

NIH



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DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

July 28, 1958, Vol. X, No. 15

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

RESEARCH FELLOWSHIP PROGRAM IS EXPANDED

The new PHS postdoctoral research fellowship program, initiated last year, will soon be extended to citizens of countries other than the present 11 Western European countries.

Next month, program representatives will visit Mexico and seven Central and South American countries, to contact national research organizations and scientific committees.

These organizations will be responsible for nominating applicants, who will be finally selected by a committee of NIH scientists. Those awarded fellowships will receive a year of training at the U. S. research institution of their choice.

Dr. John R. Paul of Yale University, who is a special consultant for the program, and Dr. Ronald E. Scantlebury, Chief of the DRG Fellowship Section, will visit medical centers in Brazil, Argentina, Chile, Uruguay, Peru, Columbia, El Salvador, and Mexico. According to Dr. Scantlebury, the program should be functioning in these countries by next year.

A study is now in progress to provide a basis for extending the program into the Far East. Australia, New Zealand, India, and Japan may also be included in future program expansions.

Flemming Appointment Confirmed By Senate

The appointment of Arthur S. Flemming to the post of Secretary of the Department of Health, Education, and Welfare was confirmed by the Senate on July 8. It is expected that Dr. Flemming will take office early in August. He succeeds Marion B. Folsom, who will return to private business in Rochester, N. Y.

SECRETARY FOLSOM HONORED AT RECEPTION



HEW Secretary Marion B. Folsom, who will retire this month, looks through a scrapbook containing highlights of his three years in office. A farewell reception in his honor was held at NIH recently. Looking on are (left to right) Dr. Leroy E. Burney, Surgeon General, PHS; Dr. James A. Shannon, Director, NIH; G. P. Larrick, Commissioner of Food and Drugs, FDA; Dr. Winfred Overholser, Superintendent, St. Elizabeths Hospital, PHS; Mr. Folsom; E. E. Ferebee, Deputy Director, Office of Vocational Rehabilitation; Lawrence G. Derthick, Commissioner of Education, OE; Charles I. Schottland, Commissioner of Social Security, SSA.

Employees Receive \$13,000 In Awards

A total of \$13,000 was awarded to 122 NIH employees during the past fiscal year as a result of their suggestions, special acts and services, or superior performance.

Of this figure, \$3,185 was awarded for suggestions that resulted in a saving of \$85,980 to the Government. The remainder of the award money was presented for "intangible" benefits, based on superior performance and special acts and services.

During the past year, the NIH Board on Employee Awards received 63 suggestions, of which 41 were approved. This number is greater than in past years, indicating an increased awareness of the program, and a growing recognition of group effort by NIH supervisors.

Dr. Peterson Appointed Asst. Director, NIAID

Dr. Paul Q. Peterson, formerly Chief of the Chronic Disease Control Program, BSS, assumed the post of Assistant Director, NIAID, on July 1. He replaces Dr. John C. Cutler, recently named Assistant Surgeon General for Program in the Office of the Surgeon General, PHS.

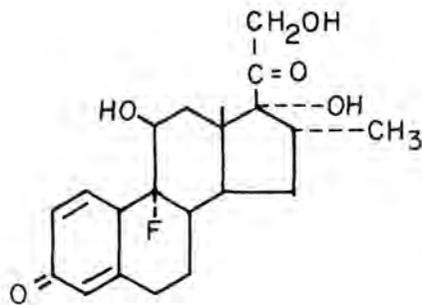
As Assistant Director of NIAID, Dr. Peterson will assist Director Justin M. Andrews in the conduct of Institute business. He will also serve as administrative representative for NIAID research grants activities.

A PHS Commissioned Officer since 1942, Dr. Peterson has had extensive experience in public health work at the state and local levels.

(See Peterson, Page 4)

Hexadecadrol Offers Hope For Arthritis Patients

No. 210 in a Series



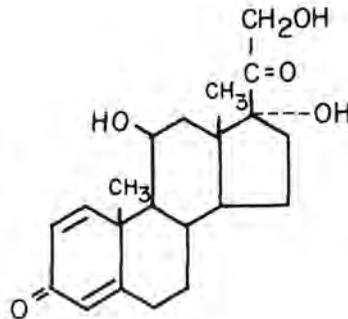
HEXADECADROL

Hexadecadrol, the newest of several antirheumatic drugs, is the most potent thus far synthesized, according to Dr. Joseph J. Bunim, NIAMD Clinical Director.

