

# the NIH Record

FILE COPY

U. S. DEPARTMENT OF HEALTH EDUCATION AND WELFARE

March 4, 1969  
Vol. XXI, No. 5

NATIONAL INSTITUTES OF HEALTH

## Epicardiectomy Benefits Ischemic Left Ventricle In NHI Animal Studies

National Heart Institute Clinic of Surgery scientists have made direct assessments, in dogs, of the function of the acutely ischemic left ventricle with and without epicardiectomy.

The surgeons, headed by Dr. Robert L. Reis, included Dr. Lee P. Enright, Dr. Hamner Hannah III, and Dr. Andrew G. Morrow.

They achieved this by means of a heart bypass procedure which allowed them to control aortic pressure, left ventricular stroke volume and heart rate independently.

### Advocated for Certain Patients

Epicardiectomy has been advocated as a myocardial revascularization procedure for patients with coronary artery disease.

Epicardiectomy is postulated to allow the heart to dilate enough so that blood also enters the ischemic myocardium directly from the ventricular lumen.

A series of ventricular function curves was obtained in each of 24 dogs. The first curve defined the

(See EPICARDIECTOMY, Page 7)

## Dr. Urban to Coordinate Programs in DDH Post

Dr. Kenneth Urban, past commanding officer of the Naval Dental School, National Naval Medical Center, has been appointed special assistant for Dental Care in the Division of Dental Health, Bureau of Health Professions Education and Manpower Training.

Dr. Viron L. Diefenbach, Division Director, announced the appointment.

Dr. Urban will serve as the Division's chief coordinator for dental care activities of the Job Corps, Vista, Head Start, and Neighborhood Health Centers programs.

He will also coordinate the dental programs of state and local health departments.

Dr. Urban was instrumental in establishing the Naval Dental Technician School at the Naval Training Center, San Diego, Calif.

Subsequently, he was officer-in-charge of the Dental Practitioner School in Guam, Mariana Islands. Selected individuals from each of the islands were trained to become dental practitioners there.

During World War II, Dr. Urban served as Senior Dental Officer

(See DR. URBAN, Page 4)

## The 'Beginning of the End' of Rubella Predicted at Internat'l Conference Here



At the first day's press briefing are (from left): Dr. John D. Harley, of Children's Medical Research Foundation, Sydney, Australia, who discussed long-term followup studies of victims of the 1941 rubella epidemic; Dr. Saul Krugman, of New York University, conference chairman, who described the meeting's goals, and Dr. Daniel I. Mullally, chief of the Vaccine Development Branch, NIAID, who outlined the scope of field trials conducted by university medical centers under contract to the NIAID.

Delegates to the International Conference on Rubella Immunization heard Dr. Lewis Thomas, Dean of New York University's School of Medicine, express the belief that they were witnessing and participating in the "beginning of the end" of a disease whose dangers have been recognized during the past 25 years.

In the final session of the meetings held in the Clinical Center, Feb. 18-20, Dr. Thomas' prediction seemed even closer to reality as discussions focused on how best to launch German measles immunization programs in a number of countries.

In an effort to stamp out the reservoir of the disease, it was suggested that children be designated as the prime target for mass immunization. In some European countries, the first lots of available vaccine will be reserved for women immediately following childbirth.

### Over 400 Attend

More than 400 scientists attended the sessions sponsored by the National Institute of Allergy and Infectious Diseases, the Division of Biologics Standards, and the New York University.

In welcoming the participants, Dr. Robert Q. Marston, Director of NIH, pointed out that the conference "demonstrates beautifully the 'one world' of scientific investigation." Noting that "science moves by stages," he reminded the group that "these stages can be hastened

but not one can be skipped."

Although a mild disease in children and most adults, rubella—when contracted by a woman during the first 3 months of pregnancy—can cause severe defects

(See RUBELLA, Page 7)

### Comm. Officers Will Meet For Briefing on Separation

NIH Commissioned Officers who plan to leave active duty during the next 6 months will meet for a briefing on Tuesday, March 11, at 3 p.m. in the Clinical Center auditorium.

The meeting, sponsored by the Commissioned Officer Unit, Office of Personnel Management, is being held to inform officers about separation procedures.

Other details will also be discussed, including travel allowances, the shipment of household effects, and veterans' benefits. Questions regarding retirement from active duty will be answered.

Administrative personnel concerned with such separation procedures are also invited to attend the meeting.



President Nixon greets Dr. Robert Q. Marston, NIH Director, after introduction by Robert H. Finch, HEW Secretary, prior to meeting with employees in the HEW auditorium Feb. 14. Looking on (from left) are Asst. Secy. for Health Philip R. Lee and Surg. Gen. William H. Stewart. In his presentation, Mr. Nixon said he was particularly concerned with problems as they affected the child between ages 1 and 5. President Nixon noted, "Research . . . indicates that what happens to the child from a nutritional standpoint, from an educational standpoint, from an environmental standpoint . . . may affect that child for the balance of his life regardless of what may happen after that time."

# the NIH Record

Published biweekly at Bethesda, Md., by the Publications and Reports Branch, Office of Information, for the information of employees of the National Institutes of Health, Department of Health, Education, and Welfare, and circulated by request to interested writers and to investigators in the field of biomedical and related research. The content is reprintable without permission. Pictures are available on request.

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and the Department of Health, Education, and Welfare.

NIH Record Office ..... Bldg. 36, Rm. 1C-18. Phone: 49-62125

Editor ..... Frances W. Davis  
Assistant Editor ..... Fay Leviero

## Staff Correspondents

Tony Anastasi, DRS; Bari Attis, NINDS; Lloyd Blevins, NICHD; Thomas Bowers, CC; George Bragaw, NHI; Katie Broberg, NIAMD; Lawrence Chamblee and Florence Foelak, BHPEMT; Jan Clagett, FIC; Gladys Ganley, DCRT; Mary Anne Gates, NIMH; Sue Hannon, NIDR; Anabel Holliday, ADA; Sheila Jacobs, NCI; Elizabeth Y. James, NIEHS; Marlyn Lebedzinski, NLM; Marion Oakleaf, DRG; Faye Peterson, DBS; Jane Shure, NIAID; Wanda Wardell, NIGMS; Beverly Warran, DRFR.

## 5 NIH Employees Named To EEO Officers Panel

Five NIH employees have been named to the DHEW Equal Employment Opportunity Hearing Officer Panel. They are Evelyn L. Attix and James Gardner, National Heart Institute; Lawrence Coffin and Charles Mahone, National Library of Medicine, and Winston Mani, National Institute of Environmental Health Services.

