

the



# Record

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NATIONAL INSTITUTES OF HEALTH

## Hugh Lee Appointed NIEHS Info. Officer

Hugh James Lee has been appointed information officer for the National Institute of Environmental Health Sciences in Research Triangle Park, N.C.

### Served in NHLBI

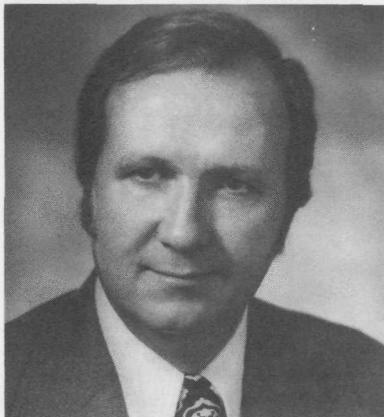
Formerly deputy information officer for the National Heart, Lung, and Blood Institute, Mr. Lee has also held positions as deputy information officer for the National Institute of Child Health and Human Development and information specialist in the Division of Research Grants.

A graduate of the Catholic University of America in Washington, D.C., Mr. Lee has extensive experience in radio and television, having served as a local news broadcaster for WJLA TV channel 7 and for WMAL radio in Washington, D.C.

NIEHS Director Dr. David P. Rall indicated that the time had come for the Institute to take a new look at methods and programs to make the public more aware of the involvement of NIEHS in biomedical research on the effects of chemical, physical, and biological environmental agents on human health and well-being.

### Defines NIEHS Concerns

The Institute concentrates on recognizing, identifying, and investigating environmental factors that may have deleterious effects on population groups, not just on individuals.



Mr. Lee has worked in various public information positions with the former Bureau of Public Roads, the District of Columbia government, and for the past 11 years at NIH.

## Commission for Control of Epilepsy Presents a National Plan for Action

The Commission for the Control of Epilepsy and Its Consequences recently announced the findings of its 18-month study. Among its discoveries are two poignant Catch-22's affecting the more than two million Americans with epilepsy.

■ Under present Government regulations persons with epilepsy can receive financial assistance to purchase medication. If the medication works and they become seizure-free, they can no longer receive assistance to continue purchasing the drug.

■ Persons with epilepsy who tell potential employers of their disorder are frequently turned down.

If they conceal it and have a seizure on the job, they can be fired for lying.

"While many programs are available to meet the needs of the person with epilepsy," said Dr. Richard L. Masland, Executive Director of the Commission, "they are badly underutilized and widely scattered. The real need is to mobilize the resources we have and bring them into one comprehensive system to attack the problem.

"We must assign responsibility to individuals at key levels in the Government and within 'the establishment' and make the system work. The person with epilepsy falls between the cracks because there is not a single, comprehensive, national approach to the problem."

On the state level, the Commission found 41 states lacked any focal program concerned with epilepsy. On the Federal level the only organized unit with the specific concern of epilepsy is the Epilepsy Research Branch, a medical investigation unit of the National Institute of Neurological and Communicative Disorders and Stroke.

The Commission presented a National Plan for Action made up of more than 400 specific recommendations which pinpoint the problems, the solutions, and the individuals or organizations, both public and private, which must accept

(See *EPILEPSY*, Page 7)

medical care and social services, offering training and counseling, and giving back-up support for community providers in difficult cases.

In addition, 10 of the EFIRT's would conduct a broad program of clinical research on the causes and treatment of epilepsy.

The EFIRT's would become an important point of technology transfer, informing physicians and other community service providers of the latest and most effective therapies.

The central Federal Office, which would support and direct the

## Dr. Kenneth Hisaoka Is New Director of NINCDS Extramural Activities



In 1970 Dr. Hisaoka received the U.S. Public Health Service Award for Sustained High Quality Performance and, in June 1977, the NIH Director's Award. Dr. Hisaoka presently serves as chairman of the NIH Grants Associates Board.

Dr. K. Kenneth Hisaoka has been appointed director of the Extramural Activities Program, National Institute of Neurological and Communicative Disorders and Stroke.

In his new position, Dr. Hisaoka will administer the Institute's research grants, contracts, and research training awards, which last year totaled nearly 1,400 with a budget of \$120 million.

### Leaves NIDR Position

Dr. Hisaoka comes to NINCDS from the National Institute of Dental Research, where he was deputy associate director for Extramural Programs for the past 6 years. From 1964, when he joined NIDR, until 1971, Dr. Hisaoka held several administrative posts in

(See *DR. HISAOKA*, Page 7)

EFIRT's and CRP's, would also have attached to it a National Information Center on Epilepsy.

This center, acting in concert with voluntary organizations such as the Epilepsy Foundation of America, would conduct a large-scale public information program informing every national sector about the nature of epilepsy.

## Service Network Plans Give Epilepsy Patient Use of 3-Tier System

The central component of the Comprehensive Epilepsy Service Network would be the Office for Special Neurological Impairments (OSNI). This office, located in the National Institute of Neurological and Communicative Disorders and Stroke, would do the groundwork of establishing the Network over a period of 3 years.

### Refers to Other Agencies

During that period, certain support areas of the Comprehensive Network would be transferred to other more appropriate agencies, such as the Health Services Administration and the National Institute of Mental Health.

Within the Comprehensive Network a patient who has epilepsy would have access to a three-tier system. The first level would be the physician or other community service provider who diagnoses or suspects epilepsy.

They in turn may refer the patient to one of the 500 regional Community Resource Persons (CRP) who will function as liaisons, providing a two-way flow of pertinent information and appropriate clients.

The final tier is the Epilepsy Family and Resource Team (EFIRT).

The proposed 50 national EFIRT's would be interdisciplinary teams providing specialized

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## NIH'ers Offered Course On Consumer Education

A Consumer Education Program, conducted by specialists from various Federal, county, state, and private organizations, will be offered to NIH employees.

The program sponsored by the Employee Relations and Recognition Branch, Division of Personnel Management, will consist of three different 3-hour lecture sessions. The sessions are scheduled for Wednesdays, Oct. 12, 19, and 26 from 8:30 to 11:30 a.m.

Subjects in the course will include: creating a budget; investing in stocks, bonds, real estate; housing in the metropolitan area; and how to register a consumer complaint and get satisfaction.

Employees who wish to attend may request permission from their supervisors. For further information call Employee Relations and Recognition Branch, Ext. 64973.

## Singles Club Holds Dance Friday in Skyview Room

The NIH Singles Club will hold a dance party to the music of Pete Eddy at 8 p.m. on Friday, Sept. 23 in the Skyview Room of the Ramada Inn in Bethesda.

Admission is \$3 for members and non-members.

