

N.I.H.



record

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

June 27, 1955 - Vol. VII, No. 12

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

BIOLOGICS STANDARDS DIVISION ESTABLISHED; LARSON NAMED CHIEF

By a Departmental Order dated June 8, Secretary Hobby created a new organization at NIH--the Division of Biologics Standards. Established to reflect the expanded NIH program in biologics control, the Division replaces the former NMI Laboratory of Biologics Control. The new program has divisional status (comparable organizationally to an Institute) and thus will be responsible to the NIH Director.

In making the announcement, Surgeon General Leonard A. Scheele explained that the creation of the new Division "has become necessary...in order to deal with increasingly complex problems in the biologics field, among them the virus vaccines." The need for an expanded program was highlighted by problems encountered in the testing and clearing of the Salk poliomyelitis vaccine.

The reorganization will result in an augmented professional staff for the new Division, expansion in the amount of testing and plant surveillance conducted by NIH, expansion of research related to the development and control of biological products, and strengthening of supporting services such as administration, records management, and statistics.

Dr. Carl L. Larson, Director of the NMI Rocky Mountain Laboratory, in Hamilton, Mont., has been

(See Division, Page 4)

Polio Vaccine Report

The PHS's role in the much-publicized poliomyelitis vaccine situation is thoroughly explained in the Surgeon General's Technical Report, issued early this month. Copies of the Report are on file in the NIH Library.



Dr. Sebrell and Mr. Mintener congratulate Mr. Hobart D. Shope, center, following presentation of a 30-year length of service award at ceremonies held June 13.

MARYLAND INCOME TAX DEDUCTIONS TO BEGIN

Starting in July, Maryland State Income Tax will be withheld from the salary check of each NIH employee. This is in accordance with an agreement signed May 18 by the U. S. Treasury Department and the State of Maryland. The deduction will apply to all officers and employees working regularly in the State, regardless of their place of residence.

First paychecks to be affected by the change will be issued to Civil Service employees on July 26 and to Commissioned Officers on July 31. With this check, each employee will receive a deduction statement and an explanation of the new policy.

A record of total earnings and deductions for State tax, similar to that prepared for the Federal tax, will be sent to each employee at the end of the year, or at the time the

(See Tax Deductions, Page 3)

LENGTH OF SERVICE AWARDS PRESENTED

Fifty-two NIH employees received Length of Service Awards at the fourth annual ceremony held June 13 in the Clinical Center Auditorium. Mr. Bradshaw Mintener, Chairman of the DHEW Board on Employee Awards, was guest speaker. Dr. W. H. Sebrell, Jr., presented two 30-year and fifty 20-year awards, and commended the 206 ten-year winners, who will receive their awards at separate Institute ceremonies. Dr. Bert R. Boone, Chairman of the NIH Board on Employee Awards, was chairman of the program.

Dr. Sebrell introduced winners of awards presented in ceremonies at the DHEW Auditorium in April. He congratulated Mr. Albert F. S. Siepert, NIH Executive Officer, who received the Distinguished Service award, and the three winners of

(See Awards, Page 4)

Transparent Chamber Technique In Cancer Research

No. 142 in a Series



This "window" in the skin fold of a mouse aids scientists in cancer studies.

By means of a transparent chamber technique, it is possible to make microscopic observations in living animals on grafts of tumor tissue. The development of a blood supply for the graft, the growth of the tumor, and its reaction to treatment by physical or chemical agents can be observed.

Adaptation of this technique to mice was first accomplished by scientists in NCI's Laboratory of Biology. Studies in the application of the transparent chamber technique to problems related to cancer are being conducted by Drs. Glenn H. Algire and Ruth Merwin, assisted by Mr. Roy Moore, Miss Mary Borders, and Mr. Wesley Williams.

The chamber (a window) is introduced into a skin fold of an anesthetized mouse. Three modifications of the technique are used. In the first, transplants of normal or cancer tissues are placed close to the blood vessels of the skin. The observer can see the development of the blood supply as the tissue grows, and can compare the blood vessels of normal and malignant tissues as they react to various experimental procedures.

In the second type of chamber, designed for detailed study of physiologic and pathologic events in individual cells, an extremely thin space into which transplanted cells may migrate is provided. This method facilitates studying the spread of

cancer cells and their invasion of normal tissues.

A third type of chamber has been developed recently, known as the "diffusion chamber," in which a membrane filter is used to separate implanted tissues from blood vessels or cells of the host. Although isolated from host tissues, grafts of tissue in these chambers survive and grow for long periods of time, nourished by fluids from the animal. Further improvements in the design of diffusion chambers now make it possible to use phase microscopy for observation of living cells *in vivo*.

