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U.S. Department of Health and Human Services

National Institutes of Health

"Still The Second Best Thing About Payday"

The NIH Record

Clinical Alert Issued

NHLBI Announces Treatment for Sickle Cell Disease

The first drug treatment for severe cases of sickle cell anemia was announced recently by the National Heart, Lung, and Blood Institute.

A clinical alert was sent Jan. 30 to U.S. physicians about findings from the Multicenter Study of Hydroxyurea in Sickle Cell Anemia. The drug hydroxyurea—pioneered as a potential therapy in the NIDDK intramural program, chiefly by Dr. Griffin Rodgers and colleagues during the past decade—proved so effective in reducing painful episodes or "crises" in adult patients with sickle cell anemia that the study was stopped on Jan. 14—4 months earlier than planned.

Announcing the finding are (from l) Drs. Michael Terrin, Samuel Charache, Duane Bonds and Claude Lenfant, NHLBI director.

In the study, daily doses of hydroxyurea reduced the frequency of painful episodes and hospital admissions for those crises by about 50 percent. Recurrent painful episodes are the most disabling feature of sickle cell anemia, interfering with education, employment, and psychosocial development.

(See SICKLE CELL, Page 7)

New Data on Nonprogressive HIV Infection Reported

By Greg Folkers

Recent studies have revealed important clues as to why a small minority of HIV-infected people have remained healthy for many years without loss of immune function, according to NIAID researchers and their colleagues.

As reported in the Jan. 26 issue of the *New England Journal of Medicine*, the investigators found that 15 HIV-infected volunteers with nonprogressive HIV disease had very low levels of HIV in their blood and lymph nodes; however, viral replication was persistent. The internal structure of these individuals' lymph nodes, unlike those of most people with HIV infection, appeared essentially undamaged, and the volunteers' immune function remained virtually unimpaired.

"Cohort studies of HIV-infected individuals in the United States suggest that approximately 5 percent of these people can be characterized as 'long-term nonprogressors,'" said Dr. Giuseppe Pantaleo of NIAID's Laboratory of Immunoregulation, lead author of the paper. "Although we do not know precisely why these individuals are able to contain the virus, our data suggest that this phenomenon is associated with the maintenance of the integrity of the lymphoid tissues and with less virus-trapping in the lymph nodes than seen in other HIV-infected individuals. In addition, in the long-term nonprogressors whom we studied, the immune response was relatively intact and appeared to control substantially, but not completely, HIV replication and the spread of the virus."

"These findings suggest that low-level, persistent HIV replication may not necessarily be associated with disease progression if

(See NONPROGRESSORS, Page 5)

Sondik To Be Acting NCI Director; Broder To Retire

NCI acting deputy director Dr. Edward Sondik will take over leadership of the institute in March, about a month before Dr. Samuel Broder, current NCI director, retires to a new post at IVAX, a Florida pharmaceutical firm; Broder revealed his intention to leave NCI last December.

The Sondik appointment was made by NIH director Dr. Harold Varmus during an address to NCI employees recently, at which time the names of the 14-member NCI director search committee were released. Chairing the committee is Dr. Paul Marks, president and chief executive officer of Memorial Sloan-Kettering Cancer Center in New York.

Members include: Dr. Karen Antman, Columbia Presbyterian Medical Center; Dr. Fernando Cabanillas, M.D. Anderson

(See NCI DIRECTOR, Page 2)

Coming This Summer

Army's Wayne Jonas Picked to Head OAM

NIH director Dr. Harold Varmus has announced his intention to name Dr. Wayne B. Jonas as director of the Office of Alternative Medicine. Jonas currently serves as director of the medical research fellowship at Walter Reed Army Institute of Research, where he teaches research methodology and conducts laboratory research in immunology and toxicology.

"Dr. Jonas is especially well qualified to meet the challenges of this important and interesting office," said Dr. Ruth Kirschstein, NIH deputy director, to whom OAM reports. "His background and experience make him the ideal candidate as NIH pursues its search for knowledge about and the evaluation of unconventional medical therapies. We are very pleased that he is available to accept this responsibility."

Jonas, a lieutenant colonel in the U.S. Army, was previously commander and clinic director of the 130th General Hospital in Dexheim, Germany, and worked for 2 years as a consultant in health promotion policy for

(See JONAS, Page 4)

20 Years of Advances

Researchers Recount NIDA Successes

Some of NIDA's leading researchers paid tribute to the institute at its recent 20th anniversary symposium celebrating progress in drug abuse research. The scientists listed a number of research advances that would not have been possible without the scientific infrastructure NIDA developed to study all aspects of drug abuse and addiction.

"We've come a long way," said NIDA director Dr. Alan I. Leshner, who pledged a bigger, more triumphant 25th anniversary commemoration in 1999 that would mark significant new advances against drug abuse and addiction.

To Treat or Not To Treat

Several NIDA-funded investigators spoke about the important role of research in advancing the effectiveness of treatment for drug abuse. They pointed to mounting data demonstrating that drug abuse treatment is practical, productive, and cost-effective.

"Two big goals of drug abuse treatment are to reduce mortality and morbidity, and there is no doubt that treatment is successful in that regard," said Dr. Thomas J. Crowley of the University of Colorado. "Studies show that methadone maintenance works" by keeping patients alive and healthy.

(See NIDA ANNIVERSARY, Page 6)

HIV Inhibitor Identified in Saliva

Scientists have identified a protein in human saliva that blocks HIV-1, the human AIDS virus, from infecting cells. Their finding may help explain why AIDS does not appear to be spread by saliva.

Although HIV has been recovered from the saliva of infected individuals, the concentration of virus is low and recovery is infrequent. Additionally, laboratory studies have shown that saliva prevents HIV from infecting white blood cells, which are the normal targets of the virus.

For some time, scientists have been searching for the components in saliva that prevent HIV infection. It is known that saliva contains large molecules that help clear microbes from the mouth, but even when these molecules are removed, saliva's protective effect remains.

Now, a research team led by Drs. Tessie McNeely and Sharon Wahl of NIDR have identified a factor that may play an important role. The scientists found that a small protein called secretory leukocyte protease inhibitor, or SLPI (pronounced slippy) attaches to the surface of blood cells and blocks infection by HIV.

In a series of test tube experiments, McNeely and Wahl tested a battery of purified salivary proteins against HIV and white blood cells to see which substances protected cells from infection. Of the compounds examined, only SLPI conferred substantial protection at levels normally found in saliva.

Further experiments showed that SLPI works by binding to the white cells and not to HIV. Interestingly, SLPI does not react with CD4, the receptor on the surface of white cells that attaches to HIV and gives the virus a foothold leading to infection. "The ability of SLPI to block HIV infectivity by reacting with a molecule other than CD4 is a significant finding," said McNeely. "The next step is to identify the SLPI receptor and determine the role it plays in HIV entry into host cells."

The investigators caution that much about SLPI's protective effect remains unknown. SLPI is found in varying levels in the coating of most mucous membranes, and is believed to be a natural protector against the body's own protein-destroying enzymes. However, the extent of SLPI's activity against HIV in fluids other than saliva, as well as its potential as a protective agent against HIV transmission, is yet to be determined.—**Wayne Little** ❑

NCI DIRECTOR

(Continued from Page 1)

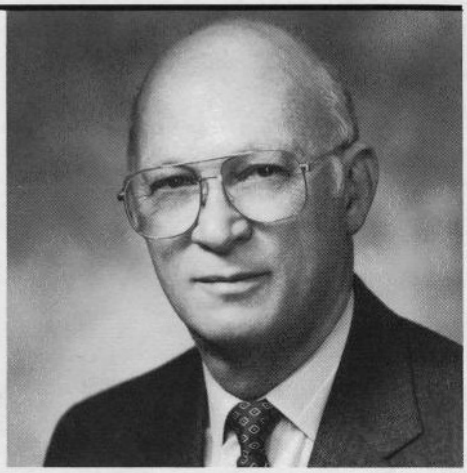
Cancer Center; NIAID director Dr. Anthony Fauci; Dr. Harold Freeman, Columbia University; Dr. Eli Glatstein, University of Texas; Dr. Joseph Goldstein, University of Texas; NIEHS director Dr. Kenneth Olden; Dr. Maxine Singer, Carnegie Institute; Dr. Shirley Tilghman, Princeton University; Fran Visco, National Breast Cancer Coalition; Dr. Christopher Walsh, Dana Farber Cancer Institute; Dr. Samuel Wells, Washington University; and Dr. Charles Wilson, University of California, San Francisco.

NCI, the largest component of NIH, has an annual budget of about $2.1 billion and a staff of some 2,340 employees. Broder has directed the institute since December 1988.

The search committee will look nationwide for candidates, then make recommendations to HHS Secretary Donna Shalala, who will advise the president of her choice.