Three other officers, previously named, are Philip Janus, NHI; Herbert Christoferson, National Institute of Dental Research, and Dr. David Johnson, National Institute of Arthritis and Metabolic Diseases.

Hearing officers listen to complaints at the Department level about alleged discrimination after decisions made at agency level are appealed.

### May Travel Far Afield

They always hear complaints from agencies other than their own. They may be called upon to travel to DHEW installations anywhere in the country.

The Federal Government's employment policy prohibits discrimination against anyone because of race, color, religion, sex, or national origin.

When an employee files a formal (written) complaint of discrimination, it is investigated by the agency's Equal Employment Opportunity officer.

If the complainant is not satisfied with that officer's decision, he may request a DHEW hearing. A hearing officer is assigned from the panel.

Dr. Colvin L. Gibson heads the EEO program at NIH.

## History of Med. Society Meets March 6 at NLM

The Washington Society for the History of Medicine will meet in the Billings Auditorium on Thursday, March 6, at 8 p.m. The meeting is open to visitors.

Dr. E. James Lieberman will discuss "L. L. Zamenhof: Dr. Esperanto." Dr. Lieberman is chief, Center for Studies of Child and Family Mental Health, National Institute of Mental Health.



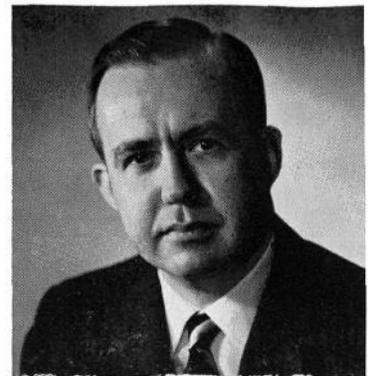
Eighteen Red Cross Hospital Volunteers have completed 4 months of special training for service to Clinical Center patients. From left are: Mrs. Mildred Lichow, Mrs. Marian Verhulst, Mrs. Irene Dietrich (CC Volunteer Unit Vice Chairman), Mrs. Pearl Mason (CC Chairman), Mrs. Zipora Carmon, Mrs. Pamela Mellor, and Mrs. Frances Burke. Not present for the photograph were: Mrs. Ruth Hay, Mrs. Dorothy Peck, Mrs. Joan Nolan, Mrs. Jane Kruze, Miss Judith Clark, Miss Patricia Dee, Miss Susan Brown, Miss Dawne Harper, Miss Shirley Morgan, Miss Barbara Ostrowski, and Miss Lynn White.

## Musical on Weight Control Rescheduled for March 11-13

A 21-minute color film to encourage overweight viewers to undertake a safe and effective weight-control program has been rescheduled for March by the Employee Health Service.

The movie, "Song of Arthur," was originally scheduled in January, but did not arrive in time.

The Broadway type musical will be shown at the following locations: CC auditorium, Tuesday, March 11, 11:30 a.m. and 12:30 p.m.; Barlow Bldg., Room 13C05, Wednesday, March 12, 12 noon and 1 p.m., and Westwood Bldg., Thursday, March 13, at 1:30 and 2:15 p.m.



L. Earl Laurence, recently named executive officer of the Clinical Center, has been with the CC Office of the Director since 1961. He received his M.A. degree in hospital administration from George Washington University.

## 'Poster Craze' Lecture to Describe History and Art

"The New Great Poster Craze" will be the topic of a talk given by Dr. Alan Fern, assistant chief, Prints and Photographs Division, Library of Congress.

He will discuss its history and development as an art form tomorrow (Wednesday), March 5, at 8:30 p.m., at the Clinical Center auditorium.

Dr. Fern's lecture will be illustrated with slides of photographs taken from "Words and Images," a book coauthored by him and Mil-

dred Constantine. The book was published by the Museum of Modern Art.

The lecture, sponsored by the Foundation for Advanced Education in the Sciences, is open to NIH personnel and the public.

## NIH Television, Radio Program Schedule

### Television

#### NIH REPORTS

WRC, Channel 4  
Sundays—3:55 p.m.

#### March 9

Dr. Viron L. Diefenbach,  
Director, Division of Dental Health, BHPEMT  
Subject: Dental Health in the U.S.: Key Issues

#### March 16

Dr. Viron L. Diefenbach,  
Director, Division of Dental Health, BHPEMT  
Subject: Dental Health in U.S.: Key Issues

### Radio

#### DISCUSSION: NIH

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

#### March 7

Dr. Robert S. Gordon, Jr.,  
clinical director, NIAMD  
Subject: Recent Advances in Medical Research at NIAMD

#### March 14

Dr. John C. Greene,  
deputy director, Division of Dental Health, BHPEMT  
Subject: Teeth After 40

Both interviews take place during intermission, Library of Congress Chamber Music Series.

## Bibliography on Cancer Useful for Teachers

A new bibliography on cancer for the public has been issued by the Department of Health, Education, and Welfare.

The booklet, *Reading on Cancer*, was prepared by the National Cancer Institute. It is a general revision of an earlier booklet by the same title.

The pamphlet lists books, reports, and magazine and journal articles, most of which require no prior knowledge of cancer on the part of the reader and are graded "easy." Others are graded "moderately difficult" or "difficult."

A notation under each listing gives clues to content and indicates whether the item is of special interest to teachers. A topical index organizes the entries according to major aspects of the cancer problem.

Suggestions to teachers on sources of information on cancer and on methods of using this subject matter in science courses are also included.

A preface explains that "although prepared with the needs of students and teachers in mind, this listing should be no less useful to the general reader."

Single copies of *Reading on Cancer—An Annotated Bibliography* (PHS Publication No. 457 revised 1969) are available without charge from the DHEW, Washington, D.C. 20402.

The booklet may be bought in quantity from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at 25 cents a copy.

## Third Volume on Animals In Biomedical Research Available at NIH Library

"Methods of Animal Experimentation," the latest of three volumes covering the role of animals in biomedical research, is now available at the NIH Library.

The books, edited by Dr. William I. Gay, chief of the Research Grants Branch, National Institute of General Medical Sciences, explore the sophisticated procedures used today in animal experimentation.

The latest volume shows methods of dental research, microsurgery, and fetal surgery involving animals.

The book also illustrates the use of the fish and the dolphin in research, and the physiological measurements in the infant animal.

Emphasis is placed on behavioral science and its growing importance in animal research, including the conditioning of animals to withstand stresses.

