NIH Conquers ‘Love Bug’ Computer Worm

By Cheryl Seaman and Kevin Haney

What a preposterous idea! Imagine a movie plot where some amateur computer programmers in the Philippines create a computer virus to steal Internet access passwords—and end up disabling a good portion of the world’s electronic mail traffic. Think about what could happen if a malicious little program called “ILOVEYOU” made its way into the email inboxes of over 45 million computer users worldwide. It just doesn’t seem possible—but it happened—and NIH learned some valuable lessons as a consequence.

On that infamous morning of Thursday, May 4, many NIH staff arrived at work, opened their email, and were greeted by numerous ILOVEYOU messages. Although opening the message was harmless, those

Point Guard in AIDS Fight

Fauci Attributes Success to Hard Work, Listening

By Robert Bock

The days are long, but rewarding, said Dr. Anthony Fauci of his position as director of the NIAID. Typically, he arrives in the office before 7 a.m. and doesn’t leave until 8:30 or 9 p.m. He works weekends as well.

“The time component can drain your energy, but that’s balanced by the energizing aspect of our mission, goals and accomplishments,” he said. “The balance tips in favor of feeling very good about what you’re doing, as opposed to feeling washed out.”

Fauci joined NIAID in 1968 as a fellow in the institute’s Laboratory of Clinical Investigation.

Where To, Now?

ORMH Marks 10th Year with Conference, Tough Questions

By Carla Garnett

Flashback to 1990. It was a busy year in medical science, and at NIH in particular. In between permanent directors that year with the threat of a federal furlough looming, NIH was stormed that spring by public demonstrations—first animal rights activists, then AIDS activists marched on campus. New therapies for stroke and spinal cord injury were announced, new approaches to treating epilepsy and colon cancer were trumpeted, and the first-ever human gene therapy trial was launched. An effort to reduce the nation’s blood cholesterol levels was begun, and HIV was beginning to spread disproportionately

NIH firefighters responded to a call for a “cardiac arrest—CPR in progress” during morning rush hour on Apr. 20 and were able to restore a pulse to a woman who had suffered a heart attack aboard a Metro subway car at the Medical Center Metro station.

Five members of the NIH Fire Department’s Platoon 2 were at the woman’s side within 4 minutes of receiving the call, which originated from Metro security and came through the Division of Public Safety’s Emergency Communications Center.

Bystanders, including a nurse from the National Naval Medical Center, had begun cardiopulmonary resuscitation on the woman, whose age was estimated at 50. “They were doing excellent CPR,” said Bill Kilinski, a technician with the NIH FD. “If it wasn’t for them, we wouldn’t have had much to work with when we arrived.”

The woman collapsed on the second to last car of a D.C.-bound train; as is Metro custom, the train separated, leaving the last two cars at the platform, and pulled ahead into the tunnel. The NIH
Dear Editor,
I am concerned about the placement of antimicrobial soap in the soap dispensers in the bathrooms in Bldg. 10's 11th floor. Soap is just fine and doesn't need antimicrobial agents. In fact, with the rise of antibiotic-resistant bacteria, the addition of antimicrobial agents to soap will just create more resistant bacteria. The biocide in the soap will breed biocide-resistant bacteria, and then what biocide will you use in the future? NIH is the last place where this soap should be popping up.

I was hoping you would investigate this matter and perhaps publish an article relating to this problem, urging NIH to remove the antimicrobial soap.

Dr. Mini Varughese, NEN Life Science Products

LOVE BUG, CONTINUED FROM PAGE 1

who double-clicked on the accompanying attachment set in motion an insidious chain of events. The attachment was actually a "worm" (i.e., a malicious, self-contained program that replicates across the network) and had two prime directives. As the worm infected Windows platforms running Microsoft Outlook email software, it sought out the individual's address book (generally the NIH global list) and began sending itself out to the entire list. In addition, the worm began overwriting certain file types, in particular graphic JPEG files, with a copy of itself. Macintosh and UNIX computer systems were generally unaffected, but the machines could act as message carriers. While updates to detect and eradicate the worm were posted on the Center for Information Technology's antivirus website at antivirus.nih.gov by late morning of May 4, the sheer number of messages produced by the initial infections overloaded email servers and made it necessary to take most of the NIH email servers offline for a day to be purged.

Because of the widespread confusion and uncertainty surrounding the worm, and to facilitate communication throughout the NIH community, CIT established a conference phone line for IC information system security officers, IT support staff, and mail server administrators. The conference call started at 10 a.m. on Thursday and continued throughout much of the weekend. NIDA's Michel Debois found "Radio Free CIT" an invaluable and timely forum for asking questions and sharing the latest information on the worm. "I very much appreciated having CIT's Chris Olandt, Don Freuss, Al Graeff, Dave Hunter and a host of others online to ask and answer questions. It was very effective because of the participation of those involved."

