

the NIH *Record*

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NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

Dr. Arnold Pratt Is Appointed First Director of DCRT

Dr. Arnold W. Pratt has been named Director of the Division of Computer Research and Technology at the National Institutes of Health, Dr. James A. Shannon, NIH Director, announced recently. Dr. Pratt's appointment was effective July 5.

Dr. Pratt will direct a three-faceted program for application of computer technology and related disciplines to NIH research programs. In addition to conducting mathematical, engineering, statistical and programming research and development for the more effective use of computers in the solution of biomedical problems, the Division will collaborate with management, program officials, and individual scientists on projects lending themselves to computer processing, and will provide a centralized computation and data processing service for all of NIH.

Dr. Pratt came to the National Institutes of Health in 1948 from
(See DR. PRATT, Page 5)

NIGMS Grant to Advance Study of the Living Body Through Tiny Transmitters

By Wanda Wardell

The study of the living body through tiny electronic devices whose components are so small as to be almost invisible will be greatly advanced by a 4-year program supported by the National Institute of General Medical Sciences.

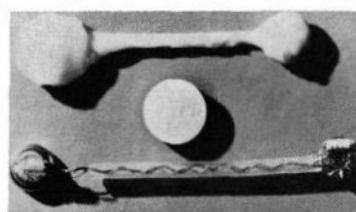
According to Dr. Frederick L. Stone, Director of the National Institute of General Medical Sciences, this award is an important step in the Institute's expanding program of support for biomedical engineering, one of the general clinical areas for which the Institute is a major source of research support.

Dr. Ko Gets Grant

An initial grant of \$153,440 goes to Dr. Wen H. Ko, Associate Professor of Engineering and Director of the Solid State Electronics Laboratory, Engineering Design Center and Engineering Division, Case Institute of Technology.

Dr. Ko has already succeeded in producing FM transmitters no larger than a shirt button to be implanted in the body and to record the electrical activity of the muscles and hearts of mice, rats and other animals.

The research program will be in



This shows comparison of size of an FM transmitter and battery-powered source with that of an aspirin tablet. The upper transmitter has been coated before being implanted in an experimental animal.

six main areas. One will be the attempt to reduce the size of the transmitter still further for implanting in the body. This would permit long-term monitoring of electroencephalograms, electrocardiograms, and similar electrical signals given off by the body.

Attempts will also be made to construct implant transmitters that can transmit 10 or more different types of physiological information on multichannel systems.

In the second area, new energy sources for the implants will be sought. Up to now, the implants have been either battery-powered, with a limited life, or radio-powered.

Aim Described

Dr. Ko hopes to provide the small microwatt requirements of the FM implants by heat, light, or electromagnetic energy from their environment inside the organism or even by motion, pressure changes, chemical differences, or electrical differences within the organism itself.

Work is also proceeding in the use of body fluids as an energy source, employing the fuel-cell principle.

In a third area, it has been found that many semi-conducting materials alter their electrical properties in response to changes in the environment such as temperature, pressure, light, magnetic fields,

(SEE TRANSMITTER, Page 6)

Dr. Sessoms Wins Meritorious Medal For Second Time

In recognition of his outstanding contributions to the regional medical programs, Dr. Stuart M. Sessoms, Deputy Director of NIH, has recently received the distinction of a second Meritorious Service Medal.

The first Meritorious Service Medal was awarded to Dr. Sessoms on April 9, 1964, for his accomplishments as Chief of the Cancer Chemotherapy National Service Center from 1958 to 1962.

The most recent award cites Dr. Sessoms' "outstanding ability and achievements in the development, operation and staffing of the new program for enhancing the health of the American people by the newly established regional medical programs."

Aids Legislation

In recommending Dr. Sessoms for the award, Dr. James A. Shannon, Director of NIH, specifically noted Dr. Sessoms' substantial contribution to the legislative process resulting in Public Law 89-239, the Heart Disease, Cancer and Stroke Amendments of 1965.

Dr. Sessoms assumed immediate responsibility for planning the administrative means by which NIH proposed to carry out the new program.

He consulted extensively with important leaders of medical institutions and organizations through-

(See DR. SESSOMS, Page 2)

Patient on Whom First Craniotomy at NIH Was Performed Returns to Visit

John Unger, a former patient here, recently returned to the Clinical Center to renew old acquaintances. One of those he greeted was his surgeon, Dr. Maitland Baldwin, Director of Clinical Research, National Institute of Neurological Diseases and Blindness, who performed the first temporal craniotomy at NIH on Mr. Unger in October 1953.

Since that time, Mr. Unger has been well. He now recalls his associations with the NIH with a sense of gratitude and friendship.

He is representative of the temporal lobe seizure program, a major effort of the Surgical Neurology Branch of NINDS.

Approximately 400 persons have participated in this program, as inpatients, since its beginning in October 1953, and 60 percent of those operated on have achieved relief of seizures.

The program also provides information on language, memory, affect, particular behavioral mani-

(See CRANIOTOMY, Page 8)



John Unger (left), once a patient at the NIH Clinical Center and subject of the first temporal craniotomy here, is shown with Dr. Maitland Baldwin who performed the surgery in October 1953.—Photo by Tom Joy.

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

SOCIAL SECURITY INSURANCE

A booklet entitled "Your Medicare Handbook" was recently mailed to all persons age 65 and over who are covered under the Medicare Health Insurance Program.

This handbook explains what benefits are available under both parts of the medicare program. The hospital insurance helps with the cost of hospitalization and related care, and the medical insurance helps with doctors' bills and other health expenses.

Office Is Helpful

Although the handbook goes into detail in its explanation of benefits and claims under the program, local Social Security offices can give more specific information or assist in the completion of claims for medical insurance benefits.

Copies of the handbook or other booklets on the medical insurance program or Social Security benefits are also available through local Social Security offices.

EMPLOYEE MANAGEMENT NOTES

The Shops Section, Plant Engineering Branch, Division of Research Services, has been approved as an appropriate unit for purposes of recognition under EO 10988.

A request from the Washington Area Metal Trades Council for exclusive recognition for the non-supervisory employees of the Shops Section is now under consideration by the NIH Management.

The Washington Area Metal Trades Council has also requested exclusive recognition for a unit in the Clinical Center laundry. The request for unit determination of the laundry is now pending with the Secretary, DHEW.

EHS Will Present Film On Suicide Next Week

"Point of Return," a film concerning suicide, will be the July health education movie presentation of the NIH Employee Health Service.

Introducing the film, Dr. Karl Menninger points out that suicide can be reduced only through understanding of the problem and appreciation of its seriousness.

