

# the NIH Record

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

March 9, 1966  
Vol. XVIII, No. 5

NATIONAL INSTITUTES OF HEALTH  
PUBLIC HEALTH SERVICE

## Reorganization of Cancer Institute Now in Effect

A major reorganization of the National Cancer Institute for direction of its research and the administration of grants and contracts has been approved by Surg. Gen. William H. Stewart of the Public Health Service.

General supervision of the NCI's programs continues under Dr. Kenneth M. Endicott as Institute Director. Assisting him in the Office of the Director are Dr. Carl G. Baker, Associate Director for Program; Dr. Bayard H. Morrison III, Assistant Director; Dr. Nathaniel I. Berlin, Clinical Director; Robert E. Learmouth, Executive Officer; Dr. John R. Heller, Special Consultant for International Affairs; Dr. Murray J. Shear, Special Adviser; and James F. Kieley, Chief, Research Information Branch.

### Programs Coordinated

Dr. Endicott explained that the reorganization is designed to bring to bear intensive, multi-disciplined, closely coordinated programs on important problems in causation and treatment of cancer while maintaining the broad support for the various scientific disciplines  
(See REORGANIZATION, Page 6)

## Women Survive Lung Cancer Surgery Longer Than Men, NCI Study Indicates

Scientists at the National Cancer Institute have confirmed an earlier finding that among patients operated on for lung cancer women live longer than men.

In their study of 504 women and 511 men, the Public Health Service statisticians also identified several factors that help to explain this sex difference in survival rates: the type of tumor, extent of disease, and amount of surgery performed.

### Tumors Differ

A marked difference was found between male and female patients in respect to tumor type, with adenocarcinomas and alveolar cell tumors occurring about 3 times more frequently in women than in men.

Among patients with these types of tumors, survival rates were sub-

## IMPROVES, EXTENDS LIFE

## Biomedical Engineering Plays Increasing Role in Research

By Tony Anastasi

Here at NIH an expanding program in biomedical engineering is being conducted in the Biomedical Engineering and Instrumentation Branch (BEIB) of the Division of Research Services.

This new area of science, combining a knowledge of engineering and the physical and life sciences, is playing an increasingly significant role in medical research by improving, extending and saving human life.



A technician operates the complicated controls of a heart-lung machine. The machine takes over the job of pumping and oxygenating blood while surgeons operate inside the heart. DRS engineers developed a heart-lung bypass design that is being used in NIH surgery and has been used in commercial versions of such devices.—  
Photo by Ed Hubbard.

What is this new activity and how does it contribute to the solution of the complex problems confronting medical science today?

Dr. Lester Goodman, Chief of the BEIB, says, "Biomedical engineering might be defined as the application of the methodology and technology of the physical sciences and engineering to problems in the context of the living system."

### Function Changes

"Engineering," he said, "has undergone a remarkably rapid evolution during the past 20 years. It has developed from a function which, traditionally, is associated with the design and construction of devices for particular purposes into a truly professional field with competence in an enormous variety of disciplines and contexts.

"Engineering today," he added, "is involved in almost every facet of basic and applied research: the physical and life sciences, mathematics and materials, measurement and analysis, and, of course, the synthesis, construction, control and  
(See ENGINEERING, Page 4)

## Chaplain Kerney Elected Sec'y of Hospital Group

Clinical Center Chaplain LeRoy G. Kerney was elected Secretary of the Chaplains' Division, American Protestant Hospital Association, at a convention in Dallas recently. About 200 chaplains attended the annual meeting.

Chaplain Kerney spoke to a regional group of the need for a more effective joint ministry of hospital chaplains and parish pastors. He noted an "isolation" of these ministers, one from the other, especially in metropolitan communities.

## Major Intramural Units Transfer to NICHD Program

Two major intramural research units—the Endocrinology and Metabolism Branch and the Laboratory of Biology—have been added to the Reproduction Program of the National Institute of Child Health and Human Development.

These additions resulted from the recent transfer of the major



Dr. Tullner



Dr. Ross

part of the National Cancer Institute's Endocrinology Branch to the National Institute of Child Health and Human Development.

Dr. Roy Hertz, former Chief of the NCI Endocrinology Branch and now Scientific Director of the NICHD, is Acting Director of the Reproduction Program.

### NCI Branch Remains

The NCI will continue to operate its Endocrinology Branch under the direction of Dr. Mortimer B. Lipsett.

The NICHD Endocrinology and Metabolism Branch, headed by Dr. Griff T. Ross, has 12 former NCI employees. This Branch carries out clinical research projects concerned  
(See UNITS TRANSFER, Page 8)

## Poiley Receives Award

Samuel M. Poiley, Head of the Mammalian Genetics and Animal Production Section of the Cancer Chemotherapy National Service Center, National Cancer Institute, recently received the Ralston Purina Technician Award, presented by Herbert A. Graff of the Ralston Purina Co.

The award, for which candidates are nominated by 14 local branches of the Animal Care Panel, includes a \$300 honorarium.

# the NIH Record

Published bi-weekly at Bethesda, Md., by the Public Information Section, Office of Research Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U.S. Department of Health, Education, and Welfare, and circulated by request to all news media and interested members of the medical- and science-related fields. The NIH Record content is reprintable without permission and its pictures are available on request.

NIH Record Office.....Bldg. 31, Rm. 4B13. Phone: 49-62125

Editor ..... E. Kenneth Stabler

## Staff Correspondents

Georgiana Brimijoin, NCI; Tony Anastasi, DRS; Martha Mader, NIAID; Mary Anne Gates, NIAMD; Marie Norris, NIDR; Ed Long, NIMH; Frances Dearman, NINDB; Bowen Hosford, CC; Faye Peterson, DBS; Linda Jacobson, NIGMS; Beverly Warran, DRFR; Dick Turlington, DRG; Gary Goldsmith, NHI; Frances Mills, OAM; Dan Rogers, NICHD.

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

### ANNUAL PERFORMANCE RATINGS

Probably the most important and difficult job a supervisor must perform is the evaluation of a subordinate's performance and the discussion with him of that evaluation in a meaningful and constructive way. The rewards for doing this well, however, far exceed the time, concentration and care required. The statement that "performance evaluation is a continuous process" remains a cardinal principle of performance evaluation.

The supervisor who takes advantage of every opportunity to advise a subordinate on both his good work and his errors may intermittently have problems as a result—but he'll be ahead of the game in the effectiveness of his group.

### Supervisor Rates Work

For these supervisors the annual rating procedure will simply involve recording on a card his overall summary of a subordinate's performance.

For the supervisor who has not advised subordinates occasionally, the annual rating process is the time to begin—not end—the evaluation process. It is an opportunity to clear the air, to communicate with subordinates, and to move ahead toward better supervisory practices.

During April of each year, supervisors in this Department are asked to evaluate and record the rating of each subordinate's performance. Cards for recording ratings are being distributed to each supervisor.

