Science Adviser Bromley
To Give NIH Lecture

Dr. D. Allan Bromley, assistant to President Bush for science and technology and director of the White House Office of Science and Technology Policy, will give the NIH Lecture on Thursday, Jan. 7 at 3 p.m. in Masur Auditorium, Bldg. 10. His topic is "Federal Science and Technology Policy."

Bromley has been the chief science adviser to President Bush for the past 4 years, during which he has been on leave from his former position as Henry Ford II professor of physics at Yale University, where he was founder and director of the A.W. Wright nuclear structure laboratory.

One of the world’s leading nuclear physicists, he has carried out pioneering studies on both the structure and dynamics of nuclei and is considered the father of modern heavy ion science, a major area in nuclear science.

He has also played major roles in the development of accelerators, of detection systems, and of computer-based data acquisition and analysis systems. An outstanding teacher, he has presided over a laboratory which, during the past two decades, has produced more Ph.D.s in experimental nuclear physics than any other.

National Asthma Conference Tackles Ill's Management

By Sharon Goluban

Asthma is on the rise in the United States and worldwide. And at the first National Conference on Asthma Management, held recently in Arlington, Va., nearly 1,000 health care professionals, researchers, educators, and policymakers exchanged information about successful programs and strategies that can help those with asthma lead better lives.

The conference, sponsored by the coordinating committee of NHLBI's National Asthma Education Program, was chaired by Dr. Shirley Murphy, professor of pediatrics at the University of New Mexico School of Medicine.

"The purpose of the conference is to bring together all kinds of health professionals in a sort of user-friendly mode," Murphy said. "We hope the message that primary care physicians will get from the conference is that asthma is an inflammatory disease and that it needs to be treated with anti-inflammatory medications."

The conference's standing-room-only audience was welcomed by NHLBI director Dr. Claude Lenfant and NIAID director Dr. Anthony Fauci. Lenfant noted that "at this conference we are not just talking to physicians, but to nurses, respiratory therapists, emergency room personnel, patient educators—and all

NIH'ers Respond to Hurricane Disasters

By Anne Barber

Last August, as members of PHS/NIH's Disaster Medical Assistance Team (DMAT) were en route to a national disaster medical conference in Oklahoma City, Hurricane Andrew was on its way to Miami. The hurricane forced team members John Wassell of DRG and Ellery Gray of HRSA to detour to an Emergency Operations Center in South Dade where they met up with their colleague Kevin Tonat, an assistant to NIEHS director Dr. Kenneth Olden.

This was the first time a team was sent ahead of a pending disaster to provide an immediate on-site assessment on what kinds of help would be needed and what PHS would be able to provide. It was to be a trial by fire.

"Because of the conference," Tonat said, "all our 'go' bags were left behind at home. That meant we had to pull together items such as uniforms, food, water, personal provisions, water purification supplies, and other equipment we needed to be as self-sufficient as possible."

The two most ready DMAT teams—from Indiana and North Carolina, both with field-deployable medical units and their own vehicles—would be the first to go. "We wanted to be part of the solution, not part of the problem," Tonat continued.

"We went straight by Coast Guard helicopter to where the management support unit and the Indiana team were to be based in the impacted area."

"Two days after Andrew hit, we had set up an

'A Community Commitment'

Patient's Video, Talk Move AIDS Day Gathering

By Rich McManus

Eight-year-old Hydeia Broadbent of Las Vegas gave a moving account of her perspective on HIV disease during NIH's fifth annual observance of World AIDS Day on Dec. 1 in Masur Auditorium.

Speaking last on a program that included remarks by NIH director Dr. Bernadine Healy and NIAID director Dr. Anthony Fauci, the child's tearful explanation of why she made a videotape titled I Need a Friend left a powerful impression on the audience.

Enrolled since age 5 in the NCI Pediatric Branch's AIDS program, Hydeia made the film so that her adoptive mother would have something to remember her by in case she died.

Reasoning that the video represented a kind of claim on immortality, she said, "I'm not going away...(because) she has my tape."

Hydeia proved a personable and talkative video host, offering her own opinions and those of two other friends being treated for HIV infection. They discussed a range of topics including school, friends, dying, being teased, finding a cure, and telling others about one's illness. Often, Hydeia's outlook took the form of songs, the lyrics of which she delivered in an unhselfconsciouness and melodic tumble into a handheld microphone.

Several of her interviews, conducted with the aplomb of a miniature Oprah Winfrey, elicited hilarious responses, as when she asked playmate Tonya to explain the difference between a good friend and a bad friend: "If I said the goodest friend was the same as the baddest friend, I would have to be absolutely out of my mind," answered Tonya with a dramatic flourish she could only have acquired from overhearing some adult.

In a song, Hydeia explained that she acquired HIV from her mother, who used intravenous drugs. Following the tape, she offered fresh opinions that, if less spontaneous than those captured on video, showed a rare maturity in a child her age.

"It's hard for parents to tell kids what AIDS is," she said with a seriousness that underscored Fauci's introduction of her as an "advocate, teacher, and expert on kids with AIDS." She explained that she is hoping to survive at least until the year 2000, when a cure, she acknowledged, may or may not be available. "We have a future," she declared, owing largely to the

NIH's Bill Campbell and Surgeon General Antonia Novello stand by the helicopter provided for transportation.

