

# NIH



# record

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE September 23, 1957, Vol. IX, No. 21

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH



Dr. John M. Lynch (center) is congratulated by Dr. Verne K. Harvey (left), former Medical Director of the U. S. Civil Service Commission, and Howard C. May, of the NIH Board of Civil Service Examiners, after an NIH ceremony where Dr. Lynch received a Presidential citation.

## DR. LYNCH RECEIVES PRESIDENTIAL CITATION

Dr. John M. Lynch, Chief of the Employee Health Service, CC, was awarded a Presidential citation September 6 in recognition of outstanding work in advancing employment of the physically handicapped.

The citation is given jointly by the President's Committee, the Governor of Maryland's Committee, and the Montgomery County Committee for Employment of the Physically Handicapped. It is awarded to individuals and organizations that have made outstanding contributions to the cause of the handicapped.

As the medical member of the NIH Board of the U. S. Civil Service Examiners, Dr. Lynch also renders decisions on the medical acceptability of applicants for Federal employment. In presenting the award, Dr. Verne K. Harvey, former Medical Director of the U. S. Civil Service Commission, commended Dr. Lynch for "...his deep concern and understanding of the needs of the handicapped individual."

Dr. Lynch was primarily responsible for the development of the Employee Health Service at NIH. The Service's preventive medicine program is recognized as being extremely effective in spite of unusual health hazards encountered by NIH medical research personnel.

Before joining the PHS Commissioned Corps in 1951, Dr. Lynch served as an industrial health physician with the Michigan Department of Health. A graduate of the University of Michigan, he received his medical degree from the same school.

In 1954 Dr. Lynch received the Certificate of Health Maintenance from the Occupational Health Institute. He was among the first group of physicians certified in occupational medicine last April by the American Board of Preventive Medicine.

## NIH VACCINATES AGAINST ASIAN FLU

The Employee Health Service of NIH has inaugurated a program offering Asian flu vaccine to selected groups of employees, in accordance with Servicewide policies recently issued from the Office of the Surgeon General, PHS.

Those in the first priority group include physicians, nurses, and other staff members responsible for patient care activities in the Clinical Center. Also included are certain employees concerned with the testing of vaccine and with research on influenza and other viral diseases, and employees maintaining essential services such as police and fire protection and water and power supplies.

If sufficient vaccine becomes available, it is hoped that all employees at NIH can be offered the vaccine.

## Dr. Lindsey Named Awards Board Head

Dr. Dale R. Lindsey, Scientific Director of the Research Grants Branch, DRG, has been appointed chairman of the NIH Board on Employee Awards, as of October 1. He replaces Dr. William S. Baum, NCI, who has been appointed to the Indian Medical Service in Phoenix, Ariz. New Awards Board members include John M. Hannan, NIAID, and Dr. William J. Zukel, NHI.

## Registration Opens For Graduate School

Registration for the fall semester of the NIH Graduate School, sponsored by NIH and the U. S. Department of Agriculture, will be held September 23-27 in Rm. 2B-48, Bldg. 10. Hours of registration are 11:30 a.m.-4:30 p.m., Monday through Friday, and 9:00 a.m.-4:00 p.m. on Saturdays.

# NIDR Conducts Heredity Study

No. 193 in a Series



William Powell examines a 7-year-old child at the NIDR Genetic Field Study.

A socially isolated community in Southern Maryland is providing NIH scientists with unusual opportunities for studies in the fields of genetics, dentistry, medicine, and sociology.

The study was initiated two years ago by Dr. Carl J. Witkop, NIDR, who became interested in the inhabitants during a survey for inherited defects in enamel and dentin. Under Dr. Witkop's direction, a detailed study of the community is now in progress.

The inhabitants consist of about 5,000 individuals of tri-racial origin who reside in two adjoining counties. Available records indicate they have in-married for several centuries.

Preliminary information for use in current studies is compiled through medical, social, and dental interviews conducted by Public Health nurses. Lineage information is verified from church records; hospital records are also checked for medical histories.

