

the



Record

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

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Vol. XXIV, No. 8

NATIONAL INSTITUTES OF HEALTH

Workshop on Research, Training Opportunities For Minorities Opens

Ways of providing better research and training opportunities for minority group physiologists will be discussed by medical educators and administrators from the Federal Government, academic community, and private foundations at a workshop in Atlantic City tomorrow (April 12).

The workshop is sponsored by the National Institute of General Medical Sciences.

The American Physiological Society — one of six member components of the Federation of American Societies for Experimental Biology — will serve as co-host for the seminar, to be held in conjunction with the 56th annual meeting of FASEB, April 9-14.

Participants Noted

Faculty members from approximately 30 minority institutions will attend the workshop and other scientific sessions. NIH will be represented at the workshop sessions by Dr. DeWitt Stetten, Jr., NIGMS Director, and Dr. Thomas G. Bowery, Director of the Division of Research Resources.

Dr. Edward W. Hawthorne, professor and chairman of the Department of Physiology at Howard University, and Dr. A. Clifford Barger, APS past-president and professor of Physiology at Har-



Dr. Stetten



Dr. Bowery

vard University, are co-chairmen of the workshop.

Dr. Stetten will describe the NIGMS training and fellowship programs, focusing particularly on new Institute programs designed to assist the further train-

(See TRAINING WORKSHOP, Page 7)

Dr. Marston to Receive Loveland Award For NIH From Am. College of Physicians

For outstanding contributions to the progress of medicine and health, the National Institutes of Health will receive the Edward R. Loveland Award from the American College of Physicians.

Dr. Robert Q. Marston, NIH Director, will accept the award from ACP President Dr. Hugh R. Butt at the opening meeting of the College's 53rd Annual session next Monday, April 17, in Atlantic City, N.J.

Surgeons Select Marston To Give Cushing Oration

On Thursday morning, April 18, Dr. Robert Q. Marston, Director of NIH, will be the Cushing Orator at the annual meeting of the American Association of Neurological Surgeons in Boston.

The Association, formerly known as the Harvey Cushing Society, each year selects a distinguished leader in medical affairs to speak.

Later, Dr. Marston will appear on a panel which will discuss Funding of Research in Neurological Surgery.

Dr. Murray Goldstein, Director of NINDS Extramural Programs, will also take part.

Three NIH grantees are among the eminent scientists who will also be honored at this session.

Dr. Victor A. McKusick will receive the John Phillips Memorial Award for distinguished contributions in internal medicine.

Dr. McKusick Honored

Dr. McKusick, professor of Medicine at Johns Hopkins University School of Medicine, is one of the Nation's leading authorities on the application of genetics to medical practice.

The James D. Bruce Memorial Award for distinguished contributions in preventive medicine will be presented to Dr. Saul Krugman.

Dr. Krugman, professor and chairman of the Department of Pediatrics, New York University School of Medicine, is an authority on infectious and allergic diseases and has made many research contributions to the development of vaccines.

Dr. Robert A. Good will be the recipient of The American College of Physicians Award for distinguished contributions in science as related to medicine.

Dr. Good is professor and head of the Department of Pathology at the University of Minnesota School of Medicine.

Studies Thymus Gland

He is a research scientist noted for increasing the understanding of the role of the thymus gland in the body's immune system.

Dr. Good was recently named to the presidency of the Sloan-Kettering Institute for Cancer Research, and will assume the post next Jan. 1.

The ACP's annual session will include 5 days of scientific sessions which some 7,000 physicians are expected to attend.

Dr. Austen to Give R. E. Dyer Lecture At CC on April 19



Dr. Austen—a member of the NIAMD Arthritis Training Grants Committee—also serves on several national councils concerned with allergy and infectious diseases.

Dr. K. Frank Austen, physician-in-chief at Robert B. Brigham Hospital, Boston, will present the 21st annual R. E. Dyer Lecture on Wednesday, April 19, at 8:15 p.m., in the CC Jack Masur Auditorium.

His subject will be "The Inflammatory Response: Appreciation of Amplification and Control Mechanisms."

Explains Effector Systems

Dr. Austen will discuss the effector systems involved in acute inflammatory responses and the part they play in the development of such a reaction, as well as how they contribute to better understanding of certain human diseases.

Dr. Austen, who has held his present position since 1966, also is the Theodore Bevier Bayles Professor of Medicine at the Harvard Medical School and physician at the Peter Bent Brigham Hospital.

He is director of the Allergic Disease Center at the Robert B.

(See DR. AUSTEN, Page 4)

U.S.-Soviet Committee For Health Cooperation Holds First Conference

The first meeting of the U.S.-U.S.S.R. Joint Committee for Health Cooperation was held in Moscow the last week in March.

The agreement to expand collaboration between the two countries in the study of cancer, heart disease, and environmental problems was announced by HEW Secretary Elliot L. Richardson on Feb. 11 (see the *NIH Record*, March 1, 1972, p. 1).

The delegations were headed by Dr. Roger O. Egeberg, special presidential consultant on health affairs, and Dmitri Venedictov, Soviet Deputy Health Minister.

The American delegation included Dr. Robert Q. Marston, NIH Director; Dr. Theodore Cooper, Director of NHLI; Dr. Carl Baker, Director of NCI; Dr. David Rall, Director of NIEHS; Dr. Paul Ehrlich, Director of HEW's Office of International Health, and Dr. James Muller, OIH staff member.

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.

April 14

Dr. John P. Adams, G.W.U.
 (NIH Fellowship-NIGMS)
 Subject: Trauma

April 21

Kenneth Kemper, DCRT
 Subject: Computers and Patient Care

Interview during intermission,
 Library of Congress Concerts.

Health Benefits Program Open Season Ends Friday

Friday, April 14, is the last day to take advantage of the Open Season in the Federal Employees Health Benefits Program which started March 15.

Before the closing date, employees who plan to enroll or change their present plan, option, or type of enrollment should contact personnel offices for instructions or further information.

Those presently enrolled are reminded that new premium rates on some of the plans become effective April 16. Rates may increase, decrease, or remain unchanged.

A desk-to-desk memorandum on the Open Season and new rates was recently distributed to employees.

Fashions to Be Presented For Patients and Employees

A spring and summer fashion show for Clinical Center patients and NIH employees will be presented on April 13 at 8 p.m. in the CC 14th Floor Assembly Hall.

Professional models from the Models Guild will show fashions for casual, daytime, and evening wear from the French Poodle.

