FIVE SCIENTISTS FROM ABROAD LECTURE AT NIH

Research developments in cancer, tuberculosis, and other fields were discussed by five noted scientists from Britain, Germany, and Japan in recent lectures delivered at NIH.

The work of London's Chester Beatty Research Institute of the Royal Cancer Hospital was outlined by Dr. Alexander Haddow, Director of the Institute, who spoke in Wilson Hall on September 18.

The Chester Beatty Institute, Dr. Haddow said, has undergone a considerable expansion in the last few years. Its principal interest centers on chemical carcinogens. Since 1948, scientists at the Institute have examined 300 substances in the nitrogen mustard class and some hydrocarbons. Efforts to locate the site in the cell where these substances operate have failed thus far, although the studies have yielded a good deal of fundamental data.

Dr. Haddow pointed out that cancer research in Britain is receiving the full support of the nation's chemical industry. He outlined briefly the nature of cancer research conducted at other centers in such cities as Edinburgh, Glasgow, Leeds, and Birmingham.

These studies include, among others, occupational cancer in the rubber industry, carcinogenicity of mineral oils, carbohydrate oxidation in tumors, and atmospheric pollution in relation to pulmonary cancer.

Fundamental research in a non-categorical field was discussed here on September 17 by another British scientist, Dr. A. Neuberger, of the National Institute of Medical Research.

MECHANICAL HEART ADVANCE REPORTED

A mechanical heart-lung apparatus that maintains circulation of blood in patients undergoing critical heart and general chest surgery may be in use in the very near future, possibly within a year.

This prediction was made by a group of seven NIH grantees who presented progress reports on their work at a symposium on artificial heart-lung mechanisms held here in September. Approximately $90,000 in grants have been currently allocated to the scientists by the Heart Institute to carry on this research.

Most of the technical problems involved in production of a mechanical pump to temporarily replace the heart have been solved. The scientists are working now on the biggest remaining problem: proper oxygenation of blood and removal of carbon dioxide. This has been carried out successfully in dogs.

A major advance made by the scientists is rendering blood clot-
Much of the research in the medical and related sciences is conducted by the Nation's universities, medical schools, and larger hospitals. To support and extend this work in the face of mounting research costs and scientific manpower shortages, it has been necessary in recent years to supplement private research funds with Federal assistance.

What this contribution to our medical resources means today is evident in the following figures. During the fiscal year 1951, NIH approved for payment 3,705 grants and awards totaling $44,371,188 -- approximately $10,000,000 more than the preceding year's figure.

This sum has been broken down into seven categories, the largest of which is research. Here, the figures show that 1,724 research grants and awards were recommended for payments amounting to $17,304,529. This is about 40 percent of the total figure.

In the other categories we find 379 teaching awards for $5,213,554; 70 special control grants for $1,032,419; 159 grants to States for $8,100,000; and 60 construction grants for $9,459,000. Trainee-ship awards numbered 764 and accounted for $1,693,315, while 549 fellowships came to $1,568,371.

A tabulation of grants and awards by Institutes shows Cancer with $15,491,031, Heart with $11,820,438, and Mental Health with $8,133,327. Grants in the non-categorical field (Division of Research Grants) came to $6,018,963.

Grants classified under the remaining Institutes are limited almost entirely to research. Microbiological is listed with $1,434,943; Arthritis and Metabolic Diseases, $704,996; Neurological Diseases and Blindness, $491,222; and Dental, $276,268.

The extensive extramural research program is administered by NIH's Division of Research Grants, which is headed by Mr. Ernest M. Allen. Applications for research grants are evaluated by the various study sections of experts, then transmitted to the appropriate national advisory council. These councils, of which there are seven, forward their recommendations to the Surgeon General. Outstanding civilian scientists serve on the councils, with government representatives serving ex officio.

Retirement
Raymond Augusterfer retired September 30 at the age of 70 after 23 years of Government service. He had been at NIH since 1939. A Buildings Management employee, he worked in the boiler room in Bldg. 1.

Bloodmobile Visit
The Red Cross blood procurement unit will visit Wilson Hall on Wednesday, October 17. Prospective donors are asked to notify the Personnel Branch, Ext. 2071.