Dr. Bunim told the American Rheumatism Association recently that early clinical trials show the drug's antirheumatic potency to be about 25 times that of hydrocortisone and about six times that of prednisone.

Dr. Bunim conducted clinical, hormonal, and metabolic balance studies on hexadecadrol in collaboration with Drs. Roger L. Black, Leo Lutwak, R. E. Peterson, and G. D. Whedon. They emphasized that results of short-term trial are usually more favorable than long-term administration, since major, unwanted effects occur, if at all, after prolonged corticosteroid therapy.

Twelve of 18 patients, previously treated unsuccessfully with other drugs, improved markedly or moderately when placed on hexadecadrol, and four improved slightly. Two patients with particularly severe cases of rheumatoid arthritis failed to improve. None developed peptic ulcers, edema, fractures, hyperglycemia, glycosuria, or evidenced the euphoria or mental depression that corticosteroids sometimes produce. The side effects were minor--increased appetite and sweating, transitory skin spots, insomnia, weight gain, and mild hirsutism.



PREDNISOLONE

Increased urinary and fecal excretion of nitrogen and phosphorus, and loss of sodium, calcium, and potassium are some of the undesirable effects produced by long-term therapy with the older adrenal cortical steroids. Chief among the hazards that may result are mental changes, vascular complications, bone fractures, and particularly peptic ulcers. Initial clinical and metabolic studies suggest that hexadecadrol may be free of most of these complications.

In these studies, covering a 3-month period, the dosages varied from 0.8 to 4.0 milligrams daily. The higher potency of hexadecadrol makes possible the small doses.

Synthesis of hexadecadrol was accomplished by altering the molecular structure of prednisolone. A fluorine atom was added at carbon 9 and a methyl radical at carbon 16. Now available in limited quantities strictly for research purposes, the new drug will be marketed only at the conclusion of much more extensive clinical trials.

Though it is still too early to fully evaluate hexadecadrol as a therapeutic agent, it is not too soon to say that it holds promise for the arthritic patient and his physician. The really important question to be answered by further clinical trial is whether long-term hexadecadrol administration will continue to suppress rheumatoid arthritis effectively without giving rise to serious toxic effects.

Publication Preview

The following manuscripts were received by the SRB Editorial Section between May 8 and May 19.

DBS

Hare, J. D., and Warren, J. Complement fixing antigens of live and inactivated poliovirus. III. Evaluation of a sensitive quantitative procedure for complement fixation.

NCl

Fioramonti, M. C.; Evans, V. J.; and Earle, W. R. The effect of inoculum size on proliferation of NCTC strain 2071, the chemically defined medium strain of NCTC clone 929 (strain L).

Gilliam, A. G. Epidemiological considerations related to the control of cervical cancer.

Landau, B. R.; Laszlo, J.; Stengle, J.; and Burk, D. Certain metabolic and pharmacologic effects in cancer patients given infusions of 2-deoxy-D-glucose.

Laszlo, J.; Landau, B.; Wight, K.; and Burk, D. The effect of glucose analogs on the metabolism of human leukemic cells.

Olch, P. D.; Eck, R. V.; and Smith, R. R. An experimental study of the effect of external irradiation on a "primary" tumor and its distant metastases.

Rothberg, S. Possible significance of elevated arginase activity in psoriasis scales.

Shear, M. J.; Achinstein, B.; and Pradhan, S. N. Effect of a bacterial polysaccharide and of several other tumor-necrotizing agents on carotid blood pressure in mice.

NHI

Brodie, B. B.; Spector, S.; and Shore, P. A. Implication of brain noradrenaline in action of psychic energizers.

Gordon, R. S., Jr. The preparation of radioactive polyvinylpyrrolidone for medical use.

