

The NIH Record

U.S. Department
of Health
and
Human Services

August 31
1982
Vol. XXXIV
No. 18

National
Institutes
of
Health

Concerned Primatologists Discuss Conservation At International Congress

Conservation of the world's endangered nonhuman primates was the major theme of the 9th Congress of the International Primatological Society held Aug. 8-13 in Atlanta.

The Congress was organized and hosted by the Division of Research Resources-funded Yerkes Regional Primate Research Center and sponsored by the society, in conjunction with the American Society of Primatologists and the International Society for Human Ethology.

Over 600 scientists and students from 23 nations attended the Congress, which included symposia, workshops, paper presentations, posters, and films on a wide range of topics including biological and medical sciences, taxonomy, paleontology and evolution, social behavior and cognition, in addition to ecology and conservation.

"Conservation was a major topic at the



The chimpanzee was identified as one of the well-known laboratory research animal species which may be threatened due to the loss of their "natural habitat" in various countries throughout the world.

Congress because the future survival of many nonhuman primate species is threatened by farming, urbanization, mining, logging and other factors which destroy the animals' natural habitat," said Dr. Frederick A. King, Congress chairman and director of the Yerkes Center.

"Primate populations native to countries with rapidly expanding human populations are particularly vulnerable to extinction,"

(See PRIMATOLOGISTS, Page 8)

NIH Officials Named to Institute of Medicine



Dr. Malone



Dr. Kupfer



Dr. Kirschstein



Dr. Bernstein

Four NIH scientists and administrators have been elected to the Institute of Medicine, which functions under the National Academy of Sciences.

They are NIH Deputy Director Dr. Thomas E. Malone; National Eye Institute Director Dr. Carl Kupfer; National Institute of General Medical Sciences Director Dr. Ruth L. Kirschstein; and Dr. Lionel M. Bernstein, research medical officer at the National Library of Medicine.

The Institute of Medicine enlists distin-

guished members of medical and other professions for the examination of policy matters pertaining to national health.

The current Institute activities include a study of how the Nation can assure the needed supply of nurses, planning for a major review of medical education, and help for the Secret Service to develop its own behavioral research capability for dealing with potential assassins.

The four NIH newly appointed members will start their term Jan. 1, 1983. □

G. B. Mider Lecture Will Be Given By Dr. William E. Paul, Immunologist

Dr. William E. Paul of the National Institute of Allergy and Infectious Diseases will deliver the 1982 G. Burroughs Mider Lecture, Living with Lymphocytes, or B Lymphocytes and How They Grow. The lecture will be held Wednesday, Sept. 15, at 8:15 p.m. in the Masur Auditorium.

The lectureship was established in 1968 by the NIH scientific directors to honor Dr. Mider, a former director of Laboratories and Clinics, for his distinguished service.

The award is made annually to an NIH scientist who, like Dr. Mider, has contributed significantly to the biomedical research eminence of NIH.

Chief of NIAID's Laboratory of Immunology, he has successfully directed a comprehensive research program aimed at achieving a better understanding of two classes of white blood cells that play an important role in the immune response—T (thymus-derived) cells and B (bone marrow-derived) cells.

Dr. Paul and his colleagues are among leaders studying the description and characterization of lymphokines which control



Dr. Paul's outstanding work in the field of immunology was recognized by an HEW Superior Service Honor Award in 1974.

the proliferation and differentiation of these cells. He is also well known for his work on the role of immune response gene

(See MIDER, Page 9)

The NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services, and circulated by request to writers and to researchers in biomedical and related fields. The content is reprintable without permission. Pictures may be available on request.

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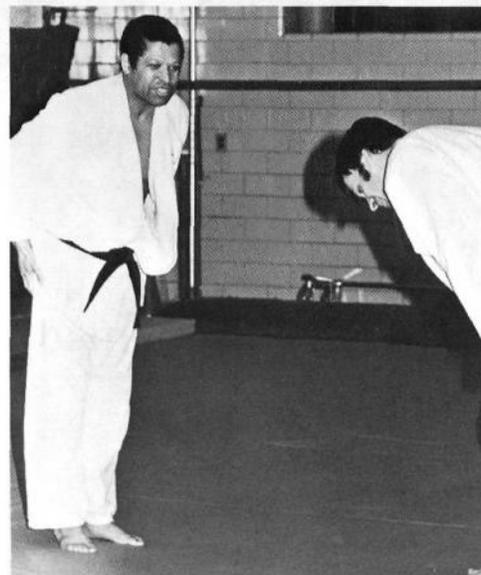
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One-Hour Judo Demo Will Be Given at Masur



Dr. Malone accepts a bow-in from one of his judo players.

A free 1-hour judo demonstration will be given at noon on Wednesday, Sept. 6, in the Masur Auditorium, by the NIH Judo Club. This event has been planned to encourage the further participation of NIH employees in the study and practice of this self-defense form, which emphasizes both physical and mental conditioning.

The NIH Judo Club is also accepting applications for the fall beginner's class. A series of 10 classes in basic judo will be held each Tuesday from 6 to 7:30 p.m., beginning Sept. 21 and ending Nov. 30. Classes will be conducted in the old gymnasium of the Stone Ridge School, at the corner of Cedar Lane and Wisconsin Avenue.

NIH Deputy Director Dr. Thomas E. Malone, a second-degree black belt, will serve as chief Kodakan judo instructor, or sensei, for the club. Dianne Moore, also a black belt, will serve as coinstructor.

Members who complete this course will be eligible to continue and be considered for promotion, either through competition in tournaments or as noncompetitors.

The course fee is \$35. Applications may be obtained from Kathleen Thomas or Dr. Malone, Bldg. 1, Rm. 132. Space is limited. Interested persons should return the completed forms to Dr. Malone. Those who are accepted will be notified in advance.

For further information, call Susan Allyn, 496-7195. □

Giddyap!

R&W is planning a horseback riding weekend at Deep Creek Lake in Western Maryland on Sept. 24-26. The \$84 price includes 2 nights in modern privately owned homes, 2 days of unlimited horseback riding and a hayride.

Interested persons may sign up at the R&W Activities Desk, Bldg. 31, Rm. 1A-18. □

WARNING: Slow Down on Greentree Road!

An increasing number of speeders traveling Greentree Rd. in Bethesda near NIH has been reported by the Montgomery County police. NIH employees are urged to exercise caution and drive within the posted 30 miles-per-hour speed limit.

Exerting less pressure on the gas pedal will avoid a speeding ticket.

Employees are also urged to abide by the 25-miles-per-hour limit on the NIH reservation. There are more than 80 pedestrian crosswalks on campus, and staying under the speed limit is the only safe way to travel. □

What Should Be Done in Cases Of Motor Vehicle Emergencies?

Imagine driving at 40 mph. The traffic signal changes to yellow. You start applying the brakes, but the car doesn't slow down. What would you do?

The Occupational Medical Service and the Protection and Security Management Branch is presenting a program on How to Deal with Motor Vehicle Emergencies.

Brake failure, loss of power-assisted brakes and steering, driving on ice and snow, fires, overheated engines, flat tires and blowouts are some topics which will be covered.

Master Police Officer John F. DeVries, Montgomery County Police Department, will be the guest speaker at the following locations:

Tuesday, Sept. 7, 11:30 a.m. and 12:15 p.m., Fed. Bldg., Rm. B-119; Thursday, Sept. 9, 11:30 a.m. and 12:15 p.m., Bldg. 10, Masur Auditorium; Friday, Sept. 10, 11:30 a.m. and 12:15 p.m., Bldg. 1, Wilson Hall; Tuesday, Sept. 14, 11:30 a.m. and 12:15 p.m., Westwood Bldg., Conf. Rm. D. □

Bill Reinckens Goes International

William B. Reinckens, editor-writer and photographer for the *NIH Record* for the past 3½ years, has accepted a position with the International Communications Agency.

Mr. Reinckens has been assigned to the Near East, South Asia Press Branch in the Washington ICA Bldg. □

Malignant Brain Tumor Patients Needed

The Surgical Neurology Branch of the NINCDS needs patients with malignant brain tumors for two new investigations.

In one study, the use of intra-arterial superselective delivery of BCNU to malignant brain tumors appears to achieve high local dose levels of the drug at the tumor cell level.

The procedure is being evaluated for use in patients whose vascular supply to the tumor appears favorable for achievement of localized drug delivery.

The second new study will evaluate the effects of a new chemotherapeutic agent CBCDA-platinum, on rapidly spreading brain tumors.

This agent, now in Phase I trials, is apparently less toxic than the parent compound cis-platinum and has appeared useful in preliminary biological studies. The agent is administered intravenously on a monthly cycle.

