

the



# Record

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

February 17, 1971  
Vol. XXIII, No. 4

NATIONAL INSTITUTES OF HEALTH

## Patent for New Method To Control Mosquitoes Is Assigned to HEW

A patent for a new technique of controlling mosquitoes by sterilization has been awarded to a National Institute of Allergy and Infectious Diseases' grantee at the University of Notre Dame.

Dr. George B. Craig, Jr., the grantee, working with an associate, Dr. Morton Fuchs, sterilized female mosquitoes with a hormone extracted from the accessory gland of male mosquitoes.

Patent No. 3,450,816 has been assigned to HEW, which will grant royalty-free, nonexclusive licenses.

### Insecticides Toxic

For many years, insecticides have been the most successful means of destroying insects that are disease carriers. In recent years, the toxic effects of these chemicals on both man and his environment have become of increasing concern.

The problem is further complicated by the emergence of insecticide-resistant strains of insects. These insects require stronger and more toxic compounds for eradication.

Dr. Craig's patent describes both

(See PATENT, Page 7)

## Dr. MacLean Receives Special APPA Award

Dr. Paul D. MacLean, NIMH, recently received a special award from the American Psychopathological Association. He was honored for his scientific contribution to the field of brain function and sexual behavior.

Dr. MacLean is with the Section on Limbic Integration and Behavior, Laboratory of Neurophysiology.

In addition to a \$500 prize, Dr. MacLean received testimonials from prominent scientists that were presented to him by Dr. Milton Greenblatt, president of the association, at its annual meeting in New York.

The topic of this year's meeting was "Critical Issues in Contemporary Sexual Behavior."

The first part of the paper presented by Dr. MacLean covered a summary of findings reported earlier concerning sexual manifestations in animals resulting from specific stimulation of the limbic system in the old mammalian portion of the brain.

He then discussed an innate sexual display among squirrel monkeys both as a mechanism of challenge among males and of mating.

In his concluding remarks Dr. MacLean discussed the implications of the experimental work as it relates to human behavior.

## NIAID Employees, Families Join Efforts To 'HELP' Pakistan Cyclone Survivors



Thousands of homes on Manpura Island—as well as on the rest of the Ganges River Delta of East Pakistan—were destroyed by the Nov. 12 cyclone. Survivors attempted to erect temporary reed and thatch homes such as these until reconstruction could begin.—U.S. Agency for International Development Photos.

By Krin Larson

To the survivors of last November's devastating cyclone on Manpura Island in East Pakistan, HELP has become a continuing way of life.

HELP—the Heartland Emergency Lifesaving Project—developed out of the concern of a group of Pakistanis and Americans in Dacca, the capital of East Pakistan.

Many of the HELP volunteers are NIAID employees and their families at the Pakistan-SEATO Cholera Research Laboratory (PSCRL) in Dacca.

However, what began as an attempt to provide immediate relief to survivors through voluntary private contributions is now evolving into a long-term plan for redevelopment that has gained the support of the Pakistan and U.S. Governments.

Manpura Island, about 10 miles long and 2 miles wide, lies at the mouth of the Ganges River on the Bay of Bengal.

Because of its location on the coastal lowlands, the area is vulnerable to cyclones, monsoon floods, and other natural disasters. Despite the great fertility of the soil, it is a very poor area.

When the flood waters accompanying last November's cyclone receded, 50 to 60 percent of Manpura's population was gone.

The cyclone came at harvest time when the normal population was augmented by migrant workers, and losses ranged from 14,000 to 19,000.

Many survivors suffered from the "cyclone syndrome"—severe abrasions, similar to third-degree burns,

on the forearm, upper arm, inner thighs, and chest—as a result of clinging to a palm tree for hours while being tossed about by the flood waters.

Fortunately, an early fear—the spread of cholera—proved to be unfounded.

Besides the population loss, most shelter on the island was gone, as were most of the cattle used for farming and harvesting, and nearly three-fourths of the rice crop.

Because the areas were inaccessible and communication was lost, it was several days before the Paki-

(Continued on Page 7)

## Computer Tells Nature of Lethal Drugs, Helps M.D. Decide Correct Treatment

During the past 15 months 45 patients who have entered Suburban Hospital in Bethesda suffering from potentially lethal doses of barbiturates or other drugs have survived because a computer determined the nature of the drugs.

Because of this the physician was able to administer the correct treatment.

The research on the drug was a pilot project carried out jointly by NIH and Suburban Hospital.

When a patient takes a sufficient amount of drugs that may kill, the emergency room physician must act swiftly.

He must try to reduce the concentration of the drug in the body in order to save the patient's life and also to prevent irreversible damage to the brain or other vital organs.

But frequently the patient is un-

(See LETHAL DRUGS, Page 8)

### Friends Assured of Leakey's Recovery From an Accident

Great disappointment was the reaction to the cancellation of Dr. Louis Leakey's scheduled appearance on Feb. 3.

Just prior to leaving for his trip to the United States, Dr. Leakey was hospitalized in Nairobi, Kenya, as a result of an accident.

While there has been reassurance that Dr. Leakey is making a most satisfactory recovery, his future plans are of necessity indefinite.

## Hospitals' Research Role Reviewed in Publication

The first comprehensive review of the involvement of the Nation's state, local, and voluntary hospitals in biomedical research is contained in a report just issued by NIH.

The publication, *Research in the Nation's Hospitals, State-Local-Voluntary, 1967* is Report No. 19 in a continuing series, "Resources for Biomedical Research and Education."

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

# the NIH Record

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## NIH Television, Radio Program Schedule

### Radio

#### DISCUSSION: NIH

WGMS, AM-570—FM Stereo  
103.5—Friday, about 9:15 p.m.

February 19

Dr. Eileen Hasselmeyer and  
Jehu Hunter, NICHD,  
Subject: Sudden Infant Death  
Syndrome

February 26

Dr. Richard L. Hayes, NIDR  
Subject: Oral Diseases

Interview takes place during intermission of the Library of Congress concerts.

Note: NIH REPORTS, the television series which has appeared on WRC, Channel 4, will be rescheduled at a later date.

## Dorothy Mathews Plans Visits to Cold Climes And Hawaii's Beaches

Visits to Alaska's icy shores and Hawaii's (or Florida's) sunny beaches are part of the retirement agenda of Dorothy Mathews.

Mrs. Mathews recently retired from the National Cancer Institute as administrative assistant in the Etiology Division. She has been with NCI for 23 of the 30 years of her Federal service.

At a farewell ceremony Mrs. Mathews' co-workers and NIH friends praised her achievements and presented her with a gift.

And soon she will start her travels. First, Mrs. Mathews plans a trip to Alaska where her daughter and family live, and then a visit to warmer climes to "thaw out."

