3-Element Perimeter Security
It's Not Just a Fence, It's a System

By Rich McManus

The black metal fence being erected — albeit in brief marches between rain showers — this summer and fall may be the most obvious part of the new NIH perimeter security system, but it isn't all that stands between the campus and a potential aggressive act. Two other elements — a campus Gateway Center and a Central Vehicle Inspection facility for all commercial vehicles — offer additional protection. The three elements, not all proceeding at the same pace (mainly to preserve parking for NIH'ers), will eventually harmonize and "work together in an integrated fashion to create a total perimeter security program," said Arturo Giron, deputy chief security officer, Office of Research Services.

MORE . . .

Lance Due Here, Oct. 17
NHGRI Researcher Teams with Lance Armstrong In Ride for Cancer Awareness

By Geoff Spencer

Each day when he enters the lab at the National Human Genome Research Institute, Peter Scacheri is in a race to understand the molecular and genetic mechanisms of cancer. In October, he'll shift gears in his race against cancer by jumping on his bike for an epic journey across America.
Zerhouni Helps Launch NEI Exhibit at Union Station

By Michael Coogan

Calling it a "wonderful partnership of science and public education," NIH director Dr. Elias Zerhouni recently helped launch the National Eye Institute's Low Vision Traveling Exhibit's 2-week stay at Union Station before about 200 people. Invited guests included Rep. Michael Capuano of Massachusetts and Dr. Dorothy Height, chair and president emerita of the National Council of Negro Women.

"As a leader of the NIH, I want to create partnerships between scientists and the public that will allow us to prevent disease," Zerhouni said. "I believe exhibits like this one from the NEI can make a huge difference in the outcomes of conditions such as age-related eye disease."

The exhibit, called THE EYE SITE: A Traveling Exhibit on Low Vision for Shopping Centers, made a 3-month swing through four D.C.-area shopping malls from April through July, culminated by a fortnight at Union Station. "The exhibit's message is simple: People can do something about their vision loss," said Dr. Paul Sieving, NEI director. "The impact of low vision on quality of life and independence can be devastating. The ability to move about safely is impaired. Low vision can interfere with reading the newspaper, recognizing faces of your family and friends and reading the label on medicines. People with low vision can experience frustrations and can feel isolated. But there is something they can do. Vision rehabilitation services can teach people how to use their remaining vision more effectively, and visual and adaptive devices can help them lead independent lives."

The exhibit, part of NEI's Low Vision Education Program, includes five colorful kiosks designed to attract a cross-section of the population, from young people to older adults. One kiosk provides information on low vision materials and local services and resources, and others feature devices that can help people with low vision. A highlight of the exhibit is an innovative, interactive multimedia touch-screen program that explains what low vision is
and what can be done about it, offers personal video accounts of people living with low vision, and shows how they cope with their vision loss and overcome the challenges of daily living. The exhibit also provides a self-assessment to help people determine if they or someone they know may have low vision. It includes information in Spanish as well as audio presentations. Two identical EYE SITE exhibits have been traveling around the country since 2001. By the end of this year, these exhibits will have traveled to 49 shopping malls in 19 states, reaching a potential 20 million visitors.

"At the NIH, our duty and focus is to no longer wait for a disease to harm someone before intervening, but to detect disease early and intervene before it causes harm," Zerhouni said. "This is a fundamental approach NIH will follow over the next 15-20 years. Unlike typical medicine, in which people visit doctors when they are ailing, NIH is asking the American people to educate themselves about the early signs of disease, such as age-related macular degeneration and glaucoma. The EYE SITE exhibit helps provide this education."

Zerhouni said he had "a very personal reason" for helping to launch the exhibit at Union Station. "My grandfather developed cataracts at a young age," he said. "His vision decreased to a point where he could no longer work. My father had to drop out of school to support the family. Seven years later, surgical therapy became available, and my grandfather was treated. My father tells me that during those 7 years in which my grandfather could not see, my grandfather aged by 25 years. As soon as he was treated, he rejuvenated himself by 25 years. When he regained his sight, the jobs and income he had lost, which prevented my father from continuing his studies, recovered, and my father went on to become a teacher of mathematics and physics. In many ways I owe my being here today to science."

In each shopping mall, the exhibit is sponsored by a host committee composed of members from NEI grantee institutions, state agencies and community organizations and groups interested in low vision. Since the tour began in 2001, NEI has partnered with 70 organizations that have provided about 165 ophthalmologists, optometrists and other low vision experts, along
with more than 280 additional volunteers. All of these have contributed more than 2,600 staff hours conducting seminars and vision screenings, demonstrating devices and holding Q&A sessions. About 47,000 NEI publications have been distributed at the exhibit, about 5,000 alone in the D.C.-area tour.

Dorothy Height (r), chair and president emerita of the National Council of Negro Women, speaks about the importance of preventive eye care. Listening are, in the front row (from l) NIH director Dr. Elias Zerhouni and NEI director Dr. Paul Sieving.

Among the written comments received from those who viewed the exhibit: "This is a wonderful thing you all are doing here. It has touched me deeply. I had no idea I was a victim of low vision. The sign spoke to me. I wasn't having fun with family members and friends. I made my first eye appointment and I am going tomorrow and I have a feeling it will change my life." And this, from a high school sophomore: "This is a great exhibit. I learned the different parts of the eye in much more detail than my freshman biology class."

For more information about the exhibit, visit www.nei.nih.gov/nehep/eyesite or contact Jean Horrigan at 496-5248.
Ehrenfeld Resigns as CSR Director

Dr. Ellie Ehrenfeld stepped down from her post as director of the Center for Scientific Review at the end of September.

"I came to NIH to assess the peer review process and effect changes to accommodate the rapidly changing scope and practice of biomedical research," she said. "We completed the design of the first total reorganization of CSR's review committees, and we are in the process of implementing the new study sections. I am extremely gratified by the support and generous participation of an outstanding team of NIH staff and many others from the extramural research communities."

Ehrenfeld will continue in her position as chief of the picornavirus replication section in NIAID's Laboratory of Infectious Diseases. Beyond this, she said that she has no specific plans. "One never knows what opportunities the future might bring."

In her 7 years as CSR director, the center experienced a dramatic increase in workload. The number of NIH and other Public Health Service applications submitted to CSR increased by 70 percent — from 38,579 applications to an estimated 66,000 in fiscal year 2003.

