

The NIH Record

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National
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First National Conference On Epidermolysis Bullosa

The first national conference on epidermolysis bullosa (EB) was held Nov. 29-30 in Washington, D.C. This event was heralded by a Capitol Hill reception in the Russell Senate Office Bldg. and the debut of the government's first publication on EB, *Living with Epidermolysis Bullosa*.

EB is a rare hereditary disorder that involves the skin and mucous membranes. EB can range from a relatively mild condition to a severely disabling and sometimes fatal disease. In severe EB, blisters can form over nearly all the body and in the digestive tract. Wounds from EB resemble serious burns.

According to Arlene Pessar, founder of the Dystrophic Epidermolysis Bullosa Research Association of America (DEBRA), an estimated 50,000 Americans, mostly children, are afflicted with this skin disorder. DEBRA, founded in 1980, is a national organization dedicated to improving the quality of life for EB patients through education and promotion and support of basic and clinical research.

Dr. Laurence H. Miller, chairman, DEBRA's scientific advisory board and special advisor to the director, Division of Arthritis, Musculoskeletal and Skin Diseases, NIADDK, said, "The coordinated action of Federal and voluntary health agencies and dedicated participation by DEBRA members will generate the momentum needed to stimulate more effective therapy and expanded research activity for EB."

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Conferees Agree on Cholesterol Dangers; Recommend Methods To Lower High Levels

A large body of evidence links elevated blood cholesterol levels to coronary heart disease. However, some doubt remains about the strength of the evidence for a cause-and-effect relationship.

Questions also remain regarding the exact relationship between blood cholesterol and heart attacks and the steps that should be taken to diagnose and treat elevated blood cholesterol levels.

To resolve some of these questions, the NHLBI convened a Consensus Development Conference on Lowering Blood Cholesterol to Prevent Heart Disease, Dec. 10-12. After hearing a series of expert presentations and reviewing all of the available data, a consensus panel of lipoprotein experts, cardiologists, primary care physicians, epi-

demiologists, biomedical scientists, biostatisticians, experts in preventive medicine, and lay representatives agreed on several recommendations.

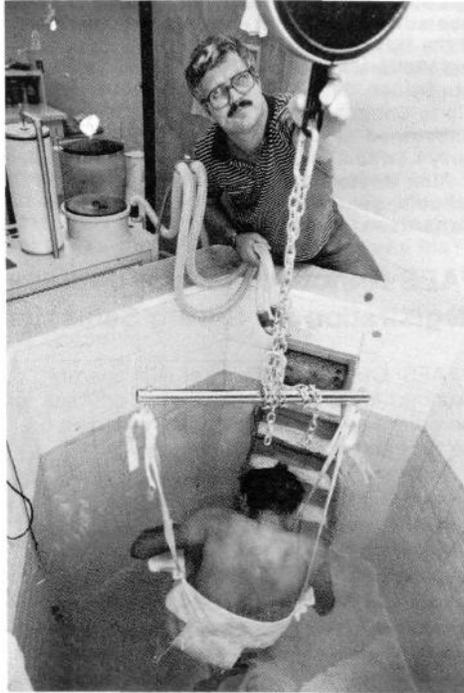
The panel concluded that elevated blood cholesterol level is a major cause of coronary artery disease. It has been established beyond a reasonable doubt, the panel said, that lowering definitely elevated blood cholesterol levels (specifically blood levels of low density lipoprotein cholesterol) will reduce the risk of heart attacks due to coronary heart disease.

Based on that basic conclusion, the panel recommended:

- Persons with high-risk blood cholesterol levels be treated intensively by dietary means and, if response to diet is inadequate,

(See CHOLESTEROL, Page 10)

Arizona's Pima Indians Are an Apparent Exception To Obesity—High Cholesterol—Heart Disease Pattern



In many of the metabolic studies, such as those of the Pima Indians, it is necessary to determine the percent of body fat of each volunteer. This measurement is made underwater, using a calculation to correct for residual air volume in the lungs.

Obesity is considered an important factor in accumulation of cholesterol in blood. High levels of cholesterol have also long been associated with increased risk of cardiovascular diseases, including heart attacks and arteriosclerosis (hardening of the arteries).

The Pima Indians of the southwestern United States appear to be an exception. They have an extremely high prevalence of obesity but exhibit a significantly lower rate of heart disease than Caucasians in this country.

This makes the Pimas an ideal group for studying relationships between obesity and cholesterol and how they may be related to heart disease.

To understand why the Pimas have fewer cardiovascular problems, Dr. Barbara V. Howard and her colleagues from the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases have been studying the role of lipoproteins in maintaining plasma cholesterol levels at the Institute's Clinical Research Section in Phoenix, Ariz.

Lipoproteins are a combination of lipids (fats) and proteins. There are three types of lipoproteins, each carrying a different amount of cholesterol in blood:

- High density lipoproteins (HDL) carry high concentrations of protein and small amounts of cholesterol.

- Low density lipoproteins (LDL) carry moderate amounts of proteins and high levels of cholesterol.

- Very low density lipoproteins (VLDL), metabolic precursors to LDL, carry very little proteins and only moderate amounts of cholesterol, but a lot of triglycerides (fats).

High levels of total cholesterol and low density cholesterol and low levels of high density cholesterol have been linked with increased risk of cardiovascular disease, a condition frequently found in obese individuals.

High levels of HDL are considered good for protection from heart disease.

The NIADDK researchers studied lipoprotein levels in over 3,000 male and female Pimas with a wide range of obesity. They compared these results to those from a previous study conducted on a similar group of U.S. Caucasians. Because the Pimas have an extremely high rate of diabetes, a disease known to elevate levels of lipoproteins in the

(See PIMAS, Page 11)

The NIH Record

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TRAINING TIPS

The following courses are sponsored by the Division of Personnel Management, Development and Training Operations Branch.

<i>Administrative Systems</i> (Call 496-6211)	<i>Course Deadline Starts</i>	
Basic Time & Attendance	1/2	12/20
	2/14	1/31
Travel Orders & Vouchers	1/7	12/14
	2/14	1/21
Delpro (for new users only)	1/7	12/24
	2/4	1/21
<i>Technical/Occupation Related Training (496-6211)</i>		
Proofreading	1/7	12/24
ABC Shorthand (given in WW)	2/5	1/4
Scientific Terminology	1/8	12/24
<i>Programs (496-6211)</i>		
Adult Education Program Training and Development Services Program		
<i>Executive, Management, and Supervisory (496-6211)</i>		
The Federal Budget Process	1/23	1/4
Managing for Productive Work Relationships	2/6	1/8
Understanding and Managing Stress	2/27	2/8
Introduction to Supervision	1/28	1/11

January: National Blood Donor Month

January is National Blood Donor Month. On behalf of the Clinical Center patients and their families, the Department of Transfusion Medicine would like to thank those who have participated in the volunteer blood donor program at NIH.

The demand for blood and blood components is increasing daily and we solicit the support of all NIH employees. Touch a life—give blood! □



NIH Director Dr. James B. Wyngaarden (seated) signs a letter encouraging members of the NIH community to join the Recreation and Welfare Association. All members who join by Jan. 31, 1985 will be eligible to win a trip to Cancun, Mexico. The membership fee is discounted to \$3.50 until Feb. 1. L to r are: Jerry Lawson, membership campaign director; C. Alan Moore, 1st vice president; Randy Schools, general manager, and Agnes Richardson, president.

FAES Announces Night Courses Registration for Spring Semester

FAES' Graduate School at NIH has announced its schedule of evening courses for the spring semester which will be given on the NIH and the USUHS campuses.

Courses offered are biochemistry, biology, genetics, chemistry, physics, mathematics, medicine, pharmacology, toxicology, physiology, immunology, microbiology, nursing, psychology, psychiatry, statistics, languages, administration and courses of general interest.

\$40 Per Credit

Tuition is \$40 per credit hour, and courses may be taken for credit or audit. Courses that qualify for Institute support as training should be cleared with supervisors and administrative officers as soon as possible.

Classes will begin Feb. 4, and registration will be held from Jan. 23-29. Spring schedules are available in the Graduate School office in the Clinical Center, Rm. 2C207A, and in the Foundation Bookstore, Rm. B1L101. To have one sent call 496-7977.

Often credits earned can be transferred to other institutions for degree work, and many courses are approved for AMA category I credit. □

Program To Honor Dr. King To Be Held Jan. 18 at NIH

The 13th Annual Commemorative Program for Dr. Martin Luther King Jr. will be held Jan. 18, in the Masur Auditorium at 12 noon.

Georgia State Senator Julian Bond will be the principal speaker.