The transparent chamber technique has been used to separate the role of various factors in the total response of tumors to irradiation. It has also been used to study the action of tumor-damaging chemicals on tumors, the localization of dyes or other diffusible substances in normal and malignant tissues, and the cellular or vascular reaction to cancer-producing agents.

N. I. H. RECORD

Published by
Scientific Reports Branch
National Institutes of Health
Room 116, Building 1
Bethesda 14, Maryland

OLiver 6-4000 Ext. 2125

Publication Preview

The following manuscripts were received by the SRB Editorial Section between May 25 and June 2.

Bailey, Pearce. America's first national program in eye research.

Bailey, Nancy. The place of longitudinal studies in research on intellectual factors in aging.

Blum, Harold F. Biogenesis: a critical résumé.

Briggs, G. M., et al. Comparison of vitamin B₁₂ and desdimethyl B₁₂ activity in the chick.

Brubach, Howard F. Desiccator cover remover and sleeve wrench.

Cantoni, G. L. Enzymatic mechanisms and biological significance of transmethylation reactions.

Eagle, Harry. The growth requirements of two mammalian cell lines in tissue culture.

Eagle, Harry. The minimum vitamin requirements of the L and HeLa cells in tissue culture, the production of specific vitamin deficiencies, and their cure.

Eagle, Harry. The propagation in a fluid medium of a human epidermoid carcinoma, strain KB.

Eagle, Harry, et al. The growth response of mammalian cells in tissue culture to L-glutamine and L-glutamic acid.

Eddy, Nathan B. Addiction liability: tests and results.

Eden, M., et al. The pH of rat tumors measured *in vivo*.

Erickson, Cyrus C., et al. The cytologic technique in the Memphis, Shelby County (Tenn.), population uterine cancer screening project.

Fish, M. S., et al. Piptadenia alkaloids. Indole bases of *P. peregrina* (L.) Benth. and related species.

Hueper, W. C. Environmental causes of cancer of the lung other than tobacco smoke.

Kielley, W. Wayne, et al. The relationship between sulfhydryl groups and the activation of myosin adenosinetriphosphatase.

Korengold, Marvin C., et al. Isonicotinic acid hydrazide in multiple sclerosis.

Law, L. W., et al. Neoplasms in the C3H strain and in F₁ hybrid mice of two crosses following introduction of extracts and filtrates of leukemic tissues.

Meister, Alton. Transamination in amino acid metabolism.

Morris, Harold P., et al. Tumors induced by 2-acetylaminofluorene in Buffalo-strain rats ingesting different levels of riboflavin.

Pletscher, Alfred, et al. Serotonin release as a possible mechanism of reserpine action.

Prescott, Benjamin, et al. A means of reducing hydrazine toxicity in mice.

Ryan, Ralph W., et al. Conjunctivitis associated with adenoidal-pharyngeal-conjunctival virus disease.

Saunders, John W., Jr., et al. The effects of tyrosine and phenylalanine on the synthesis of pigment in melanocytes of embryonic chick skin cultured *in vitro*.

Severinghaus, J. W., et al. Augmentation de l'espace mort respiratoire anatomique après injection d'atropine chez l'homme et le chien.

Severinghaus, J. W., et al. Augmentation de l'espace mort respiratoire anatomique chez le chien en hypothermie expérimentale.

Sharpless, Norman E., et al. The effect of ionizing radiation on amino acids. IV. pH effects on the radiation decomposition of alanine.

Siperstein, Marvin D., et al. The enzymatic synthesis of chetyl CoA and taurocholic acid.

Stadtman, E. R. The enzymatic synthesis of beta-alanyl coenzyme A.

Takemoto, K. K., et al. Primary isolation of influenza A, B, and C viruses in monkey kidney tissue cultures.

vonBrand, Theodor, et al. Quantitative and histochemical studies on glycogenesis in the liver of rats infected with *Plasmodium berghei*.

Walser, Mackenzie, et al. The renal clearance of alkali stable inulin.

Weisburger, Elizabeth K., et al. 2-acetyl-amino-5-hydroxyfluorene, a metabolite of the carcinogen 2-acetylaminofluorene.



R & W NOTES

At its June meeting, the R & W Executive Council voted to buy two 48-cup aluminum coffee makers to be used by employee groups. They are now located in Top Cottage and may be obtained by calling Mrs. Farmer on ext. 2422.

The appointment of Ann Shahan, NIAMD, as co-chairman of the Social Committee was also announced at the meeting. Ann will fill the vacancy left by Joan Doniger, CC, who has joined the staff of the Neuropsychiatric Institute at the University of Michigan.

The first floor cloakroom in the Clinical Center has been designated the pick-up point for the new film developing and printing service. The Service, which features 24-hour delivery, is scheduled to begin early next month. It will be open from 11:30 to 1 p.m. each workday.