The story recounts chronologically the events of a day culminating with a suicide attempt. By flashing back to selected sequences of the story, the film panel comments on the important incidents of suicide, its effects on the survivors and the need for preventive programs.

The film will be shown at the Clinical Center auditorium, Wednesday, July 20, at 11:30 a.m. and 1 p.m.; at NBOC No. 2 in Conference Room 113, Thursday, July 21, 1:30 and 2:30 p.m., and at Westwood Bldg. in Conference Room A, Friday, July 22, 1:30 and 2:30 p.m.

Irma E. Strunk Receives 2nd Performance Award

Irma E. Strunk of the Division of Research Facilities and Resources was recently presented with a certificate in recognition of Sustained High Quality Performance by Dr. Thomas J. Kennedy Jr., Chief of the Division.

Mrs. Strunk is the Travel Assistant in DRFR's Administrative Office. She has been with the Division almost since it started in July 1962.

This is the second award Mrs. Strunk has received in the course of her 10-year career in civil service, all at NIH. She received a Superior Performance award in 1960 while serving with the Division of Biologics Standards.



On the occasion of presentation of the Meritorious Service Medal to Dr. Stuart M. Sessoms, Deputy Director of NIH, in Dr. Shannon's office, others assembled for the ceremony were: seated to the right of Dr. Sessoms, Dr. James A. Shannon, Director of NIH. Standing, L to R: Dr. Robert P. Grant, Director, NHI; Dr. Robert Q. Marston, Chief, DRMP; Dr. Frederick L. Stone, Director, NIGMS; Dr. Richard L. Masland, Director, NINDB, and Dr. Kenneth M. Endicott, Director of NCI.—Photo by Jerry Hecht.

DR. SESSOMS

(Continued from Page 1)

out the nation to obtain their advice and viewpoints, maintained continual liaison with the PHS and Office of the Secretary on developments during the legislative process, and represented NIH during the discussions and deliberations within the Executive Branch.

Dr. Sessoms performed significant service for the administration by explaining its positions and maintaining liaison with interested non-Federal groups.

After the legislation was approved, Dr. Sessoms provided leadership and direction of the administrative implementation of the law.

Positions Listed

Dr. Sessoms was Assistant Director of the NIH Clinical Center from 1955 to 1957, and Assistant Director of the National Cancer Institute prior to his appointment as Chief of the Cancer Chemotherapy National Service Center in 1958.

From 1958 to 1962 he continued to be responsible for the cancer chemotherapy program. During that period Dr. Sessoms was named Associate Director of the Cancer Institute in 1960, and in 1961 Associate Director for Collaborative Research with responsibility for NCI's new Virology Research Resources Branch.

Named Deputy Director of NIH on Aug. 1, 1962, Dr. Sessoms holds the rank of Assistant Surgeon General of the PHS.

Dr. Sessoms received his B.S. degree at the University of North Carolina in 1943, and his M.D. degree at the Medical College of Virginia in 1946. He did graduate work at the Johns Hopkins School of Medicine and received additional

Former Newspaperman, Robert A. White, Joins NIGMS Information

Robert A. White, formerly a member of the Information Staff of the Agency for International Development, recently joined the Information Staff of the National Institute of General Medical Sciences.

He is a former newspaperman with broad experience as a writer, reporter and copy editor. Before joining AID as assistant editor of its internal publication—Front Lines—he worked on the sports copy desk of the Chicago Daily News and was a sports writer for the Rochester (N.Y.) Times-Union and the Dayton (Ohio) Daily News.

Experience Cited

He earlier was a general assignment reporter for the Green Bay (Wis.) Press-Gazette and the Michigan City (Ind.) News-Dispatch. He began his career as news director of Radio Station WFJS, Freeport, Ill., and later was a radio newsman at Station WJPG, Green Bay, Wis.

Mr. White received his Bachelor of Journalism from Missouri in '51.

training at the Memorial Center for Cancer and Allied Diseases in New York before joining the staff of NCI in 1953.

Dr. Sessoms is a Diplomate of the American Board of Internal Medicine, a Fellow of the New York Academy of Sciences, and a member of the Association of Military Surgeons and the American Hospital Association.

In 1957 he received the Distinguished Service Award of the U.S. Junior Chamber of Commerce.

Dr. Charles McPherson Joins the DRFR Staff

Dr. Charles W. McPherson was recently named Chief of the Laboratory Animal Medicine and Vivarium Sciences Section of the Division of Research Facilities and Resources by Dr. Thomas J. Kennedy Jr., Chief of the Division.



Dr. McPherson

As chief of this section, Dr. McPherson will be responsible for the development of facilities and resources for laboratory animals at institutions that conduct medical research.

He will administer research grants to develop animal resources and grants that are related to research in laboratory animal medicine.

In addition, he will stimulate research and training programs for professional personnel in schools of medicine and veterinary medicine, departments of animal sciences, veterinary research institutes and medical research programs.

Advises on Standards

Also, as special advisor on standards for the care of laboratory animals and on standards for the construction of laboratory animal facilities, he will serve as scientific consultant to the Division's Health Research Facilities Branch.

Dr. McPherson comes to the Division from the Laboratory Aids Branch in NIH's Division of Research Services where he worked for 10 years. For the past two years he has been head of the Pathogen Free Unit, Acting Head of the Germfree Animal Production Unit and Assistant to the Chief of the Branch.

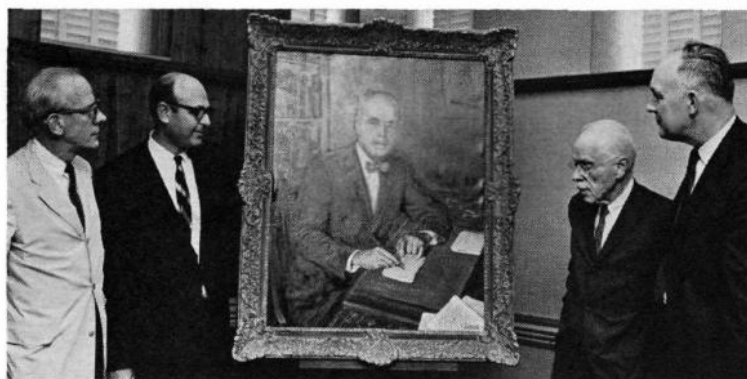
A native of Rugby, North Dakota, Dr. McPherson received his Bachelor of Science degree from the University of Minnesota in 1954 and his Doctor of Veterinary Medicine degree in 1956. He earned his Master of Public Health degree from the University of California in 1964.

