

THE NIH RECORD

Still The Second Best Thing About Payday

NIH Grantees Win Nobel Prizes

Two long-time NIH grantees have won Nobel Prizes: Dr. Leland H. Hartwell was awarded the 2001 Nobel Prize in Physiology or Medicine for his discovery of genes that control the cell division cycle; over the past 35 years, NIH has provided him more than \$41 million in grant support. And winning the Nobel Prize for Chemistry was Dr. K. Barry Sharpless, a grantee of the National Institute of General Medical Sciences, who was honored for his discovery of "chiral catalysts"—molecules that enable researchers to selectively control chemical reactions. Over the past 26 years, NIGMS has provided him more than \$7 million in research grant support.

Hartwell, president and director of the Fred Hutchinson Cancer Research Center in Seattle and professor of genetics at the University of Washington, also in Seattle,

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Summer Program Is Incubator for Young Scientists

By Anna Gillis

Clifford Pierre proposes to make the medicines, and he says, "Dr. McHugh will provide the patients." This plan, hatched during a tour of Dr. Constantine Londos's lab in Bldg. 50, won't come to fruition for more than a decade. But the young men are thinking ahead and making connections.



Clifford Pierre

In August, Pierre, Joshua McHugh, and 47 other high schoolers came to NIH from as far away as Alaska, Hawaii and Puerto Rico to present findings gathered during their 8-

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At Ground Zero

NIH'ers Respond to Tragedy in NYC

By Rich McManus

Whether summoned by duty or conscience, a cadre of NIH employees found themselves at ground zero at the World Trade Center in the weeks following the terrorist attacks of Sept. 11, and though all emerged stunned by the devastation they had witnessed, all expressed deep honor at having answered the call to serve.

The most substantial form of assistance was the response of the PHS-1 Disaster Medical Assistance Team (DMAT), a 120-person squad composed primarily of health care professionals, many of them NIH'ers. Less than half that force was deployed to New York, however, as it became clear that there were far more fatalities than injuries.

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Message in post-tragedy dust

When Too Much Is Just Fine

Future Glimpsed at 15th Research Festival

By Rich McManus

It isn't only the scientific authorities who are getting better at planning the yearly festivals of NIH intramural research—the consensus was that 2001 was an unusually strong year—but also attendees are getting more savvy; they have evolved a strategy that seems more ruthless each year: they go to the parts that interest them, and flee when the topics fail to stimulate.

The result is a sort of energetic chaos, an intersection of Grand Central Station at rush hour with the



Dr. David E. Dobbins (l) of NIAMS explains his poster on gene localization to Dr. Lutz Froenicke of NCI-Ft. Detrick.

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Jack Bishop: Scientist and Beekeeper

While working on his doctorate in genetics at Louisiana State University in Baton Rouge, NIEHS research geneticist Jack Bishop took a job at the U.S. Department of Agriculture's Honeybee Breeding and Genetics Laboratory, where he first learned beekeeping. He then incorporated honeybees into his dissertation research on the chemical dosimetry of germ cell mutagens. Their unique germ cells made them excellent subjects.

Even though his research in the Laboratory of Toxicology, under the Environmental Toxicology Program, no longer includes honeybees, Bishop has

continued keeping bees as a hobby. He currently has three hives near Falls Lake in North Carolina. They produce enough honey for him to share with his friends. A good season can yield as much as 150 pounds of honey, but he expects to yield very little this year since many bees died during this



Dr. Jack Bishop of NIEHS tends one of his three beehives near Falls Lake, N.C.

past cold winter.

Wearing only a veil and sometimes gloves if the bees are especially "testy," Bishop calmly handles the hives. His first bee encounter ended more in the tradition of a Wile E. Coyote cartoon: Bishop fleeing in his convertible car with a trail of angry bees in hot pursuit. He had accidentally disturbed a hive while he was tending the lawn of a professor and sent the bees into an angry frenzy.

As a scientist and beekeeper, Bishop is concerned about the effect of agricultural insecticides on pollinators such as bees. These pollinators have been hit hard: by Varroa and tracheal mites and by increasing use of pesticides, as well as destruction of their natural habitat such as dead trees and old fence posts. Varroa mites are like tiny ticks that suck blood from the bees, weakening them so that tracheal mites, pesticide exposure and other elements kill them quickly. Nearly all wild bees in North America disappeared 5 to 6 years ago, and have just begun developing enough resistance to make a comeback, he said. Some experts predict higher costs for produce as the population of pollinators is reduced worldwide.

Early in Bishop's career, he turned down an offer by the USDA to move to Brazil and conduct population genetics studies on control of the Africanized or

"killer bees." Instead, he returned to his graduate research on germ cell mutagenesis, taking a job in Arkansas at FDA's National Center for Toxicology Research. He spent 25 years studying germ cell mutagenesis at NCTR and at NIEHS.

Bishop is especially proud of his research involving rodent sperm fluorescence in situ hybridization assays, which he pioneered along with colleagues at Lawrence Livermore National Laboratory. These assays provide rodent models for identifying and characterizing environmental agents that produce the type of germ cell damage that leads to chromosomal birth defects like Klinefelter's and Down's syndrome. Bishop is also project officer on a number of reproductive toxicology contracts testing chemicals for the National Toxicology Program.

It was the opportunity to participate in preventive and interventional public health programs aimed at reducing the incidence of birth defects and reproductive dysfunction that initially drew Bishop into a science career, he said.—Colleen Chandler ■

Reminder: 'Trick or Treat' with CFC

Reminder to all NIH'ers—you're invited to "Trick or Treat" with the Combined Federal Campaign on Wednesday, Oct. 31, from 11:30 a.m. until 1:30 p.m. on the Bldg. 31 patio. A \$3 chili lunch will be provided by the Hard Times Cafe, and entertainment will be provided by Oldies 100.3 FM. Lots of door prizes will be given away, including tickets to see Michael Jordan play basketball with the Wizards. More than 15 local and national CFC charities will be on hand to distribute information and answer questions, and, of course, there'll be candy! For details, contact Sue Thompson at 594-4469 or see the NIH CFC web site at <http://www1.od.nih.gov/ohrm/cfc/>.

Wednesday Afternoon Lectures

The Wednesday Afternoon Lecture series—held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features Dr. Brian J. Druker on Nov. 7; he will give the fourth annual Astute Clinician Lecture on "STI571: A Tyrosine Kinase Inhibitor for the Treatment of Chronic Myelogenous Leukemia, Validating the Promise of Molecularly Targeted Therapy." He is professor of medicine, division of hematology and medical oncology, and director, Oregon Health Sciences University Cancer Institute Leukemia Center.

There are no WALS lectures Nov. 14 or 21, for Thanksgiving break.

For more information or for reasonable accommodation, call Hilda Madine, 594-5595. ■

NOBEL PRIZES, CONTINUED FROM PAGE 1

received the award jointly with Dr. Paul M. Nurse and Dr. R. Timothy Hunt, both of the Imperial Cancer Research Fund in London.

Hartwell has used a simple, one-celled organism—*Saccharomyces cerevisiae*, or baker's yeast—as a model system for tackling the difficult problem of how a cell is able to copy its genetic information faithfully and divide in two without transmitting potentially lethal genetic errors. He has discovered over 100 genes involved in cell cycle control, including the gene that controls the first step in the process. Hartwell has also documented the existence of cell cycle checkpoints, which are ordered collections of genes and proteins that ensure that cell cycle events have been completed properly before the cycle continues. In the presence of damaged DNA, for example, the checkpoints stop cell division until the damage is repaired, preventing the altered DNA from causing cell death or abnormal function in subsequent generations of cells.