A courtesy discount card for that dress shop will be available upon request.



Primaries to Be Held Soon; Limited Time Off Allowed

Statewide primaries will be held on May 2 in the District of Columbia, on May 16 in Maryland, and on June 13 in Virginia.

Polls will be open in the District from 8 a.m. to 8 p.m., in Maryland 7 a.m. to 8 p.m., and in Virginia 6 a.m. to 7 p.m.

If the polls do not open 3 hours before or 3 hours after work, employees are permitted to report for work 3 hours after the polls open or leave work 3 hours before they close — whichever requires less time off.

The limited time off under these conditions is chargeable to administrative leave.

Time Off Granted

If the employee's voting place is beyond normal commuting distance, and vote by absentee ballot is not permitted, the employee may be granted time off on administrative leave if it doesn't exceed one full day.

Information on registration and voting has been posted on NIH Official Bulletin Boards.

For other information about voting requirements of individual states or for witnessing the signature of a PHS Commissioned Officer on the Federal Post Card Application used in connection with absentee ballot and registration, call the Employee Relations and Recognition Branch, OPM, Ext. 64973.

Day Care Information Available

For information about NIH Child Day Care Program Planning, please contact Mrs. Virginia Burke, Day Care Coordinator for NIH, OD, Ext. 61811.

Virginia Motorists to Get New Tag Questionnaires

The State of Virginia recently issued new automobile license tags to its motorists with an April 15 display deadline.

Soon after this date, the Protection and Parking Branch, OAS, will distribute a questionnaire for employees to furnish their new tag numbers.

Prompt return of these questionnaires through inter-office mailing will be appreciated.

If employees who reside in Virginia have not received this questionnaire by April 26, it indicates they have already registered their new number or that the computer does not have their office address. Call Ext. 66851 to make a correction.

Memorial Fund Established For Goldie Rubin, NICHD

A memorial has been established for Goldie Rubin who died the latter part of March. Mrs. Rubin had been secretary to Dr. Charles U. Lowe, scientific director, National Institute of Child Health and Human Development.

She had been with NIH since 1960, and with NICHD since 1963.

The memorial will be known as the Annual Goldie Rubin Award. NICHD will annually confer that honor on a staff member who is considered to most closely combine Mrs. Rubin's special qualities.

Friends and colleagues may contribute to the Goldie Rubin Memorial Fund, Room 3A51, Bldg. 31.



Among Easter festivities planned by the Clinical Center Patient Activity Section were an egg hunt, an Easter hat contest, and crafts sessions where patients decorated eggs and Easter baskets. Modeling their prize-winning bonnets are (l to r): Florence Kratzert (prettiest hat), Mary Wills (best in show-adults), and Dennis Harris (best in show-children). Members of the Glens Garden Club, Rockville (r), display their Japanese garden on the CC's 14th floor.

Thefts Increase at NIH; Employees Urged to Take Proper Security Steps

Nine employee vehicles were stolen from parking lots on the reservation last year, and personal property thefts also increased during this period. These facts indicate that employees are not following correct security steps.

Parking lots are constantly patrolled by the Guard Force. However, because of the considerable employee traffic during office hours, the guards cannot stop each individual and ask for identification.

Instead, they urgently need your help to prevent further losses.

- Make sure your car is locked when you leave it.
- Roll up the windows.
- Remove all attractive items that might encourage thieves to break into the car. Keep valuables out of sight or locked in the truck.

YOU Are Responsible

The burden of eliminating personal property losses from individual offices lies with you.

- Ladies, take your purse with you or place it in a locked cabinet or desk.
- Carry keys, wallets, and other small valuables on your person rather than leaving them in a coat on a rack.
- Do not leave coffee funds, flower funds, or similar collections of money in desk drawers. You are inviting theft. Lock them in a safe place.
- Transistor radios, TVs, portable tape recorders, and cameras should be kept under lock and key.
- Do not leave your office unattended during working hours.

Follow the procedures outlined under Item 102 in the yellow pages of the NIH Telephone and Service Directory when thefts are discovered.

Mabel H. Morris to Direct Region III Nursing Program

Mabel H. Morris, who recently joined the Division of Nursing, BHME, has been appointed Regional Program Director for Nursing in the Region III Office of HEW in Philadelphia.

Mrs. Morris has served in this office for the past year as a mental health consultant for NIMH.

Prior to this assignment, she supervised the nursing program at the Temple University Community Mental Health Center.

She was also a supervisor of the Community Nursing Services of Philadelphia.

Ralph Jackson Points Out Fact of Life—Continuing School Is Worth the Effort

Ralph T. Jackson, Jr., recently returned to NIH after one year at the Department of Defense Medical Equipment Repair School at Fitzsimmons General Hospital in Denver.

He left NIH as a participant in a medical equipment repair training program of the Biomedical Engineering and Instrumentation Branch.

He returned with a certificate from the U.S. Army Medical Department stating that he had successfully completed the advanced course in medical equipment maintenance.

The certificate is something to be proud of, but Mr. Jackson, a modest man, views it in a more pragmatic light.

However, his section chief, Clarence Sharp, head of the Systems Maintenance Section, BEIB, proudly says, "Now he's working on more complicated equipment. He has a knowledge of new electrical equipment that he did not have before."

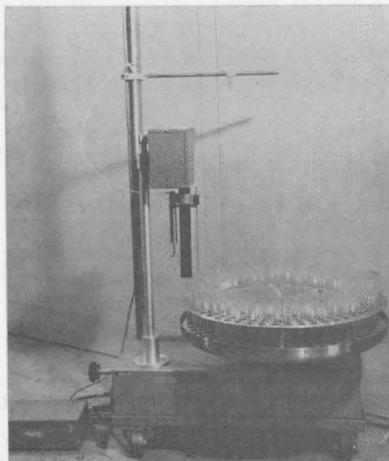
Mr. Jackson is not new to NIH nor to schooling. He was on the night-side campus Guard Force for 7 years. And as he also explained, "I'm used to going to school, I've been going all my life, or most of it anyway."

Explains Work

Before coming here in 1962 he was in the U.S. Air Force working in electronics. Mr. Jackson condenses the explanation of what happened from the time he left the Air Force until he went to Fitzsimmons, in a few pithy sentences.

"When I got out of the Air Force I looked for a job in electronics. I couldn't get it so I applied for a guard job at NIH on the evening shift.

