



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

August 27, 1956 - Vol. VIII, No. 16

PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH

BURNEY BECOMES SURGEON GENERAL



Dr. Leroy E. Burney

Leroy E. Burney, M.D., former Assistant Surgeon General and Deputy Chief, Bureau of State Services, PHS, was promoted to the post of Surgeon General, effective August 8. He will occupy the position formerly held by Dr. L. A. Scheele, who resigned August 1.

Dr. Burney first entered PHS in 1932, when he was commissioned in the Regular Corps. He established the first mobile venereal disease clinic service in Brunswick, Georgia, 1937-1939. In 1943 he became Assistant Chief, Division of States Relations, PHS, Washington, D. C.

He was detailed to the U. S. Navy for five months in 1944 and served in various Mediterranean ports.

In 1945 Dr. Burney became Director of District No. 4, PHS, New Orleans, Louisiana, and then served as Secretary and State Health Commissioner, Indiana State Board of Health, on detail from PHS, from 1945 to August 1954, when he joined the Bureau of State Services.

PREVIEW OF NIH BUILDING PLANS



NIH's long-range building plan—numbers indicate new building location. (1) NIMH's Residential Treatment Center; (2) new South Drive extension; (3) new CC surgical suite; (4) Dental Research; (5) Biologics Standards; (6) new animal facilities; (7) temporary offices; (8) proposed office building.

CIBA AWARDS TO TWO NIH SCIENTISTS

Dr. James E. Birren and Dr. Jack Botwinick, Section on Aging, NIMH, were the only two investigators in America to be honored by the CIBA Foundation award for 1956.

The awards are for outstanding research relevant to the problems of

aging. The paper which brought the two scientists 100 pounds was on "Studies on Age Changes in Speed of Simple Responses," and was co-authored by Drs. Birren and Botwinick.

He attended Butler University, Indianapolis, Indiana, and later received his B.S. and M.D. degrees from Indiana University. In 1930 he passed the Indiana State Board of Medical Examiners, and in 1931-32 attended Johns Hopkins University School of Hygiene and Public Health under a Rockefeller Fellowship. He was graduated with an M.S. degree in public health.

Surgeon General Visits NIH

Dr. Leroy E. Burney, newly appointed Surgeon General, visited NIH on August 22 to meet with Institute Directors and to greet members of the NIH staff. He addressed employees at Wilson Hall and at the Clinical Center.

Tests Establish Treatment for Burn-Shock

No. 168 in a Series

A simple, effective emergency treatment for shock due to burns has been fully demonstrated by clinical tests conducted by a team of Peruvian and American scientists, headed by Dr. Kehl Markley, of the U. S. Public Health Service, and held in Lima, Peru. Treatment consists of the oral consumption of large amounts of a saline solution prepared by dissolving a teaspoonful of table salt and a half teaspoonful of baking soda in a quart of water.

The clinical tests confirmed the earlier laboratory findings of three Public Health Service scientists, Drs. Sanford M. Rosenthal, Herbert Tabor, and R. Carl Millican.

The traditional treatment for shock has been the intravenous injection of whole blood, plasma, or plasma extenders. To the shock-burn victim, discovery of the new solution means that quick emergency aid is as close at hand as the nearest kitchen.

In Peru, both types of therapy were compared under identical conditions in a carefully controlled, large-scale, long-term clinical evaluation. Involved were 110 severely burned children and 83 severely burned adults.

Patients with burns covering a body area of ten percent or more were selected on a strict alternate case basis. In this way, every other person admitted became a control patient, receiving the standard intravenous injections. The rest received the oral saline treatment. Since a large number of patients was involved, this alternating case method established two well-

balanced and comparable groups. In both groups, burns ranged from 10 to as much as 75 percent of the body area.

No toxic effects were observed in any of the saline-treated patients despite the fact that the solution was administered in large amounts. Some cases required six, seven, or more quarts during the 24 hours following injury.

The two groups of patients registered no substantial differences either in the occurrence of shock, or the incidence of deaths from shock. It must be stressed, however, that the treatment of the patients differed only during the 48 hours following injury, and differed only in the method of shock treatment.

