Season's Greetings

With the approach of Christmas and the New Year, I should like to express to each member of the National Institutes of Health my very best wishes for a happy holiday season. I am confident that in 1951 we will advance together toward new goals significant to the health of our nation and the other nations of the world.

NIMH PROMINENT AT YOUTH CONFERENCE

At the Midcentury White House Conference on Children and Youth, of which Federal Security Administrator Oscar R. Ewing was Chairman, motion pictures shown by NIMH representatives typified problems considered by the 5,000 or so delegates. The Conference was held at the National Guard Armory, Washington, D. C., December 3-7.


Prominent among NIMH representaties at the Conference were (See Youth Conference, Page 3)

GRANTS CLASSIFIED BY RESEARCH AREAS

NCI grants for cancer research were recently classified according to research approach and areas of investigation. In conducting the study, the Grants and Fellowships Branch of NCI utilized a questionnaire, in which grantees classified their own studies. The survey covered 165 grants totaling $1,739,484, or approximately half of the active projects.

The largest group of grantees, 44 percent, studies cancer causation. Twenty-nine percent of the grants support studies of the developing tumor. And 25 percent support clinical investigations-three grants for therapy to one for diagnosis.

In about 56 percent of the 165 projects, chemical approaches pre¬ dominate.

These preliminary results have been interpreted to indicate a dis¬ tribution of grants conforming well with the present general pattern of scientific interest and progress in cancer research.

Surgeon General Leonard A. Scheele has approved a recommen¬ dation by Dr. W. H. Sebrell, Jr., NIH Director, to establish an additional position of Associate Director of NIH, with the rank of Assistant Surgeon General, PHS. On December 1, Dr. David E. Price was appointed to the new position.

Commenting on the appointment, Dr. Sebrell said, "In view of Dr. Price's outstanding achievements as chief of the Institutes' research grants program, he is eminently qualified to fill the new position."

Dr. Norman Topping, Associate Director of NIH, stated that the Surgeon General, in establishing and filling this position, "is taking a step which is part of the long-range planning of NIH, in line with the general reorganization pattern established in other bureaus of the Service."

Drs. Topping and Price, as Associate Directors at NIH, will (See Price Appointment, Page 3)
Isolation of Biological Materials

The Section on Fractionation and Isolation, NIAMD, was established to supplement the Institute's general program of research in biochemistry and nutrition. Headed by Dr. John C. Keresztesy, the Section is organized to study the isolation of new growth factors, such as vitamins, and of other biologically active substances.

Extreme purification of starting material is often required. Much of the Section's equipment therefore consists of stills, filters, agitators, large kettles, etc., used in processing raw materials in hundreds of pounds. This equipment is operated by Henry Lutterlough.

A recent project, undertaken in collaboration with Dr. Milton Silverman of the Section, was the isolation of the "citrovorum factor," which appears to be one of the forms in which folic acid, a B vitamin, exists in liver and green plants. The factor is highly active and may well be an enzymatic form of the vitamin.

In order to isolate such a substance, a practical source must first be found. Since biological activity is the only known index of the presence of the citrovorum factor, fractions of each sample of starting material were assayed microbiologically--tested for ability to support growth of the bacteria Leuconostoc citrovorum. In such studies, the accuracy of the microbiological assay controls the rate of progress of the isolation.

A suitable source of the growth factor was found in material discarded during the commercial preparation of purified liver extracts. Even incomplete purification of this material required fifteen- to twenty-thousandfold reduction in various steps.

A common purification procedure involves adsorption, the clinging of one substance to the surface of another, the adsorbent. Activated charcoal, ion exchange resin, etc., are used as adsorbents, either in a column (chromatography) or in large containers. Isolation of the citrovorum factor proceeded from adsorption on charcoal in a 150-gallon kettle to a final chromatographic fractionation using a five-gram column of aluminum oxide.

Hence, the techniques and equipment of the Section must be adapted to handling materials in widely varied quantities, from hundreds of gallons to a few drops. Because the Section can operate on such a broad scale, major projects of fractionation and isolation are conducted from time to time for other laboratories at NIH.

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YOUTH CONF. Cont'd

Dr. R. H. Felix, NIMH Director, and Dr. Dale C. Cameron of Mental Health's Professional Services Branch. Dr. Felix participated in a panel on "Housing and Healthy Personality Development," and Dr. Cameron served on the Conference planning committee.

The White House Conference is held every 10 years by the President of the United States. The goal of the recent Conference, as defined by Mr. Ewing, was far-reaching: "A society in which every child will have a fair chance for a healthy personality.

"More specifically, the purpose is to provide answers to two questions: (1) How can children be helped to develop the qualities essential for happiness and responsible citizenship? and (2) What physical, economic, and social conditions are necessary for this development?"

The Nation's leading experts on child health, welfare, and education attended. The Federal Government and 64 national organizations took part, and 500 young people were delegates.
DIRECTOR SUGGESTS WAY TO ECONOMIZE

In order to continue expanding the planned research program of NIH and yet remain within our budget, we must economize on utilities. This was emphasized by Dr. W. H. Sebrell, Jr., NIH Director, in a memorandum issued November 30 to all NIH employees.

Over the past three years, NIH utility costs have increased 52 percent. This is largely due to higher rates and greater use of electricity, fuel, water, and telephones. The estimated cost of utilities for the fiscal year 1951 is $291,900.

To cut costs, as required by reduced appropriations and possible further rate increases, we must review our individual needs and see where we can save. The total saving will be appreciable if we follow these simple suggestions:

- Turn off lights, fans, and other such equipment at night.
- Turn off faucets when not in use, and do not use water for condensers except during experiments.
- Use steam baths, sterilizers, and other fuel-consuming equipment only when necessary.
- Do not use telephones for private business; reduce long distance telephone calls; and use telegrams and air mail in place of long distance whenever practicable. Until the Clinical Center switchboard is installed, the expansion of our telephone facilities must be limited.

ANNUAL NIH BUDGET SINCE WORLD WAR II

SAFETY AWARENESS
NEW THEME AT NIH

In an expanding organization like NIH, hazards to life and property demand particular attention. Crowded offices and laboratories contribute to the accident rate. But of far greater importance at NIH is the perennial, though controllable, factor—carelessness.

In looking over the Institutes' accident record—0.68 injuries per 1,000 man-hours—one is struck by the high proportion of accidents that could easily have been avoided. An instrument maker carelessly severs a thumb tendon while using a lathe; a janitor, pushing broken glass into a basket, severely cuts his hand; a chemist, reaching for a rack of test tubes, falls backward off a chair.

Only 'safety awareness' can prevent painful and time-consuming injuries like these.

Accidents at NIH are investigated by the Safety Engineer, James B. Black. The accidents are discussed with persons involved, and unsafe working practices and conditions are corrected.

Safety films are shown, posters displayed, lectures delivered by specialists in fire-fighting, first aid, hygiene, and the safe use of chemicals and radioactive materials. Newly developed safety devices are studied. The location and condition of fire extinguishers are routinely checked.

The primary concern of the Safety Engineer is your safety. But the program can succeed only with the cooperation of each employee at NIH. Be careful!