"I went to school in the daytime — the Capitol Institute of



BEIB was one of the first developers of the sample extraction device which Mr. Jackson is fully qualified to repair. The device automatically removes a measured amount of patient's blood serum which is then inserted into other containers.



Mr. Jackson feels that the long hours of study at Fitzsimmons has paid off—now he is working on more complicated electronic equipment.

Technology — it's an electronic engineering school. I ran out of money and then went back under the VA.

"I saw the training program listed on the Guard Office bulletin board and I applied. I saw the higher echelon here, and an army liaison man, and I was selected."

Mr. Jackson was chosen under the Merit Promotion Plan.

Soon after, he and his wife, and their two children, drove out to Denver, rented an apartment, and he was ready to start school. Transportation, and salary were paid for by NIH.

The training program was divided into two parts — a 13-week basic course followed by a 35-week advanced program.

"With my experience, the first 13 weeks were rather basic. I had the electronics, but I didn't have it apply to medical equipment.

"We got into such things as respirators, anesthesiology equipment, dental equipment, and a bit of X-ray, all this in the first 13 weeks."

Rockies Lure Vacationers

Mr. Jackson said that after the short course there was a 3-week lapse before the long course started. Some of the students took leave. After all, the back drop of Denver is the Rockies. It's a temptation to head there. The Chamber of Commerce points out that there is something for everyone.

Even the nature-lover, with no penchant for hunting or fishing, can always admire a quivering aspen. But Mr. Jackson had other plans. He stayed right in Denver and worked in the Fitzsimmons

(See MR. JACKSON, Page 6)

Husband-Wife Team Wins Passano Award for 1972; Honored for Allergy Studies

Dr. Kimishige Ishizaka, a member of the Allergy and Immunology Study Section, Research Grants Review Branch, Division of Research Grants, and his wife, Dr. Teruko Ishizaka, have been selected to receive the Passano Award for 1972.

The husband-wife team was honored for their work in the mechanisms of the allergic reaction and notably their discovery of IgE, the immunoglobulin associated with reagin activity in man.

Both are associated with Good Samaritan Hospital, Baltimore.

The prize includes a citation and an honorarium of \$7,500. It will be presented to them at a dinner, April 13, during the FASEB meetings in Atlantic City.

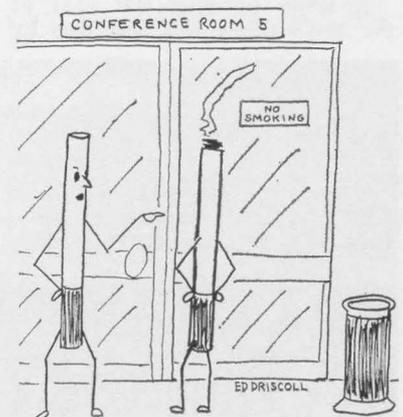
The Passano Foundation, which presents the award, is a non-profit organization that encourages medical science and research.

NIH's 'No Smoking' Ban Effective on March 13

A "no smoking" ban has been implemented in *public* conference rooms and auditoriums at NIH. A *public* conference room is defined as one which must be booked or reserved through the office of the assistant director for General Services Management, OAS.

Conference rooms in the Westwood Building are included.

No smoking shall be permitted in these areas — signs have been posted. Ashtrays have been removed and receptacles for dis-



"I know you are going to get put out about this, but NIH has implemented a 'No Smoking' policy in certain areas — no buts about it."

posing of cigarettes, etc., have been placed at entrances.

The ban went into effect on the campus on March 13.

Inquiries concerning the policy may be made by calling James B. Davis, Director, Office of Administrative Services, ODA, Ext. 62315.

Research on Cause, Diagnosis, Treatment Of Lung Cancer Reported At Conference

National Cancer Institute research on the cause, diagnosis, and treatment of lung cancer, the leading cause of cancer deaths among men in the U.S., was discussed at a recent meeting held on March 27-28 at the Clinical Center.

More than 300 research scientists and practicing physicians attended the conference.

At the first session, Dr. Marvin Schneiderman predicted a possible leveling off of lung cancer and then a decline of mortality rates among white males. Dr. Schneiderman, who is acting associate scientific director for Demography, also foresees some increase in mortality rates among non-white males and a substantial increase among females.

Models Explained

Dr. Umberto Saffiotti, associate scientific director for Carcinogenesis, reported on biological models for the identification of respiratory cancer-causing agents.

A new method for examining cells from the respiratory system of hamsters that may lead to the diagnosis of earlier cancers was explained by Dr. Michael Sporn, head of the Lung Cancer Unit. The procedure may eventually be applied to human biopsy samples.

The work being done by NCI to develop a less hazardous cigarette—one that is acceptable to the smoker and at the same time provides a decreased hazard—was outlined by Dr. Gio B. Gori, associate scientific director for Program in Etiology.

NCI-funded research on the diagnosis of lung cancer was discussed at the afternoon session.

A study initiated last year at the Mayo Clinic was described by

Dr. William Taylor of that clinic.

Using chest X-rays and microscopic examination of cells obtained from deep cough sputum, investigators are screening men at high risk to lung cancer due to smoking.

The first clinically practical color TV system developed for use in bronchoscopy was demonstrated in a movie film by Dr. Bernard R. Marsh, head of the Broyles Bronchoscopic Clinic at Johns Hopkins and chief of Otolaryngology, U.S.P.H.S. Hospital.

The color TV picture, which is transmitted through the fibers of the bronchoscope, explores smaller passages in the lungs that previously have been invisible.

It can pick up indications of early cancer even though lung X-rays may be negative.

Procedure Done Quickly

The procedure may be done quickly under local anesthetic on an out-patient basis. Limiting factors at present are the cost of instrumentation and the necessity of teaching enough people to use it correctly.

Each TV picture is kept in master record files and catalogued for easy retrieval. Copies may be made to use as teaching tools.

Scanning of lung cancer patients with gallium — a rare metal — was described by Dr. Bertram Sauerbrunn, chief of Radioisotope Research, VA Hospital, Washington, D.C.

Dr. David Sanderson of the Mayo Clinic discussed the use of hematoporphyrin, an iron-free product of the decomposition of hemoglobin, as a diagnostic tool.

The second day of the meeting was chaired by Dr. Oleg S. Selawry, chief NCI-VA Medical Oncology Service, VA Hospital, Washington, D.C.

Dr. Howard E. Skipper, director, Southern Research Institute, Birmingham, explained the implications of preclinical studies of lung cancer in mice.

