N I H SCIENTISTS CONTRIBUTE TO DEFENSE BOOKLET

N I H scientists made substantial contributions to the recently issued booklet "Health Services and Special Weapons Defense," prepared by the Health Resources Office, NSRB.

The 260-page volume is being distributed among State and local civil defense planners. It explains the effects of weapons ranging from atom bombs to nerve gases, and outlines the functions, responsibilities, and organization of civil defense health services.

The booklet estimates that a single bomb of the Hiroshima type, exploded over a city with a population density of 13,000 per square mile, would kill or injure 120,000 persons. But advance warning and adequate training of civil defense personnel could cut this total in half. A standard treatment for burns, which would probably account for most bomb casualties, is outlined.

The manual also deals with the nerve gases developed by the Germans during World War II. Odorless and colorless, these gases kill by disrupting vital functions such as respiration and circulation.

Nine NIH scientists and their associates assisted with various chapters. Dr. William H. Sebrell, NIH Director, helped prepare the section on nutrition services; Dr. Jack Masur, the section on hospital, first aid, and ambulance services; Dr. Victor H. Haas, biological warfare and laboratory services; Dr. Clinton C. Powell, radiological defense; Dr. Paul A. Neal, chemical warfare; and Drs. Robert H. Felix, Seymour Vestermark, Joseph M. Bobbitt, and Dale C. Cameron, noncasualty, pediatric, and maternity care.

DR. R. M. WILDER
N I A M D DIRECTOR

Dr. Russell M. Wilder, international authority in metabolic disease research, has been appointed Director of NIAMD. Dr. Floyd S. Daft, who has been Acting Director of the Institute, was named Associate Director in Charge of Research. The appointments were made on January 2 by Surgeon General Leonard A. Scheele.

Dr. Wilder retired last month as Head of the Department of Medicine of the Mayo Foundation and senior consultant of the Mayo Clinic, Rochester, Minn. In the course of a 39-year career, his research in the metabolic diseases and nutrition has brought him international recognition. During World War II, he served as Chairman of the Food and Nutrition Board of the National Research Council and was instrumental in promoting the addition of thiamine, a B vitamin, to commercial bread and flour.

Dr. Wilder received his M.D. degree from Rush Medical College, Chicago, in 1912. He is the author of two medical textbooks and numerous research reports. During World War I, he served in the Army as a medical officer.

DR. SEBRELL TALKS AT HARVARD BLOOD LAB DEDICATION

The role of NIH in the National Blood Program was discussed by Dr. William H. Sebrell, Jr., NIH Director, at the dedication ceremony of Harvard University's new Blood Characterization and Preservation Laboratory in Boston, January 8.

Headed by Dr. Edwin J. Cohn, the new laboratory is an emergency establishment to push development of methods for use in the National Blood Program.

NIH, through its intramural and grant activities, said Dr. Sebrell, is proud to lend its support to the laboratory. He pointed out that clinical testing of formed elements of the blood by many investigators depends largely on the laboratory's successful operation.

There is general agreement, he said, that NIH should promote the research aspects of the National Blood Program. As an initial contribution to the extensive research effort, NIH has allocated $600,000 from its grant funds, to support 18 projects in universities and other research institutions throughout the country.

This contribution will support research in two areas—(1) the separation, preservation, and clinical trial of formed elements, and (2) the collection, storage, and shipment of blood under safe conditions. NIH will have the same relation to the new laboratory as to other grantees.

Emphasis will be placed on maintaining a national network of independent, decentralized units for blood research, with details of progress freely exchanged. All this is contingent, however, on availability of funds for the immediate future.
Among the studies conducted at NCI are three projects on leukemia, a cancer-like condition characterized by excessive production of white blood cells. These studies, utilizing certain inbred strains of mice, are the work of Dr. Lloyd W. Law, James H. Miller, and Peter F. Boyle of the Leukemia Research Unit, Biology Section.

One project is a study of genetic and nongenetic influences in the origin of leukemia. By cross-breeding mice of high and low genetic susceptibility to leukemia, it has been shown that specific genes influence the disease incidence and time of onset.

Also important in 'spontaneous' leukemia are certain nongenetic factors. For example, the incidence in hybrid offspring is highest when a mouse of high leukemic strain is the mother. Moreover, the older the mother, the lower the incidence of the disease.

Another project of Dr. Law and his associates is a study of the resistance of leukemic cells to various chemical substances. Lymphoid leukemic cells are transferred from mouse to mouse, all of which receive the maximum tolerated dose of antileukemic compounds, such as folic acid antagonists. The study indicates that these cells, proliferation of which is normally inhibited by such exposure, develop a resistance to the compounds and even depend upon them for optimal growth. These changes are heritable and probably represent mutations.

Various combinations of antileukemic compounds have been shown to increase markedly the survival time of leukemic mice. Attempts are being made to distinguish biochemically between susceptible and resistant leukemic cells.

A third project of the unit is a study of the role of the thymus in spontaneous leukemia. Investigations show that complete removal of the thymus, a ductless gland in the chest, drastically reduces the incidence of spontaneous leukemia in mice. Transplantation of the gland to another site results in the full development of leukemia characteristic of the strain. It is concluded that thymic tissue is necessary for development of the disease.
As research analyst in the Research Grants and Fellowships Branch of NIMH, Phil Sapir maintains a lively correspondence with scientists interested in getting financial aid to carry on their work.

