

of the University of Missouri; W. H. Howell, of Johns Hopkins; Alfred Stengel, of the University of Pennsylvania; Captain C. S. Butler, U.S.N.; Colonel P. M. Ashburn, of the Army Medical Corps; Drs. John R. Mohler, of the Bureau of Animal Industry of the Department of Agriculture; George W. McCoy, director of the National Institute of Health; L. R. Thompson, assistant surgeon-general of the Public Health Service in charge of research, and Hugh S. Cumming, Surgeon General, chairman.

Cancer research, which is being conducted by the Health Service more extensively than ever before, was discussed with the council at some length. This work not only has been expanded under increased appropriations, but is to be extended further, and the government scientists asked the benefit of the council's advice in that undertaking.

Field work on leprosy, particularly in Hawaii, was also discussed, together with studies of malaria, Rocky Mountain spotted fever, which recently has invaded the east; child hygiene, industrial hygiene and sanitation, milk sanitation, stream pollution and statistical analysis of different public health problems.

Investigations discussed included work on certain phases of cancer, diphtheria prevention, meningitis, nutrition, infantile paralysis, scarlet fever, trachoma, tularemia, typhus, undulant fever, etc. Work on sociological problems, including studies of parasites and animal hosts, at the institute, and special chemical studies related to public health problems also were discussed.

RESEARCH AT THE MELLON INSTITUTE

In his eighteenth annual report to the board of trustees of Mellon Institute, Director E. R. Weidlein has summarized the activities of the institution during the fiscal year ended February 28, 1931. The sum of \$805,204 was contributed to the institute by the industrial fellowship donors in support of scientific research. The total amount of money appropriated by companies and associations to the institute for the twenty years ended February 28, 1931, was \$7,554,477.

Throughout the entire fiscal year 76 industrial fellowships—22 multiple fellowships and 54 individual fellowships—were in operation. During the preceding year the number of fellowships was 71. In 1930-31, 140 industrial fellows and 49 assistants held positions on the research staff. Sixty-four industrial fellowships (17 multiple fellowships and 47 individual fellowships)—three more than on February 28, 1930—were active at the close of the fiscal year. Nine fellowships are being sustained by industrial associations. The industrial research personnel consists of 109 fellows and 31 assistants. Thirty-one fellowships

have been in operation for five years or more, and of this number 18 have concluded more than ten years of work. Three and possibly four new fellowships will begin operation during the early part of the present fiscal year—just as soon as laboratory space is available.

According to the report particularly noteworthy results have come from the following fellowships: Air pollution, by-product coke, face brick, fertilizer, heat-insulation, iodine, nitrogenous resins, organic synthesis, refractories, sleep and utensil. Twelve fellowships completed their research programs, namely, chrome ore, insulating lumber, Portland cement, composite glass, yeast, inhibitor, steel treatment, rock products, roofing, fatty acids (uses), oxygen and face brick. Thirteen new fellowships were added to the institute's roll during the fiscal year, as follows: Safety fuse, plastic composition, bread, cottonseed products, hydro-engineering, abrasives, newsprint, sugar, fatty acids (synthesis), shoes, optical glass, commodity standards and tire bead.

The department of research in pure chemistry had a productive year and two fellows were added to the staff. Twenty-two investigational reports have been published since the establishment of this department in 1924. Among the subjects that are receiving research attention are the chemistry of marine plants, cherry gum, gum arabic and quince-seed mucilage, and the properties of the sugar acids.

The publications by members of the institute during the calendar year 1930 included 1 book, 5 bulletins, 45 research reports and 44 other papers. Sixteen U. S. patents and 13 foreign patents were issued to fellowship incumbents. The total contributions to the literature for the nineteen years ended January 1, 1931, have been as follows: 16 books, 101 bulletins, 573 research reports, 893 other articles, and 423 U. S. patents. These publications are listed in the institute's Bibliographic Bulletin No. 2 and its four supplements.

The commencement of the construction of the institute's new home is referred to as the most important event during the year covered by the report. Early in May, 1930, it was decided that, as the present two buildings of the institution are inadequate for the immediate and future needs of its departments and industrial fellowships, a commodious modern structure would be built at the corner of Fifth and Bellefield Avenues, Pittsburgh. The excavating work, which was started on November 5, was finished in March (97,000 cubic yards of soil being removed) and the foundation is now being constructed.