Persons wishing to join the Singles Club may do so at the R&W desk, Bldg. 31, Room 1A18.

The next business meeting will be held Thursday noon, Sept. 22 in Bldg. 31, Conference Room 4, A Wing.

## Fabric Care Dept. Holds 'Open House' on Sept. 29

The Clinical Center's modernized Fabric Care Department will open its doors to the NIH community on Thursday, Sept. 29, from 1:30 to 4 p.m., Bldg. 13, G48.

The open house will include a ribbon cutting ceremony, remarks by NIH Director Dr. Donald S. Fredrickson, refreshments, and a view of the modern, improved, fully air-conditioned facility that handles all NIH laundry and dry cleaning.

## Workshops on Privacy Act Planned in October

Free workshops on the Privacy Act will be held in October in Bldg. 31, Conference Room 4, A Wing.

The workshops are open to:

- new managers and employees with day-to-day responsibilities for the Privacy Act;
- employees who work with information about individuals;
- employees who may be establishing new systems of records regarding individuals.

The workshops are designed to assist NIH employees in:

- determining the applicability of the Privacy Act to record systems;
- implementing Privacy Act requirements for the collection, maintenance, and dissemination of personal information from these record systems; and

### Understanding Important

- understanding their rights under the Privacy Act.

Employees should choose the workshop most closely oriented to the records with which they work: Administrative staff: Wednesday, Oct. 5, 8:30 a.m. to noon; and Wednesday, Oct. 12, from 1 p.m. to 4:30 p.m.

Grants staff: Wednesday, Oct. 19, 8:30 a.m. to noon.

Personnel staff: Tuesday, Oct. 25, from 1 p.m. to 4:30 p.m.

Contract and Procurement staff: Monday, Oct. 31, from 1 p.m. to 4:30 p.m.

Nominations for the workshops (Form NIH-489 with authorizing signature) must be received by your Personnel Office 2 weeks before the starting date of the course.

For further information, call Milt Tipperman, DPM, Ext. 62146, or Bob Slevin, DMP, Ext. 62461.

## Health's Angels Holds 2nd Anniversary Run Oct. 1, Also Fun Runs

On Saturday morning Oct. 1 the Second NIH Health's Angels Anniversary Run will be held at the Kengar Recreational Center. Prizes will be given in the three events, which are open to all interested persons:

9:45 a.m.—1-mile race for children under 10 years of age;

10 a.m.—Run for Your Life 2-mile run;

10:30 a.m.—10-mile race.

### Starting Point Identified

The Recreation Center is located on Beach Drive, one quarter mile past Knowles Ave. in Kensington. For further information, call Allen Lewis at home, 365-1890.

The 1-mile Fun Runs began Sept. 14 and will continue on Wednesday afternoons at 5:30 p.m. beginning in front of Bldg. 1. Persons completing four of the eight weekly runs, regardless of speed, will receive a trophy. Contact Dr. Robert Pearce, Ext. 66300 for further information.

To join the Health's Angels Jogging Club, contact Pat Carmichael, Bldg. 1, Room 118.

## History of Medicine Society Will Present Drs. Ecklund and Olch

The Washington Society for the History of Medicine will present two speakers on Thursday, Sept. 29, at 8 p.m. in the Billings Auditorium, National Library of Medicine.

Dr. Jon Ecklund, of the Smithsonian Institution will lecture on *Another Boswell's Diary*: Edin-

burgh's Medical School in the 18th Century.

Dr. Peter D. Olch, NLM, will present an illustrative lecture on *Surgeons of Violence*: John C. Handy and George E. Goodfellow of the Arizona Territory.

For further information contact Manfred Wasserman, Ext. 65961.

## Women's Group Sponsors Rubella Screening at NIH

The NIH Women's Advisory Sub-Committee on Health and the Physical Environment is sponsoring a Rubella Screening Program in cooperation with the Occupational Medical Service for NIH women, particularly those of child-bearing age.

Rubella (German measles), a viral disease, is generally a mild illness except when women are in-



Organizers of the Rubella Screening Program include (l to r): Sol Eaton and Annie Collins of the Subcommittee; Dr. Barbara Wasserman, assistant medical director of the Occupational Medical Service; and Juanita Mildenberg of the Subcommittee.

fectured in early pregnancy. The rubella virus, during the first trimester of pregnancy, has the capacity to produce congenital defects.

These various clinical manifestations are frequently called the "congenital rubella syndrome," and include cataract formation, congenital heart disease, permanent deafness, mental retardation, spontaneous abortion, and stillbirth.

### Schedule Given

The schedule for the Rubella Screening Program to be conducted in Occupational Medical Service units will be:

Bldg. 10, Oct. 3, 11 a.m. to 1 p.m.

Bldg. 31, Oct. 3 and 4, 9 a.m. to 11 a.m.

Bldg. 13, Oct. 5 and 6, 9 a.m. to 11 a.m.

Westwood Bldg., Oct. 7, 10 a.m. to noon, 1 p.m. to 3 p.m.

### Other Buildings Identified

Federal Bldg., Oct. 10, 10 a.m. to noon, 1 p.m. to 3 p.m.

Blair Bldg., Oct. 11, 10 a.m. to noon.

The Screening Program consists of a free blood test, developed and used in nationwide immunization programs in the 1960's, which will determine if a person has adequate immunity.

History of the disease alone is not sufficient evidence of immunity. If the blood test reveals inadequate immunity a vaccine should be obtained from a family doctor or health care center.

## DRS Sponsors a New 3-D Computer Display System Demonstration

The Biomedical Engineering and Instrumentation Branch of the Division of Research Services will host a demonstration of a revolutionary new 3-D computer display system on Sept. 27 and 28 in Bldg. 13, Room 3W54.

The demonstration will feature the device known as SpaceGraph, a computer-driven display which aids in visualization of spatial structures, complex surface contours, and multidimensional data.

Several viewers at a time can independently change their perspective view of the displayed image by moving their heads, as they would in examining a real, three-dimensional object.

The SpaceGraph image, which occupies an apparent cubical volume measuring 8" x 8" x 8", appears stationary in space, facilitating detailed study by the viewer (unlike rotating/stereo displays), and can be interactively modified (unlike holographic images).

Additionally, variable brightness of individual picture elements provides a fourth dimension to the display.

SpaceGraph employs several modes of image production, in which displays can be created out of lines or surfaces in three dimensions, or out of 3-D gray-scale television-type images. This versatility in imaging techniques makes the SpaceGraph display a useful study tool in a variety of applications.

Potential users include any researcher who acquires and analyzes 3-D data by means of any form of penetrating radiation; performs systematic spatial sampling and calculation; or creates and uses contoured maps or models.

