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NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

FASEB to Meet April 16-20 in Atlantic City

One hundred and seven papers reporting on the results of biological research and investigations by NIH scientists have been submitted for presentation at the 47th Annual Meeting of the Federation of American Societies for Experimental Biology, to be held April 16-20 in Atlantic City.

Altogether some 3,380 papers reporting on the results of basic research in all areas of the biological sciences applicable in the fields of medicine and public health will be presented at the meeting, according to Dr. Sidney S. Negus of the Medical College of Virginia, Richmond, who is Director of the Federation's Office of Public Information.

16,000 Expected

Three hundred and fourteen sessions, plus numerous informal evening meetings, are scheduled during the 5-day meeting, Dr. Negus said, with an expected attendance this year of 16,000.

At these sessions, physiologists, biochemists, pharmacologists, pathologists, nutritional scientists, and immunologists will report results of their latest research and investigations.

(See FASEB MEETING, Page 6)

Peace Corps Psychiatrists May Serve as Prototypes in Mental Health Field

An extremely high calibre of American volunteers have been "selecting themselves for the Peace Corps," Dr. Leonard J. Duhl, National Institute of Mental Health, and Dr. Robert L. Leopold, University of Pennsylvania, both psychiatric consultants to the Peace Corps, told the American Orthopsychiatric Association at its recent meeting in Washington.

As the high quality of applicants became increasingly evident, Dr. Duhl pointed out, the role of the psychiatrist in the Peace Corps program changed from that of helping to select applicants to that of training and counseling them.

Because of the limited number of psychiatrists available, the new approach is an attempt to conserve

Medlars Installation at NLM Is Big Step in Communication

Medical communication in the United States took a giant step forward with the arrival this month at the National Library of Medicine of the electronic computer equipment for Medlars—short for Medical Literature Analysis and Retrieval System.

Dr. Frank B. Rogers, Director of the National Library of Medicine, predicted that with the completion of Medlars the "medical sciences in the U. S. will have access to a powerful tool equaled by none in the world."

"Medlars will provide a base," Dr. Rogers said, "for the centralized preliminary processing of information now conducted under circumstances of duplication and economic waste by multiple independent secondary publications.

Meets Research Needs

"Further," he said, "Medlars will constitute a new key to medical libraries generally, and when coupled with photoduplication service will enable libraries to meet modern research requirements with unprecedented effectiveness."

The project had its inception in August 1961 when the Library awarded a contract to the Defense Systems Department of the General Electric Company to design, develop and install an electronic storage and retrieval system.

The proposed system was essential, Library officials said, to speed

(See MEDLARS, Page 8)



One of the six magnetic tape units which are part of the electronic computer equipment for Medlars is rolled off the van onto the unloading dock at the National Library of Medicine.—Photo by Ed Hubbard.

Terry Announces Grants For Research Facilities

Dr. Luther L. Terry, PHS Surgeon General, has announced the award of \$363,166 to 10 institutions in nine States for construction of health research facilities.

The Public Health Service Health Research Construction program awards matching funds to medical and dental schools, schools of public health, non-profit hospitals and other research institutions, to build and equip research facilities.

It is administered by the Division of Research Facilities and Resources, NIH.

Recommendations for grants are made by the National Advisory Council on Health Research Facilities. Grants are awarded following approval by the Surgeon General.

Since the program began in 1956, 1,048 awards totaling \$229,992,602 have been made.

MIT to Design Computers for Biomedical Use

A contract in the area of computer technology as it relates to the biomedical sciences has been negotiated with the Massachusetts Institute of Technology, it was announced recently by the Public Health Service and the National Aeronautics and Space Administration.

The contract involves an initial investment of \$626,900 for a period of nine months. Its administration has been jointly assigned to the Division of Research Facilities and Resources, NIH, and to the Biosciences Program of NASA.

Dual Purposes Cited

Under the contract a Center Development Office has been set up at MIT with a twofold purpose: (1) To coordinate planning activities for a Regional Resource Center and (2) to evaluate the potential of a specially designed computer for the health-related sciences.

The planning activities are to be carried out with the cooperation of multi-institutional advisory committees.

These committees will examine (a) the facilities that are needed both for computer technology and for research in the biological and medical sciences, (b) integrated research programs in those areas of biological and medical sciences in

(See COMPUTERS, Page 5)

NHI Issues Pamphlet on Intramural Research

The National Heart Institute has announced the publication of a 17-page pamphlet containing information on the research programs currently being conducted within the Institute's 12 laboratories.

Each of the laboratories of the Institute is described generally, and specific studies are cited as examples of types of research underway.

Single free copies of the publication, which is listed as Public Health Service Publication No. 987, may be obtained by writing the Heart Information Center, National Heart Institute, Bethesda 14, Md.

the NIH Record

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NEWS from PERSONNEL

INFORMATION ON TRAINING ACT

This article is the first in a question-and-answer series to be presented from time to time to inform NIH employees of the scope of the Government Employees Training Act (PL-85-507).

Approved in 1958, this Act provides statutory authority for the training and development of Civil Service employees in universities and other non-government facilities. Training outside the Service for Commissioned Corps Officers is covered by PL 410, Sec. 218.

Since this series is designed to give only general information concerning the Act, additional questions should be directed to I/D Personnel Officers.

Q. Am I eligible for training?

A. Yes, provided (1) you need training related to your work; (2) program funds are available; (3) the training will promote efficiency and economy of the Service's operations; and (4) your supervisor will recommend you for training and prepare justification.

Further, you must (1) be a Civil Service employee, and (2) have had at least one year of current continuous employment under Civil Service if training period exceeds 40 hours.

Q. If my supervisor nominates me for training, what other criteria will be considered by officials in reviewing the request for training?

A. They will take a number of considerations into account, such as (1) benefits to be derived by the Service from your improved knowledge, skills, etc.; (2) how much you need the training; (3) your potential for advancement; (4) the extent to which your knowledge, skills, attitudes or performance are likely to be improved by training; (5) your ability to pass training on to others upon your return to the job; and (6)

NIH Historian Extends Thanks For Directories, Still Seeks 3

Dr. Wyndham D. Miles, the NIH Historian, reports that the response to his appeal in the February 12 issue of the *Record* for back issues of NIH telephone directories for reference use has been gratifying.

"Thanks to *Record* readers, we now have a complete file of directories for the years, 1949, '50, and '53 through January '63," Dr. Miles said. "Many sent in old directories anonymously. I would like them and all who responded to the appeal to know that I appreciate their help."