The position of NCI director is a presidential appointment, but is not subject to confirmation by the Senate. ❑

The second annual Jeff Bostic Celebrity Golf Tournament, which benefits Special Love, Inc./Camp Fantastic and the Friends of the Clinical Center, is coming up on Monday, Apr. 24 at the Tournament Players Club at Avenel in Potomac, Md. Limited space is still available for playing in the tournament. Call Ruth or Jodi at R&W, 6-6061, if interested. Shown above are (from l) Sean Fenlon of Camp Fantastic, Pam Sears of R&W, ex-Redskin Bostic, Jodi DeOms of R&W, and NCI's Larry Chloupek.



Dr. Harvey J. Kupferberg, chief of the preclinical pharmacology section of NINDS's Epilepsy Branch, recently received the first American Epilepsy Society Service Award for his outstanding contributions to the field of epilepsy in developing new antiepileptic medications. He is responsible for the NINDS Antiepileptic Drug Development Program's preclinical development of new drugs for the treatment of seizures. He received the award at the society's annual meeting held recently in New Orleans.

AIDS Symposium Set, May 8

A minisymposium on "AIDS: Therapeutic and Prophylactic Challenges," will be held May 8 in Frederick, Md., sponsored by the Foundation for Advanced Cancer Studies, Inc. For information, contact Patti Hall, (410) 658-2882. ❑

The NIH Record

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NEI 'Kids Day' Helps Pretest New School Program

NEI held its first "Kids Day" recently in coordination with the NIH Visitor Information Center. Fifth and sixth graders from Bladensburg Elementary School's achievement program helped pretest "VISION," an NEI school program for grades 4-8, dissected a cow's eye, and toured the Clinical Center.

NEI director Dr. Carl Kupfer told students about the benefits of vision research and explained how their parents' tax dollars help NEI support more than 75 percent of the eye research conducted in the United States. NEI extramural program staff led the students in exercises that demonstrated how loss of vision can affect daily activities and described the visual system and some common eye diseases.

Ted Fletcher and Dr. Michael Oberdorfer of NEI direct the children in the dissection of a cow's eye in the NIH Visitor Information Center laboratory.

VISION is a series of three minilessons on the visual system and eye health care. The school program is being developed by NEI in cooperation with the Association for Research in Vision and Ophthalmology, a research organization that will be printing and distributing it this spring to its more than 9,000 members. The lessons are designed as a supplement to any science curriculum and provide an opportunity for a teacher to invite a vision researcher or eye care professional into the classroom to share their expertise with students and help them understand the vital role of science in today's world.

Children, teachers, and NEI staff gather for a group photo to model their "VISION" logo T-shirts, designed especially for "Kids Day."

Students learn how vision can be affected if one eye is "impaired" by using petroleum jelly smeared on lenses of sunglasses.

Lean Females Needed for Study

Healthy, lean or very thin females ages 18-35 with regular menstrual cycles are needed for a study of the effects of fasting for 72 hours on reproductive hormone function. Volunteers must be nonsmokers on no medications, including oral contraceptives, willing to spend 4 days as an inpatient twice, 3 months apart. Women in each of these categories will be studied: sedentary lifestyle (no regular exercise), moderate runners (10-25 miles per week throughout the year), and runners logging more than 25 miles per week. Volunteers will be reimbursed for participation. For information, call Dr. Ruben Alvero, 6-9854. ❑

FAES Concerts in March

There are two remaining concerts in the FAES 1994-1995 Concert Series: Mar. 5, Mischa Maisky, cello; and Mar. 19, Borromeo String Quartet. Concerts are at 4 p.m. in Masur Auditorium. Tickets are $20; postdocs and students pay $10. For more information call 6-7975. ❑

Gaucher Disease Technology Assessment Workshop Set

NIH will sponsor a technology assessment conference on "Gaucher Disease: Current Issues in Diagnosis and Treatment," Feb. 27-Mar. 1 in Masur Auditorium, Bldg. 10.

Gaucher disease is a rare enzyme deficiency disorder that researchers estimate may be present in 10,000 to 20,000 Americans. It is the most frequently inherited disorder in the Ashkenazic Jewish population.

In the past decade, much progress has been made in understanding the molecular biology of the disease and the ability to treat patients who suffer from the disorder. However, many issues regarding diagnosis, population screening and therapy for Gaucher patients do not have clear consensus.

Gaucher disease is characterized by a remarkable degree of variability in the clinical signs and symptoms, ranging from severely affected infants to asymptomatic adults. Many patients suffer from anemia, bone damage, and swelling of the liver and spleen while a few develop severe central nervous system damage and death. All Gaucher patients have a genetic defect in the enzyme glucocerebrosidase, which interferes with the enzyme's ability to break down a specific fat molecule. The molecule thus accumulates in a part of the cell called the lysosome.

The purpose of the workshop is to evaluate current concepts concerning diagnosis, genetic counseling and management of Gaucher disease. The conference will bring together epidemiologists, geneticists, pediatricians, neurologists, obstetricians, orthopedists, hematologists, genetic counselors, clinical pathologists, others involved in health care delivery and representatives of the public. Participants will review data and make recommendations regarding population screening, genetic counseling, and current patient management as well as future research.

After $1^1/_2$ days of presentations and discussion by the audience, an independent, nonfederal panel will weigh the scientific evidence and write a draft statement.

The conference is sponsored by NIMH and the NIH Office of Medical Applications of Research, and is cosponsored by NICHD, NIDDK, NINDS, NCRR and NCHGR.

To register, contact Debra DeBose, (301) 770-3153. ❑

Fojo Gives Director's Talk

The next lecturer in the NIH Director's Seminar Series will be Dr. Silvia S. Fojo, who will address, "Characterization of Transgenic Animal Models for Human Dyslipoproteinemias: New Insights into the Role of Enzymes Involved in Triglyceride and HDL Metabolism." The talk is at noon on Friday, Feb. 24 in Wilson Hall, Bldg. 1.

JONAS
(Continued from Page 1)

the Office of the Surgeon General of the Army.

He is on the teaching staff of the Family Practice Residency Program, DeWitt Army Community Hospital, at Ft. Belvoir, Va., and holds faculty appointments in the departments of family practice and preventive medicine/biometrics at the Uniformed Services University of the Health Sciences, where he codirects a year-long seminar on alternative medicine.

Jonas succeeds Dr. Joseph Jacobs, OAM's first permanent director, who resigned last September. Dr. Alan Trachtenberg, a researcher from the National Institute on Drug Abuse, has served as acting OAM director since that time and will continue to run the office until Jonas' arrival, scheduled for July.

Jonas has worked closely with OAM as a consultant on research education and methods, and is chairman of a conference on alternative medicine research methodology scheduled for April. He also was a major contributor to a report to NIH from the alternative medicine community entitled, "Alternative Medicine: Expanding Medical Horizons," due for publication soon.

In addition to his conventional medical training, he has trained in homeopathy, bioenergy therapy, diet and nutritional therapy, mind/body methods, spiritual healing, electro-acupuncture diagnostics and clinical pastoral education.

Jonas has conducted research in a number of conventional and alternative areas including homeopathy, electro-acupuncture diagnosis, health promotion and wellness, nutrition, megavitamin therapy and arthritis, toxicology, pharmacology of high dilutions, immunology of tularemia infection, NMR spectroscopy, qigong healing, radionics, health promotion training and implementation, measurement of wellness outcomes, and medical education. He has conducted and written about a variety of research approaches including clinical trials, laboratory methods, outcomes research, field investigation methods, systematic reviews, and meta-analysis. He is a member of the international Cochrane collaboration group on the quality of randomized clinical trials, and is co-coordinator of the Cochrane collaboration's complementary medicine field group.

Born in Twin Falls, Idaho, in 1955, Jonas received his B.A. from Davidson College and his M.D. at Bowman Gray School of Medicine. He did a residency in family practice at DeWitt Army Community Hospital, Ft. Belvoir. A board-certified family practitioner and a fellow of the American Academy of Family Physicians, he lives in Alexandria, Va., with his wife and three children. ❑

NCI's Joost Oppenheim Honored in Germany

Dr. Joost J. Oppenheim, chief of the NCI Laboratory of Molecular Immunoregulation in the Biological Response Modifiers Program, was recently honored during a 2-day "festschrift" international symposium convened in his honor in Lubeck, Germany.

He was honored for his research accomplishments and his role in training young scientists in immunological research during his more than 30 years at NIH. The honor coincided with his 60th birthday.

