HOUSING UNITS AT NIH WILL BE FEDERALLY BUILT

Congress has decided that housing at NIH for essential personnel of the Clinical Center shall be constructed by the Federal Government, not private industry.

Under an agreement reached by House-Senate conferees on the Labor Department-FSA appropriation, the Federal Government will go ahead with construction of an initial 60 or 75 units of garden-type two-story apartments, which had been held in abeyance pending determination whether the additional units needed would be built by private capital rather than with appropriated funds. The apartments will be located northwest of the Clinical Center, between Road "A" and Cedar Lane.

The $1,025,000 fund available for the project will provide for about one-fourth of the total quarters needed for employees whose duties will require that they live on the reservation, available for emergencies. Completion of plans will now be rushed in order to assure that the units will be finished in advance of the opening of the Clinical Center, scheduled for early 1953.

With the Clinical Center almost completely bricked in now, the NIH planning staff is moving ahead rapidly on interior planning and equipment procurement. Under the chairmanship of Dr. C. D. Larsen, NCI, the Laboratory Facilities Planning Subcommittee is now completing lists of generally needed scientific equipment for the Clinical Center laboratories.

Outside consultants are now working with the NIH staff on interior decorating and landscaping plans.

NIAMD FILLS TWO NEW STAFF POSTS

Two major staff additions at NIAMD were announced recently by Dr. Russell M. Wilder, Institute Director.

Appointed Chief of Clinical Investigations was Dr. Charles S. Davidson, Associate Director of the Thordiike Memorial Laboratory in Boston and member of the Harvard Medical School faculty. Dr. Ralph E. Knutti, Associate Professor, University of Southern California School of Medicine, was named Chief of the Extramural Programs.

Dr. Davidson will be assigned to the Thordike Laboratory until the Clinical Center is completed. Dr. Knutti is stationed here.

Born at Berkeley, Calif., in 1910, Dr. Davidson received his bachelor's degree at the University of California in 1934 and his M.D. at Montreal's McGill University in 1939. After two years with the San Francisco Hospital, he came to Harvard, serving first as a research fellow and later as a member of the faculty. During this period, he also worked with the Thordike Laboratory, of which he became Associate Director in 1948. He is a specialist in hemorrhagic disease, shock, and nutrition.

Dr. Knutti was born at Palo Alto, Calif., in 1901, and took his undergraduate work at West Virginia University. He received his M.D. from Yale in 1928. His field of specialization is pathology.

Over some 20 years, Dr. Knutti has served with Vanderbilt University, Lakeside Hospital in Cleveland, the Rockefeller Institute for Medical Research, the University of Rochester, various Rochester hospitals, and Los Angeles' Childrens Hospital. Since 1942 he has been a member of the University of Southern California faculty.

TRICHINOSIS PROJECT AT N I M I

Fat shown here has just finished treadmill workout to test his endurance. In these studies, Dr. Theodor von Brand is trying to find out whether encysted trichina larvae in muscle tissue impair working ability. Apparatus measures rat's metabolic rate.
Low Energy Radiation Studies

No. 52 of a Series

Low energy radiation includes that part of the electromagnetic spectrum in which we find ultraviolet, visible, infrared, and microwave radiation.

The various effects of such radiation on living cells are familiar. Ultraviolet, which produces vitamin D from natural precursors, causes tanning and sunburn; it may also result in cancer production and genetic mutation. Visible radiation is responsible for photosynthesis, in which radiant energy is stored by synthesizing oxidizable compounds. Infrared causes burn injuries. And microwave radiation causes molecular agitation that results in intracellular heating as in diathermy.

Primary concern of NIAM's Low Energy Radiation Section, Laboratory of Physical Biology, is the immediate effects of such radiation on cell metabolism. Its secondary interest is in the use of low energy radiation as a tool to determine and localize components of cell structures through their characteristic absorption and molecular arrangement. The Section is headed by Dr. Frederick S. Brackett.

A study of the mechanism of radiation action on living cells presents a challenge to existing methods for measuring changes in the rate of cell metabolism. With the exception of certain cells, and those with specialized photochemical mechanisms, even the radiation dosages that produce delayed lethal effects cause few if any measurable immediate changes in metabolic rate.

This suggests that such profound effects of radiation must be preceded by important but subtle changes in the cell during irradiation. Such changes should be detected from the time course of major oxidation processes in the cell if adequate means of measurement could be utilized.

With this in mind, Dr. Brackett, in collaboration with Dr. Rodney A. Olson and Mr. Robert G. Crickard and with the aid of Mr. Lawrence Showkeir, inaugurated a study several years ago to develop a more sensitive method for measuring oxygen uptake of cell suspensions during radiation.

By using a static platinum micro electrode with alternating potential and a method of time selection in measuring the current, an electrolytic method was developed. It provided adequate stability and sensitivity to measure the oxygen uptake of a dilute cell suspension at ten-second intervals. This is many times more sensitive than conventional monometric techniques.