## M.C. Family Service Typifies Agencies That Receive CFC Funds, Aid NIH'ers



Zelda Porte, director of the Link Program, counsels parents during a session at the Montgomery County Family Service.

Family Service of Montgomery County is one of 149 agencies that receives funding from the Combined Federal Campaign. About 45 percent of the agency's \$410,000 budget comes from United Way allocations with the remainder coming from county government, Federal grants, and fees based on a sliding scale according to clients' income.

### CFC Will Begin on Oct. 3

This year's CFC Campaign is scheduled to begin Monday, Oct. 3.

The goal of the campaign is to significantly increase employee participation with an emphasis on first day contributions.

A traveling campaign rally will tour the reservation on Wednesday, Oct. 5.

Areas of possible application include: computerized tomography, molecular modeling, X-ray crystallography, reconstructive surgery, medical ultrasonography, and plotting and analysis of any kind of three- or four-dimensional data.

The demonstration will begin with a lecture, *The SpaceGraph Display: Computer Imaging in Three Spatial Dimensions*, presented by Dr. Lawrence Sher of Bolt Beranek and Newman Inc. at 1 p.m. on Tuesday, Sept. 27.

### 3 NIAMDD Scientists Win Diabetes Award

Three NIH'ers—Drs. Jesse Roth, C. Ronald Kahn, and Jeffrey Flier—received the David Rumbough Memorial Award from the Juvenile Diabetes Foundation at that organization's recent annual conference in New York City.

The three scientists, who are in the Diabetes Branch of the National Institute of Arthritis, Metabolism, and Digestive Diseases, were honored for their work with insulin receptors and the discovery of an antibody to the insulin receptors found in some patients with diabetes.

Dr. Roth, chief of the Diabetes Branch, recently completed an article on diabetes for the 1977 *World Book Encyclopedia*.

"Family Service of Montgomery County is typical of the agencies supported by the CFC," says Ted Nilsen, coordinator for the 1977 NIH campaign, "and a perfect example of why NIH employees should contribute to this year's campaign.

"It's an agency that . . . contributes to NIH employees who have utilized its services in significant numbers. The agency will counsel anybody who resides or works in Montgomery County . . . which means all NIH employees," he noted.

### Many NIH'ers Get Aid

Family Service Director Charles Brambilla agrees that the agency has dealt with many NIH employees as clients.

Services it offers are family counseling, including individual, family, and marriage counseling with professionally trained social work counselors; the Link Program, designed to deal with the growing problem of runaway young people in Montgomery County; and Turning Point, a counseling service for "status" offenders from the juvenile justice system.

The first step in counseling is to work with people to actually determine their problem, according to Irene Hauser, director of the Family Counseling Program.

This might take one counseling session or it might take several. Once the problem has been identified, the next step is to work on a solution.

"Usually, in family counseling, one person will call first to set up an appointment," Ms. Hauser explains. "When the person first comes in we will go over our sliding fee schedule, insurance cover-

### NIH Visiting Scientists Program Participants

8/28—Dr. Narayana Battula, India, Laboratory of Tumor Virus Genetics. Sponsor: Dr. Edward Scolnick, NCI, Bg. 37, Rm. 1B17.

8/28—Dr. Frederick Miles, United Kingdom, Laboratory of Neurophysiology. Sponsor: Dr. Edward V. Evarts, NIMH, Bg. 36, Rm. 2D12.

8/28—Dr. Yoshitaka Ohnishi, Japan, Laboratory of Vision Research. Sponsor: Dr. Toichiro Kuwabara, NEI, Bg. 6, Rm. 211.

8/30—Dr. Tadashi Yamamoto, Japan, Laboratory of Molecular Biology. Sponsor: Dr. Ira Pastan, NCI, Bg. 37, Rm. 4B27.

9/1—Dr. Diana Boraschi, Italy, Laboratory of Immunology. Sponsor: Dr. Monte S. Meltzer, NCI, Bg. 37, Rm. 2C26.

9/1—Dr. Haruo Shibuya, Japan, Adult Psychiatry Branch. Sponsor: Dr. Candace Pert, NIMH, Bg. 10, Rm. 2N315.

9/1—Dr. Toshiyuki Takemoto, Japan, Laboratory of Biochemistry and Metabolism. Sponsor: Dr. Takami Oka, NIAMDD, Bg. 10, Rm. 9B17.

### R&W Plans Family Picnic At Fort Meade Oct. 15

On Saturday, Oct. 15, the Recreation and Welfare Association is sponsoring a family style picnic at Fort Meade, Md., complete with music, entertainment, games, and prizes. There will be grills for cooking. Members of the Board of Directors will judge the R&W Baked Goods of the Year contest.

Join in for a day of frisbee-throwing, softball, family relay races, and volleyball.

Prizes will be offered. An auction will be held to benefit the Patient Activity and Emergency Funds.

### Free Drinks Provided

R&W is providing beer and soft drinks. Tickets are now available at \$1 for adults and 50¢ for children 12 and under.

For further information, contact John Edwards, Ext. 66184 or Agnes Richardson on Ext. 61331. The R&W office will also be glad to help on Ext. 64600.

age, and describe the available service."

The person then sees a counselor and after completing this first session it is decided whether to set up additional meetings. Usually, six meetings make up a full complement of counseling sessions.

Often, Family Service of Montgomery County doesn't get involved with a relationship until after a couple has decided to separate. A separation usually sets up a series

(See CFC Funds, Page 7)



Ernest Lunsford (r), a mechanical engineer in Environmental Safety Branch, Division of Research Services, receives an Equal Employment Opportunity Special Achievement Award from Dr. Joe Held, DRS Director. The award was presented to Mr. Lunsford for outstanding service as chairperson of the DRS Human Relations Committee and for his contributions to the Division's EEO program.

## A History of Division Directors and Programs

The Division of Research Facilities and Resources (now Division of Research Resources) was created in 1962. Five diverse NIH-supported extramural programs, operating under various NIH components, comprised the new Division: the Health Facilities Research Branch, the Animal Resources Branch, the General Clinical Research Centers Branch, the General Research Support Branch, and the Special Research Resources Branch.



**Dr. Frederick L. Stone, the first head of the Division in 1962, subsequently became Director of the Division of General Medical Sciences (later to become the National Institute of General Medical Sciences).**

The basic purpose of DRFR was to provide the resources necessary to ensure advances in health related research.



**In 1965, Dr. Thomas J. Kennedy, Jr., was made chief of DRFR. His title was changed to Director in 1966.**

On Jan. 4, 1969, the Division was officially renamed the Division of Research Resources and placed within the Bureau of Health Professions Education and Manpower Training which was then a part of NIH. It was separated from the Bureau and became a Division within the research component of NIH on Sept. 18, 1970.

