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the NIH Record

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

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NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

Dr. Shannon Wins Rockefeller Award In Science Field

Dr. James A. Shannon, Director of the National Institutes of Health since 1955, is one of five Federal career officers named today to receive the Rockefeller Public Service Awards for 1964.

Dr. Shannon

Dr. Robert F. Goheen, President of Princeton University, will present the awards, consisting of $10,000 each and a commemorative plaque, at a luncheon meeting at the Shoreham Hotel in Washington, December 3.

Each of the award winners is chosen from a list of nominees in five distinct fields of Government endeavor. Dr. Shannon's award is in the field of Science, Technology or Engineering.

He was cited as "a distinguished scientist in his own right who has also been a tremendous force in building and directing the National Institutes of Health."

The awards, administered by Princeton University's Woodrow Wilson School of Public and International Affairs, are made possible

(See DR. SHANNON, Page 4)

Henry A. Imus Award Established by APA

An award in honor of the late Dr. Henry A. Imus, who was Assistant to the Director of the National Institute of Neurological Diseases and Blindness from 1954 to 1958, has been established by the Military Division of the American Psychological Association.

The award is intended for junior members of the research staffs of the military services who have performed outstanding research.

Dr. Imus died in Pensacola, Fla., May 18 of this year. The annual Henry A. Imus award will be a perpetual reminder of his years of devoted service in furthering research through sponsorship and personal encouragement.

NIH Pledges $143,134 In Combined Campaign

The first Combined Federal Campaign at NIH closed November 6 with 92.6 percent of its $154,573 quota pledged.

Dr. Eugene A. Confrey, Chief of the Division of Research Grants and Chairman of the NIH Campaign, said the amount collected, $143,134, "represents by far the largest amount pledged by any component of DHEW in the Washington Metropolitan Area and was a tremendous increase over previous NIH quotas."

Praises Staff

"The NIH staff had to make extraordinary efforts to meet our quota," Dr. Confrey added. "In my judgment, NIH made a remarkable showing in this campaign, one of which the entire staff—keymen and contributors—can be very proud.

"Personally, and on behalf of James Phillips who assisted in the coordination of NIH efforts, I thank all of you for your generous contributions. I hope that our record this year is as much a source of pride to you as it is to me."

Dr. Confrey presented plaques to chairmen of the following eight NIH components for reaching 100 percent of their quota: OD-NIH, OAM, DRS, DRG, NICHD, NIGMS, DRFR and NIMH.

Malaysian Researchers Honor Dr. Don Eyles

The Malaysian Institute of Medical Research at Kuala Lumpur recently dedicated a bronze plaque to the memory of Dr. Don E. Eyles, who died of a heart attack in Malaysia on October 4, 1963.

Dr. Eyles had been in Malaysia to direct the work of the Far East Research Project of the National Institute of Allergy and Infectious Diseases.

The plaque dedicated to Dr. Eyles is on one of the Institute's buildings in which Dr. Eyles conducted much of his research. It reads:

"To the memory of Don Edgar Eyles, Sc.D., Scientist Director, United States Public Health Service, whose work on simian malaria at this Institute during the years 1960-1963 was a source of inspiration to his Malaysian colleagues."

These three men of the National Cancer Institute, pictured in front of elaborate wall chart, are chiefly responsible for planning the 4-phase program seeking virus-cancer-leukemia link. From left: Dr. Carl G. Baker, Associate Director for Program; Dr. Frank J. Rauscher, Head of the Viral Oncology Section; Louis M. Carrese, Program Planning Officer.—Sam Silverman Photo.

NCI Plans Special $10 Million Program Seeking Virus-Cancer-Leukemia Link

Plans for a 4-phased special virus-cancer-leukemia program, to be conducted under the special $10 million appropriation added to the National Cancer Institute's Fiscal 1965 budget by Congress, have been announced by Dr. Kenneth M. Endicott, Institute Director.

Predicated on the Institute's conviction that "there now exists sufficient scientific knowledge and technical capability to plan and carry out an intensified, coordinated and integrated" virus-cancer research effort, the program was planned under the direction of Dr. Carl C. Baker, Associate Director for Program, NCI.

His associates in planning the program were Dr. Frank J. Rauscher, Head of NCI's Viral Oncology Section, Laboratory of Viral Oncology, and Louis M. Carrese, Program Planning Officer, NCI.

Research Areas Named

Under the program, the additional funds will be allocated in these four research areas: Human Leukemia Etiology and Prevention, Human Leukemia Therapy, Special Animal Leukemia Ecology Studies, and Biohazards Control and Containment.

The importance attached to virus-cancer research was pointed up by the Senate Appropriations Committee in its report on the NCI budget.

"The most profound and exciting research development reported to the committee in this year's hearings," the report said, "is the likelihood of a major breakthrough in the identification of the causal agent for at least one form of cancer: the highly fatal leukemia of childhood.

Disease Resists Treatment

"The committee recognizes that over many years the research attack on cancer has been marked by a number of up-cycles of hope but that in the end, the disease generally has continued to resist understanding, prevention, or treatment.

"There is reason therefore for caution at this time. But the committee nevertheless must report most authoritative testimony that a viral causation of leukemia is very close to full, scientific proof."

(See NCI PROGRAM, Page 6)

the NIH Record

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The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policy of the paper and the Department of Health, Education, and Welfare.

NEWS from PERSONNEL

VOLUNTARY DUES DEDUCTION

An employee organization that has been formally recognized by the NIH has the right to enter into a written arrangement permitting *voluntary* deductions from the salary checks of its eligible employee members to pay their dues.

Required arrangements are now being completed with the AFGE, AFL-CIO Lodge 2419, and with the Washington Area Metal Trades Council. The details will be set forth in a Memorandum of Understanding, covering employees in those units which now have formal recognition—that is, all wage board employees and a unit comprised of Guards and Firemen.

It is planned that the voluntary deductions will start with the pay period beginning November 22. This means that authorizations received by November 21 will result in deductions from employee pay checks distributed December 15.

Procedure Explained

Employees who are covered may voluntarily authorize dues deductions by completing the request form, SF 1187, to be supplied by the employee organization. The organization will then certify it and send it to the Payroll Office.

An employee may cancel his deduction by submitting a written request, in duplicate, or an SF 1188 (supplied by the employee organization) directly to the Payroll Office. However, such cancellations will become effective only twice each year—that is, the first full pay period following either March 1 or September 1 for requests received in the Payroll Office up to those dates.

Allotments will be terminated when: 1) an employee ceases to be a member in good standing in one of the affiliated local unions; 2) the employee organization loses formal or exclusive recognition for the covered unit; 3) an employee is reassigned or transferred to a part of the NIH which does not have the required form of recognition, or has not signed a Memorandum of Understanding; or 4) an employee is separated from the NIH.

Copies of each Memorandum of Understanding will be distributed to all I/D personnel offices and a copy will be posted on all official bulletin boards.