The Genetic Field Study operates three field examination trailers, two medical and one dental, to give dental, medical, ophthalmological, and neurological examinations during the summer. The trailers are staffed by 10 medical and dental students. Permanent staff members, from NIH, Howard University, Catholic University, and Episcopal Hospital, include two physicians, three dentists, a sociologist, a statistician, and a geneticist.

From individuals examined to date, staff scientists have been able to definitely diagnose about 28 genetically determined pathological traits. Because of in-marriage, many genetically recessive traits are prevalent in the group. Completed data from the examinations are coded for later analysis, and selected patients are brought to NIH for detailed clinical studies.

The most common hereditary conditions are albinism, dentinogenesis imperfecta (a defect in the formation of tooth dentin), sickle-cell anemia, ankyloglossia (tongue-tiedness), and blue sclera. Several conditions not previously known to be hereditary have been identified.

Some individuals have shown combinations of hereditary pathological traits. By tracing and analyzing their histories, it has been possible to statistically determine linked characteristics--those that are inherited together because genes are carried on the same chromosome.

The study of family inheritance patterns often enables scientists to determine what individuals are likely to be affected by certain conditions, and to diagnose diseases at an early stage.

Data obtained from the study has been of value in many fields. Epidemiological and sociological studies are in progress. Sub-projects have been undertaken by scientists investigating glaucoma, blood-types, hematology, and oral defects.

## Publication Preview

The following manuscripts were received by SRB Editorial Section between July 10 and July 23.

### DRS

Joram, P. R. Notes on the Meiller antimony trioxide method for the preservation of gross specimens in color.

### CC

Plante, W. H. Ventriculography and pneumocephalography.

### NCI

Habermann, R. T., et al. Distemper in raccoons and foxes suspected of rabies.

Laszlo, J., et al. The effects of chemotherapeutic agents on the metabolism of human leukemic cells *in vitro*.

McQuilkin, W. T., et al. The adaptation of additional lines of clone L-929 cells to chemically-defined protein-free medium NCTC 109.

Millar, F. K., et al. Walker 256 tumor tissue as a dietary constituent. I. The stimulation of appetite and growth in a tumor-bearing rat.

White, J., et al. Walker 256 tumor tissue as a dietary constituent. II. The effect upon growth and nitrogen excretion in the normal rat.

Zervas, L., et al. Studies on arginine peptides. I. Intermediates in the synthesis of N-terminal and C-terminal arginine peptides.

### NHI

Anfinsen, C. B. The structure of ribonuclease in relation to its enzymatic activity and physical properties.

Harrington, W. F., et al. Studies on the structure of poly-L-proline in solution.

Kielley, W. W., et al. Oxidative phosphorylation in mitochondrial fragments obtained by sonic vibration.

Steinberg, D., et al. The preparation of tritiated proteins by the Wilzbach method and a simple method for liquid scintillation counting of radioactive proteins.

### NIAID

Cramblett, H. G., et al. Observations on a newly recognized ECHO virus: Association with respiratory disease in children.

Foley, G. E., et al. The cytotoxicity of anti-tumor agents for normal human and animal cells in first tissue culture passage.

Habel, K., et al. The effect of anticellular sera on virus multiplication in tissue culture.

Stoener, H. G. The laboratory diagnosis of leptospirosis.

Stoener, H. G. The sylvatic and ecological aspects of leptospirosis.

### NIH RECORD

Published by  
Scientific Reports Branch  
Division of Research Services  
National Institutes of Health  
Room 212, Building 8  
Bethesda 14, Maryland  
OLiver 6-4000 Ext. 2125

Vogel, J., et al. Adsorption-hemagglutination test for influenza virus in monkey kidney tissue culture.

#### NIAMD

Bieri, J. G., et al. The anti-vitamin E property of *Torula* yeast.

Field, J. B. Studies on the circulating insulin inhibitor found in some diabetic patients exhibiting chronic insulin resistance.

Field, J. B. Studies on humoral antagonist associated with diabetic acidosis.