"Collaboration was the key to defeating the 'Love Bug,'" according to NIAID's chief information officer Dr. Laurence Wolfe. NIAID saw its first instance of the worm at 7:08 a.m. NIAID's first response was to contain and control the worm to help keep it from spreading. All users were notified of the attack by personal contact, intranet, and email, and each received hard-copy guidance about protective steps to take at work and at home. Coordinating its response to the attack with CIT and other institutes, NIAID kept network services up and turned email off for less than 3 hours while removing the worm. "CIT's quick reaction to set up an ongoing conference call for the institutes to share solutions really helped us," commented Wolfe. He also said that damage was minimized at NIAID due to the excellent cooperation of the entire NIH user community. As an example, CIT made available to all NIH on its antivirus web site a software script "fix" developed by NIAID's Robert Cox.

Before it was over, the ILOVEYOU worm and its many copycat variations would attack 40 of the 47 NIH email servers, infect some 200 computers, and replicate over 2,000,000 copies of itself to NIH staff. The less than 1 percent infection rate was largely due to the dedicated, round-the-clock collaboration between CIT and other NIH IC staff who worked as a team to eradicate the worm. And that, according to NIH Chief Information Officer Al Graeff, is perhaps the most valuable lesson to be learned from this experience. He noted, "An electronic virus such as this propagates very rapidly, especially at the NIH where normal operations promote quick and efficient transport of email. When there is an NIH-wide problem as all-invasive as this, only NIH-wide cooperation and information sharing can solve it."
Inaugural Nealon Lecture, June 16

The Eleanor Nealon Extraordinary Communicators Lecture Series, sponsored by the National Cancer Institute, will be launched at noon on Friday, June 16 in Masur Auditorium, in Bldg. 10. The series honors Eleanor Nealon, a beloved NCI employee who displayed passion and persuasion in her communication and advocacy work until breast cancer claimed her life in 1999. The series is a tribute to outstanding communicators who have advanced the science of communication and the communication of science through their professional or personal experiences.

ABC News Special Correspondent Robert Krulwich is the inaugural awardee. He will comment on cancer, its impact on society, and the translation of scientific information about cancer to the public. Krulwich regularly appears on Nightline and Good Morning America and has received numerous awards for his reporting, in which he uses humor and entertainment to educate and enlighten.

Sign language interpretation will be provided. If you have a disability or need any assistance or assistive devices to participate in this event, call L'Tonya Frazier at 496-8776 by May 31.

President Recognizes Budding Researchers

Two intramural scientists and 11 grantees are among 60 researchers who have received the fourth annual Presidential Early Career Awards for Scientists and Engineers. This is the highest honor bestowed by the U.S. government on young professionals at the outset of their independent research careers. President Clinton, who established the PECASE awards in February 1996, honored the recipients at a ceremony Apr. 12 at the White House. Awardees receive up to a 5-year research grant to further their studies. NIH is one of eight federal agencies with science/engineering missions and PECASE honorees.

Winners from the intramural program are Dr. Ronald M. Summers of the Clinical Center’s diagnostic radiology department and Dr. Weidong Wang of the National Institute on Aging. Summers was cited “for developing special radiologic visualization techniques such as virtual reality presentations that permit doctors and patients to better understand disease and better plan treatment.” Wang’s award read, “For innovative analysis of protein complexes and genes that regulate development and aging.”

The extramural winners included:
- Dr. Linda A. Barlow, University of Denver, and Dr. Xiaoqin Wang, Johns Hopkins University, funded by the National Institute on Deafness and Other Communication Disorders; Dr. Annelise E. Barron, Northwestern University, National Human Genome Research Institute; Dr. Carolyn Berrothi, University of California, Berkeley, National Institute of General Medical Sciences; Dr. Janean Holden, University of Illinois at Chicago, National Institute of Nursing Research; Dr. Judith A. James, Oklahoma Medical Research Foundation, Oklahoma City, National Institute of Arthritis and Musculoskeletal and Skin Diseases; Dr. Cecelia B. Moens, Fred Hutchinson Cancer Research Center, Seattle, and Dr. Geraldine C. Seydoux, Johns Hopkins University School of Medicine, National Institute of Child Health and Human Development; Dr. Marina A. Picciotto, Yale University School of Medicine, National Institute on Drug Abuse; Dr. Ida Sim, University of California, San Francisco, National Library of Medicine; Dr. David William Russell, University of Washington, National Institute of Diabetes and Digestive and Kidney Diseases.
team found the victim unconscious, without either pulse or respiration, lying in the aisle.

"We told the man doing CPR to stay and continue while we set up our equipment," recalls Lt. Jonathan Mattingly, the NIH Fire Department officer-in-charge on the call. While Joe D'Ambrosio, a technician with the NIH FD, got the woman's airway and ventilation established, Kilinski took over chest compressions. Then NIH firefighters employed a relatively new tool in their arsenal—an automatic external defibrillator, or AED. This machine delivers an electrical shock to the heart in an effort to reestablish a normal beat. It can only be used when a patient's heart is in a "shockable" rhythm called "v-fib."

The firefighters delivered three progressively stronger shocks to the woman; the machine itself monitors the heart rhythm and "recommends" repeated shocks if needed.

"The first shock didn't do anything—she went right back to v-fib," said Lori Padgett, a master firefighter and former Army medic with 7 years of experience. The second shock prompted three normal beats, according to a tape of events recorded by the machine, but the heart then returned to v-fib. The third treatment restored a normal rhythm.

