

"Still  
The Second  
Best Thing  
About Payday"

# The NIH Record

## 'At the Crossroads...'

### NIH Hosts Groundbreaking Ceremony for Natcher Bldg.

By Carla Garnett

About 5 weeks ago, Rep. William H. Natcher (D-Ky.) was taking a walk through his home district when he met an elderly man he had known for several years. As Natcher spoke, one could imagine the man bent at the waist, shuffling along with the aid of a cane and obviously in very poor health. However, Natcher said, the old man was lucid enough not only to recognize and greet his congressman, but also to offer him some sage advice.

"I'm 70 years old now," the constituent said, adopting a paternal tone, "and look at me. I'm not well. When you get to be my age I want you to take better care of yourself than I have."

The octagenarian congressman nodded, accepting this wisdom with an inner smile and engraving the encounter in his long-term memory. "I promised him I would," he said.

A fit and grinning Natcher relished retelling this story at NIH on Sept. 11, the day he turned 83 and the day ground was broken for the campus building that will bear his name and legacy.

"I have always believed that if you take care of the health of your people and educate your  
(See **NATCHER**, Page 10)

### Researchers Bank on NIGMS Cell Repository, Now Age 20

By Ann Dieffenbach

It may be a bank, but it *receives* interest from its customers—scientific interest, that is. The NIGMS Human Genetic Mutant Cell Repository, which is 20 years old in 1992, is an important resource for scientists working to understand basic genetic and cellular processes, as well as diseases in which these processes go awry.

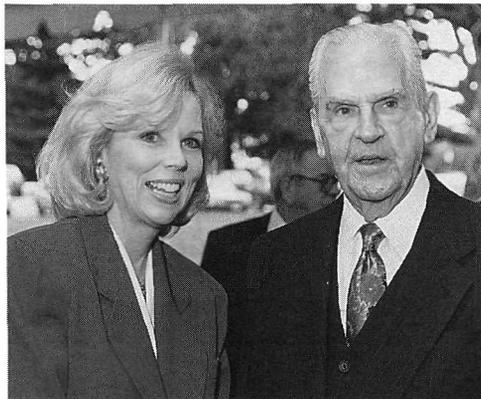
The repository provides researchers with well-characterized, uncontaminated cell lines representing genetic diseases and disorders with a genetic component. The collection also contains cells from apparently normal individuals, which can serve as experimental controls.

Using cells from the NIGMS repository, scientists have made major findings about the genes involved in a variety of diseases including Huntington's disease, cystic fibrosis, Duchenne muscular dystrophy, retinitis pigmentosa, familial hypercholesterolemia, and neurofibromatosis.

#### Filling a Need

The idea for a cell repository grew out of changes in scientific research that took place

(See **CELL BANK**, Page 6)



Rep. William H. Natcher of Kentucky shares a light moment with NIH director Dr. Bernadine Healy during the groundbreaking ceremony held Sept. 11—his 83rd birthday—for the NIH campus building that will bear his name.



Corinne Conte, widow of Rep. Silvio Conte (R-Mass.), unveils the plaque that adorns the new research facility at NIH named after her husband, a longtime champion in Congress of biomedical research. Looking on is NIH director Dr. Bernadine Healy, who remembered Rep. Conte as a vigorous defender of the American family, particularly children.

### CFC Kickoff Set for Oct. 14

The annual Combined Federal Campaign kickoff will be held on Wednesday, Oct. 14 at 11:45 a.m. in front of Bldg. 1. Fun, food and entertainment will be offered to all who attend. The NIH Health's Angels will sponsor its annual Run/Walk, t-shirts and race registrations for which are available at R&W stores. A free raffle will include such prizes as a 20-inch color TV, courtesy of GEICO, two round-trip airfares on USAir, Cineplex Odeon movie tickets, and a pair of Washington Capitals hockey tickets. See you there!

### Conte Building Dedicated Amid Fond Remembrances

By Rich McManus

He was a hearty, fun-loving, passionate, stubborn man, but this last quality proved most important for Rep. Silvio O. Conte, the late Massachusetts legislator in whose memory the recently completed Bldg. 49 was dedicated on Sept. 17.

For the better part of two decades, Conte struggled in Congress to obtain funds for increased pediatric research at NIH. His tenacity was rewarded in 1988 when ground was broken for the Child Health and Neurosciences Building, now known as the Silvio O. Conte Bldg.

"This didn't come easy," said Rep. Joe Early (D-Mass.), a longtime friend of Conte's who spoke at the dedication. "Twelve years ago, a bill for this building was knocked out of the House by a member from Missouri, whom I won't name.

"But Corinne," he said, addressing Conte's wife, "how proud Silvio would be today. He told me this was his biggest thrill, the finest thing that ever happened to him."

Early, as devoid of pretense as the man he came to honor, reenacted for the crowd of NIH officials what he imagined Conte's reaction would be were he still alive:  
(See **CONTE**, Page 4)

### Nursing Research in Action

### NCNR's Intramural Program Moves Ahead in Third Year

By June Wyman

One day each month, Ron Wilson (an alias) flies from his home in Orlando to the NIH Clinical Center and pumps iron before an audience. As the audience watches intently and records his time, Wilson gets up from a prone position, walks 30 feet, lifts weights, and climbs stairs.

Wilson is being studied by nurse researchers on the intramural staff of the National Center for Nursing Research. The main purpose of his trips is to receive AZT treatment for HIV infection as part of an NIAID clinical trial. But he also participates in an NCNR study of how muscle weakness affects the lives of HIV-infected patients.

Now in its third year, NCNR's intramural program is pioneering a kind of research that focuses more on patients' problems and experiences than on their disease or its treatment.

"We'll often study something that's a problem for the patient, like fatigue or night sweats," explained Dr. Mary E. Ropka, director of the program. "The goal is to make patients' lives  
(See **NURSING RESEARCH**, Page 8)

## NCI's PDQ Has New Editor

The NCI recently announced that Dr. Daniel G. Haller, program leader for clinical oncology research at the University of Pennsylvania Cancer Center, Philadelphia, is the new editor-in-chief of the PDQ editorial board. A member of the board for more than 3 years, he believes that "PDQ represents an unparalleled opportunity to access timely and important cancer information." He succeeds Dr. Robert C. Young, president of Fox Chase Cancer Center in Philadelphia, who had served 8 years on the editorial board, 5 of them as editor-in-chief.

PDQ is a database that contains information about state-of-the-art cancer treatment, ongoing clinical trials, as well as closed clinical trials, and a directory of oncologic specialists and organizations providing cancer care in the United States. The editorial board meets monthly to review and update the database. The board was established in 1984 with Dr. Daniel Ihde, now deputy director of NCI, as the first editor-in-chief of PDQ. At present, the core board consists of 21 cancer specialists in adult cancers; it is supplemented by pediatric, early detection/prevention, and supportive care boards. A board to develop a file of investigational drugs is expected to convene later this year.

PDQ contains information on approximately

## NINDS Honors Summer Students

The National Institute of Neurological Disorders and Stroke honored 39 of the students working in the NINDS Summer Program in the Neurological Sciences at the recent 8th annual Summer Student Awards Ceremony.

The program provides an opportunity for students to participate in research involving all aspects of the brain and nervous system. Each year, the institute acknowledges students who have done exceptional work in this program. The students received letters of commendation or award packages that included a certificate, textbook and paperweight.

Recipients of the Exceptional Summer Student Award included: Jack Chen, Scott Henson, Omar Khan, Elaine Lau, Eunice Lau, Hoang Le, Dionisio Rubi, Jorge Rubi, Rachel Sherman, Joner Tomas, and Sovanrith Tun (Laboratory of Central Nervous System Studies); Meira Cohen (Neuroimmunology Branch); Wendy Davis (Epilepsy Research Branch); Penelope Kuhn (Laboratory of Viral and Molecular Pathogenesis); Wei-Han Henry Fang (Clinical Neuroscience Branch); Jeanne Steppel (Laboratory of Neural Control); and Desiree Wilson (Contracts Management Branch).

Students receiving Letters of Commendation included: Ali Al-Attar, Michael Day, Dawn Dew, Lia Haynes, Bryan Klepper, Amir Moifar, Mary Ellexson-Nino, Jonathan Pirnazar, Christian Romero, and Christopher Tyrrell (Laboratory of Central Nervous System Studies); Michelle Bishop, Catherine Palmer, and Nina Robin (Medical Neurology Branch);



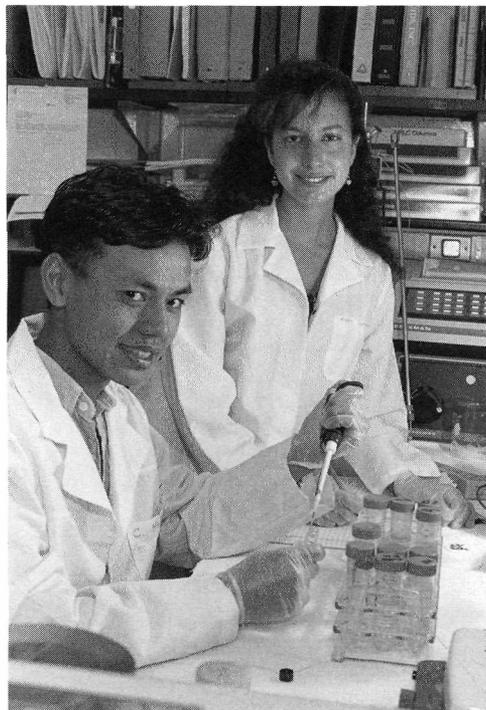
Newly appointed PDQ editor-in-chief Dr. Daniel Haller (far l) meets with former editors-in-chief Drs. Robert Young and Daniel Ihde and ICIC Director Susan Hubbard at a recent board meeting.

80 forms of cancer and can be accessed in a variety of ways by physicians and patients, as well as nurses, social workers, and medical writers. PDQ is maintained by staff at the International Cancer Information Center (ICIC), headquartered in NCI's Bloch Bldg., located at the edge of the campus on Old Georgetown Rd.

Widely accessible, PDQ is available through a personal computer with a modem and through CD-ROM. For those who do not have access to a computer, PDQ information is also

available through the CancerFax computer, 402-5874. Information from the database can also be accessed through CancerNet, ICIC's newest service, using the electronic mail services of Internet or BITNET. Internet users may send a message to—[cancernet@icicb.nci.nih.gov](mailto:cancernet@icicb.nci.nih.gov)—with a blank subject line and the word HELP in the body of the mail message. Within 10 minutes, CancerNet will send a return mail message containing instructions for accessing PDQ information.

For general information about PDQ or how to use it, call the Cancer Information Service, 1-800-4-CANCER, CancerFax at 301-402-5874, or ICIC at 496-7403. □



NINDS awardees Rachel Sherman and Sovanrith Tun worked on illnesses of the nervous system.

Shingyee Huang (Experimental Therapeutics Branch); Lester Hui (Laboratory of Neurochemistry); Maurice Johnson (Grants Management Branch); Dung Le (Epilepsy Research Branch); Eric Bradburn and Jennifer Porter (Neuroimmunology Branch); Gerardo Gonzalez (Neuroimaging Branch); and Hung Tran and Makoto Yoshino (Laboratory of Neurophysiology). □

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## Accessibility Is Theme of Disability Awareness Program

Baltimore TV consumer reporter Jayne Miller, and a leading spokesman for people with disabilities, Dr. Susan M. Daniels, will headline NIH's 10th annual Disability Employment Awareness Program on Thursday, Oct. 15, from 11:30 a.m. to 1:30 p.m., Wilson Hall, Bldg. 1.

Miller is the consumer advocate reporter for "Eleven On Your Side" on WBAL-TV Channel 11 in Baltimore. Her investigative reporting has earned many honors including the National Headliner and Associated Press awards for reporting on the handling of child abuse cases, and United Press International and Society of Professional Journalist awards for her stories on emergency preparedness at Baltimore-Washington International Airport.

