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National
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of
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Dr. Kretchmer Receives Honorary Doctorate

Dr. Norman Kretchmer, Director of the National Institute of Child Health and Human Development, has been awarded the honorary degree of doctor from the University of Bern, Switzerland. The doctorate *honoris causa*, the university's highest honor, was conferred upon Dr. Kretchmer by the dean of the Medical School and the rector of the university during the university's academic day celebration in December.

Dr. Kretchmer was cited for "his sustained scientific investigations, his constant insistence upon the application of scientific findings to the practice of medicine, and . . . his untiring effort on behalf of international cooperation."

He was also recognized for the attention he



Dr. Kretchmer, who has received numerous awards and fellowships, serves as an advisor to the WHO on maternal and child health matters.

has given to inclusion of Third World representatives in scientific exchange activities.

It was noted that from the beginning of his career, Dr. Kretchmer has been concerned with applying biochemical advances to the field of medicine. The university acknowledgment cited his research on biological processes of development and their regulation, noting his observations of intestinal cell growth and differentiation as a means of studying these processes.

Mention was also made of his studies on the effects of nutrition on human development, including cultural and historical aspects of nutrition in different populations.

Report on Arthritis Program Outlines Advances In Research, Training, Multipurpose Centers

Progress toward combating the Nation's number one crippling disease, arthritis, is outlined in *The Arthritis Program*, the first report of its kind published by the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Dr. G. Donald Whedon, Director of NIAMDD, explained that the report, transmitted to the President and to Congress on Oct. 6, 1978, describes the Institute's progress in the first year of implementation of the Arthritis Plan.

The plan is a blueprint for action, designed to tackle the problems faced by the estimated 31.6 million Americans who suffer from arthritis and related musculoskeletal diseases.

It calls for a significant expansion of both fundamental and clinical research in arthritis on the basis of recent discoveries in areas such as immunology, genetics, and inflammation.

NIAMDD associate director for arthritis Dr. Lawrence E. Shulman noted that the Institute's report describes research advances in searching for the cause and effective treatment of rheumatoid arthritis, ankylosing spondylitis, systemic lupus erythematosus, Lyme arthritis, degenerative joint disease (osteoarthritis), bone disorders, and joint replacements.

The report also describes NIAMDD's increase in research training programs, including support for fellowships and institutional

training awards under the National Research Service Award program. Moreover, for the first time, NIAMDD supported clinical investigator awards in the rheumatic disease area.

A multicentered program, Systematic Cooperative Studies in the Rheumatic Diseases, was initiated by contract to carry out several clinical trials using new agents for the treatment of rheumatoid arthritis and other rheumatic diseases. A center in Utah coordinates activities of 10 cooperating clinical centers.

NIAMDD also supports a major cooperative program with the USSR. Studies are focusing on arthritis in children, the treatment of rheumatoid arthritis, and exchange of laboratory research techniques.

The NIAMDD report also describes the development of a network of Multipurpose Arthritis Centers at geographically dispersed locations throughout the country.

In 1977, NIAMDD awarded grants for 15 centers, with programs organized in three areas: research, patient and professional education, and community demonstration projects.

In the report future NIAMDD activities under the Arthritis Plan during the next 5 years are recorded.

Single copies of *The Arthritis Program* are available from the NIAMDD Information Office, Bldg. 31, Rm. 9A-04, 496-3583.



An infant and an adult Celebes ape. This animal has been developed as a major laboratory animal at the Oregon Regional Primate Research Center for the study of diabetes mellitus. The clearance of dietary and intravenous loads of glucose in Celebes apes is similar to that of normal and diabetic human beings. (See Photo Feature, pp. 6-7.)

Jan. 24 NCI Forum To Hear Discussion of Cancer Study

Gene Pokorny, Executive Vice President, Cambridge Reports, Inc., will discuss Public and Worker Attitudes Toward Carcinogens and Cancer Risk at the next meeting of the NCI Fourth Wednesday Forum. The meeting will be held tomorrow (Jan. 24) from noon until 1 p.m., in Wilson Hall, Bldg. 1.

Mr. Pokorny's presentation will reflect the findings of a study conducted by Cambridge Reports for the Shell Oil Company.

Survey objectives included measurement of public awareness and knowledge of cancer and cancer risk, examination of public and workers' knowledge and attitudes toward the chemical industry and the role it may or may not play in causing cancer.

The NIH Record

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Lawrence Trissel Wins Award for Handbook On Injectable Drugs

Lawrence A. Trissel, staff pharmacist in the National Cancer Institute's Division of Cancer Treatment, Pharmaceutical Resources Branch, has received special recognition for his book, *Handbook on Injectable Drugs*.



Mr. Trissel

The handbook draws together in a single volume the bulk of published information on 158 commercial and 35 investigational drugs.

Under each drug heading is a discussion of the drug's concentration, stability, pH, dosage, compatibility and incompatibility with vehicles and other drugs in solution, and any other pertinent information.

Although aimed primarily at pharmacists and nurses involved in the preparation of drug solutions for intravenous injection, the handbook also has been used as a college text for classes in parenteral drug manufacturing and hospital pharmacy.

Because of the large number of drugs now on the market, Mr. Trissel said, consideration of a drug's incompatibilities are especially important.

Incompatibility occurs when one drug is mixed with others or with the intravenous vehicle to produce a product physically or chemically unsuitable for administration to the patient.

Mr. Trissel is preparing a second edition of

Herbert Spector, Champion Swordsman, Helps Organize NIH Fencing Club

"If challenged to a duel, I would refuse" is the standard reply of Dr. Herbert Spector—a champion fencer—to the question interviewers can't resist.

"Fencing," he says, "is one of the safest sports. The aim is never to hurt."

Dr. Spector, who was elected last October to the Athletic Hall of Fame of his alma mater, City College of New York, is a health scientist administrator with the Fundamental Neurosciences Program, National Institute of Neurological and Communicative Disorders and Stroke.

A member of five Olympic squads and winner of many fencing championships in the U.S. and France, Dr. Spector says, "Fencing can be enjoyed on many levels of ability. It's good for general conditioning and promotes balance and rhythm."

He shares his enthusiasm with others by teaching for the Washington Fencer's Club and the Montgomery County Recreation Association.

Dr. Spector staged the dueling scene for the opera, "The Duchess of Malfi," which premiered last summer at Wolf Trap Farm Park. His star pupil was tenor Neil Rosenshein, who after only 2 hours of lessons was praised by one reviewer as "a better swordsman than any other tenor I can recall." Dr. Spector will soon begin work on the fencing scenes for "Romeo and Juliet," an opera opening at the Kennedy Center in April.

Last year, Dr. Spector and Dr. Larry Fisher, a fellow fencer and an administrator in the NINCDS Neurological Disorders Program, helped organize a fencing club for NIH employees. The club has just moved to new space in the old Hamilton House gymnasium of Stone Ridge School, at the corner of Cedar Lane and Rockville Pike in Bethesda. New members, even beginners, are welcome.

For further information about the NIH Fencing Club, call Randy Schools, general manager of the NIH R&W Association, 496-6061.

Limited Tax Aid Available

Tax forms, tax information, and limited assistance in computing 1978 returns will be available in Bldg. 31, Rm. 4A-28, beginning Monday, Feb. 5.

Individuals should collect receipted medical bills, tax receipts, and proof of contributions and prepare a draft tax return prior to seeking assistance.

the handbook, which first appeared in May 1977 after 18 months of research and writing. It is available through the American Society of Hospital Pharmacists, and to date has sold more than 5,000 copies.

Prior to joining NCI in July 1977, Mr. Trissel worked in the Clinical Center and at the Food and Drug Administration. He received his degree in pharmacy from Butler University in Indianapolis.



The depth of concentration in fencing is apparent as Dr. Spector assumes the "en garde" position.

January Is Volunteer Blood Donor Month

President Carter has proclaimed January Volunteer Blood Donor Month.

The Blood Bank staff thanks all NIH employees, their families, and friends for their generous support during the past year.

Your continuing help is needed to supply the 23,700 units of blood and blood products needed by Clinical Center patients and the NIH employees' Blood Assurance Program.

