SECRETARY HOBBY DEDICATES PHS CENTER APRIL 8

A new four million dollar building in Cincinnati, Ohio, which will house the PHS Sanitary Engineering Center, will be dedicated April 8 by Oveta Culp Hobby, Secretary of the Department of Health, Education, and Welfare.

The Sanitary Engineering Center, until recently the Environmental Health Center, is the focal point of the Federal Government's research into how the health of human beings may be affected by contacts with elements found in air, water, and food, and, by radiation and other factors in the environment.

The structure is located at Columbia Parkway and Grandin Road, about six miles east of downtown Cincinnati and overlooking the Little Miami River. It was authorized by the 80th Congress in 1948.

Mrs. Hobby's dedication address will be part of a two-day program opening the new research and training center. The program on the second day will include talks by four leading scientists dealing with various aspects of man's efforts to control the environmental factors affecting his health.

In addition to the Secretary's address, Dr. Leonard A. Scheele, Surgeon General, and Mark Hollis, Chief Engineering Officer of PHS, will speak.

Vernon G. MacKenzie is Officer in Charge of the Sanitary Engineering Center. It is the only laboratory in the Nation to attempt a coordinated study of the health significance of physical, chemical, and biological forces in the environment.

The six-story building has shops, offices, and service units located on its first three floors, together with special laboratories for heavy

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PLANS COMPLETED FOR 4th EQUIPMENT EXHIBIT

The Supply Management Branch has nearly completed plans for the Fourth Annual Research Equipment Exhibit to be held May 24-27 in Building 22. Ninety-nine booth spaces have been allocated to manufacturers and suppliers of research instruments.

The very latest developments in scientific research instruments will be displayed and demonstrated to the NIH staff and other interested visitors during the four-day period. Their aggregate value will approximate $300,000.

A special feature of the 1954 exhibit is the symposium on instrumentation methods and techniques, which will be held concurrently on three of the days. This symposium is being arranged and sponsored jointly by the Instrument Society of America, the American Chemical Society, and the American Association of Clinical Chemists.

NIH BIDS FAREWELL TO DR. JOHN C. EBERHART

Dr. John C. Eberhart, Chief of the Research Grants and Fellowships Branch, NIMH, left NIH on March 12 to become Executive Associate for the Commonwealth Fund in New York City.

Dr. Eberhart received his Bachelor's degree from the University of Oregon, and his M.A. and Ph.D. from Northwestern University. Until World War II, he was an instructor and assistant professor of psychology at Northwestern. During the war, he served as Naval Air Intelligence Officer on the staff of Admiral Chester Nimitz in the Pacific. Before joining PHS, he was Chief of the Veterans' Administration's Surveys Design Section. Dr. Eberhart has been at NIH since 1947. He served as Training Specialist in Psychology in the Training and Standards Branch, NIMH, before becoming Chief of the Research Grants and Fellowships Branch in 1949.

Mr. Philip Sapir will serve as Acting Chief of this Branch.
The human anterior pituitary is a small endocrine gland that is about the size of a garden pea and is located under the brain. Despite its size, it is sometimes referred to as the "master" gland because it produces some six different hormones, four of which control other endocrine glands -- the thyroid, adrenal cortex, and the gonads.

Most of our knowledge concerning these hormones has been gained in the past twenty years. The small amount of hormone produced per animal has been a limiting factor in the therapeutic application of these hormones, which are proteins and cannot be synthesized. Recently, a possible new source for one of these hormones has been found in transplantable tumors of the pituitary gland. Scientists in the Endocrinology Section of NIAMD's Laboratory of Biochemistry and Nutrition are currently working in this field. By treating mice with radioactive iodine (¹³¹I) to destroy the thyroid gland, Dr. Jacob Furth of the Children's Cancer Research Foundation, has developed tumors of the anterior lobe of the pituitary gland that are transplantable to other mice. Most of these tumor strains, however, grow only in host mice, whose thyroids have been destroyed by ¹³¹I. It has been found that these tumors when transplanted into the thigh muscle of a mouse will grow to a maximum size of 5 to 10 grams.