Employees who have questions concerning dues deductions should attempt to resolve them by reading the memorandum on the nearest bulletin board. They may ask their shop steward or personnel office any questions not satisfactorily answered by the memorandum.

Employee Health Service To Present Dental Film Today Through Friday

An educational dental film, "Matter of Choice," will be presented this week by the Employee Health Service. The film stresses the importance of oral hygiene in adult life.

The introduction will be given by Dr. Richard Adams of the Manpower and Education Branch, Division of Dental Public Health and Resources, who has held many important clinical dental assignments with the Public Health Service.

The film will be shown at the Clinical Center auditorium today (November 18) at 11:45 a.m. and 12:30 p.m.; tomorow in the Westwood Building, Conference Room A, at 1, 1:45 and 2:30 p.m.; and Friday at the North Bethesda Office Center #2, Conference Room 113, at 1:30 and 2:15 p.m.

'Walking Germ' Underscores Paradoxes At Halloween Party for CC Patients

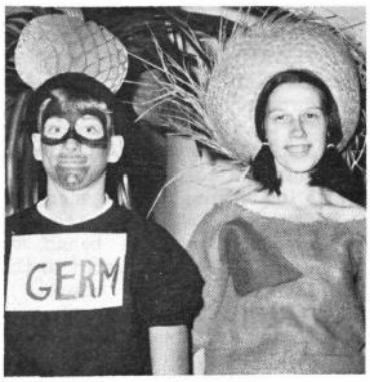
A germ—a crummy old germ! That's what Clinical Center patient Steve Miller was costumed to represent at the patients' Halloween dance party.

This friendly affront to the Nation's largest medical research center served to underscore the paradoxes that occurred in the CC 14th floor assembly hall that night.

The U.S. Marine Band combo took the starch right out of the customary "quiet zone." White-linen-covered tables replaced the usual auditorium arrangement, and each was topped with a jack-o'-lantern to give the room an unfamiliar glow.

Decorative skeletons, witches and ghosts hovered over the tables, and a pumpkin tree replaced a potted fern on the stage.

And there were other transformations. More than one pretty nurse was seen doing the cha-cha while an obviously dedicated patient did the pulse-checking for a change.



Patients at the Halloween party are Steve Miller of Middleburg, Ind., representing a germ, and Donna Benoit of Burlington, Vt., labeled "100 lbs. of Sugar."—Photo by Frank Smith.

Rusty Profitt won the funniest costume award; the prettiest went to Donna Benoit as "100 lbs. of sugar" in a well-tailored burlap sack, and the most original was captured by teenager Sally Cummings for the "butterfly" costume which she herself had made.

Clinical Center Patient Jimmy McNey of Seabrook, Md., is accompanied to the Halloween party by Mrs. Anne Koch of the CC Nursing Department.—Photo by Frank Smith.

The population of the NIH Animal Center, Poolesville, Md., in May 1964 was: 19 horses, 18 burros, 217 sheep, 60 goats, 6 cattle, 12 swine, 609 dogs, 8 cats, and 24 chickens.

CORRECTION

In the November 3 issue this column pointed out that when a civil servant or commissioned officer completes a period of training taken at another Government agency or at a non-Government facility, "his supervisor should notify the Personnel Office on Form PHS-3470. . ."

The quoted portion of this statement should have read: ". . . he should notify his Personnel Office through his supervisor on Form PHS-3470 . . ." PMB wished to emphasize that the initiative in this matter resides with the employee, not his supervisor.

List of Latest Arrivals Of Visiting Scientists

10/5—Dr. James C. N. Ma, Hong Kong, Research in the Laboratory of Metabolism, Section on Chemistry. Sponsor: Dr. Henry M. Fales, NHI, Bldg. 10, Rm. 7N306.

10/6—Dr. Jose M. Musacchio, Argentina, Research in the Laboratory of Clinical Science, Section on Medicine. Sponsor: Dr. Irwin J. Kopin, NIMH, Bldg. 10, Rm. 3N262.

10/9—Dr. Patrick M. Rabbitt, England, Research in the Aging Program. Sponsor: Dr. James E. Birren, NICHD, Bldg. 31, Rm. 4A48.

10/12—Dr. Anka Kovaceva, Yugoslavia, Research in the Laboratory of Infectious Diseases, Respiratory Bacteriology Unit. Sponsor: Dr. Roger M. Cole, NIAID, Bldg. 7, Rm. 104.

10/19—Dr. Gertrud Szabolcsi, Hungary, Research in the Laboratory of Biochemistry, Section on Enzyme Chemistry. Sponsor: Dr. Alan H. Mehler, NIDR, Bldg. 30, Rm. 403.

11/02—Dr. Peter H. Bennett, England, Research in Clinical Investigations, Arthritis and Rheumatism Branch. Sponsor: Dr. Thomas A. Burch, NIAMD, Bldg. 31, Rm. 9A35.

11/02—Dr. Kiwamu Yamaoka, Japan, Research in the Laboratory of Physical Biology, Section on Molecular Biophysics. Sponsor: Dr. Elliot Charney, NIAMD, Bldg. 2, Rm. SB08.

Cancer Scientists Find Actinomycin D Inhibits Skin Tumors in Mice

National Cancer Institute scientists have found that actinomycin D inhibits skin tumor induction in mice by a chemical carcinogen, since actinomycin D inhibits DNA-dependent RNA synthesis. The results suggest that "initiation" of carcinogenesis involves alterations at the genetic level.

Investigators have reported that the tumorigenic process was "initiated" in a group of mice treated with one small, topical application of the chemical carcinogen, 7, 12-dimethylbenz (a) anthracene (DMBA).

Another group received DMBA and actinomycin D either a few hours before or after the carcinogen.

Two groups were controls; one received only the solvent, acetone, and the other, acetone and actinomycin D. All mice were treated weekly with croton oil, a "promoting" agent, which is noncarcinogenic or weakly carcinogenic.

Results Noted

At the end of 14 weeks, the DMBA-treated animals showed 39 tumors in 13 mice, while the DMBA- and actinomycin D-treated animals showed seven tumors in six mice.

In the control groups, only one mouse developed one tumor. Studies designed to detect possible chemical interaction between actinomycin D and DMBA were negative.

The findings suggest that "initiation" of skin tumorigenesis by DMBA was dependent on DNA-directed synthesis. The investigators interpret their results as supporting the hypothesis that early events in chemical carcinogenesis are alterations in the expression of specific genic information; and that blocking of gene expression by actinomycin D, that is, inhibition of DNA-dependent RNA synthesis, would prevent this process.

The work was reported in a recent issue of Science by Drs. Harry V. Gelboin and Michael Klein, Carcinogenesis Studies Branch, NCI.

