NIAID REORGANIZES STRUCTURE OF LABS

Changes in the organizational structure of NIAID, contemplated for some time, took effect January 8. Designed to identify the programs more closely with current specialized research projects, the plan has created five new laboratories.

The Laboratory of Infectious Diseases, under Dr. Robert J. Huebner, retains its name and primary function. From it have been created the Laboratory of Biology of Viruses, with Dr. Karl Habel as chief, and the Laboratory of Cell Biology, under Dr. Harry Eagle.

The Laboratory of Tropical Diseases has been divided four ways. Dr. G. Robert Coatney, formerly acting chief of LTD, is now chief of the new Laboratory of Parasite Chemotherapy. Additional segments of the old LTD include the Laboratory of Parasitic Diseases, Dr. Leon Jacobs, chief; the Laboratory of Germ Free Animal Research, under Dr. Walter L. Newton; and the Laboratory of Tropical Virology, under Dr. Alexis Shelokov. Headquarters of the latter group is in the Panama Canal Zone; one section under Dr. William L. Pond is located on the Bethesda reservation.

Other laboratories and functions of NIAID remain the same.

Exam Scheduled By PHS For Officer Candidates

Competitive examinations for appointment to the PHS Commissioned Officer Corps will be held throughout the nation in March and April.

Persons interested must file applications for the examination with the Surgeon General no later than February 20. Forms and further information may be obtained by writing to the Surgeon General, USPHS, Washington 25, D. C.

Dr. WITKOP AWARDED PRIZE IN CHEMISTRY

Dr. Bernhard Witkop, Chief of the Laboratory of Chemistry, NIAMD, has been named winner of the 1958 Hillebrand Prize by the Washington Section of the American Chemical Society.

The award is presented annually to a member of the society who has made a notable contribution in chemistry during the three preceding years. Dr. Witkop was cited for his work on natural products, oxidation mechanisms, and labile metabolic intermediates.

Former NIH winners of the Hillebrand Prize include Dr. Jesse P. Greenstein, NCI, 1957; Dr. Bernard L. Horecker, NIAMD, 1954; Dr. Lyndon F. Small, NIAMD, 1949; and Dr. Claude S. Hudson, NIAMD, 1948.

Nutrition Team Briefed

After receiving recent briefings here, the tenth nutrition survey team, under the direction of the Interdepartmental Committee on Nutrition for National Defense, will leave February 10 for a six-week study in Peru.

Previous teams have conducted surveys in Ethiopia, Spain, Alaska, Libya, Turkey, the Philippines, Korea, Pakistan, and Iran.

CREDIT UNION VOTES INCREASED DIVIDEND

A dividend of 4 1/4 percent was voted by members of NIH's Federal Credit Union at the annual meeting January 14. This is an increase of 1/4 percent over last year's dividend.

This figure, according to Credit Union President Dr. Roger M. Cole, reflects the continuing growth and stability of the organization. However, member increase is slowing down now that approximately three out of four NIH employees belong to the Credit Union.

Total assets for the year reached $1,278,290, representing average savings of $255 for each of the 4,690 members.

The following Credit Union officers were elected at the meeting:

(See Credit Union, Page 3)
NIH 7519 -- Better Than Morphine?

Since 1806, when it was first separated from the juice of the opium poppy, morphine has been a blessing and curse to man. Its potent analgesic properties are offset, and sometimes outweighed, by harmful side effects, including its ability to make addicts of its users. The search for a synthetic drug which would retain morphine's pain-relieving properties and eliminate its addictive ones may have been brought closer to attainment a few months ago in the Laboratory of Chemistry, NIAMD, with the preparation of the compound 2'-hydroxy-5-dimethyl-2-phenethyl-6,7-benzomorphan.

Known as NIH 7519, this compound is the result of carefully planned research, and is the cooperative effort of Drs. Nathan B. Eddy, chief of the Section on Analgesics, and Everett L. May, of the Laboratory of Chemistry. Dr. Eddy's work on morphine became a full-time operation in 1929 when he cooperated on a National Research Council drug addiction committee project attempting to separate addiction and analgesia by chemical means. In 1939 he came to NIH with the late Dr. Lyndon Small and Dr. Erich Mossettig to work on a similar program.

By accident, in the late 1930's, German chemists discovered Demerol, the first synthetic to have a fair degree of analgesic potency. A study of its molecular structure revealed that it and morphine had features in common. It was then a logical step for chemists to identify additional parts of the morphine molecule as starting points for the development of other synthetics.

Work done up to this time had led Dr. Eddy and others to summarize the chemical features believed to be essential for a potent analgesic. Using this as a background, Dr. May, in 1952, took a fresh look at the morphine molecule. Mentally dissecting the structure, with the knowledge that not all of the molecule is necessary to impart strong analgesic activity, he saw in it simpler portions which he could duplicate. Fashioned by chemical synthesis from elementary coal tar products, the effect of one of these partial structures was equal to morphine in analgesic strength, but strong in addictive potency. Proceeding logically, he took another portion of the molecular structure and achieved its synthesis by standard chemical procedures.

Years of patient work and many trials and modifications of standard chemical reactions carried the process through to the final structure. From benzene and pyridine derivatives, catalytic reactions, hydrogenation, cyclization, distillation, purification, and final crystallization produce the new drug.