In 1990, NIGMS gave Hartwell a MERIT award, which provides investigators who have demonstrated superior competence and outstanding productivity with long-term, stable support to foster their continued research contributions.

Hartwell has also received funding from the National Cancer Institute and the National Center for Research Resources.

Of the 79 American Nobel laureates in physiology or medicine since 1945, 60 either worked at or were funded by NIH before winning the prize. During the same period, 123 scientists worldwide have won that prize, 70 with support from or work experience at NIH prior to receiving the honor.

Sharpless, who is the W.M. Keck professor of chemistry at the Scripps Research Institute in La Jolla, received half of this year's chemistry award for his work on "chirally catalyzed oxidation reactions." Sharing the other half of the prize for their work on "chirally catalyzed hydrogenation reactions," are Dr. William S. Knowles of St. Louis (formerly of Monsanto Co.), and Dr. Ryoji Noyori of Nagoya University, Chikusa, Nagoya, Japan.

Nearly all small molecules—either natural or synthetic—come in two "mirror-image" forms, much like a pair of gloves. When chemical reactions occur in living systems, only the "correct" form is made. In contrast, laboratory reactions nearly always produce a potful of both left and right "hands" of a molecule. The active part of most medicines consists of a single hand of a molecule. A mixture that includes the "wrong" hand of a molecule can be ineffective or even harmful to the body.

After more than a decade of trying, in 1980, Sharpless figured out how to force a chemical

reaction to go one-handed. The winning combination turned out to be a mixture of two inexpensive commercial chemicals: a relatively simple titanium compound and either the right or left hand of a chemical called tartrate.

In 1990, NIGMS gave Sharpless a MERIT award. Early in his career, Sharpless also received fellowship support from what is now the National Heart, Lung, and Blood Institute.

NIGMS has supported 24 of the 29 Nobel laureates in chemistry funded or employed by NIH since 1954. ■

Healthy Overweight Women Needed

The Uniformed Services University weight management program is looking for healthy nonsmoking overweight women ages 18-55 to participate in a weight management program as part of an ongoing study examining factors affecting weight loss. In addition, applicants should not be pregnant, have problems with thyroid, kidney or heart disease, diabetes or uncontrolled hypertension. Program and materials are provided free. If interested call (301) 295-9664. ■

Volunteers with High Blood Pressure Needed

Volunteers ages 18 to 55 with high blood pressure are needed for a 2-day outpatient study. They must be able to go off high blood pressure medications for about 2 weeks. Compensation is available. Contact Gail Sullivan, 496-3244. ■



Grantee Dr. Leland Hartwell won Nobel Prize in Physiology or Medicine.



Grantee Dr. K. Barry Sharpless shared the Nobel Prize for Chemistry.

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One Year After Lab Opens

First VRC AIDS Vaccine Enters Clinical Trial

By Laurie Doepel

NIH researchers at the Vaccine Research Center have begun a clinical trial testing the first AIDS vaccine invented at the new facility. The vaccine was produced only one year after the building housing the new center opened in September 2000.

Global statistics illustrate why this task is urgent: each day 7,000 people die from AIDS and another 15,000 become infected with the virus.

VRC director Dr. Gary Nabel and two of his research fellows, Dr. Yue Huang and Dr. Wing-Pui Kong, began developing the HIV DNA vaccine now being clinically tested a little more than a year ago.



Dr. Gary Nabel (r), VRC director, and Dr. Barney Graham, chief of the Clinical Trials Core and Viral Pathogenesis Laboratory at the VRC, display the Biojector and the vaccine. VRC scientists produced the vaccine in 1 year.

Whereas traditional vaccines usually contain a weakened or killed form of a disease-causing agent or its proteins, as their name implies, DNA vaccines instead contain only portions of the genetic material for such.

The new vaccine contains the DNA blueprint for two pieces of HIV called "gag" and "pol." Gag is HIV's core protein. Pol includes three enzymes crucial for HIV replication, all of which have been modified for the vaccine to render them nonfunctional. Gag and pol remain relatively constant across different HIV strains, and together they make up about half of HIV's total protein.

Once inside the body, the DNA in the vaccine instructs certain cells to make small amounts of these HIV proteins. The purpose of this phase 1 study is to determine if the vaccine is safe and if the body makes an immune response to these proteins. Because the vaccine does not contain genetic material for the whole virus, it is impossible for someone to become infected with HIV or to develop AIDS from the vaccine. Through a contract with Vical, Inc., of San Diego, the VRC had their laboratory product made into clinical grade DNA used in the vaccine.

The phase 1 trial is recruiting 21 healthy men and

women aged 18 to 60 who are not infected with HIV and who are at low risk for becoming so.

There have been several DNA-based vaccines already tested in humans and none has caused serious adverse reactions, notes Dr. Barney Graham, chief of the Clinical Trials Core and Viral Pathogenesis



A needle-free device called Biojector will be used to administer the vaccine.

Laboratory at the

VRC. Persons interested in the study will be extensively educated and counseled, he adds, prior to signing an informed consent agreement to join the trial.

For more information about the trial, call 1-866-833-5433 or read a description of the trial at <http://www.niaid.nih.gov/vrc/clinstudies.htm>.

According to Nabel, the HIV DNA vaccine is intended to stimulate cellular immunity to the virus, which is thought to be important to protection against HIV. The vaccine will likely be combined in later studies with other DNA components that stimulate neutralizing antibody responses to the virus. This is the first in a series of studies, he adds, with different vaccine candidates aimed toward identifying those that have the best opportunity to protect against AIDS or HIV infection.

The VRC currently has a roster of about 100 scientists and support staff. Most products evaluated in VRC clinical studies will be products conceived, developed and produced in-house. ■

Open Season for FAES Insurance

The FAES Health Insurance Program is holding an open season Nov. 1-30. The program is open to those who work for or at NIH in full-time positions but are not eligible for government plans. This includes NIH fellows, special volunteers, guest researchers, contractors and full-time temporary personnel. The minimum enrollment period is 3 months. Benefits take effect Jan. 1, 2002.

Open season is for those who did not enroll when first eligible and for current subscribers to make changes. Appointments are required. FAES offers two programs this year: CareFirst Blue Cross/Blue Shield Blue Preferred PPO, and CIGNA Healthcare, a health maintenance organization. Also offered is a voluntary dental insurance plan through CIGNA. For more information visit www.faes.org or the FAES business office, Bldg. 10, Rm. B1C18. To schedule an appointment, call 496-8063. FAES is open Monday thru Friday from 8:30 a.m. to 4 p.m.

RESEARCH FESTIVAL, CONTINUED FROM PAGE 1

leisurely ducking in and out characteristic of an endless film festival. No sooner would rooms darkened for slide presentations fill up for one speaker than attendance would ebb as someone perhaps less famous took the podium. Even the plenary sessions, which this year for the first time featured five institute directors peering into their crystal balls to predict the future of biomedical

research, were not immune to the syndrome. The festival audience wants what's hot, and they vote with their feet.

But you get the feeling organizers wouldn't have it any other way—why else overload the

4-day event (the job fair that kicks it off and the sales show at the end don't strictly count as menu items) with more than any reasonable person could swallow?