Planning sessions for the final program will be held Jan. 9 and Jan. 16 in Bldg. 31, Rm. B3C02B. Anyone is welcome to participate in the planning session.

For further information, call O.H. Laster, 496-6504. □

Workshop on Lab Animals Scheduled for January 15

A workshop for NIH investigators and technicians on the care and use of laboratory animals will be held Tuesday, Jan. 15, in Wilson Hall, Bldg. 1.

The morning session will consist of lectures and discussion, while the afternoon session will provide an introduction to biotechnology in mice, rats, guinea pigs, hamsters, and rabbits.

The NIH Animal Research Committee (NIHARC) is presenting the workshop as the first of a continuing series. Future workshops will be aimed especially at new NIH investigators and technicians.

The morning session (8:30-12:30) will be limited to 150 participants, and the afternoon session (1:30-4:30) will be limited to 30.

The workshop is presented by the NIHARC in association with the National Capital Area Branch of the American Association for Laboratory Animal Science (AALAS).

The subjects of the morning presentations and discussion will be:

- Ethical and legal issues in the use of animals.
- Animals: their environment and their importance to the research effort.
- Appropriate use of anesthesia, analgesia, and euthanasia.

Advance registration is required. Those interested should contact their BID Animal Research Committee chairperson, the BID veterinarian, or the Interagency Research Animal Committee (496-5424).

Another event of interest to NIH personnel involved in the use or care of laboratory animals is also scheduled.

The National Capital Area Branch of AALAS has announced that the January 1985 branch meeting—Thursday evening, Jan. 10, at the Uniformed Services University of the Health Sciences—will feature Dr. Patrick H. deLeon, executive assistant to Senator Daniel K. Inouye, speaking on "Congressional Perspectives on Animal Welfare Issues."

Those interested should contact Dr. John Miller, 301-663-7221, for information. □

Montgomery College Comes to NIH

The NIH Training and Development Staff recently announced a new program, the Training and Development Services Program.

If you are an eligible NIH employee GS-8 and below (or WG equivalent), you will be able to take courses to help you gain skills to better your job performance and enhance your career.

Coursework is through Montgomery College. Classes will be held on the NIH campus in Bethesda, after regular working hours. There is no charge to you or your Institute.

The TDSP has three components, each designed to meet your educational needs. Orientations to describe the TDSP to you and to answer any questions are scheduled for January as follows: 1-7, 10-11 a.m., Bldg. 31, Rm. B2C06; and 1-9, 2-3 p.m., Bldg. 31, Rm. B2C06. Orientation sessions will last approximately 1 hour. For a brochure describing TDSP call the Development and Training Operations Branch 496-6211. □

Grounds Chief Honored for Improving Bike Trails

Tom Cook, chief, Grounds Maintenance and Landscaping Branch, Division of Engineering Services, was honored recently as the individual principally responsible for improvement in NIH's bike paths.

In a ceremony in the office of Dr. James B. Wyngaarden, NIH Director, Mr. Cook was presented the certificate of appreciation given to NIH by the Washington Area Bicyclist Association for NIH's "exemplary program of bicycle facilities and promotion."

NIH is a supportive environment for bicycle riding and commuting. There have been many improvements at NIH toward this end, most of which were overseen by Mr. Cook.

George Russell, president of the NIH Bicycle Commuter Club, lists some of these improvements at NIH toward this end, most of which were overseen by Mr. Cook.

- Sidewalk/curb ramps installed on most walkways on campus;
- 5.9 miles of walkways along major roads within the NIH campus.
- Bike racks and chains for securing bikes at over 600 spaces, many of which are under cover, at major NIH buildings.

With the Montgomery County Department of Transportation and the bike club, bikeways have been developed to the NIH campus from north and south along Rockville Pike and Old Georgetown Rd. and to the Medical Center Metro Station from the north and south along Rockville Pike.

NIH's Bicycle Commuter Club is sponsored by the NIH Recreation and Welfare Association. The club holds regular meetings at which members hear presentations on bicycle-related issues by invited speakers. The club also publishes a bimonthly newsletter and acts as a clearinghouse for bicycle-related concerns on campus.



Dr. James Wyngaarden, NIH Director (r), presents the Washington Area Bicyclist Association's award to Tom Cook (l), chief of the Grounds Maintenance and Landscaping Branch of the Division of Engineering Services, to honor Mr. Cook for the help he has given the NIH bicycling program. George Russell, second from left, and Dr. Carl Frasch of the NIH Bicycle Commuter Club, were present to add their thanks to Mr. Cook and his branch.

For further information about the NIH Bicycle Commuter Club, or to join, call Mr. Russell, 496-1873.

The Washington Area Bicyclist Association (WABA) which presented the certificate to NIH, is a nonprofit, educational organization dedicated to improving bicycling conditions in the Washington area and encouraging the use of bicycles for transportation. WABA promotes safer cycling conditions, assists local governments with bicycle planning, and works to protect cyclists' rights. □



What is it? A Camera Lucida.

instrument on a table or drawing board above the drawing paper. The other end holds a prism and several filters.

"By looking through the prism, the user can see both the object to be drawn and the paper and pencil. The user can watch the drawing and the object at the same time, producing an accurate likeness of the object. The filters can be used to make the object darker so that the paper can be seen better. Camera lucidas can still be purchased at art supply stores."

Other objects in the WHAT IS IT? series will be exhibited as they are discovered. If the reader has appropriate objects for this exhibit, please contact Dr. DeWitt Stetten Jr. at 496-1932. □

Visual Information Specialist Helen Smith Retires

Helen N. Smith, visual information specialist in the Medical Arts and Photography Branch (MAPB), Division of Research Services, retired Dec. 3, after 30 years of Federal service, 28 of them devoted to medical arts at NIH.

Ms. Smith prepared graphic material for scientific publications, slide presentations, and other information uses since joining NIH in 1956. She is quietly proud of a large collection of appreciative letters from NIH intramural investigators, written throughout her career.

Among these letters are several from NIH alumni scientists at other biomedical research centers, asking Ms. Smith to provide their medical arts personnel information about her exceptionally fine techniques for tinting photographic negatives.

"Helen can obtain incredibly fine results with the tools of her craft," said MAPB branch chief Ron Winterrowd. "She began at NIH as a statistical draftsman, but she is a skilled artist."



A drawing of Helen Smith by her fellow MAPB artist Al Laoang.

"I took mechanical drawing in high school after overcoming the school's resistance to a girl taking a boy's subject," she recalls. "Fortunately the teachers liked my work, and during my senior year I was recommended for half-day work at the War Department while continuing my classwork. After graduation I became a full-time statistical draftsman at the Pentagon."

Three years after joining NIH, Ms. Smith was appointed supervisory statistical draftsman in charge of her unit. The unit was later eliminated in a reorganization, and she has worked as an illustrator as well as a visual information specialist during her MAPB career.

She has received a Superior Work Performance Award and a quality increase, besides sharing in a number of group awards.

In recent years she has also run the daily MAPB bidding sessions with graphics contractors.

Ms. Smith's retirement plans are "getting my breath, more quilting and gardening, and five grandchildren close by." □

What Is It?

In assembling articles relating to the biomedical sciences for the Museum of Scientific Memorabilia and Artifacts, a few items difficult to identify have been encountered. These are being exhibited from time-to-time at the Clinical Center, challenging the passerby to say what the articles are.

The item described here was discovered by Dr. John Buck while he was cleaning up his laboratory. Its history was totally unknown, but Dr. Robert Bowman knew immediately that it was a camera lucida.

Most of the people who saw it were totally unfamiliar with this device. Therefore, it is being exhibited under the label, WHAT IS IT?

Dr. Kevin E. Bennett recently wrote: "My wife, who is a researcher at the NIH, brought the unknown scientific instrument in the NIH display to my attention. I, being a chemical engineer and a collector of antique instruments, was intrigued and came over to see it. The instrument in question is a camera lucida, probably produced in the 1850s. The design was first described in 1812 by astronomer William H. Wollaston (1766-1826) and was widely used.

"The camera lucida is used to make drawing objects easier, and this one was probably used to sketch medical specimens.

"One end serves as a clamp to support the

Fifteen NIH Women Staffers Participate In Special Management Training Initiative

Secretary of DHHS Margaret Heckler announced a new supervisory and management training initiative last summer to provide women GS 9-12 with outstanding leadership potential the tools to compete for managerial slots.

Thirteen NIH women staffers were chosen to participate in the Women's Management Training Initiative in which they will receive 80 or more hours of supervisory or management training. They will also select at least one 30-day assignment to develop their managerial and supervisory skills. Each participant is also encouraged to identify a mentor at the GS/GM 13 level or above to serve as a role model.