Proven safe and effective with animals, NIH 7519 is being used at several hospitals on human patients with various types of pain, and its addictiveness is being determined. Not only has it achieved pain-relieving potency approximately ten times that of morphine, but there is reason to believe that some decrease in addiction liability has been achieved. Respiratory depression and other side effects, common to patients given morphine, are less evident with the new drug. Tests and studies will continue for some time in order to prove the drug's true value and safety.
NIH Spotlight

Dr. Kenneth Wolf

As a boy in Cleveland, privately educated Merrill Kenneth Wolf was reading deeply in both chemistry and counterpoint when other lads his age were just beginning to concentrate on the comic pages.

By the time he was 14, Ken Wolf had graduated from Yale with an A.B. in Music, had completed his studies under Paul Hindemith, and was composing his own musical works.

Now, at 27, Kenneth Wolf, M.D., disdains the title of "Quiz Kid," and unobtrusively goes his way as a research associate in NIH's Laboratory of Neuroanatomical Sciences, though he has composed two piano concertos, eight sonatas, a string quartet, and a number of smaller pieces.

Between graduation from Yale and enrollment seven years later in a medical school, Ken spent the time giving concerts throughout the country, practicing, and composing. After college, he had met and studied under the late Artur Schnabel, then made his New York debut in Town Hall in 1950. "There was no real changing over from music to medicine," he explains. "I grew up with music and I grew up with science. The two have always been part of my life."

M. K. Wolf became Dr. Wolf after earning his M.D. from Western Reserve University Medical School in 1956. He interned at Peter Bent Brigham Hospital in Boston before coming to NIH as a PHS commissioned officer last year.

This winter, Dr. Wolf has appeared in two performances in Washington, and presented a piano recital under R&W auspices in the CC Auditorium. In this last program, he included one of his own sonatas for his NIH audience.

NEWS BRIEFS

Dr. Theodor Von Brand, NIAID, returned last month from Europe, where he was guest lecturer at several German medical institutes. At the invitation of the Bavarian Minister for Education and Culture, Dr. Von Brand lectured on parasite physiology.

Doctors Howard W. Bond, NCI, and Elmer G. Berry and Eugene C. Weinbach, NIAID, will leave this week to join a WHO panel of experts in Geneva for a session on bilharziasis.

Dr. N. W. Shock, NHI, has been appointed a member of the Research Committee of the American Heart Association for the period 1959-64 as the representative of the Council on Circulation. He will also serve as chairman of the Research Study Committee of that council.

Dr. Cornelius B. Phillips, of NIAID's Rocky Mountain Laboratory, Hamilton, Mont., has been named a member of the International Committee on Bacterial Nomenclature, a branch of the International Association of Microbiological Societies.

CREDIT UNION Contd.

Board of Directors: John A. Beglin, DBO; Dr. Roger M. Cole, NIAID; Mrs. Clydis Jones, DBO; and Dr. John F. Sherman, NIAMD.

Supervisory Committee: Donald F. Brown and John B. Reed, both of DBO.

Credit Committee: Mrs Zella N. Boteler, Credit Union Office, and Clair Lacey, NIAMD.

But medical research claims most of Ken Wolf's time and energy. As a research associate, he is involved in studies on tissue cultures of the nervous system, and in the staining of living cells with fluorescent dyes.

Last May, Dr. Wolf was married to the former Emily Vaughn, of Atlanta, whom he had met in Boston. Now living at Pooks' Hill in Bethesda, they will soon be packing for another move--in July, he will begin a residency in neurology at Massachusetts General Hospital in Boston, and she will resume her graduate studies in English at Radcliffe.
HEALTH SERVICE OFFERS WIDE AID TO NIH

Nurse Harriet Brunscheen prepares eye solution for Lee Ingram, CC cook.

Before beginning work at NIH, the new employee makes a visit to the Clinical Center for a physical examination at Employee Health Service. When a worker here leaves his job, EHS is notified in order to close out his medical records.

Between his arrival and departure, EHS plays a continuous and often unknown part in the life of the average employee. Under the direction of Dr. John M. Lynch, EHS is responsible for all matters relating to the health of the employee. It not only assists in preventing and controlling occupational diseases and injuries, but also aids workers in maintaining their health at the highest possible level.

Though considered a model occupational health program by experts, and closely paralleling medical services available to workers in more progressive private industries, EHS must constantly deal with problems unusual in other organizations. Some of the major occupational hazards peculiar to NIH are infectious micro-organisms, toxic chemicals, and radiation. To combat these hazards, EHS uses immunizations, safety education, health advice and guidance, and other preventive measures.

In the past year, for example, EHS administered 9,931 injections and immunizations ranging from influenza and smallpox to yellow fever and cholera. The service also conducted more than 1,800 physical examinations of new employees. Health advice and guidance was given on almost half of all employee visits in the past year.

OCCUPATIONAL INJURIES

The recognition of mental illness as a problem of industry, EHS operates a program to assist employees in attaining better job adjustment and satisfaction. With the cooperation of NIMH, the unit offers wide counselling services to workers with emotional problems that influence job performance.

Recently, the staff of EHS has been able to rearrange its present facilities to make better use of its space; and although still operating in a limited area, the service is now, according to one of its nurses, "doing more business than ever before."