Since shock so often kills the severely burned during the 48 hours following injury, discovery of the emergency saline treatment should prove to be a major medical aid in the treatment of mass casualties. The ease with which this saline solution is prepared indicates that the new method may be of great aid in saving lives in those areas where skilled medical aid is not available and where supplies of blood plasma, or other colloids, cannot be obtained.

Results of the first three and one-half years' study on this project are reported by Dr. Markley and his associates in a paper entitled, "The Clinical Evaluation of Saline Therapy in Burn Shock." The report is published in the August issue of the *Journal of the American Medical Association*.

UTERINE CANCER TESTS OFFERED

The Employee Health Service has sent out notices to women employees who have not yet taken advantage of the opportunity to have uterine cancer tests. The testing program will terminate by the end of September, so forms should be filled out promptly and returned.

NIH RECORD

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

These tests have been subjected to intensive evaluation by the National Cancer Institute during the past five years at NIH and elsewhere. It has been applied to 120,000 women in Memphis and Shelby County, Tennessee, with results that have thoroughly demonstrated its reliability. In the early stages, uterine cervical cancer is practically 100 percent curable.

Holiday

NIH will be closed for business Monday, September 3, in observance of Labor Day.

Publication Preview

The following manuscripts were received by SRB Editorial Section between July 30 and August 15.

Baldwin, M., et al. Sensory deprivation after temporal lobectomy.

Baldwin, M., et al. The effect of hypothermia on epileptiform activity in the primate temporal lobe.

Bell, R. Q., et al. Retrospective attitude studies of parent-child relations.

Bieri, J. G., et al. Essential fatty acids in the chick. I. Development of a deficiency.

Biometrics Staff, NIMH. Progress in reporting mental hospital statistics.

Eagle, H., et al. Amino acid requirements of normal and malignant human cells in tissue culture.

Deringer, M. K. Effect of the injection of 4-o-tolylazo-o-toluidine (o-aminoazotoluene) subcutaneously in strain HR mice.

Dorh, H. F. The derivation of rates of separations from mental hospitals.

Dunn, T. B. Morphology of mammary tumors in mice.

Eddy, N. B. The history of the development of narcotics.

Emmons, C. W., et al. Two unusual fungus pathogens of man.

Eyles, D. E. Treatment of toxoplasmosis.

Field, J. B., et al. Some observations on the nature of the humoral insulin antagonist associated with diabetic acidosis.

Fouts, J. R. The enzymatic reduction of chloramphenicol, p-nitrobenzoic acid and other aromatic nitro compounds in mammals.

Friess, A. L., et al. The acetylcholinesterase surface. VII. Interference with surface binding as reflected by enzymatic response to turicine, betonicine and related heterocycles.

Goff, L. G., et al. Elevated end-tidal CO₂ in the trained underwater swimmer.

Goodman, H. C., et al. Tubular reabsorption of protein in experimentally produced proteinuria in rats.

Grobstein, C., et al. Electron microscopy of membrane interposed between mouse metanephrogenic mesenchyme and an inductor of epithelial tubules.

Habermann, R. T., et al. Common infections and disease conditions observed in 708 *Macaca mulatta* (Rhesus monkey) and *Macaca philippinensis* (Cynomolgus monkey).

Havel, R. J. Evidence for the participation of lipoprotein lipase in the transport of chylomicrons.

Hayaishi, O., et al. Enzymatic formation of oxalate and acetate from oxaloacetate.

Haymaker, W., et al. The effects of large doses of high-speed gamma radiation on the CNS and pituitary gland of monkeys.

Heppel, L. A., et al. Adenine deaminase of *Azotobacter vinelandii*.

Huebner, R. J. Some implications of new information on viral infections.

NJH Spotlight



Joseph B. Foley

Young, red-headed and Irish, Joe Foley, NIAMD-CE, brings an unusual amount of enthusiasm to his job.

Hailing from New England, Joe acquired his education in public schools in Easton, Massachusetts, and then attended Brown University, Providence, Rhode Island, where he was graduated with a B.A. in zoology.

Joe says his primary interest in zoology occurred when he was in his first year of college. He had intended to major in chemistry, but one day became interested in a biology book and was so attracted to the study of various forms of life that he switched to zoology.