# DRR Celebrates Its 15

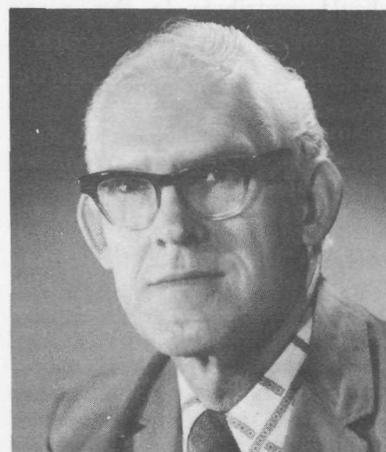
The Division of Research Resources celebrated its 15th anniversary at a luncheon yesterday. The members of the National Advisory Research Resources Council were present, and NIH Director Dr. Donald S. Fredrickson spoke.

The Division's activities over the past 15 years have ushered in new ideas and programs making possible a broad range of scientific investigations.

The Division has helped pioneer computers and other sophisticated electronic equipment in biomedical research, develop animals as models of man's health problems, enrich clinical studies of human disease, initiate flexible institutional support, and mobilize the untapped research manpower within the country's ethnic minority institutions.

### General Clinical Research Centers (GCRC)

Among the extramural-supported programs placed under the DRR umbrella in 1962 were the General Clinical Research Centers, then numbering 60.

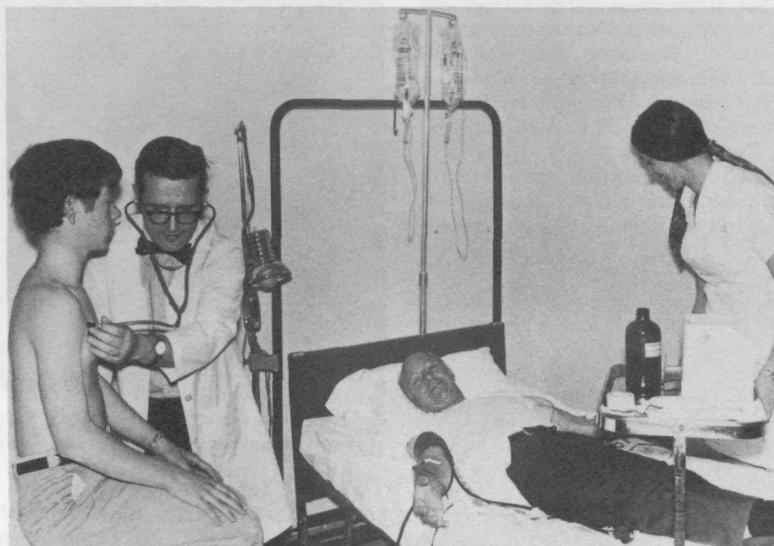


**The current Director is Dr. Thomas G. Bowery, appointed in November 1969. He served as acting director of the Division from Sept. 3, 1968.**

Dedicated to expanding the national level of clinical research on human diseases and metabolism, this program now supports 83 centers, providing facilities for researchers to pursue more than 3,000 protocols that range from metabolism studies to organ transplants.

Clinical investigators at the Centers are conducting research through more than \$200 million in grants and contracts from NIH Institutes, and also involve over 600 grants from industry and private sources.

Many well known medical accomplishments in the past 15 years derive from clinical work conducted at the GCRC's. The pacemaker for



**A patient with an immune defect is examined while blood is obtained from his father in the General Clinical Research Center at Duke University Medical Center.**

heart blockage, the artificial kidney, methods of transplanting organs, heart surgery, methadone treatment, and new methods for cancer detection, have been developed through research at the GCRC's.

Some of the current clinical research protocols at the Centers involve hormone metabolism, electrolyte balance, side effects of drugs, drug development techniques, genetic and metabolic errors, immunology and allergy, nutrition, growth development, and metabolism of proteins and amino acids.

### Expand Outpatient Research

Outpatient research was introduced to the GCRC's in 1970 as a means of expanding clinical research at reasonable cost. Today, the majority of the Centers conduct outpatient studies. There are two 100 percent outpatient research clinics in the program. The number of outpatient visits has climbed dramatically from 1,175 in 1970 to more than 60,000 in 1976.

### Biotechnology Resources Program (BRP)

Known in 1962 as the Special Research Resources Branch, this activity was later renamed the Biotechnology Resources Program under the aegis of the Division. Early on, this branch helped pioneer computer use in biomedical research. It was responsible for the development of LINC (Laboratory Instrument Computer) by contract with the Massachusetts Institute of Technology. This small, stored program digital computer is generally agreed to have triggered the minicomputer generation.

At Washington University in St. Louis, DRR supported the develop-

ment of an entirely new set of computing modules. These macromodules—hardware boxes that could be assembled in different order—allow a diversity never before attained.

Recently, within the past 5 years, DRR has been engaged in developing CLINFO, a minicomputer-based system which supports user oriented data management. This is the first system specifically designed to meet the requirements of the clinical research environment and satisfy user needs.

### Use Is Easy

CLINFO is geared to be a "friendly" system, making it possible for the user to perform functions of data description, entry, retrieval, and analysis with little reliance on a computer programmer to interpret his needs.

A cooperative effort by the health science administrators of the General Clinical Research Centers Program and the Biotechnology Resources Program, the prototype work, carried out by contract with the Rand Corporation, has been developed and tested with excellent results.

Three CLINFO systems are now in GCRC's in use at Baylor College of Medicine, at the University of Washington School of Medicine, and at Vanderbilt University.

The program has been carefully shepherded by DRR health science administrators to a point where the CLINFO computer system, specially designed for the clinical investigator, has received the go-ahead to distribute up to 30 systems to General Clinical Research Centers over a period of 3 years.

The successful application of CLINFO should facilitate clinical research all over the country.

The Division has also pioneered



**The first one-million volt electron microscope devoted to medical research was installed at the University of Wisconsin-Madison, in 1973.**

and developed a name for the Computer Information Handling System, particularly geared for research.

PROPHET's system uses a system of tables card in the computer constantly by entering code in a terminal.

Many other features are readily user. PROPHEture mathematical models of drug/ships. The ser available to mo tists at 13 sites.

