

the



# Record

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

August 17, 1971  
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NATIONAL INSTITUTES OF HEALTH

## Dr. A. M. Bruno Named NCI Assistant Director



**Dr. Bruno was a postdoctoral fellow at the Cardiovascular Surgical Clinics, University of Rome, for 3 years.**

Dr. Anthony M. Bruno has been appointed an assistant director of the National Cancer Institute. He came to NIH in 1967 as senior professional assistant to the chief, Training Grants and Awards Branch, National Heart and Lung Institute.

Prior to his NCI appointment, he was senior project scientist in NHLI's Collaborative Studies Program. In that office he had prime responsibility for the development of a total artificial heart.

### Develops New Techniques

Under his guidance a method involving special diets and radiation was developed to rapidly induce coronary heart disease in a breed of miniature swine.

The technique permitted, for the first time, intensive investigation into heart disease, including myocardial infarction and sudden death.

Dr. Bruno headed another research experiment involving young calves who had received total artificial hearts and survived longer than 260 hours—an achievement that permitted a reassessment of artificial heart development.

Dr. Bruno received his B.S. degree from St. Joseph's College, and an M.D. degree from the University of California.

From 1959 to 1962 he was a postdoctoral surgical fellow, supported by NHI, in cardiovascular and thor-

(See DR. BRUNO, Page 6)

## U.S.-Japan Panel to Study Pollutants, Health Problems Discussed at Meeting

By Krin Larson

"A healthy environment . . . is necessary not only for man's well-being but for his very existence," declared Dr. Merlin K. DuVal, Assistant Secretary for Health and Scientific Affairs, HEW, when he addressed the seventh meeting of the Joint Committee of the U.S.-Japan Cooperative Medical Science Program held at NIH on July 29 and 30.

In response to the increasing concern over environmental problems, delegates recommended that an additional Joint Panel be established to study the relationship between environmental pollutants and health problems such as cancer and birth defects.

The organization and program objectives of this new Panel will be discussed at the next joint meeting to be held in 1972 in Japan.

The U.S.-Japan Cooperative Medical Science Program was organized in 1965, following a meeting between the President of the United States and the Prime Minister of Japan.

The Joint Committee consists of a United States Delegation, chaired by Dr. Colin M. MacLeod of the Oklahoma Medical Research Foundation in Oklahoma City, and a Japanese delegation headed by Dr. Toshio Kurokawa of the Cancer Institute Hospital in Tokyo.

The National Institute of Allergy and Infectious Diseases manages the Program. The National Institute of Arthritis and Metabolic

(See U.S.-JAPAN, Page 5)



**Before the meeting, Dr. Colin MacLeod (left) and Dr. Toshio Kurokawa, the American and Japanese chairmen of their respective delegations in the Joint Committee, discuss an important issue on the day's agenda.**

## Dr. William B. DeWitt, Director of DRS, Dies



**Dr. DeWitt was described as ". . . a very able scientist and administrator who has contributed enormously to the support of all NIH research."**

Dr. William B. DeWitt, Director of the Division of Research Services, died suddenly at his home in Bethesda on Sunday, Aug. 8.

Dr. DeWitt was responsible for a wide variety of support programs for the scientists at NIH.

Dr. Robert Q. Marston, NIH Director, said, "Apart from the personal grief which all of us feel at the loss of this kind and generous man, NIH has lost a very able scientist and administrator, who has contributed enormously to the support of all NIH research."

Dr. DeWitt joined NIH as a medical parasitologist in the Laboratory of Tropical Diseases in 1949. He became associate director for Laboratory Resources, DRS, in 1965, served as acting director in 1968, and was named DRS Director in 1969.

Before coming to NIH, Dr. DeWitt served in the southwest Pacific with a Tropical Disease Unit on Malaria, Filariasis, and Schistoso-

(See DR. DEWITT, Page 7)

## Nat'l Sickle Cell Anemia Committee Begins Plans To Accelerate Program

A National Advisory Committee appointed Aug. 4 to begin immediate planning on the President's accelerated program of research and treatment against sickle cell anemia held its first meeting at NIH on Aug. 13.

The National Heart and Lung Institute will coordinate the program.

Sickle cell anemia is a painful and life-shortening disease that is genetically transmitted from parents to offspring. In the United States, it is found almost exclusively among blacks.

The President, in his health message to Congress last February, identified sickle cell anemia, along with cancer, as "a targeted disease for concentrated research."

He said, "This Administration is increasing its budget for research and treatment of sickle cell disease fivefold, to a new total of \$6 million."

Ruth Aikens, associate director for Health and Health Programs, National Urban League, New York, will be chairman of the committee.

Other committee members are: Arnita Boswell, Field Work asso-

(See SICKLE CELL, Page 8)

## Television Spots Urge Viewers to Become Part of Nation's 'Life Corps'

At half-time, the score was Washington Redskins, 10-San Diego Chargers, 3. The D.C. area television audience happily sat back for the half-time festivities and watched the first showing of a 30-second television spot that encouraged people to learn more about becoming part of the Nation's "Life Corps."

The address for more information which flashed on the screen that Saturday was: Life Corps, National Institutes of Health, Bethesda, Md. 20014.

By Monday morning, before there was time for any mail response, three enterprising career hunters had already called NIH to

(See TELEVISION SPOTS, Page 5)

# the NIH Record

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**YES, YOU'RE NOT MISTAKEN, you've seen this picture before. In the last issue, Thanora Coleman—receiving a certificate from NIH Associate Director Richard L. Seggel for successfully completing a clerk-typist course—was incorrectly identified to the "Record." As a representative of trainees in a program to provide new career opportunities here, Mrs. Coleman gave the address at the recent graduation ceremony.**

## Computers to Forecast Health Manpower Needs

Computers will be used to give more precise forecasts about the Nation's future manpower needs.

Research contracts were awarded to the Research Triangle Institute, Durham, and the University of Southern California, by the Division of Manpower Intelligence, BHME. Both institutions have already completed pilot studies.

The university will implement a computer microsimulation model.

The institute will project hospital manpower requirements.

## NIH Television, Radio Program Schedule

### Radio

#### DISCUSSION: NIH

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

August 20

Dr. Eileen Hasselmeyer and  
Jehu Hunter, NICHD

Subject: Sudden Infant Death  
Syndrome (R)

August 27

Dr. Richard L. Hayes, NIDR  
Subject: Oral Diseases (R)

Interview is during intermission,  
Library of Congress concerts.

### Television

#### PANORAMA:

(Ask the Doctor)

WTTG-TV, Channel 5, 12:30 p.m.

August 24

Dr. John C. Greene, Director,  
Division of Dental Health,  
BHME

Subject: Periodontal Disease

## Dr. Harry W. Bruce Promoted To Assistant Surgeon General

Dr. Harry W. Bruce, Jr. has been promoted to the rank of Assistant Surgeon General in the U.S. Public Health Service Commissioned Corps.