Trips and Talks
Dr. Milton J. Allen, NCI, will deliver a paper before the Electrochemical Society in Detroit, October 10. His subject will be "Electrolytic Oxidation and Reduction of Organic Compounds."

Dr. Nathan B. Eddy, Chief of the Section on Analgesics, Laboratory of Chemistry, NIA, will leave this month for Geneva, where he will preside as chairman of the W.H.O. Expert Committee on Drugs Liable to Produce Addiction. En route he will visit a number of laboratories in London and Basel, Switzerland.

Dr. Harold F. Blum, NCI, is now in Paris attending the Comite International de la Lumiere as representative of the National Research Council. From Paris he will go to Liege, Belgium, to present a paper before the October 9-11 meeting of the Association des Physiologistes.

Sartorial Note
Tieless NIH employees who break bread at the Naval Medical Center Officers' Club are reminded to don their cravats in the future. Shirt sleeves should also be rolled down if a coat is not worn. This in conformance with Naval regulations.

Board Member
The American Medical Association's weekly newsletter reports that eight physicians are presently serving on the National Committee on Alcoholism. Members of the board of directors include Dr. Robert H. Felix, Director of NIMH.
HEALTH SERVICE FOR NIH STAFF MEMBERS

The occupational health program provided by NIH for the more than 2,000 employees here parallels in many respects the medical services available to employees in the more progressive private industries. It is basically a preventive medical or health maintenance program, and is administered by the Employee Health Service, headed by Dr. John M. Lynch with a staff consisting of a nurse director, three staff nurses, and one secretary-receptionist.

Employees are introduced to this service through their pre-employment physical exams, when every effort is made to help them obtain the care they need to correct any physical defects uncovered by the examination. They may be advised to consult their personal physician, dentist, or other specialists, and the Health Service cooperates in follow-up treatments. Periodic physical exams, vital in preventive medicine, are available upon request.

As an example of health education, women are given practical instruction in breast self-examination for the early detection of breast cancer, and tetanus toxoid inoculations are available to all employees. A monthly indoctrination lecture describing NIH health services is also given to new employees.

When possible, laboratory and X-ray studies as aids in diagnosis, and on occasion consultation and treatment services, are made available to employees at the request of their family physicians.

One of the main responsibilities of the Health Service is handling work-connected injuries and illnesses, although this activity is minor in terms of time devoted to it. Every attempt is made to see that the best possible care is obtained, utilizing when necessary the facilities of the PHS Outpatient Clinic downtown and the PHS Hospital in Baltimore. During regularly scheduled working hours, employees report directly to the health unit in either Bldg. 1 or Bldg. T-6. Injuries that occur during off hours are reported to the Guard Office.

The Health Service performs periodic examinations, laboratory studies, and X-ray surveys for individuals exposed to special hazards such as infectious diseases and toxic chemicals. The medical officer also cooperates with the NIH Safety Officer in accident and disease prevention by reporting all injuries and suspected occupational diseases, and by helping with industrial hygiene surveys and studies to determine potential environmental hazards.

FOREIGN CHEMISTS VISIT NIH

Dr. L. J. Sargent (right), NIAMD chemist, explains high vacuum operation used in steroid studies for subliming solid substances. The visitors, Dr. Lifson (left) of Israel, and Dr. Cadot of France, are part of a group of 250 young chemists brought to this country by ECA and the Ford Foundation to study American research methods.

HEART-LUNG Cont'd

free in its passage through the apparatus, then restoring its clotting ability upon its return to the body. They have also been able to maintain the blood in the machine relatively germ-free.

If the mechanical heart-lung apparatus is perfected, it will represent one of the most significant contributions to medicine in recent years, the scientists asserted.

The symposium was sponsored by the Surgery Study Section of the Division of Research Grants. Scientists from the following institutions presented reports on their work: Jefferson Medical College, State University of New York, Harold Brunn Institute, Tufts College, Yale, Ohio State, and Hahnemann Medical College.

LECTURERS Cont'd

Research, London. The subject of his talk was "Metabolic Activity of Collagen." It concerned the incorporation of radioactive glycine into the collagen of rats.

"Cell Metabolism in Relation to Contractile Systems of the Cell" was the subject of a talk given on September 19 by Dr. Hans Lettre of the Cancer Research Institute, University of Heidelberg, Germany.