Male and female patients in treatment stages before or after surgery, radiotherapy, chemotherapy, or immunotherapy are needed for these two new studies.

Clinicians who wish to refer potential candidates should contact the principal investigator: Dr. Paul Kornblith, chief, Surgical Neurology Branch, NINCDS, NIH, Bldg. 10A, Rm 3E68, Beth., Md. 20205; tel: (301) 496-5728. □



Dr. Clarence J. Gibbs, Jr. (l), NINCDS Laboratory of Central Nervous System Studies, recently received a certificate of appreciation for superior achievement in rendering counsel and assistance to the Office of the Assistant Secretary of Defense (Health Affairs) from August 1981 to May 1982. The award was presented by Dr. John F. Beary III, Acting Assistant Secretary for Health Affairs, DOD. Dr. Gibbs is a captain in the U.S. Naval Research Medical Service Corps.

Dr. Oxman Officiates Soccer for 'Kicks'

By Jane White

Some people enjoy sports as a means of enjoyment and exercise—but Dr. Michael Oxman, assistant director for review at the Division of Research Resources, goes a galloping step further after NIH office hours, immersing himself into the sport of soccer as a very active official in the metropolitan area.

As a youngster, he never played soccer. However, 11 years ago he became involved in the game, and for the past 10 years has been a professional soccer referee.

He was first introduced to the game by his youngest son, Steve, in 1971. A coach was needed for Steve's elementary school league. Dr. Oxman volunteered. "The first game of soccer I saw, I coached," he said smilingly. The team went on to win the season championship that year.

Dr. Oxman became fascinated with soccer. "A good game of soccer is more like ballet than just some people running around on the field," he explained. In 1972 he passed a test enabling him to join the Metropolitan Washington Soccer Referees Association.

At first, he officiated at youth recreational league games. He liked it and soon moved up to junior and senior high school games, as well as college and senior amateur matches. He has officiated at the University of Maryland, Catholic University, George Washington University, and at high schools throughout the Washington area.

To officiate college-level soccer, Dr. Oxman had to pass another test to join the National Intercollegiate Soccer Officials Association. A different organization allows him to officiate at high school games.

Dr. Oxman feels that his interest in young people was an important factor in pushing him into soccer. He coached his two sons' high school teams during the spring and summer off-seasons. During the senior year of his oldest son, Mark, the Walter Johnson high school team advanced to the state playoffs, but lost the final game. In 1978, Steve's team won the Maryland State championship.

According to the DRR administrator, soccer is a better sport for youths than American football, since there is less chance of injury. It is also less expensive than football.

Soccer requires a high level of individual physical and technical skills. A player must be able to keep the ball from his opponent, dribble it quickly down the field, and accurately pass it to another player by a kick or head flick. Teamwork is also important. Many goals are the result of a well-placed assist kick to another player.

Dr. Oxman commented, "One of the spin-offs of officiating is the incentive to stay in shape." Each game involves two 45 minute periods of almost continuous action. He figures he runs 3 to 5 miles during a game. When he is not refereeing, he tries to run 3 miles a day and 5 miles on Saturdays and Sundays.



Dr. Oxman predicts, "When today's youngsters have kids, then soccer will finally be more popular in the U.S. Today's kids have to depend on their coaches and peers for guidance since their parents never played soccer."

An average week during the spring and fall seasons might bring him to one or two high school evening games during the week, one high school and two or three children's league games on Saturday, and two senior amateur league games on Sunday. In the summer and winter he averages one or two games a week.

Dr. Oxman's enthusiasm for soccer is evident. A few years ago, he helped organize and play in the Montgomery County Recreation Department's Over-35 League. The games were intended to be simply fun Sunday afternoon soccer matches. However, when he found himself still in pain by Tuesday or Wednesday, he decided the games were too rough for him.

He is pleased with the increased interest in the U.S. for soccer over the last 5 years. Even though most Americans are only interested in "seeing the ball go into the goal, rather than watching the play of the game, . . . the interest in soccer can only increase," he said.

A native of Milwaukee, Dr. Oxman received his B.A. in pharmacy in 1958 and Ph.D. in medicinal chemistry in 1963, both from the University of Wisconsin. He was commissioned by the PHS in 1963 to work at NIH for 2 years. He then left to do research for a pharmaceutical company and returned to NIH in 1968.

Dr. Oxman remarked that many other NIH'ers are involved in soccer, especially those from foreign countries. Most Americans do not grow up in the same "soccer atmosphere" found abroad.

He remembers seeing one Nigerian boy hit a balloon with his head, soccer-style, when it was first tossed to him. "It will be awhile before Americans have that kind of instinct," he said.

According to Dr. Oxman, soccer officiating is not without hazards. He pointed out, "Referees can be hit by the ball or a player. Even distraught parents have been known to attack officials for making calls against their children." □

Mental Health Researchers Attend Grants Workshop

In a coordinated effort to encourage minority-enrolled institutions to prepare and submit more grant proposals, the National Institute of Mental Health and the Minority Biomedical Research Program, DRR, have recently conducted a two-location grantsmanship workshop program on behavioral research applications.

The objectives of the seminars were to provide participants with grantsmanship techniques and shared experiences to enhance their ability to write successful research grant proposals, understand the grant review process, and to develop a communications network with key NIMH staff and other research investigators for grantsmanship counseling and assistance during the research grant development process.

The seminars, conducted in Albuquerque, N.M., and at NIH, emphasized the areas of neuropsychology, neuropharmacology, and experimental and clinical psychology.

Over 65 representatives from institutions throughout the country attended the sessions organized by Dr. Vernon L. Avila, associate professor of zoology, San Diego State University.

Among the speakers at the NIH session were Drs. Louis A. Wienckowski, director of Extramural Research Programs, NIMH; George Eaves, deputy director, Division of Blood Diseases and Resources, NHLBI; Sidney McNairy, executive secretary, MBRS, DRR; Herbert Pardes, NIMH Director; and Robert Kelley, University of New Mexico.

Included in the workshops were mock site visit sessions in which the attendees listened to assessments of the merits and faults of an approved and successfully funded application, and a disapproved application.

Details regarding NIMH present budget limitations in extramural funding, and alternate methods of funding through the NIMH/MBRS interagency mechanism were explained to the assemblage, which included faculty scientists and research department administrators. □

Blood Donor Party To Be Held Sept. 16

The CC Blood Bank is holding the third annual Donor Appreciation Party for employees who have donated blood. The party will be held Thursday, Sept. 16, from 1 to 3 p.m. in the 14th floor assembly hall of the Clinical Center.

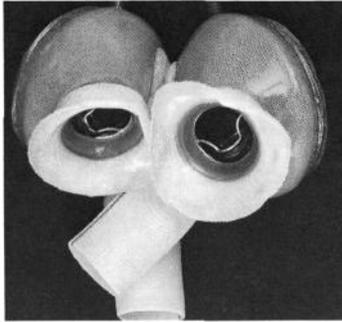
Employees who bring their invitations to the party will be eligible for a drawing for door prizes which have in the past included trips to Atlantic City, movie tickets, chocolates, and jewelry. Blood Bank Stop—Give Blood T-shirts, key chains, plastic shopping bags, and bumper stickers will also be available for lucky donors. □

Totally Implantable Artificial Heart Made by Grantees for Humans

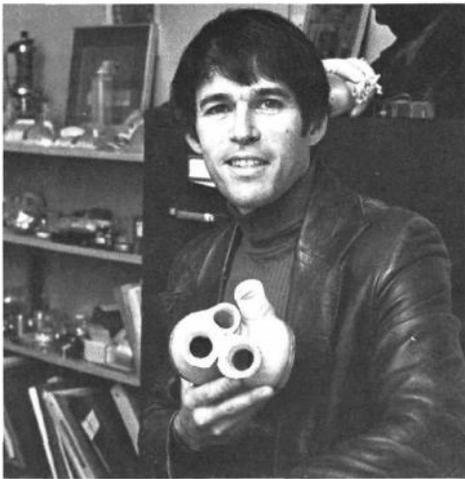
Prospects for the total artificial heart are much better now than they were a decade ago. At that time, no animal with an implanted artificial heart survived for more than 3 days. The survival record currently stands at more than 8 months by a calf that lived with a pneumatic artificial heart.

The Jarvik-7 artificial heart shown on the right, was designed by Dr. Robert K. Jarvik, research assistant professor, division of artificial organs, University of Utah Medical Center in Salt Lake City. In November 1981, the Food and Drug Administration approved this heart for implantation in a human.