If you are not already a blood donor, please call 496-1048 for an appointment now.



At The Clinical Center Blood Bank
Building 10A-Room 1E-33
Extension 496-1048 or 1049

Are you super-critical of yourself and others?
Call Employee Assistance Program
496-3164

TOX-TIPS Expands Coverage Of Studies to Identify, Clarify Toxic Substances, Agents

Beginning with the January 1979 issue, TOX-TIPS is being expanded to include epidemiology studies which identify or clarify the toxicity of substances and other agents. TOX-TIPS is a monthly publication of the National Library of Medicine's Toxicology Information Program.

In existence since June 1976, TOX-TIPS reports the initiation of long-term testing projects to determine toxic risks of chemical substances and other agents. Prompt publication of descriptions of such programs is expected to reduce the inadvertent duplication of expensive tests.

Projects Described

Projects are described briefly and pertinent administrative and funding information is included as available. The project descriptions are fully indexed by study parameters. Indexes by supporting and performing organizations and principal investigators also are included, and all indexes are cumulated quarterly.

In addition, TOX-TIPS carries selected references to articles from recent literature on work related to the reported project. These bibliographic citations are retrieved from searches of NLM's online data bases.

TOX-TIPS results from the cooperative efforts of industrial, government, and academic organizations reporting voluntarily on the initiation of long-term testing and epidemiology studies.

The publication is sponsored by the Toxicology Information Subcommittee of the DHEW Committee to Coordinate Toxicology and Related Programs.

Subscription information and sample copies are available from the Editor, TOX-TIPS, NLM, Toxicology Information Program, 496-1131.

Office Skills Career Development Program Will Accept Applications Beginning Feb. 12

The Office Skills Career Development Program will be accepting applications on a continuing basis beginning Feb. 12.

A general orientation concerning the application and selection processes and the training program will be held Monday, Feb. 12, from 11:30 a.m. to 1:30 p.m. in Bldg. 31, Rm. B2-C07.

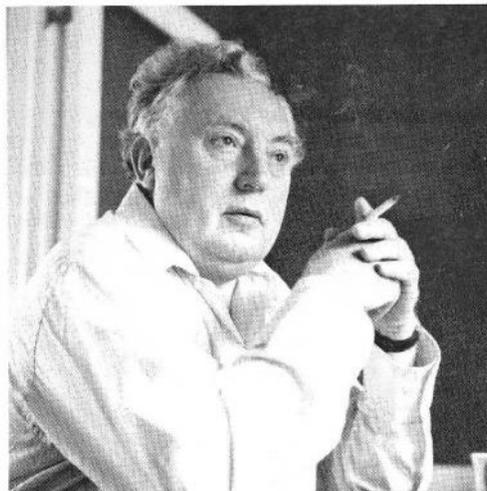
The program provides training annually for up to 10 NIH employees who desire careers in a clerical area but are in jobs making limited use of their skills.

To be eligible employees:

- May not be already certified as clerk-typists by the CSC;
- Must be full-time career or career conditional (or permanent part-time willing to be placed on full-time status);
- Must have worked at NIH for at least 1 year immediately prior to time of application;

George L. Payne Writes Own Retirement Story; His C.V. Tells All

Editor's Note: George L. Payne, Special Assistant to the NIH Deputy Director, retired Jan. 12. Some 5 years ago, long before he contemplated retirement, Mr. Payne wrote a tongue-in-cheek Curriculum Vitae. A friend retrieved it from the round file and slipped us a copy. After much arm-twisting, Mr. Payne agreed to let us print it.



In a rare moment of reflection and relaxation at his home, Mr. Payne contemplates the many activities he may or may not enter into.

Southern Illinois University Representative To Explain Its MBA Program

A master's program in Business Administration that offers a specialty in health care administration will be explained by a representative of Southern Illinois University at Edwardsville at noon, Tuesday, Jan. 30, in Wilson Hall, Bldg. 1.

Four NIH employees have recently completed this program: Kathryn Hancock and William C. Miller, III, of the National Cancer Institute, and John Knight and James Oberthaler of the Division of Computer Research and Technology.

The program, now in its third year in the Washington, D.C., area, is staffed by regular faculty from the campus of Southern Illinois who travel to Washington every 3 weeks for a full weekend seminar.

Reflecting the treatment-oriented, high-technology approach to medical care delivery prevalent in the U.S. today, the program emphasizes the techniques and benefits of applying systems concepts to the health care delivery system.

- Must be in grades GS 1-GS 3 or wage grade equivalent (higher graded employees must request a downgrade to GS 3 after selection into the program).

For further information and a copy of the OSCDP Application Handbook, contact the Career Development Branch, DPM, 496-6211, or stop by Bldg. 31, Rm. B2-C39.

"Born, with British nationality (from father) but predominantly Dutch genes (from mother), in Amsterdam, Holland, just in time to be old enough to remember being hauled out of bed at 5 a.m. and rushed into the street to see Zeppelins flying over Amsterdam on their way back to Germany from a bombing mission to England at the close of World War I.

"Started school in Bremen, Germany, where father was sent to reopen British Consulate after the war. Arrived in Newport News, Va. (whither father was transferred) as a 10-year-old Kraut, with clipped haircut and short pants, speaking only Dutch and German.

"To avoid having to explain why I was English (despite appearance and place of birth), claimed to have been born in England, which worked fine until I extemporaneously said 'Glasgow' to a Scottish lady who asked 'where?'. Resulting embarrassment taught me to prepare lies more carefully. Has stood me in good stead.

Principal 'Saved'

"Graduated from Newport News High School holding record (which, I think, still stands) for number of days tardy and distinction of being expelled by the principal 3 hours before graduation exercises commenced (he was talked out of it by two friendly teachers who successfully used 'you-don't-want-him-back-next-year' argument).

"After short stint as an 'Ordinary Seaman' on a Canadian tanker carrying crude oil from South America to Halifax—desperate parental measure designed to make me 'grow-up'—studied chemistry at William and Mary College and McGill University.

"Diverted to other fields by disenchantment with job as lab assistant (product quality control) with Crosse and Blackwell and its financial prospects during the depression (had to use 'pull' to beat out several Ph.D. competitors for the \$12-a-week job). Successively—but not very successfully—sold medical books for Williams and Wilkins and was 'technical representative' for Remington-Nippon Book Co.

"Joined staff of British Embassy in 1938—significantly on April 1—as sole Cypher Officer. Chief Cypher Officer 1939-45 during which time department grew to staff of 60. Attaché (for political analysis) 1945-56. Wrote

(See MR. PAYNE, Page 4)

Dr. Dembroski To Discuss Coronary Prone Behavior

Coronary Prone Behavior and Cardiovascular Response will be the topic of a lecture by Dr. Theodore M. Dembroski on Thursday, Feb. 1, at 2 p.m. in Conf. Rm. 6, Bldg. 31 C Wing.

Dr. Dembroski is associate professor of psychology in the behavioral science department at Eckerd College, St. Petersburg, Fla.

He is a former resident scholar in the Behavioral Medicine Branch, National Heart, Lung, and Blood Institute, which is sponsoring the lecture.

MR. PAYNE

(Continued from Page 3)

weekly analysis of U.S. political and economic affairs for circulation to U.K. cabinet and Commonwealth prime ministers. On brief special assignment in Western Germany in 1946.

"Campaign manager, press agent, and wet-nurse for unsuccessful (rightly so) Congressional candidate in 1956. After campaign, compiled and published historical-statistical analysis of elections in Maryland's Sixth Congressional District.

"Consultant to President's Committee on Scientists and Engineers, 1957-58, assigned to investigate British scientific manpower and education problems, programs, and plans. As a result, wrote *Britain's Scientific and Technological Manpower*, a 450-page tome which was enthusiastically ignored in the U.S. but well-received and much used in Great Britain.

Joins NIH in 1959

"Joined NIH staff January 1959, serving successively as Special Consultant (manpower problems); chief, Special Projects Branch, OPP, OD, 1960-68; detailed to Organization for Economic Cooperation and Development, Paris, 1962-64, to work on reviews of scientific manpower and education problems in member countries.