Results with the electrode system indicated the desirability of applying the method to the study of the time course of photosynthesis, one of the specialized cell mechanisms which show profound and immediate metabolic response to visible radiation. Further studies of this process in the green alga Chlorella revealed heretofore immeasurable transient changes in respiration and photosynthesis.

Here and There

TV Program

A weekly television program dealing with the Nation's health, welfare, and education has been inaugurated by the American Broadcasting Company, in cooperation with FSA. The program is aired Monday nights at 8:30.

Honors

Dr. Evelyn Anderson, Chief of NIAMD's Section on Endocrinology, was elected Vice President of the Association for the Study of Internal Secretions at the society's annual meeting in Atlantic City.

New members of the Washington Academy of Science include Dr. Karl Sollner and Dr. Heinz Specht, both of NIAMD.

Mental Health Report

NIMH has issued a progress report marking the fifth anniversary of the signing of the National Mental Health Act. Since passage of the Act, $2,863,677 has been allocated to 107 extramural research, $424,443 to fellowships, $1,089,350 to intramural research.

Hospital Nomenclature

The U. S. Marine Hospitals, which trace their beginnings from 1798 when a medical care program for merchant seamen was approved by President Adams, have been redesignated as United States Public Health Service Hospitals.

Eniwetok Tests

Dr. Howard L. Andrews, NIAMD, served as Director of radiological safety for a task unit at Eniwetok, where atomic tests were recently conducted. Serving as a radiological monitor was Mr. Joseph M. Brown, also of NIAMD.

These changes are extremely significant in the accurate measurement of quantum efficiency and in the interpretation of the role of photosynthetic intermediates.

Dr. Brackett and his associates plan to extend their study of radiation effects on cell metabolism to cover the transient effects of radiation on the respiration of other cell suspensions -- bacteria, yeast, and tissue cells as well as cell particulates.
FALLS MAIN CAUSE OF ACCIDENTS AT NIH

If you want to keep out of the doctor's office and lead a safe life on the job, watch your step.

That's the advice of Safety Officer James B. Black, who reports that falls account for approximately 60 percent of the time lost by NIH employees in the past year because of accidents.

Figures show that in the 12-month period employees lost over 1,300 hours because of injuries resulting from falls. About a third of these accidents were caused by falls on stairs. Other ways in which employees came a cropper included falls from ladders and chairs, slipping on floors, tripping over objects, and falls on roadways and ice.

Mr. Black pointed out that accidents from falls frequently mean that time must be taken to train others to perform the duties of the disabled.

LANGUAGE DISKS MAY BE DRAWN FROM LIBRARY

Linguaphone or Holt Spoken language recordings in German, French, Italian, Russian, and Spanish are now available for three-day loan from the NIH Library.

The records, Librarian Scott Adams said, come complete with printed texts, offering employees a convenient means for brushing up on foreign languages at home.

A number of foreign volumes have also been added by the Library recently as language aids in specialized fields. The titles include:

- Medizinische Terminologie
- Diccionario Terminologico de Ciencias Medicas
- Science Russian Course
- Scientific Russian Reader
- Medizinisches Wörterbuch der Deutschen und Englischen Sprache
- English-Spanish Chemical and Medical Dictionary
- German-English and English-German Dictionary for Scientists
- Dizionario Inglese-Italiano per le Scienze Mediche
- Science French Course: A German-English Dictionary for Chemists
- Chemical Russian, Self-Taught
- Scientific Russian
- English-German Medical Dictionary
- German-English Medical Dictionary
- and Medical Dictionary (English, French, and German).

If Summer Is Here, Can Hamsters Be Far Behind?

Like the good earth in spring, the Hamsters are coming to life. First signs of germination were observed this month in Bldg. 1 when major-domo Jack Beecher, Hamster factotum, officially emerged from dormancy.

With the Hamster season about to start, Beecher is scanning thespian soil and laying on with the fertilizer, convinced a bumper talent crop is in the making.

At this stage, the Hamster chairman is receptive to anything resembling a fresh idea. If you have something to talk about -- ideas for sketches, song lyrics, production know-how, acting or singing talents, et cetera -- he would be happy to hear you out.

Come December, the Hamsters hope to be in shape to present another of their low comedy versions of life as it allegedly is lived at NIH. Currently brught out are some notions on cornerstone and the migraine headaches involved in laying them. A rodent, incidentally, is rumored to be in the running as the title character of the show.

If enough interest develops, the Hamsters may add a band to their show this year. Beecher is convinced there are enough musicians around the lot to form a rattling good ensemble.

Nominations are being accepted from members for a new slate of officers to nurse the production along and see that no facet of NIH life escapes scrutiny.