## Employees May Register For High School Classes Conducted on Campus

NIH employees who wish to acquire a High School Equivalence certificate may presently enroll in the High School Program sponsored by the Office of Training and Employee Development, OPM.

Since September, 61 employees have enrolled in the program; 110 employees are also taking part in the Adult Basic Education Program which prepares students for high school classes.

Both daytime and evening classes are held on the reservation. Students meet twice a week, during working hours, with instructors from the Montgomery County Public Schools Adult Education Department.

Instruction and school books are provided by Montgomery County free of charge to NIH employees.

Personnel wishing to attend classes, should discuss this subject with their supervisor, and I/D/B personnel officers. For additional program information call Betty Kitterman, Ext. 62146.

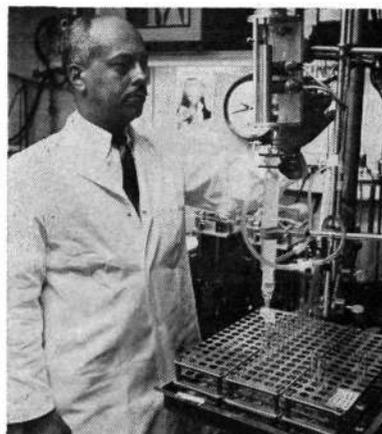
## D. C. Voter Registration Deadline Is February 20

D.C. citizens 18 years old and over may register to vote in the March 23 Congressional delegate election through Feb. 20.

Registration will be held in Room 4 of the District Building, 14th and E Streets, N.W., from 8:30 a.m. to 5 p.m. through Friday, Feb. 19, and from 10 a.m. to 5 p.m. on Saturday, Feb. 20.

For further information, call the D.C. Board of Elections, 347-0488.

## Dr. D. F. Johnson Elected Head, Board of Directors Federal Credit Union



Dr. Johnson has been with NIAMD, and with the same laboratory, since 1952, the year he came to NIH.

Dr. David F. Johnson has been elected President of the NIH Federal Credit Union Board of Directors. Dr. Johnson is with the National Institute of Arthritis and Metabolic Diseases in the Laboratory of Chemistry, Steroid Section.

He has been with NIAMD, in the same laboratory, since he came to NIH in 1952. Dr. Johnson received a Masters degree in Chemistry from Howard University, and a Ph.D. in Biochemistry from Georgetown University.

Other members serving on the Board of Directors as officers are: Dr. Harley G. Sheffield, vice-president; Herbert C. Christoferson, treasurer, and Dr. Norman E. Sharpless, secretary.

The Board of Directors also include: Dr. Jeanne L. Brand, Helene Devay, Otis Ducker, Doris Parkinson, and Walter H. Magruder.

There are over 26,000 credit unions in the U.S. The NIH Credit Union, with over 11 thousand members, is numbered among the top 150 of the largest in the country.

## 4 Senior Med. Students Participating in Program Of Clinical Electives

Four senior medical students arrived at NIH this month to participate in the recently established Clinical Electives Program at the Clinical Center.

These first students are: Bruce W. Furlow, George Washington University; Thasis Goodwin, Albany Medical College, and F. Simmons Patterson and Lewis Yecies, University of Pennsylvania.

### Med Students Eligible

Open to students from any of the Nation's medical schools, the program is designed to add a new dimension to opportunities for professional development.

For 1971-1972, staffs of several Institutes are collaborating to permit the students to learn about three clinical sub-specialties: Endocrinology, Hematology, and Immunology, and the biomedical uses of computers.

Course coordinators are Drs. Phillip Gorden, NIAMD, Edward S. Henderson, NCI, and Michael Frank, NIAID.

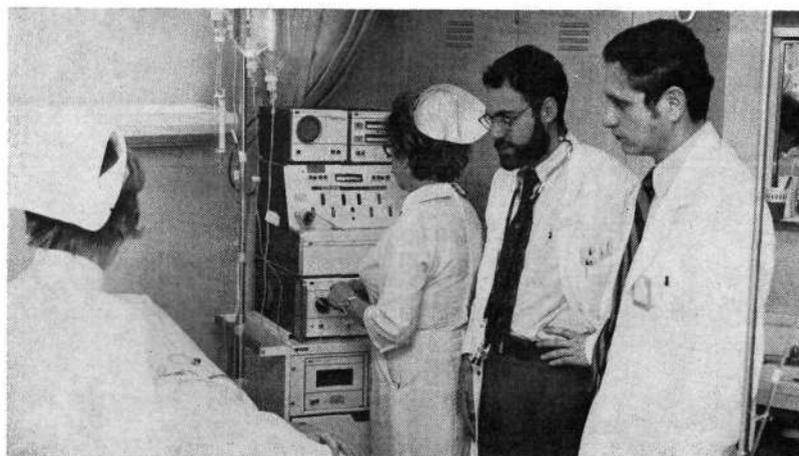
Selected students will also continue to spend some time in a tutorial in the biological sciences in some of the NIH research labs.

### Schedule Listed

Elective courses in the clinical specialties will last 2½ months. The current schedule is: Oct. 4 to Dec. 10, 1971; Jan. 3 to March 12, 1972, and March 15 to May 21, 1972.

Applications will be accepted through March 1, 1971, and may be sent in a brief letter to Dr. Thomas C. Chalmers, Director, Clinical Center, and Chairman, Committee on Specialty Electives.

According to Dr. Chalmers, the program is expected to meet the need for additional clinical teaching facilities.



Dr. Phillip Gorden (r), Endocrinology Course Coordinator, confers with medical student Lewis Yecies on a patient's progress. Close association between the student, clinical associate, and physician-scientist is an essential part of the Clinical Electives Program.

## Dr. Roger O'Gara Dies, Noted Cancer Researcher

Dr. Roger W. O'Gara, 55, National Cancer Institute physician and research pathologist, died of a heart attack on Jan. 25. He was stricken as he walked to his laboratory in the Clinical Center.

Dr. O'Gara began his research career in 1937 as a technician in the Office of Field Investigation of Cancer at the Harvard University School of Medicine.

He moved with this PHS unit in 1938 to the Gibbs Laboratory at Harvard College, and a year later to the newly completed facilities of NCI in Bethesda.

Dr. O'Gara then started night classes at George Washington University. Both work and studies were interrupted during service as a medical corpsman in the Aleutians from 1942 to 1945.

He returned to GW as a fulltime student, receiving his B.A. degree in 1948 and his M.D. degree 3 years later.

After his internship, Dr. O'Gara returned to NIH in 1952 as a path-



**Dr. O'Gara investigated the high incidence of esophageal cancer in natives living in Curacao and in Africa. He also showed that an agent from palm nuts can penetrate skin wounds and produce cancer in other parts of the body.**

ologist with NIAMD. A year later he joined the NCI Laboratory of Pathology.