There are three levels of rating;

Outstanding, Satisfactory, and Unsatisfactory. If the Outstanding or Unsatisfactory ratings are recommended, there are special procedures to be followed.

Information on the procedures for such ratings can be obtained from Chapter V of the Personnel Guides for Supervisors and PPM Personnel No. 3, Revision No. 1. Personnel Officers also will provide help and guidance.

In reviewing the performance of individuals it may become apparent that there are some who deserve special recognition based on performance exceeding normal job requirements.

### Awards Given

Supervisors will want to initiate appropriate action for rewarding those individuals for whom some special recognition is merited, such as an award under the Incentive Awards Program or special within-grade increase permitted through Quality Increases.

The NIH Awards Handbook for Supervisors and PPM Personnel No. 22, Quality Increases, contain helpful information in this respect. Personnel Officers are also available for consultation.

### PHS GEOGRAPHIC MOVES

In the near future there will be a number of moves of personnel in PHS. Certain staff are moving to a newly established location in Clarendon, Va., and other personnel who are currently working downtown and in Silver Spring are also affected.

NIH has been asked to cooperate in finding suitable jobs for those persons who have expressed a preference for a Bethesda work location.

It is also possible that some NIH personnel who are now commuting from Virginia may prefer to work

## 'Mystery in the Kitchen' Is EHS Film for March

The Employee Health Service will present health education films every other month during 1966 instead of monthly.

The title of the March film is "Mystery in the Kitchen."

An invisible man, who is a crime detective, and an average housewife pair off in a little domestic intrigue.

The film is a humorous and satirical attempt to remind the average housewife that it is not enough to be aware of modern food facts; this information must be applied in daily food purchasing and preparation.

This film will be shown at the Clinical Center auditorium, Wed., March 16, 11:30 a.m. and 1 p.m.; at NBOC No. 2, in the conference room 113, Thurs., March 17, 1:30 p.m. and 2:30 p.m.; and at Westwood, in conference room A, Fri., March 18, 1:30 p.m. and 2:30 p.m.

## Dental Institute Is Host To 60 Visiting Students

The National Institute of Dental Research was host to 60 students from dental schools in the U.S., Canada and Puerto Rico who visited here Feb. 17.

The students, who were attending a 3-day conference in Washington, toured the Dental Institute. The conference is held annually to acquaint outstanding dental students with the wide range of research career opportunities in oral health.

in Clarendon. Interested supervisors and employees may call their I/D personnel offices for further information.

### WRITING COURSES

The Personnel Management Branch has arranged for the Communications Skills Company to conduct two Clear Writing Courses and one Research Writing Course at NIH. Classes of two hours duration will meet Mondays through Fridays, beginning March 28 and continuing through April 15.

These programs are being offered on the reservation to provide training that will meet the needs of personnel responsible for writing, reviewing or editing NIH scientific or technical reports and articles and other NIH communications.

Personnel interested in either program should discuss the training opportunity with their supervisors. Nominations are to be submitted through the Institute/Division personnel officer who also can supply additional details for each program.

## Dr. Nirenberg Will Be Honored Tomorrow at ACS Awards Dinner

The Hillebrand Award for 1965 will be presented to Dr. Marshall W. Nirenberg, Chief of the Laboratory of Biochemical Genetics, National Heart Institute, at the Chemical Society of Washington's Annual Award Dinner tomorrow (March 10).

Dr. Nirenberg was cited "in recognition of the experimental verification of the chemical basis of the genetic code."

Born in New York City, he received the B.S. and M.S. degrees in Biology from the University of Florida in 1948 and 1952. In 1957 he received the Ph.D. degree from the University of Michigan.

From 1957 to 1959 Dr. Nirenberg was an American Cancer Society Postdoctoral Fellow under the sponsorship of DeWitt Stetten Jr., and in 1959-60 held a PHS postdoctoral fellowship with the National Institute of Arthritis and Metabolic Diseases.

### Experience Noted

Dr. Nirenberg was a research biochemist with the Arthritis Institute from 1960 to 1962, when he became Chief of the Section on Biochemical Genetics of NHI.

He is a member of the American Cancer Society, the American Society of Biological Chemists, the Biophysical Society, the Washington Academy of Sciences and Sigma Xi.

He was the recipient of the 1962 National Academy of Sciences award for Distinguished Research in Molecular Biology, the 1962 award for scientific achievement for the biological sciences of the Washington Academy of Sciences and the 1963 ACS Paul Lewis Award in Enzyme Chemistry.

He received the Modern Medicine Award, the Harrison Howe Award and the National Medal of Science in 1964.

## D.C. Opens New Center For All Health Services

The District of Columbia Department of Health recently announced the opening of a Health Information and Referral Center for all public health services in the District.

The new center provides ready information to anyone making inquiry about health facilities, clinics and other services in D.C. The center offers social worker assistance to those seeking such services.

The new center is located at 815 Ninth Street, N.W. The phone number is 629-3776.



Dr. Nirenberg

## Dr. Guthrie Is Appointed Ass't Surgeon General For PHS Operations

Surg. Gen. William H. Stewart of the Public Health Service recently announced the appointment of Dr. Eugene H. Guthrie as Assistant Surgeon General for Operations.

Dr. Guthrie moves to third in line of command within the Service from the Division of Chronic Diseases, Bureau of State Services, which he has headed since 1962. In his new post, he succeeds Asst. Surg. Gen. James M. Hundley who retired Jan. 31.

Born in Washington, D.C., on April 9, 1924, Dr. Guthrie has spent his entire professional career in the Public Health Service. His father, Dr. Marshall C. Guthrie, was also a Public Health Service Assistant Surgeon General until his retirement in 1942.

### Background Cited

Dr. Guthrie received his medical degree from George Washington University School of Medicine in 1951, and his Master's in Public Health from the University of Michigan in 1955. He was commissioned in the Service in 1951 when he began his internship at the USPHS Hospital in Baltimore. Subsequently, he was Public Health Resident in the Montgomery County (Md.) Health Department and in the California State Department of Health.

He is a member of the American Medical Association, American Public Health Association, American School Health Association, and the Medical Committee of the President's Commission on Employment of the Handicapped.



Shirley Rogers, 21, a Goddard College student, singled out for praise as one of the most enthusiastic recent Normal Volunteer patients in her career assignment at the Clinical Center, spent several hours a day receiving training in layout and design under Mrs. Helen Kerr, Chief of the Graphics Unit, Medical Arts and Photography Branch, DRS.—Photo by Thomas Joy.

## Family Pressures for Togetherness and Strength May Develop Schizophrenia

Miss Carol F. Hoover, a Clinical Center social worker, has concluded from a study of family interactions that simultaneous pressures on their children for togetherness and psychological strength in some circumstances may contribute to the development of schizophrenia.

Miss Hoover believes this may occur when the child who tries to achieve these family demands does not feel genuinely close to his parents or have enough strength to meet the family demands.