Dr. Bruce has been the Director of the Division of Physician and Health Professions Education, Bureau of Health Manpower Education, since its establishment in October 1970.

## Semi-Automated Blood Serum Analyzer Installed In CC Pathology Dept.

A new semi-automated blood serum analyzer—the AutoAnalyzer—was recently installed in the Clinical Center's Clinical Pathology Department, for better identification of patients at high risk of having future heart disease.

The AutoAnalyzer detects and measures triglycerides, lipids in the blood which, like cholesterol, sometimes accumulate (a condition called hyperlipidemia). This accumulation is believed to contribute to heart attacks.

### Measures Made Automatically

Dr. Nathan Gochman, assistant chief of CPD's Clinical Chemistry Service, explained that with the analyzer simultaneous measurements of cholesterol and triglycerides can be made automatically from a single 0.5 milliliter sample of blood serum (whole blood minus red blood cells and coagulation factor).

Previously, only the cholesterol analysis had been automated. Now, whenever investigators request a cholesterol measurement a triglyceride determination will also be available on a routine basis.

The analyzer, commercially available to hospitals for about 2 years, permits testing of 50 blood serum samples in 2 hours. If the tests were not automated, a technician, analyzing that number, would require a whole day, Dr. Gochman said.

### Blood Serum Diluted

To perform the test, blood serum is diluted and components, such as glucose, which would interfere with triglyceride and cholesterol measurements, are removed by centrifugation.

The remainder of the sample is put into analyzer cups and inserted into a sampler tray where the cups are covered to prevent evaporation.

The analyzer draws a sample of the serum extract through a needle into a tube where it is mixed with

## NLM's Plan Encourages Scholars-in-Residence

A scholars-in-residence program has recently been established by the National Library of Medicine.

It is designed to encourage research in the biosciences that requires using the Library's vast collection of medical literature.

Candidates must be committed to their chosen research projects full time for a minimum of 6 months.

A major portion of this time must be spent at the Library; scholars may hold no other active appointments.

Office facilities, typing services, and reference assistance—but no stipend—will be provided.

Candidates' letters of application, accompanied by a description of the planned research project and a curriculum vitae, should be sent to the Director, National Library of Medicine, Bethesda, Md. 20014.

Appointments will be made by the Library's Board of Regents.

## Internat'l Primatology Congress To Meet in Summer of 1972

The 4th International Congress of Primatology will convene at a 3-day symposium next summer, Aug. 15-18, 1972. The meeting will take place at the Oregon Regional Primate Research Center in Beaverton, one of seven centers administered by the Animal Resources Branch, DRR.

Scientists from many parts of the world are expected to attend.

color forming and fluorescence producing reagents.

Then the samples are heated and flow into a colorimeter which measures the optical density of the cholesterol color and a fluorometer which measures the triglycerides.

The results are automatically recorded for comparison with results from tests of samples with known triglyceride and cholesterol contents.

The entire procedure takes 2 minutes for the cholesterol analysis and 10 minutes for the triglycerides, resulting in substantial savings in cost compared with manual procedures.



**It just takes 2 to 10 minutes for the AutoAnalyzer to determine the triglyceride and cholesterol content of blood serum samples. As many as 80 test results an hour are automatically recorded.**

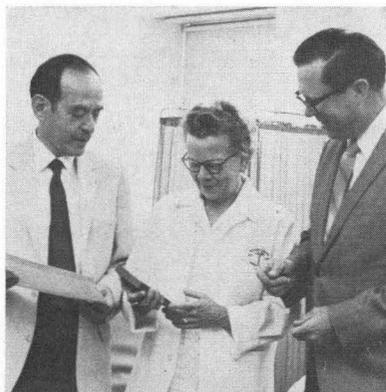
## Vida Jo Niebuhr Retires; Was First Head of CC's Physical Therapy Service

Vida Jo Niebuhr, the first chief of the Clinical Center Rehabilitation Department's Physical Therapy Service, has retired.

She joined the department in 1954, helping to organize its physical therapy functions.

A member of her staff, Mario L. Salvaneli, succeeds her as chief.

Miss Niebuhr, a PHS Commissioned Officer, began her career as



Vida Jo Niebuhr shows awards received at a recent retirement ceremony to Dr. David M. Fried (l), chief of the CC Rehabilitation Department, and Dr. Roger Black.

a physical therapist in the Orthopedic School, West Allis, Wis., then joined the Navy.

While stationed at the Naval Medical Center, she was assigned to the White House as President Franklin D. Roosevelt's personal physical therapist.

The following year Miss Niebuhr was Officer in Charge at the Naval Convalescent Hospital in New Jersey.

### Returned to D.C. in 1946

Miss Niebuhr came back to the D.C. area in 1946 as chief of Physical Therapy at Mt. Alto Veterans Administration Hospital. Two years later she became assistant chief physical therapist at VA headquarters.

After 6 years at VA, she came to the Clinical Center.

Miss Niebuhr, a graduate of LaCrosse State College in Wisconsin, and the D. T. Watson School in Physical Therapy, affiliated with the University of Pittsburgh, is the author of a number of professional publications on physical therapy for heart surgery patients, administration, and casting techniques.

She is a past president of the D.C. Chapter of the American Physical Therapy Association, and served as a panel member of the Physical Therapists Civil Service Commission Examining Board.

For the past 7 years she had been the NIH representative on the PHS Therapist Career Development Committee.

At a retirement ceremony for

## Ted Gray, a Talented 'Concerned' Artist, Receives Inspiration From His Age Group

Brotherhood—Love—Unity—Peace. These slogans may sound like clichés of the contemporary scene, but for one creative young man at NIH who is concerned with man's problems, the words represent themes of his work.

Ted Gray, an 18-year-old untrained but very talented artist, is working as a summer lab assistant in the National Institute of Neurological Diseases and Stroke. He is with the Laboratory of Molecular Biology.

Ted enjoys people and enjoys drawing them—humanity is a dominant theme in his art.

Many of his pictures deal with issues such as poverty, drugs, and malnutrition—equally as many depict love and happiness.

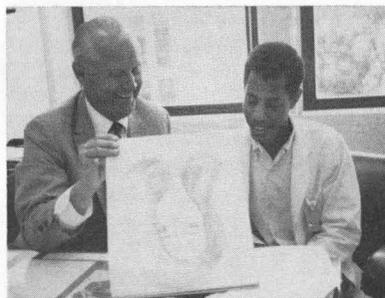
"We can't live in this world without one another," he believes. "We're too far gone the way it is now."

Ted came to NINDS 2 years ago as a summer aid and continued working parttime during school sessions.