"Executive Secretary, B/I/D Directors Meeting, 1965 to present; ODD Special Assistant, 1968 to present; Executive Secretary for Policy Advisory and Program and Budget Review Committees for several years.

"Up to ears in civic affairs in Town of Garrett Park since 1944. Elected to Town Council, 1960-62 (resigned to go to France), 1968-70 and 1974 to present; elected Mayor, 1970 to 1974.

"Married with one adult wife (and look askance at those who claim to be 'married



At his retirement party, NIH Director Dr. Donald S. Fredrickson described Mr. Payne as "the real historian of NIH because his minutes of the Directors' meetings bear witness to a remarkable facility for interpretation of what went on and great selectivity in presenting those facts."

NIEHS Periodical Features Volume on Metal Toxicity Factors

Factors Influencing Metal Toxicity is the theme of the 25th volume of *Environmental Health Perspectives* recently published by the National Institute of Environmental Health Sciences, in Research Triangle Park, N.C.

Vol. 25 features two contributed articles and 22 papers from an International Workshop on Toxicology of Metals organized by the Scientific Committee on the Toxicology of Metals of the Permanent Commission and International Association on Occupational Health, Stockholm, Sweden, July 1977.

Dr. Joe W. Grisham and colleagues at the department of pathology, University of North Carolina School of Medicine, contributed a state-of-the-arts review, *In Vitro Assay of Cytotoxicity with Cultured Liver: Accomplishments and Possibilities*.

This new issue, in addition to papers on metal toxicity, also contains an article, *Carcinogenicity of Saccharin*, by Dr. Dwaine Reuber, National Cancer Institute.

NIEHS publishes *Environmental Health Perspectives* 6 times a year. Each issue contains up-to-date information centering on research findings relating to a specific area in environmental health.

It is available from the Government Printing Office, Washington, D.C. 20402. Single issues are \$5.10 (in the U.S.) and an annual subscription is \$30.50. Outside the U.S., single copies are \$6.38, and the subscription rate is \$38.15 per year.

Orders should be sent directly to GPO *not* to NIEHS.

with 3 children'). Have 3 daughters, 3 grandsons, and 2 granddaughters.

"Hobby: music and strong affinity for anything pre-1750 and violent allergy to post-1900 'popular', especially if singers without voices are involved, as they usually are. Spend most of spare time, and some that isn't, playing recorders—both kinds: flutes a bec and tape."

At a farewell party in Wilson Hall, Mr. Payne said that his retirement activities might include launching the Up Yonder Bakery Company which, he hopes, will become famous for its heavenly cakes—mainly angel food.

If that does not pan out, he may loaf or . . . market manufacturers' surplus goods from a little store, in some secluded seacoast cove, which will be called The Inlet Outlet House.

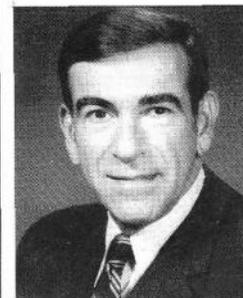
More likely, however, he will continue desultory work on a novel which, as yet, has no plot but for which he has collected scores of characters.

Actually, much of Mr. Payne's time will be directed to his interest in music. For the past 3 years he has been president of the Washington Recorder Society and editor of its newsletter.

For the immediate future he may also be found at NLM where he will be organizing his 20-year accumulation of papers.

Dr. Shulman, NIAMDD, Chosen President-Elect Of Rheumatology Group

Dr. Lawrence E. Shulman, associate director for the Arthritis, Bone, and Skin Diseases Program, National Institute of Arthritis, Metabolism and Digestive Diseases, has been chosen to serve as president of the Pan American



Dr. Shulman

League Against Rheumatism (PANLAR) for 4 years, beginning in 1982. Dr. Shulman was elected first vice-president and president-elect of PANLAR at the VII Pan American Congress of Rheumatology that met in Bogota, Colombia, in June 1978.

He will assume the presidency of the League at the organization's eighth Congress, scheduled to meet in Washington, D.C., in 1982 in conjunction with the annual scientific meeting of the American Rheumatology Association. Founded 35 years ago, the Pan American League is an association of 19 national scientific medical organizations in rheumatology throughout the Americas. It recently revised its statutes to include national community agencies, such as the Arthritis Foundation, as members.

PANLAR seeks to stimulate and promote new knowledge awareness, and the means of prevention, treatment, and rehabilitation of the rheumatic diseases.

To further these aims, PANLAR fosters cooperation among the component national societies, encourages the founding of national societies of rheumatology in countries where they do not exist, organizes or sponsors congresses, stimulates scientific research, and interacts with international agencies.

Biomedical Ethics Seminars Resume February 14

Dr. Robert Murray, professor of genetics at Howard University, will open the new series of Biomedical Ethics Seminars, addressing the Ethical Issues in Genetics, on Wednesday, Feb. 14, at 3 p.m., in the Westwood Bldg., Conf. Rm. D.

The second seminar in the series, sponsored by the Staff Training Extramural Programs Committee, is scheduled for Wednesday, Feb. 28, at 3 p.m. in Bldg. 31, Conf. Rm. 9.

Dr. Edmund Pellegrino, president, Catholic University of America, will speak on the Ethics of Collective Decisionmaking.

The series will continue on the second and fourth Wednesday of each month through May 9.

Attendance is open to all on a space-available basis. For information concerning future seminars, contact Arlene Bowles, 496-5358.

George E. Presson Retires; EO at Fogarty Center Since Its Inception

George E. Presson, executive officer of the Fogarty International Center since its inception in 1968, retires today after 39 years of Government service.

As executive officer, Mr. Presson designed and implemented the Fogarty Center's administrative management programs. He also formulated a series of guidelines for international conference procedures that are now widely used at NIH.

Before coming to FIC, Mr. Presson headed the Management Operations Section of the Office of International Research. During his career he has held key administrative positions with the Public Health Service and NIH for 31 years.

Other Service Noted

Prior to this period, he served in other Government posts at the Securities and Exchange Commission, the Internal Revenue Service, and the War Production Board.

At a recent Christmas party, Mr. Presson revealed his talent as an auctioneer. With great gusto, he inspired FIC employees who had brought Christmas wrapped presents to raise each bid higher until \$118 was collected as the Fogarty International Center's donation to the Patient Emergency Fund.

Mr. Presson plans to devote more time to family and home projects; as well as continuing to work as a tax consultant. He also intends to visit points of interest in the area, which for years he has recommended to visitors but has been unable to do himself.

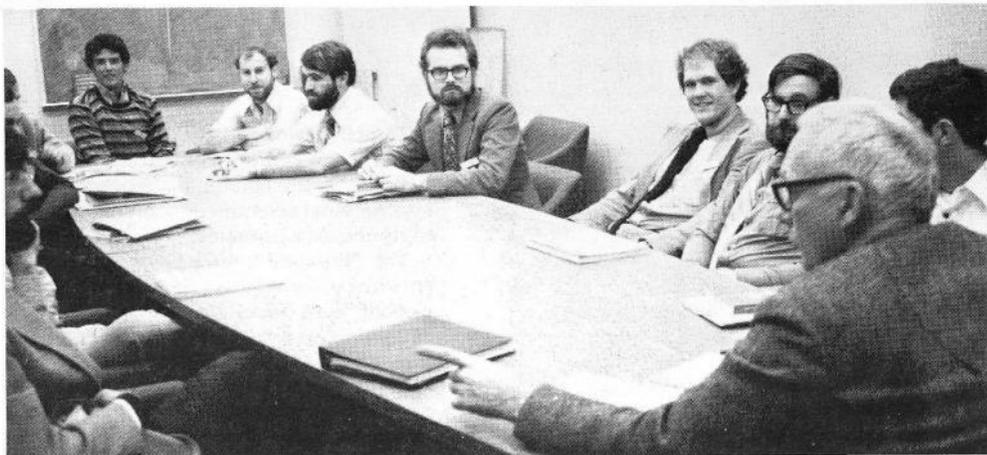
A farewell luncheon in his honor was held yesterday (Jan. 22).