Handy Guide Summarizes Financial Aid Available

Information on 75 Federal assistance programs to improve medical care is contained in a booklet released recently by the U.S. Department of Health, Education, and Welfare.

The 100-page publication, *To Improve Medical Care . . . A Guide to Federal Financial Aid for the Development of Medical Care Services, Facilities, Personnel*, is in pocket-book format and is intended as a handy guide to Federal grants and other financial aid now available to help States, communities,

Dr. Paul Dudley White Honored by Gift Of His Portrait to NLM's Collection



Present at the unveiling of the portrait of Dr. Paul Dudley White, renowned cardiologist, were (l to r), Dr. Robert P. Grant, Director, NHI; Dr. Martin M. Cummings, Director of NLM; Dr. White, and Dr. William H. Stewart, Surgeon General of the PHS.—Photo by Jerry Hecht.

Renowned cardiologist Dr. Paul Dudley White was honored at the National Library of Medicine on June 24, when a portrait of him was unveiled. The painting, destined to become part of NLM's history of medicine collection, was donated to the government by the noted portrait artist Alfred Jonniaux.

Surg. Gen. William H. Stewart, who accepted the painting in behalf of the Public Health Service, praised Dr. White as "a trailblazing physician whose career has spanned and stimulated the rise of cardiology from what one of his early advisors called 'an impossibly narrow field from which his voice would never be heard' to its present lofty status in medicine."

Painting Welcomed

Dr. Martin M. Cummings, Director of the Library, welcomed the painting. He said, "The historian today is interested in and needs a good deal more than the printed record. Portraits give a more personal and intimate insight into the lives of scientists. They 'humanize' our attitude toward noted persons."

The painting will be on display in the Library's main lobby during the month of July from 8:30 to 5 p.m.

Dr. Paul Dudley White has been active in research, teaching, clinical medicine and public service for over 55 years. His scientific writings include more than 700 papers

and 9 books, many of them classics that have influenced cardiovascular research, diagnosis and treatment throughout the world.

His honors include more than 21 awards and decorations and nearly a dozen honorary degrees from universities as far-flung as Athens University, the University of Brazil and Charles University, Prague, Czechoslovakia.

For many years Dr. White has helped plan, establish and lend direction to Federal programs of research and training in the cardiovascular field.

In his talk, Dr. White acknowledged his original reluctance to come to Washington but said he finally agreed to do so. "When I came here and appreciated what devoted and capable planners these people were, I joined them and remained an active member of the Council for the next 10 years."

Travels in Europe

In his most recent journey through Europe, Dr. White participated in the inauguration of the national heart foundations of Ireland, Czechoslovakia, Spain and Greece. In Italy, he visited the annual meeting of the Italian Society of Cardiology and attended a birthday party given in honor of his eightieth birthday.

After reading from a poem written by Oliver Wendell Holmes in 1859 on the occasion of Holmes' 50th birthday Dr. White acknowledged that "I'm more than 50 but I'm not through yet."

the Office of Public Information, DHEW. It is also on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, for 40 cents per copy.

Dr. Condliffe to Head OIR's European Office

The appointment of Dr. Peter G. Condliffe as Chief of the European Office of the NIH Office of International Research in Paris was announced recently.

He succeeds Dr. Robert P. Grant who was appointed Director of the National Heart Institute.

Dr. Condliffe will assume his new position on July 15. As Chief of the European office he will promote the



Dr. Condliffe

interests of NIH in Europe, advise on the status of research activities in Europe, work closely with NIH Institutes and Divisions in seeking out new research and research training opportunities and assist in developing closer communications between the American and European biomedical research communities.

For the past 12 years Dr. Condliffe has been working in the Endocrinology Section of the National Institute of Arthritis and Metabolic Diseases. His studies include work on the chemistry of pituitary hormones, isolation and chemistry of thyroid stimulating hormones and, most recently, research on physical properties of bovine growth hormones.

Recent Experience Noted

In the spring of 1965 he was a Guest Worker at the Museum of Natural History in Paris. He also studied in Europe in 1959-1960 as a Fellow of the National Foundation at the Carlsberg Laboratory, Copenhagen, Denmark.

Since 1960 Dr. Condliffe has been Instructor in the Biochemistry of Protein Hormones at the Foundation for Advanced Education in the Sciences. He was also Instructor, from 1956 to 1959, at the Department of Agriculture Graduate School.

Dr. Condliffe received his Ph.D. from the University of California in 1952, and from 1952-1954 was a Research Associate, Department of Biochemistry, at Cornell University.

A member of Sigma Xi, American Society of Biological Chemists, the Endocrine Society and American Association for the Advancement of Sciences, he has published 39 papers.

As medical practice becomes more complex, specialization becomes more common. The number of general practitioners is declining—66,000 today compared to 95,000 15 years ago.—President Johnson.

Arthur Catlin Retires; At NIH Since 1952

Arthur D. Catlin, Head of the Space Management Section, Office Services Branch, OD, retired recently after nearly 14 years at NIH.

As head of that section, he determined and made recommendations for space assignments in buildings on and off the reservation, maintained these records, and was responsible for the acquisition of space in rental buildings off the reservation and in all buildings on the reservation.

Joins NIH in 1952

Mr. Catlin came to NIH Sept. 3, 1952. His first job was in the Supply Unit of the Supply Management Branch. He later became supervisor of the Central and Bethesda store areas, and in March of 1956 transferred to the OSB, where he became Head of the Space Management Section in 1958.

Shortly before retirement Mr. Catlin received a cash award for Sustained Superior Work Performance.

Award Quoted

He was cited for his "resourcefulness and ability to accomplish his regular assignments in addition to workloads created by acquisition of new space . . . on a 'crash' basis."

The citation continued, "His warm personality and easy manner have been prime factors in maintaining good rapport with many organizations within NIH, PHS, HEW, with other Government agencies and with owners of rental space."



Dr. David P. Rall (right), Chief, Laboratory of Chemical Pharmacology, and Dr. Eugene J. Van Scott, Scientific Director for General Laboratories and Clinics, both of NCI, receive PHS Meritorious Service Medals. Dr. Rall was cited for significant contributions to clinical pharmacology research and for his ability in training investigators; Dr. Van Scott for his accomplishments in skin disease studies and his aid in developing cancer research programs.

—Photo by Ed Hubbard.

Foundation for Advanced Education in the Sciences Expanding, Plans New Building

The campaign of the Foundation for Advanced Education in the Sciences for funds to build an educational and faculty center has received a contribution of \$10,000 from Albert S. Keston, Ph.D., Research Director and Head of the Biochemistry Institute for Medical Research and Studies, New York City.