"Ellie has done a tremendous job," said NIH director Dr. Elias Zerhouni. "She helped initiate and advance a number of important initiatives that transformed and modernized the way NIH conducts peer review."

During her tenure, Ehrenfeld involved many researchers from the external research communities to help CSR ensure the vitality of NIH peer review as the breadth and complexity of biomedical and behavioral research dramatically expands. The center established working groups of external experts to periodically evaluate the effectiveness of CSR's integrated review groups (IRGs) and their component study sections. CSR also initiated a comprehensive reorganization of its scientific review groups with guidance of the Panel on Scientific Boundaries for Review. Teams of external experts subsequently completed the design for new IRGs and their study sections. The CSR advisory committee is now overseeing implementation efforts. In addition, CSR established liaisons with the extramural research communities to address emerging concerns. CSR recruited special advisors on clinical research, bioengineering research and behavioral and social sciences research to examine CSR practices and suggest new approaches to reviewing grant applications in these areas.

Ehrenfeld initiated efforts to collect and analyze data on applicants, reviewers and staff to gauge CSR's workload, understand trends affecting reviews and assess CSR's overall effectiveness. She also advanced efforts to
make the peer review process more transparent by speaking to many professional societies and having CSR's web site expanded and streamlined.

During the last several years NIH has also incorporated new technologies to allow the electronic submission and review of grant applications. Now all incoming applications are scanned into digital form and CSR study section reviewers can receive their applications on compact discs. In addition, most reviewers now use the Internet-Assisted Peer Review System to submit their critiques and read those submitted by other reviewers.

Ehrenfeld is proud of CSR training initiatives for staff and reviewers. "I'm particularly proud of the CSR Review Internship Program we developed," she says. "It gives experienced research scientists an opportunity to explore careers in NIH research administration, and they are playing critical roles as CSR builds up its staff to handle its increasing workload."

Ehrenfeld recently helped advance a trans-NIH effort to develop new ways to attract, review and fund high-risk and innovative research applications. "Really innovative and groundbreaking research proposals often don't fare well in review," she said, "and I hope NIH continues to do more to identify and fund these kinds of applications."

All of these accomplishments come on top of a highly productive research career that has been recognized by numerous awards, which are listed in her biography: http://www.csr.nih.gov/welcome/Moreeli.htm. The list, however, may be incomplete, since Ehrenfeld has made it clear she is not retiring.
Butterworth To Present Gorgas Lecture, Oct. 10

By Jennifer Wenger

The evolution of biomedical research in Africa — from an ongoing emphasis on parasitic illnesses to an intensified focus on the prevailing scourges of tuberculosis (TB) and HIV/AIDS — will be the topic of discussion when Dr. Anthony Butterworth, a leading authority on tropical disease in sub-Saharan Africa, presents the 10th Gorgas Memorial Leon Jacobs lecture, sponsored by NIAID. The lecture, titled "The Changing Face of Biomedical Research in Africa: A Personal Perspective," will be held at 3 p.m. Friday, Oct. 10, in Wilson Hall, Bldg. 1.

A British citizen and self-described "Africaphile," Butterworth has conducted research, both in the laboratory and the field, in Kenya, Senegal, South Africa, Sudan, Uganda, and Zimbabwe, in addition to the Philippines, South America and the United States. He has dedicated most of his 30-year career to the study of schistosomiasis, a devastating parasitic illness that affects roughly 200 million people in developing countries worldwide. The disease is caused by a blood fluke that lives part of its life in certain types of snails and, in its larval form, penetrates the skin of people who wade, swim or bathe in the contaminated water the snails inhabit. Depending on the species of parasite, it can cause both acute illness and, more importantly, chronic, long-term damage to the liver or urinary tract, which may lead to death.

Butterworth's research into the epidemiology and control of schistosomiasis as well as the human body's immune responses to the parasite have advanced understanding of the mechanisms of disease in general, while bringing the world closer to a safe and effective vaccine. When asked about his most noteworthy accomplishments in this arena, however, he is quick to point to the contributions of his peers.

"Scientific discovery is a slow-moving, methodical accumulation of events, like the tide coming in," he said. "At most, you may cause a 'ripple,' but you couldn't generate a ripple if it weren't for the tide."

One of Butterworth's more sizable ripples occurred in the mid-1970s when he served as a research fellow at the Wellcome Trust Research Laboratories in Nairobi. There, he and others demonstrated that eosinophils, granule-containing white blood cells known to be involved in allergic reactions such as asthma, can kill the larval form of the schistosome parasite when working in concert with certain antibodies.

"Up until that point, eosinophils were merely thought of as nasty, but that..."
didn't make sense from an evolutionary standpoint," he said. Later, as a research fellow at Harvard Medical School, he and several colleagues demonstrated that eosinophils destroy the schistosome by releasing highly toxic granules onto the larva's surface.

Butterworth's next ripple came when, as an external scientific staff member of Britain's Medical Research Council, he and a team of researchers demonstrated that humans can develop immunity to schistosomiasis over time. In longitudinal studies conducted in Kenya and Uganda, they showed that, beginning at approximately 12 years of age, individuals experience an increase in levels of IgE antibodies — another key culprit in allergic reactions — that react against antigens of the adult parasite, as well as a drop in levels of certain antibodies that obstruct the immune response. Molecules recognized by the IgE antibodies in immune humans are being investigated as possible candidates for a vaccine.

Butterworth says that although work toward a vaccine continues, less emphasis is now being placed on this goal for two reasons: drugs for treating schistosomiasis today are less toxic and costly and more effective than they were 30 years ago, and there is little economic incentive for drug companies to manufacture a vaccine. Instead, researchers are now more interested in the mechanisms by which the infection progresses to chronic disease or death in some individuals.

"Lots of people are infected, but only some get sick," said Butterworth. "Was the patient malnourished? Did he have malaria? HIV? It's the interaction between schistosomiasis and such conditions that is most interesting to researchers," he said. "We can no longer look at schistosomiasis in isolation."

In his current role as honorary scientific director of the Biomedical Research and Training Institute, Harare, Zimbabwe, Butterworth helps oversee research conducted in such areas as malaria, TB and HIV/AIDS. He and his wife, Dr. Liz Corbett, have studied the interaction between HIV and TB in gold miners in South Africa and are now investigating the relationship in factory workers in Zimbabwe. The risk of developing TB is much greater for individuals infected with HIV/AIDS, with TB being the leading cause of death for HIV patients worldwide.