The potential application of animal behavior to solution of human health problems is also analyzed.

## 'Bill' Overman Wins Award for Packaging A Vital Vegetable, Prolonging Shelf-Life



Otis Ducker, head, Supply Unit, SMB (left), gives a hearty handshake of congratulations to William Overman at a recent Employee Suggestion Award ceremony honoring 'Bill' for his packaging idea.

Red letter days are becoming rather frequent in William M. Overman's career. Mr. Overman is an inventory management specialist who has been with the Supply Management Branch since he started working at NIH in 1957.

On Monday, Feb. 3, he won an Employee Suggestion Award. The next day his award suggestion—the proper packaging of a vital vegetable for NIH animals officially came into use in the laboratories here.

Mr. Overman, who has so much to do with the animal food and bedding operation at SMB, won his Employee Suggestion Award for devising a new and vastly improved packaging system for the vege-



William Overman will soon insert the plastic bag stuffed with kale into the sturdy receptacle held by Clyde McKinney, warehouse foreman, Animal Food and Bedding Operation, SMB.

table, fresh kale.

Now kale is to NIH animals what spinach used to be to children—necessary.

To the guinea pigs, rats, mice and hamsters, invaluable research animals in nutrition studies, it is a prime water substitute and vita-

min C source.

"Kale," Mr. Overman said, "contains over 80 percent moisture; it's given to the animals in place of tap water. It's the main dietary supplement of many of the animals here."

Besides using a large amount of this food stuff on the reservation, NIH also sends a supply to the Patuxent Research Laboratory in Laurel, a field station for NINDS; St. Elizabeths Hospital, and NIEHS.

Mr. Overman explained the old procedure for shipping and packaging kale to NIH, versus the method he devised.

### Field Hands Picked Kale

"Formerly," he stated, "kale used at NIH was placed in baskets by the field hands who picked it. Vegetable contamination could start at several points: in the fields, enroute here, in the ice placed over the vegetable to keep it cool, or in the crates the kale was shipped in.

"That's all changed," Mr. Overman noted.

He explained that food service handlers passed by the Department of Agriculture now handle the operation from the time the kale is picked in Norfolk, Va., until it leaves the warehouse.

"There was a definite need for something to be done about the packaging, also," said Mr. Overman, "so I went ahead and experimented with ideas. I visited the

## Joseph Albrecht Retires, Served as Head of NCI Pathological Tech. Sec.

Joseph M. Albrecht, National Cancer Institute, retired last month after 18 years of Government service.

Mr. Albrecht has been head of the Pathological Technology Section, Laboratory of Pathology, for 14 years.

He has served as a consultant to the NCI staff on the technique of preparing tissues for microscopic diagnosis.

He planned and carried out experiments to develop new procedures and to improve methods for preparing laboratory specimens.

Mr. Albrecht evolved new techniques for the handling and cutting of tissue-culture material in diffusion chambers.

He also developed a method for the cutting of unfixed, undecalcified, frozen bone.

Mr. Albrecht was educated at the University of Minnesota and Washington University of St. Louis.

Prior to joining NCI, he served 23 years as chief technician, Department of Anatomy, Washington University School of Medicine.



Mr. Albrecht evolved techniques for handling and cutting tissue-culture material in diffusion chambers, and for cutting unfixed, undecalcified, frozen bone.

warehouse in Norfolk to see what could be done at that end."

From this research Mr. Overman came up with his award-winning idea of placing kale in 5-pound polyethylene bags with plastic liners.

After the kale is packed each bag is heat-sealed and air-tight. Cardboard containers, large enough to hold two bags of kale with crushed ice between, now receive the vegetable.

The containers are stacked on refrigerated trucks which immedi-

(See MR. OVERMAN, Page 5)

## Project to Provide Further Education For Practicing Physicians Is Announced

A 2-year contract for a project to provide continuing education for practicing physicians in the Jacksonville, Fla., area has been announced by Dr. Robert Q. Marston, NIH Director.

The contract is with seven hospitals in the Jacksonville area that have formed the Jacksonville Hospital Educational Program (JHEP).

About 400 doctors in the community will be offered training sessions in their specialties, Dr. Marston said.

"Faculty" for this project will be specialists already in the region. Between 30 and 40 will be trained at the University of Florida's College of Medicine in Gainesville and other centers.

### Teaching Techniques Acquired

Upon completion of their courses, which will include both medical and teaching techniques, they will be given "faculty" status and will teach locally those who are enrolled for further training.

The contract will be administered by the Division of Physician Manpower in the Bureau of Health Professions Education and Manpower Training.

Dr. Leonard D. Fenninger, Bureau Director, said, "Continuing education for a physician in practice is a lifelong challenge. He is beset by rapid advances in technology and by the impact of the miracle of what has been done in the area of communicable disease through preventive measures.

"He is also confronted with increasing demands and expectations on the part of the general public, brought about partly by the surge of legislation that the Congress has enacted in its drive to make the best care possible available to all the people of the Nation, by the general overall increase in education levels among the general population, and by the intensely creative social changes taking place today."

### Staff to Conduct Seminars

About 30 seminars will be conducted by the newly-trained staff appointees.

Periodically, the results of the program will be evaluated to determine how well the students are learning and applying the new information, how effectively the instructors are teaching, and whether the subject matter or the methods should be revised.

Dr. Max Michael, Jr., Executive Director of JHEP and assistant dean of the University of Florida College of Medicine, is the project director.

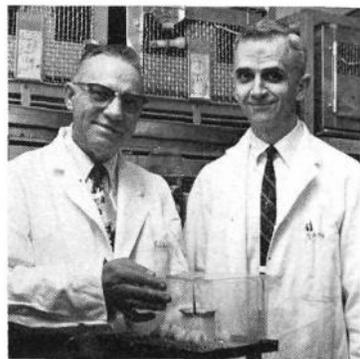
"This endeavor is an outgrowth of JHEP'S experience over a 10-year period in coordinating internships and residencies throughout the community and of its efforts to keep up with the information explosion," Dr. Michael said.

## Frederick Atwell Retires, Had 37 Years' Service In Fed'l Government

Frederick J. Atwell, assistant supervisor and animal caretaker, Laboratory of Biochemical Pharmacology, National Institute of Arthritis and Metabolic Diseases, retired last month after more than 37 years of Government service.

Mr. Atwell worked for the PHS downtown before NIH moved to Bethesda in 1938. One of his first jobs at NIH was helping to clear the landscape where Buildings 1 through 5 now stand.