Mr. Presson formulated guidelines for international conference procedures widely used at NIH.

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Medical Students Take Computer Course Here



Dr. Mohler meets with the winter session group of medical students taking the "Computers in Clinical Medicine" course.

The Division of Computer Research and Technology is hosting a group of 13 students from medical schools throughout the United States as they begin 8 weeks of advanced training on Computers in Clinical Medicine, one of the winter 1979 NIH Clinical Electives for Medical Students.

The computing course, which is in its 5th year of operation, is offered to medical students who already have had experience with the application of computers in some aspect of medicine.

During the 8 weeks, the group will listen to senior staff members from DCRT, the Clinical Center, the National Library of Medicine, clinical departments in other NIH Institutes, and several guest speakers from outside NIH.

They will also make site visits to other organizations in the Washington/Baltimore area with their course coordinator, Dr. William C. Mohler, associate director of DCRT.

The students will have an opportunity to examine in-depth representative applications of computers in clinical medicine. They will evaluate the computer systems as they talk to the developers and users—scientists, engineers, and physicians.

Some of the computer systems they will see were developed by DCRT staff specifically for NIH clinics and laboratories.

Among those are: an intensive care unit patient monitoring system; a data management system for analysis/storage/retrieval of medical text; and systems for the analysis of diagnostic and evaluative measurements in cardiology and pulmonary physiology.

Also, systems for the analysis of factors responsible for short- and long-term response to specific surgical or medical therapies; and a system developed for medical information networks based on voice-response telephone technology.

Al-Anon Group Holds Weekly Meetings in Bldg. 31

Al-Anon is a national self-help organization of spouses, relatives, and friends of alcoholics. Members meet regularly to obtain a better understanding of alcoholism and provide mutual encouragement and support.

Interested persons are invited to attend weekly meetings of an Al-Anon group held in the Occupational Medical Service, Bldg. 31, Rm. B2-B35, Tuesdays from 11:30 a.m. to 12:30 p.m.

For more information, call Irma Lee Westrell, 443-8192.

Shuttle Bus Has Service to CU

The shuttle bus between the NIH reservation and the Westwood Bldg. stops at the NIH Federal Credit Union's main office at 9030 Old Georgetown Road, Bethesda, at 9:03, 9:55, 10:50, and 11:35 a.m., noon, and 12:45, 2:05, and 2:55 p.m.

A more complete schedule will be available later.



Jennifer Jones Simon, newest member of the National Advisory Neurological and Communicative Disorders and Stroke Council, is welcomed to her first council meeting by NINCDS Director Dr. Donald B. Tower. Mrs. Simon, a popular film star and Academy Award winner, is a dedicated supporter of medical and cultural affairs. She recently served on the Commission for the Control of Huntington's Disease and Its Consequences, and as a patron to the Hereditary Disease Foundation.

NIH PRIMATE RES

A Major Scien

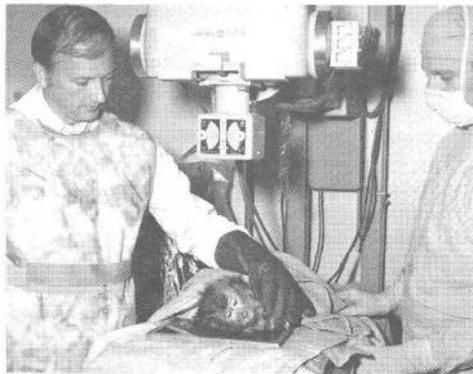


The Japanese macaque colony at the Oregon Regional Primate Research Center is used for social behavior and reproductive studies. An original small troop of 46 animals was given to the center in 1965 by the Japan Monkey Center. There are now over 250 Japanese macaques living in two 2-acre corrals joined by two tunnels.

The NIH Primate Research Centers, consisting of seven centers strategically located throughout the Nation, have become a major international scientific resource for the study of nonhuman primates.

The Primate Research Centers Program of NIH began in 1960. As the largest nonhuman primate network in the world, the program's main mission is to identify primate models in which diseases can be studied and duplicated, their causes and effects documented, and effective means of prevention and treatment developed.

Supported by the Division of Research Resources, these centers collectively are



A colony veterinarian and laboratory technician in the Regional Primate Research Center at the University of Washington take an X-ray of a crab-eating macaque. This species is used extensively for projects ranging from tooth replantation to the effects of protein deficiency.

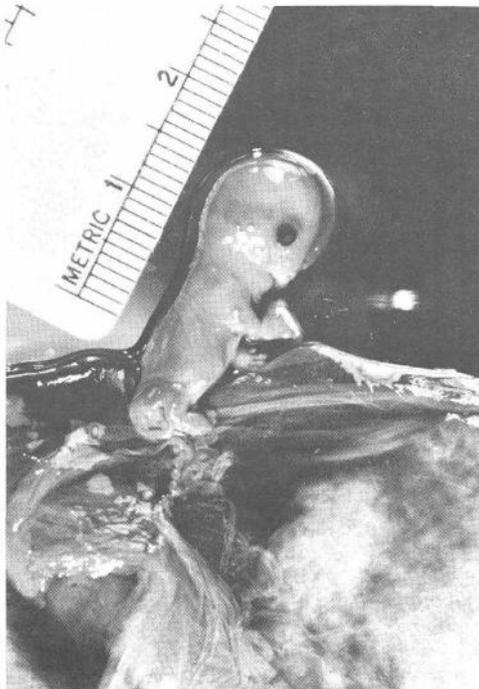
currently concerned with more than 360 different research projects on physiology, behavior, and diseases. They maintain colonies for research and breeding purposes of some 10,000 primates representing 48 species.

Approximately 140 scientists work with over 400 collaborating and affiliated investigators and visiting scientists from the U.S. and abroad. The staffs of supporting personnel in the centers total over 575.

During 1976, more than 859 scientific publications, including nine books, were published by investigators within the primate centers program.



A veterinarian examines a newborn rhesus monkey in the nursery at the California Primate Research Center. Each baby monkey is given a thorough physical examination within a few days after birth which becomes a part of the animal's medical record.



A rhesus fetus at the Wisconsin Regional Primate Research Center, expelled during a spontaneous miscarriage at about 2 months, is still attached to the placenta. The average gestation period for rhesus monkeys is 168 days.



A baby patas monkey was born at the Delta Regional Primate Research Center on a preselected date by hormonally controlling ovulation in its mother. The patas monkey has been found to be an excellent animal model for the study of varicella virus, a disease bearing a close resemblance to human chickenpox.

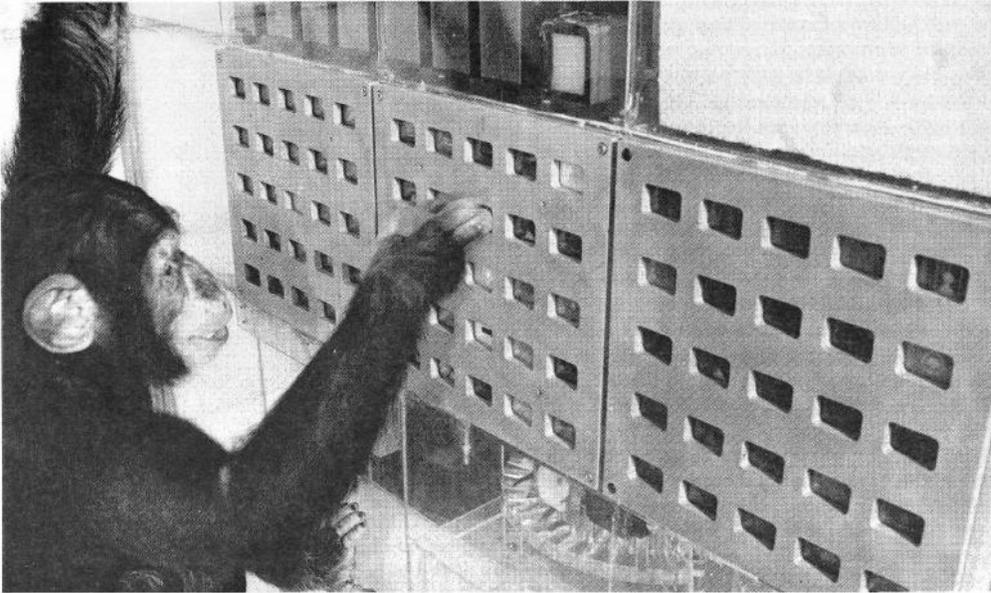
A totally revised descriptive booklet, *NIH Primate Research Centers: A Major Scientific Resource*, has been edited and produced by the Office of Science and Health Reports, DRR.