A "festschrift" is a tradition in Europe in which former students, now established in their careers, honor a professor's influence on their lives by holding a meeting to showcase the scientific progress in the professor's field, including research work by former postdoctoral fellows. "Cytokines and Chemokines" was organized by two of Oppenheim's former postdocs, Professor Dr. Holger Kirchner, director of the Institute for Immunology and Transfusion Medicine at the University of Lubeck; and Professor Dr. Thomas Luger, director of the Polyclinic for Skin Diseases at the University of Munster, Germany. Oppenheim delivered the keynote lecture, "Chemokines and Beyond." Former postdocs and colleagues from the U.S., Israel, Italy, Japan, Denmark, Germany, Austria, and Belgium also made presentations at the symposium. More than 150 scientists attended.

Dr. Joost J. Oppenheim

Commenting on the "festschrift," Oppenheim said, "I was touched by being spontaneously honored in this manner by former colleagues who are now biomedical research leaders in their own right in various parts of the world. It is a true tribute to the NIH, which has made it possible for NIH scientists to serve as mentors to biomedical scientists from all over. It is particularly gratifying to know that our efforts do not go unnoticed by the extramural community."

Dr. Dan Longo, associate director of the NCI Biological Response Modifiers Program, added, "It would be difficult to overstate Dr. Oppenheim's contributions and his importance in the field of cytokine research. His laboratory and those of his trainees have generated an enormous body of influential work in this area. However, in addition, he has served as an intellectual leader in the field, insisting on the highest standards for research, dating from the days preceding the technological advances that permitted isolation of purified molecules, a time in which he coined the term 'lymphodreck' to describe impure preparations and poorly defined immunological activities."

Oppenheim is a recognized world leader in the field of cytokine research. He and his colleagues have defined the regulation of IL1α and IL1ß synthesis, processing, and release from cells and have characterized the regulation of IL1 receptors on normal and neoplastic fibroblasts, monocytes, epithelial cells, lymphocytes, and hematopoietic cells. He was the first to demonstrate the activity of IL1 on hematopoietic cells in experiments that proved the capacity of IL1 to protect animals from death induced by lethal doses of radiation and chemotherapeutic agents.

Oppenheim is a discoverer of IL-8, a prototypical member of a family of chemotactic cytokines also called chemokines. This cellular product activates human neutrophils to phagocytose and kill bacteria and fungi. In addition, IL-8 is a potent neutrophil and T lymphocyte chemotactic factor that is under investigation as a mediator of inflammatory, autoimmune and possibly antitumor responses.

Oppenheim and his colleagues also codiscovered and characterized monocyte chemotactic and activating factor, another novel chemokine under evaluation for its capacity to exert antitumor effects.

Oppenheim began work at NIH in 1962, spending 3 years as a clinical associate in NCI's Medicine Branch. After a year of research in England, he returned to NIH in 1966 as a senior investigator in the NIDR Laboratory of Biochemistry. He was chief of the NIDR cellular immunology section from 1970 to 1983, when he became chief of the Laboratory of Molecular Immunoregulation, NCI. He received the M.D. *cum laude* in 1960 from Columbia University College of Physicians and Surgeons and served his internship at King County Hospital and residency at the University of Washington hospitals in Seattle. ❑

Training Classes

Minuet for PC DOS Network Access	2/15
Introduction to Computer Security	2/15
Database Technology Seminar	2/17
PC Trouble Shooting	2/22-23
SAS Fundamentals I for Non-programmers	3/1-2
Relational Database Overview	3/2
SAS Fundamentals II for Non-programmers	3/6-7
FOCUS Query Language	3/7
Introduction to Image Processing	3/7, 3/9, 3/14,3/16, 3/21, 3/23
Introduction to Receiver Operating Characteristic Methodology	3/9
PC Topic Session	3/9
Mathematical Models in Epidemiology: Issues and Controversies	3/10
Deregistration of Users for the NIH Computer Center	3/13
SQL: Language for Relational Databases	3/14-16

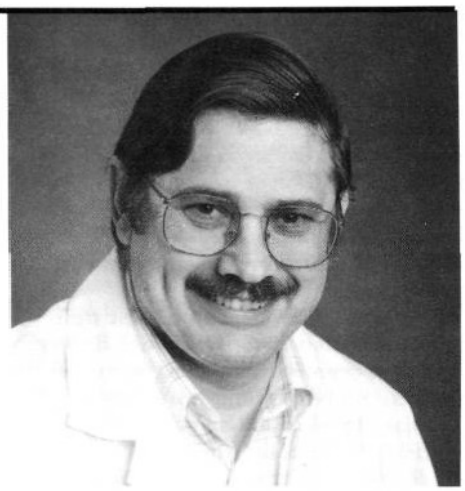
STEP Plans Science Policy Forum, Apr. 20 in Wilson Hall

The Staff Training in Extramural Programs (STEP) committee will present the forum, "Federal Science Policy: Reports from the Field," on Apr. 20 in Wilson Hall, Bldg. 1, from 8:30 a.m. to 4 p.m. No advance registration is required, and attendance will be on a first-come, first-served basis.

Speakers will focus on economic and political forces shaping science policy and will provide examples of how science policy has influenced or radically altered the programs of a number of science-based federal agencies such as the National Institute of Standards and Technology, the National Aeronautics and Space Administration, the Department of Energy, and the National Science Foundation.

Dr. Christopher Hill, from the Institute of Public Policy and Technology, George Mason University, will be the moderator. He has more than 25 years of experience in the public policy arena and is a regular lecturer in the Center for Public Policy Education at the Brookings Institution. Among the speakers will be Dr. M.R.C. Greenwood, associate director for science, Office of Science and Technology Policy. She will present the view from the White House. Dr. Donald E. Kash, Hazel chair, Institute of Public Policy and Technology, George Mason University, will talk about the interconnection of science, technology, and the economy. Dr. Kenneth E. Pedersen, research professor of international affairs, Georgetown University, will focus on NASA and the space station. Kathleen Ream, director of government relations and science policy, American Chemical Society, will talk about the ongoing debate over the mission of the NSF.

Additional speakers will focus on the view from Congress, NIST and the Advanced Technology Program, and DOE and the superconducting super collider. A question and answer period will follow each presentation.



Dr. Ronald P. Mason, a research chemist at NIEHS, has received the American Chemical Society's 1994 Southern Chemist Award. The prize confers a gold medal and an award and recognizes distinguished service to the profession. Mason, on the staff of the Laboratory of Molecular Biophysics, has been among the pioneers in the application of electron spin resonance techniques to biochemical, pharmacological, and toxicological problems. He joined NIEHS in 1978 and since then has published some 190 scientific articles. He also teaches at Duke University and UNC-Chapel Hill.

Theatre Group Holds Auditions, Feb. 26-27

The NIH R&W Theatre Group will hold auditions for its May production of *Play On* on Feb. 26 and 27 from 7 to 10 p.m. in Masur Auditorium, Bldg. 10. The play, directed by Jim Robertson, requires 10 actors, male and female, ages 25-55. Four extras are also needed for crew. For information call Alice (301) 921-4358 after 11 a.m. ❑

NONPROGRESSORS STUDIED FOR KEYS TO HIV CONTROL

(Continued from Page 1)

efficiently controlled over time," said Dr. Anthony S. Fauci, NIAID director and LIR chief. "A further understanding of the relative contributions to nonprogressive HIV disease of host factors such as the immune system and of virologic factors such as less virulent strains of the virus may prove critical to our understanding of AIDS pathogenesis and to the development of new vaccines and treatments for HIV infection."

The investigators defined long-term nonprogressors as individuals who had been HIV-infected for 7 or more years, had stable CD4+ T cell counts of 600 or more cells per cubic millimeter of blood, no HIV-related diseases and no previous antiretroviral therapy. CD4+ T cells are the critical immune system cells targeted by HIV and typically depleted during the course of HIV infection.

Of the 15 long-term nonprogressors in the study, 7 came from the NIAID-supported multicenter AIDS cohort study, which includes gay and bisexual men seen every 6 months since 1984. Four came from the San Francisco cohort study, a group of homosexual men recruited in the late 1970's for studies of hepatitis B. Another four came from an ongoing study at NIAID that examines the lymph nodes of HIV-infected individuals at various stages of infection. Of the 15 people, 13 had been infected for at least 10 years and all 15 had high counts of CD8+ T cells. No particular patterns of HLA, the "self" molecule on the surface of human cells recognized by the immune system, were observed among the participants.

For comparison, the researchers also examined 18 HIV-infected people enrolled in the NIAID lymph node study who had various degrees of disease progression.

The investigators performed lymph node biopsies on 14 of the 15 long-term nonprogressors and found that the organs were remarkably well-preserved. In one individual infected for 11 years, for example, lymph node samples from 1984 and 1993 were essentially identical. In contrast, lymph node samples taken from the 18 individuals in the control group showed patterns of deterioration typical of progressive HIV infection.