Dr. Miles still needs 1951 directory No. 3 and 1952 directories Nos. 1 and 2. He requests that anyone having these copies phone him, Ext. 3006, or send them to his office, Bldg. 15-K, Rm. 207.

your own interest and efforts to improve your work.

They must also be certain that (1) the training is not being provided solely for the purpose of obtaining an academic degree; (2) the training is not being provided for the purpose of acquiring basic skills which the employee should bring to the job; (3) adequate training is not reasonably available within Government; and (4) if the training is for the purpose of promotion, there are no other employees within the Department who are already fully qualified and available to fill the position.

INCOME TAX OBLIGATIONS

NIH employees are reminded that they are obliged to pay not only their Federal taxes but taxes due in the jurisdictions where they reside.

In a directive to Heads of Executive Departments and Agencies, the Chairman of the Civil Service Commission stated that taxes are "an obligation of the highest priority and that willful neglect is incompatible with continued employ-

First Returns From NHA-Joint Crusade Show DRFR Leads Contributors Here

With seven of the 17 units reporting first returns in the National Health Agencies and Federal Service Joint Crusade, the Division of Research Facilities and Resources was leading in percentages last week with 96.3 percent participation in both drives.

The National Institute of Child Health and Human Development was second with 55 percent. The National Institute of Neurological Diseases and Blindness was first with the largest number of contributions—141 in each drive—and the National Heart Institute was second with 87 and 88. DRFR was third with 79 in each drive.

The seven reporting units total 3,545 full-time employees, or 38.6 percent of the total number of NIH employees. The units reported 440 contributions for the National Health Agencies campaign and 438 for the Federal Service Joint Crusade.

NLM Joins Campaign

These figures comprise better than 12 percent of their share but only 4.8 percent of the total for greater NIH.

The term greater NIH is used because the National Library of Medicine was recently included in the NIH campaign.

The 17 units participating in the campaign consist of the nine national institutes, four divisions, the Clinical Center, the Office of the NIH Director, the Office of Administrative Management, and the National Library of Medicine.

For measuring participation in the campaign, a figure of 9,188 was given as the total number of full-time NIH employees.

"This joint campaign is well deserving of our support," said NIH



Heidi Rosvold, 19 months old, seems to enjoy all types of films. Here her attention is drawn away from a National Health Agencies motion picture to peek at the still-picture photographer. She was watching one of the films publicizing the National Health Agencies-Federal Service Joint Crusade, in the lobby of Building 31. Heidi is the daughter of Dr. H. Enger Rosvold, Chief of the Neuropsychology Section of NIMH's Psychology Laboratory. Holding Heidi is a neighbor, Mrs. Edna Lavezza.—Photo by Lou Cook.

Chairman, Dr. Ralph E. Knutti. "We here at NIH who are working for better health know how necessary it is to have sufficient funds to carry on this work. I would urge all keymen to remind their fellow employees of our opportunity to contribute to the battle against crippling diseases and also to support our worthwhile agencies doing vital overseas work."



NIH campaign officials for the National Health Agencies and Federal Service Joint Crusade discuss early returns from the drive. Left to right: Richard H. Henschel, NHI Executive Officer, Assistant Chairman; Tony Anastasi, Publicity Chairman; Linda-Ann Jenks, Assistant Campaign Manager; Louis Cook, Audio-Visual Director; Dr. Kenneth M. Endicott, NCI Director, Vice Chairman; Mike Canning, Publicity staff; Dr. Ralph E. Knutti, NHI Director, Chairman; Betty Wiehle, Campaign Manager; and John E. Fitzgerald, NIDR Administrative Officer, Campaign Consultant.—Photo by Sam Silverman.

ment in the service."

Recently NIH was requested to notify employees who were delinquent in the payment of District of Columbia taxes to report to the

District tax office to arrange payment.

Employees who have been so notified are urged to fulfill this serious obligation.

Howard Biggs Assumes Duties as Acting Chief Of Branch in DRS

Howard M. Biggs, a civil engineer with approximately 25 years of experience in the engineering field, recently joined the staff of the Division of Research Services as Acting Chief of the Research Facilities Planning Branch.

Before coming to NIH, Mr. Biggs worked for many years in the construction industry in the Washington area. From 1955 to 1962 he was with R. H. H. Spidel, Inc., of Washington, where he successively held the positions of engineer-estimator, vice-president and president.

Mr. Biggs served on the Board of Directors of the Construction Contractors Council in 1962, and has served as management trustee for three of the Welfare Funds of the construction industry trades. He has been a member of the Washington Building Congress for a number of years.

Promoted to Colonel

He served in the U. S. Army in World War II, entering on duty in 1940 as a 1st lieutenant and was promoted to the grade of colonel upon separation in 1946. Most of his service duty was in staff work and included personnel administration, civil affairs and engineering.

He received a B.S. degree in Civil Engineering from the University of Maryland in 1933, and is registered as a professional engineer in the state of Maryland and the District of Columbia.

Dr. Brown to Speak at Symposium March 29

Dr. J. H. U. Brown, Chief of the Special Research Resources Branch, Division of Research Facilities and Resources, will participate in a panel discussion on "Government's Role in Biomedical Engineering" March 29 in Chicago.

The panel will be part of a symposium on Biomedical Engineering and its Applications to Industry and Government Programs, to be held March 29 and 30.

Other participants in the 2-day program will be Gov. Otto Kerner of Illinois, Mayor Richard J. Daley of Chicago, and Senator Hubert H. Humphrey of Minnesota.

The symposium is sponsored by the State of Illinois and Northwestern University. The University recently announced the establishment of the Nation's first Biomedical Engineering Research Center, financed through a \$1.3 million grant from NIH.



Mr. Biggs

NIMH Scientists Find Manifestations of Aging Attributable to Other Causes

Collaborative studies by a team of 21 scientists of the National Institute of Mental Health have found that many manifestations of aging, previously considered to result from the aging process itself, may be attributed to other causes.

Designed to explore the effects of normal aging, the studies indicate that social, personality, and health variables all appear to be of considerable importance in explaining changes that occur in older persons.

The studies involved 47 medically healthy males, living in urban communities and ranging in age from 65 to 92, with a mean age of 71. This was in contrast to many earlier studies which focused on persons who were sick or institutionalized.