Announcement of Dr. Keston's gift was made by Dr. Daniel Steinberg, foundation president and Chief of the Laboratory of Metabolism, National Heart Institute, who accepted it from him during a campaign kick-off luncheon at the National Naval Medical Center Officers' Club June 17.

Noted Chemist

Dr. Keston, a noted biological chemist, developed the isotope method of analysis which is now widely used in the analysis of amino acids, proteins, steroid hormones and protein end groups.

Both a general and specific method, it is also one of the most sensitive ever employed for analysis of biological materials.

Dr. Keston became interested in the foundation's purpose and programs in 1959 when, as a visiting scientist at NIH, he did collaborative research with Dr. Sidney Udenfriend in NHI's Laboratory of Clinical Biochemistry.

According to Dr. Steinberg, Dr. Keston's gift and an earlier one of \$10,000 from Walter H. Freygang are the largest contributions received to date.

Purpose Outlined

Mr. Freygang is the father of Dr. Walter H. Freygang Jr., Chief of the Section on Membrane Physiology, Laboratory of Neurophysiology, National Institute of Mental Health.

The foundation is an educational non-profit organization incorporated in the State of Maryland Aug. 25, 1959, by a group of NIH scientists "to foster and encourage scientific research and educational activities that will facilitate communication among scientists by whatever means may be practicable."

According to Dr. Steinberg the foundation plans to build the center on approximately 4 acres of land it owns across from NIH on Cedar Lane.

Architects' Plan

Architectural plans which have already been drawn up include 9 lecture or conference rooms that can be used either for formal classes or for small conferences and seminars. These will be equipped with modern audio-visual aids.

In addition the center will house a book store, foundation offices, a small auditorium, a faculty center with a large dining hall, several small dining rooms and lounges, a library and study.



Albert S. Keston, Ph.D. (center), presents a check for \$10,000 to Dr. Daniel Steinberg (left), President of the Foundation for Advanced Education in the Sciences, for the Foundation's Educational and Faculty Center Building Fund Drive. Looking on is Dr. Sidney Udenfriend who obtained his Ph.D. under Dr. Keston at New York University, with whom Dr. Keston later did collaborative research while a visiting scientist at NIH.—Photo by Jerry Hecht.

As envisioned by Dr. Steinberg and the other officers and directors of the foundation, such a facility will fulfill a need for additional classroom space and will permit and foster daily exchange of ideas among the professional staff of the NIH and between them and the constant flow of distinguished visitors.

Noting that the realization of these goals depends upon the active participation of the total scientific community at NIH and in the Metropolitan Washington area, Dr. Steinberg said the foundation will soon send out letters inviting a large number of scientists to become members.

Membership Categories

The members will annually elect two directors to the board of the foundation, each to serve a 3-year term. In this way members will have a voice in foundation policy.

In three categories of membership, the annual dues are basic, \$10; supporting, \$25, and sustaining, \$100. Contributions are tax deductible.

The most important of the foundation activities is the NIH Graduate Program. In addition it operates a book store, a program of cultural events at NIH open to the public, a health insurance plan for guest workers and administers external grants supporting workers at NIH.

Starting in 1967 the foundation will also conduct a Ph.D. training program in cooperation with Johns Hopkins University and NIH.

Orientation Program for Commissioned Officers Scheduled Here Today

An orientation for Commissioned Officers reporting to the National Institutes of Health will be held today at 1 p.m. in the first floor auditorium of the Clinical Center.

Dr. Jack Masur, Assistant Surgeon General and Director of the CC, will preside.

The orientation will start with a talk on "The Mission of the Public Health Service" by Dr. William H. Stewart, Surgeon General.

Dr. Mider to Speak

Dr. G. Burroughs Mider, NIH Director of Laboratories and Clinics, will speak to the Commissioned Officers on "Intramural Programs at the National Institutes of Health."

Dr. Murray A. Diamond, Assistant Surgeon General for Personnel, will address the group on "The Public Health Service—What It Means to Be a Commissioned Officer."

At 2:30, Dr. Roger L. Black, Associate Director, Clinical Center, will conduct a special meeting for Clinical Associates in the first floor auditorium.

Concurrently, a similar meeting for Research and Staff Associates will be held in the CC's 14th floor auditorium. Christian B. Anfinsen, Ph.D., Director, Research Associate Program, will preside.

Research on Emphysema Intensified by Grants of \$845,000 From NIAID

An \$845,000 effort to step up the research attack on lung-crippling emphysema has been launched by the National Institute of Allergy and Infectious Diseases.

Research support for scientists at 10 major medical centers, totaling \$676,669 for the coming year, has been granted by the Institute to enlarge the scope of its program to pinpoint the causes of emphysema and prevent its damaging effects.

In addition to the direct grants, the Institute will pay an estimated \$169,000 this year in indirect costs, sharing with the 10 institutions the laboratory overhead not covered by the grants.

More than 15,000 Americans will die of emphysema this year. The number of deaths reported from the lung disorder has risen more than sevenfold in the last decade, an increase attributed only in part to improved diagnosis.

The chronic, often progressive disease disables 1 out of 14 American workers over 45 years of age. Social Security disability benefits for victims of emphysema are exceeded only by those for heart disease.

Dr. Frank J. McClure, Authority on Fluorides, To Retire on July 15

Dr. Frank J. McClure, scientist, musician, artist and philanthropist, will retire July 15 from his position as Chief of the Laboratory of Biochemistry, National Institute of Dental Research.



Dr. McClure

He intends to write a history of water fluoridation as a preventive of dental caries. The book "will not be a review of the literature but the story of a dramatic event," he says.

Dr. McClure was one of the pioneers in studying the effects of fluorides. His research on the metabolic fate of fluorides in the body provided significant evidence of the safety of fluoridation of water supplies as a public health measure.

These studies included human metabolism of fluoride, the response of large population groups to fluoride waters and animal experimentation.

A widely known and respected international authority on fluoride, Dr. McClure has more recently conducted research on the effects of diet on dental caries, particularly the relations of protein and phosphates.

Plans Given

Dr. McClure intends to spend summer days at his home in State College, Pa., and winters at his Washington apartment. He will continue to serve as consultant to the Director of NIDR. He will also continue efforts in graphic art, with linoleum and wood blocks.