The investigators found various amounts of HIV trapped in the networks of follicular dendritic cells in the lymph nodes of 14 long-term nonprogressors. The amounts of virus were less than the amounts seen in the individuals with progressive disease and paralleled the presence of lymph node structures called germinal centers, hot spots of cell proliferation and immune activity. Virtually no virus was detected in lymph nodes of five individuals with few or no evident germinal centers. "The lack of virus-trapping in long-term nonprogressors probably reflects the relatively nonreactive state of their lymphoid tissues, as compared to those with progressive disease, whose immune systems are chronically activated," said Fauci.

Using a sensitive technique called polymerase chain reaction, the investigators found that levels of HIV and HIV replication in both the bloodstream and lymph nodes were far higher in the 18 controls than in the 15 long-term nonprogressors. The controls had at least five times as many cells containing HIV DNA than the long-term nonprogressors and had levels of viral replication four- to ten-fold higher. Levels of cell-free virus were up to 20 times higher in the blood of the controls than in that of the long-term nonprogressors.

Although HIV could not be isolated from the plasma of the long-term nonprogressors, the researchers cultured the virus from immune system cells in these patients' lymph nodes, indicating that HIV is infectious and able to replicate in such people.

In addition, long-term nonprogressors had higher levels of neutralizing antibodies than patients with progressive disease, and the blood of each of seven long-term nonprogressors tested had the ability to kill HIV-infected cells.

"The presence of high titers of neutralizing antibodies, together with consistent detection of HIV-specific cytotoxic immune responses, indicates that both antibody and cell-mediated responses are preserved in long-term nonprogressors," Fauci noted. "This suggests that these individuals are constantly exposed to HIV antigens, yet somehow control the infection. Further study of these individuals may lead to insights into the mechanisms that prevent progression to advanced HIV disease." ❑

NIDA ANNIVERSARY
(Continued from Page 1)

In addition, new treatment outcome data collected by Dr. Robert Booth and Crowley show that Denver "street addicts who chose to enter some form of treatment and then were followed for 6 months did dramatically better, in terms of reduced drug use," than did addicts who did not enter treatment, Crowley said.

Studies also show that methadone treatment is even more successful when accompanied by appropriate counseling and social services. An NIDA-funded study by Dr. A. Thomas McLellan and his colleagues at the Philadelphia Veterans Affairs Medical Center found that patients who receive counseling and psychiatric care in addition to methadone are more successful in reducing their levels of heroin use than those who receive only methadone.

Other speakers at the anniversary celebration pointed to numerous basic research advances that have contributed to science's understanding of drug abuse. Dr. Solomon Snyder of Johns Hopkins University summarized the work that led to his historic discovery in 1972 of the opiate receptor, the molecular site in the brain where morphine, heroin, and other opiates initiate their actions on the body. More recently, he has conducted research on nitric oxide. He has discovered that brain cells use nitric oxide to signal each other and that nitric oxide causes brain damage following a stroke. In his current research, he is trying to determine if nitric oxide can block long-term physiological change caused by drug abuse.

Snyder also is examining the role nitric oxide plays in the development of tolerance to morphine, a phenomenon that causes addicted people to seek increasing doses of morphine.

The list of achievements in drug abuse and addiction research can be attributed in large part to "a relatively small, close-knit group of researchers who have been continuously supported by NIDA for 20 years," said Dr. Huda Akil, director of the neuroscience graduate program at the University of Michigan. Recent achievements such as the cloning 2 years ago of the genes for opioid receptors bring drug abuse to the threshold of major new advances, although researchers know "we have a great deal still to learn," she said.

Dr. Louis S. Harris, a pioneer drug abuse researcher at the Medical College of Virginia, Virginia Commonwealth University, recounted the crusade of early addiction researchers to separate the pain-relieving properties of morphine from its addicting properties. These scientists developed a number of synthetic morphine-related analgesics, tinkered with opiate molecules, and increased the potency of analgesics by as much as 50,000 times. In addition, they developed pure opioid antagonists useful in the treatment of narcotic overdoses and as

NIDR director Dr. Alan Leshner confers with NIH deputy director Dr. Ruth Kirschstein at the anniversary celebration.

medications for the treatment of opiate addiction; they also developed mixed opioid agonist-antagonist analgesics with a reduced dependence potential. However, they never achieved their goal of completely separating analgesia from addiction—still a major quest, Harris said.

Drug Abuse and AIDS

Dr. Gerald Friedland, an AIDS investigator at Yale University, said a number of research accomplishments have been made in defining the relationships between drug abuse and the spread of AIDS. These include documenting the extent of the problem; defining behavioral, social, and biological predictors of drug abuse-related transmission of HIV; profiling the natural history and progression of HIV disease; studying the problems of women with AIDS; and characterizing an expanded spectrum for HIV disease related to drug use.

Injection drug use (IDU) is now responsible for the second largest number of AIDS cases in the United States, and the proportion of these cases is increasing, Friedland said. About 25 percent of U.S. AIDS cases are now attributed to injection drug use alone, he said.

Researchers have identified a number of IDU risk factors for HIV transmission, including the number of injections per month; the duration of IDU; the proportion of IDU conducted in "shooting galleries," hideaways where addicted persons gather to use drugs and share injection equipment; the extent to which needles are reused; the proportion of injections shared with a stranger; and the year of a person's last injection.

Researchers have demonstrated substantial IDU behavioral changes resulting in a reduction in the risk of spreading HIV, he noted. One key behavioral change—sharing fewer injections—can be related to providing sterile injection equipment to users, Friedland added.

The spread of HIV also is a major part of NIDA's research portfolio examining the special needs and concerns of women as they relate to drug abuse, said Dr. Loretta P. Finnegan, NIDA's senior advisor on women's issues. A major NIDA-supported study of women, cocaine, and childbirth—including the complicating factors of smoking, drinking, youthful pregnancy and motherhood, and sexually transmitted diseases, including AIDS—is now well into its second generation, she said. Another study being conducted by NIDA in collaboration with NICHD and other federal agencies is the largest, most comprehensive study of infants born to women who used cocaine or opiates during pregnancy.

In all, NIDA has supported 20 perinatal research programs, Finnegan added. An institute study drew national attention last September when it chronicled the troubling fact that 5.5 percent of pregnant American women report using some kind of abused substance during pregnancy, creating untold risks to their unborn children, she noted.

Trend Peaks and Valleys

Also discussed at the symposium were the institute's efforts in gathering drug use statistics. "NIDA has done a great deal in the 1,000-plus weeks of its existence," said Dr. Richard Clayton of the University of Kentucky. Epidemiological studies tell who uses what drugs, to what extent, and with what consequences, and also help determine where and why drugs are abused, he said.

But studies of drug use trends must be carefully interpreted, he cautioned. Trend data that showed drug use rates on a general decline until 1993 led Congress and the public to assume a false sense of complacency because some observers of the data concluded that the cocaine use problem may be decreasing, he said. In reality, when cocaine users are divided into groups of heavy and light users, it is clear that drug use among the heavy cocaine users is actually increasing, Clayton said. This demonstrates the need for great care in evaluating and interpreting drug use trend data, he said.

Another NIDA-supported researcher, Dr. Conan Kornetsky of Boston University, said that 20 years of research by a number of NIDA-supported investigators have overturned widely held stereotypes and simplistic cliches about drug abuse. Well into the 1970's, it was generally believed that drugs were abused primarily by two types of people: those with some underlying pathology and those who became addicted and then continued to take drugs to relieve the symptoms of withdrawal, he said. Although these are important factors, the primary reason for drug abuse is the action that these drugs have on the brain reward systems—those areas of the brain involved in many natural rewards, he said.

Research during the past 20 years has delineated those structures and transmitters involved in reward systems, which are stimulated by abused substances, Kornetsky said. While dopamine has been implicated as the critical neurotransmitter mediating reward system pathways, recent studies

indicate that other mediating neurotransmitters and structures also are involved. At the same time, cognitive and environmental conditions as well as genetics may also affect these other mediating transmitters and structures. Taken together, these external and internal factors may alter or even negate the rewarding effects of a drug, he noted.

Genetics vs. the Environment

Dr. Ralph Tarter of the University of Pittsburgh discussed vulnerability to drug abuse, noting that 7 percent to 10 percent of individuals exposed to illicit drugs become dependent on these drugs; about 15 percent of those who drink become dependent on alcohol. Three variables are involved in vulnerability to drug abuse: the common environment everyone shares, each individual's unique environment, and genetic factors, he said. Many studies, some involving twins, show that the unique environment is more important than the common environment in determining vulnerability, he said. Parentage, particularly that of the father, is also an important risk factor for drug abuse, Tarter noted.

Behavioral studies show that temperament traits such as emotionality, activity, sociability and impulsivity, are important childhood predictors of subsequent drug abuse, he said. "Preliminary findings indicate that we can predict with about 75 percent accuracy at age 10 which kids will use drugs by age 12," Tarter said.