Containing 64 pages and 84 photos, the new booklet describes in detail the history, principal research emphases, administration, research teams, research facilities, primate colonies, and services of the seven NIH national primate research centers.

A single free copy of *NIH Primate Research Centers: A Major Scientific Resource* may be secured from the Office of Science and Health Reports, DRR, NIH, Bethesda, Md. 20014.

RESEARCH CENTERS

Scientific Resource



The concept of communication between chimpanzee and man by computer translation was pioneered at Yerkes Regional Primate Research Center. The adaption of "Yerkish" has since permitted severely retarded children to effectively communicate.

At present, the major research emphases of the seven centers are:

Oregon Regional Primate Research Center,
Beaverton
(Host institution: University of Oregon Health Sciences Center)

Reproductive biology, cardiovascular and metabolic research, immunology, cutaneous biology, biochemistry, nutrition, and behavior.
The Regional Primate Research Center at the University of Washington, Seattle
(Host Institution: University of Washington)

Developmental biology, neurological sciences, cardiovascular function, disease models, endocrinology and metabolism, and craniofacial structures and functions.

New England Regional Primate Research Center, Southborough, Mass.
(Host institution: Harvard University)

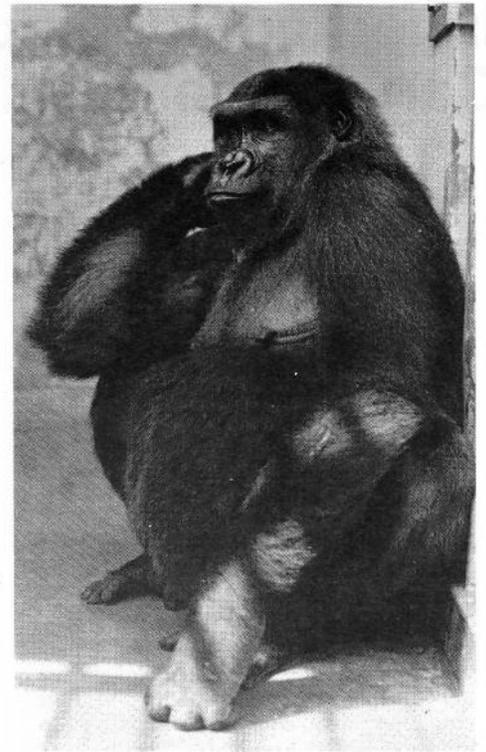
Infectious diseases, viral oncology, nutrition, animal behavior, and neurophysiology.
Yerkes Regional Primate Research Center, Atlanta, Ga.
(Host institution: Emory University)

Reproductive physiology, and neural, behavioral, and experimental pathology research with emphasis on neoplastic and degenerative diseases.

Wisconsin Regional Primate Research Center, Madison
(Host institution: University of Wisconsin-Madison)

Interactions among hormones, social environment and the brain, behavioral endocrinology, reproductive physiology, neuroendocrinology, and gonadotropic physiology.

California Primate Research Center, Davis, Calif.
(Host institution: University of California at Davis)



Paki, a pregnant gorilla at the Yerkes Regional Primate Research Center, is in a reflective mood. The 15-year-old gorilla has given birth twice to female offspring. Yerkes has the largest collection of great apes in the world.



Baboons at the New England Regional Primate Research Center are used in implant studies and in cardiology.

Effects of environmental factors on non-human primates, perinatal biology and reproduction, respiratory diseases, infectious diseases and immunology, and behavioral biology.

Delta Regional Primate Research Center, Covington, La.
(Host institution: Tulane University)

Microbiology of infectious diseases, the biochemistry of genetic disorders, and neurobiology.



The ring-tailed lemur has been found to be a prime laboratory animal for genetic studies, especially in the area of twinning. Six sets of twins were born at the Oregon Regional Primate Research Center in 1976.

Inherited Condition, Congenital Adrenal Hyperplasia, Can Cause Sudden Infant Death, Intersex Baby

An inherited condition, congenital adrenal hyperplasia, can lead in severe cases to sudden infant death. In females, it can result in an intersex baby whose true sex at birth is not immediately apparent.

The disease can be treated if identified early, say Dr. Robert L. Rosenfield, professor of pediatrics, and Dr. Anne W. Lucky, assistant professor at the University of Chicago's Pritzker School of Medicine.

Partly funded by the National Institute of Child Health and Human Development, their research seeks to develop simplified tests to identify the carriers and the inherited defect of this genetic condition. They also are working on a test to identify unborn affected children.

If a family history of the disease exists, parents should be tested to determine if they carry the trait. About 1 in 100 persons is a carrier, says Dr. Rosenfield of the University's Wyler Children's Hospital. If both parents are carriers (1 in 10,000 couples) chances are 1 in 4 that the child will have the condition.

The test for the genetic trait determines how the subject responds to an injection of ACTH (adrenocorticotropic hormone), the pituitary hormone that triggers steroid synthesis in the adrenals, two endocrine glands near the kidneys.

If the test subject overproduces cortisol precursor steroids, he or she may be a carrier of the genetic trait. If the subject produces huge quantities, he or she has congenital adrenal hyperplasia. Specifically, the test detects excessive production of 17-hydroxyprogesterone.

The condition results from the adrenal glands' genetically impaired or lost ability to

produce an enzyme, 21-hydroxylase, essential to the production of cortisol and aldosterone, two steroid hormones.

If the 21-hydroxylase enzyme is not present, the adrenals will produce excessive amounts of androgen—the male sex hormone—from 17-hydroxyprogesterone.

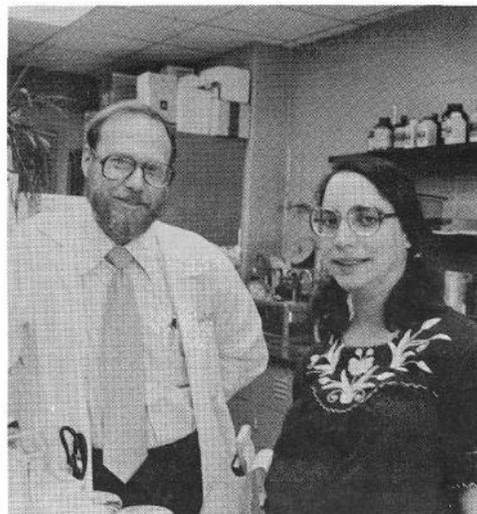
"Using the analogy of a factory assembly line to explain what goes wrong," Dr. Lucky explains, "one of the workers is not working up to par and a backlog piles up and spills over while products are insufficiently produced. The backlog is excessive male hormone, the end product cortisol."

Meanwhile, the adrenals, frantically trying to make cortisol, enlarge, giving the disease its name—hyperplasia, accelerated tissue growth.

Cortisol is essential to the body's defense against stress. An infant who has insufficient or no cortisol can go into shock and die following an illness, surgery, or accident—perhaps before the endocrine deficiency is diagnosed.

If diagnosed, cortisone treatment for the defect can be started in infancy. (The body converts cortisone to the natural steroid hormone, cortisol.) In severe cases, extra salt is necessary to compensate for the lack of aldosterone, which controls salt retention.

In the developing fetus, excessive fetal male hormone causes intersex baby girls, says Dr. Rosenfield. "Both male and female sex organs develop from the same fetal tissues. They differentiate in the embryo in response to specific sex hormones. Excessive male sex hormone in the fetus can cause a baby girl's clitoris to develop the size of a penis. The infant in severe cases may be mistakenly



Dr. Rosenfield (l) and Dr. Lucky point out that congenital adrenal hyperplasia can stimulate early growth and pubertal development in both males and females. However, since affected children stop growing early, they remain very short later in life.

identified as a boy, although she has female sex organs internally," says Dr. Rosenfield.