For example, the mini-symposia choices for Thursday morning at 11 o'clock alone numbered six, forcing guests to choose between a discussion of groundbreaking work on islet cell transplantation as therapy for diabetes and an intimate schmooze with AIDS drug pioneer Dr. Robert Yarchoan, who let his listeners in on how ddI was developed at the Clinical Center in the mid-1980's to counter HIV, to name just two options. At the latter session, attendance ranged, over the course of 90 minutes, from just over half full to standing- and sitting-room-only as four scientists described basic laboratory studies that have ripened into commercial products. One of the speakers, Dr. Hynda Kleinman of NIDCR, described the development of Matrigel, an artificial basement membrane complex whose genesis—born of fear of an impending site visit by a distinguished cell biologist—required not only dogged persistence (the product and papers about it were initially poo-hooped), but also such serendipitous moments as a research colleague's eventual contact with a manufacturer's representative "because she was cute." Such inside peeks at how science really works are just one facet of the festival's richness.

The glimpse into the future of medicine offered by a dais of directors was alternately encouraging and troubling: yes, we're living longer and healthier lives as medicine evolves new and more sophisticated tools to treat the most common ailments, but the world's burden of old, new and reemerging infectious diseases is certain to wreak political instability and immense human suffering, reported NIAID

director Dr. Anthony Fauci. His talk, more about the effects of disease on world affairs than basic science, lit one major candle near the end: as the globe encounters afresh the likelihood of bioterrorism, particularly via smallpox and anthrax, the challenge is being answered by "good old-fashioned NIH in-the-trenches research."

Those trenches looked pretty high-tech in the talk given by NHGRI director Dr. Francis Collins, who led off a forecasting session cohosted by NIH acting director Dr. Ruth Kirschstein and NIH deputy director for intramural research Dr. Michael Gottesman. With 95 percent of the human genome available in working draft form, 55 percent of the human genome sequenced in "finished, highly accurate, no-gaps form," and the whole project due in 2003, the fields of genomics (medical, comparative and functional) and proteomics are rising to the fore, he said. A major effort has arisen to tease out the genes involved in susceptibility to a host of common diseases (Collins noted that virtually every disease, save perhaps trauma, has a genetic component), and a strategy has emerged to define "common haplotypes of the human genome." Genome-wide association studies that take advantage of a "gold standard" set of SNPs (single nucleotide polymorphisms—the smoking guns of genomic research) are on the near horizon, he said. And a public-private effort to define haplotypes, called SIMMmap, is under way and will be "something to stay abreast of."

Fauci's talk, "Biomedical Research, Global Health and Foreign Policy," pointed out that infectious diseases are the second leading cause of death worldwide, and the leading cause among children under age 5. "For respiratory diseases, tuberculosis



A panel on "Eureka!" moments in science, chaired by Steven Ferguson (c) of the Office of Technology Transfer, included (from l) NIAID's Dr. Robert Chanock, who has worked since 1958 to cure respiratory syncytial virus; NIDCR's Dr. Hynda Kleinman, who urged listeners never to give up on their ideas; NCI's Dr. Robert Yarchoan, who noted drily that "developing drugs is complex"; and NHLBI's Dr. Robert Balaban, who said, "You learn something really new when your experiment fails—that's something I emphasize with all my postdocs." Doomed hypotheses, he stated, can lead to new insight.



The group Protocol Violation belts out alternative rock under warm, summery skies behind the Natcher Bldg. Members include (from l) Darrel Drachenberg, lead guitar, NCI Urology Branch; Nick Costouros, bass, NCI Surgery Branch; Leroy Hwang, lead vocals, NCI Surgery Branch; Patrick Hwu, keyboard, NCI Surgery Branch; Erik Kass, rhythm guitar, NIDCD. Not visible is drummer Steve Libutti, NCI Surgery Branch. Their T-shirts bore the slogan, "New Alternative Medicine."

and diarrheal disorders, we need the same degree of intensity as we now have with HIV/AIDS," he said. Some 36.1 million people worldwide are infected with HIV, he reported; in Botswana, one-third of the adult population is infected and rates of between 15 and 25 percent are common in other southern African countries.

"Political and economic instability will result" from these rates, he predicted. "NIH will take an ever-increasing responsibility in performing research aimed at controlling the epidemic." Fauci warned, "The epidemic in China is much more expansive than has ever been admitted before," and said there has been a massive increase of cases in Russia as well. "The epidemic will get worse in the first decade of the 21st century."

Hopeful signs, he said, include a demonstrable reining-in of the AIDS death rate as the budget to study the ailment has grown (it is more than \$2.5 billion at NIH in 2002), and recent success in deciphering the genomes of such other important killers in developing nations as *Plasmodium falciparum* (the cause of malaria) and *Mycobacterium tuberculosis* (which causes TB).

He called for sustaining the current momentum in biomedical research (with emphasis on new diagnostics, antimicrobials and vaccines), creating global multi-sector partnerships, and building research capacity and health care infrastructure in developing nations. "This will give us that satisfaction to know that we got the ball rolling," he concluded.

Dr. Patricia Grady, director of NIH's smallest institute—the National Institute of Nursing Research—gave an overview of her organization, now celebrating its 15th year. "At age 15, we face many of the developmental issues that teenagers do," she quipped. She summarized a slew of recent research advances, and noted that her institute spends twice the percentage of its budget on training, primarily at the predoctoral level, as other institutes. "We collaborate with virtually every institute across campus and benefit greatly from that," she said.

As each of the directors was introduced, either Kirschstein or Gottesman would reveal little-known personal details about them. Of committed weightlifter Dr. Richard Hodes, NIA director, Gottesman said, "It is said that 8 weeks of inactivity can result in the loss of 30 years' worth of the benefits of weightlifting—in which case Richard would look like the rest of us."

Hodes pointed out that more of the world's population is surviving into old age than ever before; there were fewer than 100,000 people age 85 or older in 1900, and there are more than 4 million at that peak now, he said. "This creates a certain urgency with respect to the health needs of the aging population," he said, but countered, "disability among the aging population is far from inevitable."

There has been a decline in the rate of chronic disability among the aged since 1982, "and we don't fully understand the cause," he said.

A major worry of those approaching old age is the onset of Alzheimer's disease, which by age 85 claims nearly half the people who live that long, according to one study. Hodes said that transgenic mouse models of AD have been "enormously useful" and added that it seems possible, at least in murine models, to immunize against the agent causing the plaques characteristic of AD, and thereby to dramatically reduce symptoms.

The future-casting session ended with

NIDDK director Dr. Allen Spiegel's description of the relatively crude investigations into the causes of diabetes characteristic of the 1950s, to today's very sophisticated molecular biological approaches. A swimmer, a patent-holder, and a runner-upper of the stairs, he called for "new quantitative approaches to handle the complexity of the new biology," including better functional imaging (it would be nice to image the loss of islet cell mass characteristic of incipient diabetes, he said), advances in structural biology, and more emphasis on developmental biology, particularly with stem cells, which he said have the capacity to open a new field of "regenerative medicine."

The panelists answered a few questions, and concluded with endorsements of NIH's intramural enterprise. Said Hodes, "Three of us (on the panel) came here for 2-year postdoctoral training sessions and ended up staying over a quarter of a century." He said the unique set of resources at NIH and the atmosphere of collegiality were key factors in attracting a prominent neurogeneticist to his institute. Concluded Fauci, "The intramural program is extremely important to the identity of the NIH. It is widely recognized by very many people as the prototypic model of what excellence in science really means." Kirschstein added, "We get more and more congressional visits that leave a great impression. When [HHS] Secretary Thompson came to visit, he was just blown away by the quality of work he saw coming from all the institutes."

Blown away. That's about what Research Festival accomplishes every year. ■



Dr. Roscoe Stanyon (l), a poster author from NCI-Frederick, stands by as his work is inspected by Montserrat Garcia (c), a visiting scientist from the University of Barcelona, and Barbara DeVinney of NICHD and the NIH Animal Center in Poolesville.