The social worker developed these hypotheses through observation of "embroiled families" over a period of years. Then she closely studied eight such families of NIH patients. Each included an adult schizophrenic.

She emphasized that not all families of schizophrenics are "em-



Carol Hoover discusses with Bowen Hosford of the Clinical Center Information staff (not shown) her study of families of schizophrenic patients.—Photo by Ed Hubbard.

broiled." Schizophrenia, a thinking disorder which seriously interferes with a realistic approach to the environment, afflicts one-fourth of all patients admitted to state mental hospitals.

"It remains an illness of such mysterious proportions that even piecemeal speculations may be useful," Miss Hoover said.

### Experts Recognize Signs

Hospital staffs learn to recognize the signs of an embroiled family, she said. "There seems to be an excessive closeness and at the same time an antagonism between the patient and at least one other member of the family, and this other person is forever reiterating love and anxiety, suggesting plans, having arguments with the patient."

Closer acquaintance usually reveals that both parents, and often brothers or sisters, are similarly entangled with the patient.

Miss Hoover found there had been frantic efforts in such families to achieve satisfying closeness with the child who later became schizophrenic. The parents also demanded that the child achieve con-

siderable success in school and show strength in supporting them in family conflicts.

However, the parents often had inadequate ego strengths themselves, so the child had no parental image that he could either lean on or rebel against.

Successful families may also exert pressures for closeness and strength.

### Closeness Advocated

"The qualities typical of the embroiled family," Miss Hoover said, "should produce life successes galore. Great closeness of family members and great strength in performance are in no way contradictory."

"But when demands for these are coupled with varying degrees of inadequacy in the supply of 'building materials,' then the double demands may be experienced as unreasonably paradoxical."

Although sisters and brothers of schizophrenics often have problems of their own, many escape with "whole mental skins." Miss Hoover explained that schizophrenia may be viewed as the end product of pressures to which humans seem to have great resistance.

### Demands Vary

Also, family demands and alliances vary. The parents may unconsciously "select" the child who, in a sense, becomes a "victim." Other children may either be born with less sensitivity or may become indifferent. "They simply won't play ball," Miss Hoover said.

Parents in such families vary. Often one is more disabled than the other in his capacity to raise a mentally healthy child. But Miss Hoover believes that if a child develops schizophrenia, it may often reflect the fact that neither parent was able to establish satisfying closeness with him.

Miss Hoover's study was published in *Family Process*. She expressed particular appreciation to Dr. Lyman C. Wynne of the National Institute of Mental Health for his encouragement and assistance.

As I watch women drivers swerve  
From inside out around a curve,  
Or signal left and then turn right,  
Pull out of line to crash a light,  
Careen along gesticulating,  
Slowing, speeding, vacillating,  
It strikes me, time and time again,  
How often I find out they're men!  
*Look Magazine.*

## Jordan to Advise NIGMS on Clinical Sciences, Surgery

Dr. George L. Jordan, Professor of Surgery at Baylor University in Houston, Tex., will serve as special advisor to the National Institute of General Medical Sciences



Dr. Jordan

in expanding research and training programs which will help to meet the demands generated by the national effort to combat heart disease, cancer, and stroke.

Dr. Frederick L. Stone, Director of NIGMS, said Dr. Jordan will spend six months with the Institute to provide intensive consultation and advice on research and training in the clinical sciences generally, and in surgery specifically.

Dr. Jordan will help define, insofar as feasible, national goals for a general surgery program and will serve as liaison in this field between the Director, NIH, and other Institutes.

He will also provide advice on which laboratories and clinics should be encouraged to establish stronger research programs, and in some cases to serve national purposes by acting as regional centers of research and training.

According to Dr. Stone, "Dr. Jordan will be the chief architect of a national program of support for research and research training in surgery."

### Serves Under DeBakey

Dr. Jordan has served since 1952 under Dr. Michael Ellis DeBakey, internationally known surgeon at Baylor University, and has published more than 100 papers on surgical research in various medical and scientific journals. At present he is also the Deputy Chief of Surgery at Ben Taub General Hospital and an attending surgeon at Methodist Hospital in Houston.

Dr. Jordan received his M.D. degree from the University of Pennsylvania in 1944 and an M.S. degree in surgery from Tulane University in 1949. He is a member of 25 honorary and professional societies and has been certified by the American Board of Surgery and the American Board of Thoracic Surgery.

Suspected or definite coronary heart disease exists in about 5 percent of the 111.1 million persons in the United States aged 18 through 79, according to a recent survey.

## New Study of Twins Shows Heredity Is Not a Key Factor in Schizophrenia

By Natalie Tulloch  
NIH Information Trainee

The results of a new study of twins in Norway deemphasizes heredity as the key factor in schizophrenia, according to a Norwegian guest researcher at the National Institute of Mental Health.

Dr. Einar Kringlen has found that if one member of an identical pair of twins has schizophrenia, the chances that the second twin also will have the disease is only 30 to 40 percent—a considerably lower rate than that reported in some earlier investigations.

In contrast, Dr. Franz J. Kallmann found in his classic twin studies that the rate of concordance ran as high as 80 to 90 percent, underscoring a strong genetic factor in schizophrenia.

Dr. Kringlen, a psychiatrist on loan from the University Psychiatric Hospital in Oslo, described his own findings and explained these wide variations in twin study results at a recent NIMH seminar in the Clinical Center.

### Sampling Methods Differ

The differences, he believes, result from vastly different sampling procedures.

The methods of sampling employed by Dr. Kallmann and others, Dr. Kringlen noted, tended to pre-select those cases where both twins were found to be chronic schizophrenics at the time of the study.

Dr. Kallmann, he said, based his data on reports from hospital staffs and "word of mouth" accounts. These methods made it difficult for him to include cases where the twin status was obscure or where twins were hospitalized in different facilities at different periods.

In contrast, Dr. Kringlen selected his subjects by comparing the lists of individuals who had been hospitalized for a psychosis with the listing of twins contained in the Norwegian birth register.

### Findings Vary

This process produced about 350 pairs of twins between the ages of 35 and 65, one or both of whom had been discharged from a hospital with a diagnosis of schizophrenia, reactive or manic depressive psychoses.

On the evidence of questionnaires and blood tests, Dr. Kringlen found that about 70 pairs were identical, and of these, about 40 pairs had a schizophrenic member. In 30 to 40 percent of these cases, the second twin has become schizophrenic too.

In addition to personal interviews with each of these identical twins, Dr. Kringlen also studied their siblings and parents.

The purpose was two-fold: first, the siblings were used as a non-identical control group which would be comparable to the identical

twins; secondly, it was necessary to obtain reliable information about the twins themselves in order to assess their position on a mental health rating scale.

This mental health scale was based upon a rating of one to seven, ranging from normal through neurotic to deteriorated schizophrenic.