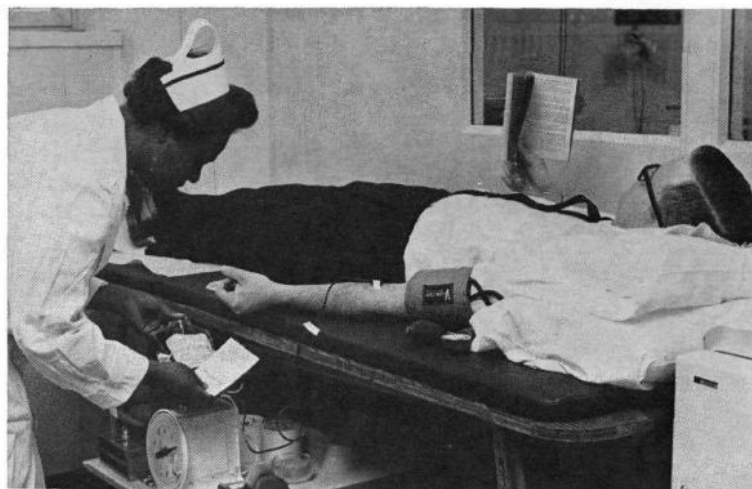
Because of his interest in art, Dr. McClure commissioned the well known sculptor, Don Turano, to design the bronze plaque which is given annually by the International Association for Dental Research, as part of the H. Trendley Dean Award, to a person honored for achievement in epidemiology and dental caries, or other research related to oral diseases.

Dr. McClure has endowed the Award in memory of Dr. Dean who was the leader in early fluoridation studies.

While retaining a life interest in the family farm near West Lafayette, Ind., where his grandfather staked out the original homestead, Dr. McClure has arranged for 100 acres to be developed and controlled by the Purdue Research Foundation, an affiliate of Purdue University.

Known as McClure Park, Inc., 60 of these acres have already been developed as an industrial research park. Here in attractive surround-

103 NIH Employees Are Now Listed in The National File of Rare Blood Donors



Dr. Scott E. Dietert, 1 in 100,000, relaxes while donating for an Australian patient. Nurse Annie Hopkins attends him.—Photo by Tom Joy.

A group of NIH employees who are akin to each other in one respect—they have inherited combinations of blood group factors that set them apart—is now listed in a national file of rare blood donors in Milwaukee. They have volunteered to help others when their special types of blood are needed.

New NLM Exhibit to Be On Display Through Oct.

The National Library of Medicine has opened a new exhibit in its lobby, "Medical Symbolism in Books of the Renaissance and Baroque," to be on display through October.

Assembled by the Library's History of Medicine Division, the exhibit features selected symbols appearing in medical books and prints in the NLM collection, and describes some of the ways in which these symbols have been interpreted.

Items of special interest include a volume by Aetius of Amida and a manuscript license to practice medicine and surgery issued in Florence in 1589.

ings, industrial scientists will cooperate with the university.

Recently returning to studies of phosphates, Dr. McClure's investigations with experimental animals indicate that soluble sodium phosphates react locally in the mouth to inhibit caries formation.

He is hopeful that research will show that this effect can be duplicated in human caries and that a way will be found to use an effective phosphate in cereals, sugar or other foodstuffs.

Dr. McClure believes that the full promise of fluoride has yet to be realized. He cites the need for an evaluation of the effectiveness of adding fluorides to table salt as a dental health benefit for people throughout the world where fluoridation of water is not feasible. But he considers periodontal diseases the greatest and most frustrating oral health problem.

Brooklyn College Honors Yolles for Health Aid

Dr. Stanley F. Yolles, Director of the National Institute of Mental Health, received an Award of Honor from Brooklyn College, New York, June 15, for his distinguished contributions to psychiatry and the national mental health program.



Dr. Yolles

Recipients of honors from the college are chosen from recommendations made by faculty and alumni. Dr. Yolles' award was made on the recommendation of both the Department of Student Services and the Department of Biology.

The award included a medal struck in his honor and a citation "In recognition of your outstanding leadership and achievements in the field of psychiatry and particularly because of your important and progressive contributions to an effective national mental health program . . ."

A native New Yorker, Dr. Yolles was a 1939 graduate of Brooklyn College. He launched his medical career as a parasitologist in tropical medicine with the U.S. Army Corps of Engineers in British Guiana and the British West Indies. His interest in the preventive and epidemiological aspects of medicine led him to psychiatry, which he calls "the field presenting the greatest challenge in preventive medicine."

DR. PRATT

(Continued from Page 1)

Cornell Medical School where he had been a Research Associate.

While engaged in physiological research with the National Cancer Institute, he developed an increasing interest in the biomedical applications of computers in selected areas of physiology, biochemistry and clinical investigation, and contributed significantly to the advancement of computer technology in this field.

He most recently headed the Energy Metabolism Section, Laboratory of Physiology, NCI.

Born in Binghamton, N.Y., in 1920, Dr. Pratt is an alumnus of Hobart College and received his M.D. degree from the University of Rochester School of Medicine in 1946. He is a member of the American Association for the Advancement of Science and the American Association for Cancer Research and the author of numerous scientific articles. He is frequently invited to discuss the application of computers to research in the life sciences.

Dr. Teegarden Joins the Grants Associates Here

Dr. James Carr Teegarden, Associate Director of the American Hearing Society of Washington, D.C., since 1960, has joined the Grants Associates program at the National Institutes of Health for a year of training as a scientist administrator.

The program, administered by the Division of Research Grants, develops professional personnel for the Public Health Service.

TRANSMITTER

(Continued from Page 1)

atomic radiation and atmospheric gas.

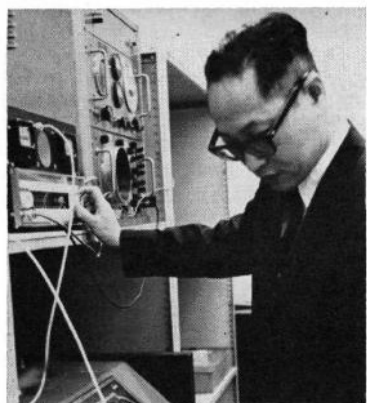
These properties make them potentially useful and worth serious investigation as small implantable biotransducers, translating signals from the body into readily recordable electric signals.

Perhaps the most important area of research will be the design of microelectronic systems which can automatically measure and control various parts of the body, including the heart, bladder and the nervous system.

It is expected that this program will yield new and better tools and experimental techniques that will make hitherto unrealizable research possible.

A major problem involved in heart disease research is in comparing data obtained from ambulatory patients and experimental animals with data obtained under more artificial conditions.

The design of telemetry systems



Dr. Wen H. Ko is controlling the electrical activity of the muscles of an implanted rat and rabbit, using a tiny FM transmitter and recording device seen in the background...

will give better long-range knowledge of the activity of the heart in both experimental animals and humans who are free to move about. These systems will be capable of monitoring many physiological signals continuously and simultaneously, 24 hours a day.