PHOTOS: RICH MOZMANUS

SUMMER PROGRAM, CONTINUED FROM PAGE 1

week summer stints in university labs. They were part of the NIH-Charles Drew University of Medicine and Sciences National High School Student Summer Research Program, which aims to eventually increase the number of ethnic minorities involved in biomedical research. "But students who may be disadvantaged in other ways—either by background or geography—are admitted to the program," says Dr. Keith Norris, a principal investigator at Drew, who just finished his first year coordinating the program for NIH.



Dr. Keith Norris (l) of Charles Drew University and Dr. Lawrence Agodoa of NIDDK flank young scholar Joshua McHugh.

The program has its roots in the NIH-Howard University Minority High School Student Summer Research Program begun in 1995 at the instigation of Dr. John Ruffin, now director of NIH's National Center on Minority

Health and Health Disparities. The goal is to give the students "a meaningful exposure to scientific research," says Dr. Lawrence Agodoa, director of the Office of Minority Health Research Coordination for NIDDK, which co-funds the program with NCMHD. Once matched with a research mentor, the students work on their own projects and then present the findings to their peers in the fashion expected among scientists.

Norris sees the program as "an opportunity for the students to find out if they enjoy and have a passion for biomedical sciences." While it takes more patience to work with high school students than with medical students and postdocs, "it is more gratifying in many ways because you are helping them determine what it is they like to do, want to do, and have an aptitude to do. In most instances, the older students have already made their decisions."

Norris and Agodoa found the students inquisitive and highly motivated, characteristics that clearly showed in their presentations. They tackled a wide array of topics ranging from kidney function and cardiovascular risk factors in people at risk for kidney disease, to the inhibitory effects of plant extracts on microorganisms, to social risk factors that influence the well-being of low birth weight babies, to chemical changes in polymers.

In his first scientific talk (which received an Award of Excellence), Lenoy Galvez challenged doctors to look at changing death patterns among AIDS patients who had been on the HAART (highly active anti-retroviral therapy) protocol. Galvez, who just

finished his senior year at Miami Northwestern High School in Florida, says his mentor, Dr. Ishmael Sharpe, asked him what he was interested in, then guided him to Miami's VA Medical Center. There, Galvez began asking, "Are there negative changes associated with HAART?" He studied reported causes of death in 1995 among AIDS patients who had not gone through HAART, and deaths in 1999 among patients who had received the comprehensive treatment. The positive result was that, in 1999, there were only 35 deaths compared to 153 in 1995, says Galvez. But the breakdown by cause of death showed significant shifts with HAART. "I never thought I'd have such a finding," adds Galvez.

He has been interested in science since he was 4, when he remembers asking his mother about the pyramids. "My mom encourages me to learn by myself, and she doesn't help me with my homework." He plans to major in biology and psychology at the University of South Florida, and thinks he wants to be a neuroscientist so that he can "find the connection between mind, body and spirit."

And what has been his greatest challenge? Learning English, says Galvez, who was 12 when he and his physician mother arrived from Cuba. "The first 3 years of English were hard."

Brian Beuttner's challenge was "learning math on my own." The only program participant ever from Oklahoma, he was home-schooled. He heard about the program by chance: "I was in chemistry class 3 years ago when my mother's friend, who is a librarian, told me about it. I was lifted onto cloud 9 when I got the call that I was accepted. More people should know about [the program]," he says.

This summer, his third year in the program, Beuttner studied pitch discrimination at the University of Oklahoma Health Science Center, and he received an Award of Excellence for his poster. In previous years, he studied lupus and acupuncture. One of the best things about the program is, "I now have friends from Puerto Rico to Hawaii. Next summer I'll visit Hawaii," says Beuttner. He's not sure what he'll study at the University of Oklahoma where he has a scholarship. "I think I want to do business and dentistry."



Melissa Fletcher

Joshua McHugh, who will be a senior at Nazareth

Regional High School in Brooklyn, spent his summer analyzing the flexibility of red blood cells from diabetic and non-diabetic patients with nephropathy. He has known since he was 6 that he wants to be a doctor, but this summer's experience clinched it. "Last year, I was just in the lab," says McHugh. "This year, I enjoyed talking to patients, even though it was kind of overwhelming."

On tour, his predilection for physiology was clear.



Lenoy Galvez

When he learned that the lab bred mice that had reduced levels of fat, but weighed the same as control mice, he wanted to know the reason why. NIDDK's Dr. John Tansey, who led the tour, said the lab was just as curious. Meanwhile, Clifford Pierre's leaning toward chemistry was apparent. While other students were interested in the movements of a clump-forming amoeba, he wanted to know how it used cyclic AMP.

Pierre, who just finished his senior year at Midwood High School in Brooklyn, had been considering a career in environmental chemistry. This summer, he shifted direction when he studied how changing concentrations of ethyl alcohol in polymer gels would alter how they responded to changes in temperature. "Knowing how polymers work would be useful for drug delivery," he says.

Melissa Fletcher begins her journey toward becoming a doctor this fall when she starts the 6-year B.S. M.D. program at Howard University. While she's studying, she plans to continue working with her mentor, Dr. Kunle Kassim, a researcher at Howard. This summer, the group she worked with evaluated extracts of three plants from West Africa and found that one demonstrated antihemolytic properties against *Staphylococcus aureus*. The only hard part of the program, Fletcher says, "was not being able to sleep the night before the presentation" because she was still working on slides. She remained as unflappable as a veteran scientist when asked whether she knew yet what the compound was. "If I don't know, I'm not going to just make something up," she says.

Kassim, who has mentored young students for many years, says Fletcher has a natural inclination

for research. "I don't have to spell out for her exactly what she has to do, and she has patience." He believes that mentors have to give the young people a realistic view of life in science: "There isn't any glamour, and there's a lot of tedium."

To the students, everything about NIH was marvelous. Awed by the price of



Brian Beuttner

a confocal scanning microscope, several of them had to take pictures of it. They played with the Morse code exhibit at the National Library of Medicine and spent time with other students who are just like them. Roberto Gonzalez from Tomas Armstrong Toro High School in Puerto Rico spoke for many when he said that he "was proud just to be invited. They must think well of us to pay for us to come to the program."

NIDDK's Agodoa does think well of them. In fact, he's quite proud of them, and he likes when they keep in touch after going to college. "It's been a great joy to see them progress."

A small group of students that included Pierre and McHugh did receive one admonition from NLM's David Nash, who held their rapt attention—possibly because he was once a Harlem Globetrotter. Nash, who is now EEO manager for the library, told them that "No matter how great you are, remember to serve." ■

NIAID director Dr. Anthony S. Fauci receives the 2001 Frank Amunzio Award in the Humanitarian Field from Rosalyn Queen Alonso, chair of the Christopher Columbus Fellowship Foundation, an independent federal



government agency. The awards are presented annually to living Americans whose thinking has led to creative work, process, product or other achievement that has had a significant and beneficial impact on society. The honor was presented Oct. 7 in Chicago. The foundation stated: "From the early 1970s to the present, Dr. Fauci has been internationally recognized as one of the world's leading researchers in the study of the pathogenesis and treatment of immune-mediated and infectious diseases. His contributions toward understanding the regulation of the human immune response and the pathogenesis of the human immunodeficiency virus (HIV) disease are universally renowned, and have served as the basis for our current strategies for the development of effective therapies for AIDS as well as for regeneration of the damaged immune system."