The whole process took only 2 minutes, 34 seconds. Just after the third shock, paramedics from the Bethesda-Cherry Chase Rescue Squad arrived. "They applied their own, more sophisticated heart monitor, and started an IV," said Mattingly.

In a team effort with the B-CC paramedics, the NIH firefighters carried the woman up the escalator on a stretcher to a waiting medic unit.

"Her heart was beating good and strong when we turned her over to the hospital," Padgett said. "She took a few breaths on her own, but still wasn't conscious."

Padgett said the woman spent 2 days in treatment at Suburban Hospital, then was transferred to Johns Hopkins Hospital in Baltimore.

Heart attacks at the Metro station on campus aren't altogether rare, said Sam Barnett, a firefighter for 27 years. "We have used the AED unit there before," he added.

The Apr. 20 rescue was a textbook save, said Mattingly. "Bystander CPR, early notification, and early defibrillation, her heart was in a shockable rhythm and we had the right equipment. You only have 4-6 minutes before the brain starts dying. Things just fell into place."

"The CPR done by bystanders helped put the patient in the rhythm we needed to use AED to start her heart back up," Padgett emphasized. Kilinski, too, said it was crucial that, among the hundreds of stranded commuters milling about the platform, someone had the nerve to start CPR.

"A lot of people are afraid to start it," he said, shaking his head. "People are afraid they'll do something wrong," chimed D'Ambrosio, mordantly. Kilinski continued, "It's so important to initiate. People ought to take advantage of the CPR course offered for free by NIH in Bldg. 31. We wouldn't have had this kind of outcome without the early CPR."

O.W. "Jim" Sweat, director of the Division of Public Safety, ORS, and Dick Shaff, chief of the division's Emergency Management Branch, stated that they are "very proud of our Fire Department, not just for their handling of this incident, but for the good job they do each and every day. Their successes are attributable to the outstanding training and dedication of the firefighters and the state-of-the-art equipment that the NIH provides."

Each of the firefighters on the call received a written commendation from NIH acting director Dr. Ruth Kirschstein.

For more information about learning CPR, call 496-4111 or visit the training facility in Bldg. 31, Rm. B2B57.

**Male Volunteers Needed**

The Behavioral Endocrinology Branch, NIMH, is seeking male volunteers ages 18-45 to participate in a 5-month study of the effects of reproductive hormones on brain and behavior. Volunteers must be free of medical illnesses and not taking any medication on a regular basis. They will complete daily rating forms and be asked to participate in one of several protocols. Payment will be in accordance with the duration of each visit and type of protocol. Contact Linda Simpson-St. Clair, 496-9376.
Dozens of keyworkers representing each of NIH's institutes and centers, as well as the Office of the Director, feasted on pizza at a luncheon May 5 in Wilson Hall that launched the U.S. Savings Bonds drive. The campaign extends until June 30, and is headed this year by the National Institute of General Medical Sciences.

Its director, Dr. Marvin Cassman, issued an all-hands email May 10 touting the benefits of bond-holding. NIGMS Executive Officer Martha Pine gave the keynote talk at the luncheon in Bldg. 1, emphasizing the merits of the new I Bond.

This year, there is a special web site—hosted by the Office of Human Resource Management—dedicated to the bond drive. Visit http://www1.od.nih.gov/ohrm/bonds to find a list of keyworkers, and bond application forms that you can fill out electronically.

NIH'ers can choose to invest in either the new Series I Bonds or traditional Series EE Bonds. Series I Bonds are sold at full face value, and pay a fixed rate over and above inflation for 30 years and are indexcd to inflation. So your investment is guaranteed to stay ahead of inflation. Series EE Bonds are sold at half their face value and earn rates based on the market returns of 5-year Treasury securities. Both Series I and EE Bonds are backed by the full faith and credit of the United States and the interest they earn is exempt from state and local income taxes.

In addition, there are special tax benefits available for investors who use Savings Bonds to save for their children's education. If you qualify, you can exclude all or part of the interest earned by your bonds from your federal income taxes when you redeem them to pay for college or technical school tuition and fees.

Here are some of the I Bond's attractive features:

- I Bonds are based on a straightforward idea. They're sold at face value and grow with inflation-protected earnings for up to 30 years.
- I Bonds are affordable. You can invest as little as $50 or as much as $30,000 per year.
- I Bonds are safe. They are U.S. Treasury securities backed by the United States Government.
- I Bonds are tax advantaged. You can defer federal taxes on earnings for up to 30 years and they're exempt from state and local income taxes. The best part is, you don't need to do anything to get these benefits — they're built right into I Bonds.

- I Bonds will usually increase in value every month, and interest is compounded semiannually.
- I Bonds are liquid and can be turned into cash anytime after 6 months.

And remember, buying I Bonds goes a long way toward solving the biggest problem that all investors face: finding a way to save that guarantees that inflation won't eat away the value of their savings. For example, if inflation averages only 2.5 percent, in just 10 years it will take $1.28 to equal today's dollar. That means your savings would have to earn 2.5 percent just to stay even. Because I Bonds pay a rate of return over and above changes in the Consumer Price Index for all urban consumers, you'll always keep up.