Through NCI Dr. O'Gara received a 3-year training assignment in pathology at the University of Pennsylvania. He rejoined the NCI staff in Bethesda as a research pathologist in 1956.

Among Dr. O'Gara's research interests was the development of improved laboratory animal techniques for detecting chemical cancer-inducing agents related to cancer in man.

In collaboration with his wife, the late Dr. Margaret G. Kelly, and Dr. Richard H. Adamson of NCI, he was the first investigator to succeed in producing cancer in monkeys with chemicals—nitrosamine

## Letter From Former CC Patient Thanks All Employees for TLC, Blood Donations

Often, the Clinical Center receives letters from former patients thanking a particular physician, nursing unit, or department for the excellent medical and hospital care that had been provided during their stay here.

But the following letter was addressed to all NIH employees.

*Dear Employees of the Clinical Center and NIH: I'm writing to thank you for helping save my life. I was in the Clinical Center a few months ago for heart surgery. As it turned out, I had four operations and a lot of bleeding.*

*By the time I left 2 months later, they had given me over 140 units of blood. They tell me that's a lot more than usual, but without it I would have needed another operation. Frankly, I was pretty weak by then and I'm sure glad I didn't need another operation.*

*So I want to thank not just the fine doctors and nurses and all the other people who took care of me, but also all of you who donated blood.*

*I'm happy to say I'm back at work again. I've been with this company for 17 years and I was really worried about losing my job because of my condition. But they say I'm fine now and can do my work. My family and I cannot thank you enough. Sincerely yours, Frederick Lusky.*

When the letter-writer, a 34 year old factory worker from Ohio, was admitted to the Clinical Center last October, he was overweight and in poor general health.

He had angina pectoris and mild

compounds.

Significantly, some of the liver cancers thus induced could be transplanted to the brains of other monkeys, a finding which led to the use of this technique in testing various methods of brain tumor treatment.

Dr. O'Gara's interest in naturally occurring chemical carcinogens led to studies of the plants eaten by natives in areas of high esophageal cancer incidence, notably in Curacao and in Africa.

Research indicated that several of these plants and their derivatives produced cancer when injected into laboratory rats.

Dr. O'Gara also showed that a cancer-inducing agent extracted from cycad palm nuts can penetrate skin wounds and produce cancer in remote sites such as the liver and kidney.

Dr. O'Gara was an authority on primate diseases. His most recent research demonstrated that leukemia can be chemically induced in monkeys, and that the lower primates are more susceptible to chemical cancer agents.

Dr. O'Gara, a native of Lynn, Mass., is survived by two sisters, Mrs. Vincent Gunning and Mrs. James Rickards, and a brother, Edward, all of Lynn.



**After using the data-phone to log in with the computer in Bldg. 12A, computer technician Charity Starr operates Wylbur, a computer terminal, to request a printout of donors with Mr. Lusky's type of blood.**

aortic insufficiency and was scheduled for an operation within a week.

A few days before surgery, Rodney Douglass, CC Blood Bank, consulted a computer printout of donors with Mr. Lusky's type blood and began telephoning them.

Since every fifth unit of blood transfused to Clinical Center patients must be fresh, it is necessary to coordinate donations with the surgical schedule.

Ordinarily an operation like Mr. Lusky's requires 20 units of blood and the Blood Bank planned accordingly. However, during the next 2 months, Mr. Lusky ultimately received over 140 units.

In surgery, two arteries were lowered from Mr. Lusky's chest wall and implanted in his heart to take over for the defective coronary arteries.

### Undergoes Further Surgery

During the operation he was given 17 units of blood. Unfortunately he suffered post-operative bleeding and that same day was returned to the operating room for removal of the clotted blood from his chest.

The hemorrhaging artery was repaired, and again Mr. Lusky received 14 units of blood.

His condition was satisfactory until a few days later when bleeding from the upper gastrointestinal tract necessitated transfusion of 18 units of blood.

In the operating room, his physician discovered an acute ulceration in the duodenum with brisk arterial bleeding.

The ulcer was oversewn to contain the bleeding, and a pyloroplasty and a vagotomy were performed in an effort to avoid future ulceration. This time only 5 units

(See LETTER, Page 6)

## Candidates for Program In Financial Management Receive on-Job Training

Qualified applicants are invited to apply for the 1971 Financial Management Intern Program.

They will be trained for eventual positions as financial managers and public administrators, according to a recent announcement by the HEW Office of the Assistant Secretary, Comptroller, James B. Cardwell.

Candidates must have a Bachelor's degree or equivalent in a field other than accounting. They must also have a Federal Service Entrance Examination rating, or proof of their scholastic ability.

Women and minority group employees who meet requirements for the Management Intern Program are especially encouraged to apply.

Interns receive one year of graduate training at an accredited university and one year of on-the-job training at downtown HEW.

The primary purpose for the graduate study, which may lead to a Masters degree in Public Administration, is to provide the technical background that is essential for financial management.

### Assignments Rotated

During the second year of the Program, rotating assignments in audit, budget, finance, and grants administration provide the foundation for an effective financial management career in HEW.

Applicants may qualify for this Program at the GS-5 or GS-7 level, depending on length of Federal service. During their internship selected candidates become employees of the Office of the Assistant Secretary, Comptroller, and must sign an agreement to remain with HEW for 3 years after completing their academic training.

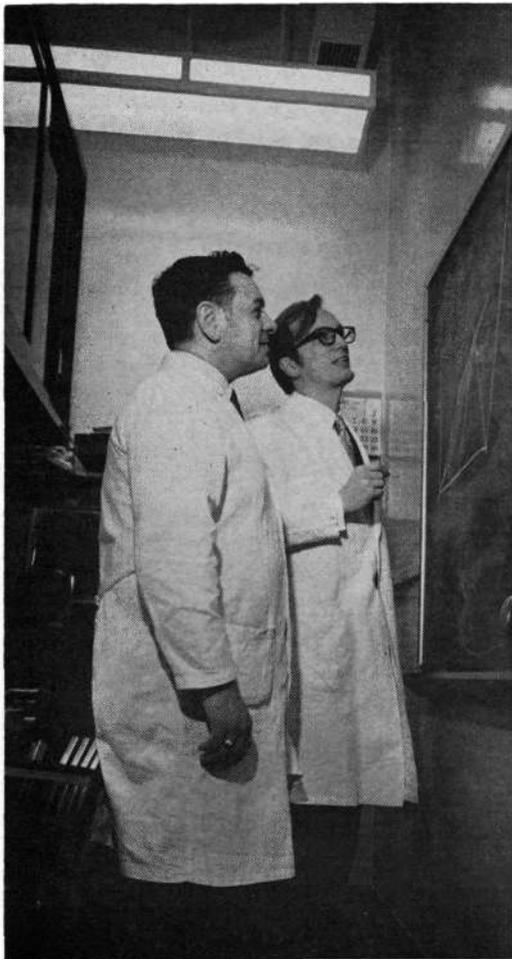
The proper application forms and a list of supporting documents may be obtained from I/D/B personnel offices. Additional information regarding the Program may be had by calling the NIH Office of Financial Management, Ext. 62567.