Those classified in Group One are people with no complaints. Group Two includes those who have minor difficulties such as headaches or sleeping problems. Subjects in Group Three have a clear-cut neurotic personality. Severe neurotics are found in Group Four; mild schizophrenics, Group Five; typical schizophrenics, Group Six; and deteriorated schizophrenics, Group Seven.

After compiling the ratings of both the schizophrenic twins and their families, Dr. Kringlen reached the conclusion that "The great variability in the healthy or non-schizophrenic co-twins speaks against a schizoid-schizophrenic dimension. . . By and large, the findings support the theory that schizophrenia is a heterogeneous group of illnesses."

### Kringlen Draws Analogy

Dr. Kringlen drew this analogy between schizophrenia and tuberculosis: "There was a time when people thought of tuberculosis as a hereditary disease. Today we know about the tuberculosis bacillus. Although a weak genetic factor seems in fact to underlie the pathogenesis of tuberculosis, not all of those who are exposed to the bacillus or to poor living conditions contract the disease.

"But we know that the bacillus and the person's living conditions are of primary importance. Perhaps this is also the situation with schizophrenia. The environment, a man's life situation, is the most important from a psychiatric point of view."

### Medical History Group to Meet

A psycho-historical perspective of American psychiatry will be discussed by Dr. Zigmond Lebensohn of Washington, D.C., at the next meeting of the Washington Society for the History of Medicine on Wednesday, March 16, at 8 p.m. in Wilson Hall, 3rd floor of Building 1.

Miss Eunice Winters of Johns Hopkins University, Baltimore, will also speak on "Aldolf Meyer at Kandakee." Visitors are welcome.

## ENGINEERING

(Continued from Page 1)

evaluation of components and systems."

The importance of biomedical engineering was also recently pointed out by PHS Surg. Gen. William H. Stewart. He said:

"The application of sophisticated analytical tools and equipment as provided by engineers and physicists to the medical and biological fields is one of the most promising developments in medical and biological research and practice."

The BEIB here is comprised of 120 people in five sections: Electrical and Electronic Engineering, Mechanical Engineering, Chemical Engineering, Instrument Fabrication, and Systems Maintenance.

The Branch provides direct and consultative support to clinical and biomedical research projects here. It designs, develops, fabricates, maintains and evaluates biomedical equipment used in research and clinical applications. It also provides a viable bilateral interface between the NIH and the technical community in its environment.

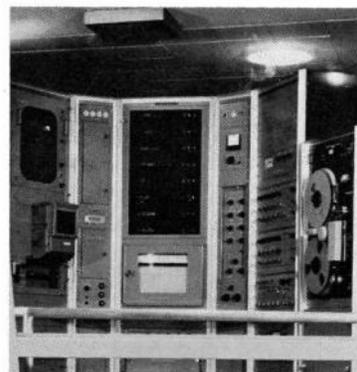
### Research Aided

The primary role of the biomedical engineer in DRS is to provide engineering support to the NIH intramural research programs. This is accomplished through consulting with and advising the life scientists on engineering methods applicable to clinical and laboratory medical research.

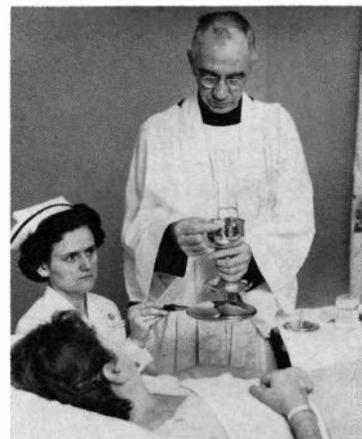
Biomedical engineering at NIH was born almost 20 years ago when professional engineers were assigned to assist the service shops with the design of instruments. Since then the scope of these activities has been greatly expanded.

One example of the significant contributions of BEIB engineers is the heart-lung machine used in cardiac surgery.

DRS engineers helped solve some of the surgical problems by devel-



BEIB engineers played a major role in the design, development and installation of this complex instrumentation monitoring system used in the new Surgical Wing of the NIH Clinical Center for cardiac surgery.—Photo by Jerry Hecht.



Holy Communion is available to Clinical Center patients every day of the year, and the number of requests increases during Lent. Father Armand J. Guicheteau is currently distributing communion at the bedside about 30 times a day. He serves an equal number of ambulatory patients in the CC chapel. Here, Mary Rose Kennedy, RN, kneeling by the patient's bed, assists by holding a paten under the host as presented to the communicant.—Photo by Ralph Fernandez.

oping electronic detecting instruments and a heart-lung bypass design. These developments have been incorporated into commercial versions of heart-lung machines.

Another area in which BEIB engineers have contributed to medical progress is automation. A steroid analyzer developed by DRS engineers and scientists a few years ago can now perform biochemical analyses by a fully automated, unattended process.

Also, DRS engineers cooperated with surgeons, other hospital staff, architects, and various engineering firms in providing for installation of the complex instrumentation system in the new Surgical Wing of the Clinical Center.

The resulting system for monitoring physiological data of patients under cardiac and neurosurgery was considered, upon completion, one of the most advanced such systems in the world.

### Other Projects Cited

Currently, BEIB is offering a host of services to the other Divisions and Institutes at NIH. Among the variety of projects with which BEIB is concerned are prosthetics (artificial heart components and kidney elements), surgical tools, lasers, ultrasonics, physiological monitoring, biochemical analysis, automation and mathematical modeling (computers). A lifetime of research and study could easily be devoted to just a portion of each one of these areas.

Biomedical engineering is still in its youth, and NIH is expected to be a focal point and continuing leader in this burgeoning new field.

## Dr. Burstone, Head of Histochemistry Section, NCI, Dies in Atlanta

Dr. Marvin S. Burstone, Head of the Histochemistry Section, Biology Branch, Office of the Associate Scientific Director for Carcinogenesis, NCI, died in Atlanta, Ga., Feb. 19. Funeral services for Dr. Burstone were held in St. Louis, Mo., Feb. 22.



Dr. Burstone

For the past 18 months Dr. Burstone had been assigned to a temporary tour of duty at Emory University in Atlanta where he was studying electron-microscopy and working toward a doctorate in histology.

### Creativity Praised

A colleague described Dr. Burstone as a brilliant, creative scientist nationally known for his development of new methods for histochemical demonstration of enzymes in tissues, particularly by means of cytochrome oxidase, amino peptidase, and phosphatase. All three methods were based on the use of synthetic naphthol substrates.

Dr. Burstone came to NIH in 1953 and worked in NIDR for eight years. In 1961 he joined NCI as Head of the Pathology Section, Diagnostic Research Branch. In 1963 he assumed the position he held at the time of his death.

Born in St. Louis, Mo., in 1922, Dr. Burstone studied at Washington University where he earned the degrees of D.D.S. and M.A. in pathology. He taught briefly at Washington University and the University of Illinois and served as Research Associate and Assistant Professor of Anatomy at the University of Chicago before coming to NIH.