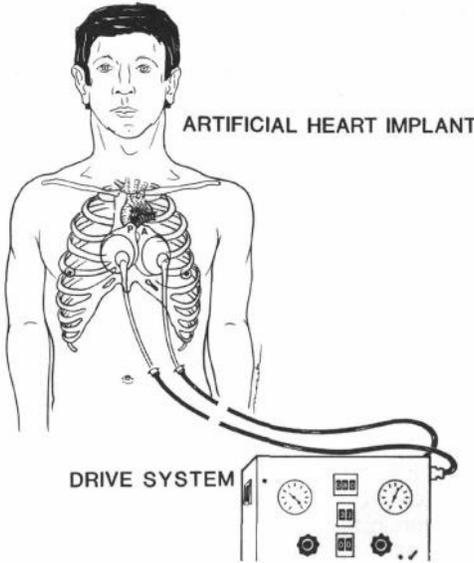
During the operation, the artificial heart is attached to the human heart. Two artificial ventricles, right and left, are connected by tubes through the patient's ab-



This is the actual Jarvik-7 totally artificial heart developed by the UUMC, which will be the first artificial heart to be implanted in a human. The picture was taken prior to the heart being sterilized and placed in readiness for the operation.



Dr. Jarvik demonstrates the Jarvik-7, which was recently approved by FDA's Institutional Review Committee for human implantation. Dr. Jarvik has been with the Utah program since 1971 and has been the principal designer of the devices since 1973. Artificial hearts have been under continuous development for more than 20 years. Their use in experimentation has been conducted at the UUMC since 1967.



The Jarvik-7 totally artificial heart developed by the UUMC division of artificial organs fits in the space normally occupied by the natural heart. Half the artificial heart is connected to the pulmonary artery (P) which moves blood to the lungs. The other half is connected to the aorta (A) which delivers the blood back to the body after it is returned from the lungs. The Jarvik-7 is powered by a pneumatic pump about the size of a portable television set. This external power supply is connected to the artificial heart by two plastic tubes. The power pack includes a battery system for use in the event of power failure or when the patient is not near a normal electrical source.

These photographs are available from Dale Blumenthal, Audiovisual Branch, Office of Communications, OD, Bldg. 31, Rm. 2B37, 496-5895, or from Don Bradley, NHLBI Public Inquiries and Reports Branch, Bldg. 31, Rm. 4A21, 496-4236.

domen. The tubes are further extended and connected to an external drive system that controls the rate and pressure of air pulsed to the heart.

This console in turn, is connected to an air compressor. As air flows into each ventricle, it pushes a thin membrane upward, expelling blood that has entered through the atria of the artificial heart out through the pulmonary artery and aorta.

Dr. William C. DeVries, chief of cardiothoracic surgery at the UUMC, has received FDA Institutional Review Committee approval to implant the first artificial heart in a human. The National Heart, Lung, and Blood Institute has provided the major funding for the University of Utah's research program leading to the clinical implantation of the artificial heart.



Dr. DeVries compares the Jarvik-7 artificial heart (l) with an instructional model of a natural heart (r). Dr. DeVries will be the first to implant the Jarvik-7 artificial heart in a human.



Doctors implant a Jarvik-5 artificial heart in a calf. The only difference between a Jarvik-5 and a Jarvik-7 is size. The Jarvik-5 is slightly larger and is used for animal testing. This picture was taken at UUMC in 1982.



Donald B. Olsen, D.V.M., holds a Jarvik-5 artificial heart and pets Tennyson, a 330-pound Jersey calf that lived for 268 days on a similar heart. Dr. Olsen has directed the animal experimentation program at the UUMC division of artificial organs for 9 years, and has supervised the implantation of hundreds of artificial hearts in sheep and calves.

NIH Library To Install New Computer Center

Construction of a new computer room on the upper level of the Bldg. 10 NIH Library is scheduled to begin in September. It is expected to be completed by April 1983. At that time, a new PDP 11/44 computer system will be installed.

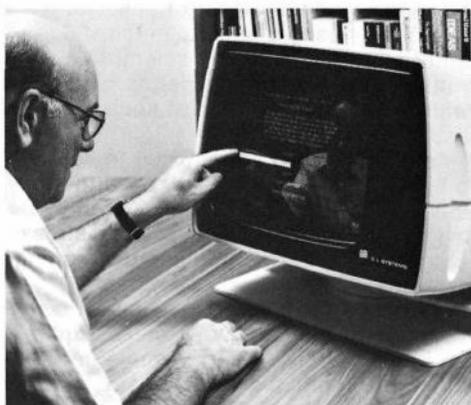
The first parts of the new computer system—online circulation control and an online catalog—will feature both keyboard and touch-screen terminals. These are scheduled to be operating by September 1983 and will replace and extend the current computer system now used by the library.

The new computer room will occupy the corner of the upper level reading room which now holds the library's reference collection. During construction, part of the reading area will be used to hold the reference books displaced by the computer room.

A dust retention wall will be placed around the construction site, and the corner window will be removed to give the work crew access without passing through the library.

When the system is installed, users will be able to browse the online catalog with touch-screen terminals similar to those used at automated banking stations. By touching various squares on the screen, the user can search the catalog by author, subject, or call number.

Within seconds, the screen will display



The new touch-screen computer system in the NIH Library will enable users to have information "at their fingertips" with a simple touch of the screen.

the bibliographic description of any item in the collection, plus the location and circulation status of any copy of that item.

Over 50,000 medical and scientific book titles, 8,000 journal titles and over 200,000 journal issues will be listed. By September 1983, the computer will be available for query by telephone by using any standard terminal.

The information about each item's status will be current since the circulation control system immediately updates the online catalog the instant it processes

each loan. Online circulation control will also eliminate the now existing 1-day delay before a change in a book's circulation status is recorded.

There will be one terminal, out of a projected six, for checkouts and returns. Five others will be available for patrons and staff. A backup microcomputer will continue to record all checkouts and returns if the main computer is temporarily down. Transactions will be recorded by the bar code system used at automated grocery checkout counters.

Besides enhancing the library's services to its users, the computer system will also provide means for improving the library's internal operations.

For example, every volume shelved could be registered on a bar code device. This will provide more precise usage data for the library staff who make decisions on managing the collection.

The staff of the NIH Library Branch, DRS, and the Computer Systems Laboratory, DCRT, made an extensive study of library computer systems before choosing the CLSI LIBS 100 System about to be installed. The LIBS 100 currently serves more than 500 American libraries.

No special training is needed to operate the computer system. It can be found operating in the District of Columbia and Prince Georges County public libraries, American University, the University of the District of Columbia, the Uniformed Services University of the Health Sciences, and the Departments of Energy and Labor. □

Teen Sexual Activity Found Not Linked to Sex Education

The debate over teaching human reproduction and birth control in schools is more than 30 years old. Opponents believe that it leads to more teenage sexual activity and pregnancy, while proponents disagree.

Investigators from the Johns Hopkins School of Hygiene and Public Health, Drs. Melvin Zelnik and Young J. Kim examined statistical evidence for either standpoint and found that teenagers who have taken a course in sex education are no more likely to be sexually active than those who have not taken a course.

Among young women in the study who were sexually active, however, those who took a sex education course differed from the others in two areas. They were more likely to use birth control at first intercourse, and less likely to become pregnant before marriage.

The scientists analyzed more than 3,700 responses from young men and women surveyed nationwide in 1976 and 1979. Women aged 15 to 19 were questioned in both surveys, which were supported by the National Institute of Child Health and Human Development. Men aged 17 to 21 were included in the later survey.

The analysis showed that about three out of four young men and women living in U.S. metropolitan areas have taken a sex education course. About eight in ten of those who took a course said they received information on birth control methods. Most of them were also told where contraceptives could be obtained

and were cautioned about possible side effects.

Drs. Zelnik and Kim compared the response of those with and without sex education, by looking at the percentage of each group that had been sexually active, used contraceptives or experienced pregnancy.

They found "overwhelming support for the claim that the decision to engage in sexual activity is not influenced by whether or not teenagers have had sex education in school." The data also showed a greater use of birth control among sexually active young women who had taken a sex education course.

If the course included a discussion of contraception, the women were more likely to have used birth control at first intercourse. And teenage women who took sex education courses were "consistently less likely" to have been pregnant before marriage.

Some results varied according to race. Black women who had sex education were more likely to use a prescription birth control method such as the pill, IUD or diaphragm. This was not true for white women. The proportion of black women receiving sex education dropped between 1976 and 1979, while the proportion of white women increased.

The authors state that the study still leaves open the question of whether a true cause-and-effect relationship exists between sex education and greater contraceptive use. They point out that sex ed-



Dr. Edward C. Melby, Jr., dean of the New York State College of Veterinary Medicine and a member of the National Advisory Research Resources Council, was presented the prestigious Charles River Prize during this summer's American Veterinary Medical Association meeting in Salt Lake City. The award, consisting of a \$2,500 stipend and a plaque, was made because of Dr. Melby's contributions to the field of laboratory animal science.

ucation courses may attract young people who would be inclined to use contraceptives anyway. If that were the case, they note, then sex education courses would "simply reinforce or enhance existing tendencies" to use birth control. □

Half of Mortality Rate Due to Lifestyle in U.S.