Drs. Abrams and Elizan Of NINDB Commended

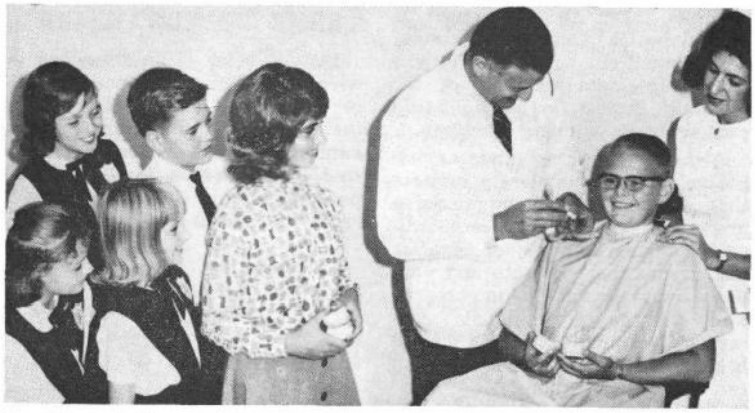
Two physicians of the National Institute of Neurological Diseases and Blindness, participating in the Institute's study of amyotrophic lateral sclerosis on Guam, recently were commended by the Commanding Officer of the U.S. Naval Hospital at Agana.

Dr. Bernard Abrams and Dr. Teresita S. Elizan received letters of appreciation from Captain William Miller for their valuable assistance to the hospital's psychoneurological services.

In his letters, Captain Miller also noted the cooperative relationship between the Institute and the hospital.

"The free and easy interchange of information and service," he said, "between the primarily research-oriented NINDB unit and this Naval Hospital has set an example to be praised and followed."

400 Children Wear Flexible Mouthpiece With Fluoride Gel in Tooth Decay Test



Dr. Henry Spiller, Buffalo orthodontist, who constructed the flexible mouthpieces containing a fluoride gel, shows one of the 400 Cheektowaga school children how to adjust it as five others observe.

Under terms of a research contract from the National Institute of Dental Research, hundreds of children in Cheektowaga, N. Y., are wearing custom-fitted, flexible mouthpieces containing a fluoride gel to test a new technique for reducing tooth decay.

The $41,097 contract with the State University of New York, Buffalo, is designed to evaluate the new method by which fluoride, or any other preventive agent, can be applied to the teeth and gums in effective concentrations for periods of time without being diluted by saliva or ingested.

Tested on Hamsters

The clinical trials follow highly successful animal experiments at the Dental Institute here, where use of a miniature mouthguard with fluoride for a few minutes a day in hamsters retarded decay which had already begun and prevented development of new cavities. Dramatic protection against decay also resulted when a fluoride gel was dabbed on hamsters' teeth with a brush.

The 400 volunteer school children, aged 11-14 years, are wearing the plastic mouthpieces for approximately six minutes each school day. One group uses a fluoride-phosphate gel, while the second group uses a gel containing fluoride only. A third group of children, acting as controls, get no fluoride or mouthpieces.

The mouthpieces, specially constructed for each child by Dr. Henry Spiller, Buffalo orthodontist, are applied by the children themselves under the supervision of dental hygienists and nurses. Only children who have not consumed fluoridated water regularly are participating in the trials.

Dr. Spiller inserts the mouthpiece.

Project director is Harry A. Sultz, D.D.S., M.P.H., Clinical Assistant in the Department of Preventive Medicine at the Medical College of the State University.

Initial examinations for dental caries, gingivitis and plaque accumulations were conducted by Dr. Harold R. Englander of the Dental Institute's Epidemiology and Biometry Branch, project officer who conceived and designed the trials. Clinical examinations will be carried out at 6-month intervals over a period of three years. Bacteriological cultures of the mouth will be obtained regularly.

Bi-weekly checkups are being conducted by Dr. D. G. Bissell, research dental director of the Erie County Health Department. Dr. Paul H. Keyes of the Dental Institute, who has conducted many of the animal tests, is acting as consultant to the project.

International Research Names Dr. Thompson To New Delhi Post

The Office of International Research announced the appointment of Dr. Randall L. Thompson as Scientific Representative in New Delhi, India. He succeeds Dr. Alfred A. Lazarus who was appointed Chief of the Latin-American Office in Rio de Janeiro earlier this year.

Dr. Thompson

The New Delhi post is part of the program area of the Pacific Office in Tokyo, headed by Dr. Heinz Specht.

As Scientific Representative, Dr. Thompson will report on bio-medical research in the Southeastern Asian countries, maintaining contact with leaders of medical research in these countries, officials of international and national organizations, and U. S. officials of other agencies. He will also report on progress of grants programs to the various NIH Institutes.

Before his appointment with OIR, Dr. Thompson was Special Assistant to the Associate Director for Collaborative Research of the National Institute of Allergy and Infectious Diseases.

Joins NIH in 1961

He came to NIH in 1961 as a medical officer and was engaged in the development of a program in tumor virus chemotherapy with the National Cancer Institute before joining NIAID in 1963.

From 1953 until he came to NIH, Dr. Thompson headed the Microbiological Section at the Sterling-Winthrop Research Institute in Rensselaer, N. Y.

From 1949 to 1964 he served as Chairman of the Viral and Rickettsial Registry Committee of the American Type Culture Collection.

Dr. Thompson was Professor and Chairman of the Department of Microbiology at Indiana University Medical Center from 1947 to 1953.

A native of Utica, Mo., Dr. Thompson attended New Mexico Highlands University and the University of Denver. He received both B.S. and M.S. degrees in bacteriology from the University of Washington, an Sc.D. degree from Johns Hopkins University and an M.D. from the University of Chicago.

NIH employment was 140 persons in 1930. Ten years later it had climbed to over 1,100. By 1950 it had more than doubled (2,888) and over the next decade increased at an average of 600 persons a year. Present total: over 11,500.

NIMH Compiles Data on First Year of State Mental Health Planning Program

The first official progress report on comprehensive, long-range, inter-agency mental health planning has been compiled by the National Institute of Mental Health.

Titled "Digest of State Mental Health Planning, 1964," the report is based on information provided by the States to accompany requests for second-year planning grants in FY 1965, for which Congress appropriated $4.2 million.

Progress reported represents State mental health planning in the first year of the program, from about July 1, 1963 to May 1964.

Before the close of the first year of comprehensive mental health planning, 31 States indicated they intend to continue interagency planning following completion in 1965 of the Federal grant program.

Some States have already allocated funds for this purpose, or have reorganized the State mental health agency to provide for a planning unit or division.

In at least 22 States, the Governor has taken an active part in mental health planning by issuing a proclamation, appointing citizen and professional members of the planning groups, or participating personally in planning meetings.

Although progress varies among States, the reports clearly indicate that the planning and decision process is involving a wide coordination among a variety of agencies and groups, both private and public. Thousands of volunteers, as well as the professionals concerned, are participating in mental health planning studies, task forces or other groups.

Public Interest Heightened

The reports show that widespread interagency cooperation in many States has resulted in heightened public interest in mental health that will facilitate the development of specific projects during the second year of planning mental health services for all the people, wherever they live.