BRITAIN'S HEALTH ON UPGRADE--DR. WILDER

British health authorities are taking an active interest in nutrition and attribute much of the improvement in the general health of the population to food planning, according to Dr. Russell M. Wilder, director of the Institute of Arthritis and Metabolic Diseases.

The NIH official returned this month from a three-month trip in Britain. He was accompanied on the trip by Mrs. Wilder.

Although the British diet is still austere, judged by American standards, food consumption is up to prewar levels with respect to calories and important nutrients. Meat is in short supply, but fish is plentiful and very tasty, especially the Dover sole, Dr. Wilder said.

Milk consumption is 50 percent higher than before the war.

An authority in metabolic disease research and head of the Mayo Foundation's Department of Medicine before joining NIH last January, Dr. Wilder was a guest of a number of Britain's medical leaders and health officials in the course of his trip. He conferred with Sir John Charles, Minister of Health, and Dr. Norman Wright of the Ministry of Food; visited Lord Horder, noted specialist in internal medicine; and called on Sir Robert and Lady McHarrison at Oxford. Sir Robert, now retired, is well known for his goiter work in India.

At Oxford, Dr. and Mrs. Wilder visited the home of the late Sir William Osler and were entertained at a luncheon by Professor Hugh Sinclair in his "chambers" at Magdalen College. Among the guests was Dame Harriet Chick, distinguished for her work on rickets in Vienna after World War I.

Dr. Wilder attended three symposia on endocrinology and nutrition sponsored by British medical societies in connection with the Festival of Britain.

Still shocking to visitors, Dr. Wilder said, is the extent of the World War II bombing of London and the port cities of Plymouth and Bristol, where whole blocks remain unreconstructed.

Starting from Plymouth by rented auto, Dr. and Mrs. Wilder motored 3,700 miles through England and Scotland, visiting many places of historical interest.
PROFILE OF AN NIH RESEARCH FELLOW

For a man who made the long march from Burma to India with General Stilwell's Army in 1942, modest Dr. John Koo has an understandable aversion. He loathes walking.

Nothing short of a major disaster involving total collapse of all transportation facilities could persuade the Chinese scientist to plant one foot in front of the other for more than three consecutive blocks. Although he has lived in the nearby Bethesda area since coming to NIH, he views with mingled suspicion and horror any advice on the metabolic benefits of a brisk morning walk to work. His nightmares, if he has any, are probably metatarsal in origin.

Dr. Koo, a Special Research Fellow in NCI's Chemotherapy Section, came here last October to continue his studies on colchicine. Interest in this compound has been markedly increased in recent years by the discovery that it arrests the process of cell division, but its structure is still not definitely known.

At present, Dr. Koo is trying to establish the structure of colchicine's 7-membered C-ring by total synthesis. This requires from 15 to 20 steps to complete. The nature of the B-ring has been proved, and several papers on this aspect of Dr. Koo's work have been published or are in press now.

A hard-driving researcher, Dr. Koo frequently spends hours in his laboratory at night, and has been known to work as late as 2 or 3 a.m. He has no wife to reproach him about overdevotion to his job.

Born in China's coastal province of Kiangsu, Dr. Koo was graduated from Chekiang Medical College, Department of Medicinal Chemistry, in 1939. From 1941 to 1943 he divided his time between the Chinese Army and the Ministry of Education.

In the spring of 1942 he was sent to Burma to take charge of medical supplies arriving from America. By that time the United Nations position in Asia was crumbling. Stilwell's outnumbered forces were chased out of Burma.

Dr. Koo joined the retreat, slogging along with a supply-less supply group and subsisting solely on bananas. In spite of continuous rains, the ragged, bone-weary members of the group managed to whack their way through 10 to 20 miles of jungle a day. They reached India in three weeks.

From India, Dr. Koo returned to China, and in 1943 his Government sent him to America. He made the long trip as a bucket-seat passenger in an American bomber -- an experience that invariably awakens renewed appreciation of beds in general and the prone position in particular. After a short period with the Chinese Supply Commission, he enrolled at Purdue University, where he took his M.S. and Ph.D. in organic chemistry. Before coming to NIH, he spent two years at the University of Pennsylvania as a postdoctorate fellow of the American Cancer Society.

China's great strength, believes Dr. Koo, is her magnificent sense of family. In a land where famine and pestilence are commonplace, where grinding poverty is the rule not the exception, the individual knows an inner security that western nations can neither create nor counterfeit. Behind it is an enduring tradition: belief in the family and its social cohesiveness. Here, at least, all hardships are shared. When crops fail, families suffer together, and from the experience comes strengthened power of survival.

Age, of course, is venerated. In their declining years, parents are cared for in the family group, not as a legal duty but as an act of natural devotion. In China there are no institutions for the aged. Even if they existed, a Chinese parent would die of a broken heart if his children were callous enough to cast him adrift in an institution.