Classroom training began in October. Participants are now seeking developmental assignments throughout NIH where they can receive on-the-job training. These include administrative, executive, contracts, grants, budget, procurement, personnel, and legislative affairs offices. Supervisors and managers are asked for full support in accepting participants into their BID for assignments.

The Development and Training Operations Branch has assisted participants with their training plans and will continue to counsel them and provide training information important to their development. Participants must complete all assignments by Sept. 30, 1985. □

Addiction to a Loved One Topic of Health Lecture

Addiction to a loved one has the same characteristics as addiction to drugs. Many of us turn to each other out of the same needs that drive people to alcohol and other drugs, food, gambling or smoking. As with all addictions, the original highs are indeed wonderful but become less and less so when we realize that we no longer have a choice, just a need we can't control.

45-Minute Lecture

This topic and viewpoint will be discussed by Rachelle Selzer, chief mental health counselor of the Employee Counseling Services, in a 45-minute lecture at the following locations and dates from noon to 1:45 p.m.:

Friday, Jan. 11, Bldg. 38A, Lister Hill Auditorium; Monday, Jan. 14, Bldg. 1, Wilson Hall; Wednesday, Jan. 16, Westwood Bldg., Rm. D; Thursday, Jan. 17, Bldg. 10, ACRF Amphitheatre; Friday, Jan. 18, Federal Bldg., Rm. 119; Tuesday, Jan. 22, Blair Bldg., Rm. 110. □

Emergency Library Hours

During any emergency closing of Federal offices, including snow emergencies, the NIH Library in Bldg. 10 will remain open on its holiday schedule: 1-5 p.m. □

No man ever became great or good except through many and great mistakes.—Gladstone



Selected from NIH to participate in the Women's Management Training Initiative are (1 to r, seated): Dorothy Moore, NLM; Patricia Gallahan, NCI; Joann Holmes, OD; Lynda Bennett, NICHD; (standing, 1 to r): Sylvia Cunningham, NIAID; Linda Stalvey, NIADDK; Nancy Cherry, NHLBI; Marion Blevins, NIDR; Fu Sing Temple, NIGMS; Catherine Callen, NINCDS. Not pictured: Christine Chastain, NIEHS; Alice Hines, NIA; Catherine Quigley, NLM; Carol Watkins, NINCDS; Anne Zimmer, NIA.

Chinese Science Delegation Visits NIH by Invitation

Upon invitation from the National Academy of Sciences and the President's Science Adviser, Dr. Lu Jiayi, president of the Chinese Academy of Sciences (CAS), made a recent visit to Washington as head of a Chinese science delegation.

Dr. Craig K. Wallace, FIC Director, and Dr. Philip S. Chen, NIH Associate Director for Intramural Affairs, attended a dinner on Nov. 15 honoring Dr. Lu and his delegates. The dinner was hosted by Dr. John K. Koo, a long-time senior investigator of NIH and a friend of Dr. Lu, and by Dr. Helen Yen Koo of FDA, former president of the Chinese Ameri-

can Medical and Health Association. At the dinner, Drs. Wallace and Chen discussed U.S.-China science research activities with Dr. Lu.

The following day, Dr. Cao Tianqin, deputy head of the Chinese science delegation, visited NIH. They met with Drs. Wallace and Chen, and other NIH staff members at Stone House to review NIH-CAS biomedical research exchange programs. These programs operate under the agreement for research cooperation in basic biomedical sciences signed in 1983 between the NIH and the CAS. □



(L to r): Drs. Wallace, Lu, Koo, and Chen.

New Genetic Technique for Studying Down Syndrome Described; Healthy Mothers Healthy Babies Awards Given

A mouse model that mimics some of the human genetic abnormalities of Down syndrome was described by Dr. Charles J. Epstein in the recent NICHD-sponsored Second Annual Child Health Day Lecture.

In his lecture "New Biological Approaches to Down Syndrome: Mechanisms and Models," Dr. Epstein, professor of pediatrics and biochemistry at the University of California, San Francisco, described how he developed the animal model using genetic engineering techniques.

The Healthy Mothers, Healthy Babies coalition also presented their first annual Healthy Mothers, Healthy Babies National Achievement Awards as part of the Child Health Day program at NIH this year. Surgeon General C. Everett Koop presented the awards to the six winning programs from around the country.

The first Monday in October is traditionally proclaimed to be Child Health Day by the President of the United States. This year's



Dr. Charles J. Epstein, who spoke at the second Annual Child Health Day on his mouse model method for studying Down syndrome in humans, answers questions following the lecture.

presidential message specifically stressed the importance of "improving our efforts to reduce the incidence of low birth weight babies and severely handicapped infants." In his remarks opening the program, Dr. Duane Alexander, NICHD deputy director, commented on the appropriateness of combining the scientific lecture with the Healthy Mothers, Healthy Babies awards. Both in their own way, he said, contribute to the fulfillment of the President's Child Health Day goals.

Trisomy 21

Dr. Epstein described the most frequently occurring form of Down syndrome, trisomy 21, as a condition caused by an extra chromosome 21. A person with Down syndrome has three chromosome 21's rather than the usual pair.

Almost all Down syndrome victims are mentally retarded. About 40 percent of persons with Down syndrome also have congenital heart defects. Other developmental abnormalities include reduced muscle tone, altered immune response, presenile demen-

tia and an increased risk of developing leukemia, especially during childhood.

Dr. Epstein and his colleagues at the NICHD-supported Mental Retardation Research Center at the University of California have been focusing their research on the mechanisms that cause this genetic error. Dr. Epstein's strategy was to develop an animal model that mimicked the genetic problems in humans.

A few years ago, Dr. Epstein and his coworkers compared the genetic maps of mice and humans and found blocks of genes that were similar in both. They identified a segment of genes on mouse chromosome 16 that corresponded to the extra genes present on human chromosome 21.

Mouse Brain Studies

Detailed studies were carried out in Dr. Epstein's laboratory of the fetal trisomic 16 mouse brain and immunological system. Dr. Epstein reported that cells from these tissues produced some of the abnormal cellular characteristics of trisomic 21 cells in humans. But this model was limited because the fetuses did not survive beyond delivery.

Taking these experiments one step further, Dr. Epstein used genetic engineering techniques to produce a mouse model which survived beyond birth. The cells of these mice are a combination of normal cells and abnormal trisomic cells, but in proportions that are not lethal to the animal.

Using this animal model, Dr. Epstein can study trisomic cells in a variety of tissues from early embryonic development through maturity, research that would not be possible in man. Ultimately, such studies may unveil the mechanisms that cause mental retardation and other abnormalities of Down syndrome in humans.

In presenting the Healthy Mothers, Healthy Babies awards, Dr. Koop commended the winners' "fine efforts and innovative ideas in exemplifying the importance of preventive programs that are necessary and possible at the local level."

Three Categories

Programs competed for awards in three categories: exemplary sustained public information programs; exemplary innovative single projects or activities; and exemplary efforts at local and state coalition-building.

The Child Life Network Project (Mid-America Chapter, American Red Cross, Chicago, Ill.), a voluntary organization providing family life education to Chicago youths, was the winner for coalition-building. The network strives to overcome the financial and geographical problems in health service delivery. More than 1,200 people were provided services from 90 organizations during the first year of the project.

The winners for innovative single projects were the Miners Clinics, Inc., North Apollo Health Center, New Kensington, Pa.; the Improved Pregnancy Outcome Project in Louisiana in New Orleans, and the American Lung Association of Los Angeles County and

Los Angeles City Human Relations Commission.

The Miners Clinics produced a Healthy Mothers, Healthy Babies Family Fair where 26 agencies provided family-oriented activities such as car seat demonstrations, drug displays, door prizes and free gifts to a mostly unemployed population.

The IPO project of Louisiana developed a special educational program aimed at the most unreachable target population—teenagers. A series of radio commercials was developed by low-income adolescents for their peers promoting prenatal care, family planning, nutrition during pregnancy and avoidance of drugs, alcohol and smoking during pregnancy.

In an event aimed at pregnant women in high-risk, low-income populations who smoke, the ALA of Los Angeles County cosponsored the World's Largest Baby Shower. Ninety-two women from a goal of 100 were recruited to attend the event which included a luncheon, a presentation by a physician of materials on quitting smoking and the ALA's new smoking and pregnancy kit.

Two programs were recognized for their exemplary sustained efforts. The Health Education Promotion Services Group of the New York State Health Department was selected for its bilingual mass media program promoting the theme, "Take Care of Yourself Right From the Start." The program is now in its fifth year with new material addressing the importance of early prenatal care. Twenty-one states have used material from this campaign.