RESPONSE TO TRAGEDY, CONTINUED FROM PAGE 1

PHOTOS: VAN HUBBARD, RICH MCMANUS, SUSAN ORSEGA

Commanding the team is a soft-spoken pediatrician who is normally so low-key that friends say he has to signal when he has told a joke, so sober is his usual demeanor. A DMAT member since 1987, Dr. Van Hubbard of NIDDK is one of those NIH'ers whose heaping platter of routine responsibilities and extracurricular efforts has already won him a slew of honors and thickened his resumé. His two main titles—director of NIH's Division of Nutrition Research Coordination, and chief, Nutritional Sciences Branch—keep him busy enough, but the morning of Sept. 11 found him almost madly engaged. Paged during a staff meeting, he soon found himself juggling four phone lines and a beeper as the Office of Emergency Preparedness put the



PHS-1 DMAT Commander Van Hubbard in his office with hard hat and respirator—reminders of a tragedy.

DMAT team on alert within minutes of the New York attack.

Then a plane struck the Pentagon, and Hubbard's team was suddenly redirected there. With the help of team member Ann Ellis of the Clinical Center's Office of Facility Management and others, he quickly contacted DMAT members—"basically anybody we could get hold of by email or phone." Ironically, Hubbard had been scheduled to fly out of Dulles, bound for Indianapolis, that day.

By 10 a.m. on Sept. 11, the team had its activation orders and was converging on the DMAT warehouse in Gaithersburg; some 45 members had assembled by mid-afternoon. Hubbard keeps a duffle bag packed with 2 weeks' worth of clothes and equip-

ment ready, in addition to a "go bag" stuffed with emergency medical supplies—the kind you can tear into without having to wait for the team's tractor-trailer-load of supplies to set up.

But all that hurrying was for naught as the team learned that it was not officially requested by the state of Virginia or the District of Columbia to assist at the Pentagon; again, fatalities outnumbered injuries there. So team members went to the Gaithersburg Hilton overnight, awaiting orders. "Everybody wanted to do something," Hubbard

'Food I Can Do'

Alice Rosenberg is a nurse case manager on the 11th floor outpatient clinic in Bldg. 10; she came to NIH 2 years ago after directing nursing care at the Whitman-Walker Clinic in D.C. and loves her work here, primarily with HIV/AIDS patients.

She learned that her daughter, in graduate school at New York University, and her friends had been feeding firemen at the WTC scene, and decided, "Food I can do—I've been feeding people for years...So I got in my car and went."

She left on Sept. 25 and spent 2 nights volunteering at a Red Cross shelter set up in a small college "a block from the hole." She showed up out of the blue, and almost wasn't needed, but was willing to do most anything, anytime. "It was, 'Do you want to wash pots or make beds?' so that's what I did."

Rosenberg said the firemen "were incredibly grateful to sit on a chair and eat a meal with a fork and a knife on a plate, rather than sitting on a sidewalk eating out of a styrofoam box. You couldn't get a lot of guys to lie down—they just wouldn't lie down. The rescue workers wouldn't even unstrap their tool belts.

"Some would talk," she continued, "some wouldn't. It wasn't disrespectful, they just didn't want to do it."

Rosenberg would put stuffed animals, donated by the boxload to the Red Cross, on each cot, along with Hershey's kisses and letters sent from kids to their new heroes, the rescuers. "It was very sweet to see that," she said.

Rosenberg is glad she went, and intends to return again late this year to see how else she can help. "It was just incredible to see this hole, and pile of rubble. The ground is still hot. The big cranes that they had looked like toys—like an Erector set—in perspective to the pile."

She is also newly evangelical about the Red Cross: "They are my new big thing," she enthused. "For the rest of my life, when I make a contribution it will be to the Red Cross. They're just an amazing group of people."

Rescue workers and their trained dogs take a break on the perimeter of the pile. Note bandages on the dogs' feet.



said, "but we recognized that [the rescue effort] had to be organized. Unfortunately we had to hold tight."

By the following evening, the team was demobilized for the Pentagon site, and most went back to their regular jobs. However they remained on high-alert status. They were called up Sept. 20 for routine deployment downtown for President Bush's address to the nation; a DMAT team is always on hand for State of the Union-type addresses in case of disruption on Capitol Hill.

On Wednesday, Sept. 19, PHS-1 learned that it was to report to New York on Saturday, Sept. 22 to relieve other DMAT teams that had been first responders there. Members got back on a bus in Gaithersburg for the drive to New York City, and arrived there late in the afternoon for a 10-day mission.

The Sheraton New York is not the typical bivouac for DMAT members; they are far more used to cots, tents, and sleeping under the stars. But the five-star hotel at the corner of 52nd St. and Second Ave. became the center of operations for PHS-1, whose management team met with authorities on the hotel's 50th floor. Prior to Sept. 11, Hubbard and other NIH team members say they had been used primarily to post-hurricane medical assistance, which, though physically more demanding, was not nearly as emotionally unsettling as what they saw in New York.

Hubbard was issued a phone/radio set and told to be ready the next morning to go by bus to another site to get special ID cards issued for the response. A tour of ground zero followed.

"I can't express it in words—the enormity of it, the feelings," he said, his face tightening. It would turn out that Hubbard lost not only a childhood friend,



Passerby lights candle at one of many impromptu sidewalk memorials.



Portion of WTC impales nearby building.

'Same Church, Different Pew'

Nurse practitioner Susan Orsega of the 11th floor outpatient unit in the Clinical Center also spent 10 days at the World Trade Center site, not as a DMAT member, but as one of a 43-person Commissioned Corps Readiness Force, or, as she defines it relative to DMAT, "Same church, different pew." An NIH'er for 11 years, the Pittsburgh native joined the CCRF in 1997.

"The CCRF was created by the Office of the Surgeon General in 1994 to improve DHHS response to public health emergencies," she explained. "CCRF is like a DMAT in that we respond to disasters or other public health emergencies but the key difference is that we respond to domestic or international requests. DMATs respond only to national disasters, and trains regularly as a solid team."



Alice Rosenberg (l) and Susan Orsega

Orsega was initially called in to provide nursing "backfill" at the National Naval Medical Center when nurses there were called to staff the USS Comfort hospital ship. She spent almost 3 days at Navy, then was redeployed to New York City, where she provided medical care at the same 5 medical assistance sites that were staffed by the PHS-1 DMAT.

"I saw patients ranging from iron and steelworkers who needed blister care management to burns, lacerations and corneal abrasions," she said. "We were treating 150-200 patients per shift at all five clinics."

Despite witnessing what she called indescribable horror, Orsega "really felt honored to represent those who couldn't go, and to represent PHS. It's a great way to feel like you're responding on behalf of the nation. And there were so many good people that were there," she continued. "The fire fighters were never, ever going to stop...So many people lost their friends. It was a war zone, really."

Orsega documented much of what she saw in photographs. Dust from the destruction piled so thick that hand-scrawled messages were everywhere: "Dana, I love you always. Mom" and "We miss you Father Mike" and "We came, we saw, we cried."

"I hope I never see anything like this again," Orsega said. "It does move your soul, and put things into perspective."

Once she got back to Bethesda, she couldn't resist tuning in news coverage of the disaster. "I felt the need to stay connected," she said.

who had captained a ladder company in New York, but also a close and promising young colleague who had been aboard the jetliner that slammed into the Pentagon. "But there was still a glimmer of hope, even then. There was still active fire when we got there. And it was there when we left, too."