"He was so good as a messenger and in the Xerox room that we decided to ask him back," explained Glenn Hammond, administrative officer of the Institute's Intramural Research program.

Traditional art, Ted feels, is relevant and important for some people—particularly older generations—but he prefers more contemporary themes and credits much of his inspiration to his own age group.

"I want my pictures to express



Glen Hammond (l) selects several of his favorites among Ted's art work. The young artist sketches many of his friends, and often, his work portrays a contemporary theme.

something," he says. He is especially fond of sketching people with expressive faces. The old and wrinkled, the ugly, and children are his favorites.

Miss Niebuhr, Dr. Roger L. Black, CC associate director, presented her with a plaque from the PHS Therapist Career Development Committee "in recognition of her sustained Superior Performance as chief of the Physical Therapy Service..." He also awarded her a Certificate of Merit from the Clinical Center.

Miss Niebuhr has returned to her native Wisconsin where she is purchasing a lakeside home.



While most of Ted's art work is done in pencil and charcoal, he also does pastels and some sculpturing.

In addition to his art, Ted writes poetry, tutors math, and reads. His favorite writers are contemporary and concerned with social problems.

This autumn Ted will be a freshman at Frostburg State College in Maryland.

He has received an Educational Grant and Minority Scholarship from that school, and plans to major in art. He is also the recipient of the Maryland Delegate Scholarship which will provide his tuition for 4 years.

## Book on Antibodies Tells Role in Fighting Disease

A new 544-page book, *The Secretory Immunologic System*, issued by the National Institute of Child Health and Human Development, gives the views of more than 40 scientists about disease fighters—antibodies—often found in the body's fluids.

They also play a role in allergic and in other defensive reactions by the body.

A bibliography lists more than 600 scientific papers on the subject of antibodies.

Multiple copies may be bought for \$5.25 each from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Single free copies are available from the NICHD Information Office, NIH, Bethesda, Md. 20014.

## Upward Mobility College Offers BA, AA Degrees At No Cost to Employee

NIH is establishing an Upward Mobility College on the reservation, in cooperation with Federal City College's Division of Community Education. Classes on the FCC satellite campus are scheduled to begin Sept. 13.

The school offers a full schedule of classes 12 months a year for participants to earn a Bachelor's degree or an A.A. degree. Emphasis will be placed on freshman classes the first year of the college.

Tuition, books, and fees will be financed entirely by NIH. In addition, tutorial and counseling services will be available.

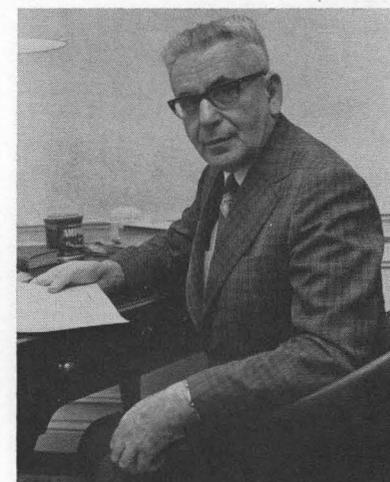
### Classes Held at NIH

Classes will be held at NIH before and after working hours, as well as during lunch periods and Saturday mornings. Some official duty time will be made available when classes are scheduled within an employee's tour of duty.

No employee enrolled as a student in the college will be required to work additional hours to make up for time spent in classroom training.

Any NIH employee in a job series that does not require at least a B.S. or B.A. or equivalent as an entrance requirement, has been a Federal employee for one year, and has either a high school diploma or equivalency certificate is eligible to apply.

For more information, contact Norma Greene, Federal City College Coordinator, Bldg. 35, Room 1B-14, Ext. 64130.



Dr. Isaac Berenblum, a Fogarty Scholar at Stone House, recently left here after a 6-month stay. The prestigious cancer researcher wrote, lectured, worked with scientists in other institutes, and conducted a seminar for NCI scientists. In the fall he will return to the Weizmann Institute, Rehovoth, Israel, where he heads the Experimental Biology Department.

## Michael Amrine to Head NHLI Information Office

Michael Amrine has been appointed chief of the Office of Information, National Heart and Lung Institute.

Mr. Amrine, who will advise Dr. Theodore Cooper, Institute Director, on information and educational matters, has been Director of Publications for the Association of American Medical Colleges.

He will also direct a program to increase public awareness of the health problems posed by cardiovascular and chronic lung disorders.

In addition, the NHLI office, under his direction, will inform public and professional audiences of the latest techniques of prevention, diagnosis, and treatment resulting from the work of the Institute's scientists and grantees.

Mr. Amrine attended Kansas State Teachers College and Columbia University.

He worked as a newspaperman for the *Emporia Gazette*, the *New Orleans Item-Tribune*, the *Baltimore Sun*, and the *London Daily Herald*, and for several years he was a science writer with the North American Newspaper Alliance.

Since 1945, Mr. Amrine has held numerous posts in science writing and public information, including 16 years as Public Information Officer for the American Psychological Association (1952-61).

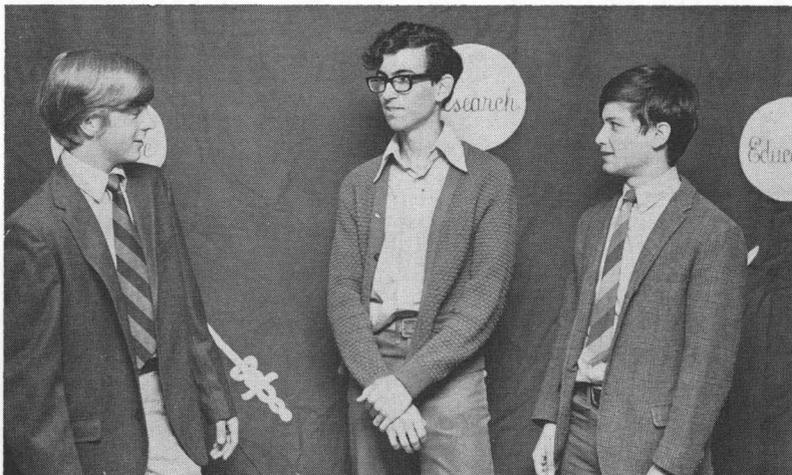
From 1965 through 1968, he was a consultant to the Office of the Surgeon General.

Mr. Amrine is the author of several books. His most recent book, on safe driving, was distributed by the Book-of-the-Month Club this spring.



Mr. Amrine is the author of several books, including "The Great Decision: The Secret History of the Atomic Bomb."

Mr. Amrine's affiliations include the National Press Club, the Federation of American Scientists, the National Association of Science Writers, and the American Medical Writers Association.