Series EE bonds are Treasury securities that earn interest at market-based rates for up to 30 years. The purchase price of a bond is 50 percent of its face amount; for example, a $100 bond costs $50. Interest is added to the redemption value every month and paid to the investor when the bond is redeemed. The issue date for EE bonds, printed in their upper right-hand corner, is the month and year an authorized issuing agent received the full purchase price of the bond. The issue date determines when a bond begins and stops earning interest. Bonds are available through the payroll savings plan in $100, $200, $500 and $1,000 denominations. Contact your keyworker for more information.
among women and in the minority community. But HIV/AIDS wasn’t the only disease in which minorities were suffering in greater numbers than whites. According to a DHHS Office of Minority Health publication Closing the Gap, a distinct difference in health status was emerging on several fronts. In response, then-DHHS secretary Dr. Louis Sullivan appointed Dr. John Ruffin as NIH associate director for minority programs, effectively establishing what is now NIH’s Office of Research on Minority Health.

“Closing the gap between white and black health must be addressed,” Sullivan said, referring to the 14th annual study on the health status of the nation, which had been released only months earlier. “Closing the gap will not be easy, but this department and this administration are committed to improving this situation.”

Fast forward to 2000. Déjà vu. NIH is in between permanent directors. Overall—thanks largely to advances in research—the nation has never known better health and longevity, but the wealth of health still isn’t reaching the country’s minorities. Again the DHHS Secretary has responded, this time with a comprehensive and ambitious plan to eliminate health gaps in six major areas by 2010.

To map out a strategy for its next decade and to acknowledge the successes of its first, ORMH hosted a 3-day conference in April titled, “Challenges in Health Disparity in the New Millennium: A Call to Action.” More than 1,000 participants—including members of ORMH’s advisory committee, minority medical schools and institutions, the medical research community and health advocacy groups across the country—gathered for what amounted to 3 days of in-depth soul-searching. As he did when he was appointed in 1990, Ruffin sparked discussion by asking tough questions.

“How can the Office of Research on Minority Health best facilitate the national research effort to identify risk factors, prevention strategies and treatments for minority populations?” he said, during his welcome address. “How can we strengthen partnerships between NIH and minority communities to promote health and prevent disease? How can we strengthen participation of minorities in clinical trials and population-based strategies? How can we improve instructional and enrichment activities in science for minority students and teachers? What are the most effective strategies for recruiting and retaining minority biomedical scientists? I think the charge is clear. The question today is, where do we go from here? Once again we are seeking the advice of the community. The collective brain power of the minority community has always been on target.”

What Are Health Disparities?

By the year 2050, most Americans will be people of color. If trends in health continue as they are, however, the majority of citizens will be sicker and die sooner than their white counterparts. The benefits of better health are not reaching all Americans.

Consider current statistics for any major disease area: African Americans are about 34 percent more likely to die of cancer than are whites. Hispanics have higher rates of cervical, esophageal, gallbladder and stomach cancers than the national average; stomach and liver cancer rates are higher in Asian Americans than the national average. The relative number of persons with diabetes in African American, Hispanic, and American Indian communities is one to five times greater than in white communities; the Pima Tribe of Arizona has the highest known prevalence of diabetes of any population in the world. Diabetes-associated kidney failure is two and a half times greater in Hispanic people with diabetes than in their white counterparts. In 1998, black and Hispanic women with AIDS accounted for 77 percent of the cumulative cases reported.

“Overcoming such persistent health disparities and PROMOTING health for all Americans—particularly those who have suffered most—ranks as one of NIH’s foremost scientific challenges,” declared NIH acting director Dr. Ruth Kirschstein, who gave the conference’s keynote address on day one. “We have entered the 21st century with such scientific and technological munificence that we should and must be able to promise good health and long life to all our citizens.”

Signaling that a commitment to better health for all has been made at the top of the federal government, DHHS Secretary Donna Shalala addressed the conference during its opening day.

“For a decade the Office of Research on Minority Health has kept its promise by working with its partners at NIH to ensure that we do not remain two nations—separate and unequal in overall health,” said Shalala, who recalled her close connection to ORMH’s earliest years. She served as a member of the NIH director’s advisory board when ORMH was created and

DHHS Secretary Donna Shalala and Frank Ayala of the University of the Incarnate Word chat during the conference.
was also a member of the original fact-finding team for the office's first research agenda.

"We need each one of you and your organizations to ensure that minority health concerns are never overlooked," she continued. "We need you to continue researching ways to unlock the mysteries that surround racial and ethnic disparities. We need you to continue to give us input and ideas, but more than anything else we need you to keep our feet to the fire. We need you to remind everyone that when it comes to improving our health, this country can never move ahead if anyone is left behind."

What Is NIH Doing Now?

Kirschstein identified three broad areas where NIH is concentrating its attack on health gaps: recruitment of more minorities into clinical trials, increasing professional and scientific training, and improving outreach to underserved populations. Active recruitment efforts have resulted in more minorities than ever before participating in NIH-supported clinical trials, she reported.