Dr. Clifton Mountain, professor of Surgery at M.D. Anderson Hospital and Tumor Institute, Houston, described what has been termed the most advanced and most functional staging, or classification, system for patients with lung cancer.

Aids Clinician

Its purpose is to aid the clinician in planning treatment and in estimating progress of the patient. The system also facilitates the exchange of information on a national and international scale.

The superiority of treatment by surgery combined with chemotherapy for patients with small-cell cancer of the lung was reported for the first time by Dr. George Higgins, chief of the Surgical, Service, VA Hospital, Washington, D.C.

Treatment studies with combinations of preoperative radiation and surgery were described by Dr. Thomas Shields, chief of the Surgical Service, VA Research Hospital, Chicago.

Current data of the National Cooperative Trial of preoperative radiotherapy were presented by Dr. James J. Nickson, chairman, Department of Radiation Therapy, Michael Reese Hospital and Medical Center, Chicago.

The findings reported by Dr. Shields and Dr. Nickson indicate no advantage for preoperative radiotherapy.

Dr. Heine H. Hansen, NCI-VA Medical Oncology Service, VA Hospital, Washington, D.C., spoke on Experience with Bone Marrow Examination and Laparoscopy for Staging Inoperable Patients. Dr. Hansen said that 45 percent of patients with small-cell lung cancer had cancer in the bone marrow.

New drugs under study for lung cancer treatment were listed by Dr. Stephen K. Carter, chief, Cancer Therapy Evaluation Branch, NCI.

Dr. Carter stated that there are agents potentially active against lung cancer such as CCNU, methyl-CCNU, and the antibiotic, adriamycin.

It's astonishing how meekly the American taxpayer sits down to figure his tax return. Why, even a sheep has to be caught before it gets clipped.—*Changing Times*.

DR. AUSTEN

(Continued from Page 1)

Brigham Hospital. This Center is one of seven established last year by the National Institute of Allergy and Infectious Diseases to translate basic knowledge in immunology into improved clinical allergy practice.

Here Dr. Austen and his staff are studying treatment methods for hypersensitivities, such as drug reactions, bronchial asthma, hives resulting from exposure to cold, and angioedema (swelling of the blood vessels).

Dr. Austen received the A.B. degree *magna cum laude* from Amherst College and the M.D. degree *cum laude* from Harvard.

From 1956 to 1958 Dr. Austen served in the U.S. Army Medical Corps in the Division of Immunochimistry at the Walter Reed Army Institute of Research.

The next 2 years he was a PHS Postdoctoral Research Fellow with Dr. John H. Humphrey in the Department of Immunology at the National Institute for Medical Research, Mill Hill, London.

Memberships Listed

Dr. Austen, who served on several health-related committees in Massachusetts, is also a member of the NIAMD Arthritis Training Grants Committee, the Council of the Infectious Diseases Society of America, the Executive Committee of the American Academy of Allergy, and the Scientific and Education Council, Allergy Foundation of America.

In addition, he is on the editorial board of a number of scientific journals.

The Dyer Lecture was established in September 1950 to honor the late Dr. Rolla Eugene Dyer, a former NIH Director.

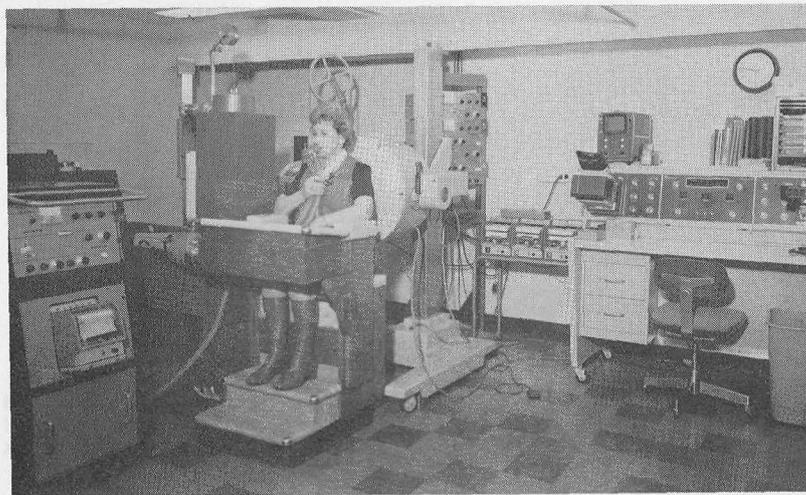
Each year the Dyer Lecturer is selected by the NIH Director —with the advice of his senior scientific staff — from among scientists who have made important contributions in either medical or biological research, particularly in the field of infectious diseases.

Dr. Myron Winick Named To Posts at Columbia U.

Dr. Myron Winick, a grantee of the National Institute of Child Health and Human Development, has been appointed director of Columbia University's Institute of Human Nutrition.

He has also been named professor of Pediatrics at the University's College of Physicians and Surgeons.

Dr. Winick, who presented a seminar at NIH on Nutrition and Brain Development, has written a chapter on nutrition and neurological development for a forthcoming NICHHD book.



Colored slides of the ¹³³Xenon pulmonary function laboratory of the Mayo clinic were shown at the NCI conference. The patient sits in front of a scintillation camera, data from which are collected and summed as stationary images, cinematographic pictures and as rates, processed on the instrumentation at the right. The patient breathes into a closed-circuit ¹³³Xe-oxygen mixture contained in the lead shielded spirometer at the left, on which "wash-in" curves are effected. After equilibrium, the patient breathes room air and the exhaled radioactive gas containing expired air is collected and measured in a spirometer behind the patient's back. Data from this system are used for the measurement of "wash-out" rates.



The third class of the U.S. Special Police recently graduated from training. Pictured with their supervisors are (l to r, seated): Cpl. Samuel E. Holiday; Lt. George W. Franklin; Cpl. Quincy DeWitt; Pfc. Joachim H. Daluge, high scholastic award winner; Pvt. Cleveland Cox and Pvt. Jerome A. Carson. Standing (l to r): Willard E. Vincent, assistant director for Protection and Safety Management, OAS; Deputy Chief Boyd T. Willard, commanding officer, Youth Division, Metropolitan Police Dept., guest speaker; Bradford E. Williams, class representative; Pfc. William S. Robinson; Pfc. Jessie J. Penn; Sgt. Spencer D. Kennedy; Pfc. Thomas D. Blickenstaff; Capt. Richard F. Jones, commanding officer, William C. Wright, training officer, and Ralph A. Stork, chief, Protection and Parking Branch, OAS.