An intersex girl's true sex can in most cases be surgically restored and the infant may develop into a normal woman—with continued endocrine treatment—and bear children.

Most physicians see only one or two cases of congenital adrenal hyperplasia in their professional lives, according to Drs. Rosenfield and Lucky, and may not immediately recognize it. However, congenital adrenal hyperplasia causes 80 percent of all intersex babies.

Skiers Call Snowshoe Downhill Dynamite

Jean Claude Killy named the Cup Run at Snowshoe one of his all-time favorite runs; a mile and a half of downhill dynamite. Join skiers at Snowshoe in Slatyfork, W. Va., for 2 days of super skiing for only \$82.

Skiers leave the evening of Feb. 14, arrive 5 hours later at the Marlinton Inn, ski all day Thursday and Friday, and leave for home the evening of Feb. 16.

Trip price includes: room, double occupancy for 2 nights; lift tickets for 2 days, transportation round trip, transportation to and from Snowshoe, and refreshments and munchies on the bus.

Ski Cross Country in Maryland State Park

The NIH Ski Club is arranging a cross-country ski trip to New Germany State Park in Western Maryland, on Feb. 2, 3, and 4. The trip will cost \$22.05.

This includes 2 nights indoor camping at the National Hotel (sleeping on cots or on the floor), two meals Saturday, and breakfast Sunday.

CU Annual Meeting Feb. 22, Voting Deadline on Feb. 12

The NIH Federal Credit Union is holding its annual meeting on Thursday, Feb. 22, at noon in the Masur Auditorium.

All members interested in learning more about the operation of the Credit Union are urged to attend.

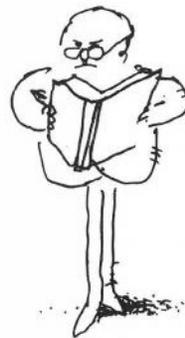
This year members will be filling three vacancies on the Board of Directors and three vacancies on the Credit Committee.

Nominations by the Nominating Committee and by petition will be posted today (Jan. 23) in the CU office. Ballots mailed to all eligible members must be returned to election tellers by midnight, Monday, Feb. 12.

Participants will drive to Grantsville Friday evening, have days available for skiing and return Sunday afternoon. Skiers must provide their own ski equipment and a sleeping bag or bedroll.

Sign up and make payment for the trip at the R&W activities desk, Bldg. 31, Rm. 1A-18.

Think you know what "hypertension" means?



"Hypertension" means high blood pressure. Don't confuse hypertension with nervous tension... staying calm won't control high blood pressure. If your doctor has prescribed high

blood pressure medication, take it daily—whether you feel upset or whether you feel terrific.

High Blood Pressure... Treat it for Life

National High Blood Pressure Education Program **A**

First Core Grant For Freshwater Research Awarded to Center

The first Marine/Freshwater Biomedical Center Core Grant aimed specifically at research on freshwater organisms has been awarded by the National Institute of Environmental Health Sciences to the Medical College of Wisconsin in Milwaukee.

The grant will provide animals, space, and technical support for Medical College of Wisconsin scientists to pursue studies involving the use of aquatic species as models for understanding the mechanisms of toxicity of environmental chemicals.

These scientists represent four different departments within the MCW, as well as the campuses of the University of Wisconsin, Milwaukee, the University of Wisconsin, Madison, and the Veterans Administration Hospital in Milwaukee.

Research Subunits Listed

Research will be divided into four subunits: toxicology-pharmacology; metabolism and bioaccumulation; immunology-endocrinology; and physiology-development.

The center director will be Dr. John J. Lech, professor of pharmacology at MCW, who is well known for his investigations into the metabolism and toxicity of chemicals in freshwater fish.

The center will utilize two facilities of MCW: their newly opened Basic Science Facility and the Great Lakes Research Facility. The latter contains fully equipped electronics and machine shops, a computer service, 6,000 square feet of aquaria space, cold rooms, and 17 laboratories, as well as a research vessel and appropriate berthing space.

The Marine/Freshwater Biomedical Center Core Grants Program was initiated in response to a 1975 meeting on Marine Biomedical Research sponsored by NIEHS and the Smithsonian Institution Museum of Natural History which highlighted the usefulness of aquatic species as experimental subjects for understanding the development of environmental disease processes in humans.

Significance Cited

Aquatic species are significant in three ways: as a potential source of contaminants in the human food chain; as models of living systems which interact with contaminants in ways that are comparable to human organ systems; and as indicators or "sentry animals" which can warn of dangerous levels of contaminants in a specific area or body of water.

The core grants provide for personnel, equipment, services, facilities, and program support.

Core grants were recently awarded by the NIEHS for support of Marine Centers at Oregon State University, Corvallis, the University of California, Los Angeles, and Duke University Marine Laboratory, Beaufort, N.C. (See *The NIH Record*, Oct. 17, 1978, p. 7.)

Drs. Atwell and Eveleth Join Grants Associates

Drs. Constance W. Atwell and Phyllis B. Eveleth have joined the NIH Grants Associates Program for a year of training in health science administration.

Dr. Atwell received a B.A. degree in psychology and general studies in 1963 from Mount Holyoke College. She then attended the University of California, Los Angeles, where she was a USPHS trainee in developmental psychology, receiving an M.A. degree in 1965, and a Ph.D. in 1968.

Since 1967 Dr. Atwell has been associated with Pitzer College and Claremont Graduate School, teaching and conducting research.

She has received support from the Grant Foundation and the National Institute of Child Health and Human Development as principal investigator on research grants, and the Mellon Foundation as a summer fellow. In 1968-69 she was on research leave at the University College, Nairobi, Kenya.

Dr. Atwell has 14 publications and papers in her specialty.

Dr. Eveleth, formerly with the Children's Hospital of Philadelphia and the University of Pennsylvania, received the B.S. degree from Tufts University in 1952 and the Ph.D. degree in physical anthropology from Columbia University in 1962.

At the Children's Hospital, she was co-investigator on a research grant supported by the National Heart, Lung, and Blood Institute. Also, she was consultant for Proyecto Venezuela, a national growth and nutrition survey initiated by the Venezuelan Government.

From 1970 to 1975, Dr. Eveleth was associated with the Institute of Child Health,

University of London, as lecturer and honorary research fellow, and was associate consultant in growth and physique under the International Biological Program.

She was a temporary consultant for the Maternal and Child Health Unit of the World Health Organization from 1972 to 1978.

She did free-lance editing and translating for the Institute of Latin American Studies, Columbia University, during 1967 and 1968.

While carrying out research work in Brazil, she was part-time instructor with the Ministry of Education, Rio de Janeiro, from 1960 to 1962, and a member of the faculty of medicine at the University of São Paulo during 1959.

Her other honors include: WHO and NICHD grants, PHS research fellowship, National Science Foundation predoctoral fellowship, Fulbright Scholarship, and Atomic Energy Commission fellowship. She is author or coauthor of 25 publications.



Dr. Atwell



Dr. Eveleth



Eleven participants in NIH's Adult Education Program passed the high school equivalency exam, also known as the GED (General Educational Development Exam) during 1978. At a recent ceremony, Dr. Thomas E. Malone, NIH Deputy Director, commended the graduates for their achievement and urged them to continue their development. L to r, seated are: Carol Clearfield, DRG; Donna Simon, DAS; Dr. Malone; and Juanita Standard, NCI. Standing are: Carrie Workman, DRS; Marty Davis, NCI; Calvin Jones, DAS; and Shirley Sockwell, DAS. Not pictured: Maria Ruiz, BHM; Ronald Eldridge, NCI; Janie Jones, CC; and Mary Fitterer, formerly with NIMH. For information about the Adult Education Program, contact your personnel representative or Milt Tipperman, Training Assistance Branch, DPM, Bldg. 31, Rm. B2-C23, 496-2146.



