

# NIH



# record

DEPARTMENT OF  
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PUBLIC HEALTH SERVICE  
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## TWO-YEAR ASSOCIATE PROGRAM OPENS HERE

A new Research Associate Program designed to give qualified young physicians and dentists the background they need for basic medical research will be launched at NIH this summer. The program includes an extensive series of lectures open to NIH professional personnel.

Fourteen physicians who have completed internships or first-year residencies have been selected to participate in the two-year program, which begins July 15. Each associate will be assigned to a laboratory, where he will participate in a research program. In addition, a formal series of lecture courses, designed in content and emphasis for prospective independent investigators, will be presented.

In view of the increasing research contributions by Doctors of Medicine, the Research Associate Program was developed by members of the Scientific Advisory Committee at the request of Director James A. Shannon. Nominations are made through the individual Institutes, and the Scientific Directors of NIH constitute an admissions committee to screen candidates for these positions.

The program is designed to combine laboratory experience with intensive lectures and conferences, to train participants in the fundamentals of basic science and inform them on latest developments in many research fields.

Over 250 hours of lectures will be offered during the first year. They will deal with modern concepts in the basic medical sciences and related disciplines essential to sound research. During the second year, a series of advanced seminars on special topics will be offered and individual programs worked out for each associate.

(See New Program, Page 4)

## NIH HOSTS EDITORS FROM INDIA



Dr. Robert P. Heaney, NIAMD (center), describes the activities of the NIH Metabolic Kitchen to Indian newspaper editors (left to right), T. K. Ghosh, V. Mukherjee, and D. R. Manekar. The visitors toured parts of the CC on June 6 as part of their nationwide tour.

## DR. HELLER RECEIVES HONORARY DEGREE FROM CLEMSON COLLEGE

An honorary Doctor of Science degree was presented to Dr. John R. Heller, Jr., NCI Director, at commencement exercises held at Clemson Agricultural College, Clemson, South Carolina, on June 2.

Dr. Heller graduated from Clemson College in 1925 with a degree in general science. He received his medical degree in 1929 from Emory University School of Medicine, Emory, Georgia.

Commissioned in PHS in 1931, Dr. Heller has been the Director of NCI for the past nine years. Before coming to NIH he was Chief of the Division of Venereal Diseases, Bureau of State Services, PHS.

## NIAID EMPLOYEE RECEIVES AWARD

Nick J. Kramis, Head of the Graphic Arts Section of the Rocky Mountain Laboratory, NIAID, has received an award of \$300 from NIH for development of equipment and a technique that makes it possible to study the destructive effects of disease-producing viruses on animal and human cells.

The award was presented by Dr. Carl L. Larson, Director of the Laboratory, at a ceremony held at Hamilton, Mont., May 15.

By means of a specially constructed microscope and time-lapse motion picture equipment, Mr. Kramis prepared a film that records

(See Award, Page 4)

# Germ-Free Rats Arrive For Nutrition Studies

No. 186 in a Series



Investigator weighs germ-free rat preparatory to nutrition experiment. The animal is housed with necessary supplies and equipment in a germ-free tank. Access to the interior of the tank is by means of arm-length rubber gloves (protected by cloth gloves) attached to the unit.

NIAMD has received 13 germ-free rats from LOBUND (Laboratories of Bacteriology, University of Notre Dame) to be used as subjects in nutrition studies.

Although germ-free guinea pigs are being used in research by the Laboratory of Tropical Diseases, NIAID, the rats are the first germ-free animals studied by nutritionists at NIH.

They are being used to compare nutritional requirements of germ-free animals with normal animals. This will provide insight into the biochemical processes of the lower animals and man.

It is known that the dietary requirement of animals for certain vitamins can be altered by including in the diet such compounds as antibiotics, sulfa drugs, and large amounts of iron salts and ascorbic acid. But it has not yet been determined by what process these compounds affect the vitamin requirement.

The specific problems being studied first in the rats are (1) the role of sulfa drugs in causing a B-vitamin (folic acid) deficiency and (2) the effect of an antibiotic (peni-

cillin) in preventing a B-vitamin (pantothenic acid) deficiency.