The other winning program in this category was Florida's Preterm Birth Prevention Program, sponsored by the Florida Department of Health and the March of Dimes-Birth Defects Foundation. The program used a scoring system designed to detect and prevent prematurity. High risk patients got weekly counseling and instruction on the signs and symptoms of preterm labor. □

Inauguration Day: Legal Holiday For Area's Federal Employees

Federal employees who work at official duty stations in the capital area—the District of Columbia, Montgomery and Prince George's Counties in Maryland and Arlington and Fairfax counties plus the cities of Alexandria and Falls Church in Virginia—will have Monday, Jan. 21, off because that will be Inauguration Day.

Inauguration Day actually falls on Sunday, (Jan. 20) but is always transferred to the following day when that occurs.

Only Federal employees who work Monday through Friday schedules and are scheduled to work on the Inaugural Monday will get the leave day.

Persons with schedules other than Monday through Friday who are scheduled to work on Sunday, Jan. 20 will *not* get that Sunday off, nor any other day instead.

Federal employees in the area are given the actual inaugural day off to avoid traffic and transportation disruptions along the routes to the swearing-in ceremony and parade. □



Russ Abbott completes his first event (the ocean swim) in the Ironman Triathlon in Hawaii.

Russ Abbott, 41, director, Office of Management, Center for Drugs and Biologics, FDA, participated in the latest Ironman Triathlon held this past October in Hawaii.

Russ finished the 2.4-mile swim, 112-mile bike race, and the 26.2-mile marathon in about 14 hours, placed 638 out of 1,200 entrants, but was still disappointed with his time.

"I trained really hard for the past year and I had wanted to finish in under 13 hours," he said.

"My swim and run times were on schedule but the headwinds in the bike race really slowed down my projected finish time by over an hour.

"The headwinds affected me psychologically more than physically," he said.

Russ had been forewarned about the very hot and windy conditions he would face in Hawaii, but headwinds of up to 45 mph and the 100+ degree temperature on race day were even more than he expected.

What made him ever want to go for the big triathlon anyway?

According to Russ, he was just plain mentally tired out from running marathons. He had run 12 since his first in 1979.

"I was trying to qualify for the Boston Marathon in Virginia Beach, Va., during 1982 and I missed by 7 seconds.

"I was feeling down on myself when I saw this man with an Ironman finishers T-shirt (from the February 1982 race). That seemed like a real challenge so I made up my mind right then and there to give it a go."

Russ had never participated in a triathlon and was not a particularly good swimmer, he says. But in March 1982, he and his good friend, Lou Mocca, went to the YMCA and after practicing for months, they began to feel "at least comfortable in the water."

That summer, Russ began to ride a borrowed 10-speed bike, and in August he entered his first triathlon at Hamlin Beach, Lake Ontario, N.Y.

"It was my first open water swim, he said, and was actually a bit intimidating ... especially with the 3 to 4 foot swells that year."

From that date on, Russ entered nine more triathlons within 2 years.

"In 1983, I qualified to participate in the Ironman but did not get selected," he stated. "That meant another year of training for me since I had really decided that Hawaii was the ultimate test for any triathlete."

The Ironman Triathlon is limited to 1,200 entrants with 700 selected from previous Ironman finishers. The remaining 500 are selected as follows: 100 qualifiers from other races, 100 foreigners, and the last 300 from a lottery. In 1984, there were 8,000 names up for the lottery and Russ's was one of those selected.

Russ talks about all the training that went into his competing in the Ironman.

In the 5 months prior to the race, he ran 50 miles, swam 6 miles and rode his bike 200-250 miles each week.

He averaged working out 4 hours every morning before coming to work and up to 8 hours each Saturday and Sunday. He also does weight lifting which he feels is important and should be included in training.

Russ has continued to participate in running marathons as well as triathlons. He had finally qualified for Boston in 1983 and finished in 3 hours and 3 minutes.

He has also run in the last six Marine Corps Marathons held here in Washington, D.C. In the latest one, Nov. 4, 1984, Russ placed 226 out of 12,000 participants with a time of 2 hours, 47 minutes, which beat his previous marathon time by 7 minutes.

"I attribute my finish time in the Marine Corps Marathon exclusively to my training for the Ironman."

As he looks to the future, Russ says he will continue to run in his favorite races—the Chevy Chase 20k, the Cherry Blossom 10-mile, the Parklawn Classic (of course), and probably the Marine Marathon.

Will he do the Ironman again?

Russ says, "I am having a difficult time getting focused on exactly how much of my life I want to continually devote to triathlons. By that I mean, I've been training two and sometimes three events a day, 7 days a week for over 2½ years now and I don't know if I want to go through it again. I mean devoting your weekends to 80+ mile bike rides, 20+ mile runs, and 2 mile swims does tend to devastate your social life. Your best friends become your bike, your running shoes, and your speedo." However ... he adds, "I think maybe I can do the Ironman faster than I did this time." □

Anne Thomas, 39, director, Division of Public Information, Office of Communications, OD, participated in her first triathlon at Muddy Run in Lancaster, Pa., Sept. 16, and placed first in her age group among the women.

This one, limited to 500 people, included a 1¼-mile swim, a 25-mile bicycle race, and a 9.3-mile run.

"I had never taken a first place in all my years of running. I was so excited," she said.

According to Anne, on the morning of the big event, the temperature at Muddy Run was 46 degrees, with the water temperature at about 67 degrees.

Triathletes Breaking

By Anne Barber



Anne Thomas trains on the turbo-trainer, as do months and during long rainy spells other times wheel is removed from your own bicycle and the applied to the rear wheel resting on a fan-like stand resistance you encounter. This device allows the degree of difficulty by changing the gears as

The most difficult part, psychologically, was the open water swim, she said. It is the unknown territory in a triathlon that makes it challenging, especially in swimming and biking.

"One by one my toes went numb from the cold water. And even 20 miles into the bicycling, I still couldn't feel my feet."

Anne has been a runner for about 10 years, mostly as an endurance runner. She has mainly participated in races, 10k to marathon distance, and in several 24-hour relays. But about 3 years ago she had back surgery and took up swimming as a kind of rehabilitation therapy.

"I had no intention of ever swimming competitively," she said.

Later on, she took up bike riding due to her husband's interest in the sport.

"I was very apprehensive at first about getting on a bike and riding in traffic."

After riding with her husband, and training on the roads between NIH and White's Ferry, she has gotten over her fear of traffic.

Her husband helped to select her bike which is an Italian racing bike, very light, around 19 lbs. with an aluminum frame and

g Out All Over NIH



many bicycle racers and triathletes, in the winter months of the year. To use the turbo-trainer, the front of the bicycle is fastened to the stand. Resistance is built into the structure. Thus, the harder you pedal, the more resistance you work out.

extremely light wheels.

"Taking up a new sport is very exciting because you improve rapidly. In fact, my biking has improved my running," she says.

Anne began training in May for the triathlon in September. During the 5-month intensive training, she rode her bike about 180 miles a week; swam 6 miles a week, in 2-mile sessions (swimming is rather boring she says but very good for you); and ran about 50 miles a week. Weight training, she considers an adjunct to sport-specific workouts.

When not in training, she usually runs about 10 miles a day, bikes because she enjoys it, and cuts back on her swimming time.

Anne considers herself to be quite even in all three events, with room for improvement in cycling and swimming.

"For fitness, I think a triathlon is better than just one sport; variety makes you a more balanced athlete."

She thinks that training for a triathlon takes more time than just participating in one sport, but is not as physically depleting as training for an event such as a marathon.

Anne says an important part of the triathlon lies in the transitions—changing from one

sport to another. You come out of the water in a wet swim suit, put on socks and cleated shoes and riding shorts for biking, and later change into running gear.

"This is where you can lose time without realizing it," she says.

In 1985, Anne would like to compete in about three triathlons, spaced over spring and fall.

"Definitely, I will compete in Lancaster again. But triathlons that require ocean swimming are definitely not for me—pool, river, lake but no ocean," she says emphatically. □

Louis Mocca, 34, research microbiologist in the Division of Bacterial Products, National Center for Drugs and Biologics, FDA, is considered to be an old-timer in triathlons. He has participated in about eight altogether and four this past year.

Lou started out as a cyclist (5 years), turned runner (3 years on-and-off) and swimmer (2 years).

He rides his bike 22 miles a day (from home to work) and a long ride of 50-100 miles thrown in over the weekend, usually Sunday, during the warmer months of the year. He usually runs between 6-10 miles on 4-6 days each week.