### Memberships Cited

Dr. Burstone was a member of a number of technical societies. He was treasurer of the Histochemical Society from 1959 to 1962 when he became Councilor of the Society. He was Associate Editor of the *Journal of Histochemistry and Cytochemistry*; a Fellow of both the American Academy of Oral Pathology and the American Association for Advancement of Science; and a member of Sigma Xi. In addition to many speeches, books and articles, he had published more than 70 papers.

Dr. Burstone is survived by his mother, Mrs. Rose D. Burstone of Clayton, Mo., and a brother, Charles J., Chairman of the Department of Orthodontics at Indiana University Dental School.

## Ideal Filling Now Sought For Use in Teeth by Two NIH Grantees

Studies designed to help solve dentistry's need for an ideal filling material that will permanently bond to the teeth will be undertaken by the Rensselaer Polytechnic Institute, Troy, N.Y., and the Research Foundation of State University of New York in Albany under grants from the National Institute of Dental Research.

In announcing award of the grants, Surg. Gen. William H. Stewart of the Public Health Service said, "We hope to gain from this research program a better understanding of why existing dental materials fail. Such knowledge should lead to development of superior restoratives."

### Advances Incorporated

The latest advances in materials engineering and solid state physics will be brought to bear on these comprehensive studies of the chemical and physical properties of dental materials.

Grants totaling \$148,217 for the first year were awarded by the Dental Institute. The National Advisory Dental Research Council has recommended support of the project for four years.

Dr. J. Lawrence Katz, Associate Professor of Physics at Rensselaer, will direct the interdisciplinary investigations to be conducted by scientists at both Rensselaer and the neighboring state university.

## New Brochure Issued on Oral Diseases Research

The many facets of research on oral diseases—tooth decay, periodontal disease, oral ulcerations, and cleft lip and palate—are described in a new brochure entitled *The National Institute of Dental Research*, recently released by the Public Health Service.

On the theme that research holds out hope for the answers, the booklet cites the prevalence, and reviews the state of research, of each oral condition.

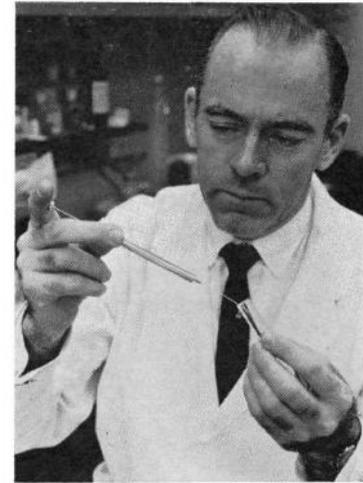
The need to increase the number of scientists engaged in dental research is also pointed up.

The 32-page publication is illustrated with photographs of laboratory and clinical studies conducted in the Institute's laboratories, as well as at some of the 100 institutions where research is supported by NIDR.

Single copies of the booklet, PHS Publication No. 1340, are available from the Information Office, National Institute of Dental Research, Bethesda, Md. 20014. Additional copies may be purchased from the Government Printing Office, Washington, D. C. 20402, for 45 cents a copy.

## Finding Possible Cause of Niemann-Pick Disease Gives Hope for Its Treatment

Scientists at the National Institutes of Health recently reported their discovery of a possible cause of Niemann-Pick disease, a fatal disorder of infancy. Infants with the disease have an enlarged spleen and liver, anemia and mental retardation, and often die before the age of two.



Dr. Roscoe L. Brady Jr. measures chemicals in his laboratory here with a precise micropipette for enzyme analysis.—Photo by Jerry Hecht.

In the Niemann-Pick patient, an excessive quantity of a complex chemical called sphingomyelin accumulates in various tissues. The normal metabolism of sphingomyelin, a major component of red blood cells and the myelin sheath surrounding nerves, is believed to be crucial for the functioning of brain and nerve tissue.

### Study Compares Livers

The study, conducted by Dr. Roscoe O. Brady and a team of researchers at the National Institute of Neurological Diseases and Blindness and National Heart Institute, compares the liver biochemistry of normal persons and Niemann-Pick patients.

In the liver tissue of diseased persons, the researchers found sharply reduced concentrations of an enzyme which is required for the normal breakdown of sphingomyelin.

By their discovery, Dr. Brady and his co-workers hope to open the way for development of an effective treatment and preventive approach to this serious disease.

### Earlier Discovery Reported

A report of this study appears in the February 1966 issue of the *Proceedings of the National Academy of Sciences*.

Dr. Brady in 1965 reported discovery of the metabolic defect in Gaucher's disease, another inherited disorder causing mental retardation (see *NIH Record* of June 2, 1965).

## LUNG CANCER

(Continued from Page 1)

of adenocarcinomas and alveolar cell tumors in women, and the more frequent occurrence of tumors limited to one lobe account for the fact that, among surgically treated patients, almost one-half of the women, compared to one-fourth of the men, had only part of the lung removed (a lobectomy).

However, among all patients with localized disease treated by lobectomy, the outlook remained substantially more favorable for women than men.

Part of the survival advantage in favor of women remains unexplained by the present study, reported in the February issue of the *Journal of the National Cancer Institute* by Roger R. Connelly, Dr. Sidney J. Cutler, and Paula Baylis of the Institute's Biometry Branch.

## Florida Gets a Third Mental Health Center

Approval of a \$269,750 Federal grant for the construction of a community mental health center in Panama City, Fla., was announced today by the Public Health Service.

The Gulf Coast facility will be the third new mental health center in Florida constructed with Federal aid under the national mental health program. Grants have already been awarded in Winter Haven and in Volusia County.

The mental health services in rapidly growing Panama City will serve a population of 157,200 within the next few years, including residents of five adjoining rural counties.

### Communities Help States

The mental health center will be sponsored jointly by the Memorial Hospital and the Bay County Guidance Clinic.

Dr. Stanley F. Yolles, Director of the National Institute of Mental Health, said that in many communities citizens are forming local mental health boards to work out public and private financing of mental health services that have either been non-existent or scattered and inadequate.

The use of general hospitals and clinics to supply these services under a coordinated system of care heralds the new community approach to treatment and prevention of the mental illnesses.

## Popular View of Carefree Bachelor and Bitter Old Maid Untrue, Study Shows

The carefree bachelor and the bitter old maid are more likely to be found in fiction and folklore than in real life, according to findings in a study supported by the National Institute of Mental Health, PHS.

In reality, the unmarried man turns out to be more unhappy and mal-adjusted than either the single or the married woman, and the married man is the happiest of all four, a research grantee has found.

Conducted by Dr. Genevieve Knupfer, psychiatrist of the Mental Research Institute in Berkeley, Calif., the study is reported in the February issue of *The American Journal of Psychiatry*.

Dr. Knupfer's group intensively interviewed 785 adults 23 years of age or more who were either married or who had never been married. The subjects also were asked to mail in a self-administered questionnaire. From this material, the researchers gleaned facts about the mental health and personality of the subjects, and a picture of their childhood years.