Hayaishi, O., et al. Studies on oxygenases: Pyrocatechase.

Kalckar, H. M. Some considerations regarding biochemical genetics in man.

La Du, B. N., et al. The nature of the defect in tyrosine metabolism in alcaptonuria.

Laki, K. A tropomyosin-like fragment of denatured myosin.

Mehler, A. H., et al. An artifact in spectrophotometry caused by fluorescence.

Peterson, R. E., et al. A clinical syndrome associated with a defect in steroid glucuronide formation.

Piccardo, M. G. A study of the spatial relations between endoplasmic reticulum and mitochondria in liver cells.

Scow, R. O., et al. Effect of growth hormone and insulin on growth and nitrogen retention in pancreatectomized rats.

Singer, M. F., et al. Oligonucleotides as primers for polynucleotide phosphorylase.

Szulmajster, H. de R. Galactose, a multi-inducer of the enzymes of the galactose pathway in *saccharomyces cerevisiae*.

von Oettingen, W. F. The new American standard on maximum acceptable concentration of carbon tetrachloride and what it means to the general public.

Wilson, H., et al. Chromatographic procedure for the determination of urinary corticosteroids and C<sub>19</sub> steroids.

#### NIDR

McClure, F. J. Effect of lysine administered by different routes on cariogenicity of a heated skim milk diet.

#### NIMH

Durell, J., et al. The synthesis of methionine by enzymatic transmethylation. I. Purification and properties of thein homocysteine methyltransferase.

Felsenfeld, G., et al. Studies on the formation of two and three stranded polyribonucleotides.

Garnezy, N. The training program of the NIMH and its implications for state and local mental health programs.

Gewirtz, J. L., et al. A note on the similar effects of low social availability of an adult and brief social deprivation on young children's behavior.

Goffman, E. On the characteristics of total institutions.

Goffman, E. Introduction to sociology issue of psychiatry.

Perlin, S. Psychiatric aspects of senile nervous diseases: Part I. A "normal control" study.

#### NINDB

Burton, R. M., et al. The effect of reserpine and promazine on liver diphosphopyridine nucleotide content following the administration of nicotinamide.

## NCI Commemorates 20th Anniversary in Journal

The August 1957 issue of the *Journal of the National Cancer Institute* commemorates the twentieth anniversary of the Institute. The *Journal* contains articles describing the development and accomplishments of cancer research and control programs.

Dr. J. R. Heller, NCI Director, reviews the organization and growth of NCI in an article entitled, "The National Cancer Institute: A Twenty-Year Retrospect." Former NCI Directors, Dr. Carl Voegtlin, Dr. Roscoe R. Spencer, and Dr. Leonard A. Scheele, have contributed congratulatory anniversary messages.

## Mrs. Wipf Named To Special Events

Dorothy Wipf is Acting Head of the Special Events Section, DRS, during the temporary absence of Dorothy Horlander. Mrs. Wipf is well known at NIH. She was employed by the Personnel Branch from September 1947 to June 1956 in the Appointments and Records Section and the Employee Relations Section, and returned to NIH for three months in February 1957 to help employees with their income tax problems.

## R & W NOTES

From Hamster headquarters we hear rumors that this year's "Life at NIH" is going to be the best ever. You'll want to join the fun, so don't miss the tryouts at 12 noon and 7:30 p.m., October 2 and 3 in the CC Auditorium. There are many parts for singers, dancers, and those who just want to get in on the act.

Director Richard Williams reports that veteran Hamsters Hazel Rea, Paul Blank, and Sue Oliver have been appointed assistant directors of the play, which will be presented November 21-23.

The R & W Counseling Service is available without charge to all NIH employees. This service provides experienced and confidential counseling to employees on personal or family problems. Mrs. Letty Whipple is available each Thursday in Bldg. 16A, Room 203, from 8:30 a.m. to 5:00 p.m., and can be reached on ext. 3597. On other days, appointments may be made by calling ext. 2381.