"Swimming is by far my worst event in a triathlon. It took me about 2 years to become strong enough and comfortable enough to attempt the swim in the 60-degree water of the Tred Avon River in Oxford, Md., on June 3. Lucky for me they shortened the swim to 1.5-miles on race day due to the cold water temperature. Even so, I paid the price of undertraining for this competition with a poor performance in all three events, finishing in 7 hours and 3 minutes, placing 202 out of 322."

Two weeks later in the Annapolis Triathlon, which was a 1-mile open water swim, 10-mile run and 25-mile bike ride, he placed in the top 30 out of approximately 200 entrants.

"The event was much more suited to my level of training; shorter than Oxford, but tough enough to challenge me," he said.

On Sept. 16 in the Muddy Run Triathlon in Lancaster, Pa., he placed 125 out of 350 participants. The 40-kilometer (24.8 mile) bike ride and the 9-mile run was very hilly, and the 1.2-mile cold swim was in a lake.

In Ocean City, Md., Oct. 7—in 58-degree water—in the 1-mile swim (40 people were pulled out of the water), 25.5-mile bike ride and the 8-mile run, Lou finished 84th out of 240.

Lou started riding his bike back and forth from work during the last energy crisis when he decided he hated waiting in line to buy gas. He finds this an excellent way of getting exercise while not investing much time.

"Bicycling is an excellent, painless form of exercise, particularly for the cardiovascular system. Running sometimes left me with sore knees and other aches," he says.

Lou has four bikes—training, racing, touring, and commuter. To support his hobby and interest, he restores 10-speed bicycles that he buys at local auction sales.

His plans for the future include shooting for the Oxford, Md., Triathlon every year. But, he says, "I will probably eventually stick to cycling." □



Lou Mocca proudly shows us his custom-built 12-speed racing bike. The equipment is Campy and the frame is Alpine custom-built by Framebuilders in Rockville, Md. It is made of chrome alloy and weighs between 20-21 lbs. The wheels are sew-ups (tubes sewn into the tires and then glued onto the wheel). The tires are only an inch wide. On this particular bike, Lou can sprint up to 35-45 mph.

Definition of a Triathlon

A triathlon is three consecutive events run one after another with no breaks in between. Transition time in between the events is very important and counts. You need to be smooth and fast.

The events can be placed in any order but the swim usually comes first. The swim can be from ¼ mile to 2.4 miles. Biking usually comes second and can be from 10 miles to 112 miles. The run, normally the last event, can be from 5 miles to a full marathon of 26.2 miles.

Switching from bicycling to running is the hardest way of doing a triathlon. The thigh muscles used in bicycling are wiped out while the hamstrings needed later for running are not used and therefore makes it harder to adjust for running.

The Ironman is the ultimate in triathlons. It is always held in Hawaii where it is very hot and windy.

The Ironman is the maximum distances you can have in a triathlon which is a 2.4-mile swim, 112-mile bike race, and 26.2-mile run.

The Ironman began in Hawaii in 1978 when a group of servicemen stationed at Pearl Harbor decided that since there were already three separate events (Honolulu Marathon, Hawaii Open Water Swim, and Hawaii Bike Race) held in Honolulu, to put all of them together in one triathlon would really be the test for super athletes.

(See TRIATHLETES, Page 8)

NIHers Stand Out as Triathletes

(Continued from Page 7)



Keith Joiner does warmup exercises before running.

Dr. Keith Joiner, 36, a senior investigator with NIAID, and the father of two boys, ages 3 and 6, participated in his first triathlon in 1983 in Muddy Run, Pa.

Keith started out as a runner in high school and college. But over the last 3 years, he had begun having back problems which were made worse by running. So, he turned to bicycling and swimming as alternatives.

"I was always the type of runner who would have spurts of running and then become bored with it. The thing I enjoy about doing different activities is that I don't get bored."

Keith became interested in participating in triathlons because of his previous technician, Mark Schmetz, who had trained with Dave Scott, a former winner in the Ironman in Hawaii.

"What I like best about bicycling is you can view the countryside as you do it," he says.

He tried riding his bike to work, but it was suicidal, he relates, so he decided against that. He does ride into work on the weekends when there is no heavy traffic. He averages around 60-70 miles per week on his bike.

"During the summer, I swam about 3 days-a-week, I joined the masters swimmers through the YMCA which helped me tremendously," he says.

In his first triathlon in 1983, he placed 56th out of about 500 participants. In the recent 1984 Muddy Run Triathlon, he placed 26th out of 400 and was first in his age group of 35-39. He has only competed thus far in the two triathlons.

Keith trains for about 3 months prior to a triathlon and he has plans to enter the Muddy Run event again in 1985.

The bike Keith rides is 22 years old, an old 15-speed Schwinn, which he got when he was 14 years old.

"It cost \$270 back then. It is a very good bike but a little bit on the heavy side. Very durable—not a fragile bike. It is more like a

touring bike," he says.

Does he have his sights set on entering the Ironman in Hawaii?

"No, realistically, I cannot commit myself timewise to train and my back would prevent me from running that long a distance." □

Dr. Phil Snoy, 33, a veterinary pathologist in the Office of Biologics, FDA, performed in his first triathlon in May of this past year (1984).

"It was a short one on the Jersey Shore. The water was 53 degrees, so they cut the swim back to ¼-mile."

Even with that as a factor, he placed third in his age group and 39th overall out of approximately 400 participants.

How did he get interested in triathlons?

Phil was always active in school sports such as rugby, soccer and basketball. After school, he needed some way to stay in shape that didn't require group participation.

"I hate machines, since I am not mechanical-minded, so I started to run."

That was in 1978 and he is still running. He runs in about 10 races a year usually of 10 kilometers (6.2 miles) or 10 miles. He runs nearly every day which adds up to approximately 35-40 miles a week.

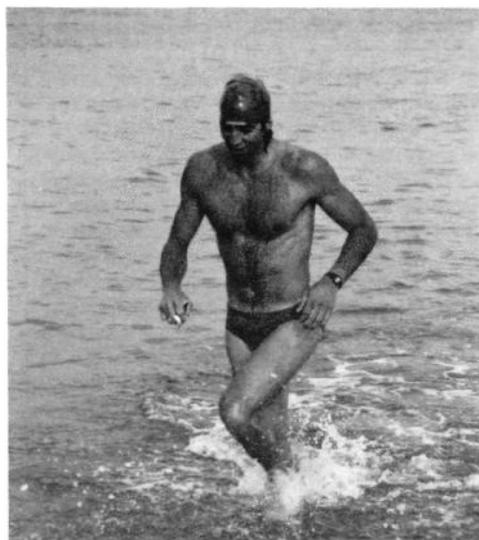
"I enjoy the competition and the atmosphere in racing," he says.

In December 1983, he decided he needed a change of pace and the triathlon began to appeal to him. He had always been able to swim, so for Christmas he asked for bicycle stuff to get started.

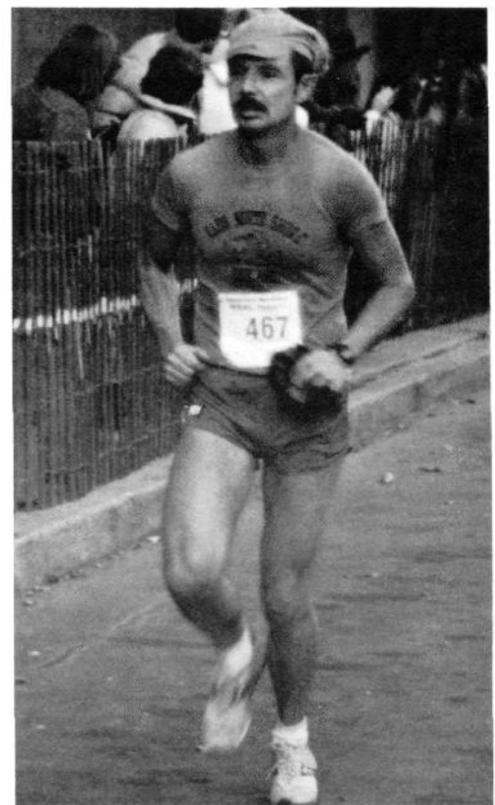
On his third long ride in February, Phil hit an icy spot in the road, fell off his bike and broke his collar bone.

"I was determined to carry on—6 days later, I was riding my stationary bike; 4 weeks later, I returned to running; and 6 weeks later, I started swimming again."

All this persistence paid off in his first triathlon but Phil felt he could do better. In his second triathlon, held in Charleston, S.C., he



Phil Snoy comes out of the water at the Oxford Triathlon in Maryland.



Bill Willmering finishes the Maryland Marathon in Baltimore.

placed seventh overall out of 80.