Ironing out the many technicalities involved in processing these grants is Mr. Sapir's main responsibility. A diverse career has well prepared him to deal with the grantees' subjects, which include psychiatry, neurology, psychology, and anthropology.

After graduation from Yale (B.S., '38), Mr. Sapir served as editorial assistant to Dr. Harry S. Sullivan, founder of the Washington School of Psychiatry; then, as a medical research technician at the Rockefeller Foundation in New York; and next, as an attendant at Chestnut Lodge Sanitarium in Rockville, Md., while attending the Washington School of Psychiatry. He entered the Division of Venereal Diseases, PHS, in 1944.

In the Army the same year, Phil became a machine gunner, and later, in Germany, served on the editorial staff of Stars and Stripes. Upon discharge, he returned to PHS as editor of Public Health Reports, and then came to NIMH as a science writer. He was a member of the professional staff of the Division of Medical Sciences, National Research Council, before assuming his present position.

Phil was born in Ottawa, Canada, 34 years ago. His recreation interests include tennis, ping-pong, music. Father of seven children, he is a committeeman of Scout Troop 15 and Cub Pack 8 of Washington, D. C.

**DINNER TO BE HELD IN DR. HUDSON'S HONOR**

After 38 years of Government service, 22 of them at NIH, Dr. Claude S. Hudson, Chief of the Laboratory of Chemistry and Chemotherapy, NIAMD, will retire this month at the age of 70.

His associates and friends at NIH have arranged a dinner in his honor, to be held January 25, at 7:30 p.m., in the Commissioned Officers' Mess of the Bethesda Naval Hospital. Dr. W. H. Sebrell, Jr., NIH Director, is honorary chairman of the arrangements committee.

Tickets to the dinner, at $3.50 each, may be obtained from Florence Lansdale, Ext. 673. Wives are welcome.

**HOW BACTERIA ARE NURTURED AT NIH**

Indispensable to bacteriological research at NIH is the service provided by a busy staff of seven in the Media Preparation Section, Laboratory Aids Branch. Headed by Melvin W. Bryant, the section is engaged in preparing food for microorganisms.

In general, each kind of microorganism requires specific types of food, or media. The staff prepares such staples as phenol red carbohydrate media, used to differentiate acid- and gas-producing microorganisms; lead acetate media for detecting hydrogen sulfide-producing bacteria; and urea media for organisms that produce ammonia.

Research is often conducted to find or develop suitable nourishment for microorganisms of unknown food requirements. A scientist working with microorganisms furnishes the Media Preparation Section with the probable composition of the medium needed. By repeated testing in collaboration with the scientist, the section works out a formula for the medium and prepares the requested quantity.

In addition to furnishing most of the media used routinely in bacteriological research at NIH, the section prepares and stocks, by special request, all types of media used in the identification of microorganisms. It also prepares media for testing the sterility of biological products.

**COKE TIME!**

Pee Wee, photogenic NWI chimp, takes timeout for refreshment.

**DR. BURCH TO DIRECT LIBERIAN INSTITUTE**

Dr. Thomas A. Burch of the Laboratory of Tropical Diseases, NMI, will leave for Liberia in early February. He will serve for two years as Director of the Liberian Institute of the American Foundation for Tropical Medicine.

Dr. Elmer G. Berry of NMI, now Acting Director of the Liberian Institute, will undertake field research projects in schistosomiasis, sponsored by the British Colonial Office under the ECA program.

**R & W ELECTS OFFICERS**

New officers and board members for 1951 have been chosen by the NIH Welfare and Recreation Association.

R. L. Campbell, NIMH, was elected president; J. B. Davis, Purchase and Supply Branch, vice president; Clydis Jones, Financial Management Branch, treasurer; Clarice Lewerenz, NIAMD, recording secretary; and Ora Marshino, NCI, corresponding secretary.

Elected to the Board of Directors were W. G. Baylis, NIAMD; A. P. Collins, Scientific Reports Branch; Cecelia Kennedy, NHI; R. P. Maher, DRG; and J. F. Monahan, NCI.

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OUR ROCKY MOUNTAIN LABORATORY: THE MEN AND THE JOB

The Rocky Mountain Laboratory of NIM is about to celebrate its thirtieth birthday. Established in 1921, in an abandoned country schoolhouse in Montana, the laboratory now occupies seven modern buildings, and its full-time staff numbers 125. Directing its many research activities is Dr. Carl L. Larson, who took the position last year at the death of Dr. R. R. Parker, the laboratory's founder and first Director.

From the laboratory's research units have come many notable advances in the battle against infectious diseases. Founded to combat Rocky Mountain spotted fever, the laboratory soon extended its work to other disease problems of particular interest to the Western States.

Present studies include widespread rickettsial diseases—Q fever, typhus, South African tick-bite fever, and others. Tularemia, plague, and various mycotic infections are also investigated.

Among their other achievements, workers of the Rocky Mountain Laboratory can count not only the development of preventive vaccines and effective therapeutic measures for Rocky Mountain spotted fever and Q fever, but also contributions to the understanding of rickettsial pox, the demonstration that tularemia can be transmitted by drinking water, identification of spotted fever in South American countries, the discovery of Q fever in the United States, and identification of sylvatic plague in Montana.

After hours, these scientists took to the hills to hunt antelope. Pictured with the day's kill are Drs. J. F. Bell (left), C. B. Philip, and W. L. Jellison. Others hunt duck, grouse, pheasants; and nearby streams are noted for trout.


Taxonomist Glen W. Kohls classifies ticks that carry causal agent of boutonneuse fever.