A majority of the States are currently studying mental health resources, legislation, financing and insurance, manpower, training, services for children, services for the aged, alcoholism, crime and delinquency.

Other studies are in progress in a variety of program areas including research, demography, mental retardation, school mental health and the prevention of mental illness.

"Digest of State Mental Health Planning, 1964" will be published by the National Clearinghouse for Mental Health Information. It was prepared by Dorothea L. Dolan, NIMH Office of Field Operations, with assistance by the mental health staffs of the Regional Offices of the Department of Health, Education, and Welfare.

DR. SHANNON

(Continued from Page 1)

by a fund established by John D. Rockefeller, 3rd. They are regarded as one of the highest forms of recognition given Federal career employees for outstanding achievements.

Stated purpose of the program is "to strengthen the public service by bringing special recognition to a small number of truly distinguished civilians in the Federal Government, and to improve the public image of government service as a career worthy of the best efforts of our most capable citizens."

Other Winners Named

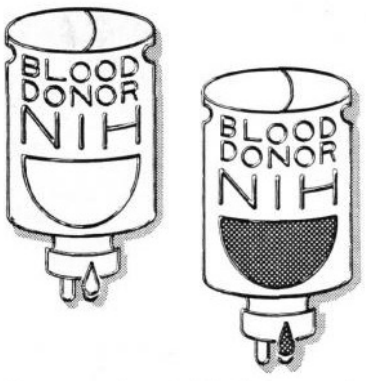
The other award winners are:

In the field of Administration—William D. Carey, Executive Assistant Director, Bureau of the Budget, Executive Office of the President.

In Foreign Affairs or International Operations—Charles W. Yost, Deputy Representative to the United Nations, United States Mission to the United Nations, Department of State.

In The General Welfare or National Resources category—Gordon E. Howard, Assistant Commissioner for Program Planning, Urban Renewal Administration, Housing and Home Finance Agency.

In Law, Legislation, or Regulation—Harold F. Reis, Executive Assistant to the Attorney General; First Assistant, Office of Legal Counsel, Department of Justice.



These are the new blood donor emblems now awarded by the Clinical Center Blood Bank. On the left is the gold pin awarded to gallon donors. The other, enameled in red and white, is presented to every donor.

Dr. Hueper, Inaugurator Of NCI's Environmental Cancer Section, Retires

Dr. Wilhelm C. Hueper, under whose direction the National Cancer Institute's environmental cancer research program was inaugurated 16 years ago when he joined the NCI staff as a pathologist, will retire November 30.

Dr. Hueper

Investigation of environmental cancer was started as a programmed activity at NCI in 1948 when the Environmental Cancer Section was established under Dr. Hueper. Its activities included the planning of and collaboration in occupational cancer surveys, consultation services, and laboratory research.

Technical assistance and consultation in relation to occupational cancer were provided to State health departments, medical schools, and various Federal agencies. Studies of carcinogenic hazards in manufacturing were also undertaken in cooperation with several industries.

Establishes New Section

In 1952 a new section designated as the Cancerigenic Field Studies Section was also established under Dr. Hueper to concentrate on epidemiological environmental cancer surveys. This section was later transferred to the Institute's Cancer Control Branch.

At the present time Dr. Hueper's laboratory research is conducted by the Environmental Cancer Section, under Dr. C. Gordon Zubrod, NCI Director of Intramural Research.

Born in Germany, Dr. Hueper received his M.D. degree in 1920 from the University of Kiel. He came to this country in 1924 and subsequently held positions as pathologist and director of laboratories in several hospitals and universities. From 1938 to 1948 he was Principal Pathologist and Assistant Director of the Warner Institute for Therapeutic Research, New York City.

Work Described

The experimental work begun by Dr. Hueper and colleagues in 1948 at NCI included comprehensive biologic, chemical, and immunochemical studies on carcinogenesis by metals, synthetic hydrogenated coal oils, water pollutants, synthetic plasma substitutes, and macromolecular polymers.

Much of the greatly increased general interest in this country and abroad in the environmental causes of human cancer can be traced to the impact of Dr. Hueper's work.

As a consultant to private industry, health authorities and universities, he helped plan field surveys and other research approaches which have led to a greater understanding of the relationship between substances in the environment and cancer.

Dr. Hueper, author of the first comprehensive textbook on occupational cancer—Occupational Tumors and Allied Diseases—has written numerous articles and reviews published in various journals. He is now an emeritus member of many of the more than 15 professional societies he has belonged to during his career.

Among Dr. Hueper's more recent honors was the 1963 Modern Medicine Award for Distinguished Achievement and the 1962 United Nations Award by the World Health Organization for outstanding research in the cause and control of cancer and allied diseases.

Forsyth Dental Center To Test Fluoride Use

Massachusetts school children will help test more effective fluoride topical treatments to reduce tooth decay under a grant to the Forsyth Dental Center, Boston, from the National Institute of Dental Research.

Dr. Finn Brudevold, Chief of Preventive Dentistry at Forsyth and Professor of Denistry, Harvard School of Dental Medicine, will direct a coordinated program of chemical and clinical research under a grant of $114,750 for one year.

The planned research will explore physical and chemical properties of tooth surfaces and develop knowledge about chemical reactions in the oral fluids.

To Test Lab Findings

Clinical projects will test the laboratory findings on varying concentrations of fluoride and methods of application of various test solutions for reduction of caries.

Preliminary tests have shown that fluoride in a special organic solvent, rather than in aqueous solutions, is taken up rapidly by the tooth mineral.

A technique called "enamel biopsy" will be used to determine how much fluoride is incorporated into tooth surfaces.

Layer samples of exposed enamel are etched off an area of known size and the fluoride level of the etched enamel is analyzed. The size and depth of the etching can be calculated by measuring area of tooth surface and concentration of calcium, assuming a certain density.

NIH employees donated 196 pints of blood for Clinical Center patients during the month of October, the CC Blood Bank reports.

Dr. Jan Cammermeyer Wins Angiology Award

The Angiology Research Foundation recently honored Dr. Jan Cammermeyer of the National Institute of Neurological Diseases and Blindness with its Honors Achievement Award for his work in cerebrovascular research.

Dr. Cammermeyer, Head of the Experimental Neuropathology Section of NINDB's Laboratory of Neuropathology, received the award at ceremonies held here at the Institute.

A commemorative certificate and inscribed volume of the journal, Angiology, in which his prize-winning study appeared was presented to Dr. Cammermeyer by Dr. Alfred Halpern, President of the Angiology Research Foundation.

Duplicate Award to NINDB

Dr. Karl Frank, Acting Associate Director of NINDB for Intramural Research, accepted a duplicate award on behalf of the Institute.

Oligodendrocytic function was the subject of Dr. Cammermeyer's paper, entitled, "Is the perivascular oligodendrocyte another element controlling the blood supply to neurons?"

Oligodendrocytes are specialized cells found in brain and spinal cord tissue, often surrounding blood vessels next to large neurons.