Daniels, who has a Ph.D. in educational psychology with an emphasis in disability studies, is associate commissioner of the HHS Administration on Developmental Disabilities. She served on special assignment to the President's committee on employment of people with disabilities during the final legislative phases leading to passage of the Americans

with Disability Act of 1990. She has extensive experience designing, implementing and managing programs benefiting citizens with disabilities.

Jorge Urrutia, director of the Division of Engineering Services at NIH, addresses this year's theme, "Accessibility: The Key to Opportunity," in his opening remarks, and Diane Armstrong, director of the Office of Equal Opportunity, presents special awards to NIH employees and others in the community who have contributed greatly to furthering employment and accessibility for persons with disabilities.

Dr. Ronald Geller of NHLBI, who chairs the NIH advisory committee for employees with disabilities, will report on recent progress and future efforts to meet the needs of disabled workers at NIH.

All NIH employees are invited to attend the program and reception that immediately follows. Sign language interpretation will be provided. For reasonable accommodation needs, call 496-2906. □

## Eggers Continues NCHGR Lectures

The NCHGR's 1992-93 Human Genome Lecture Series continues this month with a presentation by Dr. Mitchell Eggers on "Genosensors: Microfabricated Devices for Automated DNA Sequence Analysis," on Oct. 15 in Lipsett Amphitheater, Bldg. 10, at noon.

Eggers is currently head of the bioelectronics division at the Houston Advanced Research Center, which is developing technologies that will aid in DNA sequencing. He has also been associated with Rice University as an adjunct associate professor since 1991. He received his undergraduate degree in electronic engineering from Texas A&M University in 1980, his M.S. degree in 1981 and Ph.D. degree in 1984 from the same institution.

From 1985 to 1990, Eggers was on the staff of Massachusetts Institute of Technology's Lincoln Laboratory, where he founded and directed a multidisciplinary basic research project for investigating the properties emergent from networks of brain cells grown, differentiated, and synaptically interconnected on fabricated biochips. His lecture will include discussion of the development of electronic devices that link biological phenomena to electronics, specifically for biotechnology and biomedical applications such as DNA sequencing. For more information or to schedule an appointment with Eggers, contact Dr. Carol Dahl, 402-0838. □

## NAEP Sponsors First National Asthma Management Conference

Asthma has been increasing in frequency and severity nationwide and worldwide. Yet, with proper management, most asthma patients can lead normal lives.

On Oct. 11-13, the National Asthma Education Program's (NAEP) coordinating committee will host the "First National Conference on Asthma Management" at the Hyatt Regency Crystal City in Arlington, Va.

The NAEP is coordinated by the National Heart, Lung, and Blood Institute. Its coordinating committee brings together 32 voluntary health, professional, and medical organizations from the public and private sectors. The landmark event represents the first time that so diverse a group has converged to grapple solely with the problems of asthma management.

The meeting's agenda of plenary sessions, roundtables, and workshops will cover such topics as: the latest findings on the disease's inflammatory basis; epidemiological trends; clinical updates; peak flow monitoring; health care barriers; child and adult patient education; allergens; pharmacology; cultural influences; management in schools; immunotherapy; high risk patients; asthma and sports; and emergency care.

For more information, phone (301) 951-3275 or fax (301) 951-3269. □

## Bethesda Businesses Unite in Fundraiser To Help Children's Inn

The business community of Bethesda has combined forces for the second year in a row to offer "Come Back to Bethesda," a day-long festival on Saturday, Oct. 3 benefiting the Children's Inn at NIH.

Last year's function, hosted by Chevy Chase Chevyland, brought \$10,000 to the inn. That day included a hot rod show, a special showing of the film *American Graffiti* and an evening dance.

On Saturday, Oct. 3, Come Back to Bethesda '92 will again feature the free exhibit of custom cars, street rods and trucks at the Chevyland show room and lots, a showing of *American Graffiti* (at Bethesda Cinema and Drafthouse) and a fifties-style sock hop from 7 to 11 p.m. featuring the Legendary Orioles.

"We hope to raise at least \$23,000 for the Children's Inn with this year's event," said Dave Dabney, manager of Chevyland. "The business community in Bethesda has again united for a true celebration of nostalgia, and to benefit the children at NIH."

Host sponsors, who have contributed gifts of \$2,000, include Chevyland, GEICO, Hot Shoppes, Bell Atlantic Mobile Systems, and the Bethesda Urban District. Seventeen other corporate sponsors, including the NIH Federal Credit Union, have given \$500 each. Dabney hopes the sock hop will generate another \$7,000.

Raffle prizes at the event include a deluxe getaway for two from J&D Travel Associates, Inc., and tickets to Redskins, Bullets and Capitals games.

Merck & Co. Inc., which donated the money that built the inn, has offered to match, dollar

for dollar, any proceeds above \$10,000 generated by the event, said inn spokesman Judy Immerman.

Acting as emcees for Come Back to Bethesda '92 will be radio personalities from XTRA 104.1, whose reporters have interviewed inn Executive Director Robert Gray, and Randy Schools, general manager of R&W.

"Last year we were trying to raise awareness of the inn, and raise funds," said Dabney. "This year we're able to raise more money. We hope to do even better next year."

For information about the fundraiser, call Dabney, 657-4000. □

### Children's Inn Tours Available

Tours of the Children's Inn at NIH are now available to the public on the second Wednesday of each month, from 11:30 a.m. to 1 p.m. Both private quarters and community areas of the inn are part of the tour.

From its state-of-the-art playground and garden to its homelike interior, the inn provides a nurturing environment for children being treated for critical illnesses at NIH and their families. The 2-year-old facility has two double kitchens and dining areas, living room, game room, play room, computer room, library, quiet room, and laundry room, and can accommodate up to 36 families. The inn's purpose is to keep a family together in the midst of medical crisis, reduce stress, and promote self-help and mutual support.

A volunteer will be on hand to answer questions during tours. To schedule one call Judy Immerman, 496-5672.

**CONTE**  
(Continued from Page 1)

"He'd be on the phone right away to his best friend, (former Speaker of the House) Tip O'Neill. 'Tip,' he'd say, 'You should see it. They're dedicating a \$72 million research facility to me and it's the most unique building in the world. Tip, it's the best, the NIH director Dr. Healy told me so.'"

Conte's greatest pride was the NIH, according to Early. "He called NIH the finest research facility in the world. He'd be the first to say it's not the buildings that make it so great, but the people you put inside those buildings... We have to continue to give NIH the tools it needs to do the job."

Remembering Conte as a lively hunting companion and devout Catholic was his friend the Rev. William George of Georgetown University, who recounted instances of "Sil's" joy in living.

"When Sil was being treated here at NIH and knew he was dying, he never lost his passion for work or for hunting. Even when his blood



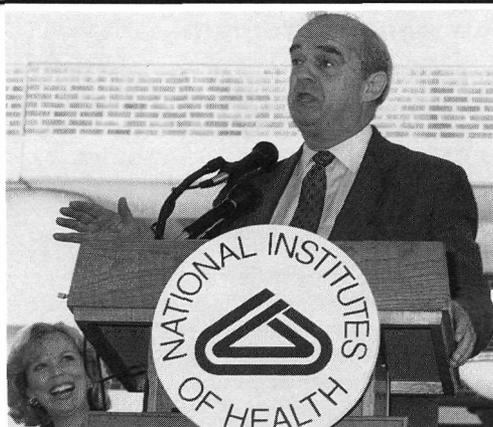
*Corinne Conte addresses the audience on Sept. 17. She is still discovering many of the good works her husband accomplished on behalf of America's medical research effort, she said.*

counts were very low and he was tired, he continued to work, thanks to the help of his crackerjack staff."

George said Conte once came to the Clinical Center in full hunting regalia to get a refill on a pump he wore that delivered chemotherapy.

"We were going to shoot quail and pheasant, and he comes striding in with this big orange hunting whistle around his neck, for calling the dogs out in the field. One of the nurses asked what the whistle was for and requested a demonstration. Well, Sil didn't just give a quiet toot, he let out a full blast."

George also recalled that when Conte would leave the CC, named after Sen. Warren Grant Magnuson, he would point to the modest plaque in the lobby bearing the former Washington state lawmaker's name and say, "Just be sure the sign on my building is bigger than that."



*Rep. Joe Early (D-Mass.) was a friend of Conte's and remembered the enthusiasm his colleague always had about NIH research. Having an NIH building named after him was Conte's greatest professional pride, he related.*

"You won't be haunted by Sil," offered George. "The sign you installed is big enough for his ego."

George said the key to Conte's effectiveness in Congress was his knowledge of strategy: "He knew how Congress worked and he loved it. He had tremendous respect for his colleagues, even his enemies. He did wonderful things to bring humor to the floor (of Congress)."

George concluded by remembering Conte as fundamentally "a very simple, sincere man when it came to piety. Underneath it all, he was a simple man of faith. He could be difficult sometimes, but he was a really fun man."

Corinne Conte, who attended with two of their daughters, remembered that her husband "loved life, and he loved you at NIH, and all the people. To this day, I'm finding out so many things Silvio was involved with that I never knew about—things that are good for people, especially those in need of medical care."

"He always said NIH was the jewel of the medical profession. Today I can say that one of the stars in NIH's crown is the fact that this building is named for him. Another star in the crown is the Decade of the Brain, which he supported so strongly. I know there will be so



*The Rev. William George of Georgetown University was a friend and hunting partner of Conte's. Here he gestures toward the sign out front of the new building, which Conte insisted be large enough that people recognize it.*

**Seven Institutes To Share Space**

Seven research institutes at NIH will occupy space in the Silvio O. Conte Bldg., also known as Bldg. 49. They are NICHD, NIMH, NINDS, NIAAA, NEI, NIDR and NIA. The following units within these institutes will locate there:

**NICHD**—Laboratory of Developmental Neurobiology, Laboratory of Cellular and Molecular Neurophysiology, Endocrinology and Reproduction Research Branch, Section on Growth Factors.

**NIMH**—Division of Intramural Research Programs, Laboratory of Neuropsychology, Clinical Neuroscience Branch, Veterinary Medicine and Resources Branch.

**NINDS**—Center for Neurogenetics, Central Nervous System Implantation Program, Laboratory of Molecular and Cellular Neurobiology, Laboratory of Neural Control, Neural Systems Section.

**NIAAA**—Laboratory of Molecular and Cellular Neurobiology, Laboratory of Neurogenetics, Laboratory of Membrane Biochemistry and Biophysics, part of Section on Neurochemistry and Neuroendocrinology.

**NEI**—Veterinary Research and Resources Section (NEI is lead NIH institute for managing Bldg. 49's state-of-the-art animal facility), Laboratory of Sensorimotor Research.

**NIDR**—Neurobiology and Anesthesiology Branch.

**NIA**—Section on Cerebral Physiology and Metabolism of the Laboratory of Neurosciences.

Photos: John Crawford



*Enjoying the reception following the building dedication were NICHD director Dr. Duane Alexander and Rep. Connie Morella (R-Md.). NICHD will be among seven institutes sharing space in Bldg. 49, which will be the site of research on child health and the neurosciences.*

many good things that will come forth from the doctors' research here."

"This building will stand as a perfect testament to his life," said NIH director Dr. Bernadine Healy, who remembered in Silvio Conte "a legacy of love and service that will forever enrich this country. He brought the passion of his Italian heritage to his concern for

the health of America's children...Silvio Conte's family was America."

Healy gave details of Conte's biography—his first career as a machinist, his Navy service as a Seabee, and highlights of his legislative tenure. She concluded with advice to the 550 workers from seven institutes who will occupy the 8-story building, beginning late this year: "Make haste carefully, but make haste—Silvio is watching."

Following the remarks, guests, who had been entertained by performances of the U.S. Marine Band, watched as Mrs. Conte unveiled a sign and plaque, cut a ribbon, then entered the new facility for a reception and tours. □

## NIEHS Centers Program Has 'New Directions'

NIEHS is making changes in its Centers Program to integrate basic research programs with the institute's new directions in public health and the environment. The changes are being implemented through new guidelines that will strengthen basic research components as well as bring new activities of outreach and education into the centers for the first time.