The NIH Softball Team is continuing its winning ways this season, with a record of 12 wins and 5 losses to date. The team holds second place in the Montgomery County League and third in the D. C. League. If you want to see the team in action, you will find them at the Polo Grounds every Monday evening at 7. The Montgomery County League games are played every Tuesday and Thursday at 6 p.m. Britt Smith, ext. 2460, may be contacted for more details.

DR. EDDY HONORED

Dr. Bernice Eddy, Division of Biologics Standards, OD, was awarded an honorary Doctor of Science degree June 6 by Marietta College, Marietta, Ohio.

TAX DEDUCTIONS Cont'd

employee leaves NIH. Detailed instructions on filing the tax will be issued by the Maryland government.

The tax deduction will be computed on the basis of the exemption slips now on file for the Federal income tax. It will not be necessary to file an additional exemption form. Any necessary adjustments should be made by the employee when he files his State tax return next spring.

The rate of Maryland taxation is two percent on nonexempted income. An \$800 exemption is allowed for each dependent.

NJH Spotlight



Jane F. Knapp

A decision to come to Washington during the early days of World War II launched a chain of events that led to fascinating experiences for DRG's Jane Knapp.

A plea for workers in the Capital prompted Jane to leave her native Waynesboro, Va., in April 1942, for a stenographic position with the Social Security Board. Less than a year later she enlisted in the Women's Army Corps. Following basic training at Des Moines, Iowa, she was assigned to Algiers, North Africa, as secretary to the Judge Advocate General, who reviewed the records and wrote decisions on courts-martial cases. In July 1944 her outfit was transferred to Naples, Italy, where she remained until her discharge in September 1945.

She had been back in the United States only a few months when the opportunity arose for a six-month appointment in Nürnberg, Germany, with the Department of the Army, and Jane hurriedly accepted. She became administrative assistant to the prosecutor, and later the judge, for the war crimes trials, and found the assignment so interesting that she extended her stay to almost three years, for the duration of the trials.

Jane came to NIH in March 1949 as secretary-editor for several DRG study sections, and later became a fellowships assistant. Since April 1953 she has been a program analyst, in which job she serves as liaison between Ernest Allen, DRG Chief, and the executive secretaries of the 21 study sections. She helps replace members on study sections and helps establish new sections.



EMPLOYEE HEALTH NOTES

The clinging vine that may spell misery for many an unsuspecting victim this summer is that common pest poison ivy--and its cousins, the tree-like poison sumac and the bushy poison oak. Unofficial reports from the Employee Health Service indicate an apparent increase in the incidence of poison plant discomfort thus far this spring.

The best way to escape trouble is to avoid the plants. Everyone should be able to identify them. Leaves of both the ivy and oak are a shiny green and grow in groups of threes. The poison ivy bears small white flowers in the spring and white berries in the fall. The fuzzy-textured poison oak leaves are shaped like those of the real oak. Poison sumac has 7 to 13 leaves and drooping clusters of small, white berries all through the year.

If you do tangle with the poison plants, your chances of preventing the pain and discomfort are best if you wash the exposed parts as soon as possible with plenty of hot water and yellow soap. Make a thick lather, and wash five or six times. Afterwards, if you can, sponge with alcohol. It's the oil in the poison plants that causes trouble, so anything that has touched the plants, whether clothes or a pet--should also be washed or cleaned.

Calamine lotion may help relieve the itching, but if you get ivy poisoning that is severe, persistent, and spreading--see your physician.

She also assists in planning meetings and agenda for the National Advisory Health Council.

During her employment in Germany, Jane spent some of her leisure time visiting France, Switzerland, Austria, Czechoslovakia, Belgium, Luxembourg, and the Netherlands. She first met her husband, John, in Nürnberg, while he was in the Army. They were married several years later in Washington, and he is now assistant manager for the Sheraton-Carlton Hotel. They live in Bethesda.

Jane shares her husband's love of sports. They play golf regularly and attend car races, sailing regattas, and baseball games. A loyal Senator fan, Jane hopes to find her team in the first division. Of all sports, her favorite is the new sports car the Knapps bought recently.

CANCER CHEMOTHERAPY COMMITTEE ESTABLISHED

A voluntary program of cooperative research and development in the field of cancer chemotherapy was recently established under the sponsorship of the Nation's leading research organizations in this field.

General guidance of the program will come from the Cancer Chemotherapy National Committee, headed by Dr. Sidney Farber, Scientific Director of the Children's Cancer Research Foundation in Boston. Executive Secretary for the Committee is Dr. Kenneth M. Endicott, NCI. The sponsoring organizations are: the American Cancer Society, Atomic Energy Commission, Damon Runyan Memorial Fund for Cancer Research, Food and Drug Administration, Veterans Administration, and NCI.