It is difficult to translate these and other findings about vulnerability into drug policy and decisionmaking, he said. For one thing, he explained, science needs a new terminology that avoids reliance on emotion-charged terms such as "impulsivity" and other current terminology for predictive temperament traits, he said.

Dr. Joseph V. Brady of Johns Hopkins University said behavioral biology has made major advances that are being applied to the field of drug abuse research. It is now recognized that drug-seeking and drug-taking are learned—not innate—behaviors, he pointed out. This is an important conceptual change in the way addiction is viewed that has come about in the 20 years since NIDA began its work, he said.

The institute has done a great deal not only to educate the public about addiction but also to recruit young scientists to enter the research field, he said. NIDA deserves praise for its support of drug abuse research and its career-guidance efforts to cultivate young scientists to become the "superstars of tomorrow" in addiction research, Brady said. He lauded NIDA for its "critical contributions over 20 years in the development and maintenance of a research infrastructure" for drug abuse studies that is unrivaled in the world. ❑

SICKLE CELL

(Continued from Page 1)

Hydroxyurea therapy also reduced the frequency of acute chest syndrome, a life-threatening complication of sickle cell anemia characterized by chest pain, fever, and an abnormal chest x-ray. Patients taking the drug had approximately 50 percent fewer cases of acute chest syndrome than patients taking a nonactive placebo.

Patients on hydroxyurea also required about 50 percent fewer units of blood transfused than patients on the placebo, a finding that has important public health implications.

"This is a significant advance in the treatment of adults with sickle cell anemia," said Dr. Claude Lenfant, NHLBI director. "Although it is not a cure, hydroxyurea therapy is the first effective treatment for this serious illness and may greatly improve the quality of life of sickle cell anemia patients."

Sickle cell anemia is an inherited disease that is most common among people whose ancestors come from Africa, the Middle East, the Mediterranean basin, and India. In the U.S., it affects primarily African Americans, about 72,000 of whom have the disease. One in 12 African Americans carries the sickle cell trait.

In patients with the disease, molecules of sickle hemoglobin stick to one another, forming long rods inside red blood cells and causing these cells to take on a sickle shape and become rigid. The sickled red cells then are unable to squeeze through tiny blood vessels, depriving tissue of an adequate blood supply and causing painful episodes.

Scientists believe that hydroxyurea may work by stimulating the production of fetal hemoglobin, which is present in the fetus and in newborn babies. By approximately 4 months of age, fetal hemoglobin has been replaced by adult hemoglobin. Fetal hemoglobin inside sickled red blood cells may prevent those cells from becoming rigid, thereby preventing blood vessel obstruction.

NIDDK's Rodgers, along with Dr. Alan Schechter and others in the Laboratory of Chemical Biology, had observed several years ago that hydroxyurea, a widely used leukemia drug, could stimulate production of fetal hemoglobin significantly; they set about trying to apply this bench finding to patients in the clinic.

In the Multicenter Study of Hydroxyurea, which eventually grew out of their work, half of the patients received hydroxyurea and half received a placebo capsule. Between January 1992 and April 1993, the study enrolled 299 adult sickle cell anemia patients age 18 and above at 21 clinical centers in the U.S. All of the patients had experienced at least three painful crises in the previous year.

Dr. Samuel Charache, principal investigator of the study and professor of medicine, Johns Hopkins University School of Medicine, cautioned that hydroxyurea may not be appropriate for all sickle cell patients.

"The drug should not be used in patients likely to become pregnant," he said. "Furthermore, long-term safety in adults and safety and effectiveness of treatment in children have not been determined. Hydroxyurea also has the potential to cause a life-threatening decrease in blood counts called cytopenia."

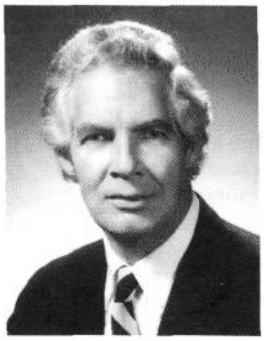
Dr. Michael Terrin, director of the study's data coordinating center at the Maryland Medical Research Institute, said, "Each sickle cell anemia patient must be evaluated carefully before hydroxyurea therapy is begun and monitoring must continue during treatment."

The only side effect of hydroxyurea was mild reversible bone marrow suppression, which caused lowering of blood counts. Because the long-term side effects of hydroxyurea are unknown, patients participating in the clinical trial will be followed and examined regularly.

Hydroxyurea is not currently approved by the Food and Drug Administration for treatment of sickle cell anemia, although physicians can prescribe it for that purpose. The drug is used for the treatment of polycythemia vera, a disease in which too many red blood cells are produced. NHLBI has alerted FDA about the study results. The FDA will consider approval of the use of hydroxyurea for sickle cell anemia following submission of study data by the manufacturer. ❑

Lindberg Resigns HPCC Post

NLM director Dr. Donald Lindberg recently announced his intention to resign as director of the High Performance Computing and Communications (HPCC) National Coordination Office, a post he has held concurrently with the NLM directorship since September 1992. The HPCC is the multiagency federal initiative that fosters rapid development of high performance computers and networks and use of these resources throughout the nation. He will remain interim HPCC coordinator until the White House names his successor.



Dr. Donald Lindberg

Dr. John H. Gibbons, assistant to the president for science and technology, said that Lindberg, as HPCC's first director, "has done a magnificent job in establishing and leading the HPCC program in its critical formative years."

Said Lindberg, "Although it has been an exhilarating several years, I know there are challenges facing the library that require my full-time attention. I look forward to devoting my energies to these challenges." ❑

In Pursuit of Chi

Don Murphy Retires After 28 Years at NIH

By Rich McManus

Unlike most retirees, who are eager to throw over the traces once they leave work, Dr. Donald Murphy is looking forward to even deeper philosophical and scientific quests in retirement. The 28-year NIH veteran, who joined the agency in 1967 as a grants associate and leaves as the administrator in charge of the GA program, is now free to pursue more avidly a spiritual journey that began while he was a high school student in Hawaii.

Many at NIH know Murphy not by his directorship, since 1990, of the Office of Extramural Research's Extramural Staff Training Office (which oversees the GA Program), but by the martial arts training he has offered at NIH. Holder of a fourth-degree black belt in taekwondo, and a first-degree black belt in aikido, Murphy "very much intends to remain involved" as president and chief instructor of both the NIH Taekwondo Club, which he helped launch back in the late 1970's with Dr. French Anderson, and the NIH Aikido Club, which he began as a sister club about 6 years ago. Hundreds of NIH'ers have trained with him in the past 17 years, and he has no plans to relinquish his teaching role.

Murphy first became interested in eastern philosophies and martial arts while a student at Punahou School, a private academy he attended while growing up on Koko Head on the island of Oahu.

"It was a very good school, and around my sophomore year, I started training in jujitsu and judo. They had a very traditional Japanese dojo (gymnasium) there."

Drawn to martial arts chiefly as a mode of self-defense, Murphy soon recognized "a budding interest in the spiritual side of martial arts—I don't think it was very profound at that time. But that interest has followed me my entire life."

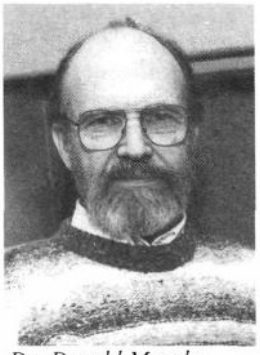
Not at all a sort of kung fu recluse, Murphy also did the fun stuff in high school—bashing up his shoulder playing football (and later not telling the Marines about it so he could serve for 2 years in a tank company) and singing and playing guitar with a bunch of fellas who would later be known as the Kingston Trio. He also developed a side interest in science: "By the time I was 12 or 13 I had set up a little lab at home. I had my microscope, and my chemistry set..."

Murphy went to Oregon State University after graduating from high school in 1952, and continued to train informally in martial arts with friends from the islands who called themselves "Hui O Hawaii"—the Club of Hawaii.

His undergraduate degree in science in hand, Murphy then volunteered for the Marines because, "I just believed that service was the right thing, and that the Marines were the most quality group I could join."

Following the jarhead tour, Murphy returned to Oregon State to complete a Ph.D., funded by the National Science Foundation, in marine biology and plant pathology, "an unusual combination, I admit." He spent a postdoctoral year on the faculty at OSU, then wrote both grant and fellowship applications to NIH, an agency about which Murphy knew nothing.

"NIH decided to fund both applications, so I chose the fellowship instead of the grant," Murphy recalls. "I spent the next 2 1/2 years at the Zoological Institute of the University of Hamburg. Living in Germany was a great experience. I was immersed in the language. I had studied German—you had to have languages to get a Ph.D. in those days—but I wasn't fluent in speaking or nonscientific reading. After living there, it became a second language."