In a group of questions to measure happiness, high spirits, and job satisfaction, the married man scored the highest. In addition, he worries less and is the least likely of the four groups to feel lonely or depressed.

### Bachelors Dissatisfied

In contrast, the single man is more likely to be dissatisfied and out of step with the world around him.

The study found that the single male is nearly three times as likely to report himself unhappy as the single girl, four times as likely to dislike his job.

Single men rank highest among the four groups in anti-social tendencies. About one-third had at one time been in trouble with the law.

The study also showed that the single men had suffered the greatest amount of stress in childhood. They were more likely than other adults to have lived with only one parent, to be unsure of parental love, and to find the authority of the parents irksome. Fifty-nine percent said their parents' marriage was "not too happy."

The single woman, on the other hand, enjoyed the happiest childhood of all four groups, perhaps reflecting "the saying that 'happy marriages produce old maid daughters,'" the author notes.

### Men Feel Superior

Dr. Knupfer reports that because many men want to feel superior to their wives, the women with strong independent personalities and other gifted traits may be by-passed more often than the less outstanding women.

Far from being happy and gay, the life of the bachelor may grow increasingly grim, the study suggests. While the single woman maintains many close friendships

## Hilsenroth Named 'EO' Of New NIH Division

The appointment of Charles Hilsenroth as Executive Officer of the new Division of Regional Medical Programs, NIH, was announced recently by Dr. James A. Shannon, Director of NIH.



Mr. Hilsenroth

In his new position Mr. Hilsenroth will assist the Division Chief, Dr. Robert Q. Marston, in staffing and organization, and in providing day-to-day management of its administrative activities. He will also be principal advisor to Dr. Marston and to regional planning groups on administrative matters.

Mr. Hilsenroth comes to NIH from the Bureau of Medical Services, PHS, where he has been Executive Officer since 1957.

Born in New York City, he was graduated from the New York University School of Law in 1939 with the LL.B. degree. He was admitted to the New York Bar in 1940 and to practice before the U.S. Supreme Court in 1941.

### Government Service Listed

Mr. Hilsenroth entered Government service as an attorney with the Federal Security Agency in 1942. In 1945 he became Administrative Planning Officer with the FSA Office of War Property Distribution and was appointed Assistant Chief, Special Services Section, Public Interest Division, War Assets Administration in 1946.

Mr. Hilsenroth joined the PHS in 1947 and became Hospital Program Representative of the Division of Hospital and Medical Facilities, BSS, in that year. He was appointed Administrative Officer of the Division in 1948. In 1950 he was named Executive Assistant to the Division Chief.

and family ties, the single man becomes increasingly isolated.

In summation, the researchers said: "In accordance with the popular view of marriage as a triumph for women and a defeat for men... we could expect to find those men who have escaped marriage to be much better adjusted than those women who have failed to marry... The data suggest the opposite."

## REORGANIZATION

(Continued from Page 1)

necessary for generating knowledge basic to advances in cancer research.

In areas of viral, chemical and radiation cancer causation and of chemotherapy, various Institute activities have been consolidated under strong scientific and management leadership for aggressive attacks on selected significant problems of cancer.

The administration of research grants and contracts has been strengthened to permit scientific staff concerned with these activities to devote more of their efforts to scientific, rather than business, activities.

### Breakdown Given

The four broad areas of program direction established are:

1. Office of the Scientific Director for General Laboratories and Clinics, headed by Dr. Eugene J. Van Scott. This area combines a Clinical Research Group, headed by Dr. Berlin as Associate Scientific Director.

This includes the Dermatology, Endocrinology, Immunology, Surgery and Metabolism Branches, and a Laboratory Research Group encompassing the Laboratories of Biochemistry, Biology, Pathology and Physiology and the Pathological Anatomy Branch.

2. Office of the Scientific Director for Chemotherapy, under Dr. C. Gordon Zubrod, former Director of Intramural Research. Deputy Scientific Director for this area is Dr. J. Palmer Saunders, former Associate Chief for Scientific Review and Development, Division of Research Grants.

### 3 Major Components

This area is divided into three major components plus a Program Analysis Branch. The first component is the Office of the Associate Director and Chief, Cancer Chemotherapy National Service Center, under Dr. Saul A. Schemper, with Dr. Abraham Goldin serving as Assistant Chief for Laboratory Research. It includes the Drug Development, Drug Evaluation and Endocrine Evaluation Branches.

The second component is the Office of the Associate Scientific Director for Experimental Therapeutics. Headed by Dr. David P. Rall, it comprises the Laboratories of Chemical Pharmacology, Toxicology, and the Institute's Laboratory of Pharmacology at the PHS Hospital in Baltimore.

The third component is the Office of the Associate Scientific Director for Clinical Trials. Directed by Dr. Seymour M. Perry, it encompasses the Medicine and Radiation Branches in Bethesda and



The switchboard lit up like a Christmas tree and the calls kept coming long after the program—WTOP's "For Your Information" series—featuring Dr. Edward A. Graykowski, Oral Medicine and Surgery Branch, National Institute of Dental Research, went off the air. The program invites listener questions.

Clinical Branch in Baltimore.

The last two components, formerly under the Director of Intramural Research, are:

3. Office of the Associate Director for Extramural Activities, directed by Dr. T. Phillip Waalkes, former Associate Director for Collaborative Research.

### Management Stressed

This area plays a key role in management aspects of the large grant and contract activities of the Institute.

Dr. Samuel S. Herman is Deputy Associate Director of this area which includes the Grants and Research Contract Operations Branch, formerly in the Office of the Director, and the new Special Programs, Award Review and Technical Administration, and Cancer Therapy Evaluation Branches.

4. Office of the Scientific Director for Etiology, headed by Dr. Paul Kotin, former Associate Director for Field Studies. Deputy Scientific Director for Etiology is Dr. William W. Payne and Associate Scientific Director for Planning and Analysis is Dr. Ian A. Mitchell.

### Kotin in Dual Role

In addition to directing the overall activities of this area Dr. Kotin is Acting Associate Scientific Director for Demography. This includes the Demography and Epidemiology Branches.

Dr. Hans L. Falk is the Associate Scientific Director for Carcinogenesis and directs the Biology and Chemistry Branches.

Dr. W. Ray Bryan, Associate Scientific Director for Viral Oncology, brings a portion of his viral research group from the old Intramural Research area. He will be responsible for the Viral Carcinogenesis, Viral Leukemia and Lymphoma, and Viral Biology Branches.

600-fold increase: NCI research grants in 1938 were \$91,000; in 1964, over \$54 million.

## Dr. Mitnick Appointed to Fellowship Review Panel

Dr. Leonard L. Mitnick has been appointed Executive Secretary of the Mental Health Fellowship Review Panel, Division of Research Grants.



