted for the foundation by the National Research Council.

The fellows may attend any accredited nonprofit educational institution of higher learning in the United States or abroad. Predocctoral fellowships carry stipends of \$1400 for the first year, \$1600 for the intermediate years, and \$1800 for the terminal year of graduate study. Postdoctoral fellowships carry a stipend of \$3400. All fellowships include additional allowances for dependents, tuition, and other ordinary expenses.

An announcement of the National Science Foundation predoctoral fellowship program for 1957–58 will be made about 1 Oct. 1956. The postdoctoral program will reopen on 15 July 1956 and again on 1 Oct. 1956. Application forms will not be available until the programs are announced.

■ The Damon Runyon Memorial Fund has recently allocated grants totaling \$98,700 for cancer research in medical and educational institutions in New York, Washington, D.C., Palm Beach, Fla., Madison, Wis., and Stockholm, Sweden.

In the Laboratories

■ Ground was broken on 15 March for the third building at the research center of the Association of American Railroads on the campus of Illinois Institute of Technology in Chicago.

Designed by Ludwig Mies van der Rohe, the \$500,000 building is the latest step in a long-range program to provide complete research facilities for the railroad industry. The structure will be used primarily for rail, track, ballast, detector car, and structural research.

■ Marquardt Aircraft Company will expand its research and development facilities at Van Nuys with a construction program calling for an expenditure of nearly \$6 million. Largest expenditure will be for modernization of the Marquardt Jet Laboratory, under U.S. Air Force sponsorship, to meet the need for "free jet" testing of supersonic ramjets under simulated altitude conditions and for high airflow test runs of longer duration, with shorter intervals between tests.

Free jet testing provides external, as well as internal, airflow at the ramjet engine inlet and more accurately simulates supersonic flight performance through direction of the air blast to provide either angle of attack or yaw conditions.

■ A materials and processes laboratory with testing facilities valued in excess of \$750,000 has been established at Lynn, Mass., by General Electric Company's medium steam turbine, generator and gear department. The laboratory, occupying close to 25,000 square feet, will have five groups: metallurgical engineering, mechanical engineering, chemistry and insulation engineering, physics and electrical engineering, and auxiliary operations.

■ A new research and administration center is being built by the Corning Glass Works in Corning, N.Y. The project is the largest ever undertaken by the 103-year-old concern, and when it is com-