As part of a scholarship program sponsored by the American Cancer Society, D. C. Division, three outstanding science students spent the summer working with National Cancer Institute researchers. The students (l to r), Michael Ellis and Paul Gross, Archbishop Carroll High School, and Daniel Zaharevitz, Gonzaga H. S., scored in the high nineties in a science test, and were among the top 20 chosen by a panel of educators. Dr. Franklin Portugal, Viral Carcinogenesis Laboratory, Dr. Robert Hoyer, Surgery Branch, and Dr. David Johns, Laboratory of Chemical Pharmacology, worked with the students.

## Breakthrough to Nursing Gives Additional Impetus Through DN Contract

"Breakthrough to Nursing"—a project aimed at helping members of minorities to become registered nurses—is being given increasing impetus through a contract awarded by the Division of Nursing, BHME.

Under the terms of the contract with the National Student Nurses' Association, ongoing "Breakthrough" activities with blacks, Spanish Americans, and Indian Americans will be expanded.

Localities in southern, southwestern, midwestern, north central, mid-Atlantic, and eastern states comprise the present target areas.

The contract also places emphasis on the recruitment of men into nursing.

"We have a commitment to see that so valuable a source is indeed tapped for nursing," said Jessie M. Scott, DN Director.

Some project groups are establishing all-male recruitment committees to tap former medical corpsmen for nursing.

Student nurse volunteers and community groups that want to extend the "Breakthrough" project should contact the Project Director, St. Clair Clement, National Student Nurses' Association, 10 Columbus Circle, New York, N.Y. 10019.

## Booklet Lists Training Programs For Physician Support Personnel

A new publication, *Selected Training Programs for Physician Support Personnel*, lists more than 100 training programs to help meet critical manpower needs.

The booklet, compiled by the Division of Manpower Intelligence, BHME, is available without charge.

## Frank O. Barden Dies; Retired NINDS Writer

Frank O. Barden, Jr., 71, who retired from the National Institute of Neurological Diseases and Stroke last year, died of a heart ailment, Aug. 2, in Arlington.

Mr. Barden served as a writer in the office of the chief, Perinatal Research Branch, prior to his retirement.

He studied music at conservatories in Oberlin, Ohio, and Berlin, Germany, and sang professionally during the 1930's.

Mr. Barden is survived by his wife, Gertrude, of the home, 3434 N. Edison St., Arlington; five daughters, a stepson, two sisters, a brother, 23 grandchildren, and eight great-grandchildren.

## Latest Participants in NIH Visiting Scientists Program Listed Here

7/20—Dr. James Arthur Goodman, U.S., Division of Special Mental Health Programs. Sponsor: Dr. Bertram S. Brown, NIMH, Parklawn Bldg.

7/23—Dr. Kosaku Noda, Japan, Laboratory of Biomedical Sciences. Sponsor: Dr. Erhard Gross, NICHD, Bldg. 10, Rm. 5B11.

7/28—Dr. Kantilal M. Patel, India, Biometry Branch. Sponsor: Dr. David G. Hoel, NIEHS, Research Triangle Park, N.C.

8/1—Dr. Robert Blumenthal, The Netherlands, Laboratory of Molecular Biology. Sponsor: Dr. Joseph E. Rall, NIAMD, Bldg. 10, Rm. 9N222.

8/1—Dr. William J. Martin, Australia, Immunology Branch. Sponsor: Dr. William D. Terry, NCI, Bldg. 10, Rm. 4B18.

8/1—Dr. Masahiro Ohata, Japan,

## Sylvan C. Martin Wins PHS Medal for Liaison Activities for NIEHS

Sylvan C. Martin, liaison officer of the National Institute of Environmental Health Sciences, Research Triangle Park, N. C., was recently presented the PHS Commendation Medal by R. Stedman Green, chief engineer officer of the PHS.

The award was given to Mr. Martin in recognition of his outstanding performance since his appointment to NIEHS in 1966.

Mr. Martin has coordinated the NIEHS program—concerned with basic research on the chemical, physical, and biological environ-



Mr. Martin has been very successful in obtaining cooperation and collaboration of scientists and technologists in the numerous environmental agencies with which he has worked.

mental agents which may reach man through long-term, low-level exposures—with other governmental and private programs of similar or related interest.

Praising Mr. Martin's performance, Dr. David P. Rall, Director of NIEHS, said, "The information, and more particularly the insight, that he has made available to me and my staff have played a very important role in shaping the research activities of the NIEHS to the real needs of the community."

Endocrinology Branch. Sponsor: Dr. Charles Y. C. Pak, NHLI, Bldg. 10, Rm. 8N226.

8/2—Dr. Jan Lundstrom, Sweden, Laboratory of Chemistry. Sponsor: Dr. John Daly, NIAMD, Bldg. 4, Rm. 227.

8/2—Dr. V. V. Subba Reddy, India, Cancer Chemotherapy National Service Center. Sponsor: Dr. Saul A. Schepartz, NCI, Bldg. 37, Rm. 5E18.

8/2—Dr. Israel Yust, Israel, Immunology Branch. Sponsor: Dr. William D. Terry, NCI, Bldg. 10, Rm. 4B18.

Since 1963, there have been 5,347 organ transplants in the world—*Bulletin of the ACS*.

## U.S.-JAPAN

(Continued from Page 1)

Diseases and the National Institute of Child Health and Human Development also participate in its activities.

The Joint Committee meets annually, alternating meeting sites between the United States and Japan, as do each of the Joint Panels.

This past meeting, and the Joint Panel meetings on leprosy and parasitic diseases that immediately preceded it, were a first at NIH.

### First to Use System

Held in the C wing in Bldg. 31, the meetings were the first to use the simultaneous translation system installed in the conference room.

Japanese and American scientists were able to hear concurrently the presentations of the Committee members and other investigators.

The new Panel will join the existing six on research in cholera, tuberculosis, leprosy, parasitic diseases, viral diseases, and malnutrition.

Among the program accomplishments discussed at the joint meetings were an improved cholera vaccine that is almost ready for clinical field trials, a better understanding of the effects of malnutrition on the mental and physical development of children, and progress toward an improved human rabies vaccine, free of the contaminants that cause serious reactions.

Dr. Howard Minners, chief of NIAID's Geographic Medicine Branch, pointed out another important achievement resulting from the joint venture—"the increased communication, understanding, and scientific cooperation that has taken place, and is continuing to expand, between the scientists of Japan and the United States.