For the past 11 years Mr. Atwell has been president of the Old Timers Club, which he organized 15 years ago, with Jordan Bryan, Sup-



Frederick J. Atwell (left) and Dr. Kehl Markley III, both of the Laboratory of Biochemical Pharmacology, NIAMD, pose with long-time furry friends in the animal room of Bldg. 4.

ply Management Branch.

In 1927, he entered the U.S. Army, in which he served for more than 6 years.

Retirement plans involve gardening and an old hobby, repairing and puttering with electrical equipment.

### BHPEMT to Begin Move to Reservation Friday, March 7

According to the Space Management Section, the long-awaited move of the Bureau of Health Professions Education and Manpower Training from Arlington, Va., to the NIH reservation will begin Friday, March 7.

BHPEMT will occupy much of the new C Wing of Building 31, as well as space in the B Wing.

## DR. URBAN

(Continued from Page 1)



Dr. Urban served as officer-in-charge of the Dental Practitioner School in Guam, Mariana Islands. Here, selected islanders were trained as dental practitioners.

aboard the aircraft carrier U.S.S. Wasp during operations in the Marianas and the invasions of Iwo Jima and Okinawa.

He also commanded the dental staffs of Naval hospitals, naval air stations, the cruiser U.S.S. Richmond, and the U.S. Naval base at Naples, Italy, as well as several Naval dental schools in the United States.

## Dr. Richard W. Olmsted Joins Staff of NICHD

Dr. Richard W. Olmsted, Chairman of the Department of Pediatrics at the University of Oregon Medical School, on sabbatical leave, has joined the National Institute of Child Health and Human Development.

Dr. Olmsted will study methods for increasing the interaction between behavioral and biomedical scientists in medical schools.

### Develops Other Programs

He will also develop programs to promote the behavioral sciences in medical schools.

Dr. Olmsted received his B.A. degree from Dartmouth College in 1941, and an M.D. degree from Harvard Medical School in 1944.

He served his internship and residency in Pediatrics at the New Haven Hospital in New Haven, Conn., and did post-residency as a Fellow in Cardiology with the New Haven Rheumatic Fever and Cardiac Program.

From 1949 to 1953 Dr. Olmsted was in private practice.

Before joining the University of Oregon Medical School he was assistant professor of Pediatrics, Temple University School of Medicine, and attending pediatrician and Director of Outpatient Department, St. Christopher's Hospital for Children.

## NCI Booklet Describes Studies of Role Viruses Play in Causing Cancer

Studies of the role viruses play in causing cancer are described in a 20-page booklet, *Virus-Cancer Research*, issued for the public by DHEW.

It was prepared by the National Cancer Institute as a revision of an earlier booklet by the same title.

The booklet explains the approaches used in current research.

It discusses the nature of viruses, their existence in our modern environment, and their implication in leukemias, lymphomas, and solid tumors.

The pamphlet describes efforts to find a possible virus-cancer path from animals to man, and reports on the prospects for prevention and therapy of viral diseases.

According to the pamphlet, viruses are responsible for such a variety of cancer in laboratory animals that it would be surprising if they did not cause some type of cancer in man.

### Hope for Answers

By making use of tissue culture, electron microscopy, and many other sophisticated laboratory techniques, researchers now hope to come up with answers to the questions posed by this evidence.

If a virus-cancer link in humans can be demonstrated, it may pave the way for the development of new preventive measures and may open up new areas in treatment.

Single copies of the pamphlet, *Virus-Cancer Research* (NIH Publication No. 29), are available without charge from DHEW, Washington, D. C. 20402. It may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 at 20 cents per copy.



Dr. Olmsted will develop programs to promote the behavioral sciences in medical schools.

## Medical Treatment of Babies From Conception Surveyed in TV Program

Two National Institute of Child Health and Human Development grantees have taken part in a television program that surveyed medical treatment of babies from conception through the first month after birth. They are Dr. Edward Hon, Yale New Haven Hospital, and Dr. Louis Gluck, Dana Newborn Special Care Unit of the Yale New Haven Hospital.

The two-part program, entitled "The First Ten Months of Life," was narrated by Walter Cronkite.

Drs. Hon and Gluck discussed the development of a new branch of medicine, Fetology.

### Formerly Fetus Untreatable

Formerly a fetus was considered unviewable, unreachable, and untreatable. Now, methods of detecting medical problems in fetuses have been developed so they can be treated while still in the womb.

Dr. Hon demonstrated a system he developed that can detect babies who have turned on their umbilical cords and thus shut off part of their oxygen.

Previously, these infants were delivered by Cesareans. Doctors now untangle the cord by turning the mother on her side. This procedure has reduced by two-thirds the number of Cesareans performed by the Yale team of doctors for fetal distress.

A nursery, especially designed to take care of medical emergencies in the newborn, was filmed at the Dana Newborn Special Care Unit; Dr. Gluck explained its facilities.

Since the unit opened in 1960, twice the number of babies treated have survived as would have been expected from national infant mortality statistics.

## William Wilson, BHPEMT, Briefs Medical Officers On U. S. Health Programs

Medical officers from six nations who are attending the Department of the Air Force Academic Instructor and Allied Officer School, Maxwell Air Force Base, Ala., were recently briefed on U.S. health programs.

William S. Wilson, Bureau of Health Professions Education and Manpower Training, explained the relationship between the Federal, State, and local government's supervision of health programs.

Mr. Wilson, who is chief, Foreign Students Educational Branch, Division of Health Manpower, Educational Services, BHPEMT, also discussed international health and the role of the Federal Govern-

## Oral Habits Due to Emotional Problems Cause Facial Pains of TMJ Dysfunction

Two dentists and a psychologist at the University of Illinois Medical Center in Chicago will test their theory that tension-relieving oral habits related to emotional problems can lead to the severe, yet difficult-to-diagnose, facial pains of "temporomandibular joint" (TMJ) dysfunction.

The TMJ is the ball and socket hinge (one on each side of the face) where the lower jaw (mandible) fits into the skull's temporal bone.

### NIDR Supports Work

The investigation, directed by Dr. Daniel M. Laskin, is supported by the National Institute of Dental Research.

An earlier study at the Illinois TMJ Research and Treatment Center revealed emotional problems in many TMJ patients.

While some of these patients could be classified as "neurotic," psychological tests showed that most of this group were "stress-reactors," like ulcer and overweight patients.