Butterworth received his education at the University of Cambridge (B.A., 1966; M.B., B.Chir., 1969; M.A., 1970; Ph.D., 1973). He was elected a fellow of the Royal Society, London, in 1994, and is a member of the Royal Society of Tropical Medicine and Hygiene. Among his awards are the Chalmers Medal from the Royal Society of Tropical Medicine (1990), the King Faisal International Prize in Medicine from the King Faisal Foundation (1990), and the Bernhard Nocht Medal from the Bernhard Nocht Institute (1987).

The Gorgas Lecture is sponsored by NIAID's Laboratory of Parasitic Diseases. For more information, contact Cynthia Nishikawa Fabry at 496-5717.
CC 50th Anniversary Feted
Research Festival Showcases Clinical Research

This year's Research Festival will begin Tuesday, Oct. 14 with a symposium titled "The Past, Present, and Future of Clinical Research," from 8:30 a.m. to 5:30 p.m. in Masur Auditorium, Bldg. 10.

Speakers for the session, who will trace progress in major clinical realms, are the people who were involved in that progress in the last century and continue to carry on into this one.


The subject matter spans cancer therapeutics, cardiovascular disease, neuroscience, the molecular basis of disease and infectious diseases.

The Research Festival runs from the 14th through the 17th. Music and food will refresh festival goers as they immerse themselves in the scientific offerings of 12 minisymposia and hundreds of posters. There will also be exhibits of intramural resources and commercial vendors, plus a Job Fair for postdocs and clinical fellows.

The minisymposia sessions — 10:30 a.m. to noon and 2 to 3:30 p.m. — will be held Wednesday, Oct. 15, at Natcher Conference Center.

The six simultaneous morning symposia are on host response to infectious diseases, molecular epidemiology of chronic diseases, protein-protein interactions, virus entry-virus receptor interactions, programmed cell death, and interconnection of hormones, bone and brain.

The afternoon symposia address genome instability, bioinformatics, negative regulation of immune responses, bringing genetics to the public, macromolecular complexes and assemblies, and interfacing the physical and biological sciences.

This year's festival is cochaired by Dr. Joseph Fraumeni, director of the Division of Cancer Epidemiology and Genetics, NCI, and Dr. Robert Desimone, NIMH scientific director.

For more information visit [http://festival03.nih.gov](http://festival03.nih.gov).
NIDCD Urges Screening for Infant Hearing

On Labor Day weekend, the National Institute on Deafness and Other Communication Disorders began an effort to ensure that babies who fail hearing screenings are brought back by their parents for diagnosis and intervention. More babies in the United States are born in August than in any other month. (Thanksgiving appears to manifest itself in many ways.)

Many of us know of a baby born this past month. Because of state laws and new programs in 38 states and the District of Columbia, it is likely that baby you know was screened for hearing loss before he or she was discharged from the hospital. Approximately 87 percent of all infants are screened for hearing loss. Two to three babies in every 1,000 infants born will have a significant hearing loss. Hearing loss or deafness in the first months and years of life affects the ability to acquire language and/or speech during a critical period of development. Undetected, hearing loss or deafness can have a significant effect on the educational and social growth of the child. (Yes, infants can wear hearing aids.) The interventions may include auditory devices, assistive technologies and/or sign language. "Most important is that the young child begins to communicate and the family recognizes the needs of the child," emphasized Dr. James Battey, Jr., director of NIDCD.

Currently, only about half the families are coming back for diagnosis and intervention. NIDCD held a working group to determine why there are problems with follow-up and determined that the rate could be improved if: parents fully understand their child's screening results; parents fully understand the importance of the diagnostic evaluation; and parents are provided with necessary contact and resource information.

To respond, NIDCD is developing a special bilingual web site (visit www.nidcd.nih.gov and follow the baby.) The institute has also begun a national outreach to local and regional newspapers. The site and resource materials include information for parents, information for professionals and hospital administrators, information about the variety of intervention resources and communication strategies and tactics as well as links to key NIDCD-supported and other useful sites that provide additional information.

Radio interviews in English and Spanish provide some simple steps for families. If you are a new parent, be sure your baby has been screened; get a diagnosis before 3 months of age; begin an intervention before 6 months of age.

Parents need to know, also, that if their baby passes the screening, it does not mean they should not remain vigilant. There are many forms of late-onset hearing loss that, if undetected, will have an important impact on the educational and social development of their child. An estimated 28 million Americans are deaf or hard-of-hearing.
Depression Screening for NIH Staff

NIMH and the NIH Work/Life Center — with support from the Employee Assistance Program — are sponsoring a health-promotion screening at six NIH locations on Thursday, Oct. 9, for employees who believe they are experiencing mood-disorder symptoms or might have in the past.

Held on National Depression Screening Day, the event will help employees determine whether they could benefit from further evaluation and, possibly, treatment of depression. Symptoms can include a sad, empty, or apathetic mood; elation, racing thoughts, grandiosity; impaired concentration; feelings of despair, worthlessness; and talk or thoughts of death and suicide.

The walk-in screening — which is anonymous, confidential, and usually takes less than an hour — involves viewing a 15-minute video (if participants' time allows); completing a screening tool (symptom questionnaire); meeting briefly with a mental health professional for results and guidance to referral organizations; or just collecting NIMH materials on mood and related disorders, including a guide to local resources.

With the right treatment — which may include short-term talk therapy, medication, or both — life can feel good again for people who have suffered painful mood disorders.

Employees who are concerned about a loved one's symptoms may also participate. Those friends and family members, however, may call (800) 520-6373 to find a privately sponsored (but also free) site near work or home where they can be screened.

People whose native language is not English and who will attend the Bldg. 10 site may request an interpreter for the screening by contacting Andrea Rander (496-1807) by Oct. 6.

The Work/Life program is arranging for sign-language interpretation or other reasonable accommodation upon request at 435-1619 (TTY 480-0690). The video itself is both open-captioned and audio-described. The screening tool is also available in Braille, as are several publications.

Staff who cannot attend the event may contact the EAP (496-3164) to arrange for anonymous screenings in their Bldg. 31 suite (Rm. B2B57) throughout October.