"We expect the number to grow as information about these trials becomes more accessible to many more people through our new clinical trials database," she said.

In addition, she noted that advancing the expertise of faculty and attracting more underrepresented minority students to the sciences and to careers in biomedical research is essential. "But success in this area has been painfully slow, a fact we must sadly acknowledge," Kirschstein said, adding that signs of some progress are evident: Funding and authority for a debt-forgiveness program—a long-sought recruitment incentive—for minorities are on the horizon.

She also mentioned a success story that combines all three strategies: The Jackson Heart Study, a collaborative clinical trial in Mississippi supported by ORMH and the National Heart, Lung, and Blood Institute, will examine environmental and genetic risk factors in the disproportionate incidence of heart disease in the black community. The largest trial of its kind ever conducted among African Americans, the Jackson study not only gathers minority participants in a clinical study, but also includes minority scientists in key leadership roles on the research team and provides training in epidemiology for undergraduate and high school students.

"Our aim at NIH is to promote the development and transfer of our research-based information in the biomedical, behavioral and social sciences for use by professionals, communities and all others working toward eliminating health disparities," said Kirschstein.

The Community Responds

Throughout the 3 days, the conference would hear from dozens of experts inside and outside the federal government on ways ORMH and NIH can meet the challenges of narrowing health gaps. Notably, former surgeon general and former NICHCH deputy director Dr. Antonia Novello, now commissioner of New York State's department of health, acknowledged the unfair disease burden borne by the nation's underserved populations and offered her perspective on improving health for minorities.

One topic of debate throughout the conference was whether ORMH should be given grantmaking authority. Currently the office cannot award its own grants, but must collaborate with other NIH ICs to sponsor research projects. Several powerful speakers, including Dr. Reed Tuckson of the American Medical Association, endorsed a promotion of ORMH to center status. Indeed, several bills are pending in Congress—including one offered by Rep. Jesse Jackson, Jr., (D-Ill.) to establish a National Center for Research on Health Disparities—that if passed could provide grantmaking authority.

In the meantime, Kirschstein has proposed creating a Coordinating Center for Research on Health Disparities that can boost ORMH's status administratively without congressional action. In addition, NIH's acting director also reconstituted the NIH-wide committee that will devise the agency's overall strategy to combat the health gaps: All NIH institute and center directors immediately became members of the committee.

On day three of the conference, the committee's cochairs Dr. Anthony Fauci, NIAID director, and Dr. Yvonne Maddox, NIH acting deputy director, described their goals and gave a timetable. Each institute and center submitted an individual plan to the cochairs on April 3; by late May, a total NIH plan was crafted. Ruffin and his advisory committee then reviewed the plan. Kirschstein received the strategy at the end of May and by mid-June—when NIH holds its annual budget retreat—the plan will be solidified and incorporated into fiscal year 2002 budget documents.

Also on the conference's agenda were state of the science reports on several major health areas, panel discussions, a scientific poster session by more than 35 minority students in medical science and a town hall meeting that opened the forum to all participants.

"This is a landmark event for the National Institutes of Health," concluded Kirschstein. "This conference marks not only the 10th anniversary of the office, but also an important threshold in efforts by the NIH and our partners to expand research opportunities for minority scientists and to reduce or eliminate disparities in health status among racial and ethnic minority groups through research."
FAUCI CONTINUED FROM PAGE 1

tion and rose steadily through its ranks. In 1974, he became head of the lab's clinical physiology section, and, in 1977, became the institute's deputy clinical director. In 1980, he was appointed chief of the Laboratory of Immunoregulation, a position he still holds. He became the institute's director in 1984. During his tenure, funding for AIDS research has risen from $60 million a year to just under $2 billion a year.

During his early years as director, Fauci was often the target of AIDS activists, who held that the federal government was not doing enough to combat the emerging threat of the virus. One group went so far as to hang him in effigy. Although such confrontational tactics put off many of his colleagues in AIDS research, Fauci tried to see beyond the theatrical nature of their protests and listened carefully to what they had to say. As a result, the activist community became one of his greatest supporters.

"There was substance to the points they were making about clinical trials, about drug approvals, and about the direction of research in this area," he said. "They sensed my good intentions, and gave me a degree of trust that they had not given very many other people."

Fauci added that this mutual understanding led to a collaboration that ultimately became a model of interaction between scientists and their constituency groups.

In managing his institute, Fauci said he tries to keep himself well informed and sets the direction the institute should take. He relies on a philosophy he first learned from then NIAID clinical director Dr. Sheldon Wolff, who first recruited him to the institute.

"Surround yourself with the best and brightest people you can find," he said. "Don't feel that their expertise will lessen your authority—it will only amplify your capabilities."

This approach, he added, worked as well for him when he first managed a lab as it does in his current position as institute director. Fauci cautions against micromanaging one's staff. Rather, he said, he makes himself available for those who have questions, and listens carefully to any new ideas they might have. "Otherwise, I stay out of their way.