Dr. Mitnick

The panel reviews for scientific merit, applications for Public Health Service support of Fellows wishing to pursue research in the field of mental health.

Dr. Mitnick comes to NIH from the National Commission on Safety Education, where he served as a research associate. From 1960 to 1961 he was employed as a research psychologist in the U.S. Navy, and from 1961 to 1964 he was a consulting analyst with the General Electric Company.

Dr. Mitnick received his B.S. and M.A. degrees in psychology from Temple University in 1951 and 1953, and his Ph.D. in the same field from the University of Maryland in 1956.

### Background Given

He fulfilled his military duty from 1955 to 1957 at Walter Reed Army Institute of Research, did research at George Washington University from 1957 to 1959, and lectured for the European Division of the University of Maryland for a year before taking his position with the U.S. Navy.

He holds membership in Sigma Xi, the American Psychological Association, the Eastern Psychological Association, the District of Columbia Psychological Association, and the American Association for the Advancement of Science.

## Cardiology Prize Honors Dr. Powell, NHI, for His Work on Catecholamines

Dr. Wm. John Powell Jr., of the National Heart Institute's Laboratory of Cardiovascular Physiology, recently won the top prize in the Young Investigators' Award competition sponsored by the American College of Cardiology.



Dr. Powell

The prize was awarded on the basis of a presentation of work carried out jointly by Dr. Powell and Dr. N. Sheldon Skinner, titled "The Effect of the Catecholamines on Ionic Balance and Vascular Resistance in Skeletal Muscle."

The award includes an engraved silver medal, a \$1,000 cash prize, and publication of the manuscript in the American Journal of Cardiology.

Dr. Powell did his undergraduate work at Harvard University, then attended Columbia University's College of Physicians and Surgeons, followed by a year each of internship, residency, and fellowship in the Department of Internal Medicine at Yale University. He joined the Heart Institute in July 1964.

## NCI Monograph Reports On Cancer Epidemiology, Cardiorespiratory Illness

A group of studies in the epidemiology of cancer and cardiorespiratory diseases is reported in a monograph issued by the National Cancer Institute.

"Epidemiological Study of Cancer and Other Chronic Diseases" includes findings from several large-scale prospective studies—those in which data about habits and other personal characteristics of healthy people are recorded and later related to their illnesses or cause of death. The monograph, number 19 in a NCI series, was edited by William M. Haenszel, Chief of the Institute's Biometry Branch.

### Tribute Paid Dr. Dorn

The publication is a tribute to Dr. Harold F. Dorn, a noted contributor to the field of medical statistics, particularly as related to cancer research, who died in 1963. His career included posts as Chief of the Biometrics Section, NCI, and Chief, Biometrics Research Branch, National Heart Institute.

The monograph is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, at \$3.75 per single copy.

## Safety Officer Constructs Unusual Gun, Replica of 18th Century Flintlock Rifle

By Frances Davis

"What's a safety officer doing with a gun?"

George Miles of the Plant Safety Branch has the answer. He has constructed a replica of a Pennsylvania flintlock rifle of the late 18th century commonly called the "Kentucky long rifle."

Our country was virtually founded on this rifle, according to Mr. Miles. It was an important gun in America's early wars, enabling our riflemen to become famous for their accuracy.

The so-called Kentucky rifle was in reality made by gunsmiths of German extraction in Pennsylvania. Frequently the Kentucky

frontiersman traveled to Pennsylvania to buy his handmade rifle.

A thing of beauty even to the uninitiated, Mr. Miles' gun becomes even more unique when he admits that, self-taught, he made it entirely by hand. The rifle, which weighs 10 pounds, has a 43-inch octagonal barrel, and the stock projects 16 inches beyond the rear of the barrel, making the total length of the gun 59 inches.

### Skill Displayed

Following the methods of 18th century craftsmen, Mr. Miles has "browned" the steel barrel and lock. The stock, made of straight-grained maple, has been smoothed and gleams with a fine finish. The original designs engraved on the brass patch box and the ornamentation by Mr. Miles rival those on similar guns found in museums.

Estimating that he worked approximately 150 hours in making the gun, Mr. Miles explained how he rifled the barrel by cutting six spiral grooves in the bore, set for 1 turn in 52 inches.

Authentic details include the steel screws which hold the ornamentation. Strangely enough, brass screws were never used for securing the brass ornaments on the early guns. The barrel, ramrod thimbles, and trigger also are attached with steel pins.

### Accuracy to Be Tested

Made for a 38-caliber round bullet using a greased patch, the gun will soon be mounted on a bench rest and tested for accuracy.

Mr. Miles is planning the next gun he will make—a double-barrel, over-and-under flintlock, with barrels hand-rotated. Striving to make his rifle as authentic as possible, he plans to decorate it with German silver.

While he has made some colonial-style furniture, Mr. Miles admits that the intricacies of making guns by hand are more intriguing.

## 4 New Institutes Established in 1948, Including NHI and NIDR

In 1948 the National Heart Institute and the National Institute of Dental Research were established. Also authorized in that year were the National Microbiological Institute (later becoming the National Institute of Allergy and Infectious Diseases) and the Experimental Biology and Medicine Institute (later absorbed by the National Institute of Arthritis and Metabolic Diseases).—*NIH Almanac.*



George Miles inspects the brass decoration on the stock of the "Kentucky long rifle" he recently made.—Photo by Thomas Joy.

## Voluntary Agencies Play Increasing Research Role

Voluntary health agencies supported by the contributions of the American public, are playing an increasingly important role in the conduct of research into national health problems, according to a report made available recently by the National Institutes of Health.

The publication, Voluntary Health Agency Expenditures for Research and Research Training, is an analytical review of the more than 50 voluntary health agencies currently operating nationally.

The 26-page document, covering the period since 1947, analyzes the relationship of the agencies' research support to their other major programs.

Voluntary health agencies provide support for public and professional education, patient and community services, and research.

Single copies of the report are available without charge from Resources Analysis Branch, National Institutes of Health, Bethesda, Md. 20014. Multiple copies are available at 20 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.



Dr. Sidney Shifrin, NCI biochemist, places a rotor in the chamber of the ultracentrifuge machine at the ultracentrifuge training course sponsored by the Biomedical Engineering and Instrumentation Branch of the Division of Research Services. Dr. Marc Lewis of NINDB (right), who helped conduct the course, and students are observers.—Photo by Ed Hubbard.

## Dr. Sokoloff to Lecture On Aging of Cartilage At N.Y.U. March 16

Dr. Leon Sokoloff of the National Institute of Arthritis and Metabolic Diseases has been invited to participate in a Distinguished Alumni Lecture Series to be held at the New York University School of Medicine between February and May of this year.



The 1966 lecture series commemorates 125 years of historic accomplishments by the New York University School of Medicine. Dr. Sokoloff will present a lecture March 16 entitled "Osteoarthritis and the Aging of Cartilage."