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BROMLEY

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department in the world. He has published more than 450 papers in science and technology and has edited 18 books; he is the recipient of many honors and awards, including the National Medal of Science.

For more than two decades, Bromley has been a leader in the national and international science and science policy communities. As chairman of the National Academy’s physics survey in the early 1970’s, he contributed to charting the future of that science in the subsequent decade. As president of the American Association for the Advancement of Science and of the International Union of Pure and Applied Physics, he has been one of the leading spokesmen for U.S. science and for international scientific cooperation.

Dr. D. Allan Bromley

Prior to his present post, Bromley served as a member of the White House science council throughout the Reagan administration and as a member of the National Science Board in 1988-1989.

Born in Westmeath, Ontario, in Canada, he received the B.Sc. degree with highest honors in 1948 in the faculty of engineering at Queen’s University in Ontario. He received the M.Sc. degree from Queen’s in 1950 and his Ph.D. from the University of Rochester in 1952, both in nuclear physics. He subsequently has been awarded 26 honorory doctorates from universities throughout the world.

Bromley is a member of the National Academy of Sciences, of the American Academy of Arts and Letters, a foreign member of the Brazilian Academy of Sciences and a Benjamin Franklin fellow of the Royal Society of Arts (London).

Female Volunteers Needed

Women, ages 18 through 39, who have regular menstrual cycles and are on no medications are needed to participate in a control group for an NICHD research protocol. This will involve one clinic visit, phlebotomy and pelvic ultrasound. Those interested should call 496-4244.

Researchers funded by NICHD have determined that a reproductive hormone known as inhibin is directly involved in preventing the formation of certain reproductive tract tumors. In the study, published in the Nov. 26 issue of Nature, the researchers report that mice deprived of the gene coding for a portion of inhibin quickly develop reproductive tumors known as gonadal stromal cell tumors.

The research team was led by Martin M. Mazuk of Baylor College of Medicine. Other members of the research team were Milton J. Finegold and Allan Bradley, also of Baylor; and Jyan-Gwo Su and Aaron J.W. Hsueh, of Stanford University.

The study identifies inhibin as the first protein produced outside the cell it acts upon to suppress the development of tumors. Although other studies have described substances that suppress tumor formation, all of these substances were produced within the cells they act upon.

The finding may one day lead to important insights regarding the functioning of the reproductive tract as well as the biology of tumor formation.

To produce the inhibin-deficient mice, the researchers used a recently developed technique known as gene targeting. The technique is built upon earlier research showing that a cell will sometimes replace one of its own genes with a foreign gene if the replacement gene bears a close structural resemblance to the original. The researchers began by exposing mouse embryonal cells to nonfunctioning copies of the alpha inhibin gene, one of two genes needed for the manufacture of inhibit. Mouse cells that had taken in the nonfunctioning gene were then injected into mouse embryos. The resultant mice, known as chimeras, were composed of two types of cells, one lacking the alpha inhibit gene, and one capable of normal production of the hormone.

Through conventional breeding techniques, the researchers were eventually able to produce mice lacking a functional copy of the alpha inhibit gene. Although the mice developed normally at first, virtually all (47 males and 23 out of 24 females) showed evidence of gonadal stromal cell tumors by 5 weeks of age.

“These observations demonstrate that inhibit is a critical negative regulator of gonadal stromal cell proliferation,” the investigators wrote. “Inhibit is the first secreted protein which has been identified to have tumor suppressor activities.”—Robert Bock

Postmenopausal Volunteers Needed

Women who experienced a normal menopause after age 45 and have had no menstrual cycle within 2 years are wanted for an NICHD study. The candidates should be in good health, on no regular medication, and able to come in for one outpatient visit to the Clinical Center. If interested, call 496-4244.

The NIH Record

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U.S. Getting Slack on Childhood Immunization

"Immunization is the single most important medical procedure which we have available to us today to protect the health of our children," says Dr. D.A. Henderson, associate director for life sciences, White House Office of Science and Technology Policy.

Yet it is estimated that nationwide, fewer than 6 out of every 10 2-year-olds have received the recommended immunizations for their age, opening the door for the resurgence of measles, rubella, and mumps—childhood diseases that were once nearly eradicated in the United States. New data indicate that the measles resurgence may be past its peak but health officials warn that the lull may be temporary.

The reasons behind this failure to immunize and possible solutions to this national problem were the focus of a recent symposium at NIH commemorating Child Health Day. The symposium was sponsored by a coalition of more than 20 federal and private agencies headed by NICHD and including NIAID.

Henderson, the meeting's keynote speaker, said that, ironically, one of the reasons for the resurgence of vaccine-preventable disease is that U.S. immunization "has proven to be too effective...Having achieved substantial control of the vaccine-preventable diseases, health providers no longer gave priority to immunization as they once had. Parents were no longer concerned. Complacency had begun to replace concern."

Henderson then described a new federal effort to assure that by the end of the decade, 90 percent of all children will receive their full schedule of immunizations before the age of 2.