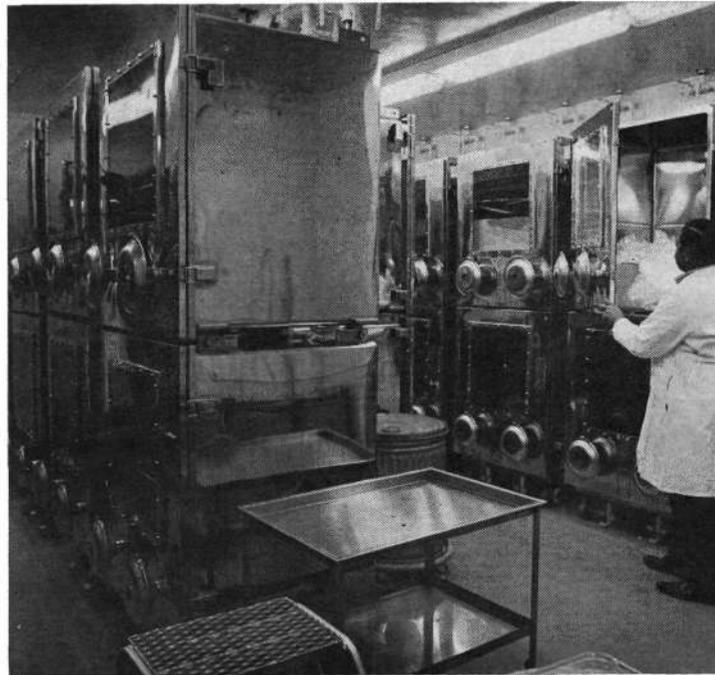
**In the CC Blood Bank's cold room, Edward Kessey, medical technologist, selects units of blood to be cross-matched in preparation for Mr. Lusky's operation.**

# NINDS Invites NIH Employees to Tour Lab

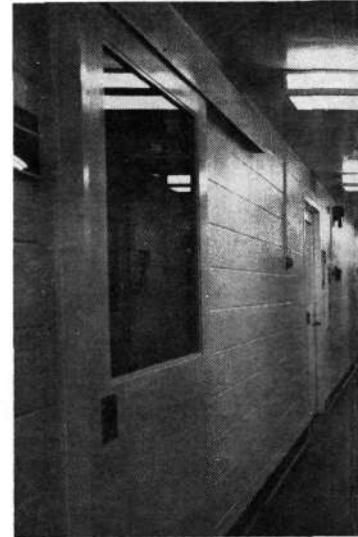
Photos by Tom Joy



In his office Dr. Sever (r) discusses plans for the new lab with Dr. David Fuccillo.



Jerry Atkinson cares for animals housed in the isolation units which were designed by Dr. William London.



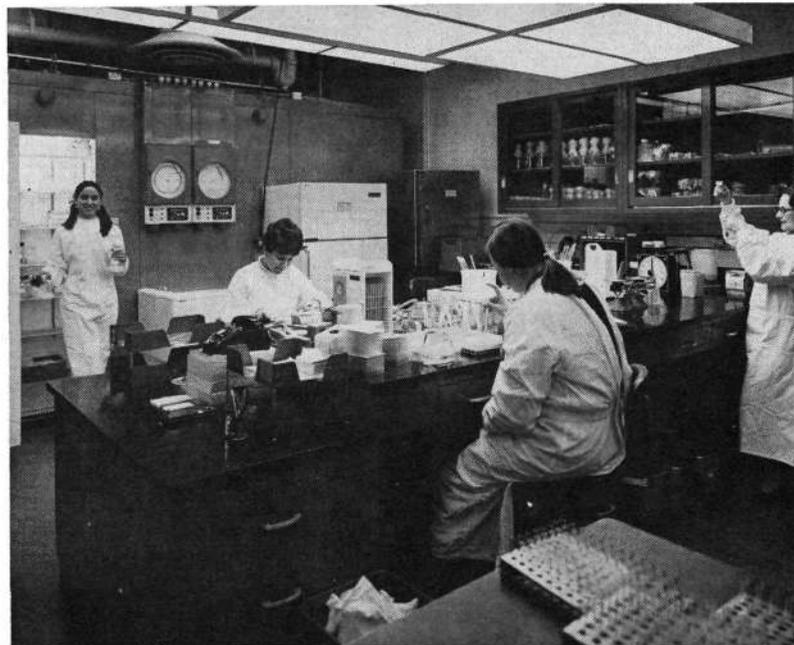
Dr. Sever, Helen Krebs, and Dr. Fu... Note the special air ducts overhead

You are  
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Building 36,  
Friday, F  
1

By Carol



Carol Nacy (l) puts on lab coat in women's bathing and dressing room. Lab workers are outfitted in special uniforms and change to this clothing kept at work. In lab at right she is removing material from one of the large freezers which open off many of the laboratories while (l to r) Anne Meth, Sandra Fitzgerald, and Anita Ley conduct serum studies.



Next Friday, Feb. 19, from 1 to 5 p.m., all NIH employees are invited to an open house tour of the newly completed NINDS laboratories for the study of infectious diseases in Building 36.

After Friday, the 5th floor, C-wing corridor will be completely closed off permanently—except to "authorized personnel."

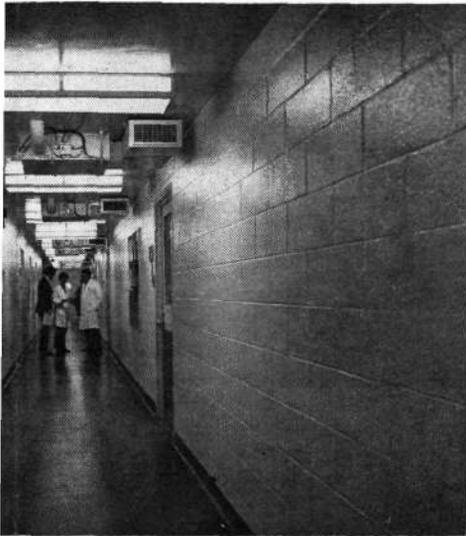
The laboratories belong to the Section on Infectious Diseases, Perinatal Research Branch, National Institute of Neurological Diseases and Stroke. The section is headed by Dr. John L. Sever.