The rat was chosen for this study because its small size permits relatively large numbers to be housed in individual compartments within the limited space of the germ-free units, and its nutrition has been extensively studied and found to be similar in many respects to that of man.

The experiments are being conducted by Dr. Floyd S. Daft, Director, NIAMD, in the Nutrition Section, Laboratory of Nutrition and Endocrinology, of which Dr. Olaf Mickelsen is chief. Dr. Daft is being assisted in this study by Ernest G. McDaniel.

Cooperating with NIAMD in the studies are the Sanitary Engineering Branch and NIAID.

## NIH RECORD

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## Publication Preview

The following manuscripts were received by SRB Editorial Section between May 15 and May 20.

Algire, G. H. Discussion of paper by Dr. P. B. Medawar, "Reactions to homologous tissue antigens."

Bartlett, R. G., Jr., et al. Oxygen cost of forced breathing in the submerged resting subject.

Botwinick, J., et al. Effects of electric shock motivation on reaction time and its relation to age.

Braunwald, E., et al. Localization of left-to-right cardiac shunts by dye-dilution curves following injections into the left heart and aorta.

Braunwald, E., et al. The hemodynamic effects of quantitative and controlled mitral and aortic valvular regurgitation: Physiologic and clinical considerations.

Gaffney, G. W., et al. Relationship between oral administration and urinary excretion of cobalt<sup>60</sup>-labelled vitamin B<sub>12</sub> following a parenteral "flushing" dose in 131 "healthy" men of ages 20-94.

Gaub, W. H. A comparative study of the effectiveness of human conjunctiva epithelial cells for the isolation of polioviruses.

Glennier, G. G., et al. The histochemical demonstration of monoamine oxidase activity by tetrazolium salts.

Hooverback, B. J., et al. Inhibition of gastric acid secretion in the dog by the precursor of serotonin, 5-hydroxytryptophan.

Itano, H. A. Interpretation of electrophoretic, solubility, and denaturation data in the study of hemoglobin differences.

Kominz, D. R. A simple method for the estimation of actin in myosin samples; and a new actin present in muscle.

Korn, E. D. Lipoprotein lipase.

Kramer, M., et al. A method for determination of probabilities of stay, release, and death, for patients admitted to a hospital for the mentally deficient: The experience of Pacific State Hospital during the period 1948-1952.

Kuff, E. L., et al. Identification of molecular ferritin in homogenates and sections of rat liver.

Landy, M., et al. Host responses elicited by polysaccharides of bacterial and mammalian derivation.

Millican, R. C., et al. Effects of chlorpromazine and chlorpromazine sulfoxide in normal and tourniquet-shocked mice.

Millican, R. C., et al. Relative effectiveness of certain phenothiazine derivatives against death from shock produced in mice by tourniquet trauma.

Nadel, E. M., et al. Urinary corticosteroids in normal, scorbutic, and stilbestrol-treated guinea pigs before and after the administration of ACTH.

Peacock, A. C., et al. A simplified procedure for quantitative measurement of alkaline phosphatase in white cells.

Pisano, J. J., et al. Biosynthesis of  $\gamma$ -guanidinobutyric acid from  $\gamma$ -aminobutyric acid.

Pittman, M. The effect of haemophilus pertussis on immunological and physiological reactions.

Pollin, W., et al. Psychiatric evaluation of "normal control" volunteers.

Prescott, B., et al. Means of increasing the tolerated dose of isoniazid in mice. III. Certain vitamins.

### THREE EMPLOYEES AT NIH RETIRE

Three NIH employees who retired recently are Bernard F. McGinley, DRS, James F. Moore, DRS, and Cornelius D. Holland, DBO.

Mr. McGinley retired May 31 after 18 years at NIH. He was assistant to the chief of the plumbing shop, Plant Engineering Branch, DRS. During the 1930's he was employed by the Rock Creek Gingerale Company. Earlier, he worked as a plumber for numerous contractors in his hometown, Washington, D. C.