Emphasizing that vaccination is a right to which each child is entitled, Surgeon General Antonia Novello presented in more detail the federal effort in immunization. She said that while the response to the crisis in the resurgence of vaccine-preventable diseases has succeeded in bringing illness rates down, the challenge now is to incorporate elements of the response into our health care system so that the crisis does not recur.

Dr. G. Gordon Douglas, president of the Merck vaccine division, gave an overview of challenges and opportunities in vaccine development research. He reported that scientific advances in the past decade have led to the promise of new vaccines and have resulted in more effective, safer vaccines. According to Douglas, more than 20 new vaccine products are in the pipeline. In the next year or two, he predicted, there will be new vaccines for chickenpox, pertussis (whooping cough), pneumonia, acute diarrheal disease and for respiratory syncytial virus.

He reported that there is work going on to achieve immunization at birth, a goal that is technically very difficult to accomplish. More feasible, he said, is the development of a single, one-time, multipurpose vaccine to replace the system now used of administering several vaccines independently on a schedule based on the child's age.

Speakers on two panels then discussed various aspects of the immunization issue including costs, service delivery, and reasons why so many children are not vaccinated before age 2.

Panelists pointed out that oftentimes, clinics and pediatricians' offices are open only at hours when working parents cannot bring their children, many insurance companies do not pay for immunization, and physicians are sometimes reluctant to vaccinate children with mild infection even though this should not be a contraindication. It was also pointed out that outreach to minority and ethnic communities has been seriously deficient.

Panelists agreed that more education and outreach, both to patients and physicians, need to be made. Examples of programs around the country that have been successful in community outreach and education efforts were also described. These included programs in Texas, West Virginia, and New Jersey that have succeeded in vaccinating a large number of vulnerable children.

A videotape called Before It's Too Late, Vaccinate, was shown at the symposium and is being distributed nationally to health clinics and welfare clinics. The tape is being evaluated as a way to encourage low-income mothers to have their preschool children vaccinated.

Healthy Volunteers Sought

The section on clinical pharmacology, NIMH, needs healthy volunteers between the ages of 18 and 65, on no medications, to participate in various studies. These include experimental drug trials, PET scan studies, and serum studies in ethnic groups (mainland Chinese, African Americans, Caucasians). Subjects will be paid. For more information call 496-5856 and leave name and daytime phone number.

Stetten Museum Opens New Exhibit

This month, the DeWitt Stetten, Jr. Museum of Medical Research opens a new exhibit titled "The World of Medical and Scientific Instruments." The exhibit and copies of an accompanying brochure are located in the hallway between the main lobby and Lipsett Amphitheater on the first floor of Bldg. 10.

The exhibit highlights the unifying principles of research instruments and explains how the tools of science have influenced the rise of modern clinical medicine. This innovative exhibit also makes use of art as a means of expressing these concepts.

The instruments in the exhibit, used at NIH between 1945 and 1965, include a stalagmometer, tensiometer, torsion balance,
professionals who deal with patients with asthma.” He said the conference hopes to promote a multidisciplinary approach that would improve the way asthma is managed throughout the country.

In his remarks, Fauci congratulated the participants for taking such an active role in asthma management. He said asthma is a growing public health problem in the U.S. and around the world.

“Deaths from asthma are increasing at an alarming rate and the social and economic damages are immense,” he noted. “We still have many things to learn about asthma but there is one thing we know. With proper medical care, asthma can be managed and the terrible toll that asthma takes on its patients can be reduced.”

Asthma now affects about 7 percent of Americans and is the leading cause of hospitalizations for children.

Dr. Michael McGinnis, HHS deputy assistant secretary and director of the department’s Office of Disease Prevention and Health Promotion, outlined the extent of this public health problem in his keynote speech to the conference. “In 1990, asthma-related health care costs were estimated to have reached $6.2 billion in the United States,” he said. “The toll of asthma is particularly high among poor and minority populations. As of 1987, Blacks were three times more likely to die from asthma than whites. The death rate due to asthma for Black males ages 5 to 45 is even higher—six times that of their white counterparts. Clearly, asthma is a national problem of the first order.”

Dr. Sonia Buist, professor of medicine at the Oregon Health Sciences University, detailed likely reasons for the increase in prevalence of asthma. “Some of the increase may be due to better diagnosis, and some to factors such as better technology, which aids diagnosis,” she said. “Other reasons may include increased exposure to air allergens in tighter buildings and exposure to environmental tobacco smoke, particularly from parental smoking. It would be wonderful to be able to identify one or two factors driving these trends, but unfortunately the increase in prevalence appears to be very complicated.”

Dr. Michael Kaliner, director of NIAID’s Asthma and Allergic Diseases Center, addressed a plenary session at the conference. “For all asthmatics,” he explained, “partial airflow obstruction impedes exhaling during breathing, so lungs become overinflated. It’s like having a basketball full of air in your chest.”

Dr. William Busse, professor of medicine at the University of Wisconsin School of Medicine, said such obstructions are reversible.

“Asthma symptoms are caused by a complex orchestration of self-perpetuating biochemical interactions that often build upon themselves, causing airway obstruction. Airways become poised to react to triggers such as cold air, exercise, chemical irritants, and allergens.