It will study infections of the fetus and newborn child, such as cytomegalovirus, herpes virus, coxsackie viruses, papova viruses, hepatitis, and neurological diseases of a possible viral origin.

The section's isolation is for two reasons, according to Dr. Sever.

"We are, of course, preventing any of our materials from getting out into the building, and we are also insuring that no 'outside' con-

# laboratories for Study of Infectious Diseases



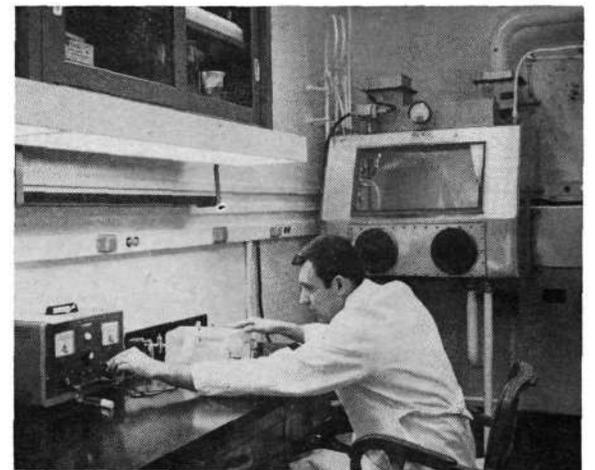
Fuccillo hold a quick conference in C corridor. ad which provide filtered-pure air.



Margaret Ashworth feeds a cuddly one-day-old monkey.



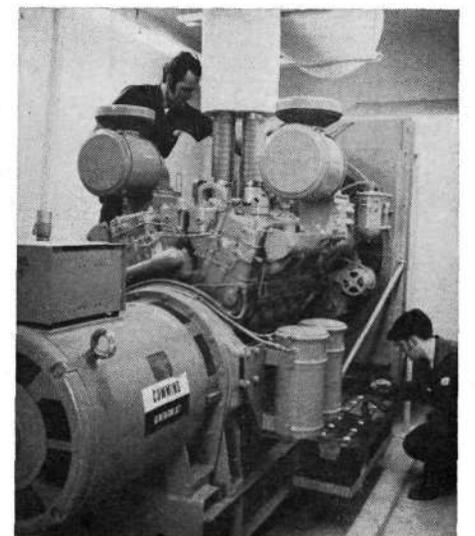
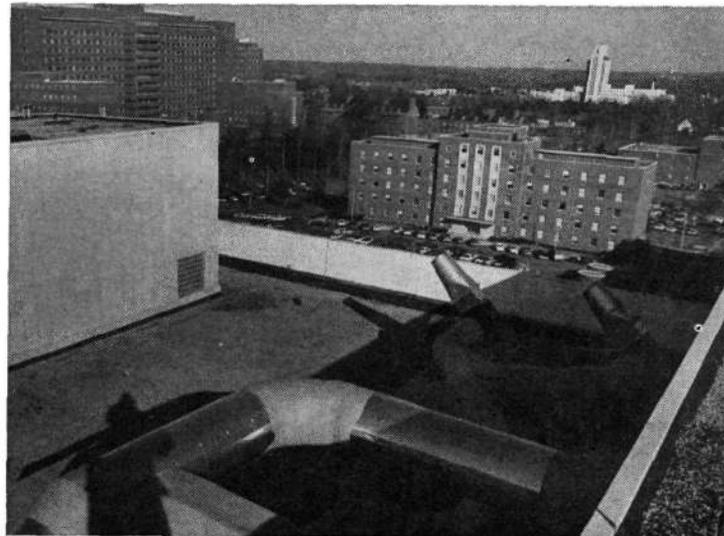
Dr. David Madden (above) uses a safety hood designed for working with highly infectious materials and (below) uses gel electrophoresis with hepatitis samples.



*e cordially invited  
Open House Tour  
ratories for the study  
fectious diseases  
'6, 5th floor, C wing  
February 19, 1971  
l to 5 p.m.*

**olyn Holstein**

o taminants will come in," he said.  
1- Safety features include:  
1e • The entire corridor and labora-  
1- tories will operate under negative  
1s air pressure so that no air from  
y within the corridor can escape into  
y the outer halls.  
2o • The section will have its own  
1e liquid waste system—separate from  
1s the rest of the building's. Sewer-  
1- age will be treated, run through  
1s sealed (welded) pipes and auto-  
1- claved (sterilized) before going in-  
1s to the sewer system.  
1e • Floor, walls, and ceiling are  
1s completely sealed, all pipes are  
1- welded.  
1e • The section has complete ani-  
1s mal holding and operating equip-  
1- ment.  
1s "If anything, we are overengi-  
1- neered for safety," Dr. Sever said.  
1e "We expect that the laboratory will  
1s be a model for future laboratories  
1- dealing with infectious materials.  
1e "The open house is to inform  
1s others of our unique set-up, and  
1- special safety arrangements."



Kenneth Kirby (l), who is in charge of Bldg. 36's engineering system, inspects filtered air exhaust chute with assist from Mark Summers. These air ducts on the roof provide special filtration of all incoming and exhausted air.



Vernon E. Taylor (r) receives a gift, presented by Arthur Moore, acting chief of the Medical Arts and Photography Branch, DRS, at a party in his honor. A former chief of the Photography Section and more recently photographic consultant, he has been at NIH 23 years. Vern, an avid yachtsman, plans a 6-month Caribbean cruise on his 35-foot ketch, "Melody."

### Latest Participants in NIH Visiting Scientists Program Listed Here

1/25—Dr. Ione Polacow, Brazil, Cell Growth Regulation Section. Sponsor: Dr. Dolph Hatfield, NCI, Bldg. 37, Rm. 3D07.

1/26—Dr. Ingeborg Hanbauer, Austria, Laboratory of Clinical Science. Sponsor: Dr. Irwin Kopin, NIMH, Bldg. 10, Rm. 2D46.

2/1—Dr. Sankar L. Adhya, India, Laboratory of Molecular Biology. Sponsor: Dr. Ira Pastan, NCI, Bldg. 10, Rm. 10B09.

2/1—Dr. Renne Ray-hung Chen, Taiwan, Section on Physiological Chemistry. Sponsor: Dr. John J. Pisano, NHLI, Bldg. 10, Rm. 7D13.

2/1—Dr. Hidehiko Kumagai, Japan, Laboratory of Biochemical Pharmacology. Sponsor: Dr. Edith W. Miles, NIAMD, Bldg. 4, Rm. 109.

2/1—Dr. Yukitaka Miyachi, Japan, Reproduction Research Branch. Sponsor: Dr. Mortimer B. Lipsett, NICHD, Bldg. 10, Rm. 12N204.