MARVIN YIENGST

Half of Team That Began Aging Studies For NIH Ends 38 Years Fed'l Service

Marvin Yiengst, half of the two-man team that first began aging studies for the National Institutes of Health in 1940, retired April 1 after nearly 38 years of Federal service.

Mr. Yiengst was a biochemist in the Gerontology Research Center, Laboratory of Cellular and Comparative Physiology, OSD, of the National Institute of Child Health and Human Development.

He began his NIH career as a medical laboratory technician under the late Dr. Edward J. Stieglitz.

In 1941, when Dr. Stieglitz returned to private practice, Mr. Yiengst teamed up with Dr. Nathan W. Shock, who was then chief of the new Section on Gerontology. Dr. Shock still heads the GRC.

Before coming to Baltimore, Mr. Yiengst's Government career included service in the U.S. Army and with the Department of Agriculture.

During World War II, he was a laboratory officer with the U.S. Army Air Forces.

Upon his return to Baltimore in 1946, he resumed aging research in renal physiology, body composition, and tissue metabolism.

Mr. Yiengst's value to the GRC can be measured, in part, by the fact that he is the co-author or author on 35 original research papers.

He is an active member of the Gerontological Society, the American Chemical Society, and the American Association for the Advancement of Science.

In addition to his research interests, Mr. Yiengst is an accomplished glassblower. He manufactured customized laboratory glassware for GRC investigators



A man of many talents, Mr. Yiengst manufactured special glassware for laboratories of the NICHD Gerontology Research Center.

for over three decades.

It is difficult to find something Mr. Yiengst is not fond of doing. He enjoys traveling, fishing, wine-making, birdwatching, photography, and gardening.

He is also interested in studying all forms of plant life.

It was therefore fitting for his friends and co-workers to present him with a two-volume folio about wild flowers of the Eastern United States at a bon voyage luncheon on March 30.

The gift should come in handy for Marvin and his wife Mabel when they hit the open road.

STEP Subcommittees Organize Programs To Familiarize Administrators With NIH

Dr. Ronald W. Lamont-Havers, NIH Associate Director for Extramural Research and Training, and Dr. Robert P. Akers, Policy and Procedures Officer, discussed NIH Extramural Programs—Issues and Answers at a recent Extramural Forum.

Sponsored by the Staff Training-Extramural Program, the Forum brings timely and pertinent issues to the attention of the NIH extramural personnel.

Drs. Lamont-Havers and Akers discussed the increasing importance of program coordination between Institutes, the funding of NIH grants, and extramural policy.

Schwartz to Speak

The next Forum will be held on Thursday, May 11, at 3 p.m., in the Westwood Building's Conference Room D.

Leon Schwartz, NIH Associate Director for Administration will discuss the role of his office.

STEP was organized to keep scientist administrators informed about developments and trends in the field and to encourage their participation in training courses and activities.

Another purpose of the committee is to provide new scientist administrators indoctrination into the complex NIH grant and contract operations.

To simplify the system and emphasize areas with which Extramural Program administrators should concern themselves, STEP created five subcommittees, including the Extramural Forum.

Organizes Seminar

A 2-day seminar is organized each year by the Orientation Program Subcommittee to familiarize the relatively new personnel with NIH and its functions.

Lectures by NIH officials giving in-depth views of NIH operations, and documents selected from various Government sources, help the administrators become active members as rapidly and effectively as possible.

Following the fall seminars, monthly workshops present specific cases and organize discussion groups on matters of management and policy.

Articles and journals on science and public administration which may influence current issues are reviewed by the Editorial Subcommittee. They select pertinent items for distribution to scientist administrators. A bibliography of recommended reading is maintained.

The Career Development Subcommittee identifies, establishes, and makes available training opportunities for the administrators.

Courses, seminars, or workshops are reviewed. The subcom-

mittee suggests those that might prove valuable for the professional to attend.

To assume the responsibility for designing an extension of the Orientation Seminars and to provide an opportunity for those who need to reevaluate their own capabilities and career goals, the Continuing Education Subcommittee was developed.

The program concentrates on training related to Government policy, management, and administration as it applies to NIH grants and contract areas.

It will not be involved in the professional or disciplinary aspects of the scientist administrators' responsibilities.

Dr. Gay Chairs STEP

Continuing education in the administrators' scientific duties is the responsibility of the Institute he serves.

Dr. William I. Gay, associate director of NIAID Extramural Programs, and chairman of the STEP Committee, said, "Larger numbers of individuals are now involved in contract and grant administration activities. The STEP program will have as its major goal in 1972 developing specific and relevant training programs useful to all NIH health science administrators."

Anyone at NIH interested in suggesting new activities which may contribute to the STEP program may contact Dr. Gay, Ext. 67291.



A cartoon made by Ronnie Kane and Julia Fisher, both in their junior year at Beloit College, symbolizes a NICHD study. The students are normal volunteers at the CC. Physicians in the Endocrinology Service, Reproduction Research Branch, are conducting the study under Dr. Griff T. Ross, assistant branch chief, to better understand how hormones regulate growth of the follicle, and ovulation in women using antisera made in rabbits.

MR. JACKSON

(Continued from Page 3)

Hospital medical repair shop.

After that stint the long course started "with a review of basic electronics through solid state components, all the way up to digital circuits.

"Medical electronics took in equipment such as EKG units and pH meters. What they tried to do there was to give you a well-rounded sampling of the field," he explained.

After the course was over, Mr. Jackson and his family returned home, and back to BEIB at NIH. He stressed the fact that his training in Denver helped his work here "most definitely."

But he admitted that "there was more to getting ahead than taking courses.

"I recognized that medical equipment electronics is a budding field. It's a good field to get into, but I think the desire to get ahead is more than anything else.

"You've got to want to get a better job and sometimes you've got to make the sacrifice, and the family has to be willing to make the sacrifice.

Success Calls for Sacrifice

"It's unreal to think you're going to get anything without making a sacrifice."

The sacrifice Mr. Jackson was talking about may be an initial cut in salary, or the cramming of courses that may act as beacons to better positions and higher grades, or the tangible sacrifice of spending less time with one's family.

He cited the campus training classes and Upward Mobility College as "real good programs.