The erecting of this edifice will require about two years' time, and the completed building will furnish the institute with the means for expanding greatly

its research facilities and activities in both pure and applied science. The structure, which will be of that type of classical Greek architecture known as Ionic, will be built of granite and Indiana limestone; it will

be plain but massive, and will be surrounded by 62 monolithic columns. The proportions of the building will be approximately 300 feet by 275 feet, and there will be eight working floors.

SCIENTIFIC NOTES AND NEWS

DR. WERNER HEISENBERG, professor of theoretical physics at the University of Leipzig, has been awarded the Barnard Medal of Columbia University. Every five years the National Academy of Sciences recommends to the trustees of Columbia University a nominee for the Barnard Medal "for discoveries in physical or astronomical science or novel application of science to purposes beneficial to the human race." The previous recipients of the medal have been Sir Ernest Rutherford, 1909; Sir William H. Bragg, 1914; Professor Albert Einstein, 1921, and Professor Niels Bohr, 1925.

THE Institution of Chemical Engineers, London, has conferred the Osborne Reynolds Medal for 1930 on the retiring president, Mr. Arthur J. Reavell; the Moulton Gold Medal on Mr. A. T. King for his work on the treatment of suint liquors, and the silver Junior Moulton Medal on Mr. L. W. Blundell for a paper on the manufacture of hydrogen peroxide.

THE University of Manchester will confer the doctorate of laws on Dr. Arthur Harden, professor of biochemistry in the University of London, and the doctorate of science on Sir James Jeans.

DR. WILLIAM H. WELCH, professor of the history of medicine at the Johns Hopkins University, observed his eighty-first birthday on April 8.

AT the close of the annual meeting in Richmond of the Virginia section of the American Society of Bacteriologists, a dinner was tendered in honor of Dr. William H. Park, chief of the research laboratory of the New York City Health Department.

A LUNCHEON in honor of Mr. Max von Bernewitz, retiring secretary of the Pittsburgh section, American Institute of Mining and Metallurgical Engineers, was tendered to him on April 9 by the engineers of Pittsburgh. Mr. von Bernewitz has joined the staff of the Bureau of Mines at Washington.

A DINNER in honor of Dr. James H. Kimball, head of the New York office of the U. S. Weather Bureau, was held in New York City on April 9, at which he was presented with a medal and scroll. The following telegram was received by the committee in charge from President Hoover: "I will be obliged if you will express my cordial greeting to those present at the dinner in honor of Dr. James H. Kimball, and to Dr.

Kimball himself my warm appreciation for his signal services in promoting the success of aviation in general and transatlantic flights in particular through his scientific skill and judgment so characteristic of the entire weather forecasting service of our country." Telegrams were also read from Dr. Hugo Eckener, Maurice Bellonte and others who have benefited by Dr. Kimball's advice. Admiral Byrd gave Dr. Kimball a silk flag that he said he had carried over the Atlantic, and also on his flights in Antarctica. Dr. Charles H. Marvin, chief of the U. S. Weather Bureau, was among the speakers.

PROFESSOR R. A. BUDINGTON and Professor C. G. Rogers, of the department of zoology of Oberlin College, have been honored at Fukien Christian University in China. A donor who wishes to remain anonymous has created at the university two scholarships which are named after the Oberlin faculty members "in appreciation and respect."

THE *Journal* of the American Medical Association reports that to observe the tenth anniversary of the discovery of insulin by Drs. Frederick G. Banting and Charles H. Best, Toronto, a course on insulin and its use, organized by the extension division of the University of Wisconsin, at the request of the State Medical Society, will be given during the week of May 18 for one day each in Madison, Milwaukee, Oshkosh, Wausau, Eau Claire and La Crosse. Dr. Leland S. McKittrick, Boston, and Dr. Russell M. Wilder, of the University of Chicago, will, with Dr. Elmer L. Sevringhaus and a dietitian of the Medical School at Madison, give lectures and demonstrations.

THE Paul Ehrlich-Stiftung has awarded Professor Levaditi, of the Pasteur Institute in Paris, the Paul Ehrlich gold medal for 1931, for his researches in the field of chemotherapy; also two money prizes to Professor Hugo Braun, head of the hygienic institute of the University of Frankfurt-on-Main, and to Dr. Walter Levinthal, head assistant at the Robert-Koch-Institut in Berlin, respectively, for their researches on the metabolism of bacteria and the virus of psittacosis. The prizes were bestowed with fitting ceremonies in Frankfurt-on-Main, on Ehrlich's birthday on March 4.

IT is stated in *Nature* that a new article of association of the Royal Zoological Society of New South Wales, giving the council power to confer the title