Wishing to further his education, Joe devoted several years to graduate study at Yale University, then accepted a position as a physiologist at the Beltsville Agricultural Research Center of the Department of Agriculture.

After three years at Beltsville, Joe transferred to NIAMD. He is deeply interested in his work, particularly in the clinical aspect. One of the most interesting studies in which he has participated is that of working with diabetics in an endeavor to gain a better understanding about the mechanism of the action of insulin.

Outside working hours Joe has a variety of interests. For example, he is a member of a literary and amateur theatrical group called "The Banshees." Whenever they produce a play at one of the D. C. community centers, Joe can be found on stage - trying to act like a professional.

His other hobbies include tennis, bowling, and the collecting of maps



EMPLOYEE HEALTH NOTES

Very frequently, early pulmonary tuberculosis shows no significant symptomatology, and a positive report on a single X-ray examination should not be considered decisive in an attempt to diagnose active tuberculosis. Lesions are not always apparent. They may also occur subsequent to the examination.

This has been amply demonstrated by periodic X-ray examinations of apparently healthy individuals who have been exposed to known cases of tuberculosis.

When asymptomatic cases are disclosed, a thorough follow-up study should be undertaken to determine whether the lesion is active. The study should include periodic, serial X-rays, sputum studies, and other essential laboratory tests.

The possibility of early diagnosis in tuberculosis is further enhanced by the use of the tuberculin skin test (PPD) as an adjunct to X-ray examination. Persons with a positive PPD reaction should receive a periodic X-ray.

It is the wise NIH employee who takes advantage of the annual chest X-ray service offered here.

and atlases, which he studies in anticipation of the day when he will be able to visit other countries. Traveling, however, is not new to Joe, for he visited Europe in Holy Year 1950. He crossed the Atlantic on the Queen Elizabeth, with a group of 35 other young people, on a pilgrimage to Rome, Italy. They also visited Switzerland, France, Belgium, England, and Ireland.

The homelife of Joe is a little unusual, since he lives with five other young men in a large house at 5336 Chevy Chase Parkway, NW. The boys do their own cooking, washing, and shopping. Joe says it's lots of fun, but it's quite a problem trying to fry 12 pork chops on one small gas range. "I can well appreciate the problems of a housewife now," Joe says, "and when I get married I am going to acquire all the gadgets possible to make housework easier, even if I have to do without some other things."

Huebner, R. J. The virologist's dilemma.
Hueper, W. C. Experimental carcinogenic studies on hydrogenated coal oils. II. Fischer-Tropsch oils.

Humphreys, S. R., et al. Observations on a leukemic cell variant in mice.

Irwin, R. L., et al. The activity of neuromuscular blocking compounds: a direct peripheral and central comparison.

Kahler, H., et al. The electron microscopy of tobacco smoke.

Landowne, M., et al. A list of terms used to describe mechanical properties of tissues.

Landowne, M. Methods and limitations in studies of human organ system function.

Landowne, M. Pulse wave velocity as an index of arterial elastic characteristics.

Leonard, E., et al. The effect of Aramine induced smooth muscle contraction on the length-tension diagram of venous strips.

Lillie, R. D. On decalcification of bone.

Markley, K., et al. Oral sodium loading in non-prehydrated normal individuals.

McMahon, P., et al. Observations on the polysaccharides of aquatic snails.

Miller, A. D. Improving the mental health of families. Theoretical and normative approach.

Milmore, B. K. Trend of lung-cancer mortality in the United States: some limitations of available statistics.

Nolan, M. O., et al. Preliminary studies on *Pneumocystis carinii*.

O'Rourke, J. F., et al. Unusual ocular involvement in acute lymphatic leukemia.

Schrecker, A. W. Resolution and rearrangement of alpha-methylhydrocinnamic acid and of its 3, 4-dimethoxy derivative.

Schwartz, C. G. Problems for psychiatric nurses in playing a new role on a mental hospital ward.

Scow, R. O., et al. Effect of testosterone propionate on myosin, collagen and other protein fractions in striated muscle of gonadectomized rats.

Schatten, W. E., et al. Neomycin in the treatment of peritonitis.