A stepping-up of research on the relationship of behavioral factors to health and disease was called for in *Health and Behavior*, a new report recently issued by the National Academy of Sciences' Institute of Medicine. The IOM study was co-sponsored by ADAMHA and NIH.

"As much as 50 percent of mortality from the 10 leading causes of death in the United States can be traced to lifestyle," according to the report.

Among these are cardiovascular disease, cancers, accidents, violence, diabetes, cirrhosis of the liver, and respiratory diseases.

Known behavioral risk factors include cigarette smoking, excessive consumption of alcoholic beverages, use of illicit drugs, certain dietary habits, reckless driving, nonadherence to effective medication regimens, and maladaptive responses to social pressures, the study reported.

"An impressive change has occurred in the lifestyles of many people in the United States," the experts found over the past decade, and they believe that this underlies "the pessimism that often clouds prevention efforts."

The report is based on a series of unique conferences held over 2 1/2 years involving more than 400 scientific experts.

They examined the extent of behavior-related disease and disability in the U.S. and identified newly emerging scientific opportunities for broadening understanding, treatment, and prevention of such illnesses.

Most of the report is devoted to setting up lines of inquiry on specific health problems known to be heavily influenced by behavior or "lifestyle." These include stress, alcohol problems, mental disorders, aging, cardiovascular disease, and others.

The scientists stressed the importance of a "vigorous, systematic, interdisciplinary training effort" to bring young investigators into the biobehavioral field.

"In the past few years, there has emerged a heightened awareness of the importance of behavioral factors in effective therapeutic and preventive interventions across a wide range of diseases and disabilities," the investigators found. "This awareness has been accompanied by a striking expansion in the scientific study of such factors."

The term "biobehavioral sciences" used in the report refers to the "panoply of basic, applied, and clinical sciences contributing to an understanding of behavior." These include the behavioral sciences such as neurology, neurochemistry, endo-

crinology, and neuroanatomy, as well as psychology, ethology, sociology and anthropology.

Many overlapping fields already have emerged, resulting in new terminology such as psychological sociology, psychoneuroimmunology, immunochemistry, or behavioral medicine. "All are part of the biobehavioral sciences," the report stated.

"Where disciplines with very different traditions are involved, time is needed to learn the essential language, style, and substance of the other, so that communication about a shared interest can be based on understanding and respect for the value of the contributions each can make to the other in solving a complex problem. Recognition of inherent difficulties by research administrators and by funding agencies is essential."

Underscoring its commitment to fostering interdisciplinary biobehavioral research, the experts emphasized that "some research support should be constructed so that it can be obtained only by collaboration" of biobehavioral and biomedical disciplines.

Dr. David Hambury was chairman of the IOM Committee for the Study of Health and Behavior. Copies of the 359-page report *Health and Behavior* are available from the National Academy Press. □

Albert D. Lasker Promoted Growth of Research Funds

In 1944, the total Federal budget for research in all illnesses was \$2,400,000. Today NIH alone operates under a budget of over \$3.6 billion.

One of the prime movers in increasing Federal funds for medical research was Albert D. Lasker, an advertising genius and philanthropist.

In the early 1940's, treatment was the main focus of medicine. Mr. Lasker saw the need for research and set up the Albert and Mary Lasker Foundation to provide funds for the research of such diseases as cancer and heart disease.

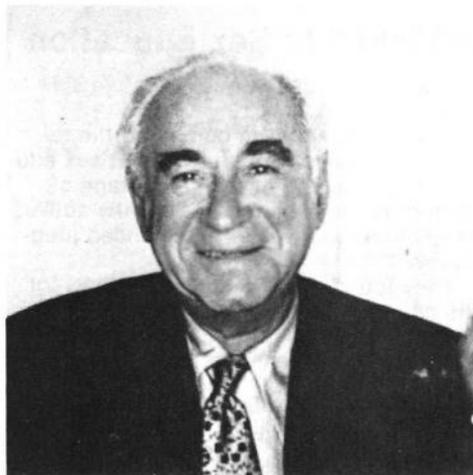
Foundation Active

Now, 30 years after his death, the foundation is still active in providing funds and giving the Albert D. Lasker Awards in medical and clinical research and public health administration.

After leaving the Lord & Thomas advertising agency in 1942, Mr. Lasker devoted much of his time and money in promoting medical research. The Laskers had both lost friends and relatives to cancer, the number 2 killer in the U.S. at that time. Yet the American Society for the Control of Cancer (now the American Cancer Society) raised only \$350,000 a year, none of which was spent on research.

In 1945, the Laskers suggested and helped finance a national cancer drive in cooperation with the American Cancer Society on the condition that one-fourth of the proceeds would be used for research.

After hassles over the taboo of saying "cancer" on the radio, the month-long drive went on to become an overwhelming success. With the aid of such radio stars



Albert D. Lasker, advertising multi-millionaire who coined the word "Kleenex," devoted the last 10 years of his life to promoting medical research.

as Bob Hope and "Fibber McGee and Molly," over \$4 million was raised.

After the first national cancer drive, Mr. Lasker suggested that the American Cancer Society help promote the increase in Federal funds for such agencies as the National Cancer Institute, which was first founded in 1936.

It was John Gunther in his book, *Taken at the Flood: The Story of Albert D. Lasker*, who said, "Lasker was a revolutionary among philanthropists, because he was the first to suggest putting Federal money to work in a big way on health matters in addition to giving away a great deal of his own."

Through their connections with various senators and representatives, the Laskers helped to encourage the formation of a group of research institutions around 1945 to 1946, now the NIH.

The Albert D. Lasker Awards, which were started in 1946, now amount to \$15,000 each and are administered by Mary Lasker, president of the Albert and Mary Lasker Foundation. The recipients are chosen by an independent panel of distinguished scientists. Thus far, over 30 NIH scientists, administrators and researchers have received the award. □

Flexi-Diet Begins Sept. 21

The Diet Workshop will begin their fall flexi-diet program Monday, Sept. 21. The 8-week session will be held from 11:30 a.m. to 12:30 p.m. in Rm. 11A10, Bldg. 31. The cost of the eight sessions is \$39.50.

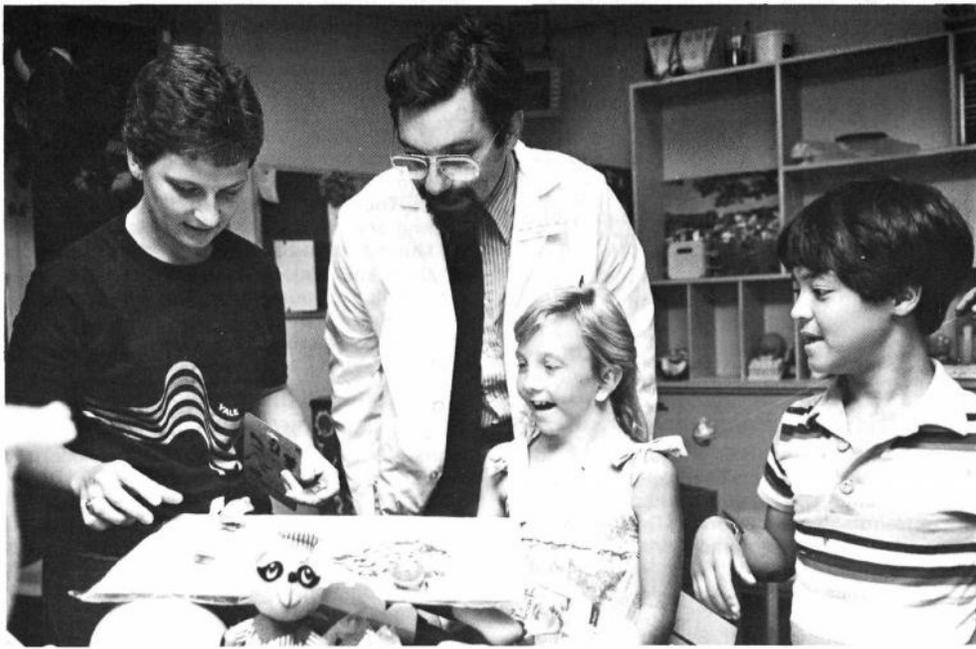
The flexi-diet is one aspect of the Diet Workshop's four-part approach to total weight control. The approach involves diet, behavior modification, exercise, and sound nutrition. Permanent weight control is emphasized.