Dr. Cammermeyer presented arguments and evidence supporting his hypothesis that oligodendrocytes are active in the intrinsic control of blood flow to neurons.

Dr. Alfred Halpern, President of the Angiology Research Foundation (center), shakes hands with Dr. Jan Cammermeyer of NINDB, winner of the Foundation's Honors Achievement Award (right), while presenting duplicate award for the Institute to Dr. Karl Frank, Acting Associate Director for Intramural Research, NINDB.—Photo by Bob Pumphrey.

Mrs. Adle Tokyo Bound

Marian Adle, Chief of the Hematology Department of the PHS Hospital in Baltimore, Md., has been appointed secretary to Dr. Heinz Specht, Chief of the Pacific Area Office of the Office of International Research.

Mrs. Adle was scheduled to leave for Tokyo on November 15.

3rd Primate Center Opens in Louisiana Under DRFR Grant

With its dedication on November 1, the Delta Regional Primate Research Center in Covington, La., became the third of seven regional primate research centers to be completed. The two others were officially opened at the University of Oregon in 1962 and at the University of Wisconsin in 1964.

The national program of these centers is administered by the Animal Resources Branch of the Division of Research Facilities and Resources.

As "host institution" to the Delta Center, Tulane University plays the traditional role of the university by providing the academic environment in which the scientists can pursue their research most productively.

Tulane is also responsible for the center's administration, one aspect of which is fostering the regional purposes of the center. To this end, Dr. Herbert E. Longnecker, President of Tulane, has an advisory board of representatives of the presidents of Louisiana State University, Loyola University of the South, and the Universities of Alabama, Arkansas, Mississippi and Texas.

Scientists to Use Resources

Scientists from these universities, as well as from other institutions throughout the region and the nation, will use the center's research resources as visiting scientists. Director of the Delta Center is Dr. Arthur J. Riopelle. A Scientific Advisory Board will assist him in developing the scientific programs of the center.

The center is situated on a 500-acre site about 35 miles from Tulane's main campus in New Orleans.

Initial PHS grants of $2,428,000 paid for the site and construction of the center. Additional PHS grants support the center's operations and the major part of its research programs.

When fully staffed, the Delta Center will have a research capacity of $2.5 million annually. Dr. Riopelle estimates that 45 to 60 scientists will be engaged in research projects when the center is in full operation with a supporting staff of about 200.

The center's research program covers five major areas: Infectious disease, including infectious hepatitis on which center scientists have been working for some time; chronic, metabolic, and degenerative disease for which studies the primate with its relatively long life-span is especially valuable; genetic, developmental, and embryological disorders; behavioral sciences; and environmental health.

Unique Hemodialysis Conference Spurs Search for New Techniques, Equipment

Nonmedical members of the scientific and engineering world joined last week with medical experts on artificial kidneys in a unique working conference on hemodialysis — blood purification with the aid of a mechanical kidney substitute.

The 2-day meeting, sponsored jointly by the National Institute of Arthritis and Metabolic Diseases and the National Heart Institute, was held at NIH November 9-10.

Designed to stimulate interest in problems involved in research and development of hemodialysis equipment, conference discussions centered on current impediments to achieving simpler and more efficient methods of hemodialysis, such as the need for basic improvements in design of small- and large-scale hemodialysis equipment.

Discuss Technology

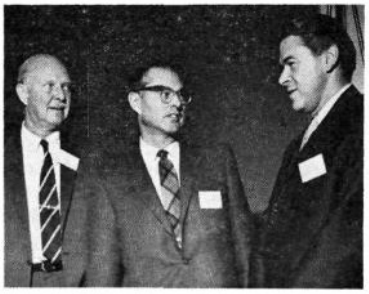
Discussions also sought to pinpoint the need for technical advances and the desirability of applying advanced technology in the field.

Artificial kidneys currently used in American hospitals employ the principle of dialysis by which a dialyzing membrane is used to remove toxic products from the blood into a circulating bath fluid.

Some 40 scientists participated in the seven conference sessions. Participants included pioneers in hemodialysis, clinicians with extensive experience with the technique, and research workers in biomedicine, engineering and physics.

Dr. George E. Schreiner of Georgetown University Medical School, an expert in the clinical application of dialysis, presided as Conference Chairman.

Topics on the conference agenda included: improvements of dialyzing membranes, basic design of the dialyzer, and composition of bath fluid and fluid circulation; problems in perfusion of dialyzer; physiologic limits to speed of dialysis; dialyzing center design; and novel and different approaches to the problem of mechanical kidney substitutes.



Attending the 2-day Hemodialysis Conference here are, left to right: Dr. Ralph E. Knutti, Director of the National Heart Institute; Dr. G. Donald Whedon, Director of the National Institute of Arthritis and Metabolic Diseases; and Dr. George E. Schreiner of Georgetown University Medical School, who presided as conference chairman.—Photo by Sam Silverman.

In keeping with the objective atmosphere sought, the conference was conducted in free and open periods of informal discussion and exchange of ideas. No formal papers have been requested for the forum but an edited compilation of conference proceedings will be published and made available to interested groups.

Will Plastic Surgery Help Rehabilitate Felons?

Plastic surgeons at Montefiore Hospital in the Bronx, N.Y., will remove tattoos and scars from a group of prisoners in the hope that this will help prevent them from returning to a life of crime.

The work is part of a research project supported by the Vocational Rehabilitation Administration, DHEW. VRA heads the Federal-State program of preparing mentally or physically disabled persons for employment and administers grant programs in rehabilitation research and training.

Behavior Linked to Looks

The researchers believe that, in some cases, when an individual considers his physical appearance unacceptable to others, his behavior may as a result also be abnormal, sometimes leading to criminal acts.

To test this theory, the research team will select 350 or 400 inmates of City correctional institutions, aged 21 to 50, who will receive plastic surgery as needed to remove any visible tattoos or other disfigurements.

To Get Job Training

They will then receive a full range of vocational rehabilitation services, including counseling, job training, psychiatric help, and upon release, job placement.

Intensive follow-up procedures will then be used to discover the benefits of the project.

The Montefiore project is being carried out under the joint leadership of Dr. Michael L. Lewin, Attending in Charge, Plastic Surgery, at the hospital, and Dr. Hans Abeles, Medical Director, and Dr. Sol Chaneles, Director of Research, both of the New York City Department of Corrections.

NCI PROGRAM

(Continued from Page 1)

The total number of projects under the four categories is approximately 150, with the bulk of the research work to be accomplished under Public Health Service contracts. Some will be under grants and some in NCI laboratories and clinics.

Preliminary program plans are being developed by NCI staff. Working groups, composed of Federal and non-Federal scientists, are being formed and will develop detailed plans for implementation of the special virus-cancer-leukemia program.

A summary of the research objectives of the program areas, together with background information on each, follows:

Research Objectives Listed

1. *Human Leukemia Etiology and Prevention.*—Assumption is made that a least one kind of virus is an indispensable element for the induction of at least one kind of human leukemia and that it continues present in the diseased person.