Members of the Joint Committee are: Back row: (l to r) Herman Pollack, Department of State; Dr. Leighton E. Cluff, U. of Florida; Dr. Theodore E. Woodward, U. of Maryland; Tadashi Inumaru, Ministry of Education, Japan; Dr. Tatsuro Iwasaki, Research Institute of Tuberculosis, Japan; Yutaka Nomura, Embassy of Japan. Middle row: (l to r) Dr. James V. Neel, U. of Michigan; Dr. Ivan L. Bennett, New York U.; Dr. Edwin H. Lennette, Cal. State Department of Health; Dr. Robert Q. Marston, NIH Director; Dr. H. Stanley Bennett, U. of North Carolina; Dr. Ken Yanagisawa, Japanese National Institute of Health; Dr. Tadashi Takizawa, Ministry of Health and Welfare, Japan. Front row: (l to r) Dr. Merlin K. DuVal, HEW; Dr. MacLeod, Dr. Kurokawa, and Dr. Takemune Soda, Japanese Institute of Public Health.

## NIH Credit Union Issues 6% Dividend for Third Consecutive Quarter

For the third consecutive quarter, the NIH Federal Credit Union has paid a 6 percent dividend—the highest percentage that is allowed under the Federal Credit Union Act.

On July 1, dividends amounting to \$173,899.62 have been paid to members on outstanding shares of \$13,221,126.34. Credit Union assets, as of July 31, amount to \$14,594,646.57.

The National Credit Union Administration recently gave the NIH Credit Union a Thrift Honor Award for its success in stimulating savings among small depositors.

"This will, hopefully, serve as an example to other nations as a way to improve not only world health, but also relations between various peoples," he added.



Many of the scientists used the simultaneous translation system that is a feature of Conference Room 10, Bldg. 31. This was the first time the system has been used. Within 5 minutes after the meeting adjourned, Japanese Embassy representatives received the set of magnetic tapes of recordings of conference proceedings.

## Asian Cholera Experience Put to Use in Treating Acute Infant Diarrhea

Experience gathered from epidemics of Asiatic cholera, a form of diarrhea, is being applied to treatment and prevention of acute diarrheas found in certain American Indian infants, according to Dr. G. Donald Whedon, NIAMD Director.

National Institute of Arthritis and Metabolic Diseases' scientists have begun the Indian study in collaboration with Johns Hopkins University School of Medicine.

The researchers have established an outpost on an Apache Indian reservation, about 150 miles northeast of Phoenix, Ariz., at the Indian Health Service's Whiteriver Hospital.

Apache children suffer annual epidemics of diarrhea. The incidence has been over one case per child per year.

The death rate, formerly very high among children under 5 years, has dropped, but the disease hospitalizes infants for long periods and causes a great deal of suffering.

It is prevalent, though less serious, among many other Indian tribes of the Southwest, where NIAMD research on arthritis, diabetes, and gastrointestinal disorders is being conducted.

The Indian population offers the opportunity to use methods that were successful in checking the course of Asiatic cholera in Dacca, Pakistan.

Both Dr. Robert S. Gordon, Jr., NIAMD clinical director and project officer for the study, and Dr. Norbert Hirschhorn, assistant professor of Medicine at Johns Hopkins University and a leader of the research team at Fort Apache, acquired first-hand experience with cholera in Dacca.

During the studies in the Whiteriver area, the investigators, will attempt to learn what types of bacteria cause the illness and what biochemical features they have in common with *V. cholerae*, the organism that causes Asiatic cholera.

## TELEVISION SPOTS

(Continued from Page 1)

learn more about the "Life Corps."

This spot and the program for providing information about careers in the Nation's health care delivery system were the result of a cooperative project between the Blue Cross-Blue Shield organizations in Washington; the J. Walter Thompson advertising agency, and the Bureau of Health Manpower Education.

The announcement will be run between the halves at three more Washington Redskin games. Test spots will also be conducted in New York City and Durham, N. C.



Dr. Lowell T. Harmison recently returned from a conference and lecture tour in Australia. Dr. Harmison is acting chief, NHLI's Medical Devices Applications Program. At the invitation of the Cardiac Society of Australia and New Zealand, he participated in the International Cardiology and Cardiac Surgery Conference in Melbourne. He described development of artificial heart and heart assist devices, and also talked with scientists, engineers, and others in Sydney, Canberra, and Kensington, about the NHLI program.

## FY 1970 Edition Lists PHS Grants, Awards

More than 12,000 grants and contracts funded by NIH during fiscal year 1970 are listed in a new edition of the *Public Health Service Grants and Awards* series of volumes, Part 1.

Three other volumes to be released will complete the series.

Copies of Part I are available at \$2 from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Single free copies are available from the Information Office, Division of Research Grants, Bethesda, Md. 20014.

## Check Withholding Tax; Some Employees Face Large End-of-Year Bill

Some HEW employees may face an unexpected, and large, Federal income tax bill at the year's end.

Most employees will find their Federal income tax withholding sufficient to cover actual tax liability in 1971, according to the Internal Revenue Service.

However, some persons will be affected by statutory changes in the withholding system.

These changes affect certain categories, especially working couples, for whom not enough money is withheld to cover the tax due.

There is still time to change withholding instructions. Employees at NIH may compute the cumulative amount withheld for the year from the Statement of Earnings furnished with each paycheck.

Timekeepers or payroll representatives can furnish a brief guide.

## Dr. Schwartz Named NEI Deputy Assoc. Director

Dr. Samuel Schwartz has been appointed deputy associate director for Extramural Programs, National Eye Institute.

Dr. Schwartz will also serve as chief, Scientific Programs Branch of the NEI Extramural Programs, succeeding Dr. Samuel Price.

In both capacities, he will assist Dr. George Brooks, associate director for Extramural Programs, in directing the scientific and administrative management of NEI's research and training programs.

Dr. Schwartz earned a B.S. degree from the University of Manitoba in 1952 and a Ph.D. degree from the University of Minnesota in 1956, majoring in Medicinal Chemistry with a minor in Biochemistry.

He was on the faculty of the George Washington University for 8 years, teaching, conducting research, and serving as an industrial consultant.

Dr. Schwartz's varied background in NIH extramural activities began in 1964 with the National Cancer Institute.

In January 1965 he was appointed executive secretary of the Medicinal Chemistry Study Section, Division of Research Grants. Later, he was named assistant chief for Referral Research Grants Review Branch, DRG.

Dr. Schwartz has received a number of academic awards, served on NIH committees, and belongs to several professional societies.



Dr. Schwartz has a varied background in NIH extramural activities.