Shannon, J. A., et al. Medical research in perspective.

Shimkin, M. B. Some observations on cancer research.

Siperstein, E. R., et al. Observations on the morphology and histochemistry of the mouse pituitary implanted in the anterior eye chamber.

Smith, F., et al. Antibody production in mice fractionally shielded during exposure to X-rays.

Sokoloff, L., et al. A method for the rapid continuous measurement of total leg blood flow in man by fick principle with Na^{24} .

Tanaka, C. Epidemic Keratoconjunctivitis in Japan and the Orient.

Udenfriend, S., et al. Increase in tissue serotonin following administration of its precursor 5-Hydroxytryptophan.

Wildman, W. C. The structures of crinine, powelline, buphanidrine and buphanamine.

Wynder, Ernest L., et al. Lung cancer in women: a study of environmental factors.

More Cash Awards Go to NIH Employees



Members of the Project Control Unit, DRG, receive cash awards totaling \$475 for superior performance.



Mrs. Dorothy Mathews is congratulated by Dr. John R. Heller, Jr., who presented her award for a special act of service, as Philip P. Simon, left, looks on.

Cash awards totaling \$750 were recently approved by the NIH Board of Employee Awards.

A group award of \$475 for superior performance was presented to the Project Control Unit of DRG; \$250 went to Mrs. Dorothy Mathews, NCI administrative assistant, for a special act of service; and a \$25 award was given to William E. Loechel for two suggestions.

The Project Control Unit award covered a four-year period from January 1952 to January 1956. During this time the Unit staff of six persons

individually demonstrated personal responsibility and willingness to assume a workload "in excess of that which could be reasonably expected," according to the recommendation. Team effort had been especially apparent, and many individual sacrifices were made in order to accomplish proper handling of grant applications.

Unit supervisor Rebecca Dunlop received \$100, and awards of \$75 each went to Ethel Browne, Mildred Dale, Sarah Haller, Gladys Phillips, and Helen Smith.

Mrs. Mathews' award was recommended for outstanding work in organizing the direct cytology testing program in different units in Wisconsin, Kentucky, Ohio, and Washington, D. C., during the period between September 1955 to March 1956.

Mr. Loechel's award was for suggesting an improvement in transferring images from one sheet of material to another and for an improved means of solving the perspective problem in art work.

Credit Union Conducts Audit

The NIH Federal Credit Union audits accounts periodically in accordance with Federal regulations. If you were a member of the Credit Union prior to August 1 and have not received a passbook verification notice, please send a note to F. L. Mills, Room 222, Building 1.

Guard of the Month

Wilson G. Morris, Guard, has been selected Guard of the Month because of the creditable manner in which he performs his duties and because of his punctuality and neat appearance.

Mr. Morris joined NIH in 1955 after spending several years in farming at Deerfield, Virginia, his birthplace. Prior to that time he served as a Towerman with the U. S. Forest Service and with the George Washington National Forest in Virginia.

OBITUARY

Robert W. Woods, Medical Biology Technician, Laboratory Aids Branch, Division of Research Services, died on August 5 after a prolonged illness.

Mr. Woods joined NIH in 1943, and during World War II served in the U. S. Army. He returned to NIH in 1945. Mr. Woods was born in New Market, Tennessee. He is survived by his wife, Mary, who resides at Boyds, Maryland, and by his five sons and six daughters.

Fellowship Program Now Under Way

A Senior Research Fellowship program, administered by DRG, is now under way. During the first year, this program will provide for 40 to 50 awards to the Nation's medical schools, dental schools, and schools of public health. The

VOTE BY MAIL

Election time is nearing, and if you're planning to vote by mail, the time to act is now. You must fill out an application card and mail it to your home State to receive your ballot.

The time requirement for filing absentee ballots is not the same for all States. If you are uncertain about the requirement of your State, it is suggested that you contact the Personnel Branch, Building 1, Room 21D, Extensions 2454 and 2673, for information.

awards will be increased by a like number each year for five years.

The awards will be for a maximum of \$10,000 a year and may be retained for as long as five years. Only three applications may be made per year by each school.

The program is designed to attract and hold able investigators in the preclinical sciences.