In the Oxford, Md., Triathlon (you must qualify to participate), he placed 94th out of 360. His time was 6 hours and 15 minutes for 1.5-mile swim, 20-mile run, and 50-mile bike ride.

In June 1985, he traveled to Annapolis and came out 22nd of 200 people. He was disappointed in his swimming ability at this meet. However, he made up for lost time in his biking and running.

In 1985, Phil has plans to enter the East Coast Ironman in Massachusetts; Mighty Hamptons triathlon in New York; a Rockford, Ill., triathlon; two Maryland triathlons—Oxford and Annapolis—and perhaps the Ironman in Hawaii.

Phil rides his bike approximately 120 miles a week and swims 4-6 miles a week.

In his free time, he and his wife, a practicing veterinarian in Germantown, spend time sailing their sailboat. They also own four horses, two of which are racing horses.

Phil feels you should do what you really enjoy. And he really enjoys biking and running. □

Bill Willmering, 40, head of the Serial Records Section in NLM, completed his first triathlon in Kutztown, Pa., in 1984. He placed 79th out of 135.

Bill entered the triathlon because he thinks it is healthier and not as physically damaging as an all-running event. Before entering the triathlon, he trained for about 2 months.

Bill started out as a runner back in 1972 in Montana.

"When I moved to Chicago, there were fewer recreational opportunities than in the West, so running became more important to

(See TRIATHLETES, Page 9)

TRIATHLETES

(Continued from Page 8)

me. I started to ride my bike a lot too, but was hit by a car while running and suffered a broken back. I couldn't run or bike for a year. Needless to say, I gave up bike riding while living there."

Bill has run in the Marine Marathon several times and again this past November, and has completed a total of 24 marathons since returning to running in 1979.

Before the triathlon in Pennsylvania, he had to pull out his bike and start riding again. His bike is 12 years old and he calls it a touring bike.

"I got the bike when I lived in Montana. It was built for me there. As a rule, unless I'm training for a triathlon, I do not do a lot of biking," he says.

In training though, he tries to ride about 100 miles a week and most of that is done on the weekends.

He only recently began swimming longer distances. He feels that swimming is his weakest point in a triathlon.

Prior to becoming a runner and entering competition, he enjoyed skiing, hiking, and backpacking. He climbed Mt. Rainier in 1972.

"It was a 2-day climb because you had to climb at night while the mountain was frozen," he said.

While living in the Midwest, he entered the Birkebeiner, now the largest ski race in the country, the American version of a Norwegian race started years ago.

In general, Bill tries to run 40-60 miles a week, swim about 3-4 miles a week and bike around 100 miles.

When asked if he would like to enter the Ironman in Hawaii sometime in the future, he replied, "No, it's above and beyond me. Running half an Ironman is about as far as I want to go in a triathlon and I honestly felt pretty exhausted after doing that." □

Dr. James L. Stevens, senior staff fellow in the Center for Drugs and Biologics, FDA, used to be very active in triathlons. In fact, he participated in about 12 within 2 years—1981-82.

He even participated in the grueling Ironman Triathlon in Hawaii in 1982 and finished 28th in a field of over 584 entrants.

After doing the Ironman in 10 hours, 48 minutes, and 55 seconds, he went on to compete in six more triathlons that year.

Jim no longer participates in triathlons because of training time required and chronic injuries sustained during his 2 years of earlier participation.

In his last triathlon in October 1982, held at the Barnegat Lighthouse in New Jersey, he placed fourth in overall competition.

Jim, who was very active in sports throughout his college years, says of the triathlon, "Everybody gets something different out of it. You get out of it exactly what you put into it."

As for his participation in future competition, he says, "I don't think so."

He still keeps in shape by running, swimming, and biking whenever he feels like it but, not on a regular schedule.

He says his years of competing in triathlons were "lots of fun." □

Elnora Jackson, NIAID EEO Specialist, Elected to Advisory Neighborhood Commission

Elnora Jackson, EEO specialist and assistant to NIAID'S EEO officer, was recently elected commissioner of one of the District of Columbia's 37 Advisory Neighborhood Commissions (ANCs). ANCs are advisory boards composed of residents elected by the voters within their particular neighborhoods. They consider a wide range of policies and programs which may affect their districts and present their views to District government officials and agencies for consideration.

They may also present their views to other government officials as well. A nonpartisan position, commissioners are elected every 2 years as part of the general elections that are held in even-numbered years.

Ms. Jackson has been with NIAID for almost 20 years and has been active in minority and women's affairs throughout this period. Currently the Institute's Federal Women's Program manager, she also served as an alternate to the NIH Women's Advisory Committee. She was instrumental in planning and organizing two successful NIH multicultural fairs. In addition, she coordinates the NIAID-EEO awards presentations.

An elected representative to the R&W Advisory Council, Ms. Jackson was selected to represent the council on the executive board as well as on the budget and public relations subcommittees.

A volunteer tutor in the District public school system for many years, she is currently working with Operation Rescue, a program launched in 1981 to provide help to ele-



Ms. Jackson

mentary students in math and reading skills. Operation Rescue is an autonomous effort operated by the Washington Urban League with the cooperation of the D.C. public schools.

Ms. Jackson was a participant in the NIH Upward Mobility College Program, earning a degree in social welfare rehabilitation from the University of the District of Columbia (formerly Federal City College) in 1975 and a graduate certificate in public management from American University. A member of several professional organizations, she is a lifetime member of the University of the District of Columbia Alumni Association. □

NIH Blood Bank Needs Granulocyte Donors

Running around loose in just about everyone's bloodstream are white cells called *granulocytes*. Their mission is to fight bacterial infections and they do a fair job of it.

Trouble is, some people don't manufacture this kind of cell. When infections require these people to become Clinical Center patients, they need healthy donors to give them the missing cells.

Until recently, donors who came to the Blood Bank to give granulocytes were paid to donate. Now that the Department of Transfusion Medicine has initiated an all-volunteer blood component donation policy, the number of granulocyte donors has dropped from several hundred to about 30.

"Donation of granulocytes is a procedure that requires the most commitment on the part of the donor," Dr. Susan Leitman, acting chief of the Blood Service Section said. This is partly because the donor must spend about 2 hours hooked up to a machine that harvests the special cells. Also, donors must take two Decadron pills the night before donating.

Dr. Leitman explains: "Granulocytes are found primarily in two pools, a circulating pool and a marginated pool. The first type flows freely through the bloodstream, but the second type lines the blood vessels and doesn't move around. That's why we prescribe Decadron, which loosens the clinging cells and gives us a better harvest."

Donation is a fully automated procedure. The donor relaxes in a recliner while a phlebotomist runs one line out of the donor's arm and into a blood cell separator. This sophisticated machine spins the blood around and separates the granulocytes from the plasma and red cells. A second line returns the remixed plasma and red cells back into the donor's other arm. Donors give about a tenth of their own body's circulating granulocytes, a deficit that is made up immediately by the body's homeostatic (or balance-preserving) mechanisms.

Once out of the donor's body, the granulocytes are transfused as soon as possible to patients who need them. Unlike red cells, which can be stored for more than a month at cold temperatures, white cells don't have a long shelf life. If they are not transfused within 24 hours, they show a significant decrease in function.

"Traditionally, we've preferred to restrict our recruitment to NIH employees only," Dr. Leitman said. "It's easier for them to come and go from the site of donation, and they are very loyal and generous donors."

Those interested in giving granulocytes must have their blood tested before their first donation. The Blood Bank also tries to make it as convenient as possible for donors to pick up their two tablets of Decadron.

For more information, or to sign up for donation, call the Blood Bank at 496-1048. □

NIA-Sponsored Research Shows Mental Powers Need Not Decline With Age But May Be Improved

A National Institute on Aging grantee has found that mental ability need not inevitably decline with aging, but can be maintained and, in some cases, actually improved among the elderly.

Studies conducted by Dr. K. Warner Schaie, professor of human development and psychology at Pennsylvania State University's College of Human Development, have shown that cognitive training of individuals beyond the age of 62 can result in improved intellectual performance.

Two hundred subjects were chosen from among participants in the Seattle Longitudinal Study which has followed 2,000 individuals of all ages for almost three decades. Various measures of mental abilities had been taken every 7 years to assess the subjects' intellectual competence. The study addressed such questions as "At what age does intellectual development peak?", "Why do some people show signs of intellectual decrement (partial loss of abilities) in early adulthood while others maintain and even increase their level of functioning?" and, "Does intelligence change uniformly with age, or in differing patterns of ability?"