For more information, write to event coordinator Sophia Glezos Voit at sglezos@nih.gov or call 443-4533.

**Screening Times, Locations**

Times and locations where NIH staff may attend a screening are:

10 a.m. - 3 p.m.
Bldg. 10, OMS Conf. Rm. 6C401
Bldg. 31, Rm. B2B57
Rockledge II, Rm. 7111
Neuroscience Center, Rm. B
1-3 p.m.
NCI-Frederick, Bldg. 426, Rm. 103
Democracy Plaza, NCRR Rm. 1037
APAO Solicits Awards Nominations

The Asian and Pacific Islander American Organization (APAO) will continue the tradition to honor NIH employees with significant achievements, in the following two categories: (I) employees who have made outstanding contributions to the advancement of APA; and (II) APA scientists who have made significant accomplishments in biomedical research. The awardees will be honored with a plaque of recognition from APAO at the group's holiday celebration in December. The organization asks NIH'ers to nominate individuals who deserve these honors. Send your nominations (up to 6) to Yun-Bo Shi (shi@helix.nih.gov) with the name(s) and a brief description of the merit for each candidate by Oct. 30. Include CV and bibliography for category II award.

The Science of Human Attraction

The staff training in extramural programs (STEP) committee will hold a "Science for All" forum on the topic, "Simply Irresistible: The Science of Attraction," on Tuesday, Oct. 14 from 8:30 a.m. to 12:30 p.m., with registration at 8 a.m., in Lister Hill Auditorium, Bldg. 38A.

Why is it that, for some people, a bottle of champagne, strawberries, soft music and candlelight make for romance while others are stimulated by a cold 6-pack, a thick steak, Patsy Cline and line dancin'? From pheromones to fantasy, find out if opposites really do attract, how we entice a mate and what determines our definition of attractive. How do these differ among various cultures? What can we learn from the birds and the bees? Research experts will use animal and human models to help explain what really happened when Harry met Sally. Join us as we reveal the naked truth about life's oldest mystery — sexual attraction.

OSIA Lodge Marks 20th Year

The Order Sons of Italy in America's NIH Lodge # 2547 will celebrate its 20th anniversary on Friday, Oct. 24 from 8 p.m. to midnight at the Knights of Columbus Hall, 9707 Rosensteel Ave., Silver Spring. Price is $25 for an evening of music, hors d'oeuvres and open bar. Playing dance music will be Kirt Vener's "Dixieland Express Band." To reserve a ticket, contact Nina Baccanari, (301) 869-4045 or Carol Humphreys-O'Keefe, (301) 353-0742.

Parklawn Classic Set, Oct. 17

The 28th annual Parklawn Classic will be held on Friday, Oct. 17, after having been postponed last April due to security concerns; the event will again be held in April in 2004. The Classic is the oldest and largest continuously run government-sponsored race in the country.
Included as part of the event is a run and health walk. Due to construction along the traditional run route, the 5-mile race will start at 10 a.m. at the Parklawn complex and follow a brand new course. The 2.5-mile walk will begin at 11 a.m. over the existing walk course, also starting at the Parklawn complex.

For more information and to register call the race hotline at 443-5350 or visit http://classic.dhhs.gov.

R&W Sponsors 'Big Train' Game

R&W recently sponsored its annual evening with the Bethesda Big Train baseball team at Shirley Povich Field in Cabin John Park. More than 250 NIH'ers and their families saw some of the leading players from the NCAA play a game in the wooden-bat league. As an added attraction, R&W hosted the Hogettes, the Washington Redskins' "Hall of Fame" cheerleaders. In the photo above, Hogetter Mikey T is flanked by Charles Butler (l), chairman of the R&W, and R&W President Randy Schools. Butler, who works in the Clinical Center's recreation therapy section, threw out the game's first pitch.

Theatre Group Presents 'Salute to Hollywood'

Come enjoy Bethesda Little Theatre's latest production, A Salute to Hollywood, a musical review featuring songs such as "That's Entertainment," "Boogie Woogie Bugle Boy," and "New York, New York." The show runs Oct. 17, 18, 24 and 25 at 7:30 p.m. and Sunday afternoons on Oct. 19 and 26 at 3 p.m. The BLT has moved its performance venue to The Writer's Center located at 4508 Walsh St. in Bethesda, half a block east of Old Georgetown Rd.

Ticket prices are $15 for adults, $10 for seniors, and $5 for children 12 and under and may be purchased at the door or through the R&W. Clinical Center patients and their families are invited to attend free of charge. The BLT is an R&W organization whose proceeds benefit NIH charities. For more information contact Elaine Hughes at (301) 589-0720.

Wednesday Afternoon Lectures

The Wednesday Afternoon Lecture series — held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10 — features Dr. Scott E. Fraser on Oct. 8, speaking on the topic, "Imaging the Motions and Signals That Pattern Embryonic Development." He is Anna L. Rosen professor of biology, director, Biological Imaging Center, Beckman Institute, California Institute of Technology.

There is no lecture on Oct. 15 due to the NIH Research Festival.
For more information or for reasonable accommodation, call Hilda Madine, 594-5595.
Dr. LaShawn R. Drew recently joined the staff of NIGMS as a program director in the Minority Access to Research Careers Branch. Prior to her appointment, she served as director of the NIH Academy and was an adjunct professor of biology at the University of Maryland, University College. She earned a bachelor's degree in natural science with a concentration in chemistry in 1991 from Spelman College and went on to earn a Ph.D. in biology in 1998 from Howard University, where she participated in NIGMS's Minority Biomedical Research Support program as a research associate. Her postdoctoral research was conducted in the Molecular and Clinical Hematology Branch, NIDDK. Drew is a member of several professional societies including the American Society of Hematology and the Association for Women in Science.
Davis Named Veterinarian of Year

Capt. Judith A. Davis, director of the NINDS-NIDCD animal care program, recently received the PHS Commissioned Corps Veterinarian of the Year Award for sustained excellence in leadership, mentorship and commitment to duty. During her 7 years as director, she has transformed the program into one of the most respected animal care programs at NIH, setting trends in daily animal monitoring and care. The program also has received special recognition by the Association for Assessment and Accreditation for Laboratory Animal Care International for rodent enrichment. In addition, Davis created an animal care program for the new Vaccine Research Center in 2000. According to Capt. Shelley Hoogstraten-Miller, NHGRI, and retired Capt. Lee Chedester, NIAAA — who wrote letters of support for the award nomination — Davis maintains a high commitment to the Commissioned Corps and provides mentorship to numerous new officers who contact her for advice. She also continues to publish timely articles in the field of laboratory animal medicine. Since her arrival at NIH in 1996, she has authored 14 publications — many co-authored with her animal care staff and other PHS officers as part of her effort to mentor and educate them. The award was presented at the annual veterinary category all-hands meeting held at the Uniformed Services University of the Health Sciences in Bethesda.