In general, the men exhibited mental flexibility and alertness, and were found to be constructive, resourceful and optimistic. They did not display the stereotyped "rigidity" commonly believed to accompany old age.

Superior Performance Noted

The intellectual performance of the aged group reflecting verbal abilities was found to be superior to that of young normal controls, although evidence of diminishing function was observed in other tests, particularly in psychomotor speed.

In addition, the chronological age of those who exhibited symptoms of a mild, early mental decline did not differ from the chronological age of those without such symptoms.

Thus the investigators were led to question the commonly accepted importance of chronological age as an overriding factor in the development of psychiatric disorders in the aged.

The social factors in the subject's immediate environment were found to be very closely related to his behavior and attitudes. If the social environment showed qualities of deprivation, as, for instance,

in the loss of intimate persons or loss of income, the subject's attitudes and behavior showed more deterioration and depression.

Whether or not enforced retirement has unfortunate consequences for the individual depends to some degree, the investigators found, upon whether or not the retirement was accompanied by conflicting internal and external pressures.

Finding Is Unexpected

Contrary to expectations, studies of cerebral circulation and metabolism revealed no significant difference in cerebral blood flow and oxygen consumption between the aged group and a group of normal young controls with a mean age of 21.

Where reductions did occur, they were found in subjects with evidence of arteriosclerosis, suggesting that decreases in cerebral blood flow and oxygen consumption found in older people do not result from the aging process itself but rather from arteriosclerosis.

Senior members of the NIMH research team included Drs. Robert N. Butler, Seymour Perlin, James E. Birren, Samuel W. Greenhouse, Louis Sokoloff and Marian R. Yarrow.

The findings were reported by Dr. Butler in the American Journal of Psychiatry.

Dr. Nina Braunwald, NHI, Named 'Woman of Year' by Local Club

Dr. Nina Braunwald of the Surgery Branch, National Heart Institute, has been named "Woman of the Year" by the Silver Spring Business and Professional Women's Club.

An article on Dr. Braunwald, an NHI staff member here since 1958, appeared in the September 25 issue of the *Record*.

Alma Culbertson Receives Performance Award

Alma Culbertson of the Office of the Director, National Institute of Allergy and Infectious Diseases, received a cash award for sustained superior performance in ceremonies held March 8.

In presenting the award, Dr. Dorland Davis, her supervisor, pointed out that for the last four years Mrs. Culbertson has consistently exceeded the normal requirements of her job and has been of inestimable value to her Institute.

Mrs. Culbertson joined NIAID in 1959, after serving for three years with the National Institute of Neurological Diseases and Blindness. She has been with PHS a total of 8 years.



Dr. Dorland Davis presents a cash award for sustained superior performance to Alma Culbertson, his secretary.—Photo by Sam Silverman.

Dr. Pease Appointed to Communications Post by International Research

Dr. Martin M. Cummings, Chief of the Office of International Research, has announced the appointment of Dr. Clifford A. Pease as a staff assistant responsible for international communications and as the NIH Science Liaison Officer with international organizations, effective March 18.



Dr. Pease

Prior to his appointment Dr. Pease had been associated with the Agency for International Development and its predecessor organizations since 1949. His last position with AID was as Acting Director, Health Service, Office of Human Resources and Social Development.

In his new position Dr. Pease will function directly under the Chief of OIR. He will be responsible for the planning, development, coordination, and policy direction of a program designed to increase the interchange of scientific and technical information between interested groups here and abroad.

Native of New England

A native of Burlington, Vt., Dr. Pease graduated with a B.S. degree from the University of Vermont in 1943. He received his M.D. degree in 1945 from the University of Vermont College of Medicine, and a Master of Public Health degree in 1949 from the Harvard School of Public Health.

Fluent in Spanish, Dr. Pease served in Peru, Costa Rica and Paraguay, and traveled extensively throughout Asia and Africa during his association with AID and its predecessor organizations.

Dr. Pease is co-author, with Dr. E. Harold Hinman, of an article on International Assistance in Medical Education which was published in the Journal of Medical Education in September 1961. He is also author of The United States and International Health Responsibilities, to be published by the American Hospital Association.

A Diplomate of the National Board of Medical Examiners, he is a member of the American Medical Association, American Society of Tropical Medicine, American Public Health Association, Royal Society of Tropical Medicine and Hygiene, Association of American Medical Colleges, and the Tropical Medicine Society of Washington, D.C.

Dr. Pease was a member of the U.S. delegation to the 14th and 15th World Health Assemblies and is a member of the International Committee of the American Public Health Association.

Gout: End-Product of Cosmic Collision a Million Years Ago

The following is a condensation of the NIH Lecture, "The History and Natural History of Gout," presented February 27 in the Clinical Center auditorium by Dr. DeWitt Stetten, Jr., former Director of Intramural Research at the National Institute of Arthritis and Metabolic Diseases, now Dean of the Rutgers University Medical School.

A COSMIC PARTICLE colliding with a DNA molecule a million years ago sparked a genetic sequence whose end-product today is called gout. As a result of this micro-cosmic tragedy, the higher apes and man are doomed to an existence without uricase, the substance that catalyzes the conversion of relatively insoluble urate into more soluble allantoin. The absence of uricase is a necessary (although happily not a sufficient) condition for the development of gout.

Gout is a very ancient disease: it has been recognized in prehistoric skeletal remains, and is unequivocally described in the "Aphorisms" attributed to Hippocrates (460-352 B. C.).

Known as 'Podagra'

The ancients called it "podagra." They recognized the familial predisposition, the preponderantly male distribution, the usual onset in middle life, the intermittent and migratory nature of the arthritis which might be precipitated by overindulgence or by stress. They proposed many treatments and, one must suppose, as in other diseases with a plethora of therapies, none was very effective.

The Byzantine doctor, Alexander of Tralles (525-605 A. D.), is credited with the first use of extracts of *Colchicum autumnale*—the meadow saffron—in the treatment of gout, thus making gout the earliest disease for which specific chemotherapy was known.

Many Byzantine and Arabian physicians have left us descriptions of the disease complete with pharmaceutical recipes—often but not always including colchicum.

In the 16th Century, we read of William Harvey, discoverer of the circulation of the blood, treating his own gout by immersing his foot in ice water.

Sydenham Quoted

Thomas Sydenham, the self-styled English Hippocrates, a long-time sufferer from gout, first offered the notion that "gout, unlike any other disease, kills more rich men than poor, more wise than simple. Great kings, emperors, generals, admirals, and philosophers have all died of gout."