For more information contact the Diet Workshop, 587-3438, or the R&W Activities Desk, Bldg. 31, Rm. 1A17. □

Evening Clinic Is Relocated

The Occupational Medical Service evening clinic has been relocated to the 3rd Floor, Ambulatory Care Research Facility, effective Aug. 14. Hours are 4:30 p.m. to 12:30 a.m.; telephone, 496-5483. □

Besides Platelets, Donor Gives Toys to CC Children



Platelet donor Janet Paluck (l) demonstrates how the little frog jumps for Dr. Zasloff (c), NICHD Neonatal and Pediatric Medicine Branch, and CC patients Julia Shaffer and Neal Patterson.

What should one do with money earned from donating blood platelets or providing some other significant service to further research and saving lives? This question can have many answers.

Some people spend the money. Some give it to the Patient Emergency Fund. Still others work toward a special goal, like funding a vacation.

But for platelet donor Janet Paluck, a secretary from the U.S. Department of the Treasury in Washington, D.C., her answer involved toys—and lots of them. On the evening of Aug. 11, she took \$300 of her donor-earned money, bought toys and personally delivered them to the children in the NIH Clinical Center.

"Giving the money seemed so impersonal," she said, as she unloaded boxes of hot wheels, smurf dart boards, coloring books, drawing boards, stuffed animals and much more. She spent 2 hours playing with the toys and the children in the NICHD Neonatal and Pediatric Medicine Branch and the NCI Pediatric Oncology Branch.

When she initially began donating platelets, Ms. Paluck said, "I had no idea people got money for it (giving platelets); so I figured I'd never miss it. Besides kids need some magic in their lives."

Ayrlawn Programs Available

During the school year, before and after-school care for 5 through 12-year-old children will be available at Ayrlawn in conjunction with the Wyngate Elementary School. Transportation will be provided by the Montgomery County Public Schools. Both full and part-time plans will be available. A new kindergarten enrichment program will be offered from 9 a.m. to 3 p.m.

Applications and further information may be obtained from Anne Schmitz, 530-5550. □

The publicity-shy donor was quick to say, "Don't make me out a heroine or saint. I didn't do it for publicity. This is between me and the kids. It just seemed like the right thing to do, and NIH seemed like the right place because kids are here from all over the country," she added.

"More important than giving toys, Ms. Paluck gave platelets which help the kids and other patients improve their health," said Dr. Michael A. Zasloff, chief, Neonatal and Pediatric Medicine Branch. Platelets are bits of cells made in the bone marrow which plug holes in blood vessels and help stop bleeding.

In giving platelets, blood is withdrawn from an individual, the platelets are separated by centrifugation, and then the blood minus the platelets is returned to the donor. This procedure is generally repeated four times to obtain sufficient platelets for a transfusion. The process takes 2 to 3 hours and donors receive \$25.

Those interested in donating platelets may contact the Platelets Pheresis Center, 496-4321 (appointments are available 7 days a week and during evenings); or the Clinical Center Blood Bank Department Donor Recruitment, 496-1048.

—James Hadley □

Mothers Needed for Study

The NIMH Laboratory of Developmental Psychology is looking for women to participate in a study about childrearing and emotional development.

To be eligible, the participant must have at least two children. One must be 1½ years old, and a second must be 5 to 9 years old. Mothers will be paid for their participation. For further information call 496-4431. □

FIC To Present Workshop On Connective Tissue Genes

The Fogarty International Center will present an International Workshop on the Structure and Regulation of Connective Tissue Genes Sept. 13-14 in Wilson Hall. Dr. Klaus Kuhn, Fogarty scholar-in-residence, collaborated with Drs. George Martin, NIDR; Ronald Crystal, NHLBI; and Benoit de Crombrugge, NCI, in organizing the workshop.

Prominent among connective tissue genes are those that code for various collagens. Collagens are large proteins forming the fibers that hold tissues together. The collagens in skin, cartilage, blood vessels and basement membranes are different, and are coded for by different genes.

Defects Underlie Diseases

Defects in collagen genes are known to underlie various genetic diseases including osteogenesis imperfecta, Ehlers-Danlos syndrome, cutis laxa, the Marfan's syndrome and cartilage defects. Changes in collagens occur in various acquired diseases including diabetes, fibrosis, arthritis and cancer.

Work has begun on the collagen genes, and has shown that these genes are among the largest, most complex known. However, several collagens are all, or partly defined, and are being studied in genetic diseases.

Certain other proteins are characteristic of connective tissues and their synthesis is coordinated with the synthesis of collagen in development. These include proteoglycans and glycoproteins that have specialized roles in the various tissues.

The first day of the meeting will pertain to the structure of the genes, their promoter regions and implications for regulation and control. The morning of the second day will focus on human genes and genetic disorders. In the afternoon, gene regulation in some model systems of modulated connective tissue cells will be discussed.

Preregistration is necessary. For more information, contact Nancy Shapiro, FIC, 496-2517. □



Alberta C. Bourn, deputy chief of the CC's Nutrition Department, recently earned a master's degree in human nutrition and foods from Virginia Polytechnic Institute and State University. She attended classes part-time in the evenings for 3 years.

Dr. McCormick Honored By Academy of Nursing

Dr. Kathleen A. McCormick, assistant to the chief, Nursing Department, NIH, has been named one of 26 new fellows admitted to the American Academy of Nursing. The academy is composed of registered nurses who have made significant contributions to the nursing profession.

Recognized as a researcher who has demonstrated a significant commitment to



Among some of Dr. McCormick's recent publications include coauthoring an article entitled "Nursing Documentation: A Model for a Computerized Data Base" in *Advances in Nursing Science*, 1982. Her presentation, Nursing Research Using Computerized Data Bases, was published in *Proceedings of the 5th Annual Symposium on Computer Applications in Medical Care*, November 1981.

research in the clinical setting, she developed the process and policies governing clinical nursing at NIH and pioneered the use of nurses as principal investigators on intramural research protocols.

Dr. McCormick has been internationally recognized for her research in respiratory distress.

Book Author

Because of her interest in this field, she is a member of the board of directors and the executive committee, as well as national secretary of the Nursing Section of the American Lung Association. In 1976, she authored a book for the association on lung hygiene for patients.

Another area of interest is the development of models to improve nursing documentation, bridging technology and nursing practice, and defining four tiers of nursing practice. Dr. McCormick has sought to develop a classification system of nursing research using computerized medical information systems.

The American Academy of Nursing was established in 1973 by the American Nurses' Association to advance new concepts of nursing care and to identify and explore issues in health care as they affect nursing, as well as to offer solutions to issues confronting nursing and health.

The new fellows of the academy will be formally admitted on Sept. 13 in Portland, Ore., where the academy's annual meeting will be held. □

Visiting Scientist Program Participants

Sponsored by Fogarty International Center

- 7/1 Dr. **Dau-Yin Chang**, Taiwan, Laboratory of Animal Genetics. Sponsor: Dr. Robert Voelker, NIEHS, Research Triangle Park, N.C.
- 7/14 Dr. **Stephen Lillioja**, New Zealand, Digestive Diseases Branch. Sponsor: Dr. Clifton Bogardus III, NIADDK, Phoenix, Ariz.
- 7/14 Dr. **Hinda Zlotnik**, Mexico, Laboratory of Biochemistry and Metabolism. Sponsor: Dr. Enrico Cabib, NIADDK, Bg. 10, Rm. 9N115.
- 7/15 Dr. **Tasushi Tomita**, Japan, Dermatology Branch. Sponsor: Dr. Stephen Katz, NCI, Bg. 10, Rm. 12N238.
- 7/20 Dr. **George A. Gaitanaris**, Greece, Laboratory of Molecular Biology. Sponsor: Dr. Max Gottesman, NCI, Bg. 37, Rm. 4B03.
- 7/20 Dr. **Voker Fischer**, W. Germany, Laboratory of Environmental Health Sciences. Dr. Ronald Mason, NIEHS, Research Triangle Park, N.C.
- 7/23 Dr. **Ananda Weerasuriya**, Sri Lanka, Laboratory of Neurosciences. Sponsor: Dr. Stanley I. Rapoport, NIA, GRC, Baltimore, Md.
- 7/25 Dr. **Gianni Chinali**, Italy, Laboratory of Molecular Genetics. Sponsor: Dr. C. Michael Cashel, NICHD, Bg. 6, Rm. 335.
- 7/25 Dr. **Peter Sonderegger**, Switzerland, Laboratory of Developmental Neurobiology. Sponsor: Dr. Phillip Nelson, NICHD, Bg. 6, Rm. 335.
- 7/26 Dr. **Nicholas Zombos**, Greece, Clinical Hematology Branch. Sponsor: Dr. Neal Young, NHLBI, Bg. 10, Rm. 7D03.
- 7/29 Dr. **Dipak Kumar Banarjee**, India, Laboratory of Experimental Pathology. Sponsor: Dr. Harvey Pollard, NIADDK, Bg. 4, Rm. 312.
- 7/29 Dr. **Pierre De Meyts**, Belgium, Diabetes Branch. Sponsor: Dr. Jesse Roth, NIADDK, Bg. 10, Rm. 8S243.
- 7/29 Dr. **Silvia Moreno**, Argentina, Laboratory of Environmental Biophysics. Sponsor: Dr. Ronald Mason, NIEHS, Research Triangle Park, N.C.
- 8/1 Dr. **Rafaella Muraro**, Italy, Laboratory of Cellular and Molecular Biology. Sponsor: Dr. Jeffrey Schlom, NCI, Springfield, Va.