Mr. Moore, a mechanical engineer in the Plant Engineering Branch, DRS, retired March 31. He was born in Broadford, Virginia, in 1897, and served a short time in the Army during World War I. He worked in the engineering department during his first years at NIH, which he joined in December 1943. His home is in Gaithersburg, Maryland.

Mr. Holland, a guard at the Institutes since December 1939, retired on May 31. He came to Washington from Milwaukee, Wisconsin, where he was born in 1896. He worked in the city post office of Milwaukee from 1925 to 1933. During World War II, Mr. Holland served as a corporal in the 331st Field Artillery, 86th Division. Kensington, Maryland, is his present home.

Ralston, B. L. The mechanism of transition of interictal spiking foci into ictal seizure discharges.

Rich, A., et al. The structure of collagen. Sargent, H. G. A technique for killing and preserving ticks for study.

Sarnoff, S. J., et al. Hemodynamic determinants of the oxygen consumption of the heart with special reference to the tension-time index.

Schaefer, E. S., et al. Development of a parental attitude research instrument.

Schwartz, W. B., et al. A syndrome of renal sodium loss and hyponatremia probably resulting from inappropriate secretion of antidiuretic hormone.

Udenfriend, S. Metabolism of 5-hydroxytryptamine.

Yarrow, M. R., et al. Social psychological aspects of aging.

### NJH Spotlight



Rita Malek

Charming and radiant Rita Malek has a quiet, vigorous determination to improve constantly her skills and the techniques of the nursing service. Her enthusiasm and dedication to her profession are evident despite her modest manner.

Rita is head nurse on 5 east, CC, which is one of the units housing patients of NINDB. The unbounded effort she puts into her work might suggest that she has known no other ambition. But in high school she felt a strong attraction to journalism, and there were definite indications she would pursue that profession.

When it came time, however, to make a definite decision, the force of various experiences inclined her in the direction of nursing.

Rita was born in North Andover, Mass., where she attended public schools. She was not only an outstanding student; her vitality surged into a wide variety of interests that culminated in many notable achievements. She won a number of first awards in poster contests and received two DAR awards for good citizenship. She was editor of the

high school paper and coeditor of the yearbook. Her high school class voted her the best-natured girl and the most likely to succeed.

After graduation, Rita made her decision to study nursing at the University of Maryland. She was class treasurer, an office she also held in high school, and received two awards at graduation: the Leander M. Zimmerman Prize for being the most sympathetic nurse and an award for being the most outstanding operating room student nurse.

Because of her absorbing interest in neurology nursing, Rita took post-graduate work in operating room techniques at the Cook County School of Nursing, Chicago, and in neurological and neurosurgical nursing at the New York Neurological Institute, New York City. She also attended two summer workshops--one at Boston University on the improvement of human relations, and the other at Syracuse University on the education of epileptic children.

Following her schooling, Rita spent six years at the University of Maryland Hospital in Baltimore. Although her heavy schedule of work and study consumed virtually all her time, she did sing in her church choir and serve as chairman of the editing committee of the University of Maryland Nurse's Alumnae Bulletin.

Rita's interest in research was instrumental in her decision to come to the Clinical Center in 1954.

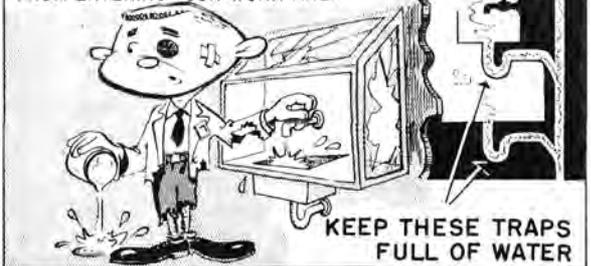
Besides the many professional rewards her work at NIH provides, she also has more time to pursue her outside interests. Painting and sketching she finds both satisfying and "therapeutic." She collects antiques, makes many of her own clothes, and attacks cooking with a creative spirit, since she likes to whip up out-of-the-ordinary dishes. But her main hobby is interior decorating.