The mission of the institute—to understand the contribution to human diseases of chemicals and physical factors in the environment—cuts across diseases of interest to many other NIH institutes and therefore requires collaborations among both staff and grantees. This is particularly evident in the Centers Program, directed by Dr. Christopher Schonwalder of the Division of Extramural Research and Training, which provides support to bring together the interdisciplinary research activities needed to study problems of environmental exposure and disease.

The new guidelines require a minimum of \$1 million in existing peer-reviewed research support related to environmental health sciences. Most, but not all, of this research would be supported by NIEHS through other mechanisms.

The center grant provides support for various facilities and will also provide funds to develop community outreach and education research, to explore new research directions, and to respond immediately to the public health implications of environmental incidents such as spills, leaks, or other situations causing public concern.

NIEHS anticipates that these new programs will promote individual actions to avoid unhealthy exposures to environmental agents or reduce the potential for disease and disorders resulting from the unavoidable exposures inherent in today's society, such as air pollutants. The centers will also be a resource for dealing with local environmental concerns by providing expertise on current issues in environmental health and educational outreach at the local level. Currently the institute funds 13 Environmental Health Sciences Centers throughout the country. □

## Avoid the Flu—Get Vaccinated This Fall at NIH

Although fall has just begun, it is time to prepare for the upcoming flu season. Now is the time to consider vaccination to protect yourself from influenza, because the vaccine takes a few weeks to produce immunity.

The Occupational Medical Service (OMS) will provide free flu shots to NIH employees between Oct. 6 and Nov. 13. Even if you have been vaccinated in the past, previous influenza vaccination does not provide protection against this year's influenza strains. Annual vaccinations are needed.

Vaccination may prevent or reduce the severity of infection with influenza and also decreases the opportunities for spread of this virus among patients, visitors and colleagues. The noninfectious vaccine will not cause influenza. *Individuals who are allergic to eggs and egg products should not receive the vaccine.* The vaccine is considered safe for pregnant women, but pregnant women in their first trimester may wish to consult their physician before immunization.

Immunization is even a higher priority for some individuals:

- Health-care workers and support staff, especially those who have contact with patients and other employees who routinely visit the Clinical Center;

- Persons age 65 or older;

- Persons with chronic cardiovascular, pulmonary or metabolic disorders, kidney disease, anemia;

- Persons who are immunocompromised.

In order to accommodate employees in a more time-efficient manner, OMS will be implementing a new schedule based on the first letter of your last name and extending the flu clinics by 2 weeks. See the schedule for a convenient time and place; no appointments are needed for these clinics. If for some reason you cannot make the assigned day, you can attend any other clinic at OMS to receive your vaccine. Additional information can be obtained from the Occupational Medical Service (496-4411) or the Hospital Epidemiology Service (496-2209). Employees will be asked to complete a short questionnaire to help OMS/HES improve the response of employees in receiving the influenza vaccine.

The CC administration strongly encourages all NIH workers to obtain the vaccine.

## Immunosuppression Is Topic of NIAID Symposium, Oct. 23

An NIAID symposium on immunosuppression in the treatment of disease will be held on Friday, Oct. 23 from 8:30 a.m. to 5 p.m. in Masur Auditorium, Bldg. 10. It will discuss the state of the art in the use of immunosuppressive agents in the treatment of immunologi-

### Influenza Immunization Schedule

Bldg. 10, Clinic 6: Rm. 6C306	Oct. 6.-Nov. 13	
A-B-C	Oct. 6	7:30-11 a.m., 1-2 p.m.
D-E-F	Oct. 8 Oct. 27	7:30-11 a.m., 1-3 p.m. 7:30-11 a.m., 1-2 p.m.
G-H-I	Oct. 28	7:30-11 a.m., 1-3 p.m.
J-K-L	Oct. 13	7:30-11 a.m., 1-2 p.m.
M-N-O	Oct. 14 Nov. 3	7:30-11 a.m., 1-3 p.m. 7:30-11 a.m., 1-2 p.m.
P-Q-R	Nov. 5	7:30-11 a.m., 1-3 p.m.
S-T-U	Oct. 20	7:30-11 a.m., 1-2 p.m.
V to Z	Oct. 22 Nov. 10	7:30-11 a.m., 1-3 p.m. 7:30-11 a.m., 1-2 p.m.
Make-Up Day, Nov. 13	8-11 a.m., 1-3 p.m.	

Evening Clinics will be held on Mondays and Wednesdays, 6-8 on a first-come, first-served basis.

Bldg. 13, Rm. G-904		
A-B-C	Oct. 23	8-11 a.m., 1-3 p.m.
G-H-I	Oct. 9	8-11 a.m., 1-3 p.m.
J-K-L	Oct. 30	8-11 a.m., 1-3 p.m.
P-Q-R	Oct. 16	8-11 a.m., 1-3 p.m.
S-T-U	Nov. 6	8-11 a.m., 1-3 p.m.

Off-site facilities listed below, first-come, first-served basis:

EPN, Rm. 103	Oct. 15	8:30-11 a.m.
	Oct. 29	8:30-11 a.m.
	Nov. 12	8:30-11 a.m.

Federal Bldg., Rm. 10-B08	Oct. 15	1-3 p.m.
	Oct. 29	1-3 p.m.

Poolesville, Conf. Rms.:	Bldg. 102	Oct. 21	9-11:30 a.m.
	Bldg. 110	Oct. 21	1-3 p.m.

Westwood Bldg., Rm. 11	Oct. 19	8:30-11:30 a.m.
	Oct. 26	1-3 p.m.
	Nov. 2	1-3 p.m.

cally mediated diseases and transplantation. Cosponsoring the CME-accredited event is the American Academy of Allergy and Immunology. Registration deadline is Sept. 30. For information, contact Dr. Howard Dickler, 496-7104. □

## CELL BANK

(Continued from Page 1)

during the 1950's and 1960's. Scientists were doing more research involving cultured cells, but this required them to locate cell donors—no easy task if a study involved a rare disorder. Often, researchers obtained cell samples from other scientists, but there was no guarantee that shared samples were free of contamination, or even that they were identified correctly. Scientists who used cultured cells during the years before the repository was created tell rueful stories of puzzling findings—and wasted time—attributed to contaminated or misidentified cells.

Dr. DeWitt Stetten, Jr., who was NIGMS director from 1970 to 1974, realized that a response to this situation would be to establish a collection of cell cultures for use by any qualified scientist. In 1972, NIGMS awarded a contract to the Coriell Institute for Medical Research in Camden, N.J., to establish the cell repository. Over the years, other PHS components, including NINDS, NIMH, NIDDK, and NIAMS, have contributed to the support of special repository collections related to their research interests.

During its first year of operation, the repository established 139 cell lines and shipped 144 cultures to researchers. Since then, it has processed more than 10,000 submitted specimens and provided more than 58,000 cell cultures to investigators. The collection now includes 5,270 cell cultures, representing 364 well-defined genetic disorders. There is a modest charge for each cell line requested.

The collection contains cells with every known type of chromosomal abnormality, including deletions, additions, inversions, translocations, and "fragile sites" where breaks are likely to occur. There are cells with identified biochemical defects, such as those from people with Tay-Sachs disease, and cells in which the biochemical defect is still unknown, as in Huntington's disease.

Recently, the repository began offering DNA purified from selected cell lines. According to repository director Dr. Richard A. Mulivor, providing DNA "saves researchers the time, equipment, and expense required to perform the extraction themselves." The repository currently has DNA from 275 cell lines available, and has already sent out 4,500 samples to investigators.

The repository also has cell cultures from extended family pedigrees, which are valuable in genetic linkage studies, and a small collection of cell cultures derived from diverse human populations such as Amerindians, Melanesians, and Pygmies.

Among the most commonly requested cell lines are those with chromosomal abnormalities, those from the Utah and Amish pedigrees, and those from individuals with xeroderma pigmentosum, cystic fibrosis, ataxia-telangiectasia, and Fragile X syndrome.



*The staff of the Coriell Institute for Medical Research includes (from l) founder Dr. Lewis L. Coriell; Selena Dwight, research associate who has trained and supervised numerous cell culture technicians; recently retired director Dr. Arthur E. Greene; and current director Dr. Richard A. Mulivor.*

### Establishing Cell Lines

It takes considerable expertise and time to establish a cell line. Cultures must be carefully characterized, able to grow, and free of contamination.

In the early years of the repository, most of the cells stored were fibroblasts, which are obtained by taking a small sliver of skin from a donor's forearm. Today, a substantial portion of the cell lines are derived from white blood cells. Other cultures are grown from cells in chorionic villus or amniotic fluid samples.

Once at the repository, the sample is placed in culture flasks containing growth medium and, as needed, other factors that stimulate growth. After 3 to 4 weeks in an incubator, the multiplying cells are transferred to additional flasks to continue their growth. Meanwhile, the cells go through dozens of tests to make sure that they are not contaminated by microorganisms, including bacteria, yeast, fungi, and mycoplasma. About 2 months later, when enough cells have been accumulated, the cells are harvested, apportioned into ampules, and stored in liquid nitrogen at a temperature of -196 degrees Centigrade until they are requested for research. When properly thawed, these living cells resume their functions and begin to multiply again.

"The cell lines, which have been referred to as our 'frozen assets,' are not a Noah's Ark of genetic diseases or museum specimens; they are a vital national resource," says Mulivor. "The staff of the repository is proud of its contributions in the application of cell culture techniques to the detailed study of human genetics, which has led to a wealth of information about metabolic disorders and gene abnormalities."

### Comprehensive Database

The repository maintains a comprehensive computer database that contains records on individual cell lines and a bibliography of publications citing cell line use. With each cell line they request, researchers receive informa-

tion on the original diagnosis, the laboratory that submitted the cells, the original literature citation, the number of cell generations or population doublings since the culture was established, and the chromosomal location or biochemical characterization of the genetic defect.

Cell lines in the repository are cross-referenced with the Online Mendelian Inheritance in Man database, and efforts are under way to cross-reference the collection with the Genome Database, as well.

Each year, NIGMS publishes a printed version of the repository's database as a catalog of available cell lines. As the collection has grown, so has the catalog—to the point that it now has reached telephone-book size. To save printing and mailing costs, several years ago NIGMS began producing a full catalog every other year, and a supplement in the intervening years. The latest catalog is likely to be the last, however, as work has begun to provide the database via online access.

### New Service

In 1990, the repository began offering DNA from rodent-human hybrid cell lines, in addition to cell cultures from these lines. These cell hybrids have been used in genetics research for more than a decade. When human and rodent cells are fused, the hybrid cells contain all the chromosomes of both species. As the cells grow and divide, most of the human chromosomes are gradually lost, for reasons that are not clear. Eventually, a given hybrid cell line will contain just one or a few human chromosomes.

A gene mapper can take a stretch of human DNA of unknown chromosomal origin and apply it to, for instance, a hybrid cell line known to contain only human chromosomes 1 and 3. If the applied DNA is complementary in sequence to any portion of either of the human chromosomes, it will bind to the complementary sequence on the intact chromosome and

can later be detected. In one step, the researcher has narrowed the search for the DNA's chromosomal origin from any one of 24 possible chromosomes to only two.

Rodent-human hybrid cell lines are notoriously unstable, however, and are also not useful for gene mapping unless the researcher can be sure exactly which chromosomes they contain. The repository has addressed both of these issues in developing two hybrid panels, one containing cell lines with from one to 19 human chromosomes in each and one containing cell lines with one or two human chromosomes. The scientific community has responded enthusiastically to the availability of the somatic cell hybrids, which have rapidly become among the most frequently ordered cell lines in the repository.

"Now that we have these panels, the next thrust is to create chromosome-specific panels," says Dr. Judith Greenberg, director of the NIGMS Genetics Program and project officer for the cell repository contract. "These panels would include hybrids containing portions of specific chromosomes, and would be useful for regional mapping studies. Eventually, we would like to have a regional mapping panel for each chromosome." Greenberg adds that the repository is trying to work closely with the chromosome groups organized by the international Human Genome Organization to identify and acquire panels that are of the greatest utility to the gene mapping community.