Under emotional stress, some TMJ patients clench or grind their teeth or chew on pencils or other hard objects. The resulting strain on their chewing muscles can cause muscle spasms, one of the first symptoms of TMJ dysfunction.

The influence of muscle strain became further evident when the investigators found that "normal" volunteers as well as TMJ patients develop similar pain when they bite hard, for as long as they can, on a device with a weight attached to it.

Dr. Laskin explained that muscle spasms can displace the jaw, allowing teeth to shift.

### Joint Vulnerable to Disease

This displacement could also interfere with chewing and even derange the "ball and socket" part of the joint so that ultimately the joint would be vulnerable to degenerative disease.

Since appropriate treatment depends on determining the cause of pain, the investigators plan extensive clinical, physiological, and psychological examinations to aid in diagnosis.

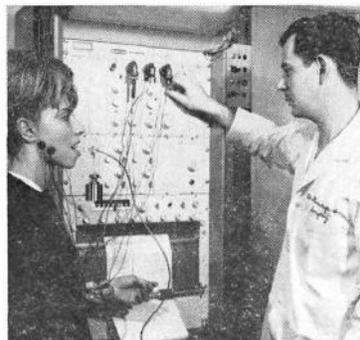
Treatment will include counselling on problems and general psychological therapy.

Working with Dr. Laskin on these studies are Dr. Charles S. Greene and Dr. Daniel E. Lupton. They are in the Department of Oral and Maxillofacial Surgery.

ment in that field.

Countries represented at the briefing were: Afghanistan, Korea, Malaysia, Philippines, Turkey, and South Vietnam.

The FSEB works with people from foreign countries on health programs and also evaluates and advises on occupational training in health professions.



A model simulating Myofascial Pain-dysfunction Syndrome undergoes a Masticatory Muscle Endurance Test at the Temporomandibular Research Center, University of Illinois College of Dentistry.

## Exhibit by NIDR Wins Award for Excellence

A scientific exhibit of the National Institute of Dental Research won an award for "Excellence of Presentation" at the 44th annual convention of the American Speech and Hearing Association.

The exhibit, "Case Studies of Oral and Pharyngeal Form and Function," was designed in cooperation with the General Illustration and Motion Picture Sections of the Medical Arts and Photography Branch, Division of Research Services.

The interactions of medicine, dentistry, and speech science, and the methods employed in the study of persons who have distortions of form or function of the mouth and pharynx are outlined in the exhibit.

## MR. OVERMAN

(Continued from Page 3)

ate's head for the loading platform at Bldg. 14 on the reservation. There, they are put on a movable storage pallet, picked up by a forklift which is driven through the doors of a room-size refrigerator, and stored until required.

A lapse of only 20 hours takes place from the time the kale is picked, washed, chilled, packaged, stacked, and transported to its destination on the reservation.

He explained that the improved packaging has increased the "shelf-life" of kale to 10 days. Formerly, when it was stacked in bushel baskets it wilted within 3 days.

Mr. Overman discusses kale and nutrition with all the zest of a Julia Child happily marrying the flavors of beef bourguignonne.

## 'Arthritis and Research,' NIAMD Pamphlet, Lists Major Disease Suspects

Two theories regarding the cause of rheumatoid arthritis are described in a new pamphlet, *Arthritis and Research*, published by the National Institute of Arthritis and Metabolic Diseases.

One is the concept of autoimmunity, which holds that the body, for unknown reasons, produces abnormal antibodies that are directed against some of its own tissues rather than against foreign material.

### Two Theories Considered

The other theory is that an infectious process might be responsible.

This second hypothesis may still be consistent with the autoimmunity concept, because it could be an infectious agent that triggers the production of abnormal antibodies.

At this time, one suspect is a minute organism of the type called mycoplasma, which is known to cause an arthritis in animals similar to human rheumatoid arthritis.

The booklet describes the major categories of arthritis and rheumatism and indicates current research and treatment in each of the disorders.

Single copies of the pamphlet may be obtained from the Information Office, NIAMD, Bethesda, Md. 20014.

It is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at 35 cents each.

## Latest Participants in NIH Visiting Scientists Program Listed Here

1/31—Dr. Hsiang-fu Kung, Taiwan, Laboratory of Biochemistry. Sponsor: Dr. Thressa C. Stadtman, NHI, Bldg. 3, Rm. 121.

2/3—Dr. Harvey L. P. Resnik, U.S.A., Center for Studies of Suicide Prevention. Sponsor: Dr. Morton Miller, NIMH, Barlow Bldg., Rm. 12D01.

2/5—Dr. Kjell J. Nustad, Norway, Section of Peptide Biochemistry. Sponsor: Dr. John J. Pisano, NHI, Bldg. 10, Rm. 7D15.

2/5—Dr. Roberto M. Tosi, Italy, Laboratory of Immunology. Sponsor: Dr. Ralph A. Reisfeld, NIAID, Bldg. 10, Rm. 11B13.

2/7—Dr. Sergio S. Alergi, Italy, Laboratory of Preclinical Pharmacology. Sponsor: Dr. Erminio Costa, NIMH, St. Elizabeths Hospital, Washington, D.C.

2/17—Dr. Tadashi Satoh, Japan, Laboratory of Cellular and Comparative Physiology. Sponsor: Dr. Charles H. Barrows, NICHD, Baltimore City Hospitals, Baltimore, Md.

## Drs. Bruno, Pinkerson Join NHI Programs in Collaborative Studies

Drs. Anthony M. Bruno and Alan L. Pinkerson have been appointed senior professional staff members in Collaborative Studies Programs of the National Heart Institute.

Dr. Bruno, formerly with NHI's Training Grants and Awards Branch, Extramural Programs, is joining the Institute's Artificial Heart Branch, which Dr. Frank Hastings heads.

Dr. Pinkerson's responsibilities will be in the Myocardial Infarction Branch of NHI. Dr. Peter Frommer is acting chief of this Branch.

Both scientists will assist in the analysis, planning, and monitoring of medical aspects of their respective programs.

### Backgrounds Cited

Before joining NHI in 1967, Dr. Bruno headed the admitting and receiving department at Los Angeles County Harbor General Hospital, the principal clinical teaching facility of the University of California School of Medicine.

He served also as research associate professor of Anatomy at the university.

In addition to his teaching and research experience, Dr. Bruno has received postdoctoral training in cardiovascular surgery both here and abroad.

Concurrent with his present position, Dr. Pinkerson serves as lecturer, Department of Physiology and Biophysics and instructor, Department of Medicine, Georgetown University School of Medicine.

