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FOUR SCIENTISTS HERE GET HONORARY DEGREES

Four NIH scientists received honorary degrees at recent university and college convocations. Those honored are Dr. James A. Shannon, Director of NIH; Dr. Ralph G. Meader, Chief of the Research Grants Branch, NCI; Dr. Walter E. Heston, Head of the General Biology Section, NCI; and Dr. G. Robert Coatsney, Assistant Chief of the Laboratory of Tropical Diseases, NIAID.

Dr. Shannon received an honorary Doctor of Science degree from Duke University on June 2, and on the following day was awarded an Sc.D. by Providence College. Prior to assuming the directorship of NIH in 1955, Dr. Shannon served as Associate Director for three years.

Dr. Meader was given an honorary Doctor of Science degree by Ohio Wesleyan University on June 9 for "unselfish leadership in the search for the cause and cure of cancer." He received his A.B. from the same university in 1925, and started his research work at NCI in 1947.

Michigan State University conferred an honorary Doctor of Laws degree upon Dr. Heston on June 8

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Grants Applications Highest In History

Research grants applications submitted to NIH in the first half of 1958 reached the highest point in the history of the PHS program. The dollar volume totaled \$36,000,000 -- the largest amount yet requested.

During the April-May Study Sections meetings of this year, 2,180 competing applications were reviewed. This is an increase of 386 over those considered in the same period of 1957. The dollar-volume increase amounts to \$4,000,000.

W.H.O. DELEGATES ENTERTAINED HERE



WHO delegates gather in the CC Board Room to hear talks on NIH and its research programs.

NIDR Celebrates 10th Anniversary

Ten years ago this month, Congress enacted legislation to establish at NIH a National Institute of Dental Research.

The events that preceded the founding of NIDR date back to 1926 when PHS was asked to survey the town of Bauxite, Ark., where many citizens were victims of a tooth defect known as mottled enamel.

Five years later, the project was continued by a small dental research unit stationed at NIH. At this time the unit consisted of a single dental officer, Dr. H. Trendley Dean. From these early studies on mottled enamel by Dr. Dean and his co-workers, there emerged the discovery that fluoride, when added in prescribed amounts to drinking water, provides substantial protection against tooth decay.

In recognition of this work and of the wide horizons yet to

(See NIDR, Page 4)

Delegates to the World Health Organization from 13 foreign countries attended a full-day program here June 23 before returning to their home countries. Surgeon General Leroy E. Burney, newly-elected President of WHO, met and spoke with the visiting delegates as they lunched in the CC Coffee Shop.

The 18 participants were greeted by Dr. C. J. Van Slyke, Associate Director, who welcomed them on behalf of NIH and PHS. Extramural and intramural research programs at NIH were then described to the delegates by Drs. Robert B. Livingston and Ralph G. Meader. Dr. Jack Masur, CC Director, discussed the Clinical Center and clinical research programs.

An afternoon program was arranged to enable the visitors to tour their choice of two Institutes or Divisions.

The delegates were from Rumania, Taiwan, Czechoslovakia, Indonesia, Tunisia, India, Iraq, Cuba, Ceylon, Syria, Thailand, El Salvador, and Portugal.

HA Test Identifies New Myxoviruses

No. 208 in a Series



Drawings show adsorption of guinea-pig erythrocytes to monkey-kidney tissue culture with addition of HA viruses (positive) and normal monkey-kidney tissue culture (negative).

Despite notable advances in the field of common respiratory diseases—at least 70 newly recognized viral agents have been described since 1948—the causes of most of these diseases remain unknown.

The newly developed hemadsorption (HA) test for the detection of influenza-like viruses is expected to speed up laboratory diagnosis.

The HA test, a comparatively simple laboratory technique, was developed last summer by John Vogel and Dr. Alexis Shelokov, NIAID, now with the Middle America Research Institute in Panama.

Chicken or guinea-pig erythrocytes, or a mixture of both, are added to monkey-kidney tissue culture that has been inoculated with throat washings or swabs from an infected patient and permitted to incubate 2 to 5 days. The material is then observed under a low-power microscope for its reaction.

When the reaction is positive, hemadsorption occurs. The erythrocytes adhere, by adsorption, to the surface of cells in the culture.

Often, this examination, which takes about 20 minutes, is sufficient to identify a virus.

The development of the HA test led to NIAID's discovery of two respiratory viruses in children. The new viruses are provisionally named hemadsorption viruses Types 1 and 2.