Dr. Donald Murphy

During his years abroad, Murphy practiced martial arts by himself. "I always carried an element of this forward," he recalls, "even in the Marines, where the martial arts training was more formal."

Upon returning to the States, Murphy took a post at the Department of Agriculture's research center in Beltsville, Md., where he was employed as a plant pathologist studying nematode diseases of plants. After 2 years there, he realized his scientific expectations weren't being met, and a period of soul searching led to his decision to follow up a long-term interest he had in science administration.

"I applied for the GA program, which I joined in 1967, and have been here ever since."

Murphy developed a strong interest in aging research during his GA year and, upon graduating, joined NICHD's Adult Development and Aging Branch, one of the precursors of the yet-unformed NIA. He was a health scientist administrator for about 10 years there, a period during which he was also a research associate at the Smithsonian and a fellow at Johns Hopkins School of Medicine.

"I did lab work in marine biology at the Natural History Museum, and cell biology in the department of pathology at Hopkins."

Once the National Institute on Aging was created, Murphy joined as chief of its Basic Aging Branch. "We worked on developing areas of cell and molecular biology, and the genetics of aging," he recalls.

Murphy moved next to NIDDK, where he spent another 10-year period as deputy director for administration in the Division of Digestive Diseases and Nutrition, a post that included research training and career development aspects.

"The common thread in these decade-long pieces of my career," he explains, "was my interest in underdeveloped areas of science that would not grow on their own. Aging research took a long time to catch on, as did some aspects of research on nutrition and digestive diseases.

"The challenge was to promote neglected areas of research that needed attention," said Murphy, letting a bit of the gardener in his plant pathology background seep forth.

In 1990, Murphy joined OER, the office from which he recently retired.

During his early period with NIH, Murphy had let his passion for martial arts simmer, working out strictly on his own. When he joined the nascent NIH Taekwondo Club in the late 1970's, "it was really a pleasure to get back to formal training."

Has he ever had to employ his potentially deadly martial arts training? "No. What it's really helped me do is avoid the need. But I've taught people who had to use it. They're very grateful."

True martial art, Murphy explains, "is not a sport. Beyond self-defense, it's a metaphor for life. In martial arts, and especially aikido, which is a martial art of relationships, people bring their baggage, their habits, feelings and attitudes, to the dojo, where they get worked through. Students move toward what we refer to as being centered. They develop the capacity to manage themselves calmly in the conflicts of daily life."

Murphy now finds himself "very interested in the spiritual side of martial arts," specifically, "chi-kung," (sometimes spelled qigong) which includes the study and use of chi—life force energy.

He identified a master of chi-kung named Shuren Ma who is now teaching at NIH through the NIH Aikido Club. "Mr. Ma has brought this energy side of martial arts—also known as 'empty force' martial arts—to the NIH community," Murphy enthuses.

But that enthusiasm is tempered by the realization that Western medicine does not recognize the existence of chi. Murphy is deeply aware of the precarious position he maintains, straddling the border between Eastern and Western medicine, and is absolutely convinced of the merits of both sides, which are more commonly applied in collaboration in Europe and in other parts of the world than in the United States.

Trained during the past several years in bioenergy healing, Murphy plans to practice it in retirement.

"I treat students who are injured in [martial arts] training," said Murphy, who amazed his interviewer when, studying my energy body, which he has learned to perceive through long and patient meditation, he correctly pointed out the only pain I was aware of, a

slight shoulder bruise incurred the night before during a basketball game. Informed that he had accurately detected an injury, Murphy exhibited no more surprise or exultation than if he had simply observed that the sun was shining.

"The sensei (teacher) I had in high school treated us if we were injured in the dojo. I've been able to recapture that for myself and for the club now," says Murphy, who intends to set up several part-time clinics to apply bioenergy healing. "I want to pursue my own training and do some clinical work. I also want to help foster research on energy medicine—the research need here is tremendous."

Talk about your underdeveloped fields of research that need nurturing!

"I'd also like to do some writing," he continues. "I'm aware of many remarkable experiences people have had in the realm of energy medicine, and I feel those experiences should be communicated."

With that, the interview took off into some deep and interesting space, but if you want to know more, get in touch with Murphy. He pledges to meet regularly with his GAs and to keep in touch with his many friends and students at NIH.

"I'm just 2 miles up the road, so I'll be seeing and talking with and supporting people." ❑

1994 Falk Memorial Lecture Focuses on Breast Cancer

Although breast cancer still represents one-third of all cases of cancer in women and affects, over a lifetime, 1 out of 9 or 10 women in the United States, the patterns of causation and some means of preventing the disease are becoming clearer, said Dr. Barbara S. Hulka, who delivered the 1994 Hans L. Falk Memorial Lecture at NIEHS recently. She was the tenth lecturer in the annual series named for NIEHS' first scientific director.

Dr. Barbara S. Hulka

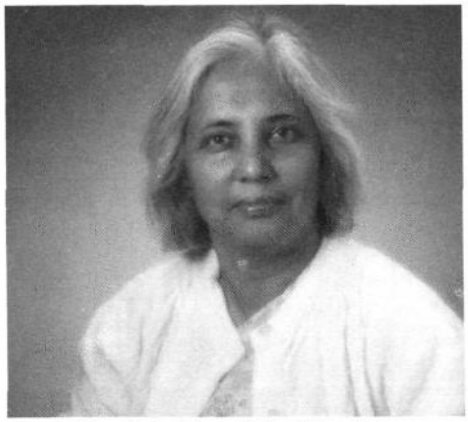
The internationally recognized epidemiologist reviewed in detail the many risk factors associated with breast cancer, some familiar from media reports and others less well-known. She then reviewed possible strategies for preventing the disease altogether, even before the benefits of mammography and early detection come into play.

Rates of breast cancer increase dramatically with age, Hulka pointed out, with only 20 percent occurring before age 50, and the rates are increased in women with family members who have had the disease, especially when those family members are young women. Geography makes a marked difference in incidence, with lowest rates in Asia and Africa and highest rates in several Western nations such as the United Kingdom and the U.S. Women with higher educational and professional levels have higher rates, perhaps because of later childbearing patterns among these women. Early childbearing and longer duration breast feeding decrease rates, as do later commencement of menstruation and earlier menopause.

Other risk factors include alcohol consumption, cigarette smoking, dietary fat, oral contraception use among women diagnosed before age 45, and estrogen replacement therapy. Controversial risk factors include exposures such as organochlorine pesticides (DDT/DDE and PCBs), electromagnetic fields, byproducts of charbroiling food (heterocyclic amines), phytoestrogens from soy products, and breast implants.

At least some of the risks also suggest means of prevention, for example in simple lifestyle choices. Women have some control of their alcohol consumption and smoking habits. Physical exercise at all ages and weight reduction in postmenopausal women are likely to be beneficial, and for new mothers, long duration breast feeding (6 months to a year or more) has potential benefits, Hulka pointed out.

Other preventive strategies being studied include a clinical trial of the drug tamoxifen, and a randomized clinical trial of dietary modification, including calorie and fat reduction, and increased fruits, vegetables and grains, among some 60,000 women volunteers. Other studies are looking at the role of micronutrients including retinoids and caratenoids, and antioxidants in decreasing risk.—**Thomas Hawkins** ❑



Dr. Chhanda L. Ganguly has joined the Division of Research Grants as a scientific review administrator (SRA) for the biochemistry study section. She was formerly an SRA at NCRR and a senior staff fellow at NHLBI. Prior to joining NIH, she was an assistant professor in the department of biochemistry and nutrition at the University of Puerto Rico Medical Sciences Campus, San Juan. Ganguly earned her Ph.D. in biochemistry from the University of Tennessee, Memphis.

NIH Police Take Medals In Olympic Competition

The 1994 National Police Olympics were held at the University of Alabama. The NIH Police were represented by Sgt. Harold Miller and Cpl. Edward Landicho. Both came home multimedal winners, competing against police officers from around the world.

Miller competed in the high-powered rifle "Palma" match, which consists of 800-, 900- and 1,000-yard distances. He won an individual bronze medal. Miller also participated in a team event with officers from Texas, North Carolina and Virginia. The team—"Pot Luck"— won a gold medal in this event.

NIH police officers Sgt. Harold Miller (l) and Cpl. Edward Landicho brought home a total of eight medals from the 1994 National Police Olympics held at the University of Alabama.

Landicho participated in the swimming competition with more than 300 fellow police competitors. He swam the 50-yard breaststroke and backstroke events, as well as the 100-yard individual medley, the 400-yard freestyle, and the 200-yard individual medley and 200-yard freestyle relays. The relay teams included officers from the Washington, D.C., metropolitan area: a Maryland state trooper, a Uniformed Secret Service officer, a patrol officer from the Fairfax police department and Landicho.