Integrated research and development will be directed toward the primary objective of prevention through an effective vaccine or other control methods of virology.

An essential target is successful growth of large quantities of human leukemia virus in tissue culture for immunologic studies requisite to vaccine development.

This will require improved detection of specific biological activity of human candidate viruses to select specimens for additional work-up, to monitor attempts at virus propagation in tissue culture, and to monitor biohazard work.

It will also require greater capacity for screening large numbers of human leukemia patients for selection of the most favorable patients and materials for virus isolation and propagation studies.

Work on leukemia in animals will continue to permit development of techniques and approaches useful for future work-up of human leukemia materials, particularly immunology and vaccine developments.

Total Cell Kill Sought

2. *Human Leukemia Therapy.*—Total kill of leukemic cells has been achieved in mice and approximated in a few patients. Slight improvements in therapy may make this feasible in many patients.

Therefore, a major objective is complete destruction of all leukemia cells with minimal toxicity for patients. Research will be directed not only toward better new drugs and better use of drugs now available, but also toward better support of the patients by amelioration of drug side effects.

Specific aims include improvement in collection and storage of blood platelets for prevention or control of hemorrhage; development of techniques for harvesting and storing granulocytes, and mass tissue culture of precursor bone marrow cells, for granulocyte replacement to counteract agranulocytosis, to prevent and control infection; and development of harvesting, storage and mass culture techniques for immunocyte replacement to overcome lymphocyte-plasmocyte deficiency caused by leukemia or host response to antileukemic drugs, which may lead to fungal and viral infections.

Animal Systems Studied

Animal systems will be studied to develop better efficiency-toxicity therapeutic ratios of drugs and predict the adjuvant effects of other therapies. They also will be used to explore possibilities of immunotherapy and viral chemotherapy in patients, and development of drugs for destroying secondary fungal invaders.

3. *Special Animal Leukemia Ecology Studies.* — Accumulated evidence suggests a relationship between occurrence of leukemia in persons who have associated with domesticated animals and occurrence of leukemia in these animals.

Leukemias in certain animals will be studied for evidence of viral etiology in hopes of establishing their antigenic relationships and modes of transmission, and of determining the etiologic relationships to human leukemia.

Virus-like particles have been seen in cows' milk and milk products (in greater numbers in these products from leukemic than from non-leukemic herds), although these particles have not been identified as viruses.

Preliminary findings also suggest that newborn swine are highly sensitive to oncogenic viruses from other species.

In view of the economic and possible health implications of these observations, it is urgent that the nature of leukemias and associated viruses in several types of domesticated animals, their relationships with each other and with human leukemias, and the significance of virus-like particles in milk be investigated promptly.

4. *Biohazards Control and Containment.*—Experience with animal model systems indicates that the activity of oncogenic viruses is greatly enhanced when they are produced in the quantities and concentrations utilized in advanced study of leukemia.

Recent evidence that oncogenic viruses can cross species lines increases the urgency of coordinated efforts directed toward successful containment and safe handling of these biohazards to those conducting virus-cancer research.

Drs. Robert J. Highet (seated) and Henry M. Fales of the Heart Institute's Laboratory of Metabolism, watch readings on the console of a new $125,000 mass spectrometer as it fragments and analyzes a chemical molecule which they have placed inside the section of the instrument seen at rear. Recently acquired by the Laboratory's Section on Chemistry, the spectrometer measures mass differences of molecules with a sensitivity exceeding any equipment previously available, making it today's ultimate tool for studying the composition of complex biochemical compounds. Definitive analyses provided by the instrument of molecular samples, some of them so small they are never seen by the investigators, will supply information concerning the exact ways the body builds compounds such as cholesterol—knowledge necessary to the development of drugs which can inhibit this process when it is harmful.

Council Members Named

Surgeon General Luther L. Terry of the Public Health Service has appointed Dr. Charles H. Rammelkamp, Director of Medicine, Cleveland Metropolitan General Hospital, and Arthur Hanisch, President of the Stuart Company, Pasadena, Calif., to 4-year terms on the National Advisory Heart Council.

NCI, NIAMD Scientists Find Heritable Variation In Protein Structure

National Cancer Institute and National Institute of Arthritis and Metabolic Diseases scientists have found heritable variations in structure of proteins from one inbred strain of mice.

Twenty out of 21 urinary proteins derived from plasma-cell tumors induced in a single inbred strain of mice were different in their molecular structure.

A given protein could be repeatedly isolated from different transfer generations of a particular tumor, indicating that the individuality of the protein was a stable heritable characteristic of the tumor cell.

Resemble Human Myeloma

These findings are the latest in investigations of mouse plasma-cell neoplasms, which are of interest because of their close resemblance to human multiple myeloma.

In earlier NCI studies, these neoplasms were found to be similar to multiple myeloma in microscopic appearance of tissues, development of bone lesions, and production of abnormal proteins related to the immune globulins and their polypeptide chain subunits.

In the experiments now reported, the 21 proteins secreted in the urine of tumor-bearing mice were compared by means of tryptic-peptide maps, or fingerprint patterns, obtained by electrophoresis.

Eleven of the proteins were primarily of a low-molecular weight chain type known as L-chain and appeared to consist of variants of a common polypeptide sequence; each contained an identical set of 11 peptides and each could be distinguished by the presence of several other peptides.

Protein Groups Described

Two of this group of proteins had identical fingerprint patterns. Nine proteins included the L-chain peptides but were more complex in their molecular structure; four of these had a Beta 2 A-L-chain structure. One protein was structurally and serologically unrelated to any of the others.

The factors responsible for the variations in molecular structure of the proteins are not yet understood; they appear to be under genetic control, since the characteristic patterns are heritably maintained.

The work is described in a recent issue of the Journal of Molecular Biology by Drs. M. Potter, E. L. Kuff, and K. R. McIntire, NCI; and Dr. W. J. Dreyer, California Institute of Technology, formerly of NIAMD.

Role of General Hospital In Treating Mentally Ill Now Seen as Significant

The general hospital is now a facility of major significance in providing treatment for mental illness, according to information announced recently by the Public Health Service.

A total of 1,005 general hospitals in the United States admit psychiatric patients for diagnosis and treatment, according to preliminary results of a current hospital survey completed by the National Institute of Mental Health and the American Hospital Association.

In the most recent 12-month period, the hospitals report that they discharged 412,459 psychiatric patients.

Public State and county mental hospitals, by contrast, admitted 285,244 patients in 1963.

Community Treatment Increases

The figures provide additional evidence that treatment of the mentally ill in their home communities has increased sharply and that many more general hospitals provide psychiatric care than earlier studies based on incomplete data indicated.

In reporting the 412,459 discharges, the hospitals used the most recent 12-month period for which statistics are available, in most instances for 1963. The last previous estimate, of 224,000 patients discharged in 1962, was based on reports to NIMH by only 392 of the 585 general hospitals then known to admit psychiatric patients.