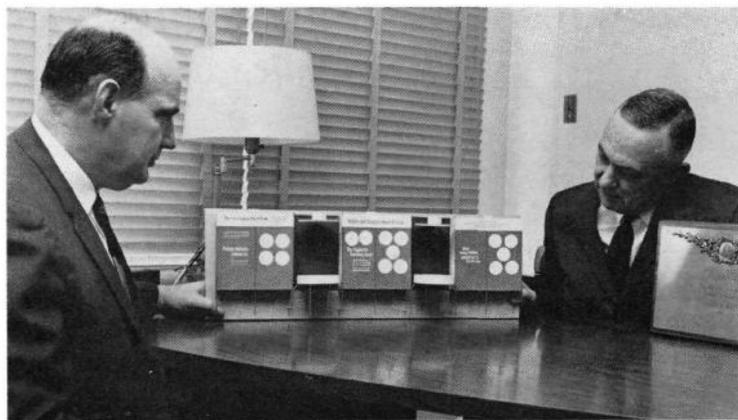
### Arthritis Study Stressed

Dr. Sokoloff is Chief of the Section on Rheumatic Diseases, Laboratory of Experimental Pathology, NIAMD. Since joining the Institute in 1953, he has specialized in the pathological investigation of human and experimental arthritis, with particular emphasis on rheumatoid arthritis and degenerative joint disease.

Dr. Sokoloff received both his undergraduate and his medical education at New York University. He was graduated with the B.A. degree in 1938 and the M.D. degree in 1944. He served as a Fellow in Therapeutics at New York University in 1944-45, and was Assistant Professor of Pathology there in 1950-52.



Richard Seggel, NIH Executive Officer (left), congratulates Donald R. Watson on receiving a cash award for superior work performance in his position as Chief, Procurement Section, SMB. The award cited Mr. Watson for monetary savings achieved through procurement management over an extended period of time and for the "TCO" system which Mr. Watson conceived. It is now used throughout NIH.



Leon Martin, Chief of the Heart Information Center (right), and Hanford Moxley, Exhibits Specialist, admire a model of the exhibit, "Habits and Coronary Heart Disease," which recently brought to the Heart Institute the Award of Merit (at right) from the 15th Annual Convention of the American College of Cardiology. The exhibit depicts some of the findings of the Framingham (Mass.) Heart Study.—Photo by Thomas Joy.

## UNITS TRANSFER

(Continued from Page 1)

with the genesis, course and treatment of problems in reproduction and allied disorders. It has a 13-bed research ward in the Clinical Center for the care, treatment and study of patients.

Besides directing the activities of this Branch, Dr. Ross will also assist the Acting Program Director in the overall planning and direction of the Reproduction Program's clinical research efforts.

A native Texan, Dr. Ross holds a B.S. degree from Austin State Teachers College, an M.D. degree from the University of Texas, and a Ph.D. degree from the University of Minnesota.

He was a Fellow in Medicine at the Mayo Foundation, Rochester, Minn., and recipient of the Mayo Foundation Alumni Award for Meritorious Research. A Diplomate of the American Board of Internal Medicine, he is currently Clinical Assistant Professor of Medicine at Georgetown University.

### Tullner Heads Lab

The Laboratory of Biology, consisting of 13 former NCI employees, is being headed by Dr. William W. Tullner.

This laboratory will conduct basic research related to the interrelationship of the pituitary gland and the gonads, the nature and effects of fetal hormones on the reproductive tract, and the mechanisms regulating reproductive processes in monkeys and other animals.

Born in New Jersey, Dr. Tullner took his A.B. degree at Philadelphia's Temple University and his Ph.D. at George Washington University. He is currently a Lecturer in Endocrine Chemistry in the Georgetown University Graduate School. He is also a Fellow of the American Association for the Advancement of Science and received the Superior Accomplishment Award from the Cancer Institute.

## 6th Program in Series, 'Treating Cancer,' to Be On Radio March 12

"Treating Cancer," the sixth program of the NCI Research Report Series, is scheduled locally over WAMU-FM (88.5 mc) Saturday, March 12, at 4:30 p.m.

NCI scientists will discuss developments in treatment that have helped to extend useful life for patients. In addition to surgery, radiation, and chemotherapy (alone and in combination), the discussion will cover the importance of early diagnosis, improvements in surgical techniques, palliative procedures, and the development of prostheses.

### Participants Named

Participants in this program will be Drs. William G. Hammond, James M. Holland and Robert C. Hoye, all of the Surgery Branch, NCI, and Dr. Alfred S. Ketcham, Branch Chief.

"Cancer Diagnosis: A Research Challenge," the seventh program of the series, is scheduled for the same time and station on Saturday, March 19.

It will cover the difference between diagnosis—a histological procedure, and detection—involving physical examination and a battery of X-ray and laboratory tests. These include isotope scanning techniques and the microscopic study of cells. Research to develop biochemical indicators and immunological tests will also be discussed.

### Staff Takes Part

Participants in this program will be Drs. Nathaniel I. Berlin, Clinical Director; John L. Fahey, Chief, Immunology Branch; and Alfred S. Ketcham, Chief, Surgery Branch, all of NCI, and Dr. Betty E. Hathaway, Chief, Diagnostic X-ray Department, Clinical Center, NIH.

## Dr. Asher Hyatt Named Executive Secretary of DRG Review Section

Dr. Asher A. Hyatt has been appointed Executive Secretary of the Medicinal and Organic Chemistry Fellowship Review Section, Career Development Review Branch of the Division of Research Grants.

He will review and analyze research fellowship applications for PHS support, and survey and evaluate research training activities within the medicinal and organic chemistry field.

A native of Great Britain, Dr. Hyatt received the Ph.D. degree in organic chemistry in 1954 from Queen Mary College, University of London.

### Experience Cited

He held a postdoctoral Fellowship at Massachusetts Institute of Technology until 1955. He then returned to Great Britain where he did research in uranium metallurgy, and was later co-founder of a London firm that dealt in custom synthesis of fine organic chemicals.

For the past 18 months he has been a senior scientist in Collaborative Research, Inc., Waltham, Mass.

Dr. Hyatt has written and collaborated on a number of research publications in the U.S. and Great Britain.

A member of the Royal Institute of Chemistry, he is also a member of the American Chemical Society and the American Association for the Advancement of Science.



Dr. Hyatt



The Clinical Center Nursing Department honored Mrs. Lucile Petry Leone, PHS Chief Nurse Officer and Assistant Surgeon General (center) at a tea following her recent retirement. She is pictured with Mrs. Louise C. Anderson, CC Nursing Department Chief (left), and Mrs. Geraldine Ellis, Assistant Chief. Mrs. Leone is the only woman in the U.S. to hold rank equivalent to a Navy rear admiral. She has played a leading role in improving nursing standards and nursing education in this country and abroad. She will now direct a program sponsored by the Rockefeller Foundation.—Photo by Jerry Hecht.