“Managing the disease requires more than just reversing the symptoms,” he continued. “The inflammation itself must be reduced.”

A panel discussion of diagnosis and management strategies concluded that the crucial element in improving a patient’s quality of life is educating patients about their disease and their need for ongoing treatment.

“No patient should lose even one night’s sleep from their asthma,” said Dr. Albert Sheffer, professor of medicine at Harvard Medical School. “The fact that asthma morbidity and mortality are preventable is not well known by most people.”

Workshops, roundtable sessions, and research papers gave conference participants a chance to share successful strategies. The sessions covered a wide range of topics including: clinical updates, access-to-care problems, cultural influences, environmental controls, high-risk patients, school and patient education ideas, minority issues, epidemiology and pathophysiology, and health care professional education.

“This conference has been unique” said one participant. “It spanned an entire spectrum, everything from the cockroach to the cell.” Cockroaches are a major source of allergens, particularly in inner cities.

At the closing plenary, conference chair Murphy asked all of the participants to write down one new idea or strategy that they learned at the conference. She then asked participants to return home and share that idea with one other person. “We can make a difference,” Murphy said. “Let’s now turn the enthusiasm and energy of this conference to reducing the terrible toll that asthma is taking on the 10 million people living with asthma.”
Recruitment Effort Thriving

CORE Attracts Minority Students to Research Careers
By Caree Vander Linden

Nearly 100 students gathered in Bethesda recently for an annual colloquium on research topics ranging from alcoholism to family relationships to schizophrenia. These students were not on a school field trip, nor were they casual observers of the scientific process. Instead, they were presenting research they conducted under a special training program called Career Opportunities in Research Education (CORE).

Since 1980, CORE, which is directed by NIMH, has assisted promising 3rd- and 4th-year undergraduate honor students at colleges and universities with substantial minority enrollment. Under the program, students, paired with faculty mentors, receive hands-on research training to prepare them for entry into doctoral level or M.D. programs in disciplines related to mental health, mental illness, and alcohol and drug abuse. Currently there are 13 institutions participating in the program.

The recent colloquium gave CORE participants a unique opportunity to present their research to a peer group using slides and poster displays. Liza Suarez, a junior majoring in psychology at the University of Puerto Rico, presented a poster titled "Parent-Child Interactions and Rate of Language Acquisition in Children With and Without Cleft Palate." She conducted the project last summer at the University of Minnesota, where she was an intern in the department of communications disorders.

"It's a wonderful educational experience," she said. "Instead of just giving me work to do, people are really interested in helping me to learn." After completing the program next year, Suarez plans to pursue graduate school and hopes to earn her Ph.D. in psychology. She is considering becoming a therapist, but has not ruled out a career in research.

Dr. Alan I. Leshner, NIMH deputy director, opened the colloquium with a simple but powerful statement to the students. "You are the future of our field. What we are trying to recruit you into is some of the most exciting, most meaningful science there is."

Sherman Ragland, NIMH deputy associate director for special populations. Each student has a faculty mentor and a CORE undergraduate student who supervises the research experience and provides career counseling.

Derrick Patterson, a junior biology major at Grambling State University, plans to attend medical school and says the program has much to offer. "I like the hands-on experience," he explained. "And it's a good incentive to keep your grades up."

CORE program directors such as Dr. Phillip May are responsible for the overall scientific merit and content of the research program, including everything from research methodology to ethics. At the University of New Mexico, May holds biweekly seminars during the academic year and weekly seminars during the summer, and arranges field placement and recruiting.

"At a big university like ours, the CORE program provides close interaction that really benefits the students," he said. "In addition to faculty members, each student has several graduate students who provide experience, offer advice...it's a great way to learn."

CORE also exposes students to various universities that can serve their graduate needs. The annual colloquium is a good way for them to meet students and faculty from other schools and find out what they have to offer.

In addition to scientific presentations and roundtable discussions, participants also could choose between half-day tours to NIMH and NIAAA laboratories; NIDA's Narcotics Research Center in Baltimore; and the National Library of Medicine at NIH. Dario Prieto, who manages NIMH's Minority Institutions Research Program, commends CORE participants for their dedication. "Our students are highly motivated," he says. "In fact, 79 percent of them go on to do graduate-level work.

While CORE helps shape the futures of many young people, it can also give participants a chance at a second career. At age 30, having achieved the position of vice president of marketing with a large real estate development firm, Rosemarie Roberts came to a conclusion about what she wanted to do with her life. Instead of continuing to climb the corporate ladder, she went to college to pursue a lifelong dream of studying mental health.

Her dream is now a well-focused goal, thanks to the CORE program. Currently a junior at Hunter College in New York, Roberts hopes to become a research psychologist working with mental health issues in Hispanic populations. She presented "Ethnic Minority Women's Attitudes Toward Victim Blame and Victim Responsibility in Sexual Harassment."

"I found CORE—or CORE found me—and it's worked out great," she said with a smile. "This experience has helped me determine what I really want to do."
AIDS DAY
(Continued from Page 1)
efforts of NIH scientists.

"I want to tell all the kids that they have great
doctors at NIH," she concluded. "They want
to help you because they love you."