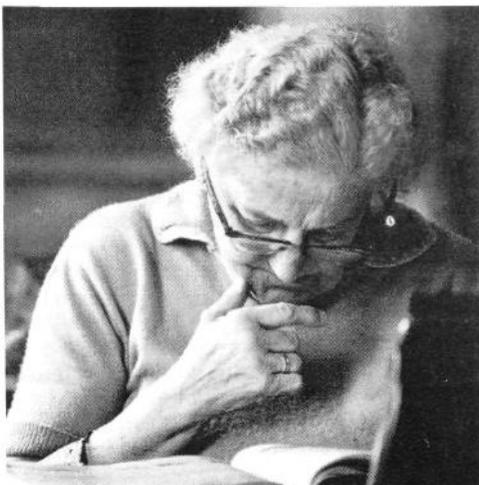
The Seattle study found that reliable age-related changes cannot be demonstrated prior to age 60, but that some decrement has occurred in many individuals by age 74. However, it is only in the late eighties that one can show the average person's performance will fall below the middle range for young adults.

In order to identify possible correlations between intellectual function and subjects' lifestyles, Dr. Schaie collected information in such areas as occupation, income, leisure activities, newspapers read, membership in clubs, travel experiences and number of people they saw each day. According to Dr. Schaie, "Those people who led active lives when they were middle age remained stable or showed improvement in mental abilities after age 60. Those people who didn't have very stimulating lives showed a marked decline."

While there is great variation in age and degree of intellectual decline, cardiovascular (heart) disease and arthritis are among the factors associated with lowered performance. Gender-specific differences were found in age-related decline as well, with women tending to decline first in active (or fluid) abilities, and men on passive (or crystallized) abilities. Active intelligence is required to make sound reasoning judgments, whereas passive intelligence draws on habits of past learning, such as concepts and terms from the fields of science and mathematics. This finding suggests that gender-role experiences may account for the pattern of change in abilities.

Hoping to reverse such declines, Dr. Schaie conducted a recent study to examine the effects of cognitive training on intellectual functioning. Volunteers were randomly assigned to experimental groups based on the ability in which they had shown greatest decline over the previous 14-year period.

Training consisted of five one-hour ses-



Crossword puzzles, other word games, and thought provoking computer games all serve to challenge the mind of the elderly.

sions conducted in the subjects' homes. The focus of the training was on the use of cognitive strategies shown in previous research to be associated either with fluid or crystallized ability.

Upon completion of training, both groups showed improved performance. Both groups attempted more items, reflecting greater confidence among the trainees. There were net increases in number of correct responses and decreases in errors among both groups. In fact, at least 50 percent of participants improved, and over one-third were returned to their previous level of functioning 14 years earlier. Greater improvement was seen for women on measures of spatial orientation and for men on inductive reasoning.

Dr. Schaie recommends that persons who want to sharpen their mental abilities take part in a variety of activities in their middle years. Square dancing offers aerobic value plus the experience of recalling and performing sequences. Crossword puzzles, other word games, and thought-provoking computer games all serve to challenge the mind.

Dr. Schaie also advises individuals to maintain a flexible attitude toward life. As people grow older they may find themselves in situations beyond their control. Those who learn to make the best of a situation will be far better off than those who insist on doing things their way or not at all. When older people lose close friends, he urges them to find ways of meeting new people.—**Claire McCullough** □

Beginner's Class in Judo To Start January 29

The NIH R&W Judo Club is accepting applications for the winter beginner's class to be held each Tuesday evening, from 6 to 7:30 p.m. beginning Jan. 29 and ending Apr. 2, 1985.

Classes will be held in the old gymnasium of Stone Ridge School at the corner of Cedar Lane and Wisconsin Avenue. Dr. Thomas E. Malone, NIH Deputy Director, will serve as chief instructor. □

CHOLESTEROL

(Continued from Page 1)

with appropriate drugs.

- Persons with moderate-risk cholesterol levels be treated intensively by dietary means. Only a small proportion should require drug treatment.

The panel also urged:

- All Americans (except children under 2 years of age) should adopt a diet that reduces total dietary fat intake from the current 40 percent to 30 percent of total calories, reduces saturated fat to less than 10 percent of total calories, limits polyunsaturated fats to 10 percent of total calories, and reduces cholesterol intake to 250 to 300 mg per day.

- Total calories should be reduced, if necessary, to correct obesity and adjusted to maintain ideal body weight.

- Persons with elevated blood cholesterol should pay special attention (with their physician) to the management of other risk factors: hypertension (high blood pressure), cigarette smoking, diabetes, and physical inactivity

Among other recommendations, the panel suggested that:

- Programs be planned and initiated to educate physicians, other health professionals, and the public to the significance of elevated blood cholesterol and the importance of treating it, and that the National Heart, Lung, and Blood Institute develop plans for a National Cholesterol Education Program to this purpose.

- A blood cholesterol measurement be done on every patient seen by a physician "whenever possible."

As to drug therapy, the panel concluded that drugs should be used only after a careful trial of diet modification "using the maximal dietary protocol possible for the particular individual." Even when drugs seem appropriate, it is important to stress that maximal diet therapy should be continued, the panel concluded. Several drugs, used singly or in combination, are now available, to lower cholesterol, the panel noted.

Values For Selecting Men and Women At Moderate And High Risk Requiring Treatment

Age	Moderate Risk	High Risk
2-19	Greater than 170 mg/dl	Greater than 185 mg/dl
20-29	Greater than 200 mg/dl	Greater than 220 mg/dl
30-39	Greater than 220 mg/dl	Greater than 240 mg/dl
40 and over	Greater than 240 mg/dl	Greater than 260 mg/dl

The most awful thing one can do is to tell the truth. It's all right in my case because I am not taken seriously.

—George Bernard Shaw

Antibiotic Neomycin Lowers Abnormally High Cholesterol Without Toxic Side Effects, NIH Investigation Indicates

The common antibiotic neomycin safely lowers blood levels of cholesterol in patients with abnormally high levels of the fatty substance, according to a team of NIH scientists.

The NIH group noted that the antibiotic appears to act specifically on low density lipoprotein cholesterol, the type of cholesterol that has been associated with cardiovascular disease. Levels of high density lipoprotein cholesterol, which scientists believe actually exerts a protective effect on the heart and blood vessels, are unaffected by neomycin treatment, the researchers added.

NIH (NHLBI) investigator Dr. Jeffrey M. Hoeg and coworkers reported on their neomycin study in the October 1984 issue of *Clinical Pharmacology and Therapeutics*, published by the American Society for Pharmacology and Experimental Therapeutics. This organization is a constituent of the Federation of American Societies for Experimental Biology, located in Bethesda, Md.

People with hypercholesterolemia, a condition in which blood levels of cholesterol are abnormally high, have an increased risk of premature coronary artery disease—the number one killer in the United States. Studies of patients with an inherited form of the condition have revealed that reductions in total blood cholesterol levels as small as 8 percent can reduce the incidence of heart and blood vessel disease by as much as 19 percent. So scientists have been understandably interested in finding therapeutic agents to effectively lower blood cholesterol levels in hypercholesterolemia patients.

Drugs are currently available to lower blood cholesterol. But many patients find these drugs so unpalatable, Dr. Hoeg explained, that they refuse to take the full dose every day. And with a dose-response relationship existing between drug therapy and both blood cholesterol concentration and coronary heart disease, failure to take recommended doses is serious indeed.

The NIH group believes that neomycin may be a safe and effective alternative to treatment with currently available cholesterol-

lowering drugs. The ability of the antibiotic to lower blood cholesterol was recognized in 1958, but the drug was never used clinically for this purpose because of concern over its toxicity.

Now Dr. Hoeg and coworkers have conducted more rigorous tests of neomycin, looking at the antibiotic's effect on the different cholesterol fractions, as well as on total cholesterol, and neomycin's toxicity. Working with 20 patients with elevated levels of low density lipoprotein cholesterol, they found that oral neomycin effectively lowered low density, but not high density, lipoprotein cholesterol, just the effect one would wish to see. And the drug produced no toxic side effects over the 3-month test period.

The NIH scientists commented that past observations of neomycin toxicity may have been the result of conditions—for example, kidney failure, liver insufficiency, inflammatory bowel disease, and the use of other medications—that weren't properly accounted for during the early studies.

Dr. Hoeg's group also noted that taking neomycin for prolonged periods shouldn't increase the risk of bacterial infection or cause the development of broad antibiotic resistance in intestinal flora. Neomycin-resistant organisms grown from patients' stool cultures were still sensitive to a variety of other antibiotics.

While the NIH investigators don't know how neomycin works, they do know that it exerts its effects within the gastrointestinal tract. Neomycin delivered via the bloodstream had no effect on blood cholesterol levels.