- 8/1 Dr. **Tsutomu Oh-Ishi**, Japan, Metabolism Branch. Sponsor: Dr. Thomas Waldmann, NCI, Bg. 10, Rm. 4N117.
- 8/1 Dr. **Miroslava Protic-Sabljić**, Yugoslavia, Laboratory of Molecular Carcinogenesis. Sponsor: Dr. Kenneth Kraemer, NCI, Bg. 37, Rm. 3E06.
- 8/1 Dr. **Theirry G. Pun**, France, Biomedical Engineering and Instrumentation Branch. Sponsor: Dr. Murray Eden, DRS, Bg. 13, Rm. 3W13.
- 8/1 Dr. **Nikhat Najam**, Pakistan, Laboratory of Biochemistry. Sponsor: Dr. Elbert Peterson, NCI, Bg. 37, Rm. 4C25.
- 8/1 Dr. **Vijayalakshmi Ravindranath**, India, Laboratory of Viral Carcinogenesis. Sponsor: Dr. Nancy H. Colburn, NCI, FCRF, Bg. 560, Rm. 12-34.
- 8/1 Dr. **Carole A. Warnes**, United Kingdom, Pulmonary Branch. Sponsor: Dr. William Roberts, NHLBI, Bg. 10A, Rm. 3E30.
- 8/1 Dr. **Christine Zioudrou**, Greece, Laboratory of General and Comparative Biochemistry. Sponsor: Dr. Werner Klee, NIMH, Bg. 36, Rm. 3A19.
- 8/3 Dr. **Sudhit Chandra Gupta**, India, Laboratory of Immunobiology. Sponsor: Dr. Sarkis Ohanian, NCI, Bg. 37, Rm. 2B23.
- 8/4 Dr. **Jehoshua Katzhendler**, Israel, Genetics and Biochemistry Branch. Sponsor: Dr. Rafael Camerini-Otero, NIADDK, Bg. 10, Rm. 9D08.
- 8/4 Dr. **N. Ingemar Rundquist**, Sweden, Laboratory of Neuroscience. Sponsor: Dr. Stanley Rapoport, NIA, GRC, Baltimore, Md.
- 8/8 Dr. **Susan Adeniyi-Jones**, Nigeria, Neonatal and Pediatric Medicine Branch. Sponsor: Dr. Charles Sidbury, NICHD, Bg. 31, Rm. 2A50.
- 8/8 Dr. **Alokes Majumder**, India, Laboratory of Molecular Biology. Sponsor: Dr. Sankar Adhya, NCI, Bg. 37, Rm. 4B04.
- 8/9 Dr. **Simonetta Pastore**, Italy, Division of Virology. Sponsor: Dr. Julie Djeu, BOB, Bg. 29A, Rm. 2B17.
- 8/15 Dr. **Olav Meirik**, Sweden, Biometry Branch. Sponsor: Dr. Howard Hoffman, NICHD, Landow Bg., Rm. 6C03A.

PRIMATOLOGISTS

(Continued from Page 1)

he added. "If the primate species become extinct, the human population will lose a valuable partner in research and education.

"With their close biological and behavioral relationship to humans, the great apes and monkeys contribute a great deal to improving our understanding of human development, psychological and biological."

Congress participants discussed the decreasing wild populations of nonhuman primates as well as methods that can be used in the field and laboratory to promote the survival of the endangered primate species. These include primate population surveys, establishment of reserves to protect the animals' natural habitats, and educational programs to inform governments of the decline of their countries' primate species.

In addition to conservation, other topics discussed during Congress sessions included vocal communication in primates, nonhuman primate *in vitro* fertilization, ecology of gorillas, size and scaling in primate biology, and comparative neurobehavioral ontogeny. □



Liberia's Minister of Health and Social Welfare, Martha K. Belleh (c), recently visited the Clinical Center and toured the new ACRF. Mrs. Belleh, a registered nurse and a graduate of Case Western Reserve University, met with Rena M. Murtha (l), chief, CC Nursing Department, and Dr. Jay R. Shapiro, Acting CC Director.

Let's Throw 'Em Down the Alley

The NIH Early Bird Bowling League is accepting members for the 1982 season. The new season starts Sept. 7 at the Brunswick Bowling Alley at 5:30 p.m. For further information, contact Dottie Banks, 789-1770. □

Serotonin Malfunction May Trigger Suicide

Persons who commit or attempt suicide may be influenced by an abnormality in the functioning of serotonin, a neurotransmitter found in the blood, brain and tissues, which acts as a vasoconstrictor and is important in mental activity.

Evidence from three studies conducted by scientists from the National Institute of Mental Health, Wayne State University, and in Sweden, indicate that suicidal individuals generally have lower levels of a serotonin metabolite, or a decreased serotonin receptor functioning.

Dr. Gerald Brown, staff investigator of the NIMH Biological Psychiatry Branch in Bldg. 10, said, "Although suicide has been commonly associated with depression, the key factor in suicidal behavior may be low serotonin levels, not depression. This would mean that suicidal behavior is not necessarily related to a particular mental disorder, but may be associated with other factors such as low serotonergic functioning."

Lower levels of serotonin have also been found in schizophrenics, alcoholics, and persons exhibiting aggressive behavior and poor control of their impulses.

In a recent issue of the *American Journal of Psychiatry*, Dr. Frederick Goodwin, director of NIMH's Intramural Research Program, and several of his colleagues reported on the correlation of aggression, suicide, and low serotonin levels.

According to the authors, in a group of non-depressed persons, "Histories of aggressive behavior and of suicide attempts were significantly associated with each other, and each was significantly associated with lower 5H1AA (a metabolite of serotonin) level." However, Dr. Brown, a coauthor of the article, cautioned against assuming that all persons with low serotonin are either suicidal or impulsive/aggressive.

"Aggression in and of itself is not a negative trait; there are aggressive people who are criminals and have antisocial traits, but there are also those who are ambitious, competitive, and have highly successful careers," he said.

Earlier work by Dr. Marie Asburg of Sweden has been underscored by the NIMH work. Her studies show that those who committed violent suicide (gunshot, knife wounds, etc.), had lower levels of 5H1AA than those who committed nonviolent suicide (e.g., an overdose of sleeping pills).

Measuring levels of serotonergic functioning might be useful in screening those who may be more vulnerable to suicide, Dr. Brown suggested. He proposed screening a pool of individuals and examining more closely those who had low serotonergic functioning.

If either a personal history or family history of mental disorders was apparent, particularly involving depression or aggression, then closer attention could be given to those people.

"The fact that brain serotonin tends to increase with age may or may not lead to clinical changes over time within an individual," Dr. Brown said. "Clinicians have talked for a long time about psychopaths burning out as they get older; perhaps the same observation holds true for individuals who have suicidal tendencies related to low brain serotonin."

Age, sex, and diet all affect brain serotonin. Some pilot work has led to promising results in maintaining increased brain serotonin levels. A few tricyclic antidepressants currently in use are successful. A combination of a specific drug and a diet which includes a precursor of serotonin (i.e., 5-hydroxy tryptophan) and tryptophan, an amino acid found in proteins and particularly in dairy products, have also been used. □

Lilly Award Presented To CC Pharmacy Resident



Nominations for the Lilly award were voted on by the faculty of St. John's University. Mr. DaBronzo feels that his acceptance at NIH was a major factor in the faculty's decision.

Joseph L. DaBronzo, CC pharmacy resident, was awarded the 1982 Eli Lilly Achievement Award upon his graduation from the College of Pharmacy and Allied Health at St. John's University in Jamaica, N.Y.

This award is given to a graduate of each college of pharmacy in the United States who "has displayed superior scholastic and professional achievement, desirable qualities of professional leadership and ethical conduct."

Originally from Trenton, N.J., he received his bachelor's degree in psychology from LaSalle College in Philadelphia. He is one of six CC pharmacy residents with 1-year appointments.