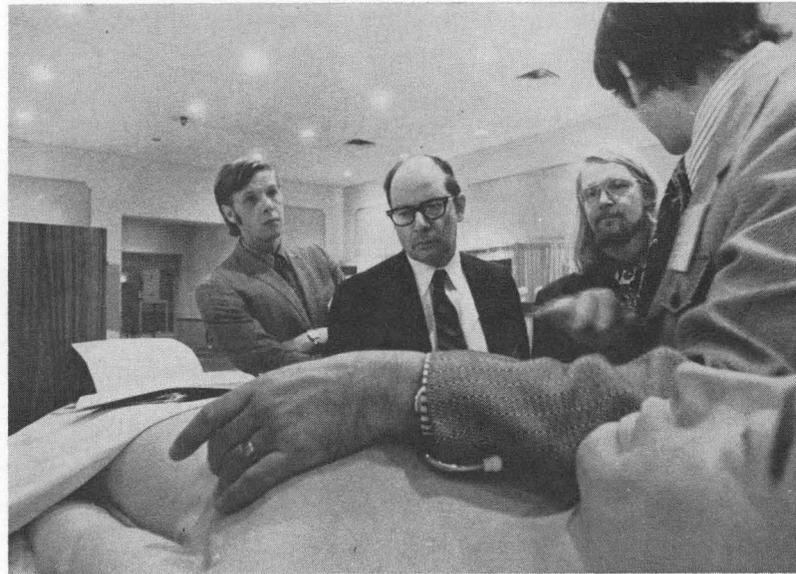
### 2 TV Announcements Released To Explain Periodontal Disease

The Division of Dental Health has prepared two television spot announcements in cooperation with the American Academy of Periodontology.

*The Tenth American* explains the signs and symptoms of "perio" and stresses its prevalence.

*Gum Care*, an animated cartoon, describes gum disease and its consequences.

## Conference Stresses Use of Multimedia To Improve Teaching of Health Sciences



An automated mannequin is programmed to produce responses simulating 150 cardiovascular disorders. The model, developed under a BHME grant, is used by the University of Miami School for Medical Education.

Scientists from NIH were among those who participated last month in a conference on the use of "multimedia" in health science education.

The meeting, titled "Media 70's National Conference on Multimedia in the Health Sciences," was cosponsored by the Bureau of Health Manpower Education, the National Library of Medicine, the University of Cincinnati Medical Center and the Educational Communications Foundation.

Medical school faculties and directors of biomedical communica-

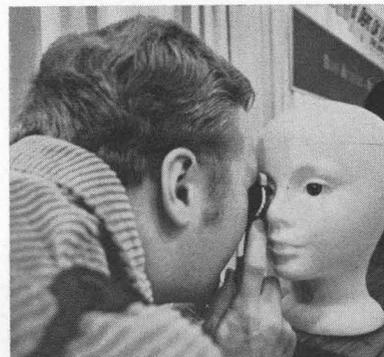
tion centers also attended the meeting.

The conference program stressed the combination of audiovisual concepts, television, computers, and programmed instruction to improve health sciences teaching.

Dr. Harry W. Bruce, Jr., Director, Division of Physician and Health Professions Education, BHME, presided at the second general session. Dr. Ralph P. Christenson, Lister Hill National Center for Biomedical Communications, NLM, conducted a workshop at the third session.

The announcement that BHME has established an Office of Audiovisual Educational Development was made by Dr. Eugene A. Confrey, the Bureau's associate director for Program Planning and Evaluation. The facility will be located at NLM's National Medical Audiovisual Center in Atlanta.

Norman E. Tucker, educational consultant, Dental Education Branch, DPHPE, was general chairman of the meeting.



An artificial head, demonstrated by the University of Iowa, produces normal and abnormal variations in the eye's fundus, and gives students practice in using the ophthalmoscope.

## A Book Evolves From Conference on Biologic Studies of Blastocyst

A conference on biologic research of the blastocyst supplied material for a book titled *Biology of the Blastocyst*. Biologists, chemists and physicians attended the 1969 international symposium which was primarily sponsored by the National Institute of Child Health and Human Development.

The blastocyst represents the final stage of embryonic development before implantation in the uterine wall. Research on this subject is a vital part of NICHD's contraceptive development contract program in reproductive biology.

The book, edited by Richard J. Blandau, University of Washington, Seattle, summarizes the biology of the mammalian egg before and during early implantation. It is published by the University of Chicago Press.

An earlier NICHD conference was the source for a companion volume, *The Mammalian Oviduct*.

Both books aid in presenting a fuller understanding of reproductive processes and the development of modern contraceptive methods.

## DR. BRUNO

(Continued from Page 1)

acic surgery at the Cardiovascular Surgical Clinics, University of Rome, Italy. He was also consultant in Surgical Cardiology at the Institute of Cardiology.

In 1962 he received a Special Postdoctoral Fellowship Award from NIH for studies at the Cardiovascular Research Laboratory, Los Angeles County Hospital.

### Received Research Award

The following year he received an advanced research award from the Los Angeles County Heart Association.

Dr. Bruno served as postgraduate surgical fellow, and later, as attending surgeon in the Department of Oncologic Surgery, City of Hope Medical Center, Duarte, Calif.

He worked in cancer surgery and on specialized techniques for isolated organ perfusion in treating inoperable tumors.

From 1965 to 1967 he was head physician in the Admitting and Emergency Department, at the Los Angeles County and Harbor General Hospital.

Dr. Bruno served on the NHLI Fellowship Review Board, and on the Committee on Staff Training-Extramural Programs (STEP). Later he became chairman of this organization.

Dr. Bruno holds a faculty appointment at Georgetown University Medical School and is on the attending staff of the University Hospital.

## Proposal to Permit Live Virus Vaccine in Human Cell Cultures Considered

A proposal to permit the preparation of live poliovirus vaccine in human cell cultures was published in the July 30th issue of the *Federal Register*.

The proposal would amend Part 73 of the Public Health Service Regulations which presently permit this vaccine to be prepared only in monkey kidney tissue.

However, data presented by manufacturers to the Division of Biologics Standards, and confirmed in DBS laboratories, indicate that the biological properties, including neurovirulence, of all three types of poliovirus currently approved for use are indistinguishable whether grown in human cell cultures (diploid strain) or in primary monkey kidney cells.

Interested persons have 30 days to comment on the proposed amendment. After comments are considered, final regulations will be published in the *Federal Register* to become effective 30 days after publication.

## Dr. Omar Yoder Named DRG Grants Associate

Dr. Omar Christian Yoder recently joined the Grants Associate program for training in grants administration.

Dr. Yoder comes to NIH from Johns Hopkins University, Division of Medical Genetics.

Prior to 1969, he was assistant professor in the Department of Pathology at West Virginia University.

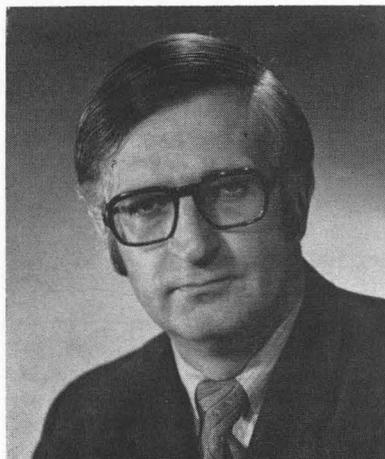
His work involved research in enzymology and a preliminary genetic survey.