#### Input from the Scientific Community

In addition to Greenberg's supervision of the repository's operation, a committee of outstanding scientists advises NIGMS on the repository's progress. The advisory group also predicts areas of future scientific need and makes recommendations for the acquisition of new cell lines, the deletion of cell lines from the collection, and related matters. The advisors include experts in medical genetics, cytogenetics, population genetics, molecular genetics, somatic cell genetics, and database management.

The repository also relies on investigators to submit specimens for inclusion in the collection, as well as on curators who analyze cell cultures for specific biochemical and chromosomal abnormalities.

Greenberg stresses that the repository "could not have flourished during the past 20 years without the generosity and cooperation of the many members of the scientific community who have served as advisors and curators and who provided the samples from which the cell lines were established."

Dr. David Ledbetter of Baylor College of Medicine, who chairs the advisory group to the repository, says that the repository "serves two important functions for me as a biomedical researcher. First, it is a tremendous resource for obtaining cell lines with genetic and cytogenetic abnormalities for experimentation and gene

mapping. Second, and at least as important, is the fact that the repository will accept valuable cell lines from my laboratory for permanent storage—and who hasn't ever had a freezer break down and lost critical cell lines? The repository will also aid in the distribution of these materials to other interested laboratories, eliminating a substantial workload from my lab."

#### Future Directions

Among the repository's newest initiatives is the acquisition of all cell lines from the French Centre d'Etude du Polymorphisme Humain (CEPH). This collection includes more than 800 lines from about 60 families, and is "very useful for linkage analysis," notes Greenberg. Using the CEPH lines from the NIGMS repository, investigators will be able to obtain larger amounts of DNA than are available from CEPH itself, and will also be able to look at cellular characteristics that cannot be studied by examining DNA.

"Another fairly new, and growing, emphasis is

#### NIH Introduces TRANSHARE Program, Subsidizes Employees' Commutes

NIH recently launched its TRANSHARE Program, a subsidy program to encourage employees to use public transportation. It will be run by the Office of Research Services, Division of Security Operations, Employee Transportation Services Office (ETSO).

TRANSHARE will begin as a 1-year pilot program of 2,000 employees subsidized up to \$21 a month in fare media for using public transportation. The Bldg. 31 R&W gift shop will distribute the subsidies to participants in the form of Metrorail farecards, Metrobus tokens, Ride-On tickets and commuter coupons for the MARC trains. Employees must relinquish their on-campus parking permits to participate in TRANSHARE.

The future of the government-wide subsidy program, which includes TRANSHARE, depends on the success of this and similar programs. The legislation that authorizes the subsidy expires December 1993. Renewal of the law depends on recorded successes of all subsidy programs.

In particular, the success of TRANSHARE hinges on whether it effectively mitigates on-campus traffic concerns. Regardless of the renewal of the subsidy law, NIH must prepare a report for the DHHS before continuing beyond the pilot. If approved, NIH plans to expand the program and include on- and off-campus employees subject to available funding in fiscal year 1994.

For employees whose commute route to NIH is convenient to the Shady Grove Metro Station, TRANSHARE is enhanced by the availability of a satellite parking lot there. In surrendering on-campus parking permits for guaranteed Shady Grove parking spots, employees automatically qualify for TRANSHARE.

Should demand exceed supply during the pilot program, TRANSHARE participants will

on cell lines with mutations that are well-defined at the DNA level," Greenberg says. "For example, the repository has 21 cell lines containing distinct, molecularly characterized cystic fibrosis mutations, as well as cell lines containing thalassemia mutations. These are valuable for diagnostic work, and also to correlate various defects with the severity of the disorder." In research on cystic fibrosis, the repository collections are expected to aid the search for the mutations responsible for about 30 percent of the cases. Greenberg adds that the repository is working to characterize similar cell lines for other diseases, such as Fragile X syndrome.

According to NIGMS director Dr. Ruth L. Kirschstein, who took her position when the repository was just 2 years old, "The repository is a dynamic resource that has continually evolved to meet, and even anticipate, the changing needs of research scientists, and there is every reason to expect that it will continue this record of responsiveness in the future." □

be selected by lottery.

The ultimate goal of TRANSHARE is to relieve traffic and parking congestion on campus and surrounding roadways. For more information about the TRANSHARE pilot, call ETSO, 402-RIDE.

# UNCLE SAM WANTS YOU



# TO RIDE METRO

## NURSING RESEARCH (Continued from Page 1)

more livable, helping them to feel and function better or to cope with a chronic illness and its treatment."

That orientation is clear in the intramural program's current portfolio. Three projects, all at the Clinical Center, deal with problems experienced by people who are HIV-infected as they undergo treatment for the disease. Beyond the CC, NCNR researchers in Hawaii are studying caregiver burden and quality of life of women who care for older men with dementia, as part of NHLBI's Honolulu Heart Study and NIA's Honolulu Aging Asian Study. At NIA's Gerontological Research Center in Baltimore, nurse researchers are examining how to manage urinary incontinence, limited mobility, and other common problems of older people.

Collaboration with other health disciplines is a key feature of the NCNR intramural program, which operates by adding a complementary nursing research component to established NIH projects. Currently, NCNR staff are working with intramural nurses and scientists from NIAID, NIA, NHLBI, and NINDS, as well as nurses, dietitians, and investigators from the CC. For example, HIV-infected people who come to NIH to participate in NIAID clinical trials are invited to participate in NCNR's studies of nutrition and myopathy.

### AIDS and Quality of Life

Because HIV infection is no longer rapidly fatal, patients infected with the virus are living long enough to develop chronic problems that interfere with their daily lives. Eating is one of those problems.

Nutrition-related problems can include fatigue, nausea and vomiting, oral lesions, weight loss, difficulty in swallowing, diarrhea, and fever. These are caused either by the disease itself or by drugs that attack the virus or associated opportunistic infections. NCNR research nurses are studying what nutritional problems occur, what causes them, and how these problems affect immune function in various stages of HIV infection and different HIV treatments.

While they are enrolled in the study, patients keep food intake records and undergo several tests that measure body composition including height, weight, body fat, and lean body tissue. Patients get copies of these body composition analyses, as well as printouts showing their food and vitamin intake compared with recommended nutrient allowances. If they are losing weight—as happens in sicker patients with chronic diarrhea—a dietitian meets with them to see how they can change their diet to gain weight. Blood samples are analyzed for viral activity and immune function.

Of 120 patients in the study, most are men, although there are 14 women. Their ages range from 19 to 55. Although all are HIV-infected, they may or may not have AIDS.



*Dr. Mary Ropka reviews body composition information obtained by bioelectrical impedance analysis during the HIV nutrition study.*

What motivates patients to participate in this research, which promises no immediate individual benefit? "Some are genuinely interested in things like whether they have elevated triglycerides and how much body fat they have," Ropka said. "Others believe that by participating they will help someone someday." Results of the research will shed light on when and why nutritional problems occur, and help identify who is at risk.

### Muscle Weakness

A second study evolved from clinical observations of a new problem in HIV-infected patients: myopathy, or muscle weakness. Several questions arose: Are there actually physiologic changes in muscle tissue? When does this happen? How does it affect people's ability to function?

Bob Wilson, for example, suffered from extreme fatigue, weakness, and pain in his muscles and joints after taking AZT for awhile. "At the time I was a designer, and I spent all day on my feet," he said. "It was very painful." Asked to participate in the myopathy study, he agreed because of the chance to learn more about his problem. Although Wilson suspects his myopathy is a side effect of AZT—he had more energy when he stopped taking the drug temporarily—researchers are unsure how myopathy is related to AZT, other drug treatments, and the virus itself.

To find out, NCNR scientists are studying 25 HIV-infected people for 6 months. Like Wilson, patients are interviewed and fill out questionnaires each month about how muscle weakness affects their normal routines. Their strength and endurance are evaluated in clinical exams and tested in timed activities—for example, how long it takes to get up from a prone position and a chair, climb stairs, walk 30 feet, and lift weights. Finally, muscle biopsies are done to evaluate the effects of HIV and drug treatments on muscle tissue.

Results of this study are expected to suggest to what extent myopathy is related to certain anti-

HIV drugs, the disease itself, or both. Researchers also are hoping to learn how the myopathy responds to changes in HIV treatment—for example, lowering AZT doses or stopping the medication for a time.

### Problems with HIV Medication

A third study is evaluating patient compliance with three drug treatments—interferon alone, AZT alone, and AZT plus interferon—in an NIAID clinical trial. The study is conducted in collaboration with an NIAID nurse.

"This is a particularly interesting study because patients are essentially feeling well, but are being asked to take drugs that might make them feel bad and interrupt their attempts to live a normal life," said Ropka. Nurse researchers would like to know what personal, health, and treatment factors contribute to patients' problems with taking their HIV drugs as prescribed.

Results of all three HIV projects are expected to yield knowledge that will help make life more liveable for people with HIV. □

### NHLBI Symposium on Oct. 15-16 Honors Gardner McMillan

NHLBI will host a special symposium on atherosclerosis Oct. 15-16 to honor Dr. Gardner McMillan, former director of its Arteriosclerosis, Hypertension, and Lipid Metabolism (AHLM) Program.

The symposium, to be held in the Clinical Center's Masur Auditorium, will bring together experts from around the country to explore the latest research findings about the pathobiology and associated risk factors of atherosclerosis.

Topics will include endothelial dysfunction, lipoprotein receptors, oxidation and free radicals, monocytes, growth stimulatory and inhibitory molecules, cytokines and monokines, smooth muscle diversity, immunity, matrix molecules, platelets and coagulation, thrombosis, hypertension, diabetes, and genetics. Also, special sessions will feature a look back and a glance ahead at the past and future of atherosclerosis research.

The symposium honors one of the pioneers in atherosclerosis research. McMillan, who retired as AHLM director in 1991, advocated seeking a multiple explanation for atherosclerosis and conducted key research in the field. One of his studies showed that the amount of cholesterol in atherosclerotic lesions did not match their severity. He also coauthored with Dr. George L. Duff of McGill University a paper on atherosclerotic lesions that has been the standard reference since 1951.

A transplanted Canadian, McMillan joined NHLBI in 1966. His productive career resulted in nearly 80 scientific publications and earned him numerous honors, including the 1977 NIH Director's Award.

For more information on the symposium, contact Louise Duvall, 496-9899; to register, contact Carol Sadler at (301) 468-MEET. □

## New Genome Center Launches Fruit Fly Mapping Project

A new, multi-campus research center based at the University of California-Berkeley will spearhead a project to map the fruit fly's complete set of genetic instructions, known as its "genome." The center will unify efforts to map the animal's DNA and provide a centralized resource for technologies and materials to the large number of scientists studying genetics in the fruit fly. The maps of the fly genome will be unique in their ability to relate the physical location of genes on chromosomes to their biological function in the organism.

The center "without walls" will be composed of four laboratories located at different sites. Dr. Gerald Rubin, a respected fruit fly geneticist and head of U.C.-Berkeley's genetics division, will serve as the center director. A component at Washington University in St. Louis will be led by Dr. Daniel Hartl; Dr. Allan Spradling will head the component at the Carnegie Institution of Washington (in Baltimore); and a component at the Lawrence Berkeley Laboratory will be led by Dr. Michael Palazzolo.

"The researchers leading this effort have a history of doing excellent science using the fruit fly, and they make their resources freely available to the rest of the community," says Dr. Jeffery Schloss, program administrator at NCHGR. "The maps generated by this project will not only give researchers new opportunities to understand where genes are located but will also facilitate learning what these genes actually

do, and the technology they develop can be applied to mapping human genes."