This idea that gout sufferers possess superior intelligence has persisted through the years. To determine whether a correlation exists between man's intelligence and his level of serum uric acid (a concomitant of gout), a correlation study was made between individual test scores on the Army Classifica-

tion Battery—which provides a measure of general intelligence—and each subject's serum uric acid concentration. The investigators reported finding a small but significant correlation.

Causality, however, is not clearly defined by correlation; which is cause, which is effect, is still undetermined. The consolation that gout patients may nevertheless derive from an association of high serum uric acid and intelligence must be tempered by the recent observation that a high serum uric acid level exists in Mongolism.

Modern Research Important

The modern era in gout research came with the discovery of urea in serum and the advent of isotopic tracer techniques, which gave a true understanding of the synthesis of the uric acid group known as purines. In addition to enzymes and energy sources contributing to the purine nucleus, a contributory role is played by four amino-acids: glycine, glutamine, serine, and aspartic acid.

Two types of gout patients are now recognized: those who seem to produce uric acid at normal rates, and those who make it far more rapidly. Although many questions still remain, apparently a specific renal defect accounts for the hyperuricemia of gout patients who are not overproducers. Both types of patients suffer from a metabolic defect in purine synthesis or in uric acid excretion which is only now beginning to be understood. But the relation of this to the arthritic aspects of the disease remains a mystery.

Colchicine Action Studied

Also only poorly understood until recently has been the mechanism of the highly specific, anti-inflammatory, and analgesic action of colchicine in this disease—an action it manifests in no other disease. New approaches are now beginning to provide answers.

The presence of crystalline sodium urate in joint fluids of gout patients had long been noted. Crystals of this substance have recently

(See GOUT, Page 7)

Dona McNish, NIGMS, Receives Cash Award

Mrs. Dona McNish, Grants Assistant with the Research Grants Branch, National Institute of General Medical Sciences, was presented a cash award March 8 for "performing functions over and above the position she occupies."

In presenting the award, Dr. Carl Brewer, Chief of the Branch, cited Mrs. McNish for her "ability and willingness to assume the responsibilities of functioning as assistant to the Acting Chief (of the Grants Administration Section) . . . and for planning and directing overall procedures."

Cooperation Cited

"Mrs. McNish's cooperation in the application of program knowledge and leadership . . . has been a major factor in the maintenance of the necessary level of support to the Research Grants Program of the Institute during the past year," Dr. Brewer added.

Mrs. McNish came to NIH in 1958 and was with the DRG Data Retrieval Section and the NINDB Eye Clinic for 6-month periods. She has served with the Research Grants Branch since 1959.



Dona McNish receives an award for superior performance from Dr. Carl Brewer.—Photo by Sam Silverman.

Herpes Simplex Virus Produces Oral Ulcers In Inoculated Rabbits

Inoculation of rabbits with herpes simplex virus produces oral ulcers, whereas bacterial agents produce only superficial abscesses, according to a recent report of National Institute of Dental Research investigators.

The scientists found that virus-treated rabbit mucosa developed small ulcerations which enlarged and coalesced to form a single large ulcer at 5 to 6 days.

These ulcers gave positive cultures for herpes simplex virus from the second to the sixth day. After this period cultures were negative, although ulceration was usually evident for 10 to 12 days.

Lesions produced by comparable or larger doses of different species of oral bacteria were clearly different in character and pattern from the viral lesions.

Bacteria Produces Abscesses

The bacteria produced superficial abscesses which were confined primarily to the connective tissue. Some of these abscesses developed small overlying ulcers which did not enlarge, and became re-epithelialized within 3 to 4 days.

It was also found that previous exposure to herpes simplex virus, either by single oral inoculation or multiple intraperitoneal inoculations, conferred protection against ulcer formation when subsequent mucosal challenges were made with virus.

Specific antibodies against herpes simplex virus were demonstrated in the sera of all the protected animals.

These findings were reported last week at the International Association for Dental Research meeting in Pittsburgh by Dr. Anthony A. Rizzo, Laboratory of Microbiology, and Warren K. Asha, Laboratory of Biochemistry, NIDR.

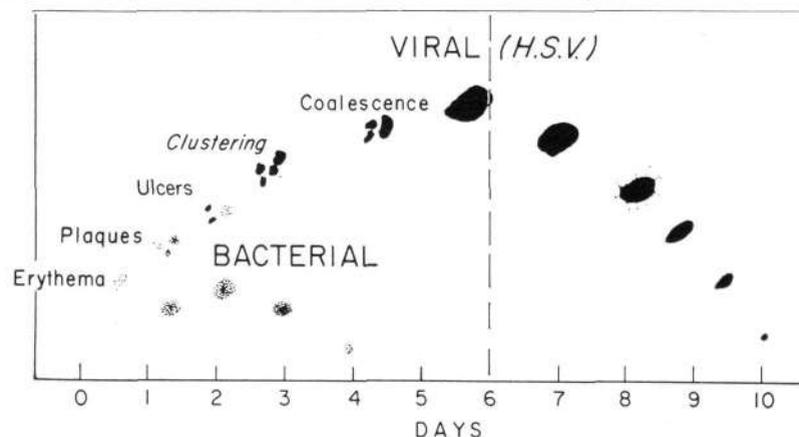


Chart of clinical course of experimental oral ulcers produced in rabbit oral mucosa by herpes simplex virus. White plaques were observed within first 2 days, followed by discrete, frank ulcerations (indicated in solid black) which enlarged and coalesced into a single ulcer by the sixth day. From the second to sixth day, ulcers gave positive cultures for herpes simplex virus. After that cultures were negative. Bacterial lesions abscessed but did not ulcerate.

Exhibit on Research in Mental Retardation To Be Shown Here

"Pathways of Research in Mental Retardation," an exhibit depicting the major avenues of Government-supported research in mental retardation, will go on display in the lobby of the Clinical Center for two weeks beginning April 2.

The exhibit was first shown at the International Awards Program of the Joseph P. Kennedy, Jr. Foundation at Washington's Statler-Hilton Hotel in December. Dr. J. H. Tjio, of the National Institute of Arthritis and Metabolic Diseases, was among the noted scientists from around the world whose research accomplishments were honored by the Foundation at the awards program.

Exhibit Praised

Mrs. Sargent Shriver, Executive Vice President of the Foundation and sister of President Kennedy, described the exhibit as "a remarkably thorough presentation of what is being done and what needs to be done in the whole area of mental retardation research."