A further objective of the program is to develop new techniques for investigating single living cells and parts of the cell that are too small for present techniques.

Dr. Ko says, "As knowledge of the electrochemical processes governing the function and growth of single cells increases, and as the ability to control the electrochemical environment of the single cell becomes possible through microelectronics, undreamed-of applications are expected to result."

Joining Dr. Ko in this research program are Drs. Alan B. Kuper, Associate Professor of Engineer-

International Research Seminar Held on Community Mental Health Programs

An International Research Seminar on the Evaluation of Community Mental Health Programs throughout the world was held at Airlie House, Warrenton, Virginia, recently. Organized by the National Institute of Mental Health, the Seminar brought together representatives of community mental health programs from 20 countries.

Dr. Richard H. Williams, Assistant to the Director for International Activities, NIMH, made the arrangements for the Seminar, and substituted for Dr. Stanley F. Yolles, NIMH Director, who could not be present because he was appearing before a Congressional Committee. Dr. Williams greeted the delegates in English, French and German.

He also spoke to them on the major issues to be considered and remarked that "in spite of your geographical diversity, you have been confronted by similar problems in developing treatment methods and research studies for community mental health programs."

Dr. Tsung-Yi Lin of the World Health Organization spoke on "Developments in Community Mental Health Programs: A World View." Professor G. M. Carstairs, Director of the Medical Research Council Unit for Research on the Epidemiology of Psychiatric Illness, Edinburgh, Scotland, discussed "Problems of Evaluative Research."

Members in 5 Groups

Members were divided into five discussion groups on the basis of geography and professional background. Psychiatrists, social scientists, social workers and nurses from the United States, Great Britain, Canada, Western Europe, Eastern Europe, Latin America, and the Far East participated in almost every group.

Discussions centered on the range of alternative services to be provided by community mental health centers, the boundaries of treatment capabilities and facilities, the real nature of mental programs, the integration of various mental health services, and the relation of the roles of various mental health professionals to each other. The specific problems of alcohol and drug abuse also were considered.

At the final session, three panel

ing; David Fleming, Professor of Bioengineering and member of the Systems Research Center, and Robert Plonsey, Professor of Electrical Engineering and member of the Systems Research Center, and 14 consultants including professors in engineering and medical sciences at Case and Western Reserve University School of Medicine.

Work of the laboratory is conducted in conjunction with Highland View Hospital, Veteran's Hospital and Western Reserve University School of Medicine.

147 Give to CC Blood Bank in June; 11 Join 'Gallon Club'

The Clinical Center Blood Bank reports that 147 units of blood were received from NIH donors in June. During the same period CC patients received 1805 units of blood.

Eleven NIH staff members also joined the "gallon-donor club." They are Dr. Wayne Counts, NCI; Dr. R. T. Evans, NIDR; Forest W. Gray 3d., NCI; Maurice H. Haugh, NIAMD; J. Loring Jenkins, DRS; Margaret C. Lusk, NIMH; Charles W. Mock, NCI; Richard Parker, DRG; David A. Rector, DRS; Arnold Sperling, CC, and Jack Volpe, DRS.

groups discussed various programs and the research and evaluative issues raised, methodological problems of evaluation, and ways of continuing international cooperation in mental health.

One of the most immediate results of the Seminar was a second Conference held May 23-25 at West Point, New York. Six of the guests at the Seminar, from Great Britain and Holland, met with 40 directors of mental health programs in New York State to discuss problems of rehabilitation, hospital-community relations, and program evaluation.

Doubts Dispelled

Discussions at both conferences did much to dispel some of the doubts about community-based mental health programs, according to Dr. Williams. Delegates thought the term "area mental health programs," which would include mental hospitals as an integral part, better expressed their intentions than "community programs."

The problem of the boundaries of mental health service was widely discussed. Differences of opinion were expressed on the extent to which mental health programs should become involved with a wide variety of social problems.

Participants arrived at the consensus that mental health programs and professionals cannot solve all the ills of society, but that they must have an understanding of social problems in order to develop and carry out their own programs more effectively, Dr. Williams said.

The delegates also agreed that mental health programs must be multi-disciplinary to be most effective.

Dr. O'Connor Leaving for 2-Yr. Cancer Research Assignment in France

Dr. Gregory T. O'Connor of the Pathologic Anatomy Branch, National Cancer Institute, will leave for Lyon, France, early this summer to begin a 2-year assignment to the International Agency for Cancer Research. He will serve under Dr. John Higginson, formerly of the University of Kansas, who has been named director of the agency.



Dr. O'Connor

The international agency, established in May 1965, is closely affiliated with but not a part of the World Health Organization.

The agency was created to promote international collaboration, and its voluntary membership is open to any nation wishing to cooperate in the stimulation and support of all phases of research related to the problem of cancer.

Besides the five original sponsoring nations—France, Italy, the Federal Republic of Germany, the United Kingdom of Great Britain and Northern Ireland, and the United States—membership in the agency now includes Australia, the Soviet Union and Israel.

Activities Wide-Range

Financed by annual contributions by its members, the agency's activities cover a broad range.

Its initial projects will focus on epidemiological research and training, with particular emphasis on Burkitt's lymphoma and primary cancer of the liver.

Both of these types of cancer are major health problems in some parts of Africa and have long been of especial interest to Dr. O'Connor. He is hopeful that internationally coordinated experiments and studies of these two diseases may lead to definition of the environmental factors involved in their unusual patterns of incidence and distribution.

Dr. O'Connor received the M.D. degree from Cornell University in 1948. After serving residencies in obstetrics and gynecology, and in pathology, he spent 8 years as pathologist at St. Francis Hospital in Hartford, Conn.

Before joining NCI in 1960, Dr. O'Connor served for 2 years as Lecturer in Pathology at Makerere College Medical School, Kampala, Uganda.

tive.

Proceedings of the conference, including papers submitted by each of the participants, will be edited and published in the near future.

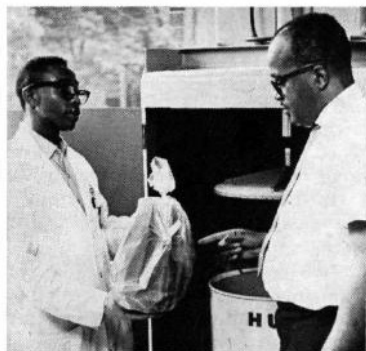
New Compactor at CC Simplifies the Disposal Of Radioactive Waste

Each month about a ton of paper, gloves, boxes and glass—seemingly harmless but with enough radioactivity to set Geiger counters chattering—moves from NIH.