Known to researchers by its scientific name, *Drosophila melanogaster*, the fruit fly has been intensely studied by geneticists for over half a century. Modern geneticists have used the fruit fly to learn how combinations of genes control the head-to-tail and side-to-side development of the insect's body. More precise knowledge about the genetic rules that govern how a body forms will provide researchers with new tools to understand fetal development in humans and how errors in this process may result in birth defects.

In addition, says center director Rubin, "The information gathered on the fruit fly so far gives scientists the best opportunity to combine knowledge about DNA sequence and gene function in a complex organism." The maps constructed by the center researchers will provide a natural stepping stone into sequencing the animal's DNA, Rubin says.

A key reason why the fruit fly has been so valuable is because of its giant polytene chromosomes, found in cells of the insect's salivary glands. Each of these special chromosomes is made up of just over 1,000 identical strands of DNA, instead of the usual one strand. Each gene, therefore, is present 1,000 times and the copies are all lined up next to each other. This alignment makes the chromosomes so large they can be seen under a simple microscope, a fact that has been a boon to geneticists seeking to

locate specific genes on chromosomes.

To make more detailed "physical" maps of the fruit fly genome, scientists at the new center will use bacterial virus vectors capable of holding a cloned piece of DNA about 100,000 base pairs long. By matching the overlapping sections of the DNA pieces, the team will prepare maps of DNA covering large portions of each chromosome. The relatively small size of the DNA pieces in these vectors will allow scientists to begin sequencing the fly genome's 165 million base pairs by adding some novel twists to efficient and widely practiced techniques.

By inserting so-called "jumping elements" into critical genes in the fly's genome, the researchers will develop a set of mutations that will be useful in mapping a gene and, at the same time, help to identify the gene's specific function. The jumping gene will knock out the function of crucial genes necessary for the fly to live. By studying these lethal alterations, researchers can draw conclusions about the role of the mutated gene in a vital life process. At the same time, the investigators will map and catalog areas around the jumping genes.

Such information will also be valuable in deciphering the function of human genes. Many of the proteins in the fruit fly, such as receptors, regulatory proteins, and enzymes, are already known to have direct counterparts in humans, indicating that important basic life processes have been preserved during evolution.

### FlyBase: A *Drosophila* Database

A 3-year grant has been awarded to support the development of a relational database for the *Drosophila* genome. The database will be called FlyBase. When complete, FlyBase will serve as a resource for the genome research community. FlyBase will greatly enhance the quality of accessing and handling the overwhelming amount of information about *Drosophila*.

There are four locations involved in the FlyBase project. Dr. William Gelbart, professor of cellular and developmental biology at Harvard University, serves as the principal investigator. The coinvestigators are Dr. Michael Ashburner of the University of Cambridge (Cambridge, UK); Drs. Thomas C. Kaufman and Kathleen A. Matthews of Indiana University (Bloomington, IN); and Dr. John R. Merriam of the University of California (Los Angeles).

"In the past, dedicated volunteers from the *Drosophila* genetics and molecular biology research community have maintained and distributed essential data resources for *Drosophila* genetics," says Dr. David Benton, program administrator at NCHGR. "The rapid increase in the amount of available information now requires that a public database be established. This database will incorporate the wealth of information col-

lected by Drs. Dan Lindsley and Michael Ashburner and others over many years and will be continuously updated with new research findings," he said.

While the establishment and maintenance of the curated database is the responsibility of all four sites, each location will be responsible for specific curatorial functions. The master database and major programs will be maintained at Harvard University, where much of the programming effort will occur. The University of Cambridge component, headed by Ashburner, will maintain the genetics tables and will also be the European database server site for FlyBase. The component based at the University of California, led by Merriam, will maintain tables relating to the molecular properties of genes. Kaufman and Matthews, based at Indiana University, will maintain tables of strains from the two funded *Drosophila* stock centers in the United States. Gelbart, at Harvard University, will maintain tables relating to mobile genetic elements and genes introduced by germline transformations. These data tables will allow representation of up-to-date genetic and molecular maps of the fruit fly genome. Programs integrating FlyBase with DNA and protein sequence databases will be developed in collaboration with the National Center for Biotechnology Information.

### DCRT Computer Training Classes

Classes	Dates
Managing Data Effectively	9/30
Intermediate PC-DOS	10/1-10/2
Developing In-House Applications on the Macintosh	10/5
Beyond Basic WYLBUR	10/5-10/9
Analysis of Ligand Binding Data Using the LIGAND Program	10/6
OS/2 2.0 Overview	10/7
Topics in Flow Cytometry	10/8-10/9
Introduction to Microsoft Windows	10/13
PC <—> Mainframe Communication with ProComm Plus	10/13
Getting Started with C	10/13-10/16
GCG Sequence Analysis Under Unix on the Convex	10/14
Introduction to the Convex Supercomputer	10/14
Enter BBS	10/14
Developing Data Entry Applications with SAS/FSP	10/14
Introduction to ISPF/PDF	10/15
Using Computers to Find Possible Regulatory Elements	10/15
Introduction to WYLBUR	10/19-10/30
Introduction to Parallel Computing	10/20
Running SAS Software in the PC-DOS Environment	10/20-10/22
Unix Commands	10/21
Editing with Emacs	10/21
Introduction to Molecular Modeling	10/22
Orientation to Running SAS on the Mainframe	10/26
DCRT Support for Unix Workstations at NIH	10/26

Classes are offered by the DCRT Training Program without charge. Call 496-2339 for more information. □

**NATCHER**

*(Continued from Page 1)*

children, you continue to live in the strongest country in the world," he said, repeating words he has made famous over his years in public service, to the birthday gathering that included among other congressmen and high-ranking government officials, DHHS secretary Dr. Louis Sullivan, Interior Department Secretary Manuel Lujan, and the longest-serving (50 years, 5 months) member of congress, Rep. Jamie Whitten (D-Miss.), a close friend of Natcher's.

Paraphrasing a line from *Oklahoma* composers Rodgers and Hammerstein, NIH director Dr. Bernadine Healy said in opening remarks that in naming NIH's newest construction undertaking after the Kentucky congressman, "We're only doin' awhat comes Natcher-ly."

Though not geographically in the center of the country, Healy said, Kentucky represents the core of the union.

On its northern border, the state touches the heartland of the Midwest; to the east, it stretches deep into Appalachia; below, it borders Tennessee, home of the Grand Ole Opry; and at its western-most tip, Kentucky



*NIH director Dr. Bernadine Healy leads the ceremonial hardhat crew (from l) Maryland Rep. Steny Hoyer, Interior Secretary Manuel Lujan, Reps. William Natcher of Kentucky and Jamie Whitten of Mississippi and DHHS secretary Dr. Louis Sullivan in breaking ground for the administration building that will reunite a large portion of Bethesda-based NIH'ers currently working in rental properties.*



*Healy, DHHS secretary Dr. Louis Sullivan (second from l) and birthday boy Natcher (r) share a few moments with Rep. Steny Hoyer (D-Md.) before the ceremony.*

"dips its toe into the Mississippi River, the traditional border between east and west."

Kentucky has often been at the political crossroads of the nation, she continued. "The fairness and evenhandedness for which Mr. Natcher is truly famous, I believe, derives in part from his origins in the state that is both geographically and politically so central to this nation."

Like Kentucky, Healy said, NIH also touches every corner of the country, funding research in every state in the U.S., with more than 24,000 research grants at more than 1,800 universities and research institutions. Eighty percent of NIH's \$9 billion budget is dispersed primarily in grants.

"The 318 acres, 50 buildings and 16,000 employees here are only the tip of the iceberg," Healy said. "The country is our campus and the Natcher Building will be the crossroads for that national campus."

Scheduled to house the extramural programs for seven institutes and provide conference facilities for researchers, the \$176 million Natcher Bldg. will also reunite NIH'ers now housed in scattered rental properties with their colleagues at 9000 Rockville Pike.

"This building certainly will be a beacon of enlightenment and of hope and of great activity," predicted Sullivan, "not only for this campus but also for our whole nation's biomedical research enterprise." The Natcher Bldg., he continued, will go a long way toward quickening and improving the process of health research.

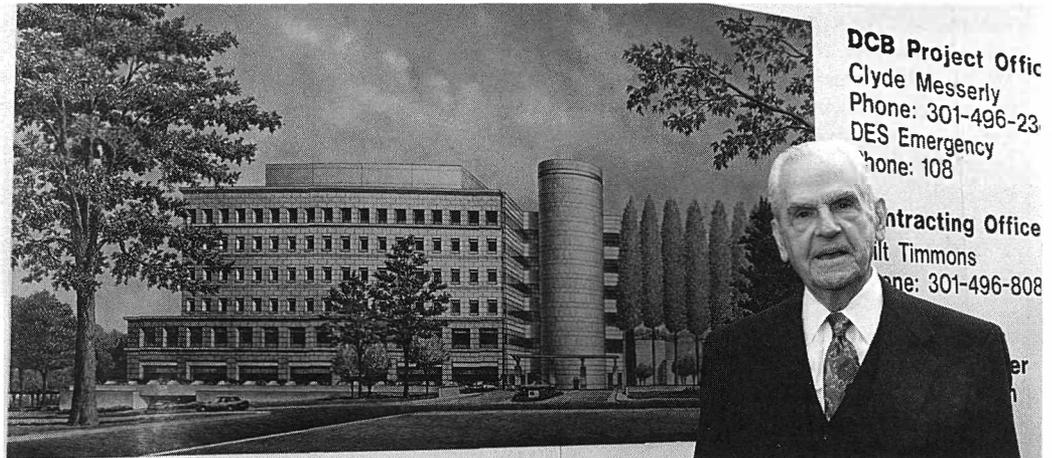
"Today is not only my birthday," said Natcher, accepting accolades from the audience, "but it is one of the happiest days of my life."

He shared the day with several family members including his 19-month-old great granddaughter, who he proudly said "demands all kinds of

*"May this building be filled with the hallmarks of his life—a zeal for good health and a fullness of life."*

special attention, and receives it."

First elected to Congress in 1953, Natcher, a long-time NIH ally and ardent supporter of health research who is known for sponsoring biomedical funding legislation, has served 39 years through 8 presidents, 38 appropriations

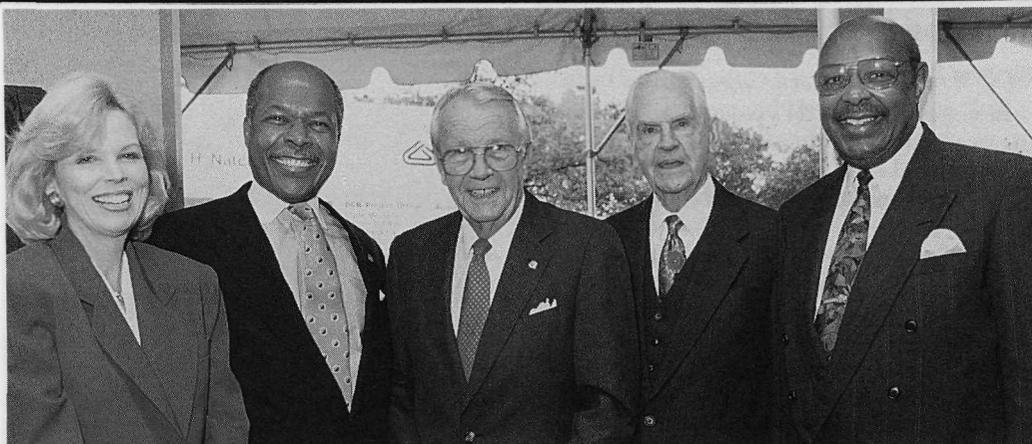


*Natcher, a longtime biomedical research advocate, recently celebrated his 83rd birthday at a groundbreaking ceremony here for the NIH building named for him.*

committees and 7 NIH directors.