Regarding his institute's priorities, Fauci said he feels one of the greatest threats to humanity is emerging and re-emerging infectious diseases. At times, such disease entities can burst forth as deadly little blips on the radar screen, like the Ebola virus, during its last appearance in 1997, which swiftly killed about 100 people before disappearing. More alarming, he said, are the large-scale epidemics that can have a major impact on world health in a comparatively short time. The influenza epidemic of 1918 killed 750,000 people in the United States and more than 20 million throughout the world. More recently, the AIDS epidemic is uncontrolled and accelerating, particularly in developing countries.

"That's the nature of the interaction between microbes and humanity," he said. "There will always be a constant back and forth fighting for survival between the two."

Fauci believes, however, that major inroads against the infectious diseases threat will come from the ability to sequence the genomes of microbes. By learning how their genomes are structured, scientists will be better equipped to diagnose infectious diseases, design treatments for them, and vaccines to prevent them.

Another promising area under NIAID's purview, he said, is greater understanding of the immune system. Through unraveling its secrets, researchers may be able to prevent transplant rejection and to combat disease in which the immune system attacks the body's own organs and tissues—without resorting to toxic drugs. Similarly, greater knowledge of the immune system may also lead to design of more effective vaccines.

To date, the most challenging disease NIAID has had to contend with is the AIDS virus, he said. The institute has made great progress in understanding the pathogenesis of HIV infection as well as in developing an armamentarium of drugs to hold the disease at bay and prolong life. Still, progress has not come as quickly as Fauci would have liked.

"We still have a major problem with developing a vaccine," he said. "It's a problem that can be overcome, but, as in all complicated problems in biomedical research, it's going to take time."

Although he has learned much from his role as lab manager and institute director, Fauci credits a high school experience with teaching him one of life's greatest lessons. While a student at Regis High School in New York City, he played point guard for the school's basketball team.

"As good as you think you might be, it's not possible to do many good things alone," he said. "When you're part of a team, you have your own talents amplified and synergized with the talents of others—you make other people look good, and they make you look good."

The lesson, he explained, also applies to scientific research. Although individuals working alone have made striking discoveries in the scientific arena, research also involves a great deal of teamwork and reliance on others.
“Playing sports in high school was a really important lesson in how individual effort synergizes with a team effort, and how team effort can make an individual accomplishment look even more impressive.”

(The author is the press officer for the National Institute of Child Health and Human Development and a member of the NIH Management Cadre class of 2000. This article resulted from an assignment to study science and leadership at NIH. Information about the NIH Management Cadre Program is available at http://mcp.nih.gov.)

Camp Fantastic Barbecue, June 13

Be sure to attend the annual Camp Fantastic Barbecue—to raise money and awareness for Camp Fantastic/Special Love Inc.—on Tuesday, June 13 on the Bldg. 31 patio. Outback Steakhouse will be providing food again this year. A limited number of food tickets are available for this event. The ticket price is $5 and will include a choice of hamburgers, chicken, hot dogs, a side of coleslaw, chips and a drink.

Attention Female Computer Users

Do you experience work-related pain, numbness, or tingling in your fingers, hands or wrists? Have you been diagnosed with carpal tunnel syndrome? Are you a female between the ages of 21 and 50 who is currently working full time? If so, you are invited to participate in a research study of job stress and carpal tunnel syndrome that can help you learn more about your problem. This study includes a $100 payment and receipt of ergonomic and job stress self-help workbooks.

For more information call (301) 295-9660.

‘Noons in June’ Lecture Series

Salutaris, the NIH gay and lesbian employees forum, announces plans for its fourth annual “Noons in June” lecture series and Camp Funshine fundraising efforts.

In June 1996, Salutaris hosted its first Noons in June conference series on each Wednesday of the month. “Since that time, Noons in June has become our signature event,” said Kevin Crist, event coordinator. This year, the series will be held each Thursday at noon and features a different speaker who addresses events or research affecting the gay, lesbian, bisexual and transgender employees of NIH.

Key speakers this year include Dr. Bert Hansen, associate professor of history at Baruch College of the City University of New York, and Tim Bergling, editor/producer for News Channel 8.

In conjunction with Avon Products, Inc., Salutaris will be hosting a special fundraiser for Camp Funshine, a summer camp for children with HIV.

The group hopes to raise funds by selling Avon’s “Skin-So-Soft Bug Guard Plus” product. For each unit sold thru Salutaris, Avon will donate $3.50 to Camp Funshine.

For more information about Salutaris, visit its web site at http://www.recgov.org/glse/index.htm.