Hydeia's adoptive mother, Pat Broadbent, was
no less convincing in her remarks, which
focused on her founding, with two other Las
Vegas foster parents, of a group called Reach
Out, which stands for Relieving Every AIDS
Child's Hurt Our Ultimate Task.

"We were just three mothers, stumbling in the
dark," she said of Reach Out's origins 5 years
ago. "We thought we were alone at first, but
then we saw NIH and realized we needed to
do something."

The three had seen news accounts of babies
born with AIDS and were determined to
respond to their needs.

"Through a lot of talk, a lot of tears, and
going to hospitals to see HIV children, we
shared our feelings. Gradually, a community
began to build. We were on a long, dark road,
but we knew we had a little light. Maybe we
could help."

Today, Reach Out operates a home for HIV
children in Las Vegas with four paid staff, many
volunteers, and the patronage of singer
Engelbert Humperdinck, who supports the
program and wrote a song in its honor.

"A lot of our success had to do with NIH,
"testified Broadbent. "After visiting here, we
didn't feel so helpless. We got positive feed­
back. I knew Hydeia was in very good hands
here, and that when families need help, NIH is
here to help them."

Also on the program was longtime AIDS
activist Reggie Williams, executive director of
the National Task Force on AIDS Prevention.
His message echoed the day's theme—"A
Community Commitment." Identifying
himself as a member of a variety of communi­
ties throughout his life—the Black community,
gay community, HIV-infected community—he
said, "My sense is that we truly belong to one
community, the human community, the world
community. We are not a series of individual
communities working in isolation."

concluded by quoting Martin Luther King, Jr.:
"Either we can learn to live together as brothers
and sisters or we can die together as fools."

Dr. Lawrence "Bopper" Deyton, NIAID's
assistant director for community clinical
research, reviewed the advantages of commu­
nity-based biomedical research, which his
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The fourth speaker in NCHGR's 1992-
1993 Human Genome Lecture Series will be
Dr. Neil Holtzman. Entitled, "Getting
Genetic Tests to the Public Safely and
Effectively," the lecture is scheduled for Dec.
17 in Lipsett Amphitheater, Bldg. 10 at
11:30 a.m. Holtzman will examine the
ethical issues surrounding the growing
practice of genetic testing.

A professor of pediatrics at Johns Hopkins
School of Medicine, Holtzman received his
undergraduate degree from Swarthmore
College, his M.D. from New York
University College of Medicine, and an M.P.H.
from the University of California, Berkeley.
A member of the Institute of Medicine's
committee on assessing genetic risks, he also
sits on the advisory committee of the project
on ethical and legal implications of genetic
testing for the American Association for the
Advancement of Science/American Bar
Association.

For more information or to schedule an
appointment with Holtzman, contact Dr.
Carol Daly, 402-0838.

Cell Line Catalog Available

The 1992/1993 Catalog of Cell Lines of the
NIGMS Human Genetic Mutant Cell Reposi­
tory is now available from the institute.
The 16th edition of the catalog lists 5,270
cell cultures and 275 DNA samples. Three
sections of the catalog have been added or updated.

They are: lymphoblast cultures characterized by
HLA typing; lymphoblast cultures from
extended families, including those from the
Amish, Utah, and Venezuelan pedigrees; and
cultures from a variety of diverse human
populations such as Amerindians, Melanesians,
Pygmies, Japanese, Cambodians, and Chinese.

The repository, supported by a contract from
NIGMS to the Coriell Institute for Medical
Research in Camden, N.J., establishes and
stores cultured cell lines from people with well-
characterized genetic disorders as well as from
members of their families for use as controls.
These lines, along with detailed background
information, are provided to investigators at
modest charge, enabling them to study the
cellular aspects of many genetic disorders
without first having to locate a cell donor.

The collection includes fibroblast and
lymphoblast lines from individuals with a range
of inherited metabolic diseases as well as
individuals with disorders characterized by
chromosomal abnormalities. It also includes a
growing number of human/rodent somatic cell
hybrids. These constitute two well-character­
zated mapping panels, as well as regional
mapping panels for a number of human
chromosomes. DNA samples are available for
the somatic cell hybrids and other, selected cell
lines from the repository.

Since its inception in 1972, the cell repository
has processed more than 10,000 submitted
specimens and provided more than 58,000 cell
cultures and 4,500 DNA samples to investiga­
tors.

Single copies of the catalog are available from
the NIGMS Office of Research Reports, Bldg.
31, Rm. 4A52, phone 496-7301.

NIDDK Scientist's Play Showcased

The American Showcase Theatre in Alexan­
dria will hold 10 performances, Jan. 2 through
10, of a new play by NIDDK's Dr. Robert
Martin—"A Stampede of Zebras." The drama
portrays the real workings of a biomedical
laboratory and has become part of the curricu­
lium in bioethics at more than a dozen univer­
sities. It tells the story of an African-American
postdoctoral fellow who is unable to reproduce
the experiments of a hot-shot young star in the
laboratory of a leading researcher. Jenelle Deria
Brown, who plays the role of the postdoc, has
been nominated for this year's Irene Ryan (best
actress) award in the American College
Theatre's annual competition (to be announced
next spring at the Kennedy Center). Tickets are
on sale through Dec. 15 at the R&W for $10.
Box office price is $12.