Frasier Accepts Honor from HHS

Diane Frasier, director of NIH's Office of Acquisition Management and Policy, recently accepted on behalf of the NIH acquisition community a group recognition award from the HHS Office of the Secretary for being the best overall large organization in the areas of customer service, executive leadership and workforce management. The award was presented by Marc Weisman, acting director, HHS Office of Acquisition Management and Policy, at the department's 2003 Acquisition Benchmark Symposium, a 2-day meeting that featured presentations and panel discussions on such issues as the President's small business management agenda, acquisition consolidation, electronic government and streamlining performance-based contracting.
Nursing Research Leader Bloch Dies

Dr. Doris Bloch, formerly special assistant to the director of the National Institute of Nursing Research, died of congestive heart failure at Suburban Hospital in Bethesda on Aug. 10. She was 75 years old.

Bloch is considered a giant among nursing research leaders because of her work in the early development of federal programs in nursing science. According to Dr. Ada Sue Hinshaw, who was NINR director when Bloch worked there, "She was a strong, relatively quiet, very bright colleague and friend. She was a mentor for many of us and guided us through our first RO1 grant applications." Hinshaw added, "Without the strong foundation she was instrumental in building, nursing research and research training programs at NINR would not have met with such outstanding success."

In 1986, Bloch led nursing research and research training staff from the Division of Nursing, HRSA, to NIH's then National Center for Nursing Research, which later became an institute. She was chief of the Program Planning and Evaluation Office and later moved to the special assistant to the director position in 1990. Among her major achievements was producing the plan to develop priorities for the National Nursing Research Agenda that became the guiding policy during the early years of the nursing institute.

"Although I worked with Doris only briefly," said Dr. Patricia Grady, current NINR director, "I admire her contributions to nursing research and specifically to this institute. We still benefit from her innovations. Even though she retired in 1994, she continued to keep up with NINR activities and helped reconstruct the history of federal nursing programs, an invaluable contribution that was based on her first-hand experience."

Bloch was a native of Berlin. She escaped Nazi persecution by hiding in The Netherlands with the aid of families in the Dutch countryside. While she and her sister survived, her parents died in Auschwitz. Her story is recorded in the U.S. Holocaust Memorial Museum.

As an illustration of her courage and perseverance, following high school in Holland, Bloch immigrated to the U.S. and enrolled in Mount Holyoke College, even though she did not speak a word of English. After graduating with a B.A. in zoology, she completed her nursing education at Yale University, earning a master's degree in nursing, followed by master's and doctoral degrees in public health at the University of California at Berkeley.
She went on to forge a distinguished career in public health, which included service in the then Tanganyika, Kenya and the Philippines. After returning to the U.S., she joined the Division of Nursing at HRSA in 1971.

Bloch was a dedicated fan of the arts, including film, and it was after a pleasant evening with friends viewing the film *Winged Migration* that she fell and fractured her hip. As Hinshaw put it, "She survived the hip surgery, but her heart, taxed by a life of service, could not sustain her."

**NIH Mourns Death of Nobuko Tasaki**

Nobuko Tasaki, 88, wife of NICHD neurophysiologist Ichiji Tasaki, died Aug. 12 of heart disease. "Noko," as family and friends knew her, was the constant work companion of Dr. Tasaki, a noted researcher at NIMH and later, at NICHD. For nearly 70 years, Mrs. Tasaki worked closely with her husband, serving as his lab assistant and partner, making several important technical contributions in the field of neurophysiology. There were few days that Mrs. Tasaki was not working with her husband in his lab, and they even skipped vacations. On the day she died, she collapsed just after leaving his lab in Bldg. 13.

A native of Japan, Mrs. Tasaki attended college in Tokyo. In 1951, she and her husband came to the United States to do research at Washington University in St. Louis. In 1953, Dr. Tasaki began his career at NIH. Realizing that if she ever wanted to see her always-working husband she was going to have to join him in the lab, Mrs. Tasaki began assisting him in his experiments. Over the years, he often jokingly called her his "supervisor."

During their long research careers together, Mrs. Tasaki made many important technical contributions of her own. She developed a method of making micropipettes by hand before the process was mechanized. She and her husband used these micropipettes to make neurophysiological recordings — an innovation that enabled researchers to take readings inside the cell. The couple made the first in vivo recordings from afferent primary auditory nerves of the guinea pig. This allowed them to demonstrate that traveling mechanical waves arise in the guinea pig cochlea in response to sound pressure. It also allowed them to record cochlear microphonics, which are sounds produced by active hair cells within the ear. This work led to the development of the field of audiology, indirectly providing the basis for diagnosing and treating many hearing disorders.

When Dr. Tasaki began researching the physical and chemical processes that occur in nerve membranes, Mrs. Tasaki developed a novel method to load the tip of the intracellular electrode (which is necessary to make accurate intracellular recordings) with potassium chloride (KCl) solution. Mrs. Tasaki first filled the electrode tip with alcohol and then replaced it with KCl under a vacuum. She also was adept at micro-dissection of single axons, from which the couple made intracellular recordings. In recent years, Mrs. Tasaki focused on helping Dr. Tasaki make pH and electrical measurements of
nerve properties, while continuing to help prepare solutions and wash glassware. She was especially talented at creating figures and drawings and prepared all of those in Dr. Tasaki's books and articles.

Throughout their research career, Mrs. Tasaki was a constant source of encouragement and emotional support for her husband, whose deepest desire has been to understand fundamental physical mechanisms governing nerve excitation. In addition to her husband, Mrs. Tasaki is survived by two sons, Akira Tasaki of Tsukuba, Japan, a retired physics professor, and Keiji Tasaki, an engineer who works at NASA; two grandsons; two granddaughters; and four great-grandchildren.
Healthy Volunteers Sought

The Mood & Anxiety Disorders Program, NIMH, is looking for healthy volunteers, not on medication, with no current or history of psychiatric illness, between the ages of 30 and 45, for a multitude of studies. These may include PET scans, MRI, psychological interview, neuropsychological testing, and other procedures depending on the project in which you choose to participate. A stipend is available. Call 1-866-627-6464 for more information.