Dr. Yoder received his M.S. degree (1964) and Ph.D. degree (1965) from West Virginia U.

During 1967-68, he was an NIH Research Fellow at the Max-Planck Institute in Germany.

This research included cytology, tissue culture preparations, and biochemical genetics.

Dr. Yoder is the author and co-author of a number of biomedical genetics publications.



Dr. Yoder was, for 3 months, visiting professor at the University of Geneva.

## 'To Seek' Wins Awards At Recent Film Festival

"To Seek, To Teach, To Heal," the prize-winning NIH film, has won three additional awards at the recent "Medikinale International Marburg 71," held in Germany.

The Gold Medal Award was given to the picture for being the most outstanding film in its category.

Special awards were won by Werner Schumann, selected as the best director, and Robert Pierce, selected as the best film editor.

"To Seek," has also been nominated and entered in the Edinburgh International Film Festival and the Third International Scientific Film Festival in Rio de Janeiro by the U.S. Information Agency.

Designed for general audiences, the film is available on free loan to medical schools, educational institutions, and civic groups by writing to Association-Sterling Films, 866 Third Ave., New York, N.Y. 10022.

## DR. DEWITT

(Continued from Page 1)

miasis from 1947 to 1949.

He also conducted a program against schistosomiasis in Egypt for several years. During World War II he served with the Navy.

Dr. DeWitt was an authority on the effects of nutrition in the course of infectious diseases.

He was influential in describing a special vitamin deficiency disease due to a lack of Vitamin E and certain rare elements.

He was scheduled to participate in a symposium arranged by the American Society of Parasitologists on "Parasites in Relation to Man's Total Environment" to be held in L.A. this month.

Dr. DeWitt was active in the American Society of Tropical Medicine, and from 1959 to 1965, served as editor of its *Tropical Medicine and Hygiene News*.

He was secretary and vice president for the Helminthological Society of Washington.

Dr. DeWitt was an active participant in the Cathedral Choral Society of the Washington Cathedral.

Dr. DeWitt was born in Birmingham, Ala. He received his B.A. degree from Howard College in 1948. He earned both his M.A. degree (1952) and his Ph.D. in Parasitology (1956) from G.W.U.

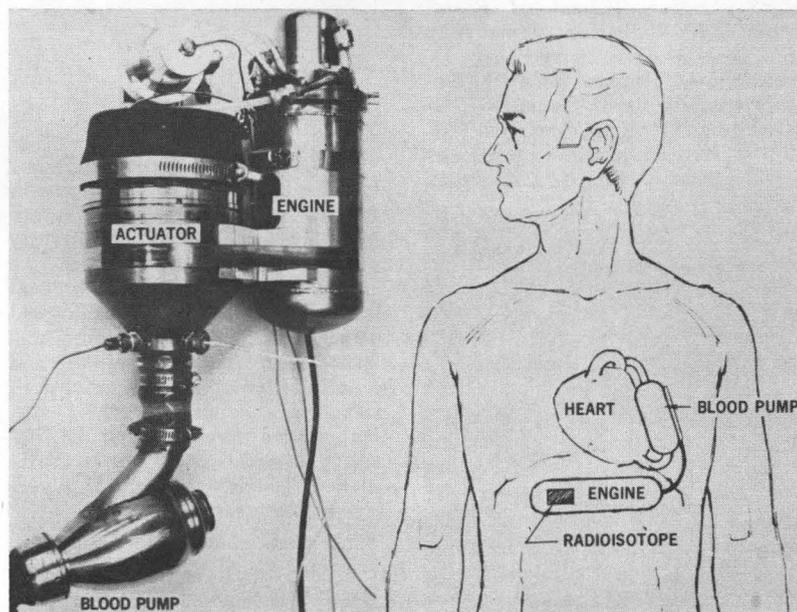
He was commissioned in the Public Health Service Commissioned Corps in 1951.

Services were held Aug. 11, at Gawler's Funeral Home, Washington, D.C. Burial was in Parklawn Cemetery, Rockville.

Dr. DeWitt is survived by his wife, Sara, of 7209 Arrowwood Road, and his mother, Mrs. Alma V. DeWitt, of Birmingham.

In lieu of flowers, the family requests that donations be made to the William B. DeWitt Memorial Scholarship Fund, Samford University in Birmingham, formerly Howard College.

## Miniature Heat Engine Tested in Calves; Flawless Performance—Over 2,000 Hours



The Stirling cycle engine of this prototype heart-assist system has performed flawlessly for over 2,000 hours in a continuing bench test. It employs a blood pump next to the heart, and a unit in the abdomen that combines the flash-light-sized nuclear powered engine with an hydraulic actuator component for driving the blood pump.

An experimental miniature heat engine, tested in calves as a power source for an implantable heart assist system, has performed flawlessly for over 2,000 continuous hours of operation.

A description of the Stirling cycle engine and results of the continuing bench test were presented to the 1971 Intersociety Energy Conversion Engineering Conference in Boston early this month.

The Medical Devices Application Program, National Heart and Lung Institute, and the Donald W. Douglas Laboratories, Richland, Wash., reported the research.

The research program seeks to develop various temporary and permanent heart- and respiratory-assist systems, total artificial hearts, and other implantable devices and materials.

Development of the miniature

Stirling engine, along with the necessary auxiliary equipment to operate a heart pump, has been underway for 4 years at the Donald W. Douglas Laboratories under the guidance of NHLI's program.

The system has been successfully tested in calves and can operate on 50 watts of heat from an electrical source, or from the heat of nuclear decay of a radioisotope (plutonium-238) when this becomes available.

### Unit Self-Contained

As a self-contained unit, such a power system can furnish all the energy needed to take over the work of the heart.

Whether the primary energy source is electrical or nuclear, this energy is used to melt a mixture of lithium salts in an insulated container where the heat is stored and doled out to the heat engine.

When operating with a radioisotope heat source, the completely implantable system will free patients from the daily support that would be involved with other power sources which require periodic recharging.

The current model engine and auxiliary equipment—except the blood pump—occupy a space roughly equivalent to a quart and weigh about 6 pounds.

The engineers are attempting to devise an advanced system whose weight, volume, and energy input requirements can be cut in half.

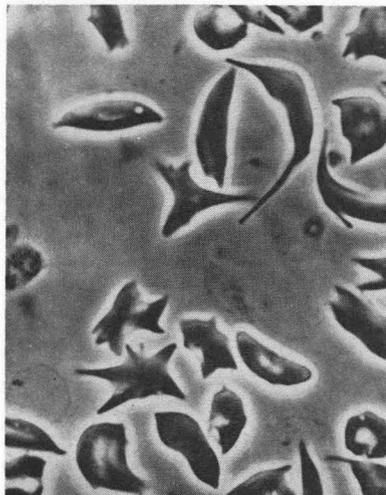


Dr. Peter J. Olch (l), deputy chief of the History of Medicine Division, National Library of Medicine, and William H. Caldwell, deputy chief of NLM's Bibliographic Services Division, recently received the PHS Commendation Medal for "sustained high-quality performance while on active duty."