The investigators concluded that neomycin treatment is an inexpensive and effective means of lowering the concentration of low density lipoprotein cholesterol. They recommended that patients be given tests of kidney, liver, and ear function before neomycin therapy is begun. These tests should be redone at 3- to 6-month intervals, they noted. The NIH scientists cautioned against the use of neomycin to treat hypercholesterolemia in children and pregnant or lactating women.—*From FASEB Feature Service* □

PIMAS

(Continued from Page 1)

blood, the Indians chosen for this study were nondiabetic.

Total amounts of cholesterol in blood of both male and female Pimas were significantly lower than levels found in male and female Caucasians. Levels increased with age in three of the four groups. In the Pima males, total cholesterol concentrations remained unchanged after age 20.

Significantly lower levels of LDL cholesterol were found in the Pimas and followed similar patterns with age.

These comparisons are consistent with the lower prevalence of cardiovascular disease in the Pimas, and support the relationship between low LDL cholesterol and a decreased susceptibility to heart disease even though the Pimas also have low levels of HDL cholesterol, the kind which protects against heart disease.

These findings, however, appeared inconsistent with the fact that the Pimas exhibit a high incidence of obesity, which is usually associated with high levels of cholesterol.

The scientists found that in the Pimas catabolism (chemical breakdown) of LDL, the major carrier of plasma cholesterol, was very high, suggesting that cholesterol levels in the Pimas are low because LDL is metabolized more rapidly.

The researchers found that almost half of the VLDL (the LDL precursor) metabolized by the Pimas is not converted to LDL but is metabolized along another pathway into something else.

In Caucasians, a greater proportion of VLDL is converted to LDL.

Thus, an alternate VLDL metabolic pathway might exist in the Pimas which prevents buildup of cholesterol normally seen in obese individuals, and may explain their low rate of heart disease.

When the scientists measured high-density (HDL) cholesterol levels in the Pimas, they found these levels were also significantly lower than in their Caucasian counterparts, supporting the theory that an inverse relationship exists between obesity and HDL levels in the Pimas. In addition, they found that—unlike Caucasians—both sexes of the Pimas had relatively equal amounts of HDL cholesterol.

Results of this study showed relationships that were previously not seen.

- First, Pima females exhibit a lower rate of heart disease than Pima males, yet both sexes have similar levels of HDL cholesterol.

- Second, Pimas in general have lower levels of HDL cholesterol than Caucasians, which should predispose them to higher rates of heart disease. However the opposite is true.

The NIADDK researchers now believe that HDL cholesterol levels in some populations may have less effect than originally thought.

The group plans to conduct further analysis of the relationship between plasma lipoproteins and cardiovascular disease in the Pimas. □

It takes your enemy and your friend together, to hurt you to the heart, the one to slander you and the other to get the news to you.—*Mark Twain*

EB

(Continued from Page 1)

A meritorious award was given to Dr. Miller by DEBRA for his outstanding efforts in planning and chairing the scientific conference. Special recognition was also accorded Dr. Lawrence E. Shulman, director, Division of Arthritis, Musculoskeletal and Skin Diseases, NIADDK, and Dr. Alan Moshell, NIADDK Skin Diseases program director, for their scientific leadership. Constance Raab, deputy information officer, NIADDK, received an award for her role in producing the new publication on EB.

DEBRA also gave awards of merit to Sen. Mark O. Hatfield (Oreg.), Rep. Benjamin A. Gilman (N.Y.), and Rep. Henry A. Waxman (Calif.). A joint resolution passed by the Senate and House of Representatives and signed by President Reagan proclaimed Nov. 25-Dec. 1, as National Epidermolysis Bullosa Awareness Week. □



Attending the Capitol Hill reception marking the First National Conference on Epidermolysis Bullosa (EB) were (l to r): Arlene Pessar, founder of the Dystrophic Epidermolysis Bullosa Research Association of America (DEBRA); Constance Raab, deputy information officer, NIADDK, and Dr. Laurence H. Miller, chairman of DEBRA's Scientific Advisory Board, and special assistant to the Director, Division of Arthritis, Musculoskeletal and Skin Diseases, NIADDK.

NIH Workshop on Humane Use of Animals Attended by About 90 NIH Staff Members

Nearly 90 NIH staff members—including investigators, administrators and veterinarians—participated in a Nov. 26 workshop on the latest NIH policy on humane care and use of animals within the intramural program of NIH. It was the first broad discussion on implementation of the policy which was issued on Dec. 30 as NIH Manual Issuance 3040-2. Dr. Arthur S. Levine, NICHD scientific director, chaired the workshop.

In opening remarks, Dr. Joseph E. Rall, Deputy Director for Intramural Research, suggested the creation of an NIH-wide committee that could grapple with problems in the care and use of laboratory animals which involve multiple institutes. Such problems include design of animal facilities for buildings under renovation and for new buildings, as well as utilization of available space and personnel within current constraints.

Workshop speakers included Dr. Charles R. McCarthy, Director, OPRR; Dr. Albert E. New, Director, Laboratory Animal Science, NCI; and Dr. Robert A. Whitney, Acting Director, DRS. Dr. McCarthy presented a summary of current public policy problems in the use of animals in research and discussed the NIH response.

Dr. New gave an overview of management and the use of research animals at NIH. Dr. Whitney presented a summary of the long evolution of NIH policy on the care and use of laboratory animals, including development of the new intramural policy which was the subject of the workshop.

A panel was convened to discuss experience with implementation of the intramural animal policy from various viewpoints. Panelists and workshop participants explored topics including animal care program review with site visits to facilities, project review and documentation, accreditation by the American Association for Accreditation of Laboratory Animal Care, and annual reports to the U.S. Department of Agriculture as required by the Animal Welfare Act.

During the discussions, participants heard about some specific problems encountered in existing intramural facilities, and some proposed solutions, including, for example, more extensive use of centralized facilities and management to improve care and possibly result in savings of resources.

The above topics were introduced for discussion by the following participants: Dr. John Donovan, staff veterinarian, NICHD; Dr. Peter L. Solway, special assistant for Animal Care, Intramural Program, NIAID; Dr. Charles A. Strott, chief, Section on Adrenal Cell Biology, Endocrinology and Reproduction Research Branch, NICHD; Dr. Gene M. Shearer, senior investigator, Immunology Branch, DCBD, NCI; Susanne A. Stoiber, executive officer, Clinical Center and Richard P. Striker, administrative officer, Division of Intramural Research, NHLBI. Dr. Richard G. Wyatt, special assistant for Intramural Affairs, chaired the panel.

Dr. James Harwell of the Veterinary Research Branch, Division of Research Services, outlined training opportunities for NIH staff with different levels of responsibility in



Three key participants at the workshop to implement NIH's latest intramural policy concerning laboratory animals (l to r): Dr. Charles McCarthy, director, Office for Protection from Research Risks; Dr. Joseph E. Rall, Deputy Director for Intramural Research; and Dr. Robert Whitney, Acting Director of the Division of Research Services and chairman of the NIH Animal Research Committee.

the care and use of laboratory animals. Dr. Conrad Richter, chief of the Comparative Medicine Branch, NIEHS, reported on the "hands-on" workshops that are now required for new investigators and technicians involved in animal research at the Research Triangle Park Facility.

In summarizing the workshop, Dr. Philip S. Chen, Associate Director for Intramural Affairs, stressed the need for an "organized sensitivity" to all issues pertaining to the humane care and treatment of animals. He hoped for development of ways in which the Office of the Deputy Director for Intramural Research could get continual feedback from the broader NIH community on laboratory animal issues.

The workshop was sponsored by NIH's Office for Protection from Research Risks. In addition to promoting implementation of the intramural policy, the workshop served as a prototype for a series of eight or nine future regional workshops on the revised Public Health Service Animal Welfare Policy for Grantee Institutions. Both intramural and extramural policies are similar. □

STEP Offers Seminar On Computer Capabilities

The Staff Training in Extramural Programs (STEP) Committee will present Module 1—Seminar III on computer capabilities and review activities in the Lister Hill Auditorium (38A), Thursday, Jan. 10, 1:30-4:30 p.m.

The agenda will be:

- Genesis and Contrast of Consultant Files, Dr. Dennis Cain, NCI;
- Bibliographic Searches for Review, Dr. Robert Hammond, NIA;
- Personal Computers in BID Review, Dr. Michael Oxman, DRR;
- DRG Computer Developments: Past, Present, Future, Dr. Stephen Schiaffino, DRG and Mr. James Dybvad, DRG.

No advance registration is required. Registration will begin at 1 p.m. All extramural staff are invited to attend. For additional information, contact the STEP Program Office, Bldg. 31, Rm. 1B63, 496-1493. □

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