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### Support Other Pro

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# es Its 15th Anniversary



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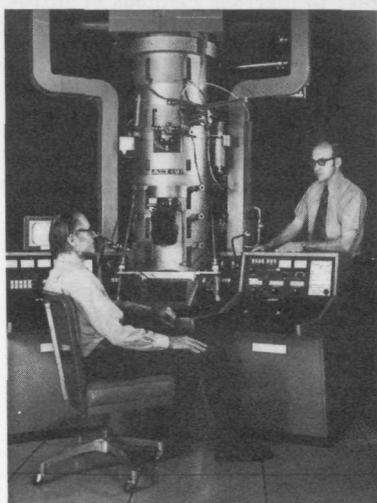
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The first one-million volt electron microscope devoted exclusively to biomedical research was put into operation at the University of Wisconsin, Madison, in 1973 with DRR support.

and developed PROPHET, the name for the Chemical/Biological Information-Handling System particularly geared to pharmacology research.

PROPHET's data management system uses a format familiar to scientists to store data—the table. These tables can be indexed, stored in the computer, and retrieved instantly by entering their calling code in a terminal keyboard.

Many other graphing capabilities are readily available to the user. PROPHET can also structure mathematical and molecular models of drug/compound relationships. The service is currently available to more than 150 scientists at 13 sites.

The Biotechnology Resources Program has effectively paved the way for use of the million volt electron microscope in biomedical research. The great penetrating power of the million volt electron beams permits the investigator to obtain sharp 3-D images of how cells are constructed.

The viewing of whole intact cells with the various subcellular components clearly resolved is now possible. Two such centers—both supported by the DRR—are located at the University of Colorado and the University of Wisconsin.

#### Support Other Projects

Other promising recent scientific projects supported by DRR include the Electron Probe Microanalysis system at Harvard, the SUMEX-AIM Artificial Intelligence in Medicine program at Stanford, the Mass Cellular Screening Laboratory at the University of California, Berkeley, and others—all designed for national resource sharing—a premise to which the Division is dedicated.

#### Primate Research Centers

The Primate Research Centers, initially established by the National Heart Institute, were originally proposed to develop nonhuman primates as models in human cardiology studies. Congress appropriated funds to establish the Centers for this purpose.

Four of the Centers were planned for construction in 1962. A year later, Congress approved construction funding for three more Centers.

Under the Division and subsequently through the Animal Resources Program (ARP), the Centers' missions were expanded beyond cardiology studies to include wide-ranging research directed toward the solution of many health and social problems.

Now the world's largest primate research centers network, seven Centers occupy sites in Oregon, Washington, California, Wisconsin, Massachusetts, Georgia, and Louisiana.

In 1971, a select group of Primate Centers advisors reviewed growing investigations at the seven sites and recommended they focus their research expertise in the fields of population control, environmental health, infectious diseases, and neoplastic and degenerative diseases.

#### Establish Special Missions

Specific research missions for each Center were established as follows:

—The Oregon Regional Primate Research Center at Beaverton, associated with the University of Oregon. . . . studies of reproductive physiology and population control.

—The Yerkes Regional Primate

Research Center, at Emory University in Atlanta, Ga. . . . neural and behavioral research, and studies of neoplastic diseases.

—The New England Regional Primate Research Center, associated with Harvard University, and located at Southborough, Mass. . . . infectious diseases, viral oncology, and primate pathology.

—The Delta Regional Primate Research Center, operated by Tulane University at Covington, La. . . . infectious disease research.

—The Wisconsin Regional Primate Research Center, at the University of Wisconsin at Madison. . . . primate behavior, reproduction, and neuroscience.

—The University of Washington Regional Primate Research Center at Seattle. . . . neurophysiology relating to the cardiovascular system.

—The California Primate Research Center at the University of California at Davis. . . . environmental health sciences and infectious diseases.

#### Discoveries Result

The Centers' special missions opened up extensive fields of research, such as the discovery of a virus of primate origin—Herpes virus saimiri—to produce malignancy in other primates; the correction of cage paralysis by special administration of vitamin D; the identification of polychlorinated biphenyls (PCB's) as a cause of irregular menstrual cycles, early miscarriages, stillbirths, and infant mortality; behavioral and communication studies; maternal-infant studies; reproductive studies, and many more.

Within a single decade, the Primate Research Centers, through studies like these, have established



Lana, the chimp who effectively communicates in "Computer Yerkish," is housed at the DRR-supported Yerkes Regional Primate Research Center.

themselves as valuable national resources for the understanding and improvement of human health.

#### Hope To Be Self Sufficient

Due to the impending shortage of primates from foreign countries, the Animal Resources Program has adopted the long-term objective of achieving self-sufficiency in primate supply for the Primate Research Centers. The Centers report that they are more than halfway to realizing this goal.

#### Biomedical Research Support Program (BRS)

For over 15 years, the General Research Support Program (GRS) has undergirded the structure of the nation's top biomedical research organizations. The versatility of the use of discretionary funds based on allocation by formula has enabled many academic institution laboratories to strengthen, develop, and keep in touch with the latest state-of-the-art techniques in the biomedical research field.

GRS has thus helped to develop the necessary scientific talent, techniques, and resources to assist American researchers in their quest to conquer disease and disability.

Realizing the necessity of giving greater central control for overall development of the biomedical research resources, the Federal Government (by Public Law 86-798) established the General Research Support Program in 1962.

#### Function Described

The basic function of GRS is to strengthen, balance, and stabilize Public Health Service-supported biomedical and behavioral research. The funding mechanism places the responsibility for administration and priority setting on the institutions themselves.

In response to specific request from the Senate Appropriations Subcommittee, the configuration of  
(Continued on Page 6)



A new fingerprick blood test for quick analysis of lead poisoning in children was developed at the New York State Department of Health with support by Biomedical Research Support funds.

## DRR CELEBRATES ANNIVERSARY



An extensive drug addiction study on albino laboratory rats was conducted by Minority Biomedical Support student researchers at Xavier University's College of Pharmacy in New Orleans.

(Continued from Page 5)

the General Research Support Program was drastically altered and streamlined in 1976 to give more stimulus and direction.

The name of the program was changed to Biomedical Research Support (BRS), and an additional provision was specifically made for new, small, and developing health professional institutions to participate.

### Assist Development

The competitive Biomedical Research Development Grant (BRDG) Program was created for those institutions possessing a minimal research base which offer potential to develop and sustain a high quality research program with limited involvement of BRDG funds over a short period of time.

Eligibility for BRDG funds is limited to those institutions which, during the latest complete 12-month period ending Sept. 30, have received less than \$200,000 in PHS grants. Both direct and indirect costs are included in computation of the \$200,000 limit.

### Designate Funds

Up to 10 percent of the funds appropriated for the BRS program have been designated for support of the BRDG program. These grants will be generally limited to up to 3 years of support, averaging \$100,000 per year.

The first awards to BRD grantees are expected to be issued in September 1977.