Hospitals surveyed include those listed by the American Hospital Association as either general hospitals (958), infirmaries (40), or general hospitals for children (7), all of which provide treatment of physical and mental illnesses.

Many Eligible for Grants

Approximately 45 percent of the total maintain separate psychiatric units within the hospital and the others admit psychiatric patients to their general medical service.

Many of these hospitals will be eligible for Federal grant-in-aid construction funds appropriated under the Community Mental Health Centers Act of 1963, as component parts of comprehensive community mental health centers.

General hospitals are assigned special priority in the statute, as potential sponsors of community mental health centers, if they are a part of a coordinated network of treatment services providing the essential elements of comprehensive care and treatment of the mentally ill.

To stimulate establishment of community centers, Congress appropriated $150 million for Federal aid in financing up to two-thirds of the construction costs of a center. Of that total, $35 million is available for Federal grants in the next year.

WIN CASH AWARDS

Mrs. Clemence Howard, left, and Mrs. Margaret M. Smith of the Biometry Branch, NCI, receive cash awards for superior accomplishment from Dr. Marvin Schneiderman, Associate Chief of the Branch. They were commended for their assistance in preparing a basic textbook for a 6-week summer study session, organized by NCI, on the development of a new mathematical theory for clinical trials.—Photo by Sam Silverman.

Joseph Foley Appointed To Publications Post In Division of NLM

Joseph B. Foley, formerly a Scientific Grants Assistant in the National Heart Institute, has been appointed Scientific Publications Officer in the Publications and Translations Division of the National Library of Medicine.

Mr. Foley will be responsible for scientific administration of grants and contracts awarded by the Library in support of biomedical publications.

He will also serve as special staff assistant to the Subcommittees on Critical Reviews and on Abstracts and Translations of the PHS Advisory Committee for Scientific Publications.

After earning his A.B. degree in zoology from Brown University in 1944, Mr. Foley did graduate work at Yale University. He was employed as a biologist by the Department of Agriculture before joining NIH in 1951.

He served for six years in the research laboratories of the National Institute of Arthritis and Metabolic Diseases, and then accepted an appointment in NHI's Extramural Program.

Mr. Foley, an associate member of Sigma Xi and the American Association for the Advancement of Science, has co-authored many scientific articles.

DRG Study Sections Meet to Evaluate Scientific Merit of Grant Applications

By Elaine Snyder
NIH Information Trainee

In a round of sessions recently completed, study sections of the Division of Research Grants met to consider the first of Fiscal Year '65's Public Health Service extramural research grant applications.

These grant-review groups, composed of prominent scientists from universities, hospitals, foundations, and other research institutions, assemble three times each year to evaluate the scientific merit of applications in their particular areas of specialization.

To assure a constantly renewed source of independent viewpoints in judging the applications, study section members are chosen from a wide geographic area for a 4-year term.

Applications Evaluated

Evaluation of the applications is a demanding task that requires section members to do a great deal of "homework" before their meetings actually begin.

They must carefully study the applications assigned to them for review well in advance of the meetings in order to prepare detailed reports for presentation to the whole group.

Project-site visits to grantee institutions by one or usually more section members may also be necessary to provide a complete picture of the research environment under consideration.

In addition to evaluating grant applications, study sections serve PHS and the scientific community in another complementary role—as technical advisory groups, uniquely equipped to survey the status of research activities in their field, to evaluate existing programs, and to recommend initiation or expansion of other promising research areas.

Study section recommendations on grant awards are then reviewed by the appropriate National Advisory Council or Committee, which, in turn, makes final recommendations to the Surgeon General.

Qualifications Cited

To carry out the numerous administrative details necessary for the smooth functioning of these groups, each study section has an executive secretary who brings to this job a background as scientist and administrator. His role in the review process is also a dual one.

The executive secretary's primary function is the initial review of the applications for his section. He compiles supporting correspondence and may also visit the project site, speaking not only with the investigators but also with deans, department heads, and project supervisors in order to obtain first-hand information to aid the section members who will receive the application for review.

His familiarity with all details of the application, as well as with the personnel and research programs of many institutions, qualifies him to make vital policy recommendations to the study section.

A representative example of the interaction between the executive secretary and his study section was provided during the recent meeting of the Cell Biology Study Section.

In a congenial though business-like atmosphere, the 17 members of the section prepared to consider 97 applications.

Many different criteria for evaluating the grant proposals were revealed during the session. Validity of past research by an applicant; his educational background; the available staff, equipment, and other facilities were just some of the factors considered in the evaluation of an application.

Reports Aid Decisions

Reports by the executive secretary on field trips made and financial statements prepared helped form an important background for decisions on specific proposals.

These decisions were reached only after much deliberation and discussion. Final judgment was by majority vote of the section on the recommendations of the members who had reviewed the applications.

A numerical score or priority attached to each approved application reflected the order of payment recommended by the study section on the basis of scientific merit.

At stake in this review were the aspirations and goals of fellow scientists, and the comments and criticisms of the reviewers reflected the seriousness with which they regarded their task.

Medicine-History Group To Meet November 24

The Washington Society for the History of Medicine will meet Tuesday, November 24, at 8:30 p.m. in the auditorium of the Folger Shakespeare Library, 201 East Capitol St., Washington, D.C.

Two presentations will be featured—the first, entitled "Freud and the American Historian" by Mary R. Dearing, Ph.D., Associate Professor of History, Montgomery Junior College; and the second, "Prince Hamlet and Some of His Critics" by James G. McManaway, Ph.D., Consultant in Bibliography and Literature, the Folger Shakespeare Library.

All visitors are welcome to attend.

NIMH Survey Reports Increase in Psychiatric Day-Night Units in '64

The second annual survey conducted by the National Institute of Mental Health indicates a total of 142 psychiatric day-night units as of March 1964, a net increase of 28 over those reported in 1963.

These treatment units are intended for persons who require more help than can be given by an outpatient psychiatric clinic or a psychiatrist in office practice, but less than full 24-hour hospitalization.

A total of 139 day, 26 evening, 23 week-end, and 26 night programs were reported by the 142 units. Ninety-one of the units were affiliated with hospitals and 35 with clinics; only six were part of a community mental health center.

Increase Anticipated

It is anticipated, however, that the number of day-night units will increase as a result of recent Federal legislation supporting the construction of community mental health centers.

About 38 percent of the day facilities were operating at less than 50 percent of capacity and only 13 percent (including facilities serving children exclusively) had a utilization rate of 90 percent or better.