Ross, J., Jr.; Gilbert, J. W., Jr.; Sharp, E. H.; and Morrow, A. G. Elective cardiac arrest during total body perfusion: The relationship of elevated intracardiac pressures during arrest to subsequent myocardial function and pathologic pulmonary changes.

Sanders, R., and Morrow, A. G. The diagnosis of circulatory shunts by the nitrous oxide test: Improvements in technic and methods for quantification of the shunt.

Severinghaus, J. W., and Bradley, A. F. Electrodes for blood pO₂ and pCO₂ determination.

Sjoerdsma, A. Clinical and laboratory features of malignant carcinoid.

Strehler, B. L., and Gee, M. V. Spectrophotometry of highly scattering samples: A simple accessory permitting automatic spectrophotometric recordings of organs, tissues, particulates and cells.

Udenfriend, S. Aspects of aromatic amino acid metabolism of neurochemical interest.

NIAID

Bell, J. F.; Owen, C. R.; and Jellison, W. L. Group A streptococcus infections in wild rodents.

Brennan, J. M. Synonymy of *Odontacarus Ewing, 1929* and *Acomatacarus Ewing, 1942* with redescription of *O. dentatus* (Ewing) and *O. australis* (Ewing), also descriptions of three new species from southern United States (Acarina: Trombiculidae).

Burch, T. A., and Reardon, L. V. Vaginal trichomoniasis and associated cytology.

Eddy, B.; Rowe, W. P.; Hartley, J. W.; Stewart, S. E.; and Huebner, R. J. Hemagglutination with the S. E. polyoma virus.

Haskins, W. T., and Olivier, L. Nitrogenous excretory products of *Taenia taeniaformis* larvae.

Lackman, D.; Casey, M.; Philip, R.; and Owen, C. A comparison of influenza in the Northwest caused by A-prime and Asian strains of influenza virus.

Paterson, P. Y. Discussion of session devoted to immunologic unresponsiveness.

Reichelderfer, T. E.; Chanock, R. M.; Craighead, J. E.; Huebner, R. J.; Ward, T. G.; Turner, H. C.; and James, W. Infection of human volunteers with type 2 hemadsorption virus.

Rush, W. A.; Brennan, J. M.; and Eklund, C. M. A natural hibernation site of the mosquito *Culex tarsalis* Coquillett in the Columbia River Basin, Washington.

Saz, A. K., and Martinez, L. M. Enzymatic basis of resistance to Aureomycin. II. Inhibition of electron transport in *Escherichia coli* by Aureomycin.

NIAMD

Ashwell, G.; Wahba, A.; and Hickman, J. A new pathway of uronic acid metabolism.

Bauer, H. Confirmation of the structure of imidazoleacetic acid riboside by synthesis.

Diehl, H. W., and Fletcher, H. G., Jr. 2-deoxy-D-ribose. I. A simplified preparation of 2-deoxy-D-ribose based on treatment of α -D-glucose monohydrate with solid calcium hydroxide.

Kilham, L.; Lerner, E.; Hiatt, C.; and Shack, J. Properties of myxoma virus transforming agent.

Labaw, L. W., and Wyckoff, R. W. G. The electron microscopy of tobacco necrosis virus crystals.

Richtmyer, N. K. The formation of 1,6-anhydro- α -D-galactofuranose and 1,6-anhydro- β -D-galactopyranose by the action of acid on D-galactose.

NIDR

Greene, J. C. Relationship of oral hygiene status to periodontal disease in and around Bombay, India.

NIMH

Axelrod, J.; Shafer, R.; Inscow, J. K.; King, W. M.; and Sjaerdsma, A. The fate of papaverine. Cole, J. O. Research problems in clinical psychopharmacology.

Lilly, J. C. Some considerations regarding basic mechanisms of positive and negative types of motivations.

Parloff, M. B.; Schwartz, C.; and Jenkins, W. C. Impact of ward milieu philosophies on nursing role concepts.

Schaefer, E. S. A circumplex model for maternal behavior.

Schaefer, E. S. An empirical model for maternal behavior and personality development.

Schaffer, L., and Deasy, L. C. Social mobility and the value context of psychiatry.