NIAID’s Dr. Franklin Neva (l) and Dr. Jose Ribeiro (below) recently received awards from the American Society of Tropical Medicine and Hygiene. Neva is chief of the opportunistic parasitic diseases section of the Laboratory of Parasitic Diseases (LPD). He received the 1999 Donald Mackey Medal for outstanding research in tropical medicine. He was honored for his research on Chagas’ disease in Brazil, Kala-azar in India, and cutaneous leishmaniasis in Honduras. Recently the main focus of his research has been the intestinal worm Strongyloides stercoralis. He and his colleagues have developed several diagnostic tests for human infections with this parasite. They are investigating the immunologic mechanism(s) for this opportunistic infection in patients with human T-cell lymphotropic virus type I. Ribeiro is chief of the medical entomology section in LPD and received the 1999 Bailey Ashford Medal for distinguished work in tropical medicine. Over the past 20 years his research career has focused on the discovery and characterization of anticoagulating, antiproteinase and vasodilatory and immunomodulatory substances found in the saliva of bloodsucking insects and ticks. These molecules aid in the transmission of leishmaniasis, Lyme disease and some arboviral diseases. These same molecules may be used as targets for vaccine development.
Merchant Is New NIDDK Executive Officer

Barbara Merchant has been appointed new NIDDK executive officer.

A veteran administrator, she has had a distinguished 23-year career at NIH. She was administrative officer at NLM in the Division of Intramural Programs and the Library Operations Division from 1984 to 1987, providing administrative support in budget, personnel, contracts, procurement and space management.

She became principal administrative officer of the Basic Research Division in NIMH's intramural program, with responsibility for 350 employees and a $21 million budget. Highlights of her accomplishments there were automating the budget process, creating a system to aid laboratory and branch chiefs in managing monthly expenditures, and balancing the area budget. In addition, she provided leadership and administrative management to the NIMH-NICHD Poolesville Shared Animal Facility.

The quality of her work earned her 10 performance awards in less than 10 years, and accolades from those who benefited from her ability and efficiency. She earned the NIH Director's Award in 1993 for “providing innovative research support to mental health scientists, which is distinguished by its extraordinary high quality, its creativity and its timeliness.” In a letter of commendation Merchant received in 1995, then NINDS director Dr. Zach Hall wrote, “I think I have witnessed a miracle. I have just toured my renovated lab space which has come in 1 month ahead of schedule.”

In 1995, Merchant was selected as chief, Administrative Management Branch for the Division of Intramural Research, NIDDK, with responsibility for over 960 research investigators, fellows and administrative and support staff covering 20-plus labs and branches. She re-engineered the branch, forming an information technology unit, and establishing an innovative budget reporting and projection system. “Barbara created a highly responsive, service-oriented administration for NIDDK that really enhanced scientific productivity,” says Dr. Ira Levin, NIDDK's acting scientific director.

Merchant also spearheaded numerous renovations during her tenure and received a commendation from then NIDDK scientific director Dr. Allen Spiegel for her “extraordinary management of a complex, interlocking series of lab renovations and moves that...have gone well beyond the consummate professionalism to be expected from any outstanding administrative officer.”

She received the NIH Director's Award again in 1998 in recognition of her outstanding contribution to the NIH intramural programs; and the NIH Clinical Center Director's Award in 1999 for her leadership in opening the NIDDK Transplant and Autoimmunity Branch’s clinical area on 11 East and laboratories at Bethesda Naval Hospital.

A well-known leader in the NIH community, Merchant has served on numerous committees and has mentored many individuals who have become leaders at NIH themselves. She was cochair of the NIH intramural administrative officers group from 1993 to 1997, and chair from 1997 to 1999. In these roles, Merchant championed the concept of information sharing among the IC principal AOs to avoid duplication of effort.

As NIDDK executive officer, her goal is to provide responsive management and innovative leadership.—Jane DeMeyu

NLM Mounts Exhibit of Rare Medieval Books, Manuscripts

To celebrate the return of a long-lost medieval manuscript, the National Library of Medicine has mounted a small exhibit of treasured medieval manuscripts, dating from the 11th through the 15th century, and printed works that date from the 15th through the 17th century.

The manuscript, TreaTsises on Medicine, written in Latin in England in the 12th century on vellum (calf skin), mysteriously disappeared from the library some 30 years ago. This returned treasure will be featured with approximately 25 other books and manuscripts including a splendidly illuminated manuscript from 13th-century Oxford, an Arabic text from 1094 (the oldest item in the NLM collection), and several copies of Hippocrates' Aphorisms, one of medicine's cornerstones. Much of Hippocrates' medical advice can be recognized as today's common sense. He focused on prevention, lifestyle and dietary medicine—not magic bullets.

Other treasures in the exhibit include works by physicians who practiced in Salerno, Italy, between the 10th and 12th centuries and who were famous for the high quality of their medical knowledge and care; texts that made up the curriculum in the first faculties of medicine; and books that demonstrate the flourishing of medical literature in medieval England.

The exhibit will be on view through June 30 in the History of Medicine Reading Room, on the first floor of the National Library of Medicine.
NIH Chamber Singers Spring Concert

The NIH Chamber Singers entertained a small but enthusiastic audience in Masur Auditorium during lunch on Friday, May 5 for the second of their two spring concerts. The impressive range of selections began with four Vespers by Sergi Rachmaninoff and ended with three light pieces that included the popular standards The Way You Look Tonight and Stand By Me.

During the course of this ambitious program the group delivered plenty of wonderful moments to leave a languid Friday afternoon. The women, introduced as “The Chamberettes,” sang three traditional mountain ballads, and the men answered with the spirited barbershop-style I Got a Feelin’ I’m Fallin’. Steve Bauer provided an exhilarating solo in My Love is Like a Red, Red Rose. The punchy French Renaissance piece, Il est bel et bon provided the perfect ending.