On September 21, Germany's Nobel Prize winner, Dr. Gerhard Domagk, delivered a lecture in Wilson Hall on the chemotherapy of tuberculosis. Dr. Domagk has recently developed Conteben, a drug that has been used successfully in treating laboratory infections of tuberculosis and has been tried out clinically with promising results.

Dr. Domagk won the Nobel award in 1939 for his work on Prontosil and other sulfa compounds. Successful use of Prontosil against streptococcal infections led to the development of all sulfonamide therapy.

A week earlier, Dr. Tomizo Yoshida, professor of pathology at Japan's Tohoku University, spoke on cancer research in his country. His subject was "Origin of Yoshida Ascites Sarcoma and Experimental Production of Ascites Liver Sarcoma in the Rat."
NIH employees sustained 26 disabling injuries at work during the fiscal year ended last June, according to Safety Officer James B. Black.

For statistical purposes, a disabling injury is defined as one which causes loss of time beyond the day on which it occurs. Accidents in this category numbered seven in the first two months of the present fiscal year. In addition to these, a number of less serious mishaps occurred. Here are a few examples:

A chemist was burned when she dropped a bottle of sulfuric acid on the floor. She stepped under a shower and was able to flush all of the acid from her skin, thus averting serious injury. As a safety precaution, laboratories should check their showers and keep the nozzle adjusted to produce a fairly solid stream of water.

A typist received face burns when she tried to clean a calculating machine with a flammable solvent without disconnecting the electrical plug.

A clerk cut his hand while trying to adjust the position of a fan without first turning it off. Another cut her hand on a razor blade as she reached into a desk drawer.

A laboratory worker received a finger cut when he attempted to attach a rubber tube to the side arm of a suction flask which had just been repaired but had not been annealed.

For the benefit of laboratory personnel, the Employee Health Service medical officer offers these safety suggestions. HCN users should call the Health Service for first aid supplies and for advice on how to use the medication. In case of rat bites, which sometimes go unreported, an employee should receive prompt inoculation. In 1941, 6-foot, 304-pound Coke -- "the fattest tap dancer in the business" -- left the entertainment world to take a job as special messenger assigned to Paul McNutt, FSA's first Administrator.

The move topped him into the financial cellar. From $250 a week, he dropped to a meager, soul-shrivelling $27. More than his pocketbook was fractured. His whole mode of life was reduced to splinters.

"It took some getting used to," he recalls. "Working days instead of nights was quite a change for me. I had been in show business for seven years -- theaters, night clubs, three Broadway shows, the Roxy, and all the rest. It was a wonderful life and I enjoyed every minute of it. But I had to leave it. My mother was going blind, and I felt I had to return home to help out."

That was ten years ago. After serving his apprenticeship as a messenger, Coke moved on to Food and Drug's Legal Division. A few years later, after clipping his poundage down to 270, he found himself draft-eligible. He spent the next year at Camp Lee, Va., in the office of the trial judge advocate. Within three months he made staff sergeant.

Four years ago he joined the Mental Hygiene Division of PHS, moving with the division when it became an Institute at NIH. In his present job, he is in charge of Miscellaneous Office Services. His unit prepares supply requisitions, maintains records, and handles the many and varied details that come under the heading of "housekeeping."

At 34, Coke still tackles show business with the same gusto that marked him when he began dancing professionally at 17. He used his last vacation to fill entertainment engagements in New England. Come next spring, he expects to tour the southern states. Only recently he appeared on a local television show, and has plans for several more TV engagements in the months ahead.

At NIH, Coke has done yeoman service for the Hamsters, dancing in their shows and training others in dance routines.

Dancing is only one of his extracurricular activities. From time to time, he does special holiday and wedding work for florists, fashioning what the trade calls "living jewelry": earrings, necklaces, and what-not made from flowers with the use of fine wire.

Ever since he won the battle of the bulge, Coke's interest in calories has been second only to choreography. He came out of that hassle a nymph-like 210 pounds -- down 94 from his high water mark. Like all true believers, he proselytizes tirelessly for the cause of dieting. His favorite reading matter is that metabolic best seller, "Eat and Reduce."