## Dental Clinic Moves

The Dental Clinic for Commissioned Officers is now located in Bldg. 10, Rm. IN-256. Telephone extensions, 575 and 576, remain the same.

## GERRY REMEMBERS HIS DAD WITH GIFT TO NCI



Ten-year-old Gerald C. King (center) of Rockville presents Dr. John R. Heller, NCI Director, with \$52.40 at an NIH ceremony September 10. Gerry previously sent \$2 of his \$5 vacation fund in memory of his father, a former NIH patient, who died of cancer. Delighted by Dr. Heller's prompt letter of thanks, Gerry and his mother, Mrs. Elizabeth King (right), a nurse in the CC, requested that sympathetic friends contribute money for cancer research.

## ANIMAL CARETAKING DEMANDS SKILL, KNOWLEDGE, TRAINING



John D. Stream, a "student" in the June LAB course, is a Medical Biology Technician in NHI. He helps maintain the colony for the Laboratory of Cellular Physiology and Metabolism. He also gives technical assistance in lab research projects. Here he is preparing to perfuse a rat kidney for use in protein studies.



On order, LAB provides NIH laboratories with animals of specific genetic categories, age, sex, and weight. Claude W. Tibbs, LAB caretaker, checks this animal's physical condition and weight before shipment.

Breeding and maintaining animals for research has become "big business" at NIH.

During 1956 Laboratory Aids Branch, DRS, bred and issued more than 900,000 small and large animals of all types. On the average, each of the 98 animal caretakers in DBS and the Institutes received and was responsible for more than 9,000 animals last year. LAB production this year is expected to exceed last year's mark.

Animal caretaking duties at NIH involve considerably more than routine housekeeping, since each caretaker must maintain his colony in accordance with the demands of research under way in his Institute. Additionally, he must possess the knowledge and skill required to maintain his colony at a high quality level, for substandard animals suffering from disease, malnutrition, or injury can seriously prolong or even nullify the results of an entire research project.

As the NIH animal-production and holding center, LAB has long been keenly aware of the difficulties these men and women encounter in maintaining quality in the face of steadily rising production. LAB itself continually conducts studies and instructs its staff in sanitation, the use of caging and equipment, antibiotics and other disease-control drugs, bedding materials, rations and dietary supplements, and animal handling.

This summer, the Branch took an initial step in a "job assistance"



Every two weeks, LAB caretaker Claude W. Tibbs checks the health of each of his charges, records the findings on individual History Charts (on table), and dusts the animals to control pests.

program for the Institute's caretakers.

Dr. Willard H. Eyestone, LAB Chief, and his staff planned a "pilot" refresher course consisting of five two-hour lecture and demonstration periods. The late Dr. Charles S. Dayton, NIH Training Officer, gave invaluable organizational support and assistance. The material selected emphasized new and more efficient methods and techniques and the fundamentals of good animal care, rather than administrative or other details which vary from one Institute to another.

The course, held in June, was attended by 12 experienced animal caretakers selected on the basis of merit by their supervisors. Students were Arthur Braxton, Maurie Page, and Nathan Diggs, NIAID; Donald Lyles, Fred Sexton, John Stream, Charles Pierson, Anthony Brazell, and Carlton Abney, NHI; and John Carter, Elmer Horman, and R. Anderson, LAB.

The "faculty" included Dr. Eyestone, Dr. William I. Gay, and Samuel M. Poiley of LAB, and Robert D. Merrill, SEB.

Lectures and demonstrations presented the care and handling of small and large animals, basic sanitation, the use of animals in NIH research, and the caretaker's role in the research program here.

At the conclusion of the five sessions, the students were asked to evaluate the course in the light of their own duties. Their comments indicated that the planners of the course had struck close to the mark in estimating the caretakers' job needs. The class unanimously considered that the training received was of immediate and future value to them, and recommended the course to fellow caretakers.

During the past eight weeks, Dr. Eyestone and his staff reviewed the material presented in June and, following some excellent student suggestions, have readied a second 10-hour course tentatively scheduled for October. Supervisors have been asked to submit the names of recommended caretakers this week.