The spring concert was dedicated to the memory of Gail Jacoby, a former member who died in an airplane accident this past November. It was a charming and heartfelt tribute.—Harrison Wein

Thomas La Salvia has been named associate director for scientific information and program planning in NIAID’s Division of AIDS. He comes to NIH from the Fenway Community Health Center in Boston, where he was director of research and evaluation. He served as project director there at the NIAID-supported HIV Network for Prevention Trials (HIVNET) site and chair of HIVNET’s community education/media relations working group. La Salvia received his bachelor’s degree in international relations from the University of Notre Dame, a master’s degree in American institutions from the University of Michigan, and a master’s degree in public health from Boston University. He completed a 2-year research and clinical fellowship focusing on addictive disorders and HIV prevention/treatment in the department of psychiatry at Harvard University. He is also actively working with UNAIDS, helping to develop vaccine communications strategies for studies to be carried out in developing countries.

Brain Imaging Study Recruits

The section on brain imaging and electrophysiology, NIAAA, seeks right-handed healthy volunteers ages 21-40 to participate in non-invasive brain imaging (fMRI) studies. Volunteers must have 20/20 vision or wear contact lenses and will be paid for their time. For more information contact Dr. Brian Knutson, 496-5861 (knutson@odin.niaaa.nih.gov) or Grace Fong, 435-3493.

HRDD Training Tips

The Human Resource Development Division, OHRM, will offer the courses below. Hands-on, self-study, personal computer training courses are available through the HRDD’s User Resource Center at no cost to NIH employees. For details, visit HRDD online at http://trainingcenter.od.nih.gov/ or call 496-6211.

**Communication Skills**

Plain Language in Government Writing 6/6

Scientific and Technical Briefing 6/8

**Computer Applications and Concepts**

Advanced Web Page Design 6/1

Introduction to FileMaker Pro 4.0 6/8

Introduction to MS Excel 97 (Office 97) 6/6

Introduction to MS PowerPoint 97 (Office 97) 6/6

Introduction to Adobe Illustrator 6/7

Intermediate FileMaker Pro 4.0 6/8

**Financial & Procurement Management**

Price Reasonableness in Simplified

Acquisitions (a.m. and p.m.) 6/1

Montgomery College News

Montgomery College is renewing its affiliation with NIH. Previously, the college offered skills assessment and college courses. Now, as part of the new affiliation, the college is offering not only on-site college courses, but also certificate programs, CLEP and DANTES testing, skills assessment and college information sessions for all NIH employees.

In addition to new courses and information sessions, the college has representatives at NIH for 1½ days a week to provide counseling and skills assessment testing. The college’s counselors are located at the Human Resource Development Division in EPS/100 and can be reached at 402-3382 or via email at pmiller@mc.cc.md.us. Visit the training center website for more information.

**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.

**Fundamentals of Unix**

The NIH Contractor Performance System for New Users 6/6

Introduction to Networks 6/8

WIG - World Wide Web Interest Group 6/13

**Angry, Irritable or Difficult Teens**

You and your 11-16-year-old may be eligible to take part in research at the National Institute of Mental Health. This is a study about how young people experience emotions, and how bad moods can cause problems. Payment will be provided. For details, call Barbara Usher, 496-1301.
R&W Sponsors Night at the Circus

NIH's Recreation and Welfare Association recently sponsored a premier evening with the Ringling Brothers and Barnum and Bailey Circus at the MCI Center in downtown Washington. Three busloads of patients from the Clinical Center added to a crowd of some 9,800 NIH'ers and their guests at the function.

According to Randy Schools, R&W president, the NIH patients were joined by children from Washington area hospitals including Children's Hospital, Walter Reed, Fairfax, Georgetown and Andrews Air Force Base. "Also attending as guests of R&W were Bethesda Cares, the Baptist Home for Children and the Boy's and Girl's Club."

Bryan Fulton—the clowns of Ringling Bros. use their real names, not aliases—of Baltimore entertains at premier night.

Postmenopausal Women Needed

The Cardiology Branch, NHLBI, is recruiting postmenopausal women who are in good health and have not been on medications (including hormone therapy) for at least 2 months. Eligible volunteers will participate in a study to determine whether hormone replacement therapy improves the imaging characteristics of the carotid arteries, which may be associated with early atherosclerosis. Volunteers will be paid. Phone Londa Hathaway, 435-4038.

Wednesday Afternoon Lectures

The Wednesday Afternoon Lecture series—normally held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features the General Motors Cancer Research Foundation: 2000 Annual Scientific Conference on June 7, starting at 1:30 p.m. Lectures will be given by laureates of GM Sloan, Kettering and Mott prizes for cancer research. The program concludes at 3 p.m.

On June 14, Dr. Vishva Dixit will discuss "Identification of Components of the Cell Death Pathway." Dixit is director of molecular oncology, Genentech, Inc.

For more information or for reasonable accommodation, call Hilda Madine, 594-3595.