### Laboratory Animal Science Program (LASP)

Recognizing the need for healthy laboratory animals other than primates, the LASP officially was started by the Animal Resources Branch in 1966. The program's mission was to improve animal models and their use through diagnostic laboratories, training pro-

grams, and animal resource improvement programs.

Through LASP, diagnostic laboratories have been developed to study natural diseases of animals. There are now 15 DRR-supported laboratories throughout the country offering both diagnostic and pathological services.

LASP has also proved effective in developing special colonies of laboratory animals for specific disease studies.

Some of these included a rabbit colony with an epileptic strain, a herd of cows with lymphosarcoma, a colony of Siamese cats for the study of the pathogenesis of Tay-Sachs disease, a colony of nine-banded armadillos for the study of leprosy, and other colonies for research on organ transplants, aging, and chronic diseases.

### Upgrade Animal Care

The LASP also assumed responsibility to upgrade research animal holding facilities throughout the nation. In 1966, Congress passed legislation setting guidelines to upgrade animal facilities and care.

This law was followed by the Animal Welfare Act of 1970. It had a major impact on animal care in institutions. The Animal Resources Program awarded institutions funds to buy needed equipment, such as cages and washers, and helped renovate facilities and initiate the employment of professional direction of animal resources. By 1976, 96 institutions had received animal resources improvement grants.

### Publish Guide

ARP has also been responsible for the publication of the *Guide for the Care and Use of Laboratory Animals* which has become a standard reference at laboratory animal facilities throughout the country. This guide is now in its third printing.

### Minority Biomedical Support Program (MBS)

Recognizing the need to bring a representative segment of ethnic minority people into the mainstream of the biomedical research community, the Division initiated the Minority Biomedical Support Program in 1971. Officially launched in 1972, a \$2 million annual budget was distributed among 38 colleges and universities having minority student enrollments of over 50 percent.

Today, nearly \$10 million in annual MBS grants supports nearly 1,800 faculty and student researchers in 80 institutions.

### Eligibility Changes

In 1974, the MBS eligibility was changed to allow 4-year institutions with a substantial minority enrollment or located in large minority areas to participate. This not only increased students and faculty in research, but introduced many non-black minorities who did not have access to minority schools such as the traditional black colleges.

The number of undergraduates supported by the program has almost quadrupled since its inception in 1972. In 1976, almost 1,000 undergraduates were supported by MBS funds.

Of these participants, 605 undergraduates received their B.S. degree in June 1977. Of these graduates, 141 are presently in medical schools, 31 are in dental schools, 155 are in graduate schools, and 82 are in other health science-related advanced studies.

In the early stages of the program, extensive surveys and visits found that the majority of the minority institutions applying for grants were understaffed and lacked adequate laboratory facilities to conduct biomedical research.

### Increase Student Support

During the initial years of the program, 80 percent of the MBS budget went for personnel and consultant costs, and for equipment, supplies, and renovations in grantee schools.

As the professional staffs and laboratory facilities were bolstered in the minority institutions, the portion of the funds devoted for student participation gradually increased. In 1976, over 40 percent

### Research Resources Information Center (RRIC)

In response to demands of Congress to increase methods of information dissemination, the DRR Office of Science and Health Reports (OSHR) has established the Research Resources Information Center by contract in late 1976, becoming fully operation in early 1977.

Conceived by OSHR, the new source of DRR information dissemination is intended to provide the catalyst for easy access and rapid exchange of information between biomedical research scientists, staff, and administrators in the DRR extramural community.

It transmits resource-related information from one field to another, such as reports of new developments in the biomedical research resource field, and any useful information relating to resource operations and service.

The *Research Resources Reporter*, a monthly scientific newsletter featuring interesting, usable information for the resource community, first appeared in January 1977 and is now distributed to over 1,600 individuals who receive approximately 4,600 copies.

The RRIC has also published two 56-page directories. The *Biotechnology Resources Directory* identifies in detail the current DRR grantee facilities which may be used by researchers throughout the country.

The *Animal Resources Directory*, identifies animal diagnostic laboratories, animal information projects, animal reference centers, and special colony and model centers currently supported by DRR.

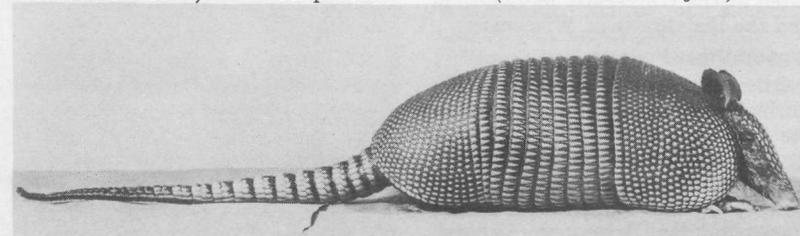
Directories for other DRR programs are now in the planning stage.

of the entire MBS budget was expended on student participation.

The First Annual Xavier-MBS Biomedical Symposium was held in New Orleans in 1973 with 250 students and faculty attending. Approximately 75 scientific papers were presented.

The Symposium's yearly attendance figures and numbers of papers presented in subsequent years clearly reflect the increase and strength of the program.

(Continued on Page 7)



The DRR-supported development of the nine-banded armadillo as the key laboratory animal model for leprosy research at Gulf South Research Institute in Louisiana has contributed significantly to recent breakthroughs in skin testing for human leprosy.

## DRR PROGRAMS

(Continued from Page 6)

In 1977, over 1,300 minority faculty and undergraduate researchers attended the Fifth Annual Xavier-MBS Biomedical Symposium, and over 370 papers were delivered. This represented the largest gathering of minority researchers ever held in the U.S.

As a former program director remarked, "The flower garden we planted in 1972 is starting to bloom. The biomedical research community is now ready to pick the flowers in the form of competent young minority scientists ready to embark upon their careers and assist in the massive effort to conquer the diseases of man."

## DRR Goal and Objective

As the result of a self-study during 1973-1974, DRR's primary goal and basic objective were sharpened and evolved as follows:

- To identify and meet the research resource needs and opportunities of NIH.
- To conceive, create, develop, and assure the availability of those resources that are essential for the effective conduct of biomedical research.

Since 1974, the Division has been conducting a series of NIH Institute interface presentations to acquaint B/I/D Directors and staffs with DRR-supported facilities throughout the country.

### Meet With Other Institutes

Thus far, meetings and discussions have been held with eight NIH Institutes. The availability of DRR national resources has been stressed at these meetings through invitations to the Institutes to make use of these facilities. The DRR interface effort has resulted in various working agreements between DRR programs and Institute components.