Snack Bar Open on Saturdays

At the request of NIH'ers, the "Hav-A-Snack"
snack bar on the B1 level of Bldg. 10 will be
open on Saturdays, from 7 a.m. to 1 p.m.

NCI director Dr. Samuel Broder meets with the NCI EEO advisory group in a forum to discuss equal
employment opportunity concerns. He continues to support such group activities as "Adopt-a-School" and
the Science Enrichment Program, which target high school students of predominantly minority city schools
to stimulate interest in medical science. He heard speakers describe barriers that undermine progress for
intramural women scientists, and indicated his support for nursery and child care centers at NIH. To
attend a monthly EEOAG meeting or join the group, call 496-6266.

Genome Lecture on Genetic Testing

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For more information or to schedule an
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Carol Daly, 402-0838.
Air Pollution May Be Linked To Genetic Damage, Study Finds

A new study by researchers at Columbia University, Sweden’s Center for Nutrition and Toxicology, and the Institute of Oncology in Poland provides the clearest evidence to date of a direct link between environmental air pollutants and cancer-related genetic damage in humans.

Funded by NIEHS, NCI, NIOSH, and the United Nations Development Program, the study, "Molecular and Genetic Damage in Humans from Environmental Pollution in Poland," was published in the Nov. 19 issue of Nature magazine, and breaks new ground by using a sophisticated battery of biomarkers to detect potential environmental cancer risk. Biological or molecular markers serve as indicators that signal events in individuals exposed to environmental chemicals. Acquisition of exposure data through analysis of cells, tissues or body fluids of exposed people, i.e., biomarkers, can lead to the identification of potentially hazardous exposures before adverse health effects appear. Furthermore, exposure limits can be established to minimize the likelihood of significant health risks.

Previous epidemiologic studies designed to evaluate the health significance of environmental agents have been limited by the lack of quantitative exposure data for individuals within exposed populations. By using specific markers of individual exposure (and doses), more valuable information can be obtained from human effects studies.

Earlier research has focused mainly on workers and smokers directly exposed to carcinogens, whereas this study looked at residents in an industrial area having nonoccupational exposure to community air pollution. The researchers studied two population groups in Poland with differing degrees of exposure to air pollution from coal combustion. The highly exposed group lived in the town of Gliwice, Upper Silesia, an industrialized region characterized by high rates of cancer. None of the 39 persons studied was employed in pollutant-generating industries. The 49 unexposed "controls" were from Biala Podlaska, a rural province with roughly tenfold lower levels of air pollution than in Gliwice.

An array of biologic markers of molecular and genetic damage, including DNA adducts (the chemical fingerprints of cancer-causing pollutants on the genetic material), chromosomal mutations, and activation of an oncogene was measured. The researchers found considerably higher levels of DNA and chromosomal damage in the exposed population compared to the control population. A doubling in the frequency of oncogene activation also occurred in the exposed group.

Molecular epidemiology seeks to prevent disease by using biomarkers to identify risks well before clinical onset to enable effective intervention. This group of investigators, using a battery of biomarkers to measure molecular and genetic damage in peripheral blood samples, produced results showing that exposure to environmental pollution is associated with significant increases in carcinogen-DNA adducts (PAH-DNA and BaP-DNA adducts), in sister chromatid exchange including high-frequency cells, and in chromosomal aberrations, as well as doubling in the frequency of ras oncogene expression. Prior studies have linked these biomarkers to increased risk of cancer. Chromosomal mutations and carcinogen-DNA adducts are also highly relevant to reproductive damage. The results of this investigation showed statistically significant increases in all of the biomarkers in the exposed group compared to the controls. A relationship was observed between DNA adducts and structural alterations in the chromosomes. These studies provide a molecular link between environmental exposure and a genetic alteration relevant to cancer and reproductive risk.

The international research team is expanding its studies to understand further the interplay between environmental pollution and genetic damage and, specifically, the reasons why there is a variation in the level of biomarkers measured in different individuals having comparable degrees of exposure. Such individual variation makes it virtually impossible to identify a level of exposure to environmental pollutants that can be considered safe for all individuals.—Bill Suk

Dr. Edward G. Lakatta, chief of NIA's Laboratory of Cardiovascular Science, is the 1992 winner of the Paul Dudley White Award. He accepted it during the recent annual meeting of the Association of Military Surgeons of the United States in Nashville. The award recognizes Lakatta, an international leader in cardiovascular research, for "his outstanding clinical and basic research discoveries on how the heart ages." His research ranges from studies of the heart and circulation in man to how heart cells function, with emphasis on how aging alters this process. In 1975, he was awarded the Eli Lilly fellowship in medical science from the American College of Physicians. His other honors include the NIH Director's Award and two PHS Commendation Medals.