2/1—Dr. Amin Mohammed Suria, Pakistan, Laboratory of Chemical Pharmacology. Sponsor: Dr. James R. Gillette, NHLI, Bldg. 10, Rm. 8N118.

### Dr. Bloch Joins Nursing Staff As an Educational Consultant

Dr. Doris Bloch has joined the Division of Nursing, BHME, as a consultant in nursing education and community nursing practices.

Previously, Dr. Bloch served as nursing research consultant with the Regional Office of the World Health Organization at Manila.

She was graduated from Mt. Holyoke College in 1951 and earned a Master of Nursing degree from

## LETTER

(Continued from Page 3)

of blood were transfused.

Five days later bleeding increased. Mr. Lusky was given another 20 units of blood and scheduled for exploration of the abdomen. This time the bleeding site was not readily accessible.

One solution was the Whipple procedure—an operating method which would have involved removal of the duodenum and all or part of the pancreas. This procedure may have meant risking complications including diabetes and continuous digestive difficulties.

The surgeons elected to perform a partial gastrectomy, removing the acid-secreting part of the stomach, and to continue massive blood support in the hope that the bleeding would ultimately stop.

Such a decision was possible only because the Blood Bank staff felt assured that NIH employees would be willing to provide an adequate blood supply.

Meanwhile Mr. Douglass and other Blood Bank staff members continued calling potential donors.

During the operation Mr. Lusky was given 16 units of blood and within the next 4 days required 40 more.

Fortunately, the bleeding did stop, but, before his discharge on Dec. 1, he had received another 15 units, making a total of over 140 units.

Eventually, after several weeks of rest, Mr. Lusky was able to return to his job.



Thurman B. Irby, a custodian with the Plant and Office Services Branch, ODA, recently received a Special Achievement \$150 cash award. Assigned to the National Library of Medicine for the past few years, Mr. Irby was cited for being consistently conscientious and friendly as well as for displaying initiative.

Yale University in 1954. Dr. Bloch received her Masters and Doctoral degree in public health from the School of Public Health at the University of California.

### NIH Blood Donors Needed To Meet Needs of Patients

The Clinical Center Blood Bank reports that 517 units of blood were received from NIH donors in January, and CC patients received 1,841 units.

To make an appointment to donate blood, call the Blood Bank, Ext. 64509.

### Research on Brain Tumors Described in Pamphlets Issued by 2 Institutes

Research approaches followed by the National Cancer Institute and the National Institute of Neurological Diseases and Stroke on the problem of brain tumors—which cause nearly 8,000 deaths in the United States each year—are described in publications issued simultaneously.

#### Booklet Easy to Read

*Brain Tumors and Spinal Cord Tumors, Hope Through Research* is an easy-to-read booklet on current research and treatment of benign and malignant tumors of the central nervous system, published by NINDS.

The NCI publication, *Research on Malignant Diseases of the Brain*, is a more detailed report on detection and treatment of brain cancers.

Various types of benign and malignant tumors of the central nervous system are discussed in both books.

Early diagnosis is important for the successful treatment of brain tumors, according to the new publications. They also discuss surgery, radiation therapy alone or in addition to surgery, and the more recent use of radioisotopes.

Nationwide cooperative studies coordinated by NCI and NINDS are focusing on finding new drugs and new techniques of drug administration.

Other cooperative studies described in the booklets concern ways to enable cancer drugs—which are normally excluded by a protective mechanism called the blood-brain barrier—to enter the brain. Both publications describe a mechanism already developed for bypassing this barrier.

For single free copies of the pamphlets contact the Research Information Branch, National Cancer Institute, NIH, Bethesda, Md. 20014.

### Softball Leagues Now Forming, Employees Asked to Call R&W

The R&W Men's and Co-Rec Softball Leagues are now forming.

Anyone interested in entering a team in either the Men's fast-pitch league or the Co-Rec League should call the R&W office, Ext. 66061, and leave his name, extension, and R&W membership card number.

### New NIH/NIMH Chapter In Federal Association To Meet February 24

The NIH/NIMH Chapter of the Federal Professional Association will be established at a meeting on Wednesday, Feb. 24, at 11 a.m. in Bldg. 31, Conference Room 1A-17.

Dr. Edwin D. Becker, NIAMD, chairman of the Organizing Committee, announced the meeting.

FPA's Executive Committee authorized the formal organization of the chapter. Dr. Becker noted that the committee "looks forward to valuable suggestions for FPA activities and policies from this important bastion of Federal science."

Two NIH/NIMH members are already serving on FPA's national Executive Committee. They are Dr. George J. Cosmides, national secretary, and Mel White, editorial director and editor, FPA Newsletter.

Personnel who have formally applied for membership may attend Wednesday's meeting and will have full voting privileges.

For further information and application blanks call Dr. Becker, Ext. 62194, Dr. Cosmides, Ext. 67707, or Mr. White, Ext. 66011.



Four Eye Nursing Service staff members participated in a recent conference on granulomatous sclerouveitis. They discussed the effect of visual impairment on the patient's social behavior. From left are: Rachael Thrasher, head nurse, Athena Wright, Rosellen Howell, and Barbara Rolling.

### Axelrod, Nobel Laureate, Honored by Alma Mater

Dr. Julius Axelrod, Nobel Laureate, was awarded an honorary Doctor of Laws degree this week by the George Washington University.

It was from this university that Dr. Axelrod received his Ph.D. in Pharmacology in 1955, the year he joined the National Institute of Mental Health. Until that time he had been associated with the research programs of the National Heart Institute.

Dr. Axelrod shared the 1970 Nobel Prize for Physiology or Medicine with Dr. Ulf von Euler of Sweden and Sir Bernard Katz of England for research on neurotransmitters.



Dr. William D. Terry was recently named assistant chief of NCI's Immunology Branch. He began his association with NIH in 1961 under a training grant with the Rheumatic Disease Group at the University of California School of Medicine, S. F. In 1962 he was appointed research associate in NCI's Immunology Section, Diagnostic Research Branch.

## Proceedings of Internat'l Symposium on Trauma Held in 1970 Published

Recently published *Proceedings of the International Trauma Symposium* held in Washington, D.C. in May 1970, puts into perspective the physical, social, and economic costs of trauma.

The proceedings of the symposium, sponsored by the National Institute of General Medical Sciences, cover the 3 days of discussions, in general sessions, panels, and 14 workshops.

Reports summarize discussions on the reaction of the body as a whole to injury, the effects of injury on the lungs, endocrine and nervous systems, and regional metabolism of kidneys, liver, and other organs.

The hard cover edition of the *Proceedings*, 190 pages, illustrated, at \$12 a copy, may be purchased from Williams and Wilkins Co.

## PATENT

(Continued from Page 1)

the sterilization method and the method of extracting and purifying this hormone, which is called "matrone."