Sternberg, R. S.; Chapman, J.; and Shakow, D. The problem of intrusions on privacy in psychotherapy research.

NINDE

Agranoff, B. W. Cytidine nucleotides. Frank, K. Basic mechanisms of synaptic transmission in the central nervous system.

Moore, J. W. Zero volt loss current meters. Pieper, J. L., Jr.; and Allison, M. E. Neurologic syndromes observed in association with Asian influenza epidemic on Guam.

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

Dr. Branham To Retire After 30 Years At NIH



Dr. Sara E. Branham

Dr. Sara E. Branham, a pioneer in the field of biologic research, will retire this month from her position as Chief of the Section on Bacterial Toxins, DBS, after 30 years with PHS.

An internationally known bacteriologist, Dr. Branham came to the old Hygienic Laboratory, PHS, in 1928. Her many research achievements include the demonstration of the epidemiological differences in groups of meningococci and the classification of this group of bacteria. With the advent of sulfonamides, she did some of the pioneer work on the susceptibility of various microorganisms to these drugs.

A native of Oxford, Ga., Dr. Branham received her M.D. and Ph.D. degrees from the University of Chicago. She is a diplomate of the American Board of Pathology in the field of clinical microbiology and a diplomate of the National Board of Medical Examiners. She was the recipient of the first "outstanding achievement award" to be given by the Wesleyan College Alumni Association, and in 1952 received a "distinguished service award" from the University of Chicago Medical School Alumni Association.

Dr. Branham has recently been studying the components of diphtheria toxin. She plans to present some of this work next month at the 7th International Congress for Microbiology in Stockholm, Sweden. After the Congress, she will tour Scandinavia, and will be at home to her friends by mid-September at 5307 Glenwood Road, Bethesda.

Postgraduate Course In Endocrinology Schedule

A postgraduate course in endocrinology will be given by NIH February 2 - 4, for the American College of Physicians. A similar course in cardiovascular diseases was presented at NIH last year.

The course will be open to internists, with priority given to members of the College. Registration will be handled by the American College of Physicians. Not more than 100 students will be accepted.

The endocrinology course will consist of lectures in the CC Auditorium, demonstrations of laboratory procedures, and panel discussions, all to be conducted by members of the NIH staff. The course is under the direction of Drs. Delbert M. Bergenstal, NCI; Joseph J. Bunim, NIAMD; and Luther L. Terry, NHI.

Further details about the classes will be published in the American College of Physicians Bulletins of July and October, 1958.

Obituaries

Marjorie F. Brown, Service Supervisor in the CC Cancer Nursing Service, died of cancer on July 1 in Toronto, Canada. She had returned there on a leave of absence to visit her brother, Dr. Gordon Brown.

Miss Brown had been in cancer nursing at NIH for 11 years, and spent the first six of these years in the NCI Laboratory of Oncology, in San Francisco.

Ernestine L. Taylor, cash accounting clerk in the CC Nutrition Department, died July 8 at Georgetown University Hospital following surgery. She came to NIH in 1953 as a kitchen helper, and had served as cashier in the CC cafeteria for the past four years.

NIDR Scientist To Work At English University

Morrison Rogosa, Laboratory of Oral Bacteriology, NIDR, has accepted an invitation to spend a year at the University of Reading, in England, as a visiting scholar. He will leave this month.

Mr. Rogosa, who has been investigating the lactic acid bacteria group, will collaborate with scientists in England on work in immunology and cell wall chemistry of bacteria.

ASSOCIATE PROGRAM OFFERS LECTURES

The NIH Research Associate Program, now in its second year, is offering a series of lecture courses in the fundamentals of basic science and research developments to staff professional personnel.

This year, eight young physicians who have completed internships or first-year residencies are participating in the two-year program, designed to prepare them for basic medical research. Each associate has been assigned to a laboratory where he will participate in a research program. In addition, an intensive series of lectures and conferences will be presented.

A total of 141 hours of lectures in the basic medical sciences and related disciplines will be given by highly qualified NIH scientists. The lectures are limited to NIH personnel who, with their supervisors' approval, wish to attend on a course basis. Lectures will be given from 9-10 a.m. every Monday, Wednesday, and Friday in Rm. 7N-232, Bldg. 10.