Five medical assistance sites—named after the

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streets on which they were located—ringed the WTC rubble, nicknamed by fire fighters and police “the pile” or “the Devil’s Tower.” Hubbard visited them all as his team mainly cared for rescue workers injured while sorting through the wreckage. The most common ailments were respiratory problems, from breathing grimy air, and “a fair number of lacerations needing sutures, as well as aches and bruises. The men would get stitched up and go right back to work.” Hubbard said some rescue workers declined further evaluations of suspected problems in order to return to the rescue effort, saying, “Nah, I’ll do that later.”

Hubbard says PHS-1 also offered fluids, respite “and conversation if they needed it. We saw more and

A three-story flag adorns a building in New York City in the tragedy’s wake.



A memorial to lost police officers and fire fighters gets a visit by a responder.

more foot problems as the week went on—the workers spent so much time in wet boots.”

The DMAT team was supposed to work 8-hour shifts, but with security so tight and the effort so unrestrained, most shifts stretched close to 12 hours. The five medical tents saw roughly 500

Ed Pfister’s Diary

Ed Pfister works on a pile every day, but normally the pile is composed of building blueprints, which he reviews by the acre in his role as environmental compliance officer in the Office of Research Services. His Bldg. 13 workspace is awash in drawings that depict neatness, order, rationality. Chaos, danger and evil intent are not spoken here.

So the shock was acute when he arrived in New York City with the PHS-1 DMAT team; he is its preventive medicine/safety officer. A team member for the past 8 years, he makes sure his mates have the proper equipment, in this instance mainly respirators. He believes “it is part of the calling of the PHS to respond to disasters—it is part of the duties of a commissioned officer to ‘go outside the box,’ so to speak, and do some interesting things to help people.”

A veteran of three hurricanes and two flood relief efforts, he was not prepared for the destruction he saw in New York, so he resorted to diary-keeping as a way of managing his emotions. “I sent what I wrote to my family while I was away,” he said. “It really helped me to write it down, and resulted in some encouraging emails. It helped with the mentally distressing aspects of the deployment. I get choked up just thinking about it.”

Some excerpts:

Sept. 22 – Day 13 of the disaster and day 1 for us. Travel by bus to NYC. We were briefed by the incident command chief. He had been on the scene since day 1 and was visibly affected by his recent experience. A veteran of 30 some years as a police officer and fire fighter himself, he broke down as he

described a vivid scene of the recovery of the remains of a fire fighter. Only the crushed helmet, a limb, a boot and a segment of turnout coat was left of the recovered man and yet he was identified. As the remains were brought out to the street, all work stopped and rescue workers lined the street with bowed heads to pay their respects to their comrade.

Sept. 28 - I made a point to visit as many of the impromptu memorials around the site that I could. Also, in the city, the people have come and placed hundreds of flowers, candles, cards and photos around the fire halls. At fire station 57, “The Pride of Midtown,” the activity board still is dated Sept. 11, 2001, and bears the names of the shift leader, crew and responding truck



Ed Pfister

that was lost on that day. We also had a scare regarding the potential for the freon gas tanks, which provided air conditioning for the towers, to rupture. Freon tanks are under pressure and if ruptured in the presence of heat and water will form a toxic acid gas (phosgene) which displaces oxygen and causes severe burns in the lungs and on the skin.

Sept. 29 – Today, our last day and being Sunday and as I’m not a habitual churchgoer, I visited the

patients per day.

Team members had to travel in pairs and report their whereabouts hourly as changing conditions at the site and shifting winds altered their risk exposure dramatically. Hubbard said the girder removal clanged like church bells; Clinical Center nurse practitioner Susan Orsega said it sounded more like the building itself “was screaming and crying; it sent chills down your spine.” Nurse Alice Rosenberg of the CC’s 11th floor outpatient clinic, who went to New York for 2 nights on a solo mission of mercy, said her fellow Red Cross volunteers were alerted to three signals: “One horn meant be alert. Two horns meant move a block away. Three horns meant run like hell. I wasn’t going to wait around after horn number two.”

Though Hubbard said the DMAT deployment was as well-staffed and supplied as any he has been on, and lauded his teammates as “willing to put in the



A workman surveys the damage at ground zero. The dented ball in the center was allegedly an ornament in the WTC courtyard.

time needed,” the witness he bore proved more taxing than the work itself. “I don’t think anyone could be prepared to see this site,” he said. “Realizing what happened, and the number of people involved...”

Hubbard joined the DMAT team the year after he’d switched from intramural NIH to extramural; he’d read about the opportunity in the *NIH Record*. “I did it to do something clinical,” he said. “Once I got involved, I thought it was the right thing to do.” In the past, he has been deployed primarily to hurricanes—Andrew,

he says, was the worst—and his most recent storm was Georges in Puerto Rico and Key West. Until the WTC deployment, he had never had to say no to normal NIH duties during DMAT engagements. “The number of times we are actually called up isn’t that great,” he said.

“The question is, can you stay interested in the times in between?”

Hubbard is grimly aware that PHS-1 may be called up again, and soon. He says the team is always willing to take on new members, and concludes on a note of pride: “It does make you feel good to go out and do this.

You know you’ve made a difference. It’s an internal reward.”

Administrative officer Ann Ellis, who had helped Hubbard contact the DMAT team members, and whose husband had participated in the Pentagon search-and-rescue mission, has offered to assemble a



Crane-borne bucket carries rescue workers to the top of the pile at ground zero.

“Pride of Midtown” fire battalion station again. Lynch, Twitty and a host of other names and pictures of the first responding fire fighters were posted with candles and letters from all over the world. I spent about an hour there to pay my last respects and ponder on the meaning of all this.

The funeral day took on added meaning as we took our shift at 4 p.m. Reports surfaced that a stairwell (Tower 1, I think) had been accessed and hundreds of intact bodies had been found. Now, in this driving rain, the big cranes and other rigs on this side of “the Pile” came to a halt, as fire fighters climbed up the mound and formed bucket brigades to remove debris by hand...

I spent several hours tonight, walking “the pile” and attempting to soak it all in for the last time and find a bit of closure...deep below ground a portion of the pile was still on fire and boiled with molten material. Sometimes, open flame would erupt as a crane pulled debris out and air rushed in. Fire hoses constantly poured streams of water causing huge billowing steam clouds to rise up over the site into the huge lights above.

I watched at least six bodies pulled out at about 20 minute intervals and I moved in closer to the scene. I joined the scene with the fire fighters just as the flag-draped remains of one of their comrades was removed. I joined the yellow-jacketed responders lining both sides of the rubble roadway and we saluted this fallen hero as he was placed in an ambulance and removed.

Today was the most solemn day I have ever experienced in my life.

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team album from the WTC deployment, as both recruitment tool and remembrance.



DMAT member Ann Ellis works in facility management at the CC.

"Seeing the destruction was so incredibly sad to me," she said. "I didn't feel anger until I saw it. All of the surrounding buildings were affected. I kept wondering what it must have been like that day."

Like everyone else from NIH who went to ground zero, she has taken something positive from the holocaust: "It was such an honor to go out with the DMAT team, and to be part of it. It's an experience I'll never forget."

Other NIH participants in PHS-1 DMAT deployments during September included Linda Brown, nurses William Campbell and Rosa Clark, communications officer/pharmacist Albert Lock, safety officer Ed Pfister, Dr. Eric Mann and pharmacist Michael Montello. NIH'ers who served in New York with the CCRF included research nurses Lucienne Nelson of NCI and Ann Knebel of NINR, and NIDA nurse scientist Angela Martinelli.



Clockwise from left, paperwork from the WTC disaster collects on the fire escape of a nearby building; a plaster-of-paris pillar becomes an instant message board and memorial; and at left is one of the five medical sites erected by federal responders to the disaster at the World Trade Center.