The normal mouse pituitary is about the size of a pinhead and weighs about 1 mg. One year after treatment with ¹³¹I, the primary pituitary tumors may reach the size of 100 mg. or larger, sufficient to cause distortion of the skull bones. After transplantation into the thigh muscle, the tumors may grow to weigh as much as 5 to 10 grams, or 10,000 times the normal size.

Bioassays indicate that these tumors primarily contain and produce thyroid stimulating hormone (TSH) in relatively high concentration. Mouse tumors have been found to have a TSH concentration three to five times that of the pituitaries of other mammals.

TSH is one of the pituitary hormones that has not been satisfactorily purified. Adequate amounts of the mouse tumors may be a favorable starting material for extracts, especially since the content of other pituitary hormones is low. By hypophysectomizing host mice and determining what happens to the weight of the body, the adrenals, and the gonads, Dr. Evelyn Anderson and Dr. Furth have been studying the extent of production of pituitary hormones other than TSH by the tumors. Apparently some tumor strains produce gonadotrophin, but no evidence of the production of ACTH has been found. Dr. Robert W. Bates and Mr. Tulane Howard have been trying to find the best method for the accurate bioassay of TSH as a necessary preliminary to fractionation of the tumors. The method used is the injection of day-old baby chicks for three days with TSH. The thyroid glands are then removed and the iodine content determined. When a chick is hatched, its thyroid has a high iodine content, and TSH causes iodine depletion or loss.
The R & W Association has a variety of activities to offer NIH employees in the coming month. The long-anticipated Slimnastics course began March 29 in the gymnasium of the Clinical Center. The instructor, Miss Nancy Morse, has an M.A. degree in modern dance and is a former student of Martha Graham.

Arrangements are now being made for a program of chamber music on Wednesday, April 28, in the Clinical Center Auditorium. The concert, similar to the one sponsored by the Association last year, will again be under the direction of Dr. Charles P. Hutterer of DRG.

Draw a big red circle on your calendar around Friday, April 30. It's the date of R & W's Spring Dance.

The R & W Choral Group is planning to present a program for employees later in the spring, and would like to have 25 or 30 more voices. You don't have to be a Pinao or a Como to join. If you enjoy singing, call Dave Johnson of NIAMD on ext. 2742, and let him tell you more about it.

The current issue of Smoke Signals carries details of a special offer to R & W members who play golf, or who might like to take golf lessons. Tennis enthusiasts also will find news of interest to them. Cal Baldwin of CC, chairman of these activities, has been busy making special arrangements for use of facilities at Glenbrook Bank.

Jeanne Walton of NIH, membership chairman, announces that R & W rolls stand at an all-time high with 1,350 members.

BEAUTY PRINCESS

Betty Elliott, clerk-typist in NCI's Field Investigations and Demonstrations Branch, was recently selected Apple Blossom Princess at American University. Betty will participate in the Apple Blossom Festival in Winchester, Va., April 29 and 30.

A senior majoring in Spanish, Betty attends the university in the morning and works in the afternoon. She was recently elected to Who's Who in American Colleges and Universities.

The research interests of Harry Burruss, technician in the Pyrogen Testing Unit of NMI's Laboratory of Biologies Control, have carried him to many parts of the globe. A native of Maryland, Harry had lived in Virginia and Massachusetts before his career took him to Nigeria, Brazil, Montana, and finally back to his home State.

Harry grew up in Front Royal, Va., and attended preparatory school in Mount Hermon, Mass. After completing his pre-medical course at Harvard, he was offered a job as a laboratory technician with the West African Yellow Fever Commission of the Rockefeller Foundation, in Lagos, Nigeria. He stayed there for five years, participating in basic and clinical studies of the disease.

In 1933, he accepted another job with the Foundation, this time in Brazil. He worked four years in Bahia, and three years in Rio de Janeiro, assisting with research and control work on yellow fever. Harry is particularly fond of reminiscing about the pre-inflation prices of living in Brazil. He and his family were able to rent a large house for the equivalent of thirty dollars per month. An additional thirty dollars paid the salaries of four or five servants, while the going price for the best cuts of beef was eight or nine cents per pound.