‘Knowledge Is Power’ Workshops

The Black employees advisory committee will sponsor five “Knowledge Is Power” workshops on preparation of the SF-171 (federal job application form) and the evaluation method known as KSAs—knowledge, skills and abilities. The workshops will begin with an overview followed by small group sessions during which a facilitator will be able to work closely with participants wishing to improve the quality of their SF-171 or prepare KSAs for their present or future position. All employees are invited to attend, and should bring their SF-171 and KSAs for their present job or a position they wish to obtain. Registration is suggested; forms can be obtained from the Office of Equal Opportunity, Bldg. 31, Rm. 2B40, or by contacting Dr. Kathryn W. Ballard, WW, Rm. 550.

The schedule for the workshops follows:

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<td>Programming in Perl</td>
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Hurricane Andrew devastates mobile home park in Homestead, Fla.

HURRICANE
(Continued from Page 1)

emergency operations center and were seeing patients," he said.

Tonat was assigned to organize an emergency water distribution system and work with local health personnel to establish water supply/resupply, sanitation, disease control, and general preventive medicine. "Because there was such massive water/sewer damage," he said, "the authorities completely shut off all water and sewer for South Dade. Much of our time was spent trying to coordinate incoming volunteer health personnel, supplying DMATs with water, ice, generators and medical supplies.

"We worried about gastrointestinal and respiratory diseases in shelters and later in the tent cities, and vaccinating children to prevent any outbreak of disease. Our primary goal," he said, "was to prevent or minimize any outbreak of disease and we were successful."

"But there was air-conditioning," he added. "We worked round-the-clock. It didn’t matter if it was day or night, things had to be done."

Campbell’s group was responsible for setting up medical units at six sites in a 12-square-mile area. Each site had a National Guard unit for security, Red Cross for meals, and medical personnel.

"I always had equipment," Campbell recalls. "But I could not always get people who knew how to use or drive it."

This is Campbell’s 8th year with DMAT, which he has served sometimes as a nurse, and other times as a communications or transportation officer. "But this was my first disaster to be right on the scene. This was no drill, it was the real thing," Campbell was there for 33 days.

Over the next 2 months, Tonat helped oversee public health care matters. Secretary Sullivan asked local and regional HHS officials to try to get all payments such as Social Security to the people who needed them. Out of 46,000 clients, only 23 people missed getting their checks, said Tonat. Additionally, plans were made to ensure “one-stop shopping” for all DHHS activities including Social Security, WIC, and primary care.

"We wanted to establish one-stop health and human services that would allow a mother to pick up her check and get health care in one place rather than having to go to separate sites."

One of the DMAT team’s main concerns was environmental. More than 30 million cubic...
yards of combustible waste were being burned 24 hours a day, at more than 80 sites. Also, more than 1 billion cubic yards of solid waste and many chemical spills from tanks that had been damaged needed handling.

There were many more PHS and NIH officers who participated in the cleanup of Hurricane Andrew not mentioned in this article. Staff rotated in and out as needed to address the enormous task at hand.

"I can't say enough about all the people who helped in the disaster," Tonat said, proudly. "We drew staff from the Washington area headquarters as well as from Atlanta and Denver. In fact, we have a team still down there. Everyone did an outstanding job. I'm sure they would all agree with me, 'That's what public health is all about.'"

Wassell, after leaving Florida, went to Hawaii to provide an assessment of Kauai after Hurricane Iniki hit on Sept. 11. "The same type of damage was found in both places but on a lesser scale in Hawaii due to the size of the island," he observed.

In Florida, there were 168-square-miles of damage and 250,000 people left homeless whereas in Hawaii, some 50,000 people were affected. There was also a dramatic difference in the number of patients seen by PHS DMATs—Florida, 17,000; Hawaii, less than 900.

"Although it was on a smaller scale, we provided PHS doctors and personnel from FDA and San Francisco," said Wassell, who is normally deputy executive officer for DRG.

How well did PHS perform? What lessons were learned? These topics were discussed at a conference held last month with emergency personnel from the Florida disaster. Tonat concluded, "We learned from Hurricane Hugo in 1989 that the PHS needed to get people in early to assess and assist at once. That lesson was applied to Andrew and was a large part of the success we had. With Andrew we learned the importance of returning both response and transition back to local control for the near and long-term recovery. Being a part of a group with the goal of helping people in their time of extreme need is something we all will remember."
NIH Interns Complete Successful 1992 Programs

This year marks another successful phase for 11 NIH management and presidential management interns, who have completed 1- or 2-year programs in an array of developmental assignments.

Since its inception in 1957, the Management Intern Program has been designed to foster excellence in administrative management for biomedical research at NIH. The program prepares selected individuals, demonstrating high potential in both management and leadership, for careers in administrative management. Interns arrange a variety of developmental assignments in such areas as financial management, program planning, grants and contracts, personnel management, legislative and information analysis, and equal employment opportunity. Additionally, interns attend conferences, management seminars, discussion groups, and training courses that enhance their career plans. Through these activities, they are exposed to a breadth of administrative functions that support NIH’s intramural and extramural research programs. The internship is a 12-month program overseen by the administrative training committee and accepts up to 10 candidates each year.

PMIs are recruited by the Office of Personnel Management and hired by NIH for a 2-year developmental training experience. Each PMI has an advanced degree in a field related to public administration, and many have previous work experience. Most PMIs are new to the federal government. There is a great deal of flexibility in the developmental assignments available to them. They can select from similar functional areas as PMIs and explore assignments at various levels within the department as well complement work experience; OPM provides additional training for PMIs.