Landicho won three bronze medals for the 50-yard breaststroke, the 50-yard backstroke and the 100-yard individual medley. He won a silver medal in the 400-yard freestyle. In the relays, Landicho's team won a gold medal in the 200-yard individual medley relay and a silver medal in the 200-yard freestyle relay.

Both officers are now training for the 1996 International Police Olympics that will be held in Salt Lake City. ❑

Hispanic Employment Recruitment Efforts Flourish Under OEO

NIH Hispanic Employment Program Manager John Medina, III, recently attended the Hispanic Enterprise 6th annual federal government job fair held at the San Juan Convention Center in Puerto Rico. The president of the enterprise estimated that during the 2-day session, 15 federal agencies met 4,500 candidates. Medina collected 204 mostly science-oriented resumes and SF-171's that the Office of Equal Opportunity is making available to ICD personnel officers currently advertising nonstatus positions.

While in Puerto Rico and at the invitation of Norman Maldonado, president of the University of Puerto Rico, Medina conducted student recruitment workshops at the Cayey and Mayaguez campuses as well as the School of Medicine in Rio Piedras. He targeted the honors programs consisting of students with grade point averages of 3.5 and above. More than 200 student applications were distributed at the well-attended workshops.

Medina also attended the 14th annual conference of the National Puerto Rican

John Medina, III, (r) manager of NIH's Hispanic Emploment Program, attended the Hispanic Enterprise 6th annual federal government job fair in Puerto Rico and met with (from l) Jorge Sanchez, chancellor of the University of Puerto Rico (UPR)-Medical Sciences Campus; Jose L. Monserrate, chancellor of the UPR-Cayey campus; and Norman Maldonado, UPR president.

Coalition, Inc. (NPRC) titled, "Visions and Tools for Tomorrow's Leadership," which addressed strategies to help conference participants plan for the future. The conference was held in Washington, D.C., and some 550 Puerto Rican leaders from the nonprofit, education, corporate, and government sectors participated. The NPRC conference included workshops and panel discussions on topics such as "Effective National and Local Advocacy Strategies," "Strategies and Resources for Community Economic Development," "Effective Employment/Training Programs," and "Puerto Rican Mobility and the HIV/AIDS Crisis." The conference theme and workshops reflected NPRC's determination to deal with the role Puerto Ricans will be playing as Hispanics and American citizens in the coming years. By the year 2000, it is predicted there will be nearly 8 million Puerto Ricans in the United States—3.6

NIH Hispanic employee recruitment discussions were also held between National Puerto Rican Coalition, Inc. President Manual Mirabol (l) and NIH's Medina.

million on the U.S. mainland and 4 million on the island of Puerto Rico. According to the U.S. Census Bureau's projections, the Hispanic population could rise from 24 million in 1992 to 31 million by the year 2,000, 59 million by 2030, and 81 million by 2050 or one-fourth of the total U.S. population. The NPRC's 1994 conference was convened to discuss these new realities and develop strategies for greater empowerment of the Puerto Rican community.

The immediate benefit to NIH is that these recruitment efforts have produced qualified Hispanic candidates, student recruits and more than 150 contacts throughout the Northeast and Puerto Rico. Information on these candidates has been distributed to ICD personnel officers by OEO. NIH, through OEO and the Hispanic Employment Program, is continuing to improve the representation of Hispanics in its work force, and to establish long-term working relationships with Hispanic leaders, organizations and educational institutions. For more information, contact Medina, 6-9281. ❑

NIH's north maintenance engineering unit recently crafted and donated a wooden hobby horse to residents of the Children's Inn. Shown above with toy horse "Nancy" (she was named after maintenance) are (from l) Jon Stevens, NMEU carpenter; Robert Gray, inn executive director; Margo Bradford, inn operations manager; and William Monath, NMEU head.

Santa's Helpers Thanked

The folks at the Children's Inn at NIH were grateful for the recent appearance of Santa Claus and some of his helpers, who arrived before Christmas on a fire engine, sirens blaring, bearing sacks of gifts.

The visitors from the North Pole were actually a group of NIH Police officers and members of the NIH Fire Department who belong to the Fraternal Order of Police and the International Association of Firemen, respectively.

The officers and firemen had conducted a preholiday drive to collect toys for pediatric patients at NIH, some of whom reside at the inn and others of whom stay on several units in the Clinical Center. Collection bins for toys located in Bldgs. 31 and 10 netted some 200 gifts, along with more than $400, said Ofc. Bradley Fitzgerald, who helped organize the effort.

"People were very generous, all the way around," he said.

"Your time and efforts made the holidays very special for kids who couldn't be at home," said Margo Bradford, inn operations manager.

NIH fire fighters hosted three Santa Nights at the inn, and purchased a Santa costume for reuse each holiday season; Fireman Sumpter M. Embrey filled the Santa role this year.

Bradford said there were plenty of presents to go around, and thanked all NIH'ers who contributed the gifts, which ranged from teddy bears and dolls to Teenage Mutant Ninja Turtles.

Fitzgerald said that extra funds collected during the Toy Drive will go to the recreation therapy section in the Clinical Center, which will use the money to purchase birthday presents for inpatients throughout the year. ❑

Award Nominations Sought

The NIH Asian/Pacific Islander American advisory committee (APIAAC) seeks nominations for its 1995 annual outstanding achievement awards. Two awards each in the following three categories are given: category I—for achievement in advancing ICD EEO goals; category II—for achievement in the scientific field and/or administrative work; and category III—for achievement in advancing NIH's EEO goals. Nominees are reviewed for the extent of participation and accomplishment in the respective categories. Recipients will be honored during the evening program of the Asian/Pacific Islander Americans Heritage Month celebration in May.

Nominations should be in the form of a letter of recommendation stating the nominee's accomplishments. Nominations should be sent to the chair of APIAAC's education and awards subcommittee, Dr. Rita Liu, OEPR/NIDA, Rm. 10-42, Parklawn Bldg., 5600 Fisher's Ln., Rockville, MD 20857. The closing date for nominations is Mar. 2. Recipients will be notified in mid-April. ❑

TRAINING TIPS

The Division of Workforce Development, OHRM, offers the following courses:

Courses and Programs	*Starting Dates*
Management and Supervisory, 6-6211	
Managing Conflict in the Workplace	2/22
Interacting with Difficult Employees	2/23
Congressional Operations Workshop	3/13
Introduction to Supervision	3/20
Practical Approaches to Stress	3/28
Special Courses, 6-6211	
NIH Retirement Seminar	3/8, 4/19
Privacy Act Seminar	3/23
Practical Approaches to Stress	3/28
Administrative Systems, 6-6211	
Delegated Acquisition Training Program	3/6
Domestic Travel	3/1
Introduction to NIH Property Management	3/20
Administrative and Skills Development, 6-6211	
Proofreading Skills	3/14
How to Write & Publish Scientific Papers	3/2
Medical Terminology	3/13
Personal Computing, 6-6211	
Welcome to Macintosh	3/1
Advanced Macintosh Techniques	3/23
Introduction to Pagemaker	4/13
Kaleidagraph 3.0	4/18
Intro to Microsoft Word 5.1	3/13
Disaster Recovery & Data Security	3/7
Excel 4.0 for Windows	2/21
Intro to Windows	3/8
Harvard Graphics 2.0 for Windows	2/24
Intro to Personal Computing for New Users	4/22
MS:Mail for Macintosh	2/27

Softball Teams, Players Needed

The NIH R&W Men's Softball League is looking for additional teams for the upcoming season. Teams consist of approximately 15 players. The softball season runs from May until August and includes both the regular season and playoffs. Games are played weekday evenings at a field close to NIH. The entry fee is approximately $150, which is about $15 per player and less than $1 per player per game. Compared to county softball leagues, this is a real bargain for a lot of fun. Current teams are also looking for individual players. Team captains or individual players should contact Frank Nice, 6-1561, for more details. ❑

Doralee Agayoff Dies; Worked 48 Years at NLM

Friends and colleagues at NLM mourn the passing of an era—Doralee Agayoff, senior reference librarian and an employee of the library for nearly five decades, died on Dec. 28, 1994, after a long illness.

Doralee Agayoff

She entered government service on Apr. 23, 1946, when she joined the staff of the Army Medical Library located in downtown Washington, D.C. In 1962, the library changed its name to NLM and relocated to its present site in Bethesda. Her 48-year career with the library was spent in the various incarnations of what is now called the collection access section.

During her NLM career, Agayoff received numerous commendations. Her astuteness in locating information and her unusual depth of knowledge of the general collection and the collection of the History of Medicine Division earned her a comparison to such fictional detective greats as "Miss Marple" and "Sherlock Holmes." An article written on her 45th anniversary with the library called her the "sleuth of the stacks."