He also is an attending physician at Georgetown University Hospital, Washington Hospital Center, and Sibley Memorial Hospital in Wash-

## NICHD Pamphlet Reveals Relationship Between Family, Retarded Child

What effect does having a mentally retarded child have on the other members of the family; how does the family attitude affect the retarded child?

Aspects of these questions are discussed in a publication released by the National Institute of Child Health and Human Development.

The document evolved from a recent NICHD conference on an important but neglected side of mental retardation.

The conference, conducted by Dr. Michael Begab, head, Mental Retardation Research Centers Program, NICHD, was attended by a group of sociologists.

They discussed the effects of mental retardation on the child and family in regard to social research, clinical practice, and family theory.

The family has a strong impact on the retarded child's development, personality, and emotional status. The new document investigates this role, parental attitudes, and child management techniques.

Single free copies of *The Social Sciences and Mental Retardation: Family Components* are available from the Public Information Branch, NICHD, Bethesda, Md. 20014.

ington, D.C.

His research experience includes investigations of cardiac rhythm and its effect on vena caval blood-flow, studies in pulmonary blood-flow, reflex controls of the systemic circulation, and cardiovascular responses to drugs.

For the past 2 years he practiced as an internist and cardiologist with Group Health Association, Inc. in Washington, D.C.

## Horses Susceptible to Induced Infection May Be Reservoir of Human Flu Virus

Horses have been found susceptible to artificially induced infection with type B human influenza. This finding, by NIH and University of Maryland scientists, along with the recent discovery of flu antibody occurring naturally in horse sera, indicates that horses may serve as a reservoir of human influenza virus.

Antibody against type B flu virus was found in the blood of horses in the vicinity of Toronto, Canada, suggesting that natural infection of horses can occur.

This led the NIH-University of Maryland team to attempt experimental infection of a group of 12 Chincoteague ponies with human influenza virus.

These animals, from a wild herd living on Assateague Island, Va., had been relatively isolated from other horses as well as humans, and lacked detectable antibody against influenza B virus.

Recovery of virus from nasal washings indicated that 8 of 12

ponies had become infected. Nine of the animals developed serum neutralizing antibody.

The scientists concluded that horses are susceptible to influenza B infection.

Whether such infections actually occur in nature, or are transmissible to man, remains uncertain, but appears possible. Epidemiological surveys of horse populations might therefore be helpful in controlling human influenza.

Dr. J. A. Kasel, Dr. R. J. Byrne, and E. W. Harvey, all of the National Institute of Allergy and Infectious Diseases' Laboratory of Clinical Investigation, conducted the study with Dr. R. Shillinger of the University of Maryland.

## DCRT to Convert Its Processing System For Simultaneous Job Runs on March 17

March 17 is Saint Patrick's day, but at the Division of Computer Research and Technology the date has been given another designation. It's MVT Day, the day NIH's central Computer Center will abandon the MFT (Multiprogramming with a Fixed Number of Tasks) system of processing, and convert to the new and much more powerful MVT (Multiprogramming with a Variable Number of Tasks) system.

In practical terms, this means that many jobs can be run simultaneously in a computer where in the past each job had to be run sequentially.

### Team Devises System

Mathematical modeling laboriously worked out by the Computer Systems Team of DCRT's Computer Center Branch over the last 9 months has been largely responsible for bringing this new system into being.

The new MVT system is made possible by assigning only that space in the computer's memory and on its ancillary equipment (tapes, disks, card readers) actually needed by the job itself or its individual steps.

Formerly, a job or its steps might require only a fraction of the computer's resources, but it tied up all the rest. Even a small task could, therefore, make the computer unavailable for other uses.

Now these resources will be shared, with each job being carefully fitted into the available space. As a job or a job step is completed, freeing a block of space, a new job will be added.

Maximum use will thus be made of computer time, and the "turn-around" time, or time the user must wait to have his results returned to him, will be reduced.

With the implementation of the MVT system, the CPS II, or Conversational Programming System will also become a standard production system at the Computer Center.

A limited number of public terminals will be installed in Bldg. 12 for use by any authorized NIH computer user. Service will be available from 8 a.m. to 8 p.m., Monday through Friday, beginning March 17.

### Private Terminals Available

Requests for the installation of private terminals for use by single organizations or individuals are being accepted by the Computer Center Branch.

Initially, all terminals installed will be connected to the central computer via Data Phones from the telephone company. Eventually the Center plans to provide portable acoustic couplers so that standard office telephones can be used to connect terminals to the computer.

New simplified account numbers will also be introduced for all DCRT services on March 17.

Detailed information on all these changes and on training courses for use of the CPS system is included in the Feb. 7 (#7) issue of the Computer Center's technical publication, *Interface*. A copy can be obtained by calling Ext. 65431.

Users who have questions after reading *Interface* are urged to contact the Program Assistance and Liaison (PAL) Unit at the Computer Center before March 17.

## Dr. Underwood Retires From Federal Service, With DRG Since '61



Dr. Bruce Underwood, veteran public health official, concludes career that spanned three decades.

Dr. Bruce Underwood, assistant chief, Career Development Review Branch, Division of Research Grants, recently retired, bringing to a close a career of 31 years in public health.

Dr. Underwood's first active service in PHS was in 1956 when he was appointed chief of the Professional Services Branch, Division of Hospital and Medical Facilities. Later, he became chief of the Nursing Home Services Section, Division of Chronic Diseases.

He received his M.D. degree from the University of Louisville School of Medicine in 1937. For a number of years, he served with the Kentucky State Department of Health and the Kentucky State Medical Association.

Dr. Underwood came to DRG in 1961 as executive secretary, Cell Biology Review Panel, and in 1963 was appointed assistant chief, Research Career Program.

## EPICARDIECTOMY

(Continued from Page 1)

control level of ventricular performance.

Then the coronary branch which supplies the left ventricle was clamped off for a 2-minute period and the second ventricular function curve was recorded.

The coronary was then unclamped for 30 minutes of free flow, then occluded once more for 2 minutes.

The epicardium was peeled from the heart during the 30-minute period between recordings of ventricular function in the 24 dogs.

The 2-minute periods of coronary occlusion were brief enough to allow the myocardium to recover, so the last of the four ventricular curves resembled the first.

The second curve showed fairly severe depression of ventricular function during the first period of coronary occlusion.

In the group subjected to epicardiectomy during the 30-minute period, ventricular function during the second period of coronary occlusion was improved over the first.