## Recent Organizational Changes

The most recent DRR change has been the reorganization implemented in 1976. All DRR grants management specialists were combined into one section, the Office of Grants and Contracts Management, resulting in greater flexibility and efficiency in the grants management operation.

### Improve Communication

The new arrangement also gives professional personnel the opportunity for cross-training and familiarization in all DRR programs, and thus improves communication within the Division.

Another change in 1976 was the establishment of the Divisional Scientific and Technical Review system. Under this arrangement the overall supervision of review activities was transferred from

## Post Photographer Speaks At Camera Club Sept. 27

Photographer Gerald Martineau of the *Washington Post* will speak at the next meeting of the NIH Camera Club.

The meeting has been rescheduled for Tuesday, Sept. 27 at 8 p.m., Bldg. 12A, Conference Room 1020.

All interested persons are invited to attend.

Contact Gail Planck at 881-1378 concerning membership in the R&W-sponsored club and use of the club's darkroom.

## EPILEPSY

(Continued from Page 1)

responsibility.

The report called for Congress to take quick action regarding the modest direct investment proposed to make existing service programs more effective in the areas of medical services, research and prevention, education and employment, social adjustment and mental health, public, patient and professional knowledge and understanding, and achievement of equality and independence through legal rights.

The Commission also proposed the creation of a Comprehensive Epilepsy Service Network, a direct-service system which would become a catalytic force to fill the gaps and stimulate current service agencies to better, more cost-effective performance.

"The Action Plan represents a balanced approach to the problems of epilepsy," says Dr. Masland, former Director of NINCDS. "It provides a network of improved social and medical care for citizens with epilepsy, enabling them to make their fullest contribution to society."

"At the same time it prepares society to accept that contribution. All too often it is not epilepsy itself, but society's reaction to it which creates the disability."

the program directors to the deputy director.

Designed to increase mutuality of program knowledge and to provide more flexibility of use of health science administrators among the five DRR programs, this change also tends to avoid any possible conflict of interest in individual programs.

Coincident with the DRR reorganization, all personnel in the Division are now quartered on the fifth floor of the B wing in Bldg. 31.

The Division is now developing a Five-Year Plan designed to give the Division "the capacity to sense and serve the changing research resource needs of the nationwide biomedical research community and NIH."



A fashionable English matron drops her teacup in horror as she discovers what a microscope reveals about the water in her tea in early 19th century London. This etching—"Monster Soup Commonly Called Thames Water"—by William Heath, is one of six NLM prints now on display outside HEW Secretary Joseph Califano's office.

## CFC FUNDS

(Continued from Page 3)

of problems that both people in the relationship might have trouble coping with.

A typical example involved a newly divorced female with children who found herself in the position of having to seek employment to support herself and her family. It was discovered that her main problem was an insecurity about entering the job market.

While undergoing counseling, she received a job at NIH, leaned heavily on Family Service for support during the initial stages of her job, gradually but steadily increased her self confidence, and eventually completed college through the STRIDE Program and is building a professional career at NIH.

The Link Program for runaways is the largest of the agency's services dealing with youth. Zelta Porte, Link Program director, explains that Montgomery County has a growing problem with runaway young people in the 11- to 17-year-old range, including several young people from NIH families who received help from the agency.

The Link Program is staffed 24 hours per day, 7 days a week. It provides temporary housing for runaways and, through counseling, involves the family in determining the reason for the runaway situation.

The agency also counsels parents on how they might trace their runaway children, although it will not help track down runaways for their parents.

Another youth oriented program, Turning Point, deals with "status" juvenile court offenders. "Status" offenders refer to those people who are in difficulty with the law be-

cause their behavior is illegal due to their status as a young person.

The police and courts refer young people who are having problems because of truancy, running away from home, or being out of control to Family Service which counsels these youngsters with the goal of diverting them from the juvenile justice system.

"We exist to provide help with any situation in which a person is having difficulty coping," says Mr. Brambilla.

"We do not offer long term analysis; we're more interested in what is happening right now and how can that problem be solved. Most of our counseling involves no more than nine or ten sessions."

Family Service of Montgomery County can be contacted at 840-2000. Its offices are at 1 West Deer Park Road, Suite 201, Gaithersburg.

## DR. HISAOKA

(Continued from Page 1)

that Institute's Extramural Program.

A native of British Columbia (Canada), Dr. Hisaoka graduated from the University of Alberta and received his M. Sc. degree from the University of Western Ontario in 1951, and his Ph.D. degree from Rutgers University in 1953.

He was a research and teaching assistant in the department of zoology at Rutgers in 1953 before joining the faculty of Loyola University, Chicago, where he was associate professor of biology from 1961 to 1964.

Dr. Hisaoka is an expert in the martial art of Judo. He holds a 5th Degree Kodokan Black Belt in that discipline and is chairman of the Board of Examiners, Capital Black Belt Association.

## Operation Backfill Relocates Thousands Of NIH's in New Office Assignments

When Harry Hall finishes checking off the list of office numbers with the colored blocks on the stack of building floor plans, more than a quarter of all the NIH employees will have been moved to new working areas.

The office relocation project is known as Operation Backfill in the lingo of the Space Management Branch, Division of Administrative Services.

Begun in April, the massive space reassignment program, now more than half completed, primarily is the result of the relocation from the NIH campus of the Bureau of Health Manpower of DHEW's Health Resources Administration.

The Bureau had occupied some 49,000 square feet on campus in Bldg. 31 and some 40,000 square feet in the former Wiscon Bldg., now known as the Federal Bldg., at 7550 Wisconsin Ave.

### BHM Moves to Prince Georges

The Bureau is now at Prince Georges Plaza in Adelphi.

Currently Operation Backfill is trying to fill the vacated space in a manner to consolidate similar offices and services and to provide the expansion of space where it is badly needed.

For instance, some offices of the National Cancer Institute and of the National Heart, Lung, and Blood Institute were housed in the Landow Bldg.

When the Bureau of Health Manpower left its space in the Federal Bldg., NHLBI was able to move there and to expand, while NCI was able to expand in the Landow facility.

In order not to interfere with carrying out NIH services, most office moves were performed after 5:30 p.m. or on weekends.

The move and consequent space

reassignments were more than 2 years in the making, according to Mr. Hall, project coordinator, who is a supervisory space management specialist and assistant to James Hawkes, chief of the Space Management Branch.

Twelve different reassignment plans were narrowed to three for submission to the NIH Director before a final plan was decided upon.

While Operation Backfill is not the largest reshuffling in Mr. Hall's 18 years in the Space Management Branch, it involves three other DAS branches, and he uses a special Operation Backfill rubber stamp to identify the relocation documents as priority items.