The HA viruses are classified as myxoviruses, a generally accepted family name for a group of viruses having a mucoid component. The

new viruses are related to, but biologically distinct from, the viruses that produce mumps, croup-associated diseases, and influenza A, B, C, and D.

Type 1 HA virus is associated with a 3-day fever, coughing, and other upper and lower respiratory signs and symptoms. Type 2 HA virus produces similar illnesses but is particularly associated with croup, one of the important causes of death in young infants.

In 700 children studied in Washington hospitals during the past winter, 47 isolates of virus Types 1 and 2 were found. Only one each of the two viruses was recovered from 550 age-matched control children.

These findings confirm studies made in a nursery at Junior Village, where Type 1 virus was isolated in 27 out of 54 children.

The use of the HA test was responsible for many of the virus isolations. The cytopathogenic (cell-destroying) effect of the viruses was minimal during initial passage. This undoubtedly is the explanation for previous failures to discover these viruses, which retrospective studies show to have been very common in recent years.

The role of the HA viruses in adult respiratory illness is currently under investigation in the Patuxent Institution at Jessup, Md. A small outbreak of cold-like disease occurred at the reformatory after male volunteers were infected with Type 2 virus.

Publication Preview

The following manuscripts were received by the SRB Editorial Section between April 11 and April 25.

DBS

Schmidt, P. J. An anti-k (anti-Cellano) serum with the properties of a complete saline agglutinin.

DRG

Stone, F. L. Research manpower in the sciences basic to medicine.

DRS

Johnston, G. I.; Riggle, G. C.; and De Broske, J. M. F. District paper, control system of dual isotope scanner for detecting brain tumors.

Joram, P. R. Economical plastic museum jars - an exhibit.

NCI

Brindley, C. O.; Markoff, E.; and Schneiderman, M. A. Direct observation of lesion size and number as a method of following the growth of human tumors.

Bryant, J. C.; Schilling, E. L.; and Earle, W. R. Massive fluid suspension cultures of certain mammalian tissue cells. I. General characteristics of growth and trends of population. Bryant, J. C.; Schilling, E. L.; and Earle, W. R. Massive fluid suspension cultures of certain mammalian tissue cells. II. Glucose utilization and cell proliferation.

Endicott, K. M. The National Cancer Chemotherapy program.

Goldin, A.; Venditti, J. M.; Humphreys, S. R.; and Mantel, N. Quantitative evaluation of chemotherapeutic agents against advanced leukemia in mice.

Heller, J. R. What is new in cancer? Holcroft, J. W., and Smith, W. W. Endotoxin treatment and x-irradiation in mice bearing transplanted tumors.

Jude, J. R.; Zimmerman, J. M.; and Ward, G. E. The results of thyroid cancer surgery.

Potter, M. Variation in resistance patterns in different neoplasms.

Sievers, M. L. Hereditary aspects of gastric secretory function: race and ABO blood groups in relationship to acid and pepsin production.

Smith, W. W. Induced recovery of blood-forming tissue in irradiated animals.

Smith, W. W., and Cornfield, J. Extending the range of dose-effect curves for irradiated mice.

Westfall, B. B.; Peppers, E. V.; Bryant, J. C.; Schilling, E. L.; and Earle, W. R. Effect on the medium on growth of clone NCTC 929 cells as suspensions in agitated flasks with simple fluid addition.

NHI

Bragdon, J. H. Chylomicrons and lipid transport.

Hajdu, S., and Leonard, E. A serum protein system affecting contractility of the frog heart present in increased amounts in patients with essential hypertension.

Sanders, R. J., and Morrow, A. G. A new diagnostic method in the study of congenital heart disease; the Krypton ⁸⁵ test for circulatory shunts.

Sjoerdsma, A. Selected observations on carcinoid, mastocytoma and pheochromocytoma.

NIAID

Andrews, J. M. The residual control of communicable diseases.

Brennan, J. M., and Jones, E. K. Keys to the chiggers of North America with synonymic notes and descriptions of two new genera (Acarina: Trombiculidae).

Coatney, G. R.; Mickelsen, O.; Young, M. D.; Burgess, R. W.; and Pirkle, C. I. Chloroquine or pyrimethamine in salt as a suppressive against sporozoite-induced vivax malaria (Chesson strain).

Eagle, H.; Barban, S.; Levy, M.; and Schulze, H. The utilization of carbohydrates by cultures of normal and malignant human cells.

Huebner, R. J. Implications of 70 newly recognized viruses in man.

Kohls, G. M. Ixodides.