The hormone is extracted by centrifugation of the gland in a saline solution or from whole male bodies which have been freeze-dried. The hormone can be lyophilized and stored.

Sterilization of females, which is lifelong, can be accomplished either by injection or by feeding.

The hormone can also be added to the food of mosquito larvae or sprayed on surfaces where young mosquitoes feed.

## NIAID EMPLOYEES HELP PAKISTANI SURVIVORS

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stani Government and the world knew the extent of the disaster.

When the serious relief problem was realized, some PSCRL employees and their wives—Richard Guerant, Lincoln and Martha Chen, George and Peggy Curlin, and Jon and Cornelia Rohde—as well as Pakistani nationals and other Americans in Pakistan, decided to bring emergency relief to a village of about 500 people.

### Food, Clothing Distributed

They collected more than \$9,000 in Pakistan currency in Dacca and from friends in the United States and with this purchased 4 tons of milk, rice, and clothes to distribute.

On Nov. 21, the PSCRL men and other volunteers arrived in Chittagong. The next day they moved on to the large island of Hatiya, and when they learned that no relief had reached Manpura Island, they chose that island for their work.

Their field report describes what they found at Manpura the next morning: "The stench is at first unbearable with corpses widely scattered. Good water up to 4 feet from the bank, and wide open fields will make a good drop area.

"Tried to get further south but found coast shoals up and carcasses every few feet."

By sunset, they had distributed clothes, utensils, rice, matches, mustard oil, kerosene, and a tin lamp to families and milk to the children, serving over 1,500 people. They also attended to those needing medical attention.

### Planes Sight Red Crosses

The next day planes and helicopters began sighting the red crosses on white sheets displayed in the fields and dropped more supplies. A distribution system was set up using a different line for each item.

With each line policed by local citizens almost 4,000 people were served that day. Eventually, they established three relief centers 6 miles apart.

While the men worked on the island, their families were busy in Dacca and Chittagong securing supplies and arranging for planes and helicopters to airlift them to Manpura.

By their combined efforts, and with the cooperation of West German, French, Pakistani, and American pilots, the Manpura survivors were soon regularly receiving the bare necessities of life.

As of Dec. 21, the group's expenses amounted to about \$40,000. Actually because many items were donated, the value of the goods distributed was much higher.

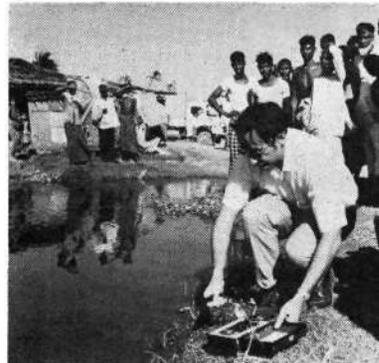
Following the group's early success, the American Government (represented by the Agency for

International Development) agreed to contribute \$2 for every \$1 collected by HELP.

With these funds, HELP plans to execute a redevelopment project on the island, as described in a recent letter from Dr. Jon Rohde, PSCRL:

"Volunteer specialists in agriculture, water resources, health, road building, and education have joined HELP to assist in formulating the *Manpura Plan*, a multidisciplinary outline for rehabilitation and development of the island.

"This plan supports the principle of self-help and group cooperation in the construction of dikes, new houses, schools, roads (the island



Dr. Wiley Mosley, an NIAID scientist at the PSCRL, tests drinking water in the Delta area as part of a 4-day survey conducted by U.S. and Pakistani physicians and scientists to determine the area's immediate needs and available resources.

has never had any), cyclone shelters and the introduction of more efficient agricultural methods.

"Already the people have joined into cooperatives that have embarked on harvesting, road construction and house building . . ."

The volunteers hope the plan will not only restore the islanders' former standard of living, but eventually advance their economy beyond the pre-cyclone level.

### Donations Requested

To do this, the group is expanding its efforts to obtain donations. Dr. Robert S. Northrup, Laboratory of Clinical Investigations, NIAID, who is also a contract coordinator in the SEATO-Cholera Research Program at NIH, and Dr. Robert S. Gordon, Clinical Director, NIAMD, are representing HELP's collection efforts in the U.S.

Dr. Northrup is a former PSCRL staff member and International Research Career Development Program Fellow.

"HELP has not only been instrumental in providing aid to people in critical need," observed Dr. Northrup, "but through its demonstration of the value of cooperative self-help community programs, even under disaster conditions, it has made real economic advancement a tangible goal for the Manpura area."

## Bibliography of Scientific Papers on Marijuana Published by University

An annotated listing of selected scientific papers on marijuana that have been published from 1924-1970 was recently issued by the Brain Information Service (BIS), University of California at Los Angeles.

The book, *Marijuana: A Selective Bibliography*, was published by BIS operating under contract from the National Institute of Neurological Diseases and Stroke.

According to the editor, Dr. William H. Rickles, Jr., UCLA Medical School, the bibliography includes such topics as the botany and chemistry of marijuana and hashish, sociological and legal issues, and clinical studies and case reports.

Summaries of each paper give the reader enough of an idea of the author's findings to enable him to decide if a reading is worthwhile.

BIS is part of an information network set up by NINDS to help find pertinent articles to aid researchers and clinicians interested in the nervous system.

The bibliography may be purchased for \$3 from the Institute Publications Office, BIS, UCLA Center for Health Sciences, Los Angeles, Calif. 90024. Checks may be made out to the UCLA Regents.

## Booklet on Periodontal Disease Discusses Causes, Prevention

A new publication, *PERIO*, contains facts on periodontal disease, one of the most widespread ailments known to man.

The brochure discusses what the disease is, how it is treated, and how it can be prevented.

Single copies may be obtained without charge from the Office of Information, Division of Dental Health, BHME, Federal Bldg.

Additional copies may be purchased at 30 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.



Dr. Jon Rohde, PSCRL (seated right), and U.S. AID Deputy Administrator, Maurice Williams (l), discuss the relief project at Manpura with Pakistani volunteers.



Nell Spruce, who has been with the DBS Laboratory of Blood and Blood Products for 20 years, accepts a gift from Dr. Sam T. Gibson, DBS assistant director, at her recent retirement party.

## LETHAL DRUGS

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conscious and there may be no indication of the drug imbibed, and the amount.

Recently, Drs. Henry M. Fales and George W. A. Milne, National Heart and Lung Institute, Laboratory of Chemistry, reported a technique that, usually within an hour, can determine which drug or drugs the patient has ingested, and approximately how much he took.

### May Help Locate Drug

This system may also help to determine whether the drug is still mainly in the patient's stomach or in his bloodstream.

Their method, developed in collaboration with Norman Law, of Suburban Hospital, uses gas chromatography plus mass spectrometry to analyze a sample of the patient's stomach contents and/or blood.