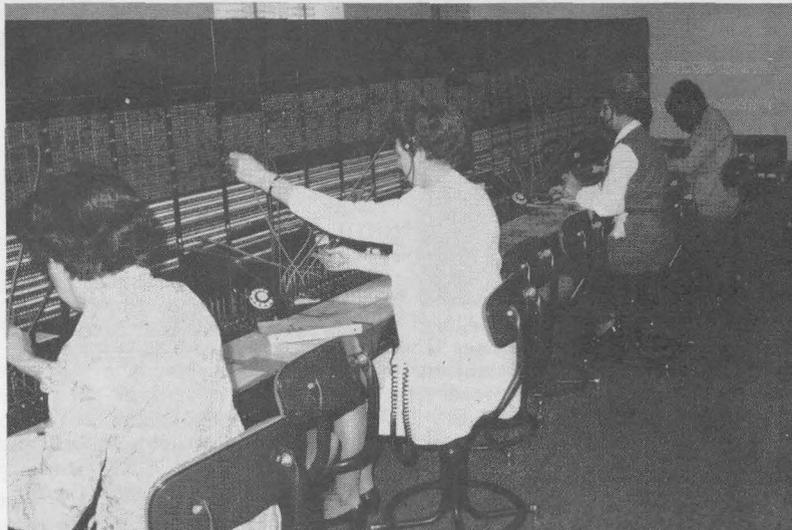
"I've watched people pushing brooms in mechanical shops and labs who have raised their earning potential by taking training courses. School takes work, formal school or on the job training. It takes effort to learn.

"Dr. Goodman (Dr. Lester Goodman, BEIB chief) was impressed that I had gotten so much schooling on my own. He wants me to go back and get a degree in Electronic Engineering, a B.S. I'm going to do it, I'm not just going to try. It's just a matter of time."

And he also feels that the studying, the long hours, the overtime work, and his training in Denver were all part of the process of getting ahead.

Employer expenditures for pay supplements amounted to 26.6 percent of basic wages and salaries in private industry and 27.8 percent in the Federal Government during 1970.—U.S. Bureau of Labor Statistics.

Communication Systems at NIH Excel; Offer Phone, Computer, Other Services



Telephone operators sit at the main switchboard and answer all incoming calls which are not dialed direct. They also assist patient, ship-to-shore, mobile, long-distance, and collect calls.

What is faster than a letter, is more reliable than a locomotive, can cross hundreds of miles in seconds? A telephone.

This modern convenience, within an arm's reach, is usually taken for granted and overlooked — except when something goes wrong.

The Communications Section of the Communications and Space Management Branch, ODA, handles all aspects of the telephone system at NIH.



This PBX switching equipment, located in Bldg. 10 handles all calls that come to or go out of NIH in a never-ending symphony of clicks and whirrs. There are 11 rows of these switches with over 3,500 switches that process a minimum of 50,000 calls a day that do not come through the switchboard.

Located in Bldg. 10, the communications center has a 6,000-line Private Branch Exchange (PBX) board. Currently there are 5,100 lines in use on the reservation—300 reserved for patients.

In addition, there are two 1,000-line satellites. One is in Rockville and serves the National Oceanic Atmospheric Administration.

The other is in the Westwood

Building which serves the employees there and members of the Food and Drug Administration and the Federal Engineering and Construction Agency located in Westwood Towers.

In all, the present switching equipment can accommodate 8,000 telephone lines, of which approximately 6,300 are now in use.

Nearly 14,000 telephones are being used by the employees served by the communications center.

The C&P Telephone Company has permanently stationed one foreman and 10 installers to process the 4,000-5,000 telephone orders per year and respond to "trouble calls" which average 20-30 each day.

Information, switchboard, and telephone directory services are handled by 14 operators, six supervisors, two directory clerks, and one trainee.

The 14 switchboard operators provide 24-hour service 7 days a week covering nine tours of duty.

In addition to the 83,000 calls per month handled by the switchboard operators, the information operators answer 40,000 inquiries each month.

Outgoing calls number 3,300 monthly which include patient, long distance, out-of-the-country, and collect calls.

Other functions handled by the switchboard are the voice pages for patient care staff and emergencies (7,000 per month) and the signal pages to receivers carried by the Guard Force, patient care staff, messengers, and housekeepers (3,000 each month).

NCI to Hold Conference With Minority Groups From Schools, Colleges

Minority groups from many parts of the U.S. will take part in a 3-day conference, sponsored by the National Cancer Institute, to improve communications between the Institute and other schools with a high percentage of minority students.

The Minority Conference, which starts tomorrow (April 12) at NIH, will feature seminars on cancer research and visits to research laboratories.

Marston to Speak

Dr. Robert Q. Marston, NIH Director, will address conference participants — graduate students in biomedical sciences and public administration, medical students, college presidents, and deans and chairmen of medical departments.

According to Dr. Carl G. Baker, NCI Director, conference objectives include familiarizing minorities with NCI research programs, and exploring programs that may benefit both NCI and minority colleges and schools.

The pagemaster system was devised to signal personnel who move around continually on the job. This signal alerts the employee to call a prearranged number for the message.

Teletype, facsimile, conference call service, and over 350 remote data terminals which have access to DCRT computers are other services provided by the section.

Another service is available — when required — to those employees attending conferences or exhibits in other cities. Through the Communications Section, arrangements may be made to have a phone installed for use during the meetings.

For further information concerning possible use of telecommunications, call Ext. 65671.



Edna Royster, a telephone operator, works at the information switchboard answering calls that need assistance.

Simple Test to Detect Carriers of Tay-Sachs Disease Offered April 16

Couples of child-bearing age from NIH who might be at risk for Tay-Sachs disease may be screened next Sunday, April 16, from noon until 6 p.m. at Temple Israel in Silver Spring.

Tay-Sachs disease is a rare but uniformly fatal inherited neurological disease of infants that occurs principally in American Jews of Eastern European ancestry.

Screening Detects Carriers

The voluntary screening to detect carriers is part of the John F. Kennedy Tay-Sachs Disease Prevention Program at the Johns Hopkins Hospital Medical School.

Dr. Michael M. Kaback of Hopkins is directing the screening.

In this country — where approximately 90 percent of the Jewish population is of Eastern European ancestry — an estimated one in 30 persons carries the Tay-Sachs gene.

Only if both parents carry the gene, however, does the couple risk producing a child who has this genetically recessive disorder.