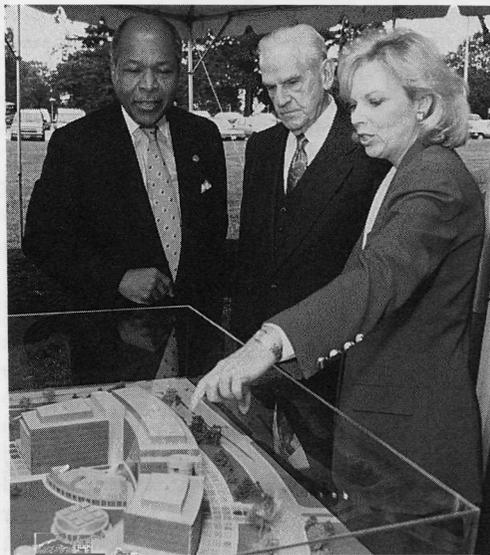
"I can tell you that of the 7 NIH directors I've served with, I've found none more able, none more dedicated and certainly none more beautiful than Dr. Healy," Natcher said, recalling the support he has given and received from the Maryland delegation to Congress. "Thank you, especially my friend Steny Hoyer, Connie Morella and Barbara Mikulski and all those who marched with us every step of the way [through annual appropriations hearings]."

The Natcher Bldg. is the second NIH edifice in recent years to be named for a congressman



Kentucky Sen. Wendell Ford (c) joined Healy, Sullivan (second from l) and Rep. Louis Stokes of Ohio (r) to congratulate fellow Kentucky congressman Natcher on his 83rd birthday, which Natcher called "one of the happiest days of my life."

Photos: Bill and Ernie Branson



Healy uses the engineering model to point out features of the new campus edifice that will house NIH's extramural program offices, and a 1,000-seat auditorium and conference center.

from \$73 million when he entered Congress in 1953 to nearly \$9 billion in 1992, promised to see it reach \$15 billion before Sullivan leaves office.

"You're all able people," Natcher said, commenting that the annual budget proposal hearings attended by Sullivan, PHS head Dr. James Mason, Healy and the institute directors are some of the nicest occasions in Congress. At those hearings, individual institute directors submit their "wish" lists for the upcoming budget season. "We admire you," continued the congressman. "We appreciate you...and your testimony is always unusual. I serve on three subcommittees and when I use the word 'unusual,' I mean we agree with you."

In the opening moments of the program, Chaplain Gary Johnston of the Clinical Center's spiritual ministry department, gave an invocation. His words also provided an appropriate benediction: "May this building that shall bear [Natcher's] name be filled with the hallmarks of his life—a zeal for good health and a fullness of life."

Following the ceremonial groundbreaking where Natcher, Sullivan, Healy and members of Congress donned hard hats and picked up shovels, Healy presented the honoree—



Healy (l) greeted several members of Congress who attended the groundbreaking for Natcher including Rep. Connie Morella, who represents Maryland's district eight, where NIH is located.

who sits on the House appropriation committee; the Silvio O. Conte Bldg., dedicated on campus Sept. 17, was named for Natcher's Massachusetts colleague in the House who died of cancer last year at NIH. Natcher and Conte were great friends in addition to sharing advocacy of health research—their committee was known as the "Bill and Sil Show."

Natcher, who has seen the NIH budget grow

renowned for his unique collection of ties—with two birthday presents: a tie bearing an embroidered Natcher Bldg. and a framed rendering of the edifice. □

### NCRR Cosponsors Symposium

NCRR's General Clinical Research Centers Program and the University of Texas Southwestern Medical Center at Dallas are cosponsoring a symposium, "Techniques of Patient-Oriented Research," on Oct. 30-Nov. 1 in Dallas.

The symposium seeks to better equip clinical researchers to translate discoveries in the laboratory to the bedside. Directed by Drs. Charles Y.C. Pak, principal investigator of the General Clinical Research Center, and Perrie Adams, associate dean for research, both at the University of Texas Southwestern Medical Center at Dallas, the symposium is intended for young physicians who wish to learn the fundamental techniques of clinical research, as well as for senior investigators who would like to organize a similar program.

For more information, please contact: Dr. Charles Y.C. Pak, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-8885; phone: 214-688-2100. □



At left, Healy gives Natcher the smaller of two birthday presents from NIH. The bigger gift was a framed rendering of the NIH building named for him. At right, Natcher shows off a new addition to his renowned collection of unusual neckwear—a Natcher Bldg. tie.

## NIH Police Officers Shine In 'Olympics,' Win Five Medals

By Anne Barber

Five members of NIH's police force entered the recent International Law Enforcement Olympics and came away with 1 gold, 2 silver and 2 bronze medals. Not a bad showing for a first-time entry.

The Olympic events, held during August, were spread throughout the District of Columbia, Maryland and Virginia and included events from darts to "toughest cop." Participants came from many countries including Australia, New Zealand, The Netherlands, Hungary, Finland, Sweden, Russia, Bulgaria, China, Dubai, Hong Kong, Canada, and from all over the United States, including Hawaii and Alaska.

Representing NIH were Sgt. Mark E. Knowles (patrol section), Cpl. Bruce A. Blum (patrol section), Cpl. Edward C. Landicho (detective), Cpl. Harold L. Miller (detective), and Cpl. Patrick Coajou (patrol section).

The officers were excited about participating in the Olympics and were happy to represent NIH. "A lot of people did not know DHHS had a law enforcement group," said Miller. "In fact, we are the second largest police department in Montgomery County."

"We (officers) all share similar experiences," added Blum. "There were a lot of people there willing to give you pointers," Miller said.

"Like a big brotherhood," they all agreed.

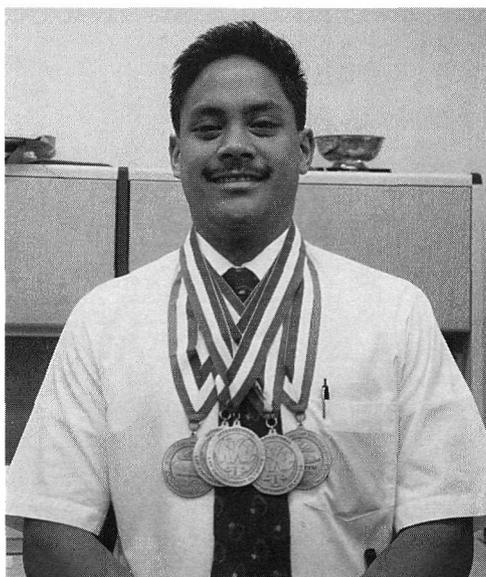
To make this point, the officers discussed some of the swapping of patches and hats that took place among participants. Blum came away with a Russian police banner and, in exchange, gave a Russian his blue Colt hat. "This fosters good relationships," Blum said.

Landicho won all the NIH's medals in the swimming competition. "I chose this category," he said, "because I have always been a swimmer. I began at age 6 and continued throughout college swimming in competitions. I lift weights and participate in other sports, but I decided swimming was my best shot. I used to do extremely well in endurance races, but this time I only went for the shorter distances."

Entering in the age group 20-29, Landicho won a gold medal in the 50-yard backstroke. He won silver medals in both the 100-yard backstroke and the 50-yard breaststroke. He also won 2 bronze medals—1 for the 100-yard individual medley and the other in the 200-yard individual medley team relay.

For the gold medal, he said, "I beat out the Australian who just outouched me in the 100-yard backstroke the day before."

For the team medal, he was one of a four-member team, where each racer participated in four categories—breaststroke, backstroke, butterfly, and freestyle. The relay team consisted of officers from Maryland State Police, Prince Georges County Sheriffs and the Secret Service. The finishing times were then averaged out as a team. Out of four individual events and two relays, Landicho placed in four



*Landicho displays the 5 medals he won at the Olympics—1 gold, 2 silver and 2 bronze.*

individual events and one relay.

The swimming competition was scheduled for 2 days. "On the first day, when I came home with two silver and two bronze medals, my mother said to me, 'That's good. But, where's the gold?' That made me more determined to go back the next day and give it my best shot.

"Next time," he says, "I will train for the long-distance events. I have been lifting weights and improving my endurance."

Knowles, weighing 235 pounds, participated in power lifting in the 242-pound weight class. "This was my first competition in 9 years," he said. "My problem was that I did not get low enough in my squats.

"I also lacked the proper training equipment—power suit and proper wraps. Power lifting is very different from lifting weights.

"I wish I had decided earlier to enter the

Olympics," Knowles admitted. "I would have trained harder and gotten the right equipment. But I'm not making any excuses. I'm looking forward to 1994 when the Olympics will be held in Birmingham, Ala., where I hope to make a better showing.

"I lifted 425 pounds in my squats but depth was my problem. I have squatted deeper in competitions and lifted more pounds (550) but not this time. It was a good meet though," he said. "By the way, the champion lifted 640 pounds."

Officers Miller and Blum entered the shooting competition—pistol, service revolver, and high-powered rifle. They went in as unqualified masters, which meant they did not get to shoot in specific categories. Miller finished 9th in rifle (out of about 50), 26th in semi-automatic pistol and 16th in the revolver shoot with 250 competitors.

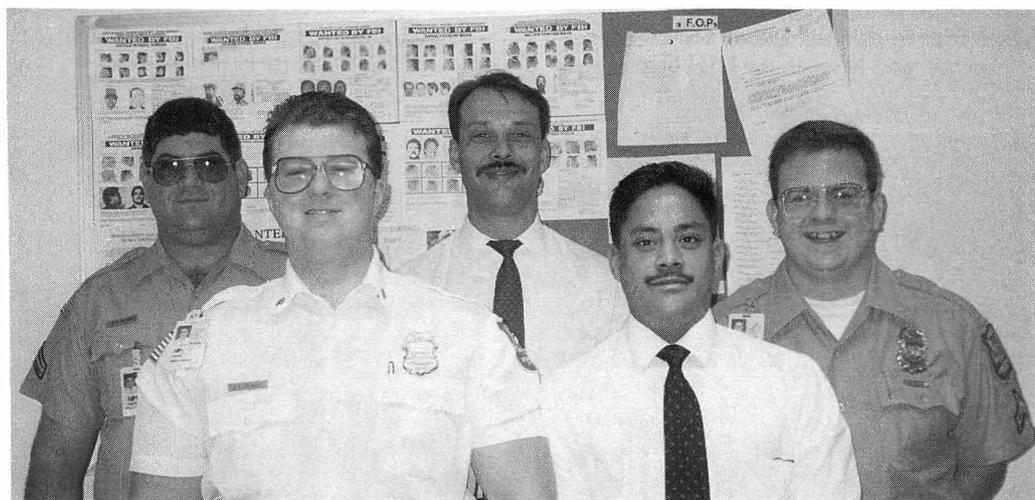
"I ranked fairly well, since this was only my second time competing," Miller said. "So, I'm really looking forward to the 1994 Olympics."

Blum placed 18th in revolver, 25th in pistol, but "not far from the bottom in rifle shooting," he admits. "It was my first time ever in a rifle competition. I realize I made mistakes. It was very illuminating and a lot of fun. I would like to do it over again."

"I want to push and try more rifle events next time," said Miller. "I also hope to shoot in a specific category. However, I don't think we did too badly because the target was at 600 yards and we only practiced at a 100-yard range for a month before the meet."

Coajou entered the darts competition. He made it to the 5th round of eliminations but lost in the final rounds.

Three of the top 15 medals in the shooting events went to Hungarians; swimming was dominated by Australians; and the toughest cop was a 32-year-old from Stockholm, Sweden,



*Representing NIH's police force at the International Law Enforcement Olympics were (from l) Cpl. Bruce A. Blum, Sgt. Mark E. Knowles, Cpl. Harold L. Miller, Cpl. Edward C. Landicho, and Cpl. Patrick Coajou.*

who had to compete in eight events, all in 1 day. Landicho has his eye on this contest for the next Olympics.

Prior to the international contest, the NIH officers competed in local meets such as the Patrol Officers' Competition, sponsored annually by the Metropolitan Washington Council of Governments. Two years ago in this event, NIH won a 3rd-place trophy in felony traffic stops; the hardware is on display in the police section, Bldg. 31C, B3 lobby.

"NIH has always placed in the top 50 percent of the patrol board matches," said Miller, proudly. "But that competition is more job-based, while the international competition is more individualized."