In 1940, the Burruss family returned to this country, and Harry joined the PHS Rocky Mountain Laboratory at Hamilton, Montana. There he assisted Dr. Mason V. Hargett in the yellow fever vaccine production laboratory. The vaccine was supplied to the Armed Services and was sent to PHS immunizing stations in the U.S. and to many foreign countries. In 1946, Dr. Hargett transferred and Harry was put in charge of the production unit. Virus production was turned over to a private concern, the National Drug Company, in 1952. For eleven months before coming to NIH, Harry assisted the company in setting up its laboratories and training its personnel.

In his present job at NMI, Harry assists with testing manufacturers' samples for the presence of pyrogens, fever-producing by-products of the growth of microorganisms occasionally found in biologicals. The Unit also helps with the testing of blood recipient kits and other supplies used in the NMI Blood Bank. In addition, Harry assists Mr. Thomas Probey with his experimental studies on syphilis.

Harry now lives in Gaithersburg with his wife and two sons, aged 19 and 9. In his leisure hours, he keeps busy with a variety of activities, including tennis, gardening, and reading.
OFFICE SAFETY HAZARDS

Carelessness and haste can cause a number of potentially serious accidents in the typical office set-up at NIH. Last year, for example, NIH office workers reported injuries caused by falling over waste baskets and hassock fans, tripping on electric cords, falling over in unstable swivel chairs, and being struck by falling file cabinets that were overbalanced by an open top drawer. Coffee spilled on the linoleum floors in T-6 has caused a number of falls.

Asphalt liquid dripping from the black ballast boxes attached to fluorescent lamps caused head burns for two office workers. Be sure to move away from the lights when you detect a peculiar hot tar odor, and when the electrician is changing the tubes.

Remember that ditto fluid is flammable and toxic. Refrain from smoking while handling the fluid, and be sure to use a pouring spout to prevent slopping. Electric typewriter cords may cause a short circuit when jammed between a closed compartment door and the desk frame. Take care to disconnect the plug before putting the machine away.

CREDIT UNION CHANGES

TWO REGULATIONS

The Board of Directors of the Credit Union recently authorized two changes in regulations, both effective April 1. Deposits on single and joint share accounts are limited to a maximum of $100 per month. The interest rate on loans is one percent on the first $1,000, and one-half percent on the amount loaned over $1,000. This last regulation does not apply to car loans, which have a special rate.

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physical instruments. The upper floors house physics, chemistry, radiation, and microbiology laboratories, milk and food sanitation laboratories, and aquatic biology laboratories. One wing contains animal facilities and a laboratory trailer shop, and the other holds an auditorium and experimental plant areas.

Intensive research into environmental factors is new in the health field. Important by-products of research in the Cincinnati laboratories may be clues to the mysteries of diseases-polio, myelitis, heart disease, and cancer.

SOCIAL SERVICE HELPS MEDICAL CARE PROGRAM

Social service in a clinical research center provides an opportunity for social workers to facilitate the medical care program in many new ways. Clinical Center physicians must select their study patients with care to get the maximum benefit from the research program. They rely in great measure on the Social Service Department to help the patient work out personal problems so that he can remain during the term of research. The department tries to make the patient contented during his stay, and assists him in problems arising from his discharge.

The social worker, through contacts with local welfare or family agencies, may help a prospective patient insure an income for his family during his hospitalization, or may help a mother plan for the care of her children through homemaker service or foster home care. If a patient will need convalescent or continued care after discharge from the Center, the social worker will help arrange for it.

While a patient is here, the social caseworker helps him alleviate concerns about the medical procedures he will undergo, such as severe diet limitations or extensive surgical procedures. He helps members of the patient's family deal with their fear about the patient's condition. He provides the physician with significant information on the social, economic, and emotional factors in the patient's illness that will contribute to an understanding of the patient and his response to treatment.

After the patient is discharged, the Social Service Department participates in follow-up studies, primarily to obtain a full understanding of the patient's social situation following his return home. If a patient fails to continue participating in follow-up studies, the social worker tries to find out the reasons and to help the patient solve any social or emotional concerns that may be responsible.

The Social Service Department, headed by Mr. Daniel E. O'Keefe, participates in the Clinical Center's in-service training for professional personnel, in addition to providing a staff development program for its own members. It participates in research undertaken in the Center from the standpoint of the social, economic, cultural, and emotional aspects of the illness. The department plans in the future to set up a training program for social work students at the doctorate level, and internships for students with full professional training.