Lerner, E. M., and Haas, V. H. Histopathology of lymphocytic choriomeningitis in mice spared by amethopterin.

Paterson, P. Y. Studies of immunological tolerance to nervous tissue in rats.

Salvin, S. B. Delayed-type hypersensitivity and antibody formation—a discussion.

Salvin, S. B. Serology and acquired resistance.

Salzman, N. P. Systematic fluctuation in the cellular protein, RNA and DNA, during growth of mammalian cell cultures.

Weinberg, E. D.; Saz, A. K.; and Pilgren, E. Y. Induction of bacteriolysis by cysteamine and its derivatives.

NIAMD

Best, J. B., and Heaton, J. Z. Thermodynamic aspects of homeostasis.

Loki, K. The nature of the meromyosins.

Lillie, R. D. Acetylation and nitrosation of tissue amines in histochemistry.

Mehler, A. H. Tryptophan-nicotinamide transformation.

Wood, H. B., Jr., and Fletcher, H. G., Jr. The preparation of crystalline 2-O-methylsulfonyl-D-arabinose and some of its derivatives.

NIDR

Keyes, P. H. Dental caries in the molar teeth of rats. I. Patterns of caries induced by high-carbohydrate low-fat diets.

Keyes, P. H. Dental caries in the molar teeth of rats. II. A method for diagnosing and scoring several types of lesions simultaneously.

NIMH

Gibson, R. W.; Cohen, M. R.; and Cohen, R. A. On the dynamics of the manic depressive personality.

Wynne, L. C.; Day, J.; Hirsch, S.; and Ryckoff, I. The family relations of a set of monozygotic quadruplet schizophrenics.

NINDB

Chang, J. J., and Hild, W. Contractile responses to electrical stimulation of glial cells from the mammalian central nervous system cultivated *in vitro*.

Cole, K. S. Potassium ion current in the squid axon membrane.

Enomoto, T. F. Unilateral activation of the nonspecific thalamic system and bilateral cortical responses.

Feder, N., and Sidman, R. L. Histological fixation by a modified freeze-substitution method.

Hall, K.; Baldwin, M.; and Norris, F., Jr. Succinylcholine drip for awake craniotomy patients.

Kuhlman, R. E., and Resnik, R. A. Enzymatic studies of x-irradiated corneal epithelium with special reference to glutathione reductase.

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Dr. Cutler, Others, Named Assistant Surgeon General

Three career PHS officers were promoted to the rank of Assistant Surgeon General this month, including Dr. John C. Cutler, Assistant Director, NIAID. Others are Harry G. Hanson, Director of PHS's Robert A. Taft Sanitary Engineering Center, Cincinnati, and M. Allen Pond, staff assistant to the Special Assistant for Health and Medical Affairs, HEW.

Dr. Cutler, who has been with NIAID since January 1958, has been named Assistant Surgeon General for Program in the Office of the Surgeon General, PHS. He succeeds Dr. Arnold B. Kurlander, who has been appointed Deputy Chief of the Bureau of Medical Services.

Mr. Hanson has been with the Service's Commissioned Corps since 1942 and has directed the Sanitary Engineering Center since its establishment in 1954. Mr. Pond, a commissioned officer for 14 years, has been on detail from PHS to the Office of the Secretary, HEW, since 1953.

Lost

Anyone finding a book entitled "Clinical Neuropathology," by Dr. Paul O. Chatfield, and autographed by the author, please return it to William Loebel, Bg. 10, Rm. 1A-17.

ROCKEFELLER AWARD PROGRAM NOW OPEN

Nominations for the Seventh Annual Rockefeller Public Service Awards must be submitted to the NIH Board on Employee Awards by July 30.

These awards are designed to recognize Civil Service employees who demonstrate outstanding leadership, intellectual maturity, character, and competence, and who evidence sincere interest in public service as a career.

Award recipients are entitled to spend from six to nine months in residence at an educational institution of their choice, or in some comparable educational activity.

In past years, eight DHEW employees have received these awards. Of these, four were NIH employees.

Application and endorsement forms may be obtained by calling ext. 707.

Dr. LaRoche Appointed NHI Visiting Scientist

Dr. Marie-Jeanne LaRoche, a pharmacologist of the Institut National d'Hygiene, Paris, France, has been appointed to a Visiting Scientist post in NHI. She will spend a year in the Laboratory of Chemical Pharmacology under the direction of Dr. Bernard B. Brodie.