Landicho sums up the group's feelings: "We are all happy to make NIH known in the law enforcement area."

Adds Miller, "We may be small, we may be young, but never discount us. Look over your shoulder, we are right behind you." □

## NCI-FCRDC Hosts Health Fair

The NCI's Frederick Cancer Research and Development Center recently held its second annual Health and Safety Fair, conducted by the occupational health services and safety division of the environmental control and research program. The goal was to increase health and safety awareness and provide tips to be used at home and in the workplace. The fair was a success as more than 1,000 people participated.

Dr. Raymond Gilden, director of the operations and technical support program at NCI-FCRDC, gave opening remarks and a formal welcome. More than 65 vendors, volunteer organizations and health professionals contributed to the event. Comprehensive health screening programs including health assessment, hearing, blood pressure, cholesterol/triglyceride profile, diabetes, and stress assessment were provided. Vendors displayed products relevant to home and workplace safety such as child safety devices, power and hand tool safety, and industrial safety supplies. Recycling organizations distributed literature and set up visual displays.

Speakers addressed important health and safety topics throughout the day from estrogen replacement therapy and the detection and management of early prostate cancer, to exercise and fitness and health eating, to an update on AIDS. □

## Ski Club To Meet

The NIH Ski Club will meet on Thursday, Oct. 8 at 7 p.m. in Bldg. 31, Conf. Rm. 4 to announce details of its 1992-93 ski season and take deposits for trips. Day trips include Whitetail and Blue Knob; there will be a long weekend at Canaan Valley, W.Va., including members of the Special Love program. The big trip of the season will be to Breckenridge, Colo., for downhill and crosscountry skiers. Attend the meeting for more details. □

## Physician Assistants Celebrate 25th Anniversary, Oct. 6

On Oct. 6, thousands of physician assistants around the country will celebrate the 25th anniversary of their profession.

It was on that day in 1967 that three former medical corpsmen, who wanted to transfer to civilian jobs the skills they learned in the military, graduated from the first physician assistant (PA) educational program in the country at Duke University.

Today there are nearly 22,000 licensed practicing PA's in the United States. More than 50 percent of all PA's provide primary care including family, general medicine, internal medicine, pediatric and OB/GYN care. Nearly a quarter of all PA's also serve as commissioned officers in all branches of the military. PA's take medical histories, perform physical exams, order and interpret tests, make diagnoses, establish treatment plans, and, in many jurisdictions, write prescriptions.

Seven PA's currently work at NIH. Three PA's employed by NIAID provide continuity of care for inpatients, primarily with vasculitis, and are responsible for outpatient followup visits. Four PA's in the Occupational Medical Service clinic provide care for employees with occupational injuries and illnesses. A new PA will start this fall with NHLBI's bone marrow transplantation unit.

The following PA's at NIH wish their colleagues a happy 25th anniversary: Sandra Bishop, Karen Kobayashi, Mary Stevens and Catherine Vangellow of OMS; Jennifer Hahn, Cheryl Talar Williams and Patricia Steele of NIAID; and Kathryn Whitfield, NHLBI. □

## NCI Scientist's Book Is Alternate Book-of-the-Month Club Selection

*The Transformed Cell: Unlocking the Mysteries of Cancer*, by Dr. Steven A. Rosenberg, chief of surgery at NCI, and John M. Barry, has been selected as a Book-of-the-Month Club alternate for September. It is published by G.P. Putnam's Sons. The book is also a Quality Paperback Book Club alternate selection. Copies are now available in the R&W Gift Shop in Bldg. 31.

The book describes Rosenberg's efforts to marshal a patient's own white blood cells to fight cancer. It traces how he and his team developed a technique that stimulates the body's T-cells using interleukin-2 and inserted foreign genes into the T-cells to help them attack tumors.

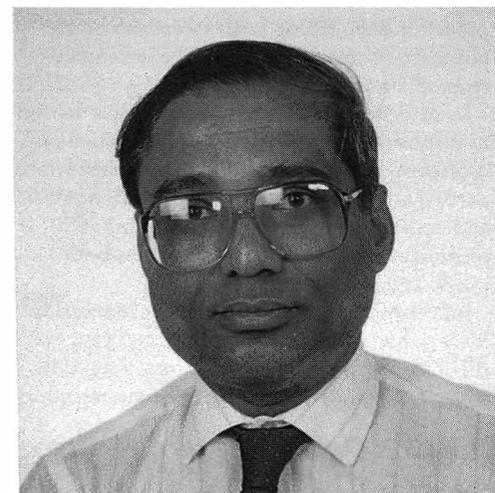
Rosenberg's purpose in writing the book was to explain to the public how medical research is conducted and to describe the importance of such research in a time when science "often seems under siege." He details his training and research and discusses the experiences of his patients in their battle against cancer. □

## Ganguly Named NHLBI Branch Chief

Dr. Pankaj Ganguly has been appointed chief of the Thrombosis and Hemostasis Branch of NHLBI Division of Blood Diseases and Resources.

A nationally recognized investigator in thrombosis and hemostasis, Ganguly has been with the branch since joining NHLBI as a health scientist administrator in 1987. He has contributed to numerous division initiatives related to basic and clinical studies with blood platelets.

A native of Calcutta, India, Ganguly attended Calcutta University, earning a B.S. with honors



Dr. Pankaj Ganguly

in physics and a Ph.D. in biophysics. He was a professor of biochemistry at the University of Tennessee in Memphis and the University of Puerto Rico in San Juan, where he also chaired the biochemistry and nutrition department.

He has published more than 70 scientific articles and served on the NIH hematology study section. Among his awards is the 1990 NIH Merit Award for "dedication, commitment, and innovation in scientific management and program development in thrombosis and hemostasis." □

## Ozone Layer Changes Discussed

On Oct. 8, Dr. Richard Stolarski, research scientist with the NASA Goddard Space Flight Center, will make a presentation to the NIH skin diseases interagency coordinating committee on the data that provide a fairly consistent picture of the change that has occurred in stratospheric ozone levels. Stolarski's specialty areas are atmospheric chemistry and stratospheric ozone.

The meeting will take place from 1:30 to 4:30 p.m. in Bldg. 31, Conf. Rm. 7.

For more information, call Sharon Nouzari-Louis, 496-0801. □

## NIEHS Creates New Development Office; Johnson-Thompson Named Director

Dr. Marian Johnson-Thompson, who holds a Ph.D. degree in microbiology from Georgetown University, and for several years has served as professor in the department of biology at the University of the District of Columbia, has joined NIEHS as director of the newly established Office of Institutional Development (OID).

Johnson-Thompson had previously served as a member of the minority programs review committee, NIGMS, where she provided leadership on the Minority Biomedical Research Support Program review committee.

In her new position, she will serve as the focal point for establishing goals to assure diverse populations' participation in the institute's research and training programs.

In addition, she will serve as principal liaison to minority institutions, develop programs to increase minority populations' and institutions' participation in environmental health research, and coordinate overall policies related to minority health and education issues both inside and outside NIEHS.

Johnson-Thompson will create programs for local public schools and colleges and get NIEHS staff more involved in teaching. She will also administer the NIEHS summer intern



*Dr. Marian Johnson-Thompson*

program, and oversee the institute's proposed graduate program in conjunction with the University of North Carolina at Chapel Hill.

The OID, located within the Office of the Director, will develop policies and procedures for promoting a more aggressive minority recruitment program within the institute.

Johnson-Thompson has worked as a molecular virologist in the Laboratory of Biological

Chemistry, NCI, studying the role of protein kinase C in multidrug resistance with Dr. Robert Glazer, whom she later joined at Georgetown University as adjunct professor of pharmacology in the medical school; she collaborated with him in identifying the regulatory role of "C-fes" in the differentiation of myeloid leukemia cells.

Her previous research experiences have included work at Howard University's Laser Chemistry Laboratory; the space science division of General Electric Co.; and the Lawrence Livermore Radiation Laboratory.

In addition, Johnson-Thompson has worked with NASA and has served in the Office of International Health within the Office of the Secretary, DHHS, analyzing health problems in underdeveloped countries.

"The institute is indeed fortunate to have someone with the outstanding qualifications of Dr. Johnson-Thompson accept this position," said NIEHS director Dr. Kenneth Olden.

"It is extremely important that we do all we can to introduce young minds to wonders of science and to make sure that women and minorities in particular are recruited." □

## NIAID's David Hoggan Retires, To Teach in China

He spent countless hours in the laboratory exploring the biology and genetics of viruses. Now he begins a new challenge—teaching English to the Chinese.

In July 1992, Dr. M. David Hoggan retired as a senior scientist in the Laboratory of Molecular Microbiology, NIAID, after 29 years of service to NIH and the PHS.

"After spending 8 to 14 hours in the lab every day, it's hard to make the break," says Hoggan. "I am very fortunate to have worked with such great colleagues at NIH."

"Dr. Hoggan is an eminent scientist whose work has furthered research on a number of different viruses," says Dr. Malcolm Martin, chief of the Laboratory of Molecular Microbiology.

One of Hoggan's most important contributions, Martin says, occurred in 1975 when he demonstrated that a parvovirus, the adeno-associated virus, was able to integrate copies of its DNA genome into mammalian cells. Parvoviruses, capable of causing serious disease in certain animals, also can infect people, but thus far are not known to cause disease in humans.

This finding has opened doors to the development and use of parvoviruses as vectors in gene therapy. Viruses, acting as vectors or carriers, provide a way to introduce foreign genes into cells.

"If you could replace the sick gene or superimpose another one using a vector like a parvovirus—well you know that's the whole

idea behind gene therapy," says Hoggan.

When he wasn't at the laboratory, working to develop an animal model for HIV or chromosome mapping endogenous murine leukemia viruses, Hoggan found time to pursue scuba diving, skiing and biking, with camera close at hand.

"He uses a camera much like an electron microscope," says colleague Dr. Roy Repaske, "always looking for that perfect photograph." Hoggan conducted much of his early research using an electron microscope.

In August, Hoggan began another venture. Through the David M. Kennedy Center for International Studies at Brigham Young University (BYU), Hoggan and his wife have taken a 1-year teaching assignment at the Zhenjiang Medical University in Hang Zhou, Province of Zhejiang, People's Republic of China.

The Hoggans are members of the Church of Jesus Christ of Latter-day Saints, which runs the Kennedy Center.

At Zhenjiang, Hoggan teaches English to Chinese medical students and college students preparing to study medicine. His wife also teaches English at the university.

"We knew we wanted to go back to China; we've been there before and love the people," he says.

The Kennedy Center, BYU's focal point for study and research concerning international affairs, acts as an employment agency, supplying Chinese agencies with names of people

from the United States who wish to teach in China. Through the program, Hoggan, his wife and 31 other Americans with backgrounds varying from travel to chemistry will work in China this year.

Hoggan received his B.S. degree in 1952 and his M.S. degree in 1953, both in bacteriology, from the University of Utah. After completing his Sc.D. degree in microbiology at Johns Hopkins University in 1959, he joined the U.S. Army's Bacteriology, Immunology and Infectious Disease Branch in Washington, D.C. He became a PHS commissioned officer in 1963 and began working in the Laboratory of Viral Diseases, NIAID. In 1984, he moved to the Laboratory of Molecular Microbiology, becoming a senior scientist in 1990.