During the past three months the Clinical Center's Radiation Safety Department staff has experimented with a compactor that crams more waste into drums in a shorter time than previously and with added safeguards.

This solid waste, plus liquid waste that goes into a 10,000-gallon container in the yard of Building 21, is a by-product of nuclear medicine.

NIH use of radioactive nuclides



James H. Austin (right) instructs Physical Science Technician Clearon Wilson in loading a radioactive waste compactor. In operating the machine, technicians wear face shields and dust filters.—Photo by Ralph Fernandez.

is increasing at the rate of about 15 percent a year. In the fiscal year more than 55 curies were received in 3,000 shipments.

Radiation Safety Officer Joseph M. Brown notes that every thousandth of a curie must be accounted for, to the AEC.

When members of the Waste Processing Section, headed by James H. Austin, collect radioactive waste from laboratories and other areas, they must record the millicuries so these can be subtracted from those received.

Formerly, waste disposal technicians at Building 21 rammed waste into drums with hand implements. The compactor does so with a steel disc and a hydraulic force of 2,900 pounds.

A carbon steel enclosure protects the technicians against possible flying fragments. A filter screens out radioactive dust. And the technicians wear plastic face shields and charcoal dust filters over nose and mouth, and badges and dosimeters to warn against any possible overexposure.

The new machine cuts the volume of waste fourfold, which leads to a saving in transportation and burial.



Members of the Sciences Council of Japan visit NIH recently during their U.S. tour, at the invitation of the National Academy of Sciences. From left: Dr. Harold Stewart, Chief, Laboratory of Pathology, and Chief, Pathologic Anatomy Branch, National Cancer Institute; Dr. Kazushige Higuchi, Chairman, Seventh Division (Medical) Sciences Council of Japan and President of Jikei Medical College; Dr. Eisei Ishikawa, Professor of Pathology, Jikei Medical College; Herbert Gardner, Assistant to the Chairman, Division of Medical Sciences, National Academy of Sciences, and Thomas C. Leffingwell, Administrative Officer, Office of International Research.—Photo by Tom Joy.

NCI Film Depicts How New Medical Technique Aids Leukemia Patients

A motion picture demonstrating a medical technique that is substantially reducing leukemia deaths due to hemorrhage has been released by the Acute Leukemia Task Force of the NCI.

Titled "Technique of Platelet Transfusion Therapy," the film was prepared as orientation material for blood bank personnel by the Task Force at the NIH.

The motion picture shows the method of obtaining blood platelets by plasmapheresis, a procedure in which platelets and plasma are removed from an ordinary blood donation by centrifugation and a simple pressure device.

The donor's red cells are immediately returned to him, so that a normal person can donate platelets from 2 units of blood as often as twice a week without ill effects.

The platelets thus obtained, when given in adequate amounts, prevent the hemorrhages common among acute leukemia patients and are a contributing factor to lengthening their life expectancy.

The film also portrays a family's role in contributing to a leukemic child's well being through platelet transfusions.

The 16-millimeter color production, running time 21.75 minutes, was made with assistance from the American Red Cross, the District of Columbia General Hospital and the NIH Clinical Center. Requests to borrow the film without charge may be addressed to the U. S. Public Health Service Audio-visual Facility, Atlanta, Ga. 30333.

Intensive 4-Day Course In Bio-Medical Telemetry Offered by Smithsonian

A short intensive course in Bio-Medical Telemetry will be offered by the Smithsonian Institution at the Museum of Natural History, August 10-13.

This 4-day program, conducted by Dr. R. Stuart Mackay, is designed to provide a comprehensive introduction to the field for those engaged in research in the biological and health sciences.

Prerequisite for taking the Bio-Medical Telemetry Course is a B.Sc. degree.

Tuition is \$125, and enrollment is required by August 1.

Further information may be obtained from Institute and Division Personnel Officers.

PHS Defense Courses To Be Held in Alabama

Three 1-week classes of the Public Health and Medical C and B Defense Course have been scheduled for Oct. 10-14, 1966; Feb. 27-March 3 and May 22-26, 1967, at Fort McClellan, Ala.

The course is designed to give selected health and medical personnel a general knowledge in technical aspects of Chemical and Biological Defense. It is sponsored by the Public Health Service and the U.S. Army Chemical Center and School at Fort McClellan.

Requests for enrollment should be submitted to Assistant for Civil Defense, Plant Safety Branch, Office of Administrative Management, Office of the Director, Bldg. 12A, Rm. 1005, at least 6 weeks in advance of the course.

Dr. Hertz Appointed to GW Medical Faculty; Was With NCI, NICHD

Dr. Roy Hertz was recently appointed Professor of Obstetrics and Gynecology at the George Washington University School of Medicine. Dr. Hertz joins the GWU faculty after serving as Chief of the Endocrinology Branch of the National Cancer Institute, and most recently as Scientific Director of the National Institute of Child Health and Human Development.



Dr. Hertz

In his new post,

Dr. Hertz will conduct both clinical and experimental research on problems of sterility, fertility control, menstrual disorders, adolescence, the menopause, and on complications arising during pregnancy. These investigations will be carried out in the new Eugene Meyer Pavilion of the George Washington University Hospital.

In addition to his work at GWU, Dr. Hertz will continue to serve as a consultant to NCI in order to develop the Institute's national program for the detection and treatment of choriocarcinoma.

Achievements Cited

Dr. Hertz is widely known for his research in the field of human reproduction, particularly in relation to certain complications of pregnancy. Most notable was his development of the first chemical cure of tumors which arise in pregnancy from what would normally become the after-birth or placenta.

This type of tumor (choriocarcinoma) was previously fatal in almost all cases. Although all women with this disease were subjected to removal of the uterus in past years, only a few were relieved of their disease by this operation.

Due to Dr. Hertz's work, in collaboration with his colleagues at the NCI, it is now possible to cure 9 out of 10 of these women by drugs alone, if treatment is begun early enough. In this way the fertility of these women is preserved and they can continue to have normal babies.

Research Described

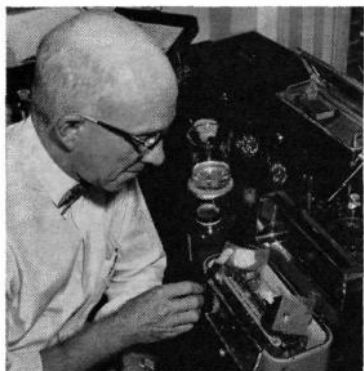
In addition, Dr. Hertz, in collaboration with Dr. William W. Tullner, developed the first orally active pregnancy hormone for the treatment of menstrual disorders and related gynecological problems.