Hamsters Rehearse Compass Course Skit



The Hamsters have not succumbed to any kind of epidemic, as this picture might suggest. They are lending their talents to the orientation course by portraying the services offered to NIH personnel by the Employee Health Service. Shown rehearsing are (left to right): Helen Orem, Dorothy Ellis, Phil Joram, Marcia Musser, Len Stitleman, and Ozzie Grabner.

FAREWELL RECEPTION HELD FOR SECRETARY FOLSOM

A farewell reception, sponsored by PHS, was held here on June 29 to honor retiring HEW Secretary Marion B. Folsom, who has served in the Cabinet post for the past three years. He will be succeeded by Dr. Arthur S. Flemming, president of Ohio Wesleyan University.

Several hundred persons attended the reception, held in the CC Auditorium. Music was furnished by the "Singing Strings," an Air Force ensemble. After the program, which included talks by Mr. Folsom and Surgeon General Leroy E. Burney, refreshments were served on the terrace of the Clinical Center.

NEWS BRIEFS

Dr. Thomas Parran, former PHS Surgeon General, was awarded the 8th Leon Bernard Foundation Prize at the recent WHO Assembly in Minneapolis. The award was in recognition of Dr. Parran's achievements in the field of social medicine. He served as PHS Surgeon General for 12 years before his retirement in 1948.

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A national conference on public health training sponsored by PHS will be held in Washington on July 28 to review and evaluate the public health traineeship program authorized by the Health Amendments Act of 1956. Dr. Berwyn F. Mattison, executive secretary of the American Public Health Association, will be chairman.

DEGREES Contd.

be explored, a Dental Institute was officially established at NIH in June of 1948, with Dr. Dean as Director. The original one-man dental unit had become one of the world's outstanding dental research institutions.

NIDR has grown to include a staff of 44 professional investigators at NIH, as well as an expanding research grants and training program in this country and abroad. Studies are under way in such fields as bacteriology, genetics, pathology, biochemistry, epidemiology, and biophysics. According to Dr. Francis A. Arnold, Jr., present NIDR Director, "the fact that attention is now being focused on the true magnitude of the dental health problems of the nation is, in itself, indicative of progress made."

TRANSLATION PROGRAM INTERESTS RUSSIANS



Ministers of health from three Union Republics of the USSR listen intently as Scott Adams (2d from left), Librarian, outlines NIH's Russian Scientific Translation Program. The Russians, who visited NIH after attending WHO meetings in Minneapolis, were also introduced to Institute Directors here. David P. Gelfand (3d from left), Senior Program Assistant, served as guide and translator during the visit.

DR. HENRY W. SCHERP ASSUMES NIDR POST

Dr. Henry W. Scherp, formerly Professor of Bacteriology at the University of Rochester, has been appointed Chief of the Laboratory of Microbiology, NIDR.

A native of New York, Dr. Scherp received his B.S. from Dartmouth College and his M.S. and Ph.D. from Harvard University. He replaces Dr. Robert M. Stephan, who will now devote his full time to the position of Acting Chief, Clinical Investigations Branch, NIDR.

NIDR Contd.

for "general achievement in the field of medical research." He was the first to receive a Ph.D. from this university in the Department of Zoology, and was one of the recipients of Michigan State's Centennial Award in 1956. Dr. Heston joined the Cancer Institute when it was established in 1940.

Dr. Coatney received an honorary Doctor of Science degree from Bowling Green State University on June 8 in recognition of his contributions to world health, particularly in the development of antimalarial drugs. He has been conducting research at NIH for over 20 years.

FATHER VEITH APPOINTED FULL-TIME CC CHAPLAIN

The Reverend Father Francis Veith has been appointed full-time Catholic chaplain in the Clinical Center. For more than two years, Father Veith has served as a part-time chaplain, visiting patients and holding Mass in the CC chapel.

Prior to his full-time assignment here, Father Veith was assistant to the Reverend Father James A. Caulfield of St. Jane de Chantal Church, Bethesda. He was appointed to his new post by Archbishop O'Boyle of the Washington Catholic Diocese.

In addition to saying Mass, Father Veith will provide spiritual guidance for patients in the Clinical Center.

Are You Colorblind?

The Ophthalmology Branch of NINDB wishes to locate individuals who have certain types of color blindness. Those who have difficulty in distinguishing one or more colors, and who would be interested in analysis and classification, are asked to call ext. 3080.

NIH Will Welcome--

July 10 - National Education Association, Washington United Nations Seminar.

July 29, 30 - American and Canadian Home Economics Associations.