Maternal Depression Study Recruits

Are you a mom with a young baby? Do you feel tired or irritated? Do you have trouble sleeping or just have the blues? If so, NIH needs your help in a study about maternal depression and child development. The study focuses on understanding how maternal moods are linked to maternal and infant behavior. Although this is not a treatment study, we will provide supportive resources to mothers who may need them. If you are between 20 and 45 years old, with an infant 4 months or younger, or if you are currently expecting a baby, call 1-888-667-3867 or email ppcordinator@mail.nih.gov or visit http://postpartum.nichd.nih.gov to learn more about this study. All calls and emails are confidential. Seeking information about the study does not obligate you in any way to participate. You will be paid for participation.

Healthy Men, Women Needed

Healthy men and women, who regularly exercise, are needed for a study of the effects of exercise on physical fitness and mood. Men and women between the ages of 18-45, height-weight proportionate, with normal blood pressure and who are in good health are eligible. Volunteers will be compensated for three 2-hour visits to the Uniformed Services University of the Health Sciences. For more details, call Shannon Boyer at (301) 295-3263.

Computer Users with Arm Pain Needed

Full-time computer users with pain/symptoms in hands, arms or neck are needed for a study of methods for reducing upper extremity symptoms/disorders. Volunteers will complete an intervention program and online surveys, and may receive access to ergonomic and/or workshop programs for reducing symptoms. Not all participants will directly benefit from the study, but they will be paid for completing questionnaires. Call (301) 295-9660/9659 or email workstyle_study@hotmail.com.
3-Element Perimeter Security
It's Not Just a Fence, It's a System

By Rich McManus

On the Front Page...

The black metal fence being erected — albeit in brief marches between rain showers — this summer and fall may be the most obvious part of the new NIH perimeter security system, but it isn't all that stands between the campus and a potential aggressive act. Two other elements — a campus Gateway Center and a Central Vehicle Inspection facility for all commercial vehicles — offer additional protection. The three elements, not all proceeding at the same pace (mainly to preserve parking for NIH'ers), will eventually harmonize and "work together in an integrated fashion to create a total perimeter security program," said Arturo Giron, deputy chief security officer, Office of Research Services.

Continued...

"It's very important to realize that our security program is much more than the fence," said Giron, who chairs two of the three NIH security committees formed largely in response to 9/11 and sits on the third (see sidebar). The perimeter fence, due for completion early in 2004, offers general physical security, as does a plan to "harden" the exteriors of certain key buildings nearest the perimeter with a special Mylar glazing, Giron noted.

But the fence is not just the 9-foot pickets, he explained; there are also 8 pedestrian gates located around the perimeter — operable with proximity cards — and another 8 pedestrian/vehicle entrances, plus a variety of anti-ram defensive measures including strategic use of boulders and vehicular cable barriers running parallel to the fence in certain vulnerable places. These consist of four 1-inch steel cables secured to poles and anchored in concrete every 200 feet; this feature is perhaps most evident along Cedar Lane on the campus's north boundary. "We have also taken advantage of natural barriers — including streams and trees — to arrest potential ramming," noted Stella Serras-Fiotes, director of facilities planning in the Office of Research Facilities.
The Gateway Center complex, to be located near the Medical Center Metro station, has two pieces, continues Giron. "The center itself (located on the south side of the intersection of Center Drive and Rockville Pike) will process all visitors, in a welcoming way, to NIH, and include ID check. We hope eventually to be able to issue temporary access cards to visitors, which they will return to us on the way out," Giron said. "The cards will be specific to the building the guest needs to visit." He envisions a web-based system wherein NIH'ers who expect visitors can alert security officials at the Gateway Center online about who is coming and when.

The second piece of the Center is an underground multi-level parking garage where visitors can leave their vehicles, which won't require inspection; this would be the only parking facility on campus outside the fence boundaries. "The idea is to inspect only those vehicles coming onto campus, within the perimeter fence," notes Giron.

Once visitors are parked and cleared at the Gateway, the plan, still subject to final approval, is for them to proceed via covered walkway to a shuttle bus station that will ferry them to their destinations within campus. Employees who have missed the "Kiss and Ride" option at this site will be relieved to know that this feature is to be restored to its prior status, Giron said. Patients coming to the Clinical Center, he added, and their visitors won't be required to use the Gateway, though that option will be available to them; a separate entrance for these populations is being established, in coordination with CC
authorities, at Cedar Ln. and West Center Dr. "It will function strictly as an entrance, and be open during weekdays only," Giron said. "It could also be used as a campus exit in the event of emergency."

Whether they choose to enter campus via the Gateway or by Cedar Ln., patients and their visitors will find special Clinical Center information kiosks, staffed by CC hospitality workers, to help guide their way.

The third element of perimeter security is the Commercial Vehicle Inspection (CVI) facility, to be located on the northeast corner of campus, along Rockville Pike just south of Cedar Ln. All commercial vehicles visiting NIH must stop here, where multiple technologies will be used to inspect them.

"We'll be able to do chemical explosive trace analysis, and K-9 teams will be permanently stationed there," Giron said. "We'll do visual inspections of vehicles, and there will be a pit for examining the undercarriage. We may even be able to X-ray whole trucks eventually."

The CVI site was chosen because surveys showed that more than 90 percent of NIH's commercial traffic arrives at campus via Rockville Pike, headed south, said Giron. "We expect quick inspections with no significant delays for customers."

Once the "total perimeter security program" that Giron envisions is in place, life within the fence will still be somewhat scrutinized: "Certain buildings will continue to have a security guard presence," he said, "either because they are heavily trafficked (as in the A-wing of Bldg. 31) or because of their special status (such as the power plant)...Once the fence is up, we'll rely more heavily on electronic access systems (proximity cards) as opposed to guards at most buildings." (Note: Many people mistakenly think that the magnetic strip on the back of their ID card is the "trigger" for using proximity card access; the card itself has embedded electronics, so waving any part of it is effective, Giron explains.)