The appointments are divided among five rotations. They are the control and formulation of investigational drugs; the administration of a drug information service for hospital professional staff; pediatric oncology, for experience in the chemotherapeutic treatment of malignancies in children; neurology, for experience in drug therapy of neurological conditions; and medical oncology, for the study of cancer chemotherapy in adults.

Mr. DaBronzo is a member of the American Society of Medical Technology, the American Society of Clinical Pathologists, the American Society of Hospital Pharmacists, the American Pharmaceutical Association and the New Jersey Society of Hospital Pharmacists. □

MIDER

(Continued from Page 1)

products in the regulation of T cell activation.

Born in Brooklyn, N.Y., Dr. Paul attended the State University of New York Downstate Medical Center, where he received an M.D., cum laude.

His internship and residency were both served at the Massachusetts Memorial Hospitals (University Hospital), Boston.

Early in his career, Dr. Paul was a clinical associate in the NCI Endocrinology Branch. Leaving NIH, he joined the staff of the New York University School of Medicine in 1964 where he worked until 1968. From 1966 to 1968 he was a clinical assistant visiting physician at Bellevue Hospital.

An NIAID staff member since 1968, he became acting chief of the Laboratory of Immunology in 1970, and its chief in 1971.

Dr. Paul is the recipient of numerous honors including election to the National Academy of Sciences and winner of the Texas Instruments Foundation 1979 Founders' Prize.

Training Tips

The following courses sponsored by the Division of Personnel Management are given in Bldg. 31.

Communication Skills	Course Starts	Deadline
Stress Management for Increased Productivity	9/22	9/9
Reading Improvement	10/4	9/15
<i>Office Skills</i>		
Effective English Workshop	10/18	9/29
Proofreading	10/13	9/29
Refresher Typing	9/21	9/9
Beginning Shorthand	9/21	9/9
<i>Supervisory and Management</i>		
Effective Supervision	10/4	9/13
Group Dynamics	9/15	9/3

To learn more about these courses call the Training Assistance Branch, DPM, 496-2146.



A new "mini-pumper" 200-gallon engine has recently been delivered to the NIH Fire Department. The only one of its kind in the area, the engine is specially designed for parking garage fire fighting. Captain W. T. Magers (l), and firemen K. C. Holderness (c) and W. D. Boswell check out the new vehicle.

Clinical Center's MIS Computer System Found Highly Efficient and Innovative

An extensive evaluation study of the Clinical Center's medical information system, or MIS, has been completed by Analytic Services, Inc. The results have recently been summarized in a six-volume report.

MIS has been found to be one of the most fully automated and comprehensive systems now operating in a hospital, and in the past has served in the role of prototype for such systems considered or installed by other medical centers.

Since installation began in 1976, MIS has evolved to the present network of video display terminals and printers which record, store, and communicate patient record information, medical orders, and the results of diagnostic tests.

Every year, physicians at the CC order literally millions of tests and other services for patient care and research on the MIS.

The report states, "There have been improvements in the speed, accuracy, and reliability of communications. There has also been an increase in the amount of documentation available on patient care activities."

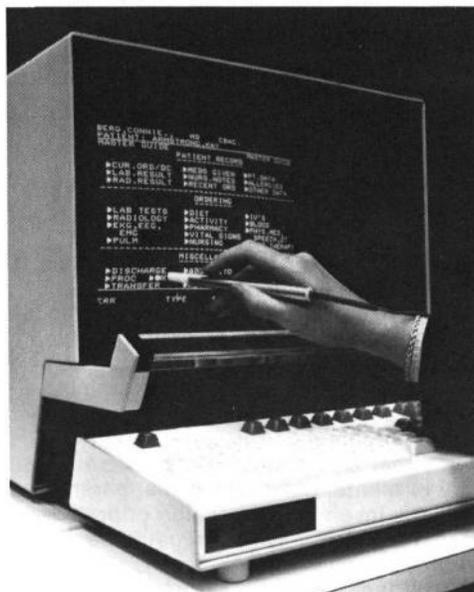
They also found that MIS has provided CC departments with information that was not previously directly available to them; and also improved the accessibility to certain types of information.

Physicians and nurses can obtain a patient's biographic data, diagnosis, medications, and previous test results from MIS files in seconds.

Before the physician prescribes medication, the computer can provide him or her with all current drug orders, the patient's allergies, and dosage forms and strengths available for the new medication.

The drug request is electronically relayed to the pharmacy department and the patient's nursing unit and is entered into the patient's computerized record. Administration of drugs and other treatment is recorded.

Physicians and nurses use the system to document all aspects of patient care and progress.



MIS users, which include all personnel involved in patient care, select the type of information or services they need with an electronic "light pen" directed at the video display screen.

According to Gerald Macks, management analyst and MIS evaluation study project officer, "Every nurse, every person in departments using the system, and virtually every physician actively involved in patient care was given an opportunity to evaluate the system through questionnaires or interviews."

The MIS report contains the details of the methods and results of the study. The evaluation will serve as a guide to the Clinical Center in planning improvements of MIS, making it more useful for the personnel who use MIS and those who model their own systems after it.

The project also provided a basis for future evaluations of MIS. Dr. Thomas Lewis, associate director for information systems, Clinical Center, emphasized that "As a user-oriented system, it is important for us to continue to evaluate usage and user satisfaction." □

New Study Section Established on Hearing Research

NIH has established a new hearing research study section and has changed the name of the Communicative Sciences Study Section to the Sensory Disorders and Language Study Section.

The study sections are part of NIH's system for peer review and provide scientific review of grant applications. These two study sections will relate primarily to the research programs of the National Institute of Neurological and Communicative Disorders and Stroke.

The new Hearing Research Study Section will review research grant and research training applications related to the structural and functional bases of disorders of the ear, and to the mechanisms that underlie hearing.

Specific areas include: basic and clinical

aspects of middle ear diseases (such as otitis media and conductive hearing loss); basic and clinical aspects of inner ear diseases (such as tinnitus and Meniere's syndrome); basic and clinical aspects of tumors of the auditory and neurosensory apparatus; and prevention, diagnosis, and treatment of hearing loss, vertigo, and vestibular abnormalities.

The new study section, which will begin to be constituted in the fall, will consist of 15 members selected from outstanding authorities in the fields of otolaryngology, otology, neurology and the neurosciences, audiology, pediatrics, psychoacoustics, bioengineering, pharmacology, and other disciplines with interests in the auditory system and hearing disorders. □

Dr. M. Klein, Cancer Strategist, Retires

Dr. Michael Klein, acting chief of NCI's Program Analysis and Formulation Branch, recently retired. He was a research planning officer in the Office of Program Planning and Analysis since 1967.



Dr. Klein

Dr. Klein assisted in planning the National Cancer Program after the passage of the National Cancer Act in 1971.

During his years in the laboratory, he produced 60 publications, with a major emphasis on the mechanisms of chemical

carcinogenesis.

Earning his B.S. in biology at the City College of New York in 1938, Dr. Klein first researched cancer at the University of California at Los Angeles in 1945 when "nobody else at the university was doing it yet," he recalled.

He became an NIH junior research fellow in 1947, and subsequently earned his master's in zoology and doctorate in endocrinology at UCLA. He joined NCI as a research fellow investigating chemical carcinogenesis.

Some of Dr. Klein's earlier studies with fetal tissues and embryos addressed whether a mother's exposure to certain chemicals posed a cancer risk for the fetus. He found that there were real hazards due to chemicals moving across the placenta, affecting the embryo, and subsequently producing cancer.

"I feel extremely optimistic—and I didn't always feel this way—that within the next few years we will be finding major pieces of the cancer puzzle, in the direction of prevention, and of cure as well."

Dr. Klein and his wife, Naldi, will retire to Florida where he plans to devote his time to community and church activities. □

Freedom is not worth having if it does not include the freedom to make mistakes.—*Gandhi* □

Ain't You Got an Aunt?

Once upon a time, there was a grasshopper and an ant. All during the summer the ant worked very hard storing up food and supplies for the winter months. The grasshopper just hopped around, had a good time, and did no work.

Came the winter and the ant was comfortable in her little home with her well-stocked larder. The grasshopper was starving and miserable. Finally, he asked the ant for help. She bawled him out for frittering away the whole summer, but felt sorry for him and took him in and gave him food and warmth.

The moral of the story is "If you're down and out, get yourself a rich old ant!" □

Veteran Biologist Honored for Immunogenetic Research

Delta E. Uphoff, a research biologist in the radiation biology section of NCI's Laboratory of Pathophysiology, was recently awarded an honorary doctorate of science by her alma mater, Russell Sage College in Troy, N.Y.