"The exhibit," she said, "will contribute greatly to both professional and lay knowledge of the progress which is being made in combating this disorder."

The exhibit was prepared by the National Institute of Neurological Diseases and Blindness, in cooperation with the National Institute of Mental Health, the National Institute of Arthritis and Metabolic Diseases, the National Heart Institute, and the Medical Arts Section of the Division of Research Services. It will be on display in the Clinical Center through April 15.

Property Utilization Plan Saves \$702,417 Here

The Supply Management Branch, OAM, saved an estimated \$702,417 in Fiscal Year 1962 by making use of 6,714 excess property items issued through SMB's Property Utilization Program.

This saving was estimated on the cost of these items if purchased new. It is reported in a recent leaflet describing the program which is administered by the Property Management Unit's Utilization Office, Property and Supply Section, SMB.

The leaflet explains that if an employee is no longer using certain equipment the Utilization Office will, upon request, remove it. It will be renovated, if necessary, and placed on display in a storage area.

Lists of displayed items are circulated periodically, and other offices and laboratories are encouraged to examine this equipment to select items required for their work.

Contact Maintained

The Utilization Office maintains telephone contact with various Government agencies and regional offices to learn of the latest surplus items they have available. This equipment is generally obtained at no cost to NIH. A considerable savings thus is realized.

Another helpful aspect of this program is the location of special kinds of equipment at NIH for loan to areas within NIH where a specific item is needed for a short term.

Details on this and other facets of the Utilization Program are included in the brochure.

Copies may be obtained through the property representatives in each Institute and Division. They are listed on Page 140 of the current issue of the NIH telephone directory.

Associates Honor Departing Dr. Allen, Mrs. O'Neal With Party, Gifts, Humor

Dr. Ernest M. Allen, recently appointed Grants Policy Officer in the Office of the Surgeon General, was honored by more than 100 colleagues, associates and friends at an after-hours party, March 7, in the Service Dining Room of Building 31.



Dr. Ernest M. Allen and his long-time associate, Dr. Jack Masur, Clinical Center Director, are pictured at the party in honor of Dr. Allen.—Photos by Sam Silverman.

Prior to appointment to his new position (See *NIH Record* of Jan. 29), Dr. Allen was Associate Director for Research Grants at NIH, and had been associated with the NIH Research Grants Program since 1946. He was Chief of the Division of Research Grants from 1951 until 1960.

Dr. Allen's secretary, Mrs. Dorothy O'Neal, who will continue as his secretary in the new position, was also a guest of honor at the party.

Dr. Masur Is MC

Acting as master of ceremonies, Dr. Jack Masur, Director of the Clinical Center, presented to Dr. Allen an engraved wrist watch, the gift of his many friends. Dr. Allen also received a "memory book" which included a pictorial account of his service here since 1945, and dozens of letters from well-wishers.

In less serious vein, Clifford F. Johnson, Chief of the Office of Research Information, presented Dr. Allen with a variety of comical gifts, including a crystal ball, to assist him in his new position.

Skit Adds Humor

Adding to the hilarity was a satirical skit, "Seven Minutes in Allen's Alley," which in three sequences depicted Dr. Allen's experience at NIH and presumed to peer into the future.

Mrs. O'Neal was presented with several pieces of sterling silver and an azalea plant whose blooms were to "remind her of her many friends at NIH."

Dr. Allen and Mrs. O'Neal also received guest books autographed by those attending the party.



Dr. Allen and his secretary, Dorothy O'Neal, sample the fruit punch. She was also a guest of honor.

COMPUTERS

(Continued from Page 1)

which the life scientists and the computer scientists involved have overlapping interests, and (c) related on-the-job training programs.

The major recommendations will be summarized in a report that will also include (a) some considerations that relate to the formation and character of regional resource centers at the interface of technology and the health-related sciences and (b) a discussion of training programs in relation to the range of activities and objectives for such centers.

Digital Computers Used

The Center Development Office also will supervise an evaluation program for the Laboratory Instrument Computer (LINC).

LINC is a small, stored-program digital computer which was developed at MIT's Lincoln Laboratory by W. A. Clark and Lt. C. E. Molnar of the Air Force Cambridge Research Laboratories and their associates at MIT.

It is planned to build about a dozen LINC's during the summer of 1963 in Cambridge. Scientists who are prepared to participate in the assembly of a LINC, to use it subsequently in their own research, and to provide a critical evaluation of LINC performance have been invited to submit applications.

An advisory committee representing major disciplines of the health-related and engineering sciences will be appointed to help guide the LINC evaluation program.

Not all women talk for hours on the telephone. Some have to listen.—Homer Phillips in *SatEvePost*.



Technicians assemble one of the ten subject units of the exhibit which will be displayed in the Clinical Center lobby beginning next Tuesday. At right are (left to right) James McMahon, Evelyn Meyer (slightly visible), and Robert Walters, all of the NINDS Information staff, and George Marsden, Chief of the Medical Arts Section, DRS.—Photo by Ed Hubbard.

FASEB MEETING

(Continued from Page 1)

tive work on heart disease, radiation protection and recovery, cancer therapy, organ transplantation, human and animal nutrition, drugs affecting human behavior, and space biology.

Additionally, 26 symposia and special sessions are scheduled, including a general session in the ballroom of Convention Hall at which Karl R. Popper, Professor of Logic and Scientific Method, University of London, will discuss "Science: Problems, Aims, Responsibilities."

About 280 industrial and scientific exhibits will be displayed on the arena floor of Convention Hall.

1,500 Interviews Scheduled

The Federation Placement Service, located in the lower lobby, will schedule 1,500 interviews between employers and those seeking positions in the biological fields represented by the six Societies comprising the Federation.

Dr. F. S. Cheever, Dean of the University of Pittsburgh School of Medicine, is Chairman of the Federation Board, the governing body of the organization, which consists of three representatives of each of the six Societies.

The complete program for this year's Annual Meeting is now available from the Federation which maintains headquarters at 9650 Wisconsin Avenue, Washington 14, D.C. Dr. Milton O. Lee is the Executive Officer of the Federation, and Mrs. Helena B. Lemp is Convention Manager. The registration fee for scientists is \$15.

Today Is Last Day to Make FASEB Bus Reservations

Today (March 26) is the last day for NIH personnel planning to attend the FASEB Annual Meeting in Atlantic City April 16-20 to request bus reservations.