Statistics Stated

About one in 900 Jewish couples may have a child with Tay-Sachs disease, while only one in 90,000 non-Jewish couples undergoes such a risk.

If both parents are carriers, there is one chance in four of their child being born with the disease.

Of 7,000 persons in the Baltimore-Washington area who have thus far taken the simple blood test, some 250 were found to carry the Tay-Sachs gene. In ten couples, both parents carried the gene with its consequent risk.

A simple and accurate blood test to detect carriers for the Tay-Sachs gene was made possible by discovery of an enzyme deficiency in carriers of the disease.

Enzymes Absent in Disease

The enzyme hexosaminidase-A was found to be totally absent from tissues of children with Tay-Sachs disease and to be significantly diminished in carriers, although the latter are in all other respects completely normal.

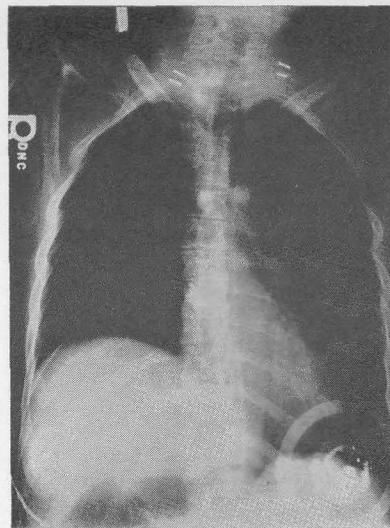
The disease can now be accurately and safely diagnosed through evaluation of the embryonic fluid in the fetus during the 14th to 16th week of gestation. Therefore, when both parents carry the Tay-Sachs gene, they can be helped to have unaffected children.

The April 16 screening will be

2 Radio Receivers Enable Paralyzed Man To Breathe Without Mechanical Device

By Jerry Gordon

A man paralyzed from the neck down has been breathing for nearly a year without the aid of a mechanical respirator, due to the research efforts of a group of doctors using the facilities of the Division of Research Resources-supported General Clinical Research Center at the Yale University Medical School.



A roentgenogram shows the position of the electrodes on the phrenic nerves in the neck and their attachment to the two radio receivers (bottom) implanted in the subcutaneous tissue on the anterior chest wall. The external antenna is taped to the skin overlying the receiver on the left side to which it transmits electrical impulses to stimulate the left phrenic nerve, causing the left hemidiaphragm to contract. After 12 hours, the antenna will be moved over the receiver on the right side, and stimulation on the right phrenic nerve will be carried out for a similar period. The opaque objects in the mid-thorax region are metallic wire splices.

Two miniature receivers, implanted in the subcutaneous tissue on the anterior chest wall, electrically stimulates the phrenic nerves.

This causes the diaphragm muscles to contract in the body of the 38-year-old electrician who suffered a broken neck in a 1970 Connecticut racing-car accident.

His upper spinal cord was damaged, interrupting the normal nerve pathway to the diaphragm muscles.

Fourteen months ago, the team of doctors, headed by Dr. William W. L. Glenn, implanted the two radio receivers under the skin of the chest with connecting platinum electrical wires in the neck leading to the phrenic nerves.

A small radio transmitter, carried in the pocket, sends pulses to the receivers which stimulates the phrenic nerves.

Breathing Rate Normal

The breathing rate can be maintained at about the normal rate of 15 to 16 diaphragm contractions per minute.

The patient was discharged from the hospital on May 13, 1971, and resumed activities as near normal as his disability would allow.

He has been able to travel and has attended sports-car races recently.

According to Dr. Glenn, the phrenic nerves must be functional for the successful application of the newly-designed radiofrequency respiratory technique.

"The type of damage suffered by the electrician is often associated with diving accidents," he said. "Our method can be applied to patients with this type of breathing difficulty and spinal damage."

Idea Conceived 20 Years Ago

The basic idea of stimulating the phrenic nerves was conceived about 20 years ago by other researchers who were trying to help victims of bulbar polio, Dr. Glenn reported.

"Until now, however, the technique hasn't been used on a patient for more than a few hours at a time," he said.

The case history and the development of the electronic nerve stimulation technique is reported in the March 9th issue of *The New England Journal of Medicine*.

TRAINING WORKSHOP

(Continued from Page 1)

ing of minority group faculty.

Dr. Bowery will discuss DRR's new Minority Schools Biomedical Support (MSBS) Program which is concerned with institutional support for minority colleges, universities, and health professional schools.

Other programs providing support for minority individuals interested in pursuing scientific careers will be outlined by Dr. James W. Mayo, assistant director of the College Science Improvement Program of the National Science Foundation.

Also, Dr. J. Z. Bowers, Josiah Macy, Jr. Foundation; Dr. John Scanlon, Ford Foundation; Dr. Steven Stackpole, Carnegie Corporation, and a representative of the Robert Wood Johnson Foundation.

the only such program offered in the Washington area this spring. Reservations may be made by telephoning 881-3700.

Dr. William Caudill Dies; Chief of NIMH Section Studied Social Systems

Dr. William A. Caudill, 51, whose laboratory of Socio-environmental Studies, NIMH, is located at the Clinical Center, died March 24 at G.W.U. Hospital.

Dr. Caudill, who had been with the National Institute of Mental Health since 1960, was chief of the Section on Personality and Environment.

His research was concerned with the relationships between social systems and personality development.

In his studies, he compared Japanese and American methods of child rearing and their effect on personality development.

Prolific Research Writer

Also, he made cross-cultural studies of psychiatric illness and treatment as well as anthropology in medicine.

Dr. Caudill, whose research articles were published in numerous scientific journals, was the author of *The Psychiatric Hospital as a Small Society* and co-editor of a volume entitled *Mental Health Research in Asia and the Pacific*.

Dr. Caudill, a native of Cincinnati, received his B.A., M.A., and Ph.D. degrees at the University of Chicago. He was also a graduate of the Boston Psychoanalytic Institute.

Academic Posts Listed

Before joining NIMH, he held research and teaching positions at Harvard University, McLean Hospital, Yale University, and the University of Chicago.

He is survived by his wife, Mieko, and daughter, Charlotte, both of the home at 10405 Great Arbor Drive, Potomac.

'Five Faces of Arthritis' Scheduled as April Movie

The Employee Health Service will present "Five Faces of Arthritis" as its April movie.

The 20-minute color film shows five patients, each with a different form of arthritis.

In the setting of Los Angeles General Hospital, the movie depicts some modern methods of treatment and progress being made in the rehabilitation of arthritis victims.