## SICKLE CELL

(Continued from Page 1)

ciate professor of Social Welfare Administration, School of Social Work Administration, University of Chicago; Dr. George Brewer, professor of Human Genetics, Department of Human Genetics, University of Michigan, and Dr. William H. Bullock, associate professor of Medicine, Howard University



A photomicrograph, magnified 1,000 times, shows blood cells characteristic of sickle cell anemia.—Photo by Dr. Makio Murayama, NIAMD.

School of Medicine.

Dr. C. Lockard Conley, professor of Medicine, Hematology Division, Johns Hopkins Hospital; Dr. Yvette Francis, director, Sickie Cell Clinic, Jamaica Hospital, New York, and Dr. Rudolph Jackson, associate member in Hematology and Oncology, St. Jude's Hospital, Memphis.

Also, Moses Newson, executive editor, the Afro-American Newspapers, Inc., Baltimore, and William Robertson, special assistant to Virginia Governor Linwood P. Holton, Richmond.

### Other Members Listed

Dr. Louis Sullivan, associate professor of Medicine, Boston University School of Medicine, and Zeola Walder, chairman, Citizens Advisory Board, South Central Multipurpose Health Services Center, Los Angeles.

HEW Secretary Elliot L. Richardson, who announced the formation of the committee, said ex officio members will be appointed from the Department of Defense and the Veterans Administration.

Sickle cell anemia causes a malformation of red blood cells in the bodies of its victims. These cells take on a sickle shape which causes them to aggregate and clog small blood vessels.

Over two million blacks are carriers of the genetic disorder and most carriers, being free of illness, are unaware that they may transmit the disease to their children. About one out of every 500 black babies is born with the disorder.

## New Technique Offers View of Blood Flow In Inner Ear, Records on High Speed Film

A new technique has been developed for directly viewing and photographing blood cells passing through the capillaries of the basilar membrane, which supply the spiral organ and contains the special sensory receptors for hearing.

The technique—observing the flow microscopically and recording it on high-speed motion picture film—promises to be of value in experiments to relate inadequate blood flow in the inner ear directly to sensorineural hearing loss.

Scientists, supported by the National Institute of Neurological Diseases and Stroke, are using this method both in normal animals and in animals treated with quinine.

They are conducting their studies at the Kresge Hearing Research Institute and the Department of Otolaryngology, University of Michigan.

The researchers opened the ears of anesthetized 450-gram guinea pigs, removing the ear drum, annulus, and ossicular chain.

A small wedge of bone was taken from the edge of the round window, and the round window removed in order to expose the basilar membrane.

A camera running at 128 frames per second was placed over the microscope, and synchronized with a strobex light source which produced flashes at the exposure of each frame, thus avoiding overheating of the tissue.

This arrangement permits clear viewing of both the blood flow through the capillaries, and many

of the structures comprising the organ of Corti.

The scientists determined that the rate of blood flow through these capillaries in normal animals is about 320 microns per second. Their films clearly demonstrate, they report, the cessation of blood flow following injection of quinine dihydrochloride.

With perfection of the technique, including faster photography, they anticipate that much new information will be forthcoming about the relationship between occlusion of these blood vessels and various drugs, oxygen distribution in the organ of Corti, and other factors affecting hearing.

A report of this study, by M. Lawrence, appeared in a recent issue of *Acta Otolaryngologica*.

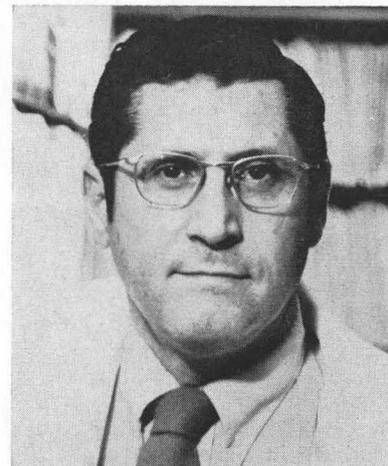
## 21st Century Oral Health System to Be Visualized

Visualization of how an oral health system should exist in the 21st century will be attempted by seven scientists at the University of Oklahoma.

The year-long project is supported by the Division of Dental Health, BHME.

Each specialist will center attention on one aspect of the research program.

## Dr. William B. Kannel Is Cover Story Subject Of 'Modern Medicine'



Five years ago Dr. Kannel assumed leadership of the NHLI Framingham study to construct a medical profile of the coronary-prone individual.

Dr. William B. Kannel, Director of the National Heart and Lung Institute's Framingham Heart Study, was the cover story subject in the July 12 issue of *Modern Medicine*.

Dr. Kannel, a 1949 *summa cum laude* graduate of the Medical College of Georgia, has worked in Framingham, Mass., since 1950 and has served in his present position for the past 5 years.

### Served as Consultant

Dr. Kannel has also served as assistant in Medicine at Peter Bent Brigham Hospital, consultant at Framingham Union Hospital, and instructor in the Harvard Medical School's Department of Preventive Medicine.

He is a fellow of the American College of Cardiology, American Heart Association, and American College of Physicians, and a PHS commissioned officer.

## 18 Contracts Awarded For Heart Research

A number of contracts in support of heart research have been awarded by the Myocardial Infarction Branch, National Heart and Lung Institute.

Twelve contracts have been given for research on the onset of acute heart attacks and sudden cardiac death.

Research goals for this study include identifying factors that "trigger" acute heart attacks, and developing methods for treating the very early stages of the attack.

Six contracts were awarded for research on effective ways of protecting heart muscle against the destructive consequences of blood deprivation (ischemia) and thus reduce the extent and severity of heart damage resulting from acute heart attacks.

## 'The Mind of Man'—Documents Brain Age



The National Institute of Neurological Diseases and Stroke's Information Office invites all NIH employees to see "The Mind of Man," a motion picture about the brain.

The British Broadcasting Company's 2-hour film will be shown in the Jack Masur Auditorium, Clinical Center, for one week, Aug. 16-20, from 11 a.m. to 1 p.m.

It is suggested that employees watch the first hour of the movie during lunch time, and the other half on another lunch hour later in the week.

Filmed in research laboratories throughout the world, it offers evidence that brain exploration holds significant implications for Man's future.

Because of tremendous interest in brain research revealed in recent publications and other media, the film is being presented to alert NIH'ers to important achievements in the "Brain Age."