The timeline for deployment of the perimeter security system "varies from project to project," Giron added. "The fence and gates should be in place by January. The Gateway Center is slated for completion in 2006, but we'll have an interim solution, probably a double-wide trailer. The CVI is due to be finished around fall of 2005. That job won't start until the garage for Bldg. 33 is complete, because it would deprive the campus of 500 parking spots."
Aerial view of Metro station area, including the Gateway Center just to the left of the traffic circle. Rockville Pike is at bottom.

Just outside the fence, a perimeter pathway for pedestrians and cyclists is being constructed in areas not served by sidewalks. That pathway is perhaps most prominent on the front lawn of the National Library of Medicine, where work has proceeded this summer on a lighted path connecting the Pike to Old Georgetown Rd., along the campus's southern boundary. This path, lying 6 feet outside the perimeter fence, allows circulation at all hours, said Serras-Fiotes.

She and Giron assure NIH'ers that the perimeter fence will in no instance be used to pen employees in, even in the event of a Code Red emergency. "We can restrict access into campus," said Giron, "but we can't restrict access out. Anyone who needs or wants to get out can do so anytime they want." Even under Code Red, exit options for vehicles won't be restricted; there will always be 8 ways to drive off campus. "But you have to remember that the roads outside campus still have the same limited capacity (to accommodate a potential flood of evacuees)," cautioned Serras-Fiotes. "The main artery capacities in the area are what they are."

Giron said that in the event of campus evacuation, a controlled-phase dismissal plan would take effect. "The evacuation would be by parking area, not by what building you work in." An all-hands email has been distributed providing guidance in this area. He went on to distinguish Code Red from Code Orange: "Unlike the orange level, which covers the whole U.S., a Code Red would be very limited geographically. It would have to be based on much harder intelligence than is required for Code Orange. And it would only be for a short duration, no more than about 48 hours."

Giron said the fence project, which has been hampered by unusually wet weather, has some other features of interest to employees: each of the 8 vehicle entrances includes a "rejection lane" (for cars that fail initial visual inspection) that can also serve as a drop-off point for riders coming to campus. Also, a special "mini kiss-and-ride" is still in the design and
modeling phase for possible inclusion at the Cedar Ln. patient/patient visitor entrance. A special vehicle hanger is also being developed that would allow employees to be dropped off within the campus, but does not grant parking privileges to the vehicle.

Finally, campus security involves much more than the perimeter system, Giron emphasized.

The NIH Police force has also been beefed up recently. "At the time of 9/11, we had 50 officers on the force. We have more than 70 now and we'll get to 90 by the beginning of the next fiscal year." NIH has also hired scores of unarmed guards who check IDs at building entrances and inspect vehicles entering campus.

"We also have probably one of the best fire departments in the state," he continues. "We now have a total of 31 fire fighters and added a tower truck that can reach up to 100 feet high. The fire department will be moving into their new fire house soon."

Furthermore, electronic security systems include the proximity card/ID cards worn by NIH'ers and a surveillance program employing video cameras targeting certain key areas of campus.

Security upgrades are also in progress at NIEHS in North Carolina and the Rocky Mountain Laboratories run by NIAID in Montana. "Each of these campuses has a well-articulated security program that meets its needs," Giron said. A perimeter fence exactly like the Bethesda campus version is planned for RML, and the possibility of a satellite NIH Police station there is being evaluated. "There is a bona fide need for an NIH law enforcement presence at this site," said Giron.

Several Groups Contribute to Security Policy

Because of their dramatic effect on employees' daily routines, NIH's post-9/11 security policies have been advised by a number of bodies whose expertise ranges from professional consultants to senior-level managers to plain old "what's this going to do to my life" NIH'ers.

NIH's chief security officer is Stephen Ficca, director of the Office of Research Services; Arturo Giron is deputy chief security officer. Three groups provide major guidance to these individuals: the community advisory board for security (CABS), chaired by NIMH scientific director Dr. Robert Desimone (see Sept. 16 issue of the Record); the security operations advisory committee (SOAC), chaired by Giron; and the Monday operations group, also chaired by Giron, which meets every second Monday.

"CABS is concerned with governance issues," explains Giron. "They address issues dealing with convenience and the lack thereof, and overall impact on the NIH community. They have provided input on the design and concept of the major elements of our security program. It's a very global group, and includes institute and center scientific directors and lots of senior folks."
The SOAC offers more of what Giron calls "granularity...These are operations managers at NIH with significant input into the security program. It includes the chiefs of the police and fire departments, senior operations managers and nationally recognized consultants from outside NIH. They've been working together for almost 2 years now."

The Monday ops group includes managers "one level down from the SOAC members," says Giron. "They deal with the real nitty-gritty stuff, the issues to be dealt with immediately." This group keeps a punch list whose items get checked twice monthly.

A fourth body, the emergency preparedness group, is revamping NIH's COOP — continuity of operations program — which kicks in when emergencies such as 9/11 befall the campus. This group is currently working with NIH's executive officers on a building evacuation program, said Giron. "They are also working with NIAID on additional responsibilities concerning emergency preparedness and liaison with the department (HHS) and with metro area groups such as the Council of Governments."

Rosters for the three main advisory bodies are as follows:

**CABS:** Dr. Robert Desimone (chair), NIMH; Linda Adams, NHGRI; Dr. Duane Alexander, NICHD; Dr. Carl Barrett, NCI; Maureen Gormley, CC; Dr. Michael Gottesman, OD; Alan Graeff, CIT; Dr. Richard Hodes, NIA; Robert Hosenfeld, OD; Dr. John La Montagne, NIAID; Chick Leasure, OD; Dr. Eugene Major, NINDS; Dr. Norka Ruiz-Bravo, NIGMS; Dr. Thomas Gallagher, OD; Office of Research Services Representatives Stephen A. Ficca, chief security officer, and Arturo Giron, deputy chief security officer.

**SOAC:** Arturo Giron, ORS (chair); Stella Serras-Fiotes, ORF; Juanita Mildenberg, ORF; Alan Graeff, CIT; Police Chief Alvin Hinton, ORS; Stuart Knoop, Oudens & Knoop Architects PC; Marco Monsalve, McManis & Monsalve Associates.