The gas chromatograph rapidly separates drugs from one another and also from normal components of biological fluids.

As the pure compounds emerge, one by one, from the column of the gas chromatograph, they enter the second part of the instrument; the mass spectrometer.

Here the compounds are bombarded by electrons to produce a complex signal, called the mass spectrum, that provides a very precise "fingerprint" of the drug in question.

With the help of Virginia Aandahl, Division of Computer Research and Technology, the NHLI scientists have collected the mass spectra of 80 of the most toxic common drugs and stored them in a computer.

### Computer Searches List

The mass spectrum of the unknown drug is read by the computer which then searches through this list to find a drug with the same spectrum or fingerprint.

The result is that, within about one hour, the physician is told what he needs to know about the drug taken by his patient. Now he can begin treatment to remove the drug

## \$1.9 Billion FY '72 NIH Budget Request Exceeds Previous Year by \$211 Million

The fiscal year 1972 Federal budget submitted by the President to Congress on Jan. 29 recommends a total of \$1,889.5 million in new obligatory authority for NIH, an increase of almost \$211 million over fiscal 1971 funds.

Of the amount proposed in the budget for NIH, \$1,283.3 million is for biomedical research (an increase of \$120.7 million), \$544.8 million for the Bureau of Health Manpower Education (up \$89.7 million), and \$21.5 million is for the National Library of Medicine (\$205,000 above FY 1971).

Included in the biomedical research total is \$100 million for a new "special cancer research initiative" that will focus on virology, basic cell biology, and cancers which may be caused by various chemicals in foods and the environment.

This special research effort, which hopes to build on substantial progress that has been made in molecular biology and virology, is over and above the \$232 million requested for the regular activities of the National Cancer Institute.

It is being identified separately because other NIH components, apart from the NCI, may be involved in this special research effort.

Altogether, research grants account for \$680.5 million (an increase of \$17.2 million) of the \$1,283.3 million proposed for biomedical research.

### Training Grants Increased

Another \$42.9 million (a decrease of \$7 million) is budgeted for fellowships, and \$109.8 million is proposed for training grants.

Funds for direct operations of the Institutes and Divisions amount to \$350.1 million (up almost \$10 million).

Of the \$544.8 million allocated to the Bureau of Health Manpower Education in the proposed NIH budget, the bulk, \$421.6 million (up \$84.7 million) is for institutional support and student loans and scholarships, educational grants and contracts, direct operations, and construction in medical, dental and related health professions.

Nursing activities account for \$68 million; public health, \$18.5

from the patient's system.

The identity of the drug determines the treatment. In some cases, the use of an artificial kidney may be necessary. In other cases, dialysis of the peritoneal sac or intestinal wall may be the treatment.

With some drugs, however, such serious surgical procedures are either unnecessary or ineffective and the patient must rely upon his own system for detoxification.

The NHLI investigators reported their findings at the Middle Atlantic Regional Meeting of the American Chemical Society.

### 1972 NIH Budget Summary

Components	Amounts in Thousands
OD .....	\$ 10,822
DBS .....	8,636
NCI .....	232,234
NHLI .....	194,448
NIDR .....	38,400
NIAMD .....	134,400
NINDS .....	95,496
NIAID .....	98,431
NIGMS .....	150,091
NICHD .....	102,532
NEI .....	32,434
NIHES .....	25,039
FIC .....	3,252
BHME .....	544,801
NLM .....	21,486
Research Resources ..	67,916
Special Cancer Research Initiative .....	100,000
Scientific Activities Overseas .....	25,545
Bldgs. and Facilities .....	3,565
Total .....	\$1,889,528

million; allied health, \$26.5 million, and program direction and manpower analysis, \$6.2 million.

Fiscal 1972 funds for the National Library of Medicine—\$21.5 million—propose \$15.4 million for direct operations, including library operations, toxicology information, the NMAC, and Lister Hill Center. Medical library assistance grants account for another \$6.1 million.

## Engineering Scientists Demonstrate Terminal For Patient Monitoring

A new computer display terminal for on-line patient monitoring is adding several dimensions to biomedical research through its low cost and unique combination of features.

Engineering scientists from two universities, working under grants from the Biotechnology Resources Branch, Division of Research Resources, recently demonstrated this computer display terminal.

Known as the General Purpose Graphics Terminal, it was developed at Loma Linda University. Currently, the University of Iowa is building eight of the display terminals.

The computer display terminal was designed so that it could be built from components costing less than \$7,000, about half the price of a commercially built model.

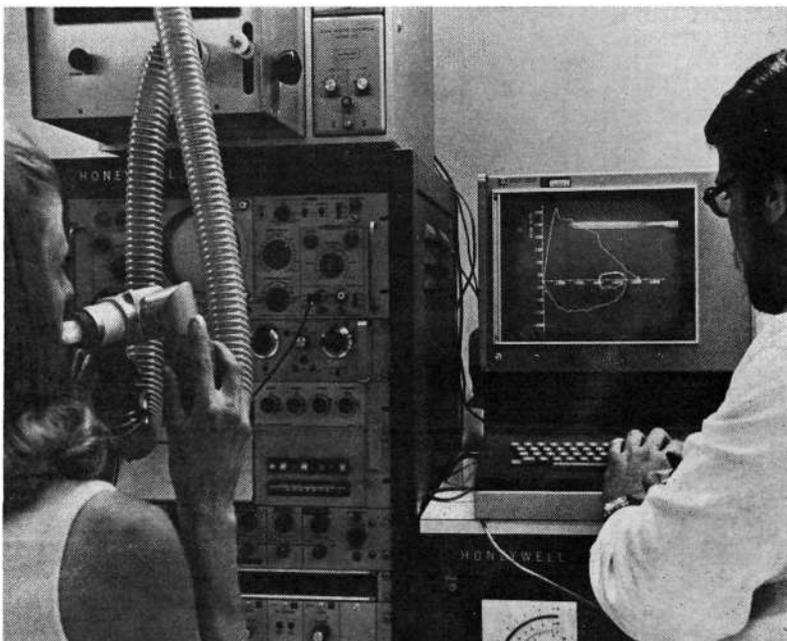
### Special Features Cited

Some of the special features built into the terminal are character and vector generators for easy building of letters, numbers, and graph axes on the display, and a "refresher" to keep the picture steady while the computer analyzes test results.

These features allow the researchers to cut down programming time and reduce the computer's load so scientific data and tests can be analyzed more quickly.

Another feature is a direct lead-in from the patient to the computer through the graphics terminal.

This allows the display to show preliminary results of tests such as pulmonary function and electrocardiogram, while the computer does a complete analysis and then updates the display.



The low cost display terminal incorporates a built-in "refresher" to keep the picture steady while the computer analyzes test results of pulmonary function.