Staff and patrons alike admired her even-handed, gentle manner as well as her experience and expert advice. A favorite place for her was the History of Medicine Division, where she would spend hours searching and identifying little known sources.

Recalling her greatest challenge on the job, she once stated, "I left my computer untouched for almost a year before I decided to give it a try, but when I did my job was never the same. It opened another world."

Since Agayoff loved children and was an enthusiastic supporter of NIH, a fund has been established in her memory at the Children's Inn. Those wishing to contribute should contact Jean Buergler at the inn, 6-5672.

NINDS's Marian Park Bids Goodbye to NIH

Marian Park, an NINDS grants management officer (GMO), recently retired, ending a 35-year career of dedicated service to NIH.

She began her career as a member of a typing pool in 1959. Six weeks later she became a clerk-typist in the NINDB (now NINDS). Since then she has held many positions in several institutes including NIGMS and NIA.

Marian Park

In 1989, she returned to NINDS as a GMO for the Divisions of Stroke and Trauma and Fundamental Neurosciences. She later became GMO for the Divisions of Demyelinating, Atrophic and Dementing Disorders and Convulsive, Developmental and Neuromuscular Disorders, the position she held at the time of her retirement. As a GMO, Park supervised management of half of the institute's extramural grants program.

She has served as an advisor to the NIH women's advisory committee, a facilitator for the Grants Associate Program, an NINDS facilitator for total quality management, and a mentor at Potomac College.

She is a member of the National Contract Management Association, the National Council of Research Administrators and the Society of Research Administrators. She has also served on numerous quality review boards for the STRIDE program and grants management specialist positions.

Park, who lived in the Bethesda/Rockville area until 1971, currently lives in her hometown, Berkeley Springs, W.Va., and has commuted more than 200 miles a day to work for 23 years.

Her future plans include spending more time with her family and becoming a certified real estate appraiser. ❑

FIC Sponsors Income Tax Workshops for Visiting Foreign Scientists

The Fogarty International Center's International Services and Communications Branch will sponsor "How to Complete Federal and State Annual Income Tax Returns," a series of workshops presented by Valley Tax Service for visiting foreign scientists. Workshop schedule is listed at right; session A is targeted to visiting fellows, session B is targeted to visiting associates, visiting scientists, guest researchers and special volunteers. All sessions will be held in Bldg. 31C's 6th fl. conference rooms.

Annual returns for tax year 1994 must be filed by Apr. 15 for both federal and state income taxes. Every visiting foreign scientist must file an annual income tax return even if income may be excluded from taxation under the terms of a treaty between the United States and the individual's home country. Recommended procedures for preparation of tax returns: have Form 1099, 1042S or W-2 to complete tax returns (ISCB must have individual's current mailing address to mail this form); bring tax forms (1099, 1042S or W-2) and a calculator to one of the tax workshops; be prepared to complete tax return at the workshop. Seating capacity is limited; advanced reservations not accepted.

Tax Workshop Schedule

Feb. 24	Conf. Rm. 10	Session A	10 a.m.-1 p.m.
		Session B	1-4 p.m.
Mar. 8	Conf. Rm. 6	Session B	10 a.m-1 p.m.
		Session A	1-4 p.m.
Mar. 14	Conf. Rm. 10	Session A	10 a.m.-1 p.m.
		Session B	1-4 p.m.
Mar. 20	Conf. Rm. 10	Session B	10 a.m.-1 p.m.
		Session A	1-4 p.m.
Mar. 27	Conf. Rm. 6	Session A	10 a.m.-1 p.m.
		Session B	1-4 p.m.
Apr. 3	Conf. Rm. 8	Session B	10 a.m.-1 p.m.
		Session A	1-4 p.m.

NLM To Exhibit Van Der Zee Photograph Collection

In observance of African-American History Month, the National Library of Medicine is now exhibiting a collection of photographs taken by world-famous photographer James Augustus Joseph Van Der Zee (1886-1983).

The photographs, which are on display in the library's rotunda (near the front entrance) through Feb. 27, were recently on exhibit at the Smithsonian Institution in Washington, D.C.

The collection features the most prolific period of Van Der Zee's photographic career. It features his work during the Harlem Renaissance of the 1920's through the 1940's, and includes such noted African-Americans as Marcus Garvey, Jack Johnson, and Bill "Bojangles" Robinson. Van Der Zee's "clients" included thousands of less celebrated persons from all races, whose portraits were afforded the same careful attention as those of the celebrities. His love of Harlem is captured through the lens of a resident photographer who loved it intimately as a native son.

J.A.J. Van Der Zee

The library's hours are 8:30 a.m. - 5 p.m. weekdays, except Thursdays when NLM is open until 9 p.m.; 8:30 a.m. - 12:30 p.m., Saturdays; closed Sundays. (The library will be closed on Saturday through Monday, Feb. 18-20, during President's Day holiday.) ❑

Wednesday Lectures Planned

The Wednesday Afternoon Lectures continue with a presentation on Feb. 22 at 3 p.m. in Masur Auditorium, Bldg. 10, by Dr. Richard H. Scheller, professor, department of molecular and cellular physiology, Stanford University/Howard Hughes Medical Institute. He will discuss "Membrane Trafficking in the Nerve Terminal," sponsored by the Cell Biology Interest Group.

On Mar. 1 at 3 p.m. in Masur, Dr. Johann Deisenhofer, investigator, Howard Hughes Medical Institute and Regental professor and professor in biochemistry, University of Texas Southwestern Medical Center at Dallas, will speak on, "The 3-D Structure of DNA Photolyase: How Light Repairs DNA." The lecture is sponsored by the Structural Biology Interest Group.

For information about the series, contact Hilda Madine, 4-5595.

Drawing the names of the lucky winners at the recent NIH Combined Federal Campaign raffle are (from l) Randy Schools, general manager, R&W; Jody DeOms, director of recreation and employee services, R&W; David Kerr, NIDCD executive officer; and Anne Sumner, acting chief, Administrative Management Branch, NIDCD. The winners are Dr. Arippa Ravindran, NIAAA, who won a 27-inch color TV (courtesy NIH Federal Credit Union); Dr. Robert Lagas, OD, winner of two round-trip airline tickets (courtesy USAir); and Teresa Arnold, Division of Procurement, OD, who also won two airline tickets. The CFC recognition ceremony will be held on Monday, Mar. 20 in Bldg. 1's Wilson Hall at 10 a.m.

Black History Activities To Be Held on Feb. 21, 24

In honor of Black History Month, the NIH Black employees advisory committee (BEAC) will be sponsoring several events. Among these is an original musical play by James Chapman, titled "Our Young Black Men Are Dying and Nobody Seems to Care," which will be presented on Feb. 21 in Masur Auditorium, Bldg. 10, from 9:30 to 11:30 a.m. Another event will be the Annual African American History Luncheon on Feb. 24 from 11:30 a.m. to 1:30 p.m. at the Howard University Hotel, Washington, D.C. Dr. John Chissell of Baltimore, founder and consultant of Positive Perceptions Group, will be the keynote speaker. The topic of his presentation will be "Melanin and Optimal Health." Information on purchasing luncheon tickets will be posted at various locations around NIH, or contact your BEAC representative. ❑

NIH Mail Center Misused To Send Chain Letters

The Office of Research Services has received information that chain letters have been forwarded through the NIH Mail Center in government envelopes for mailing as official mail. The misuse of government envelopes or federally funded postage for unofficial mailings is prohibited. Report the receipt of chain letters, or the misuse of government envelopes and postage, to the mail center customer services section, 6-4774. Should you receive a chain letter, retain the mailing container and its contents until disposition instructions are provided by the NIH Mail Center. Chain letters and unofficial materials discovered within the NIH mail system will be referred to NIH's Division of Security Operations for investigation. ❑

Sailing Club Open House Set, Feb. 23

"Winter's Almost Over" is the theme of this year's NIH Sailing Association annual in-town open house, to be held Thursday, Feb. 23, from 5 to 8 p.m. at the FAES House (corner of Old Georgetown Rd. and Cedar Ln.).

Members of the NIH/NOAA community are invited to come and meet sailing club members and program chairman and look at the sailing opportunities available; the sailing club maintains active chartering, training, cruising, racing, and social programs.

Application forms will be available for guests to sign up for membership and basic training, the club's popular on-the-water class taught in its five Flying Scots (19-ft. sloop-rigged centerboard daysailers, kept in slips on the Chesapeake Bay).

A $5 charge for the open house includes entrance fee, pizza and other snacks, and sodas. There will be a cash bar for beer and wine.

More information on the club is available at R&W Activity Desks. ❑