Internet Grateful Med Is Retired

After a productive 5¹/₂-year run, the National Library of Medicine's Internet Grateful Med interface got its gold watch. IGM was retired on Sept. 28; it enabled users to search 14 different NLM databases including MEDLINE, TOXLINE and AIDSLINE with ease and precision. The rapid march of technological progress, including the phase-out of the library's mainframe databases and the conversion to new web-based retrieval systems, prompted the change.

Users attempting to access Internet Grateful Med following its shutdown will be offered links to other NLM search services appropriate to the data formerly available through IGM. One of the most helpful is the NLM Gateway (<http://gateway.nlm.nih.gov>), which provides "one-stop searching" across many of NLM's databases and other resources. The Gateway features many of the functions that made IGM popular with users.

"For more than 5 years, users worldwide made many millions of searches of IGM," said Dr. Lawrence Kingsland III, NLM assistant director for medical informatics research and IGM project leader. "We're pleased that the system helped connect the public with NLM's many resources." ■

FEW New Member Training

If you had a brief audience with the President, what would you want him to remember about you? Genia Bohrer, senior management analyst, ORS, and immediate past president of the Bethesda chapter of Federally Employed Women, will teach you how to make a good first impression, be recognized and rewarded for your efforts, and attract people and opportunities that you really want in your life. New and prospective members are urged to attend the next monthly meeting to learn about the chapter and the national organization of FEW. The meeting, open to the public, will be held on Tuesday, Nov. 13 from noon to 1 p.m. in the Natcher Bldg., balcony C. RSVP to Yvette Porter at portery@od.nih.gov. ■

Introduction to Clinical Research

Registration for the 2002 "Introduction to the Principles and Practice of Clinical Research" will begin on Nov. 1. The course will run from Jan. 15, 2002 through Apr. 23, 2002. Classes will be held on campus on Tuesday and Wednesday evenings from 5:30 to approximately 7. There is no charge for the course; however, purchase of a textbook is required. A certificate will be awarded upon successful completion of the course, including a final exam. The deadline for registering is Jan. 4, 2002.

For more information about course work or to register, visit <http://www.cc.nih.gov/od/core>. ■

CSR's Eugene Vigil Retires

By Don Luckett

Encouraging words can make a world of difference. They certainly had an impact on Dr. Eugene Vigil, who recently retired from the Center for Scientific Review. He was a scientific review administrator in the cell development and function integrated review group.

"My mother saw America as the land of opportunity," he said. Vigil explained how she came from the Ukraine and encouraged all her children to set high goals. His father was a Native/Chicano American who saw opportunity in hard work, and he encouraged his children to do just that.



Dr. Eugene Vigil

Vigil was thus enabled to make the best of his opportunities, particularly the ones NIH provided. After earning an M.S. degree in botany from the University of Iowa, he received an NIH predoctoral fellowship to continue his studies there. He earned his Ph.D. in 1967, studying plant growth hormones in the germination of grass seeds. He developed bioassays for studying the regulation of growth in the coleoptile shoot, which brings the first leaf out of the seed. Vigil then received a 2-year NIH postdoctoral fellowship at the University of Wisconsin followed by a 2-year Public Health Service traineeship at the University of Chicago. His postdoctoral research characterized peroxisomes, crystal-bearing cell bodies found in coleoptile cells. He discovered that these structures were common in mammalian tissues. Researchers who have continued this research have since associated peroxisome abnormalities with various human diseases. Vigil sees this development as a testament to the value of basic research.

He went to Marquette University in 1971 to be an assistant professor in its department of biology. He continued his studies of peroxisomes and developed techniques for studying related enzymes as well as photosynthetic reactions. In 1979, Vigil moved to the University of Maryland. He was an assistant professor in its department of botany until 1981, when he became a research associate in the department of horticulture.

He joined the Agricultural Research Service at the U.S. Department of Agriculture in 1988, working as a plant physiologist in the Climate Stress Laboratory in Beltsville, Md. He helped address a major problem for the cotton industry: white speck in dyed fabric. He showed how drought stress at a certain time created immature fibers resistant to dyes. In other research, he showed that plasma

membranes of seed cells were intact and not porous, as was commonly believed.

Throughout his career, Vigil was guided by something else his mother urged him to do: "Try to give something back and help others." He worked to bring underrepresented minorities to the USDA, for which he received the director's award, and he served on the minority affairs committees of the Federation of American Societies for Experimental Biology, the American Society for Cell Biologists, and the American Society of Plant Physiologists.

Vigil seized an opportunity to do more to help others in 1995, when he became a program director in the Minority Biomedical Research Support Program at NIGMS.

In 1998, Vigil returned to his scientific field by becoming a scientific review administrator for the CSR study section that reviews grant applications dealing with light and electron microscopy, flow cytometry, bioinformatics and related areas in cell biology. He continued to help underrepresented minority scientists by recruiting them to serve on his scientific review group and by participating in outreach efforts.

Many are thus fortunate that Vigil took to heart the encouraging words his parents gave him. Though he has retired from NIH, he will continue to work hard and encourage others. He intends to pursue independent business interests with the hope of developing a foundation to help even more people. ■

Annual Leave: Use It or Lose It

Annual leave in excess of the maximum carryover balance (in most cases 240 hours) is normally forfeited if not used by the end of the current leave year. If you have not already planned to take those excess hours of annual leave, you should discuss your leave with your supervisor now while there is still time to schedule it. Your bi-weekly Earnings and Leave Statement tells you how much annual leave you must use so that you will not lose it when the leave year ends on Saturday, Jan. 12, 2002.

In spite of planning, circumstances sometimes arise that prevent you from taking leave that has been scheduled and approved earlier during the leave year. In such cases, you and your supervisor are jointly responsible for ensuring that any "use or lose" leave is officially rescheduled. This year, your "use or lose" leave must be scheduled not later than Saturday, Dec. 1.

If you or your supervisor have questions regarding "use or lose" leave, contact your Human Resource Office or other appropriate program official designated by your institute or center.

Do You Have Sickle Cell Disease?

If you have sickle cell disease (SCD), consider participating in a study that can help you and future generations.

Doctors at NIH invite individuals age 18 or older with SCD to take part in important new studies.

There is no charge, and compensation is available to those who take part.

Call for more information: 1-800-411-1222 (TTY 1-866-411-1010), or visit www.cc.nih.gov.
Se habla español.

Health Benefits Fair, Nov. 6

In conjunction with the 2001 Federal Employees Health Benefits (FEHB) Program Open Season, which runs from Monday, Nov. 12 through Monday, Dec. 10, NIH is sponsoring an FEHB Open Season Fair. The fair will be held in Bldg. 1's Wilson Hall (3rd floor) on Tuesday, Nov. 6 from 10 a.m. to 2 p.m. Representatives from most of the plans that are available to employees will be on hand to answer questions on their 2002 benefits. Sign language interpretation will be available for those who need it.

Salerno Appointed NIA Deputy Director

Dr. Judith A. Salerno, who executed policies to improve pain management, long-term care, and end-of-life care as chief consultant for geriatrics and extended care at the Veterans Health Administration (VHA), has been appointed deputy director of the National Institute on Aging.

"Dr. Salerno's experience administering the VHA's major geriatric and aging initiatives, her relationships with professional and advocacy organizations, and her previous tenure at the NIA, presage her contributions toward the NIA's future research agenda," said Dr.



Dr. Judith A. Salerno

Richard J. Hodes, NIA director.