## Hypertension: Its Causes And Treatment Revealed In Publication by NHI

More than 17 million American adults are afflicted with hypertension; that figure can go as high as 22 million. It is the commonest of the diseases affecting the heart and blood vessels.

The National Heart Institute has recently issued a publication entitled *HYPERTENSION (High Blood Pressure)*.

The pamphlet describes what hypertension is; the causes and diagnosis of hypertension; its drug treatment, and what research is doing to find the cure for hypertension.

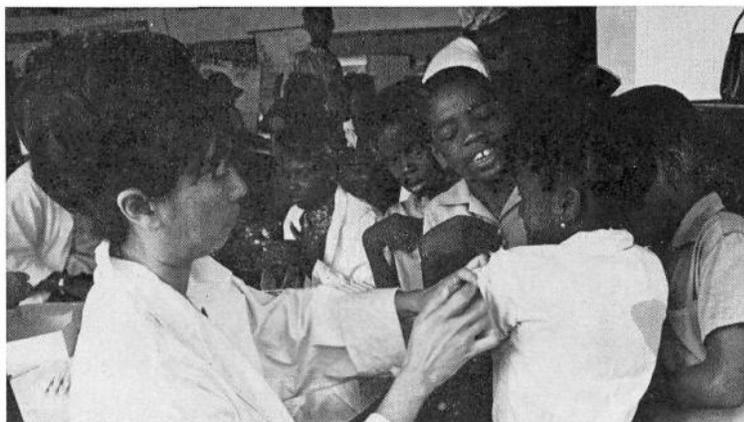
### Increased Risks Cited

The publication points out that hypertension increases the risk of heart attacks and strokes by accelerating the development of artery-clogging deposits of atherosclerosis.

However, almost all cases of hypertension can be controlled by a variety of drugs, or combination of drugs for reducing elevated blood pressure.

During the past decade the death rate from hypertension has decreased by nearly 50 percent.

Copies of the NHI Publication, No. 1714, may be obtained by writing to the Heart Information Center, NHI, Bethesda, Md. 20014. Quantity copies may be purchased at 50 cents each from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.



Two groups of 16,000 and 25,000 Jamaican school children have been vaccinated with the Cendehill strain of German measles vaccine. The study is under the direction of Dr. Louis S. Grant, Microbiology Head at the University of the West Indies.

## RUBELLA

(Continued from Page 1)

in the unborn child. According to a report made at the conference by NINDS scientists, there is now evidence that rubella may also exert a harmful—although less serious—effect on the fetus in the fourth to sixth month of pregnancy as well.

Data presented at the conference focused on results obtained in tests of three vaccines in various population groups.

The three live, attenuated (weakened) virus preparations are: HPV-77 (first derived by scientists at the DBS and grown in a variety of tissue cultures); Cendehill (attenuated in rabbit kidney cell cultures by scientists in a Belgian laboratory), and RA 27/3 (cultured in human embryonic cells by investigators at the Wistar Institute, Philadelphia).

None of these vaccines produced significant adverse side effects in children. In a small percentage of adult women and a few men given the vaccine, mild to moderate joint pains of a temporary nature were noted.

Drug companies involved in research on rubella vaccines include



ROUTINE CHECK for rubella rash was made twice weekly on all children in first four grades during Kaohsiung study. Dr. R. Palmer Beasley, University of Washington, and Nurse Martha Chen, U. S. Naval Medical Unit No. 2, check a Taiwanese schoolboy for signs.

Eli Lilly; Philips-Roxane; Merck Sharp and Dohme; Smith Kline and French; and Wyeth Laboratories.

Three—Eli Lilly, Philips-Roxane, and Wyeth—have worked under contract to NIAID in production of various rubella virus vaccine strains.

Merck Sharp and Dohme has produced its own virus strain but has also concentrated on HPV-77 and has adapted it to growth in duck embryo cell cultures. The Smith Kline and French company has tested and is promoting use of the Cendehill strain.

### World-Wide Trials Reported

At the conference, reports were given of vaccine trials in over 50,000 children in countries around the world, including the United States, Russia, Taiwan, Israel, Switzerland, Iran, and Jamaica. Small groups of adults have also been vaccinated in this country, France, Finland, and England.

All vaccines tested were reported to have produced protective levels of antibodies (protective substances in the blood) and to have shown no definitive evidence of spread of virus to unvaccinated contacts.

In some trials, the rubella vaccine was combined with those against measles and mumps. Hope was expressed by a number of conferees that multivalent vaccines might eventually be available to protect against these three common diseases of childhood.

Experimental HPV-77 vaccines produced in monkey kidney, duck embryo, and dog kidney cell cultures were equally effective (93 percent) when tested in a large group of Taiwan school children.

In order to determine what effect an attenuated virus might have on the fetus, scientists in several foreign countries vaccinated a small number of women scheduled for therapeutic abortions. In these cases, there was some evidence that virus could be found in both the placenta and fetus.

## NCI Conducts Evaluation Study on Arthropods For Anticancer Drugs

Within recent years microorganisms and plants have yielded several clinically useful anticancer drugs, notably actinomycin D, daunomycin and vincristine.

In an effort to uncover other compounds of novel structure from natural sources, the National Cancer Institute has undertaken the collection and assessment of chemical extracts obtained from species of the Arthropoda classes Insecta, Arachnida, Crustacea and Myriapoda.

The evaluation program is being conducted by Drs. Jonathan L. Hartwell and Harry B. Wood of the Cancer Chemotherapy National Service Center, NCI, in collaboration with Dr. George R. Pettit, Arizona State University, an NCI grantee.

As far as can be determined, this is the first systematic evaluation of arthropods as anticancer agents.

The task is one of large proportions; the class Insecta alone comprises nearly 900,000 species.

A substantial number of arthropod species from North and South America and Asia have already been examined in the program.

According to a preliminary report, a small number have given encouraging results when evaluated against rodent cancer.

For example, extracts obtained from certain butterflies, beetles and grasshoppers have shown activity against Walker 256 carcinoma (intramuscular) in the rat, and will be evaluated further.

Further investigation of the possible transmission of live attenuated virus to the fetus was strongly recommended by conferees who also expressed a need to know more about differences in reaction to rubella virus among pregnant and non-pregnant women.

The effectiveness of gamma globulin in meeting the special needs of pregnant women was also discussed. Results of studies vary, but evidence indicates that the varying degrees of protection may be explained by varying amounts of rubella antibodies in different gamma globulin preparations.