Drug and chemical industries are brought into the program through an advisory liaison group, with members from Vick Chemical Company, Burroughs-Wellcome and Company, Merck and Company, American Cyanamid Company, Dow Chemical Company, E. R. Squibb and Sons, and Parke-Davis and Company.

The National Committee will define the scope of the program, develop general policies, assist in obtaining financial support for the work, and coordinate the activities of the sponsoring organizations.

Four technical advisory panels have been established, covering the fields of chemistry, pharmacology, experimental screening of chemical compounds, and clinical studies.

DR. H. A. ITANO, NCI, ADDRESSES AMA GROUP

Dr. Harvey A. Itano, of NCI's Laboratory of Biochemistry, delivered the fifth annual Minot Lecture at the meeting of the Section on Experimental Medicine and Therapeutics, of the American Medical Association, on June 8 in Atlantic City, N. J. Selected as this year's guest speaker in the field of hematology, Dr. Itano spoke on "Clinical States Associated with Alterations of the Hemoglobin Molecule."

Holiday July 4

NIH will be closed for business Monday, July 4, in observance of Independence Day.



Dr. Carl L. Larson, Chief, Division of Biologics Standards.

DIVISION Cont'd

named Chief of the Division and will be responsible for planning and organizing the new program. A career PHS Officer, Dr. Larson served as Assistant Chief of the NMI Laboratory of Infectious Diseases before becoming Director of RML in 1950.

Dr. William G. Workman, Chief of the former Laboratory of Biologics Control, will serve as Assistant Chief of the new Division. Mr. Kenneth Painter, formerly Head of the BMB Administrative Services Section, has been appointed Administrative Officer.

SUE KLINE, NCI, DIES

Mrs. Sue Kline, Mail and File Clerk in the Office Service Section, NCI, died June 9 after a short illness. She had been at NIH since December 1952. She is survived by two children, Susan 13 and Henry 11.

LOST AND FOUND



The following articles have been found on the NIH reservation:

Gold earring	Sweater
Keys	Lipstick
Glasses case	Compact

The above articles may be seen in the Guard Office, Room 119, Building 1, and those listed below in the Guard Office, Room 1A-06, Building 10.

Gloves	Change purse
Eyeglasses	Pocket watch
Scarf	Lady's belt
Wristband	Keys

DR. SEBRELL HONORED BY TWO UNIVERSITIES

Dr. W. H. Sebrell, Jr., NIH Director, was honored recently by two universities for distinguished achievements in medical research. On June 11 he was elected to membership in the Beta of Virginia Chapter of the Phi Beta Kappa Society in ceremonies at the University of Virginia, Charlottesville, and on June 5 he was awarded an honorary Doctor of Science degree by Alfred University, Alfred, N. Y.

B. T. SOCKRIDER DIES

Benjamin T. Sockrider, former NIH employee, died of a heart attack June 5 in Carville, La. Mr. Sockrider retired in 1946 from a position as Associate Technologist in NMI's Biologics Control Laboratory. His NIH employment began in 1914, when he joined the Hygienic Laboratory. After retirement, he moved to Miami, Fla.

AWARDS Cont'd

Superior Service awards: Dr. W. F. von Oettingen, NIAMD; Dr. Frank J. McClure, NIDR; and Mr. Bruce P. Phillips, NMI. Aloysius C. Faber, NMI, and Willie D. Morgan, NCI, were cited for cash awards presented recently.

Mrs. Mabelle O. Nolan, NMI, and Mr. Hobart D. Shope, BMB, were honored for 30 years of Government service.

Recipients of 20-year awards were Joseph D. Allen, Catherine L. Beane, Ruth M. Bertram, Charles H. Brinker, Kenneth H. Brown, Melvin Bryant, Buford L. Burks, Milton R. Carson, Arthur D. Catlin, Wilbern O. Cissel, Marion S. Cooley, Ruth C. Coons, Ruth J. Corcoran, Jerome Cornfield, Lawrence R. Crisp, Harry W. Diehl, Somerville A. Duvall, Helen M. Dyer, John E. Fitzgerald, Clifford L. Flanagan, Jesse B. Geiser, George G. Gordon, Ada P. Hall, Otto J. Hauck, Richard H. Henschel, Cornelius D. Holland, Henry J. Jacques, George O. Jarrels, Ethel B. Kastler, Walter H. Magruder, Roland P. Maher, Gladys E. Marine, John W. McGuire, Bruce P. Phillips, Edgar G. Pickens, Samuel M. Poiley, Nettie A. Saeger, Boyd F. Schaff, Irene E. Seiler, George Sklar, Harold L. Stewart, Annie L. Thomas, Clarence R. Tignor, Norval J. Van Houten, Hery Veazey, James L. Weaver, Elizabeth L. Wiehle, Charles D. Wilson, Willis D. Wine, and Marvin J. Yiengst. GPO 894249