The major fields to be covered, the number of hours devoted to each, and the starting dates are as follows: Organic Chemistry, 45 (July 14); Tracer Methods, 12 (July 14); Mathematics, 24 (Aug. 13); Physical Chemistry, 28 (Dec. 8); Instrumentation, 20 (March 30); and Statistics, 12 (June 1).

For additional information, contact Miss Carol Long, ext. 2427.

Red Cross Calls For Donations Of Blood

Vacation time brings an increase in the number of accidents, with a corresponding increase in the need for whole blood for treatment of the injured. There is always a need for blood in surgery, shock, and maternity cases.

NIH employees are requested to respond to this need when the Red Cross Bloodmobile visits here on August 6. Blood may be donated in Wilson Hall from 9:30 a.m. to 3:00 p.m.

Donors between the ages of 18 and 60 are accepted; those under 21 must have written permission from a parent or guardian. Eight weeks is the minimum interval between donations.

Appointments may be made through the Employee Relations Section, Bldg. 1, Rm. 21, ext. 707.

NIH Spotlight



Paul T. Calderwood

NIH mice can be grateful to Paul Calderwood, if his current project is successful.

Paul is one of the 20 skilled instrument makers in the Fabrication Unit of the Instrument Section who construct instruments for the special needs of NIH scientists. He is now building a device that will permit small animals under study to move about freely, while they receive continuous intravenous infusions. Designed by Dr. Piero Gullino of NCI, the instrument will be a miniature, fluid-sealed swivel built into a long, tiny tube.

Paul's craftsmanship has helped build many other unusual instruments. Although quiet and shy, he is obviously proud of the human stereotaxic instrument he worked on, which is now being used successfully in NINDB.

Designed by the Instrument Section's engineering staff, the instrument enables a surgeon to reestablish exact reference points on the skull by means of precisely calibrated moving parts mounted on a fixed base. One of the details Paul handled was the tooling of grooves around the edges of special sets of small rollers, which carry the instrument's adjustable probe with maximum accuracy and smoothness.

"For such precise, painstaking work," explains John DeBroske, Chief of the Fabrication Unit, "an instrument maker must be calm, creative, patient, highly skilled, and must take a strong interest in his work." Paul and his co-workers obviously have these qualities. As background for his present assignments, Paul has the additional qualification of 30 years of Government

NEWS BRIEFS

New Deputy Director of the HEW Office of Publications and Reports is Samuel Botsford, formerly Editorial Officer. In this post he is the second-ranking civil service official for public information activities within the Department.

Robert E. Ansheles has been named Legislative Liaison Officer of HEW, succeeding John R. MacKenzie. Mr. Ansheles will assist Department officials in matters involving members of Congress, their staffs, and Congressional committees.

Successor to Dr. Vane M. Hoge, who recently resigned as Chief of the PHS Division of Hospital and Medical Facilities, is Dr. Jack C. Haldeman, formerly Deputy Chief of the Division. Dr. Haldeman, who now holds the rank of Assistant Surgeon General, will administer a program he helped to organize--the Hill-Burton program of grants for construction of medical facilities.

PETERSON Contd.

His previous experience includes service with the Ohio and Kentucky state health departments, and a tour of duty in the Far East as Chief of the Health Division of the Mutual Security Mission in China, Cambodia, Laos, and Vietnam.

service as a machinist, toolmaker, and instrument maker.

Because of his intense interest in his work, he has little time for outside interests, except for his childhood home in Deer Park, Md. It was there that Paul's father settled and married, after coming from Scotland in the 1890's as a shepherd for the flocks of a local gentleman farmer. Paul and his wife now visit the old homestead almost every other weekend, and use it during their vacations.

When he was 19, Paul started as an apprentice machinist at the Navy Yard in Washington, D. C., and from 1940 to 1945 was with the Navy Bureau of Ordnance in Philadelphia. He then transferred to the Post Office Department in Washington, D. C., where he made special-purpose locks for the mail service. In October of 1955 Paul came to NIH, and now resides on Battery Lane in Bethesda.