The reassignment has so far been the smoothest large scale office relocation he has seen, Mr. Hall says. He expects the moves to be completed in November or December.

### Many Cooperate

Mr. Hall attributes the relative ease to the cooperation of the Plant Engineering Branch, DES, and the Telecommunications, Transportation, and Sanitation Services Branch, DAS.

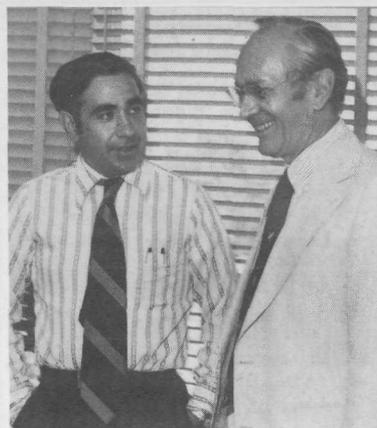
Highlights of the space reassignments are:

NINCDS, from parts of Bldg. 31 to the Federal Bldg.; NIA, from parts of the fourth floor of Bldg. 31B and the Landow Bldg. to the fifth floor of Bldg. 31C; NHLBI, from parts of the Landow Bldg. to space in the Federal Bldg.; NCI, from parts of Bldg. 41 to parts of Bldg. 13 and parts of Bldgs. 31 and 37 to parts of the Landow Bldg.; NIEHS, to parts of the fourth floor of Bldg. 31B; NIAMDD, from parts of the second floor of Bldg. 31B to parts of the ninth floor Bldg. 31A and parts of the ninth floor of Bldg. 31A to parts of the fourth floor, Bldg. 31B.

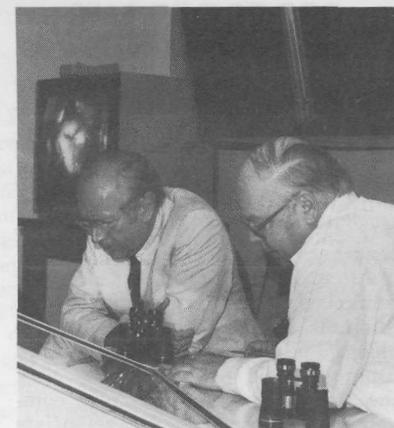
### Others Reassigned

Also, NIMH, from parts of Bldg. 10 to space in the fourth floor of Bldg. 31C; NIDR, from the Clinical Center and space in the fourth floor of Bldg. 31B to parts of the third floor in the same building; NICHD, from the Auburn Bldg. to the B2B level of Bldg. 31B; DRR, from the fourth floor of Bldg. 31B to parts of the fifth floor of the same building; and DCRT, assigned new space in the fourth floor of Bldg. 12A.

Also, OD, from space on the second floor of Bldg. 31B to parts of the fourth floor in the same build-



Congressman Newton Steers, of Maryland's Eighth Congressional District, was invited to visit the National Heart, Lung, and Blood Institute while taking part in a cardiopulmonary resuscitation course conducted by Dr. Jay Moskowitz, director of the Institute's Office of Program Planning and Evaluation. Left, he chats with Dr. Robert I. Levy, NHLBI Director. Right, the recent visit included a tour of the Cardiology Branch where he viewed an open-heart operation with Dr. Andrew C. Morrow, chief, of the NHLBI Surgery Branch.



### Talk on Hypertension Opens Medicine for Layman Series

The weekly series of seminars, Medicine for the Layman—to which NIH employees, their families and friends are invited—begins tonight, Sept. 20, at 8 p.m. in the Masur Auditorium.

The problem of hypertension and recent advances in treating the disorder will be discussed by Dr. Harry Keiser, clinical director of the National Heart, Lung, and Blood Institute.

Next Tuesday, Sept. 27, Dr. Robert Butler, Director of the National Institute on Aging, will speak about the biological processes of aging and current research in that area.

On the following Tuesday, Oct. 4, Dr. Jesse Roth, chief of the Diabetes Branch, National Institute of Arthritis, Metabolism, and Digestive Diseases, will describe different types of diabetes and explain treatment for diabetics.

ing; OC, from parts of the fourth floor of Bldg. 31B to other space on the same floor; DCG from the first floor of Bldg. 31B to other space on the same floor and on the second floor of the same building; DEO, from the second floor of Bldg. 31B to other space on the same floor; DPM, from the B2B and B2C levels of Bldg. 31 to parts of the first floor and B2 levels of Bldg. 31C, and the fourth floor of Bldg. 31B and DMSR, from parts of the first floor of Bldg. 31C to parts of the fourth floor of the same building.

Also, DAS from parts of Bldg. 10 to Bldg. 1 and Bldg. 13, to Bldg. 31; DFM, from parts of the Westwood Bldg. to Bldg. 31B and Bldg. 31B to Bldg. 31C; DES, from Bldg. 12A to parts of Bldg. 13;

### Fredrickson To Open New Seminar Series On Biomedical Ethics

Dr. Donald S. Fredrickson, Director of NIH, will open a new series of seminars on Biomedical Ethics on Wednesday, Sept. 28, from 3 to 5 p.m., in the 14th floor Auditorium of the Clinical Center.

He will speak on The Ethics of Biomedical Research in the Future.

As in the past 2 years, the seminars are sponsored by the Staff Training Extramural Program.

The second seminar in the series will take place on Wednesday, Oct. 12, in Bldg. 1, Wilson Hall.

Dr. Robert Young of FDA and Robert Veatch of the Hastings Institute will present their views on the rights of patients to select forms of therapy which are outside the standard practice of medicine.

Other speakers in the series will be: Dr. Burke Zimmerman, House Subcommittee on Health and the Environment; Dr. Joseph Perpich, NIH Associate Director for Program Planning and Evaluation; Dr. Richard McCormick, Georgetown University; and Dr. Ronald Green, Dartmouth College.

They will discuss such questions as safety issues associated with recombinant DNA research and the findings of the National Commission for the Protection of Human Subjects about pediatric research.

A complete schedule of the seminars may be obtained by calling Arlene Bowles, Ext. 65358, Special Programs Office, OD.

DRS, from parts of Bldg. 31B to Bldg. 13; CC activities from parts of Bldg. 10 to parts of Bldg. 31B; Child Day Care, from Bldg. 31B to other space in Bldg. 31B; GAO from parts of 31B to other parts of 31B; and Blind Industries and Services of Maryland from Bldg. 13 to new facilities in Bldg. 12B.



Vernice Ferguson, Clinical Center Nursing Department chief, was recently awarded the honorary degree of Doctor of Science from Marymount College in Virginia at its summer commencement exercises. Ms. Ferguson has supported and contributed to the development of educational programs for nurses at Marymount.