The film will be shown Wednesday, April 19, at 11:30 a.m. and 12:15 p.m., in the CC Jack Masur Auditorium, and Thursday, April 20, at 1:15 and 2 p.m., in the Westwood Building, Conference Room D.

Potential Hazards of Mutagenic Agents Of Vital Concern to Environmental Group

By Carolyn Holstein

A professional society vitally concerned about the alarming presence of potentially dangerous chemicals in foods, drugs, and pesticides has elected an NINDS scientist, Dr. Ernest Freese, as its president.

Dr. Freese assumed leadership of the non-profit Environmental Mutagenic Society at its annual meeting March 26-30 in Cherry Hill, N.J.

He is chief of the National Institute of Neurological Diseases and Stroke's Laboratory of Molecular Biology.

Dr. Freese has long been studying potential hazards of agents which cause mutations—inherited alterations in genetic material which may lead to cancer, congenital malformations, or a wide range of inherited diseases in future generations.

Early in his career, he identified different classes of mutations and mutagenic agents.

Currently his lab is investigating properties of food additives to determine why they inhibit bacterial growth and whether some of them produce congenital abnormalities.

Compound Tests Inadequate

"Many compounds in food additives, drugs, and pesticides have not been adequately tested to determine whether they are mutagenic," Dr. Freese said.

Since its inception in 1969, the Society has been making known the potential hazards of mutagenic compounds present in the human environment.

The Environmental Mutagenic Society publishes a bi-yearly newsletter and supplement entitled *EMIC (Environmental Mutagen Information Center)* — a registry of compounds tested for mutagenesis.

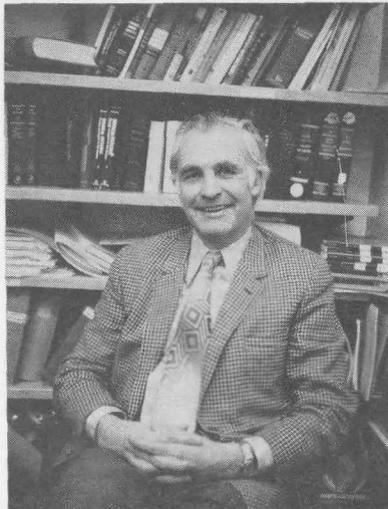
Society members, from Government, industry, and universities, are developing and teaching new test methods.

Three simple tests in rodents

can within a few weeks determine whether a compound is mutagenic.

"If any test is positive, the compound should be considered potentially hazardous," Dr. Freese said.

"If a compound is found to be



Dr. Freese has written chapters in two Environmental Mutagenic Society publications, "Chemical Mutagens" and "The Mutagenicity of Pesticides" based on an HEW Advisory Report.

mutagenic," he added, "a value judgment must be made to determine whether its benefits outweigh its risks."

At present, the Delaney Clause of the Food and Drug law stipulates that any compound found to be carcinogenic in any animal cannot be used as a food additive. It does not apply to drugs or pesticides.

This is, in part, because some carcinogenic drugs are nonetheless effective in combatting certain cancers or other diseases, such as psoriasis.

The FDA at present has no ruling on mutagenic compounds, but Dr. Freese has suggested that a maximum safe exposure dose be established for each potentially mutagenic compound.

Among several commonly occurring mutagenic compounds are many pesticides containing organic phosphates and carbamates which break chromosomes.

While chromosome breaks usually kill the cell, a mutation results when broken chromosomes heal, either by restitution or by exchange of two broken chromosome portions.

Other mutagenic compounds include: hycanthone, a bacterial drug used to treat schistosomiasis; cyclamates, recently banned for use in "diet" soft-drinks by the FDA after they were found to be carcinogenic as well as mutagenic.

Toxic Nitrites Found

Nitrites, known to be toxic in man, have been found in certain vegetables grown in nitrate-fertilized soil.

In addition, low concentrations of the compound are added to stored meat and fish as preservatives. Scientists are investigating the possible relationship between nitrites and ulcers and intestinal cancer.

While all proximal carcinogens apparently are mutagenic, not all mutagenic compounds are carcinogenic. But mutagenic tests are easier, faster, and much cheaper than carcinogenic tests, and industry therefore, can use them to indicate potential carcinogenicity.

Also being investigated are several habit-forming psychotropic drugs, such as morphine and codeine, which break plant chromosomes; several antimalaria compounds which inhibit DNA and RNA synthesis, and certain heavy metals (mercury and manganese) in pesticides.

Of particular concern to Dr. Freese is isoniazid, a highly effective drug for tuberculosis

Airport Shuttle Stopped

The shuttle connecting NIH with Dulles and Washington National airports has been discontinued.

The company handling the transportation has determined that the stop at NIH is no longer economically feasible.

In the future other means—taxi, bus, or private car—will have to be used to reach the airports.

which is frequently used as protective treatment for patients with a positive TB skin test. It has consistently induced pulmonary and liver tumors in mice.

"A few cases of pulmonary cancer have been detected in isoniazid-treated TB patients, and an increased frequency of congenital malformations from several tuberculostatic drugs including isoniazid has been observed," he said.

Recently, two newsmen died of liver disease from protective isoniazid treatment following exposure to TB.

Babies Treated

Also, 400 babies exposed to TB shortly after birth in a Cincinnati hospital were being tested for TB.

Those with a positive TB skin test are to be given protective therapy with isoniazid. One hundred sixty of the children who are still too young for an accurate TB test are being treated prophylactically with isoniazid.

"Considering the enormous risk of abnormal development, pregnant mothers or young children should not be treated with isoniazid unless absolutely necessary," Dr. Freese commented.

Studies show one-half of Europe's population lack a certain liver enzyme predisposing them to isoniazid side effects. This deficiency, combined with another enzyme deficiency (G6PD) greatly increases the risk of mutations.



Scientists and executives of many organizations throughout the U.S.—members of the Industrial Research Institute—met on campus recently to tour facilities and attend seminars. (L) Dr. Lester Goodman, BEIB chief, explains the work of his branch—building complex scientific equipment to specifications of NIH

researchers. (C) William Kump, head of BEIB's Glass Blowing Unit illustrates an apparatus made of glass fused with metal. (R) Kenneth Bolen, head of the Optical Unit, BEIB, describes a human stereotaxis, made in the unit, that is used for positioning electrodes in areas of the brain—built for an NIH neurosurgeon.