Willard E. Vincent, Assistant Chief for Operations, OSB-OD, said that bus travel order forms, which are available from Administrative Officers of all Institutes and Divisions, must be completed and returned to AO's today. All reservations will be confirmed by issuance of a bus ticket to each traveler.

Late model buses are scheduled to leave from in front of Building 1 at 2 p.m. on April 15, Mr. Vincent said, and to return from the bus terminal at Bacharach Boulevard and Tennessee Avenue, Atlantic City, at 6 p.m. on April 20.

If the need is sufficient, he said, buses also will be scheduled to depart from Building 1 at 2 p.m. on April 16, 17, 18 and 19, and to return from Atlantic City at 6 p.m. on these same days.

Further information may be obtained from Mrs. Mary McCormack, Ext. 3441.

Mental Health Study Center, Established 15 Years Ago, Moves to New Location

The Advisory Board and staff of the Mental Health Study Center celebrated its move into new offices in Adelphi, Md., with an open house on March 1 for professional and administrative representatives of the National Institute of Mental Health and professional and civic leaders of Prince Georges County.

A Branch of Program Development of NIMH since 1960 and its only community-based program, the Center now occupies the top floor of a 2-story building located at 2340 University Blvd. East. Its new telephone number is 422-8812.

Formerly quartered at 1000 Lebanon St., Langley Park, Md., the Study Center is directed by Dr. James S. Osberg.

Established in 1948

The Mental Health Study Center was established 15 years ago under provisions of the National Mental Health Act through the cooperation of interested citizens and organizations of Prince Georges County, the County and State Health Department, and the Mental Hygiene Division of the U.S. Public Health Service.

During the first six years of its existence the Study Center was known as the Prince Georges County Mental Health Clinic and did not receive its present name until 1954.

As a demonstration program in community mental health, the goals of the Clinic were to study methods through which its activities could be made a part of the overall health program of the County and to de-

termine methods which communities could apply to attack the factors contributing to psychiatric disorders.

Although a small number of research projects were conducted in the early years, research became a more prominent part of the total program in 1956 when a long range epidemiological study of reading was initiated.

In 1960 a major change occurred in the structure of the Study Center when it became a Branch of Program Development of NIMH.

Progress has been made over the past two years in refining the research objectives of the Center through the development of specialized sections in the areas of adolescent behavior, community projects, and clinical studies.

Staff, Projects Expanded

There also has been an expansion of staff, now numbering close to 50, particularly among the behavioral sciences, and the initiation of many new research projects.

The Advisory Board of the Center, whose chairman is Dr. Thomas M. Magoon of the University of Maryland, evolved out of the original planning group which was instrumental in establishing the pilot Clinic in Prince Georges County.

Composed of 12 representatives from various organizations in the County, the Advisory Board meets monthly with Staff members to exchange and examine information about issues of joint interest to the Study Center and the County and to serve in an advisory capacity to projects at the Center.

Habermann to Transfer From DRS to FDA

Dr. Robert T. Habermann, a Veterinarian in the Comparative Pathology Section, Laboratory Aids Branch, Division of Research Services, will transfer to the Pharmacology Division of the Food and Drug Administration in early April.

In his new position Dr. Habermann will be responsible for evaluating the effect of new drugs on animals prior to their clinical testing on man. He will also engage in animal toxicity tests.

Dr. Habermann came to NIH from the Department of Agriculture in 1949. Since then he has assisted in the control and elimination of diseases in NIH laboratory animals.

He holds a B.S. degree in medical biology, an M.S. degree in bacteriology and chemistry, and a D.V.M. degree from Michigan State University.

Dr. Habermann entered Government service in 1936, as a veterinarian with the Agriculture Department.

He is the author of more than 50 scientific papers, a member of the American Veterinary Medicine Association, the Conference of Research Workers in North America, the U.S. Livestock Sanitary Association, and the International Academy of Pathology.

He is also a Diplomate of the American College of Veterinary Pathology and of the American College of Laboratory Animal Medicine, and a member of the Animal Care Panel.

Knutti Is Elected Fellow Of College of Cardiology

Dr. Ralph E. Knutti, Director of the National Heart Institute, was elected an Honorary Fellow of the American College of Cardiology at the College's 12th Annual Convocation March 2 in Los Angeles.

Prior to his appointment as Director of NHI in September 1961, Dr. Knutti was Associate Director for Extramural Programs of the National Institute of Arthritis and Metabolic Diseases. He had been with NIAMD since joining the PHS Commissioned Corps in 1951.

At the recent meeting Dr. George E. Fahr, Emeritus Professor of Medicine of the University of Minnesota, and Dr. Seeley G. Mudd, former Dean of the Medical School of the University of Southern California, also were elected Honorary Fellows of the American College of Cardiology.

TWO FROM DRG RECEIVE MERIT AWARDS



Two Division of Research Grants employees who recently received cash awards are pictured at informal awards ceremonies. At left, Dr. Bernard Brookman, Assistant Chief of the Career Development Review Branch, watches Nicholas A. Smith, Office of the Branch Chief, open the cash award he received for developing and conducting a branch-wide course for clerical supervisors. At right, Dr. J. Palmer Saunders, Chief of the Research Grants Review Branch, presents the meritorious service award to Ellen M. Blum for her work as Chief of the Project Review Section.—Photos by Sam Silverman.



Dr. Habermann

GOUT

(Continued from Page 4)

been detected within phagocytes. Injections of microcrystalline sodium urate into the joint spaces of both normal and gouty men produced attacks similar, in all major aspects, to acute gouty arthritis.

What is noteworthy is that amorphous urate suspensions did not, in most cases, produce such symptoms. Crystals of other materials, such as sodium orotidate, were equally effective. Thus, the effect observed seemed in some way to be related to the crystalline state of the injected solid.

The fact that as many as 90 percent of the crystals were shown to have been phagocytosed at the time when pain, heat and effusion at the joint were maximal led these workers to the suggestion that the act of phagocytosis of urate crystals was in some way causative of the symptoms.

Karnovsky's Studies Cited

Phagocytosis had previously been studied by Karnovsky who showed a striking increase in glycolysis by leukocytes during the process of ingestion of solid particles. In a closed space, such as the joint space, the lactic acid which leukocytes produce in large amount during phagocytosis will inevitably lower the pH, with resultant decrease in solubility of urate and tendency to further crystallization. A vicious cycle is thus established.