It was also reported that, although a "killed" virus vaccine safe for administration to pregnant women is within the realm of possibility, its development has encountered considerable technical problems.

Suitable cell cultures which will produce the large amount of virus needed are not now available nor can "killed" virus capable of evoking an immunogenic response be uniformly produced at this time.

# A Visit to NICHD's Gerontology Research Center a 'Must' for Foreign Scientists

By Dan Rogers

Photos by W. H. Fisher and R. B. Schnick

A visit to the Gerontology Research Center, National Institute of Child Health and Human Development, is becoming a *must* for foreign scientists traveling in the area.

Since GRC's 4-story building opened last year, investigators, gerontologists, geriatricians, and physicians in other fields have traveled from Rumania, Israel, Australia, Japan, Chile, and Great Britain to visit the largest facility of its kind in the Western Hemisphere.

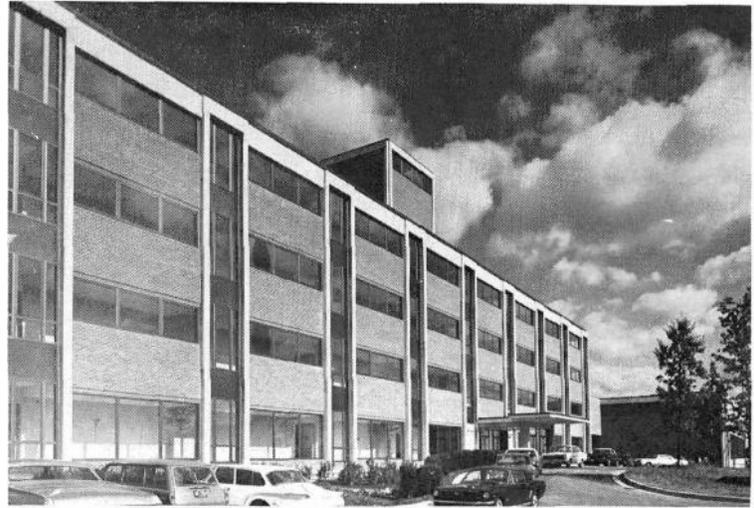
This summer, visitors from 28 countries attending the 8th International Congress of Gerontology in Washington, D.C., Aug. 24-29 will tour the Center.

This group will see the spacious animal quarters, a specialized research library, modular laboratories and other facilities that make the Center outstanding.

During the sessions members of the Congress will discuss the biological, psychological, and social theories of aging, and the health care of the elderly.

The conference is being supported in part by a grant from NICHD.

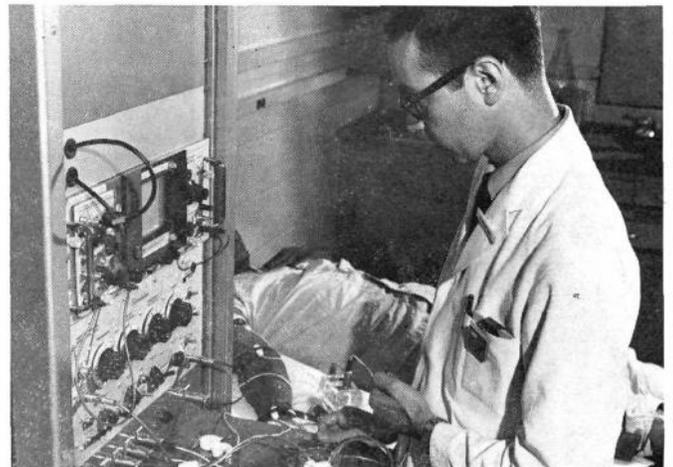
NIH scientists wishing to attend the Congress and visit the Center may obtain registration information from the Secretariat, 8th International Congress of Gerontology, 9650 Rockville Pike, Bethesda, Md. 20014, or telephone 530-3200.



NICHD Gerontology Research Center in Baltimore, Md., will be on the visiting agenda for many of the scientists attending the 8th International Congress of Gerontology this summer in Washington, D.C.



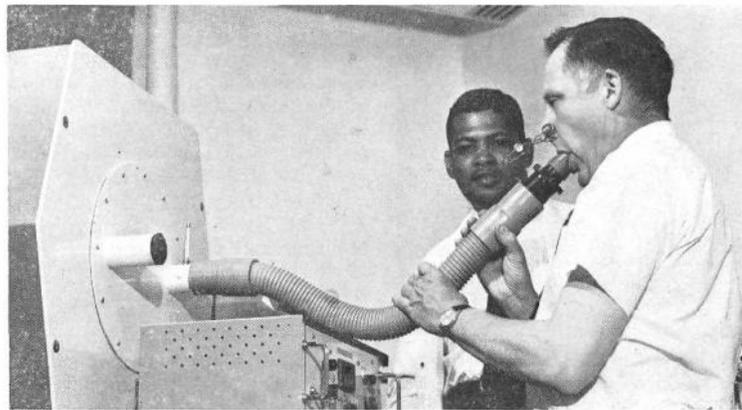
Studies on molecules active in cell processes that may be basic to aging are conducted by Dr. Yong Ae Shin, Laboratory of Molecular Aging; she is determining the effect of metal ions and molecules on DNA melting curves.



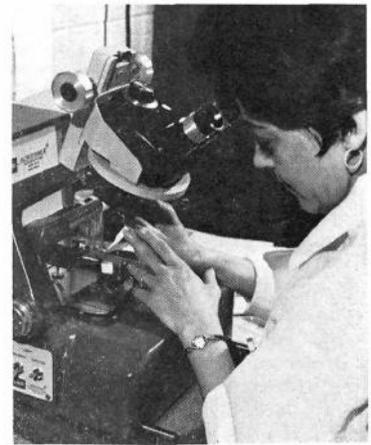
Dr. Melvin Haas, Clinical Physiology Branch, monitors age changes in the nervous system by measuring sensory and motor nerve conduction velocity. The relationship of conduction velocity to diabetes indicators can also be determined.



A tonography test to detect glaucoma is given to volunteer subject Neil Hill by Lee Pisarski. Both work in the Clinical Physiology Branch.



Posing as one of the Center's more than 600 healthy male volunteers, Rowland Schnick, Photography and Arts, takes a lung function test given by Sylvester McArthur, Clinical Physiology Branch. The subject breathes hard for 15 seconds into a spirometer which records lung capacity changes.



Tissue slices are prepared for viewing through an electron microscope by Lela Carter, Laboratory of Molecular Aging, Gerontology Research Center.