**Monday Operations Group:** In addition to Giron, Serras-Fiotes and Mildenberg, the usual attendees are Bill Brosius, ORS; Sandra Miller, ORS; Tony Clifford, ORF; Brad Moss, ORS; Julie Cullen, ORS; Charlie O’Hanlon, ORF; Robert Ostrowski, ORS; Paul Hawver, ORF; Ken Ryland, ORS; Tom Hayden, ORF; John Dattoli, ORF; Gary Hess, ORS; Alvin Hinton, ORS; Michael Spillane, ORS; Joe Kristofik, ORS; Tim Tosten, ORS; J.P. McCabe, ORS; Jim Wilson, CC; Jan Weymouth, CC; David Chung, ORS.
On the Front Page...

Each day when he enters the lab at the National Human Genome Research Institute, Peter Scacheri is in a race to understand the molecular and genetic mechanisms of cancer. In October, he'll shift gears in his race against cancer by jumping on his bike for an epic journey across America.

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Scacheri, a postdoctoral fellow in NHGRI's Division of Intramural Research, will join a select group of 25 other cyclists on the national team for the Tour of Hope, a cross-country bike trip led by five-time Tour de France champion Lance Armstrong. A survivor of testicular cancer, Armstrong is taking on the challenge to raise awareness about cancer and increase public participation in cancer research.

The tour, scheduled to take place from Oct. 11-18, will begin in Los Angeles and wind its way through Phoenix, Dallas, St. Louis, Indianapolis, Pittsburgh and Philadelphia before culminating with a ride to Washington, D.C., and finishing at the Ellipse in front of the White House. During the course of their grueling journey, the cyclists will stop at National Cancer Institute-funded Comprehensive and Clinical Cancer Centers in each city to inspire the public to participate in cancer research. They will also share their personal experiences related to cancer, which claims the lives of an estimated 1,500 Americans every day.

Scacheri, 31, was selected for the Tour of Hope team from more than 1,000 applicants because of his research exploring the genetic basis of cancer, his record as an avid cyclist and his personal connection with cancer. "I feel energized and the team is amazing," said Scacheri. "It means a lot for Lance to be on the tour. Lance is an inspiration for cancer patients and I appreciate what he's accomplished as a cyclist."

The team, continuously riding in a relay day and night, will be divided into
four groups of six to seven cyclists. Each cyclist will bike 3 hours at a time, twice a day, averaging about 120 miles per day. In between cycling stints, team members will rest and follow the tour in a motor caravan. Each member of the team will ride about 800 miles over the course of the week at an approximate average speed of 20 miles per hour depending on weather and terrain. In comparison, competitors in the 2003 Tour de France rode 2,130 miles in 3 weeks.

Scacheri works in NHGRI's Genome Technology Branch in the lab of institute director Dr. Francis Collins, who led the Human Genome Project's successful effort to sequence the 3 billion base pairs that make up human DNA. Scacheri's research is aimed at understanding the genetic and cellular mechanisms that contribute to cancer using the most current scientific techniques produced by the Human Genome Project. "We're confident that our approaches, based on genomic technologies, will revolutionize the treatment of cancer within our lifetime," said Scacheri.

In addition to their cycling feats, team members will make stops to talk about cancer research and to visit with cancer patients. "It's important for cancer patients struggling with their illness to know that scientists like me struggle right along with them to find a solution," said Scacheri. "Even though we may not take care of patients directly, we feel the clock ticking."

Scacheri began cycling 9 years ago when he was working as a lab technician in Pittsburgh. "Lab work can be frustrating and so I started riding to relieve stress and get away from it all," he recalled.

What started off as a casual hobby has turned into a non-stop chain of triathlons, charity bike events and mountain bike races. As part of a constant training regimen to stay in shape, Scacheri swims with the Masters Swim Team at the Naval Medical Center twice a week, putting in at least 4,000 yards per workout; runs 5 to 7 miles three times a week; and rides his bicycle more than 200 miles in an average week.

Even before the Tour of Hope, the NHGRI researcher was using his cycling talents to draw attention to cancer care. In 1998, Scacheri lost a good friend and groomsman in his wedding to cancer. "Doug passed away at the age of 25, within months of being diagnosed with a highly aggressive form of cancer," said Scacheri. The primary site of the cancer was never identified. Each year since then, Scacheri has organized an 85-mile bike ride from Washington, D.C., to Gettysburg, Pa., where a charity golf tournament is held to honor his friend's memory and raise funds for charities such as the Ronald McDonald House and Make-A-Wish Foundation.

Now, the scientist is expanding those efforts to reach a nationwide audience. "For someone like myself, an avid cyclist, a cancer researcher, and someone who lost a special friend to cancer, the Tour of Hope is the opportunity of a lifetime," he said. "It's an opportunity for a basic researcher to tell the public what we do."

Scacheri said that he anticipates that riding on the tour will be like riding in a weeklong series of races. Mentally, he will have to prepare and motivate himself as if each leg of the trip was a different race. "I'll definitely be thinking about Doug," said Scacheri, "and I'll be thinking of cancer survivors..."
and what they go through. I get my inspiration from those survivors and that is really my motivating factor."

Nine team members are cancer survivors and the team as a whole has experienced 15 types of cancer. Team members range in age from 29 to 57 and represent 18 states, including: Alabama, Arizona, California, Connecticut, Florida, Illinois, Maryland, Massachusetts, Michigan, North Carolina, New Jersey, New Mexico, New York, Pennsylvania, Rhode Island, Texas and Vermont.

During the tour, the national team, which is sponsored by Bristol-Myers Squibb, hopes to get 1 million Americans to sign a "Cancer Promise," which is a written pledge to learn about cancer and the importance of cancer research in finding a cure for the devastating disease. In addition, an estimated 1,000 cyclists are expected to register to ride with the cycling legend in the tour's sendoff ride in Los Angeles and its finale in Washington. Information on how to sign up to ride with Armstrong or how to obtain the "Cancer Promise" is available at the Tour of Hope website, www.tourofhope.org.

Armstrong Bike Tour Makes Stop at NIH

*Lance Armstrong*, cancer survivor and five-time winner of the Tour de France, is leading a bicycle tour across the United States Oct. 11-18 to raise awareness of cancer research and the vital importance of clinical trials. The Tour of Hope bicyclists will make a stop at NIH on Friday, Oct. 17. See the next NIH Record for more details.