(See Spotlight, Page 4)

## Ben Goofin



TO PREVENT TOXIC OR FLAMMABLE VAPORS  
FROM ENTERING YOUR WORK AREA



KEEP THESE TRAPS  
FULL OF WATER

MARSDEN

## R & W SPONSORED POST OFFICE OPENS



Mrs. Hazel W. Rea, president of the R & W Association, purchases stamps from Mrs. Revelle LeVine, employee of the new contract post office on the B1 level of the CC. Waiting his turn is John E. Roller, DRS, who was construction inspector of the project.

## DR. SMALL RECEIVES HONORARY DEGREE

Dr. Lyndon F. Small, Chief of the Laboratory of Chemistry, NIAMD, received an honorary Doctor of Science degree June 9 at Dartmouth College commencement ceremonies.

A graduate of Dartmouth College in 1920, Dr. Small received his M.A. and Ph.D. degrees from Harvard University. He joined PHS in 1939 and came to NIH nine years ago. Since 1951 Dr. Small has been Chief of NIAMD's Laboratory of Chemistry, directing and coordinating activities of the steroid, carbohydrate, and analgesic sections.

## Sgt. Franklin Is Guard of the Month

Sgt. George W. Franklin has been selected Guard of the Month for May. He received this honor for executing his duties with courtesy and responsibility. As supervisor of his shift, Sgt. Franklin was also recommended for his attendance, neat appearance, and the alert and diplomatic manner in which he enforces regulations.

Sgt. Franklin is a native of Brownsburg, Virginia. Before coming to NIH in July 1949, he worked for the Safeway Grocery Co., and served with the U. S. Army as a staff sergeant.

## NEW PROGRAM Contd.

This year's series of lectures, to be given by highly qualified NIH scientists, will be open to NIH professional personnel. Those wishing to attend should contact the office of their Institute Scientific Director. The lectures will be open only to persons attending on a course basis.

The major fields to be covered during the year, the approximate number of hours to be devoted to each, and starting dates for each course are as follows: Organic Chemistry, 46 (July 15); Tracer Methods, 10 (July 15); Mathematics, 20 (July 16); Instrumentation, 20 (July 17); Physical Chemistry, 29 (Sept. 26); Biochemistry, 52 (Oct. 7); Statistics, 16 (Oct. 9); Genetics, 5 (Jan. 6); Physiology, 39 (Jan. 7); Microbiology, 30 (Feb. 11); and Psychology, 4 (April 22).

## AWARD Contd.

the effects of disease-producing viruses on cultures of living cells. Titled "Gross Morphologic Changes in Virus-Infected Monkey Kidney and HeLa Cells," the film has been of considerable interest to scientists and medical schools.

The first application of the technique was in connection with studies on poliovirus by Dr. Bill H. Hoyer, who initiated the recommendation that Mr. Kramis be granted the special award.

## BANTING MEDAL AWARDED DR. DeWITT STETTEN

Dr. DeWitt Stetten, Jr., Associate Director in charge of research, NIAMD, was awarded the Banting Medal of the American Diabetes Association at the seventeenth annual meeting of the association in New York City, June 1.

At the meeting, Dr. Stetten delivered the Banting Memorial Lecture, entitled "Certain Aspects of the Metabolism of Glycogen." This was a report on work carried out in collaboration with Dr. Marjorie Stetten of the Laboratory of Biochemistry and Metabolism, NIAMD.

One of the country's leading research scientists in metabolic diseases, Dr. Stetten received his bachelor's degree from Harvard University and his M.D. and Ph.D. degrees from Columbia University.

## SPOTLIGHT Contd.

In connection with her first love, neurological nursing, she spends one evening a week at the Neurosurgical Research Laboratory of the University of Maryland Medical School. There she assists in research and occasionally performs autopsies and minor operative procedures on research animals.

## WORLD FAMOUS SPEED TYPIST HERE JUNE 18



Cortez W. Peters, internationally known typist, will exhibit his amazing speed and unique typing feats on June 18 at 1:30 and 3:30 p.m. in Wilson Hall. All employees are invited to attend the exhibitions where Mr. Peters will demonstrate proper typing techniques and perform such stunts as making the typewriter "talk" and typing blindfold and in mittens.