Dr. John L. Sever (c), chief of the Infectious Diseases Branch, NINCDS, and district governor of Rotary International in central Maryland and Washington, D.C., joined others at the White House recently to honor President Carter. They presented the President with the Paul Harris Award in honor of his efforts to improve international understanding. L to r are: Rotary officers Joseph Cook and Walter Marshall, Dr. Sever, Clem Renouf, president of Rotary International, and President Carter.

VISITING SCIENTIST PROGRAM PARTICIPANTS

1/1—**Dr. Roque Cano**, Peru, Nuclear Medicine. Sponsor: Dr. Gerald Johnston, CC, Bg. 10, Rm. 1B37B.

1/1—**Dr. Ching-Juh Lai**, China, Laboratory of Infectious Diseases. Sponsor: Dr. Robert Chanock, NIAID, Bg. 7, Rm. 301.

1/1—**Dr. Michel Legraverend**, France, Laboratory of Medicinal Chemistry and Biology. Sponsor: Dr. Robert Glazer, NCI, Bg. 37, Rm. 6B24.

1/1—**Dr. John MacDonald**, Canada, Laboratory of Neurophysiology. Sponsor: Dr. Thomas G. Smith, NINCDS, Bg. 36, Rm. 2C02.

1/2—**Dr. Jean-Michel Foidart**, Belgium, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George Martin, NIDR, Bg. 30, Rm. 416.

1/2—**Dr. Steven H. Fried**, United States, Arthritis and Rheumatism Branch. Sponsor: Dr. John Decker, NIAMDD, Bg. 10, Rm. 9N222.

1/2—**Dr. Alexander Levitzki**, Israel, Laboratory of Molecular Biology. Sponsor: Dr. Ira Pastan, NCI, Bg. 37, Rm. 4B27.

1/2—**Dr. Raymond Ming-Wah Chau**, U.K., Laboratory of Pathology. Sponsor: Dr. Alan S. Rabson, NCI, Bg. 10, Rm. 2N116.

1/2—**Dr. Gabrielle de Courten**, Switzerland, Developmental Brain Pathology Section. Sponsor: Dr. Ronald E. Myers, NINCDS, Park 5, Rm. 451G.

1/2—**Dr. Clovis Peres**, Brazil, Biometry Branch. Sponsor: Dr. David Hoel, NIEHS, Research Triangle Park, N.C.

1/2—**Dr. Samir Shafie**, Lebanon, Laboratory of Pathophysiology. Sponsor: Dr. Pietro Gullino, NCI, Bg. 10, Rm. 5B36.

1/3—**Dr. Matti A. Lang**, Finland, Developmental Pharmacology Branch. Sponsor: Dr. Daniel Nebert, NICHD, Bg. 10, Rm. 13N234.

1/3—**Dr. Jean-Marie Meyer**, France, Laboratory of Biochemistry. Sponsor: Dr. Earl Stadtman, NHLBI, Bg. 3, Rm. 222.

1/4—**Dr. Elio Gulletta**, Italy, Laboratory of Molecular Biology. Sponsor: Dr. Sankar Adhya, NCI, Bg. 37, Rm. 4B04.

1/4—**Dr. Umberto Mura**, Italy, Laboratory of Biochemistry. Sponsor: Dr. Earl Stadtman, NHLBI, Bg. 3, Rm. 222.

1/8—**Dr. Bahige Baroudy**, Lebanon, Macromolecular Biology. Sponsor: Dr. Bernard Moss, NIAID, Bg. 5, Rm. 316.

1/8—**Dr. Donald Gill**, U.K., Laboratory of Biochemical Pharmacology. Sponsor: Dr. Leonard Kohn, NIAMDD, Bg. 4, Rm. B1-31.

1/8—**Dr. Michael Hitchcock**, U.K., Laboratory of Experimental Pathology. Sponsor: Dr. Robert Friedman, NIAID, Bg. 4, Rm. 310.

1/8—**Dr. Isabel Tagnon**, US/Belgium, Environmental Epidemiology Branch. Sponsor: Dr. William Blot, NCI, Landow Bg., Rm. C307.

1/9—**Dr. Jan Arvidsson**, Sweden, Neurobiology and Anesthesiology Branch. Sponsor: Dr. Stephen Gobel, NIDR, Bg. 30, Rm. B10.

1/14—**Dr. Ching-San Chen**, Taiwan, Laboratory of Biochemistry. Sponsor: Dr. T. C. Stadtman, NHLBI, Bg. 3, Rm. 103.

Topics for SIAM or AAAS Symposia Requested

Dr. Judith M. S. Prewitt, Division of Computer Research and Technology, has been appointed Society for Industrial and Applied Mathematics representative to the American Association for the Advancement of Science for the next 3 years.

Dr. Prewitt has asked NIH scientists to give her suggestions for topics in mathematics, statistics, engineering, computation communication and information theory—especially as they arise in biology and medicine—that would serve as suggestions for forthcoming symposia sponsored by SIAM or the AAAS.

Dr. Prewitt is located in Bldg. 12A, Rm. 2053, 496-1247.

Dr. Irving Fuhr Retires, Last of Original DRG Staffers



Prior to joining DRG, Dr. Fuhr served from 1963 to 1968 as a toxicologist with the U.S. Army.

Dr. Irving Fuhr, the last of 80 original staff members of the Division of Research Grants, retired Dec. 30 after more than 35 years of Federal service.

Dr. Fuhr joined the Division in 1948 as executive secretary of the Biochemistry and Nutrition, and Dental Study Sections.

Dr. Fuhr was appointed referral officer in 1955 and served in that capacity for 5 years in addition to his executive secretary study section duties.

At the time of his retirement, he was executive secretary of the Biophysics and Biophysical Chemistry A Study Section.

During his service with NIH, Dr. Fuhr was witness to 30 years of growth in health science research. When he came to NIH in 1948, DRG was 2 years old.

Today, the original 21 study sections have grown to 52, and NIH support in extramural research has increased from about \$1 million to over \$2 billion annually.

Mary Ann Sherman Gives Special Harp Recital

A special recital by Mary Ann Sherman, harpist, is being presented on Sunday, Jan. 28, at 4 p.m. in the Masur Auditorium by the Foundation for Advanced Education in the Sciences, Inc.

Ms. Sherman will be accompanied by Alice Takemoto on the piano.

This recital is separate from the FAES subscription chamber music series, and admission is free.

The recital will be devoted to a survey of music written for the harp from the 17th century to the present. It will consist of selections from the work of Croft, Parry, Natra, Rota, Hindemith, and Ravel.

A discussion of the harp as a musical instrument and of its repertory will accompany the performance.

Pilot Program Will Introduce Participants to Language Of Signs Used by Deaf

A pilot program in sign language, open to NIH supervisors and co-workers of the deaf and hearing-impaired, is being offered by the Training Assistance Branch, DPM.

The course—an introduction to the language of signs used by the deaf—is intended to produce more effective working relations between hearing and hearing-impaired employees.

Meet Once a Week

Participants in the 36-hour course will meet for 2 hours once a week, on Fridays, Feb. 23 to June 22.

Practice and instruction will be given in expressive and receptive signs and finger spelling with emphasis on signs specific to the work environment. Discussion and information on deafness and the problems and capabilities of deaf people will be included.

For further information contact Doris E. Dorin, 496-2146.

Hear Tapes—Dial 496-4608

Telephone tapes on personnel topics will be presented:

- | | |
|----------------|---|
| Jan. 22-26 | The Supervisor and the Part-time Employee |
| Jan. 29-Feb. 2 | Health, Life, and Retirement Benefits; Rights of the Part-time Employee |

Call 496-4608 to hear the recorded tapes.

Oscar Hollingsworth Retires; Leaves Legacy Of Unique Audio Visual Section

Oscar Hollingsworth's retirement plans will keep him extremely busy, but it is quite clear that the Audio Visual Section, DAS Travel and Administrative Services Branch, will continue to have a high priority in his thoughts even after his departure.

Pushing aside questions about his own career, he proudly recounted how the section started out with a minimum of equipment, and how anticipated future developments will enable the section to offer increasingly valuable audiovisual services to scientists at NIH.