They also developed the first drug capable of inhibiting functions of the adrenal cortex. Dr. Tullner is now with the NICHD as Chief of the Reproduction Program's Laboratory of Biology.

Dr. Arden Howell Jr. Of NIDR Dies at 56; Was Noted Mycologist

Dr. Arden Howell Jr., Scientist Director in the PHS Commissioned Officer Corps and internationally known mycologist at the National Institute of Dental Research, died of a heart attack June 22 while vacationing with his family at Myrtle Beach, S.C.

Dr. Howell joined the Dental Institute in 1950 after five years of



Dr. Howell in his laboratory prepares special culture media for nutritional study of pathogenic fungi.

field studies with the Division of Tuberculosis Control. One of the early investigators of histoplasmosis, a disease sometimes mistaken for tuberculosis, Dr. Howell worked to standardize the antigen used in skin tests to diagnose the disease.

For the past 16 years Dr. Howell has studied fungi and other thread-like organisms of the mouth.

Howell Pioneers

In a largely unexplored field, of interest to few scientists because of its complexity and lack of reliable data, Dr. Howell succeeded in classifying some of these forms, establishing their relationships, discovering their food requirements, and learning more about their sensitivity to antibiotics, production of enzymes and potential for disease.

Among these, he and his colleagues identified and named the fungus, *Odontomyces*, and showed that it lives harmlessly in the mouths of hamsters until sucrose is included in their diet.

Sucrose makes the fungus grow rapidly and produce so much of a gummy byproduct that physical pressure in the dental crevices soon causes periodontal disease.

Experiment Described

However, when the hamsters return to a standard diet, the overgrowth of fungus subsides, and the dental tissues can recover.

Dr. Howell was also interested in the puzzling diphtheroids, which are intermediate between the tu-

Philatelist Reviews 73 Years Spent in Collecting at NIH Stamp Club Meeting

Emery Bower, retired educator and father of a daughter at NIH, reviewed his experiences of 73 years of stamp collecting for the benefit of members and guests at the June meeting of the NIH Stamp Club, sponsored by the Recreation and Welfare Association of NIH.

Mr. Bower began collecting in 1882 when he was 9 years old. His first acquisition was a basket of envelopes and paper brought home from the office—mostly revenue stamps.

From 1896 until 1908, "more important matters" required his attention, but when he went to work as physical director of a YMCA in New York State, he resumed stamp collecting. The following year he joined the American Philatelic Association and holds the coveted low membership and auction number 3664.

In the course of his years of collecting, many rarities went through his hands including an early imperforate from Madeira, a perfectly centered 1851 U.S. 3-cent stamp, a block of four 1908 2-centers perf 11, and a number of unusual perforations picked up during the years when the U.S. Mint was trying to find out which perforations worked best.

At one time he acquired more

than 1,000 envelopes mailed between 1851 and 1880. And once he bought an 1847 stamp on cover (a copy of the first stamp ever issued by the United States) for \$4.

"Stamps," he said, "paid for a trip to Europe on one occasion, and on another, provided the down payment on a house."

Officers elected for the coming year were: President, Herbert B. Nichols, NHI; Secretary, Dr. Paul H. Keyes, NIDR; Treasurer, Dr. Edward P. Offutt Jr., NIAMD; Program Chairmen, Mr. and Mrs. Narbik Karamian, DRS and NIDR; Auction Chairman, Webster C. Leyshon, and Auctioneer, Roy Perry, DRS.

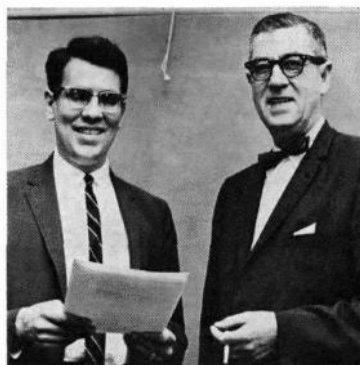
Regular meetings of the Stamp Club are held on the first Thursday of each month. Each program includes a short talk on some phase of stamp collecting, opportunities for swapping, purchasing plate blocks at face, and participation in a stamp auction. The next meeting is August 4 at 7:30 p.m. in Bldg. 31, Conf. Rm. 6.

CRANIOTOMY

(Continued from Page 1)

festations, and electrophysiological data.

It is a multidisciplinary effort in which neurosurgeon, neurologist, psychiatrist, psychologist, physiologist and social worker participate. The Nursing Department of the Clinical Center has made a major contribution to its success.



Karl D. Yordy, Assistant Chief, Division of Regional Medical Programs, NIH, reads the citation of the William A. Jump Foundation Meritorious Certificate presented to him by NIH Director, Dr. James A. Shannon. Mr. Yordy received the award recently in recognition of his outstanding service during the development of Regional Medical Programs legislation. At that time he was Chief of the Legislative Reference and Liaison Branch, Office of Program Planning, NIH.—Photo by Ralph Fernandez.

Artificial Heart Program Lets 15 New Contracts

The National Heart Institute recently awarded 15 new contracts totalling \$3,090,284 to 12 institutions for research aimed at the solution of specific problems in artificial heart development, it was announced recently by the Public Health Service.

Seven of these contracts will support research seeking materials that provide the combination of physical and chemical properties most desirable for artificial heart construction.

Three contracts will support studies on the effects of extra heat on blood, tissues, organs and their physiological functions in order to establish what levels of heat generated by an artificial heart power source could be safely tolerated by the body.

Other Contracts Listed

Two contracts will be concerned with evaluating effects of various blood pumps on blood pressure and flow, on red blood cells and other formed elements of blood, on blood chemistry and on the function of various organs.

Two contracts will provide for refinement and limited production of those assist devices now ready for further evaluation, so that these models can be supplied to research teams for continued testing.

And a contract was awarded for research to determine the feasibility of an implantable fuel cell as a potential power source for the artificial heart.

This group of awards increases to 32 the total number of contracts let by the Artificial Heart Program since June 1964, when NHI launched an expanded program of research and development to make circulatory-assist devices and, eventually, total heart replacements a clinical reality within the shortest possible time.

Goal Given

To this end, NHI is supplementing its highly successful program of individual research grants to university scientists with negotiated contracts to chemical companies, electronic and engineering firms and other elements of private industry as well as to academic institutions.

The overall goal of the program is to tap the scientific resources and manpower, both of the university research community and of private industry, in a coordinated research and development program employing, where appropriate, systems development techniques that have served the defense and space industries so well. During the fiscal year just past, the NHI outlay for artificial heart research and development totaled nearly \$4 million.