At the VHA in Washington, D.C., Salerno set procedures to improve the VHA's diagnosis and treatment of dementia while forging relationships with the American Geriatrics Society, the Gerontological Society of America, and the National Chronic Care Consortium. Geriatric training is her top priority: at the VHA, she expanded the Geriatric Research, Education and Clinical Centers from 16 to 21 major centers. This represented an important recommitment of the veterans' health system to academic geriatrics and a research investment into stroke, palliative care, functional impairment, and cardiovascular diseases in older people.

This is Salerno's second appointment at NIA. From 1989 to 1992, she served as senior clinical investigator at the Laboratory of Neurosciences, where she concentrated on clinical research in Alzheimer's disease and geriatric hypertension. From 1992 to 1995, she was an NIA guest researcher.

Salerno received her M.D. degree and a master's degree in health policy and management from Harvard Medical School, followed by clinical and fellowship training in internal medicine at Georgetown University, George Washington University and NIH. Certified in geriatric medicine, she has authored more than 50 publications related to the treatment of older people and age-associated diseases.—Jeannine Mjoseh

Vaccine Volunteers Needed

The Vaccine Research Center is recruiting men and women between the ages of 18 and 60 who do not have HIV. They are asked to participate in a study to test the safety of an experimental HIV vaccine. Participants will be compensated and receive free medical exams and tests. The vaccine will not infect participants with HIV. Call toll free 1-866-833-LIFE to help scientists develop an HIV vaccine.

NIH-Duke Training Program Offered

Applications for the 2002-2003 NIH-Duke Training Program in Clinical Research will be available in Bldg. 10, Rm. B1L403 beginning on Nov. 1.

Designed primarily for clinical fellows and other health professionals who are training for careers in clinical research, the program offers formal courses in research design, statistical and decision analysis, research ethics and research management.

Courses are offered at the CC by means of videoconferencing from Duke or on-site by adjunct faculty. Academic credit earned by participating in this program may be applied toward satisfying the degree requirement for a master of health sciences in clinical research from Duke University School of Medicine. For more information about course work and tuition costs, visit <http://tPCR.mc.duke.edu/>. Enrollment in the program is limited. The deadline for receipt of applications is Mar. 1, 2002. Applicants who have been accepted into the program will be notified by July 1, 2002. Applications from both intramural and extramural divisions are encouraged.

Email queries about the program may be addressed to Dr. William E. Wilkinson, program director, at tPCR@mc.duke.edu.

Find Information for Your Research

The NIH Library offers several modes of training to suit your learning styles:

- ◆ Classes on how to use electronic resources effectively. The fall schedule includes many seminars on several topics, for example: Accessing full-text journals; searching databases; ordering and receiving articles via email; setting up a literature alert service; creating instant bibliographies for your manuscripts; using the new NLM Gateway.

- ◆ Tutorials offering one-on-one assistance with a librarian in your office or in the library.

- ◆ Web-based tutorials on how to use electronic resources, for example: conducting a cited reference search in the Web of Science database to find out who has cited a particular article; setting up a Porpoise profile to receive weekly updates from the Web of Science database; organizing your research files for creating instant bibliographies for your manuscripts using Reference Manager.

Go to <http://nihlibrary.nih.gov/training.htm> for more information or call 496-2184. The training opportunities are free. NIH staff only.

Healthy Adults Needed

NIMH is seeking healthy adults between the ages of 18 and 45 to participate in a memory study. Individuals must be able to see at least 3 feet away without the use of glasses or contact lenses. Participants will be interviewed and will complete a memory task during which physiological functioning will be recorded. Call 402-9347 for information.

NIEHS's Sandy Lange Retires

Sandy Lange said she was always too busy to go back to school, despite the fact that countless times during her 33-year career at NIEHS she heard the words: If only you had a college education.

But the lack of a college degree did not stop her career progression. Lange started at NIEHS in 1967, as a GS-3, the secretary to the director's secretary. She progressed steadily to an administrative assistant, then an administrative officer, a staff assistant to the NIEHS director, director of NIEHS Office of Communications, and finally to director of the National Toxicology Program Liaison Office and assistant to the Environmental Toxicology Program director.



Sandy Lange

When she retired in early September, she was a GS-15. As director of the NTP Liaison Office, Lange said it was her job to "communicate the best science to the broadest group of people in a way they can be empowered with it and understand it."

And it was a job she took seriously.

Over the years, Lange honed her skills as she went, using NIH resources such as the Executive Potential Program, which she participated in during 1990. In 1991, she added government public affairs and dealing with the media to her training portfolio.

In her office shortly before her retirement, she sat back in her chair and calmly reflected on her career at NIEHS.

There were lots of firsts in the institute's early years. Like the big polychlorinated biphenyls, or PCB, conference when she was pregnant with one of her sons. (Both sons are now grown.) Or when the international programs were first established, how she worked with her counterpart in the Russian delegation, negotiating not science but language for the first environmental health agreement between the two countries. The next 3 days included repeated trips between the institute, the director's house and the hotel where the Russian dignitaries stayed. Two years later, she recalls, she traveled to Russia with an NIEHS delegation to renew that agreement.

Then there was the institute's 10th anniversary. It was held in a warehouse. She worked tirelessly on pulling it together. And then the 20th and 30th anniversaries came and went as well.

It's obvious the events spring to life in her memory as she softly recites the names of people and places that are landmarks in her career.

But make no mistake. She has long-range plans for

her free time in retirement: Duke University's Institute of Learning in Retirement, her church's outreach project, a 2-year academy focusing on spiritual formation and personal growth. Projects that undoubtedly will keep her interacting with people.

"That's what I will miss most," she said.—Colleen Chandler ■

CIT Computer Classes

All courses are on the NIH campus and are given without charge. For more information call 594-6248 or consult the training program's home page at <http://training.cit.nih.gov>.

Getting Started with MIPAV	11/1
Hands-On Windows 2000 Server for System Administrators	11/1
Introduction to HTML	11/1
SDP: CIT Program to Cut Software Costs	11/2
Introduction to the Mac Operating System	11/2
Windows XP - What's New	11/5
Safe Desktop Computing in Uncertain Times	11/5
Creating Presentations with PowerPoint 2000 for the PC	11/5
Installing and Using VirusScan	11/6
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Using SQL to Retrieve DB2 and Oracle Data	11/7-8
EndNote 5 for Windows - Introduction	11/9
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Getting Started with GCG	11/13
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Postpartum Depression Study

The Behavioral Endocrinology Branch, NIMH, is seeking volunteer mothers ages 18-40 who have had one or more past episodes of postpartum depression following a full-term pregnancy, but are not currently depressed. Participants must be free of medical illnesses, medication-free and currently not breastfeeding. Volunteers may be asked to participate in a 6-month protocol investigating the effects of hormones on brain and behavior. Participants completing the study will be paid. For more information call Linda Simpson-St. Clair, 496-9576. ■

Female Volunteers Needed

NIMH seeks healthy females ages 40-50 to participate in longitudinal studies of the perimenopause. Volunteers must have regular menstrual cycles and be medication free. Hormonal evaluations, symptom rating completion and interviews will be performed. Subjects will be paid. Call 496-9576. ■

Management: Is It for Me?

Promotion to a supervisory position can bring more money and responsibility, but will it bring you satisfaction? How do you decide if management is right for you? The class "Is Management for Me?" explores the rewards and drawbacks inherent in positions of management. Through guided exercises, you will experience situational dilemmas common to supervisors to help you decide if this is an area where you can find fulfillment. The class is Jan. 15, 2002, from 9 a.m. to 4 p.m. in EPS. For more information, call HRDD at 496-6211 or visit <http://learningsource.od.nih.gov>.