It now remains to establish the role of colchicine. It was first observed that the effective use of colchicine was accompanied by a striking decline in the fraction of urate crystals contained in phagocytes. In vitro, the addition of colchicine or of serum from a colchicized patient inhibited phagocytosis.

Colchicine Effective

Colchicine markedly inhibited the oxidation of uric acid by leukocytes, a process attributed to ver-doperoxidase which these cells contain. The drug also decreased the oxidation of glucose by leukocytes in the presence of urate crystals.

From all of these observations it may tentatively be concluded that colchicine blocks phagocytosis of urate crystals. The relationship of colchicine to gout is almost fortuitous, depending upon the fact that phagocytosis of urate crystals in the joint space is in some way responsible for the pain and swelling. If it is the function of colchicine to spoil the normal appetite of the white blood cell for crystals, then the drug will be seen to interrupt the vicious cycle which crystallization of urate in the joint fluid has established.

Sailing Club Seeks Members, Offers Landlubbers Guidance

Ahoy all sailors and landlubbers who would like to sail! With spring weather in the offing, the R&W-NIH Sailing Club is off to a breezy start this year and is actively seeking members.

Sponsored by the NIH Recreation and Welfare Association, the club held its first official meeting in January and is now in process of organizing a full sailing schedule for the 1963 season.

Prospective members do not have to own a sailboat in order to join the club or take part in its activities. Boat-owning members, now numbering about 27, have indicated a willingness to share their boats with others.

Dr. Robert B. Livingston, elected Commodore of the NIH club for 1963 at the January meeting, pointed out that "some of the finest sailing waters in the world are within easy reach of NIH." These include, he said, the waters of the Chesapeake Bay and nearby rivers and tributaries.

Other newly elected club officers are:

Vice Commodore, Dr. Rodney A. Olson; Rear Commodore, Dr. Gerald M. Shean; Fleet Captain, Vernon E. Taylor; Treasurer, Edward Hedgley; and Secretary, Celeste L. Sewell.

Seven Committees Formed

At the January meeting seven club committees were approved and chairmen appointed.

The Matching Committee will bring together sailboat owners and those without boats who are interested in sailing.

Similarly, the Racing and Measuring Committees will handle the details involved in arranging races and the handicapping of boats; the Cruise Committee will organize group cruises to be taken by club members; and the Charter Committee will provide a service through which sailboats of members may be hired or rented.

Charged with arranging the club's outside activities is the Program Committee. The Junior Com-



Commodore Livingston's 44-foot yawl "Estrella" sails close to the wind on Chesapeake Bay with a crew of five.

mittee will organize a program for the children of club members, through which they will receive lessons in sailing, seamanship and water safety.

In addition, the club is planning a series of adult classes in sailing to give novices an opportunity to learn seamanship from the many knowledgeable sailing veterans who are members of the club.

Meets Monthly

The Sailing Club meets at NIH on the first Thursday of each month. Members will be advised as to the time and place of each meeting.

Club members are looking forward to the next meeting on April 4, Dr. Livingston said, at which Aubrey Graves, Outdoors Editor of the Washington Post, will speak on outdoor activities, with special emphasis on sailing.

Club membership is open to all NIH personnel and NIH-related people, and membership dues have been set at \$1 for this year for R&W members and \$2 for others.



Members of the R&W-NIH Sailing Club gather on the dock beside Vern Taylor's 32-foot sloop, "Melody," at the Fall Rendezvous at Pirate's Cove on the West River at Galesville, Md.

Volunteers Needed for Poison Ivy Patch Test

NIH employees who are sensitive to poison ivy will have an opportunity to assist two NIH scientists who are searching for an effective preventive measure against this springtime scourge.

Drs. Harold Baer of the Division of Biologies Standards and Robert Auerbach of the National Cancer Institute have initiated a study on the varying degrees of sensitivity of humans to poison ivy. The spread of the itching rash associated with poison ivy varies considerably, depending on the sensitivity of the individual.

Call Dr. Auerbach

The investigators are seeking NIH employees who are sensitive to poison ivy for patch testing. Employees who are interested in volunteering for this test may call Dr. Auerbach on Ext. 6381 for an appointment.

The test is made by applying poison ivy extracts to the skin. The scientists then observe reactions for hypersensitiveness.

One objective of this study is to determine which of several materials is the best diagnostic reagent for establishing the degree of sensitivity to poison ivy.

The investigators hope this study may aid in the ultimate development of an effective preventive against poison ivy. At present, the easiest approach to successful prevention is to avoid contact with poison ivy.

300 Patients, Guests Enjoy 'Pajama Game'

Over 300 Clinical Center patients and their guests enjoyed a special advance performance of "Pajama Game" presented Wednesday evening, March 13, in the CC auditorium by the Hamsters, dramatic group of the NIH Recreation and Welfare Association.

This year, for the first time, invitations for the special event were extended to patients at Saint Elizabeths Hospital. About 50 of them attended.

Bed Patients Attend

Arnold Sperling, director of the show and Chief of the CC Patient Activities Section, reported that many bed patients who had been looking forward to the show managed to attend in wheel chairs. Eight Gray Ladies provided escort services for them.

The four regular performances—Thursday, Friday, Saturday evenings and a Sunday matinee—played to capacity audiences. Approximately 25 persons who had not purchased tickets in advance were turned away at the door for each performance.

MEDLARS

(Continued from Page 1)

up indexing, search and retrieval of medical literature, and it had to meet the stated requirements set forth by the Library. The heart of the system is a Minneapolis-Honeywell 800 digital computer.

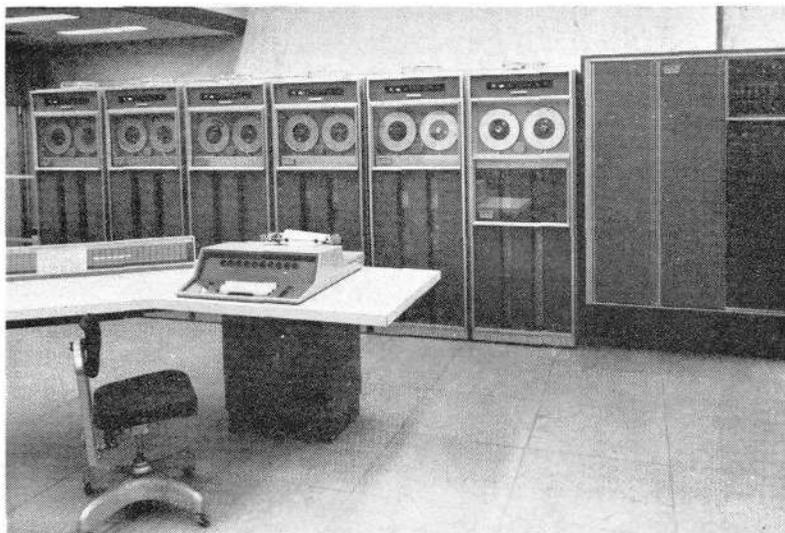
The system, now being installed in the specially air-conditioned, glass-enclosed Data Processing Section area on the first floor of the Library, Dr. Rogers said, will not be fully operative until next fall. The first publication to come out of Medlars, he said, will be the January 1964 issue of the *Index Medicus*.