Ms. Uphoff's research focuses primarily on the immunogenetics of tissue transplantation. She has worked at NCI since 1949.

She graduated from Russell Sage College in 1944. While writing her master's thesis in 1946 at the University of Rochester, N.Y., Ms. Uphoff was associated with the Manhattan Project's low-level radiation laboratory.

Working with *Drosophila* (fruit flies), Ms. Uphoff and associates discovered there was no threshold for radiation's ability to rearrange chromosomes or damage genes. The lowest doses can cause changes.

Much of her subsequent research concerned the immunogenetics of bone marrow transplantation. Transplanting healthy bone marrow into irradiated mice would prevent radiation-induced leukemias, if the transplant succeeded. Often, these grafts failed.

Ms. Uphoff decided to look at the problem from a genetic angle. She noticed that while some hybrid murine offspring could donate bone marrow to their parents, if marrow from the parental strain was transplanted into the hybrid offspring, a lethal syndrome was produced.

This syndrome was thought to be a result of the host rejecting the graft. Although this is true for most organ transplants, bone marrow is a different kind of organ—bone marrow can manufacture its own antibodies.



The International Society of Experimental Hematology gave Ms. Uphoff a special award in 1976 for her outstanding contributions in transplantation immunology.

Ms. Uphoff discovered that the rejection occurred when the bone marrow graft made antibodies that attacked normal cells in the host.

This new understanding paved the way for better matching of donors and recipients, leading to greater success in bone marrow transplantation.

"When I look at a problem, I often wonder whether the underlying premise for the experiment is correct," she said.

This kind of thinking leads to new observations. Ms. Uphoff has published 59 papers. She maintains 26 mouse strains for her experiments.

"I do all my own observations," she said. "If I see something unusual once, I note it. If I see it twice, I set up an experiment to investigate it." □

Rocky Mt. Technician Gains Medical School Acceptance

Hard work and determination paid off for Ramona Heiland. This fall she will be fulfilling her dream of a medical career by attending the Utah Medical School in Salt Lake City.

Because of the large number of applicants, Ms. Heiland was unable to gain acceptance into a medical school immediately after graduation from college. But determined to keep her hand in science, she accepted a nonpaying research position with the NIAID Rocky Mountain Laboratory. For the past several months, she has been on the NIAID payroll.

Working with Dr. Alan Liss, Ms. Heiland has been conducting a study of mycoplasmas—a group of filterable wall-free microbes that produce disease in humans, animals, plants and insects.



Ms. Heiland worked hard while waiting to get into medical school by studying mycoplasmas at the Rocky Mountain Laboratory.

In addition to her work at RML, she and Dr. Liss taught a weekly class on "Mycoplasmas and L-forms" to a group of graduate students at the University of Montana. Ms. Heiland is also an active member of the Hamilton ambulance crew, on duty 4 days a week.

Asked her goals following medical school she stated, "I really haven't made a definite decision yet, but I do feel that research is of the utmost importance."

As a going away present, her colleagues in the Laboratory of Microbial Structure and Function pitched in and bought Ms. Heiland her first stethoscope. □

Sail on the 'Amazing Grace'

R&W is chartering the *Amazing Grace*, one of the largest of the remaining "bug-eyes," for a day of sailing on Sunday, Oct. 10.

Price per person is \$20. Interested persons may sign up at the R&W Activities Desk, Bldg. 31, Rm. 1A18. □

Happiness and unhappiness are constitutional and have nothing to do with money. Money can cure hunger; but it cannot cure unhappiness.—George Bernard Shaw □

Dr. Norman Shumway Dies; Guided MEDLARS System

Dr. Norman P. Shumway, former chief of the medical subject headings section, NLM, died July 11.

Dr. Shumway joined NIH in 1965 and was responsible for terminology control for various publications of NLM, the preparation and publication of terms necessary for indexing and cataloging biomedical literature, and the preparation of various NLM publications.

He was also responsible for guiding the development of the MEDLARS controlled vocabulary almost since its inception, as well as for planning the hierarchical search system for MEDLARS I. In 1974, he received the NLM Director's Award for efforts in developing and implementing MEDLARS vocabulary design concepts.

Although Dr. Shumway retired in 1974, for the past several years he spent much

of his time at NLM working for the World Health Organization, doing literature searches for requesters in developing countries.

A native of Philadelphia, he earned his M.D. degree from the University of Pennsylvania Medical School in 1931. He practiced internal medicine in Philadelphia from 1936 to 1941.

When World War II broke out, Dr. Shumway volunteered his services as a civilian in the London Hospital. He later served in the U.S. Navy Medical Corps. For the next 20 years, he was chief of the medical service at the Veterans Hospital in Cleveland and professor of medicine at Western Reserve University.

At Dr. Shumway's memorial service, John Blake, chief of NLM's History of Medicine Division, praised him as one who cared deeply for other people and had an alert, critical intelligence.

He also served as a consultant to the World Health Organization, the State Department and the Department of the Army. He was awarded the Legion of Merit for his services to the U.S. Army in the investigation of schistosomiasis in the Far East.



Dr. Shumway

Flamenco To Be Part of Hispanic Heritage Week

The customs, dance, and music of South America and Spain will be featured this year in NIH's 2-day observance of Hispanic Heritage Week Sept. 23-24.

The cultural program includes a panel discussion on Hispanics—Who Are They Anyway? on Thursday, Sept. 23. The discussion will be followed by music and singing by El Tayrona, a Colombian folklore ballet group. First-day activities will run from noon until 1:30 p.m. in Bldg. 10's Masur Auditorium.

Romisongo—a musical group that performs traditional compositions from Peru, Chile, Argentina, Uruguay, and Bolivia will be featured from 11:30 a.m. until 12:30 p.m. on Friday, Sept. 24.

A professional variety group, composed of two guitarists, a pianist and a singer, will perform from 12:30 to 1:30 p.m. Several hours later at 7:30 p.m., the Masur Auditorium will reverberate with the sounds of Spain and Ecuador.

For an hour or more, the auditorium's stage will be turned into a "tablao" where the ancient Spanish art of flamenco dancing will be exhibited with all its rhythmical explosion and subtleness.

This free entertainment, which is open to all NIH employees, their families and friends, and to Clinical Center patients, will feature Ena Camargo, an NIAID microbiologist, who for the past 4 years has been president of NIH's advisory committee for Hispanic cultural programs.

A native of Colombia, Ms. Camargo studied Spanish traditional dance, which is quite different from flamenco, while living in South America. She did not learn flamenco until she came to the United States over 14 years ago. Seven years ago, she formed her own group and replenishes her ranks by running a school from her Bethesda home. Several of her smallest aficionados performed recently at the NIAID EEO Multi-Cultural Awareness Fair held last month.

Flamenco dancing has its origins in



Ms. Camargo demonstrates caracoles, a flamenco dance featuring dramatic fan flourishes.

Andalucia, a southern province in Spain. It has been influenced by the various cultures of invading populations through the centuries.

Flamenco has had subtle stylistic changes added to it over the years with contributions from South America and Caribbean countries, and is performed by groups today in most countries where Spanish culture was first implanted.

"Flamenco is more popular today in America than it was 10 years ago," noted Ms. Camargo, adding that many of her younger students are Americans who are learning for the first time about this classic form of dance and the culture language that surrounds it.

The Ena Camargo Flamenco Group will perform 10 examples of flamenco dance from their repertoire. They are to be followed by the Ecuadorian Folklore Ballet. □

Artificial Skin Research Advances to Phase II

Scientists from Massachusetts Institute of Technology and Massachusetts General Hospital recently reported on advances in the development of artificial skin for use on severely burned patients.

The first version of the artificial skin—called phase I—is now successfully being used on patients, while the later version—called phase II—has proven very successful in animals. The principal investigators, Drs. Ioannis V. Yannas and John F. Burke, are supported under grants from the National Institute of General Medical Sciences.

The artificial skin, which inhibits infection and prevents fluid loss in burn patients, reportedly is more effective than grafting the patient's own skin over the burned area or than using grafts of animal or cadaver skin.

Basically, phase I artificial skin is a porous polymer bound to a component of cartilage and covered with a silicone rubber sheet that provides mechanical strength. The patient's own skin cells begin to migrate and grow over the graft while the synthetic skin is slowly biodegraded. Later, the silicone layer is removed and epidermis from elsewhere on the body is transplanted in its place.

Stage II artificial skin has basically the same structure, but it is "seeded" with a small amount of skin-forming cells taken from the patient. This allows faster growth of an intact skin layer.

Although stage II has been tested only in guinea pigs, scientists have found that contraction, pathologic shrinking of tissues, is limited. They plan to proceed with human trials within the next year. □

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