During his career, Hoggan received the Medal for Meritorious Service from the Armed Forces Institute of Pathology and two PHS Commendation Service Medals. He is a member of the American Society for Microbiologists, the American Association of Immunologists and the Electron Microscopy Society of America.—*Mary Jane Walker* □

## Research Subjects Needed

The NICHD is seeking infants for a longitudinal study of cognitive and social development. Infants must be 2 months old between Oct. 1, 1992, and Jan. 1, 1993. For more information, call Deborah Clay, 496-6832, and ask for information on the infant study. □



## TRAINING TIPS

The NIH Training Center, Division of Personnel Management, offers the following "hands-on" IBM and Macintosh computer courses:

*Personal Computing Training* 496-6211

Course Titles	Starting Dates
Welcome to Macintosh	11/9
Advanced Macintosh Techniques	11/18
MacWrite	11/30
Intro to WordPerfect 2.0 (Mac)	11/17
Excel-Level 1	11/16
Excel-Level 2	11/15
3Com PC Network-Level 1	11/16
Intro to Personal Computing for New Users	10/30, 11/20
Disaster Recovery and Data Retrieval for the PC	11/13
Intro to Windows	11/9, 11/23
WordPerfect for Windows	11/10, 11/17
WordPerfect 5.1 - Advanced Topics	11/16
Intro to DOS 5.0	11/2
Intro to WordPerfect 5.1	11/3
Intro to Paradox	10/27
Advanced Paradox	11/24
Intro to dBASE IV	10/28
Intro to dBASE III+	11/4
IMPACT System for Personnel Staff	10/15, 11/3
IMPACT System for Administrative Staff	10/29, 11/23
IMPACT System for Professional Staff	10/29, 11/23
Intro to CRISP	10/30

### Theatre Group Presents Kern Gala

The NIH R&W Theatre Group will present *The Melody Lingers On*, on Nov. 6, 7, 13, 14, 20 and 21 at 8 p.m., and Nov. 8 and 15 at 3 p.m. in Masur Auditorium, Bldg. 10.

The production is a journey through Jerome Kern's vision of a musical revue of his finest songs, including "Why Was I Born?", "Smoke Gets In Your Eyes," "She Didn't Say Yes," "The Last Time I Saw Paris," and many others, plus selections from *Showboat*. Larry Salkin and Gary Daum are directing a talented cast of actors, singers and dancers.

Ticket prices are \$7 for adults, \$5 for seniors, and \$3 for children 12 and under.

The Theatre Group is an ensemble of NIH employees and community members who each year present a musical revue and a dramatic production for the benefit of the NIH Patient Emergency Fund. For information and tickets, call Brenda Merson, 496-4835, or (301) 253-3511. □

### Blood Donations Needed at NIH

Now that summer has drawn to a close and most employees are back to work, the NIH Blood Donor Center reminds NIH'ers that it still needs blood. The center did well during the prime vacation months in maintaining an adequate supply of blood for patient care. But it reminds employees to put blood donation on their "to do" lists for autumn. To make an appointment, call 496-1048. □

## Training Center Mourns Roy Chisholm

Leroy C. Chisholm, Jr., an employee development specialist with the NIH Training Center, Division of Personnel Management, died suddenly on Thursday, Sept. 3, at age 46.

Better known as Roy, he began his career at NIH with the National Cancer Institute in 1972. Since 1974 he has been with the NIH Training Center, where he assumed responsibility for a number of programs including Upward Mobility College, career planning and development, and supervisory and management development. In 1992 he received an NIH Merit Award.

Chisholm was known for his hardworking professionalism and his warm and caring manner both at NIH and throughout the Washington area. His attention to detail, follow through, and personal commitment endeared him to clients and colleagues alike, many of whom credit him for their career successes.

A native of Washington, D.C., Chisholm

graduated from Frederick Douglass High School in Upper Marlboro, Md., and later served in the U.S. Navy, from which he was honorably discharged in 1973. He was a graduate of Howard University, earning a bachelor of science degree and a master's degree in guidance and counseling. Later he earned another master's degree in adult education from the University of the District of Columbia and was enrolled in doctoral study at Grambling University.

His professional affiliations included the American Society for Training and Development, the American Society for Personnel Administration, and the National Association of Adult Educators. Chisholm was in demand as a speaker on career change and was also employed part-time as a real estate associate.

Several hundred people including relatives, friends and coworkers gathered on Sept. 9 at St. Paul United Methodist Church in Oxon Hill, Md., to bid him farewell.

## NCI Retired Scientist Delta Uphoff Dies

Delta Emma Uphoff, 70, an NCI scientist for more than 40 years, died Aug. 24 of lung cancer.

She started working at NCI in 1949 as a research biologist in the Laboratory of Biophysics with Egon Lorenz on radiation biology. Uphoff did pioneering work on the restoration of mice after lethal doses of radiation. Uphoff and Lorenz were the first to demonstrate that bone marrow cells could protect lethally irradiated mice from certain death. Uphoff determined the number of bone marrow cells that were required for protection. This work foreshadowed a whole field of research on the mammalian hematopoietic stem cells, which are found in greatest abundance in the bone marrow. Working with *Drosophila*, Uphoff and associates also discovered there was no threshold for radiation's ability to rearrange chromosomes or damage genes. Even the lowest doses can cause changes.

Uphoff was born in Brooklyn, graduated from Russell Sage College in 1944 and received her M.S. degree from the University of Rochester in 1947. In 1982, Uphoff's alma mater, Russell Sage College, awarded her with an honorary doctorate of science. Uphoff officially retired from DCBDC in December 1989, and then became a guest researcher in January 1990.

Uphoff's later research interests focused primarily on the immunogenetics of bone marrow transplantation. She noticed that when bone marrow cells from a parental strain were transplanted into appropriately irradiated hybrid offspring, a lethal syndrome was thought to be a result of the graft rejecting the host. Her work provided further early evidence of graft versus host tissue interactions. Uphoff maintained one of the most strictly controlled mouse colonies on the campus. She also investigated the long-term genetic effects of ova transplantation.

## Water/Steam Pipes To Be Laid Between Buildings 13, 5 and Center Drive

This fall, the Division of Engineering Services will begin construction of an underground utility tunnel for chilled water and steam piping between Bldgs. 13, 5 and Center Drive.

This construction is part of the Infrastructure Modernization and Improvement Program to replace aging campus infrastructure systems that are becoming more inefficient.

By replacing the chilled water and steam lines, an improved, more reliable heating and cooling service will be provided to current campus buildings and will permit DES to better

meet future campus needs.

Construction is expected to take approximately a year and a half and will start with an open cut excavation through parking lot 13C, from west to east. Small portions of the lot (30-70 parking spaces) will be closed at any time, depending on construction phasing.

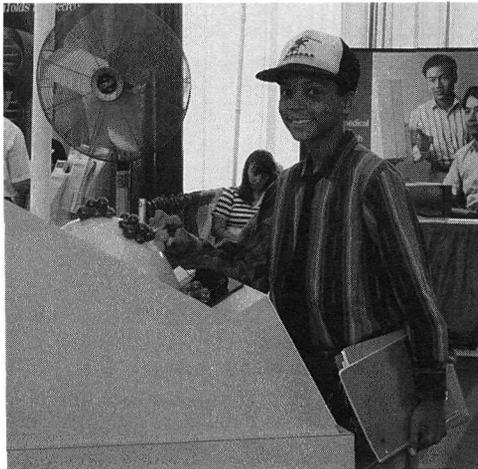
DES regrets any inconvenience that may be caused by these improvements. □

## Dogs, Frogs Hog the Show

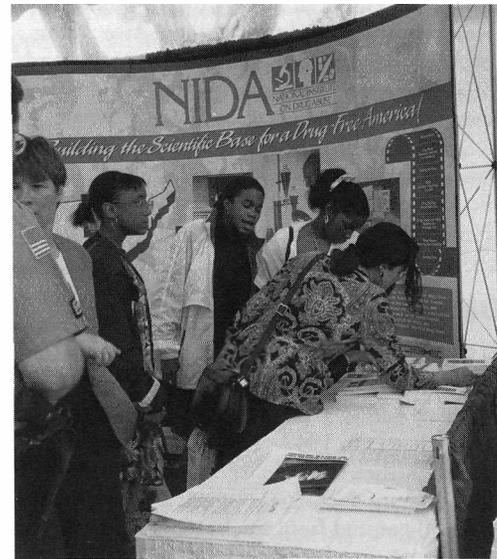
### NIH's 2-Day Open House Draws Thousands

Nearly 4,000 visitors got a taste of NIH two weekends ago when the agency presented its first open house in 5 years. Of the more than 40 exhibits gathered in a humongous tent adjacent to the Stone House, the animal presentations were the most popular.

"The two biggest hits were the frogs and the dogs," said Thomas Flavin, NIH special project officer, whose office coordinated the event. The koi-koi frog exhibit allowed visitors to examine poisonous amphibians under study at NIH; the



Vernon Williams, a ninth grader at Paul Junior High School in the District, got a kick out of the "Path of Pain" exhibit during NIH's first open house in 5 years.



Students from Paul Junior High and Flint Hill School were among the more than 2,000 visitors from 25 schools to gather literature and other materials from 40 exhibits and institute booths during the final day of open house.

to get a feel for the research atmosphere. Many seemed surprised, he continued, that NIH is so much more than laboratories and microscopes.

Another offering that drew large crowds was the Healing Garden, a collection of plants being studied for their therapeutic value. In addition



Officer Pat Pozar and bomb-detector dog Turbo (l) and Officer Gerald Watson and narcotics-detector dog Nicky presented one of the most popular demonstrations at NIH's open house held in an enormous tent on parking lot 16.

dogs—Nicky, a narcotics detector, and Turbo, a bomb specialist—performed under the direction of NIH's police department.

According to Flavin, many of the visiting families brought their young aspiring scientists



NCNR's Suzie Watson (l) staffed her center's booth in the big open house tent that stood through more than 4,000 visitors over 2 days.

to standing displays under the tent, bus tours of the campus grounds were led by NIH employees. Outside the tent, the NIH fire department gave hands-on tours of a fire engine and demonstrated safety equipment and procedures.

On Monday, Sept. 14, the open house continued for local school children. About 2,000 students from 25 schools, mainly middle and junior high schools, were ushered through the "big top," where they collected hats, posters, stickers and bags emblazoned with NIH programs and services.—Carla Garnett □

## October Is Breast Cancer Awareness Month

### Low Cost Mammography Screening Available at NIH

Due to its popularity and importance, low-cost mammography screening will be offered twice each year, in the fall and spring.

This service is coordinated through the Office of Disease Prevention of the Office of the Director. The cost of \$60 is reimbursable through any health insurance company in the State of Maryland that also pays for breast cancer treatment. A mammogram is a low dose x-ray that can detect breast cancer at its earliest, most treatable stage—up to 3 years before other methods.

The mobile screening program will be provided by the University of Maryland Cancer Center, whose technique and equipment have been accredited by the American College of Radiology. Female radiology technologists will perform clinical breast exams and conduct the mammograms. This combination achieves maximum detection rates. The procedure itself may cause brief, slight discomfort, but is not painful. The results will be read by a board-certified radiologist and sent to each woman and her physician of choice. The NCI recommends that all women get a mammogram every 2 years between ages of 40-49 and annually thereafter.

To be eligible to use this service women must:

- Be asymptomatic—experiencing no current breast problems (not have a lump, or nipple discharge and no history of breast cancer);
- Not have had a mammogram within the last 12 months;
- Not have breast implants;
- Not be pregnant or nursing.

The appointment will take approximately 20 minutes. Appointments may be made by calling the University of Maryland Cancer Center, 1-800-787-0506. Payment options include a personal check, money order, Visa or Mastercard. Space is limited and requests will be handled on a first-come, first-served basis. For more information call OMS, 496-4411, and ask for the triage nurse.

#### Dates and Locations

Thursday, Oct. 15	All Day	Bldg. 31
Friday, Oct. 16	All Day	Bldg. 10
Monday, Oct. 19	All Day	Bldg. 10
Tuesday, Oct. 20	8:30 a.m.-12:30 p.m.	Westwood
Thursday, Oct. 22	1-5 p.m.	EPN&S

#### Normal Volunteers Needed

The voice and speech section, NIDCD, needs healthy, nonmedicated, males and females ages 20-60 to participate in a PET scan study to determine which areas of the brain are involved in speech production. Subjects will be seen three times; a neurological evaluation and speech task training prior to the scan for 1½ hours. Subjects will be paid a total of \$300. If interested, call Dr. Allen Braun, 496-7492, or GERALYN SCHULZ, 496-9365. □