System Uses Tape

Information is fed into the system through punched paper tape, representing the indexing done by the Library staff. This information or data is then converted to magnetic tape and manipulated in the digital computer.

The magnetic tape so processed is then used to activate a high-speed composing device which is capable of producing photographic masters for printing.

Medlars will materially increase the total volume of the information processed by the Library after it becomes fully operative, officials said. Currently, the Library indexes 140,000 papers each year. Medlars will accommodate 250,000 papers annually.



This a partial view of the Data Processing Section area on the first floor of the Library, where all electronic computer equipment for Medlars is located. In the foreground is the console unit. In the background are the six magnetic tape units and, at right, the tape control unit.—Photo by Ed Hubbard.

In addition, Medlars will have controls which will enable the Library to sort by language, by date, by title of publication, as well as by subject fields.

In its first year of operation, Library officials said, Medlars will contain 180,000 references. This will be increased annually until more than one million references will be stored on magnetic tape for searching.

In developing the program, the Library specified that the follow-

ing categories of products were to be derived from the system:

An increased high-speed composition capacity for the published *Index Medicus*; a recurring bibliographical listing of references selected in accordance with the predetermined requirements of particular research fields; and an independent search and retrieval capacity to answer on demand queries from individual research installations concerning new publications bearing on their immediate problems.

Chamber Music Concert At CC on March 29

A concert of chamber music for strings and piano will be presented Friday (March 29) at 8:30 p.m. in the Clinical Center auditorium. It is the fourth in this year's Annual Concert Series, sponsored by the Recreation and Welfare Association of NIH.

The concert will be presented by a quartet including three members of the National Gallery Orchestra: Mark Ellsworth, violin, concertmaster of the Gallery Orchestra and director of the NIH Orchestra; Nancy Ellsworth, violin, who studied at the Curtis Institute and has been a member of the Denver and Pittsburgh Symphony Orchestras; and Jean Robbins, cello, who has played with the New Orleans and Buffalo Orchestras.

The fourth member of the quartet, Esther Ballou, piano, has taught at the Juilliard School and is presently on the faculty of American University.

Admission is by ticket only. Tickets at \$1 each may be purchased at the R&W Film Desk, Rm. B1C27 in the Clinical Center, and the R&W Office, Rm. 1A18, Building 31. Children under 12 and CC patients will be admitted without charge but must obtain tickets.

New Car Pool Locators Set Up for Use Here

A self-service car pool locator system was installed last week near the main entrances to the Building 31 cafeteria.

A large numbered map of Washington and its suburbs and a bin containing boxes which are numbered to correspond to areas on the map are the main features of the system.

Employees may use the locator by filling out a pink or green card, depending on whether they need or wish to offer transportation.

This card should be placed in the box which bears the same number as the area in which the employee lives.

If there are cards in this box, the employee may contact the persons who have deposited these cards. All are requested to copy the information, leaving the cards in the box for other users.

When a driver and rider have completed arrangements, they should remove their cards from the numbered box and place them in the "Requests Filled" box.

The locator in Building 31 is designed to serve all employees on the NIH reservation. In a few weeks similar locators will be placed at the North Bethesda Office Center, the National Bank Building, the Robin Building, the

Westwood Building, and the Norfolk Building.

This new self-service system replaces the present car-pool arrangements system.

Further details on the new locators can be obtained from the Building 31 Guard Office, Ext. 5685.



Graduates of the first class of X-ray technicians to complete the Clinical Center's 2-year training course are pictured at graduation ceremonies held in the sixth floor solarium. They are (left to right) Betty Williams, Jessica Wright, and John Hilton.—Photo by Jerry Hecht.

Certificates Awarded to First Graduates of CC X-Ray Training Program

The Clinical Center's first class of X-ray technicians was graduated on Wednesday, March 13, in ceremonies held in the sixth floor solarium.

Successfully completing the 2-year training program, conducted by the Clinical Center Diagnostic X-ray Department, were Jessica Wright, Betty Williams, and John Hilton.

Participating in the graduation ceremonies were Dr. Willie Baensch of Georgetown University Hospital, Dr. Clifton K. Himmelsbach, Clinical Center Associate Director; Joseph Morel, Chief X-ray Technician; and Dr. Betty Hathaway, Chief of the Clinical Center's Diagnostic X-ray Department.

Stresses Patients' Welfare

Dr. Baensch, the principal speaker, stressed the patients' welfare as the X-ray technician's chief concern, and the importance of a continuing study of techniques and new developments to render more valuable service to the radiologist and the department.

Dr. Himmelsbach commented on the successful establishment of the program and spoke of the Clinical Center's hopes for a continuing recruitment of high-caliber technicians.

Dr. Hathaway greeted the students and guests and presented certificates to the graduates.

Future plans for the new X-ray training program call for small classes—four students each year for the 2-year course—to begin in September of each year.

Accredited by the American Hospital Association and the American College of Radiology, and affiliated with the Georgetown Hospital X-ray Department, the program consists of an 8-hour day, 5-day week course during which the students receive practical and didactic training in the Clinical Center's X-ray Therapy Section, Dental Clinic, and Radiation Safety Laboratory, as well as with the Georgetown Hospital X-ray Department.

Also participating in the training are the Nursing Department, physicians of NINDB and NCI, and the NIH Administrative staff.

When the students have reached a certain degree of proficiency they are subject to call for actual duty. As graduates of the program they are eligible to take the examination for the American Registry of X-ray Technicians which, when successfully completed, permits their certification as Registered Technicians, or RT's.

The National Computer Center, the heart of Internal Revenue's automatic data processing system, was opened in 1961.