Mr. Hollingsworth began more than 35 years of Government service as an aerial photographer in the Air Corps from 1940 to 1945.

Following his tour of duty in Europe during World War II, he joined the Army Map Service in 1948, and transferred to NIH in 1955.

At that time Mr. Hollingsworth was placed in charge of the Motion Picture Department of the National Institute of Mental Health Laboratory of Psychology.

For the past 10 years he has headed the Audio Visual Section, TASB, DAS. This section's staff provides general audiovisual support throughout NIH. This includes audio-video productions and other related services, such as simultaneous translation, recordings, etc.

It is anticipated that by approximately mid-year the technicians will be able to project a



Mr. Hollingsworth fondly looks over one of the older TV cameras. He will probably be busier than ever during retirement—his plans include resuming the profession of photographer, playing more chess, and traveling.

live show in 33 places at NIH at one time; provide TV field units; use a graphic camera to reproduce slides; or tape a TV show in a unique studio in Bldg. 31.

During his last week before retirement, Mr. Hollingsworth was immersed in planning and proposals for designs to bring up to date the sound system in the Bldg. 31 conference rooms.

Studies Indicate Early Dietary Restrictions May Delay Onset of Age-Related Disease

Many of the diseases which shorten life span and cause excessive illness in the later years may be the partial result of our decreasing ability to utilize or metabolize fat with age.

National Institute on Aging-supported studies on rats indicate that dietary restrictions imposed early in life may markedly delay this decline, thereby delaying the onset of age-related diseases such as diabetes and coronary heart disease.

An NIA grantee, Dr. Edward J. Masoro of the University of Texas Health Science Center in San Antonio, examined the relationship between calorie-restriction and age-related decline in fat metabolism efficiency after earlier work showed that food-restricted animals far outlived animals permitted to eat freely.

3 Variables Examined

Dr. Masoro and his colleagues examined three variables: age-related decline in responsiveness to the hormone, glucagon; age-related decline in responsiveness to adrenalin; and age-related accumulation of serum lipids in the blood.

Both glucagon and adrenalin promote fat

metabolism by releasing fat from adipocytes (fat cells) and carrying it to the blood where the body converts it into energy.

Normally, as the animal ages, its adipocytes become less responsive to these hormones, a factor which may lead to obesity. However, in rats whose caloric intake is restricted from early life, these declines in hormone responsiveness are substantially delayed.

In addition, the increasing accumulation of serum lipids, which occurs with advancing age and is implicated for man in coronary heart disease, is also delayed in early food-restricted animals.

Current Theory Contradicted

Equally significant is this group's observation of certain adipocyte changes in selected tissues of the rat which contradict current theory on the biology of fat cells. For years, scientists have believed that the lifelong number of fat cells is determined in the first few weeks of life by pre-weaning nutrition.

These studies on the rat show that dietary restriction beyond the weaning period can cause changes not only in the size of adipocytes but also in the number of adipocytes in the fat depot surrounding the kidneys.

Calorically restricted animals maintain fewer and smaller fat cells in these tissues than free-fed animals.

Also contrary to the current belief that adipocyte number remains constant throughout adulthood is the discovery that, regardless of food intake, all rats acquire additional fat cells in the kidney depot with advancing age.

Appearance Improves

Finally, these grantees observed that food-restricted rats maintain a sleek, smooth, bright physical appearance and active, alert behavior patterns typical of chronologically younger animals. This early restriction in calories also enhances the animal's ability to maintain optimal muscle function.

While these studies suggest the possibility that certain age-related diseases may be delayed through early caloric restriction, they also reveal a possible explanation for the tendency towards obesity—more cells for deposit of fat and more difficulty in utilizing this fat, once deposited.

Dr. Masoro presented this work at the annual meeting of the American Association for the Advancement of Science, Jan. 3-8, in Houston, Tex.



NHLBI Director Dr. Robert I. Levy (c), on behalf of the Institute, accepts two awards won this past year by the National High Blood Pressure Education Program. The plaque held by Graham W. Ward (l), program coordinator, was awarded by the Society of Public Health Educators, which cited NHBPEP as "a model national health education program." Jacquelyn B. Admire, NHBPEP coordinator for rural health activities, holds the CEBA statuette awarded by the World Institute of Black Communicators for the program's public service television spot on high blood pressure. The new CEBA (Communications Excellence to Black Audiences) award is given to organizations and advertising agencies in recognition of superior achievement in communications directed at the Black consumer market.

12th in Network of Nuclear Magnetic Resonance Laboratories Opens at Purdue University

The 12th in a national resource sharing network of nuclear magnetic resonance laboratories, supported by the Division of Research Resources, was formally put into operation on Nov. 17, 1978, at Purdue University, West Lafayette, Ind.

NMR makes possible the study of structure and functions of proteins, nucleic acids and drugs, and their biological interactions, thus leading the way toward direct applications and to better understanding of a host of ailments, including heart disease, cancer, and birth defects.

Designated as the midwest regional facility for the NMR network, the new laboratory at Purdue houses two nuclear magnetic resonance spectrometers.

Scientists will investigate active sites of enzymes, the mechanisms of interaction between enzymes and inhibitors, structures of glycoproteins, and the mechanisms of protein folding and of electron transport in photosynthesis.

DRR has developed the national sharing concept within recent years to enable biomedical researchers throughout the Nation to avail themselves of advanced instrumentation and technology.

In addition to the new Purdue laboratory,



Biochemist Dr. John Markley, director of the Purdue NMR laboratory, adjusts the specimen holder for the newly installed powerful nuclear magnetic resonance spectrometer. This highly sophisticated instrument makes possible the study of biological molecular structures.

DRR supports NMR facilities at the Massachusetts Institute of Technology; the State University of New York at Stony Brook; the University of Pennsylvania; the University of Connecticut; the Carnegie-Mellon University; the University of Utah; Yale University; Stanford University; and University of California, San Diego.

Each of the resources is available to bio-

Three Named to NLM's Board of Regents

Three members have been appointed to the National Library of Medicine's Board of Regents, bringing the Board up to its full complement of 10 members.

The new regents are Dr. Ismael Almodovar, Dr. Emmet F. Ferguson, Jr., and Prof. Martha E. Williams.

Dr. Almodovar, president of the University of Puerto Rico in San Juan, a chemist by training, has degrees from the University of Puerto Rico (Mayaguez) and the Carnegie Institute of Technology.

Before assuming his present position, Dr. Almodovar was director of graduate studies at the University of Puerto Rico (Mayaguez), chairman of the chemistry department at the University's Rio Piedras campus, and dean of the College of Natural Sciences there. He also served as a health science administrator at NIH while on sabbatical leave from the University of Puerto Rico.

Dr. Ferguson, a prominent surgeon in Jacksonville, Fla., received his medical degree at the University of Georgia.

Dr. Ferguson is assistant clinical professor of surgery at the University of Florida and a member of numerous professional societies.

Martha Williams is research professor at the University of Illinois Coordinated Science Laboratory and director of the university's Information Retrieval Research Laboratory. She also holds the positions of professor of library administration and professor of library science in the university's Graduate School of Library Science.

She is editor of ASIS's *Annual Review of Information Science and Technology* and U.S. editor of the *On-Line Review* (Oxford).

The next meeting of the Board of Regents will take place at the Library on Jan. 25-26.

medical researchers on a regional basis, and specialized technical help is provided to researchers on a national basis. In addition to the Nation's NIH researchers, it is expected that pharmaceutical researchers in industry will be users of these facilities.

Dr. James F. O'Donnell, DRR deputy director, keynoted the dedication at Purdue and voiced the concerns of the scientific community in coping with the escalating cost of conducting research.

Discuss New Trends

The symposium on biochemical NMR held the following day included eight prominent biochemists and physicists who discussed new trends in the field and indications of how advanced instrumentation and technology can extend research capabilities.

The seminar was highlighted by a report from Dr. Iain Campbell of Oxford University, England, who described a newly developed process for direct measurements on cells and cell suspension using NMR instrumentation.