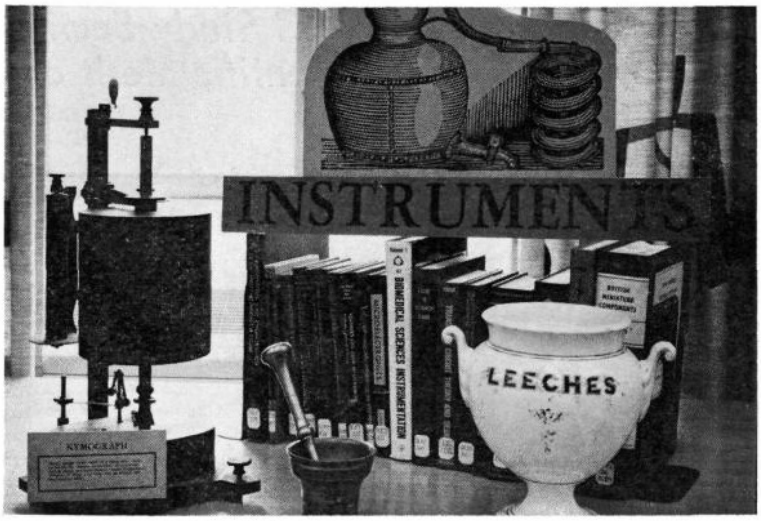
Occupational therapy and individual and group psychotherapy were available in over 90 percent of the facilities, and family therapy, recreational and educational therapies, vocational counseling, and chemotherapies in more than 50 percent.

The largest single category of professional man-hours in the units was for nurses, who accounted for over one-fifth of all hours. The day-night units provided an average of 244 professional man-hours of service a week, the equivalent of seven to eight full-time professional persons.

Present Program Modest

The authors note that day-night units in the United States represent at the present time a "very modest program" compared with the large inpatient and outpatient programs—14,000 patients served in day-night units in 1963 compared to an estimated 1.3 million psychiatric inpatients and 850,000 clinic outpatients.

The findings of the survey appear in a paper, "Survey of Psychiatric Day-Night Units in the United States, 1964," by Margaret Conwell, Beatrice Rosen and Dr. Anita Bahn of the Biometrics Branch, NIMH. Mrs. Conwell presented the paper at an American Psychological Association meeting in Los Angeles.



An early model of a Kymograph recorder used to record changes in movement during sleep, a hand engraved brass mortar and pestle dated 1590, and a leech bowl may be seen in the NIH Library Instrument Exhibit, in the library on the 5th floor of the Clinical Center. Included among the instruments old and new on display are an early drinkometer used to determine the amount of alcohol in the breath and tissues, and a recently developed arterial pulse wave recorder. The exhibit ends December 1.—Photo by Ed Hubbard.

Heart Institute Reissues Four Revised Leaflets

High blood pressure is not a disease but a sign of something wrong.

Persons with varicose veins usually complain that their legs feel tired.

A stroke can occur while a person is awake or asleep.

Rheumatic fever most often afflicts children between the ages of five and 15.

These facts and others are presented in four leaflets recently revised and reissued by the National Heart Institute.

Hypertension Described

High Blood Pressure, PHS Publication 146, describes the causes, symptoms and treatment of high blood pressure and the progress being made toward the eventual prevention and cure of it.

Varicose Veins, PHS Publication 154, describes the condition of permanently distended veins common in adults of all ages, sexes, and races, its causes, symptoms, and methods of treatment.

Cerebral Vascular Disease and Strokes, PHS Publication 513, describes disease of the blood vessels of the brain and cerebral vascular accidents, their causes, treatment, and patient rehabilitation after a "stroke."

Rheumatic Fever Can Be Prevented, PHS Publication 144, describes causes, diagnosis, treatment and possible prevention of rheumatic fever, which can cause rheumatic heart disease.

Single copies of these leaflets are available upon request from the Heart Information Center, NHI, Bethesda, Md. 20014.

Quantities may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Prices per 100 are: PHSP 146, High Blood Pressure: $2.50; PHSP 154, Varicose Veins: $2:00; PHSP 144, Rheumatic Fever Can Be Prevented: $2.50; and PHSP 513, Cerebral Vascular Disease and Strokes: $10.00.

Dr. Olof E. Stamberg Accepts DHEW Post

Dr. Olof E. Stamberg of the Division of Research Facilities and Resources has resigned to become Chief of the Graduate Facilities Branch in the new higher education facilities program of the Office of Education, DHEW.

In his new position Dr. Stamberg will operate a grants program to aid construction of graduate school facilities.

NIAID Scientists Isolate New Rhinovirus Strains

Two new rhinovirus strains, one associated with mild "cold-like" illnesses, have been isolated from throat swab specimens of Parris Island recruits by scientists of the National Institute of Allergy and Infectious Diseases.

These two rhinoviruses have been found to be immunologically distinct from all previously established rhinoviruses and, in the case of one, to be associated with mild upper respiratory illness.

The properties of these candidate agents, designated strains 363 and 1200, fulfill current criteria for their characterization as prototype human rhinoviruses. (Like the enteroviruses, rhinoviruses are small, ether-resistant viruses containing an RNA core. However, they can be distinguished from the enteroviruses by their lability to acid.)

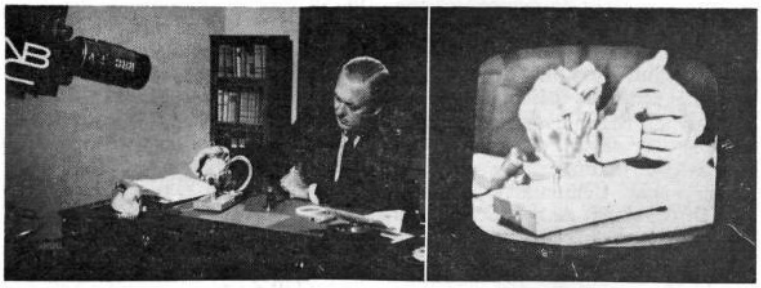
Isolates Recovered

Nine isolates of rhinovirus 363 and 10 isolates of rhinovirus 1200 were recovered from 278 marine recruits over a 10-month period. Persons sampled only during weeks when homologous virus strains were isolated were used in a test of the statistical relation between virus isolation and incidence of respiratory illness.

There was no significant correlation between the recovery of virus 363 and the presence of illness. However, rhinovirus 1200 was found to be associated statistically with the occurrence of mild upper respiratory illness.

The studies also indicated that persons with specific neutralizing antibodies were protected against infection by rhinovirus 1200.

These viruses were described in the Proceedings of the Society for Experimental Biology and Medicine by Drs. P. A. Webb and K. M. Johnson of MARU, Canal Zone, and by Dr. M. A. Mufson of the Laboratory of Infectious Diseases.



Dr. James Watt, Director of the Office of International Health, PHS, demonstrates for his Sunday afternoon TV audience in "The Doctor Reports," a cardiac "pacemaker" designed by General Electric engineers in collaboration with Dr. Adrian Kantrowitz, Director of Surgery and Surgical Research at Maimonides Hospital, Brooklyn, N. Y. At right: picture of the TV screen. Maimonides was recently awarded a 7-year grant by the National Heart Institute to study ways of making paralyzed or diseased muscles of the human body, including the heart, obey electronic commands. Dr. Watt described the pacemaker as "an amazing electronic device that may reclaim thousands of sick people."—Photos by Lou Cook.