Upon completion of their programs, PMIs and PMIs work with mentors to find permanent positions at NIH and other federal agencies. Interns of years past have advanced to represent NIH in various management positions including four current executive officers, eight budget officers, a grants management officer and a legislative chief.

The success of both programs is a reflection of the caliber of the candidates who apply and are selected as well as the support these programs receive from the NIH community. The ambition and energy of the interns complement the dedication of the managers who continue to support the program by providing meaningful and challenging work assignments.

Confusion Cleared on Correct Inauguration Holiday, Jan. 20

Due to an error on many 1992 pay calendars, there has been confusion regarding the correct date of the 1993 Inauguration holiday. Wednesday, Jan. 20 is the official holiday, according to the Office of Personnel Management.

This is a legal holiday only for employees whose official duty station is located in D.C., Montgomery and Prince George’s counties in Maryland, Arlington and Fairfax counties in Virginia, and the cities of Alexandria and Falls Church in Virginia.

Grants Associates Program Celebrates 30th Anniversary

Sixty present and former health scientist administrators at NIH and their guests gathered at a dinner meeting recently to commemorate the 30th year of the NIH Grants Associates (GA) Program. With the exception of only 6 years, one or more individuals representing each year of the GA program from 1962 to 1993 attended this reunion. Drs. Donna J. Dean and Christine K. Carrico, outgoing and incoming chairs of the GA board, presided over the occasion.

Highlights of the evening included remarks from two former NIH deputy directors: Dr. Thomas E. Malone, deputy director from 1977 to 1986, was a member of the first Grants Associates class in 1962 and is now vice president for medical research at the Association of American Medical Colleges (AAMC). Dr. Ronald Lamont-Havers, deputy director from 1974 to 1976, was a former GA board member and is now deputy director for general affairs in the cutaneous biology research center at Massachusetts General Hospital. Both individuals spoke briefly and eloquently about the program and of the contributions of Dr. John F. Sherman, NIH deputy director from 1968 to 1974 (now vice president of AAMC), who was instrumental in the creation of the Grants Associates Program. Dr. William Sharrock, program administrator in NIAMS and a recent graduate of the program, spoke on behalf of the current class of GAs and praised the unique experiences provided by the training.

To a prolonged ovation, A. Robert Polcari, director of the GA program from 1976 to 1990, was presented a commemorative plaque. His dedication and commitment to maintaining excellence in the training program during his long and productive tenure was emphasized by Dr. Donald G. Murphy, current director of the GA program.

Since its inception in 1962, the GA program has provided 1 year of training to 185 research scientists to facilitate their development into effective, efficient and knowledgeable scientist administrators in the Public Health Service. In addition, more than 150 health scientist administrators at NIH have served as members of the GA board and as preceptors to GAs during their year of training. The GA board also serves in an advisory capacity to Dr. George J. Galasso, NIH associate director for extramural affairs, on health scientist administrator training activities.

NIH Police Holding Raffle To Benefit Patient Fund

NIH’s Fraternal Order of Police is holding a raffle to help benefit the Clinical Center’s Patient Emergency Fund. The drawing will be held Dec. 11, on the patio of Bldg. 31A at 12:30 p.m. The FOP will be selling hot dogs and sodas from 11 a.m. to 1 p.m. The prizes for the raffle are: First—trip for two to Cancun or $1,000 cash; second—color TV; and third—dinner for two at Le Vieux Logis French restaurant. Tickets are $1 per chance and may be purchased from any NIH police officer or by calling Jody Luke, 496-3211, up until the drawing.
Leo Rossiter Named NIH Deputy Police Chief

The vacant NIH deputy police chief post has been filled by Leo J. Rossiter. He replaces Howard S. Davenport, who retired in January. Rossiter previously worked for the Prince George’s County police department where he retired as deputy chief of police.

“Rossiter has a wide range of experience that includes field operations, investigations, budget and administration,” says O.W. Sweat, director, Division of Security Operations. “He is also a strong proponent of police and community relations and is well respected throughout the law enforcement community for his knowledge and operational skills. We are delighted to have him at NIH.”

As deputy chief of police, his duties will include working with the patrol section and investigation unit and overseeing any labor or management problems, as well as budget and other administrative duties. He will attend roll call, inspection of officers, and review commendations and disciplinary actions. As to the number of staff he will supervise, Brightwell says that NIH’s Police Branch is at a low of 56. In the past, the numbers have ranged from 87 to 100.

Rossiter, who started work on Oct. 19, says his job is to make sure the police directives and orders are carried out. “Right now, I am working days but I plan on adjusting my schedule so that I will be able to meet every person under my command.”

He began his 23-year career with the P.G. County police department in January 1969 as a patrol officer for the Hyattsville district station. Working his way up the ranks, he rose from detective in 1972 to lieutenant colonel in 1990. In doing this, he served in various jobs—detective for criminal investigations and robbery squad, administrative assistant, and various command positions.

While the number of officers in P.G. County is far higher than at NIH, Rossiter does not believe in comparing departments. “I don’t mind size,” he says, “I look at its mission.”

To him, NIH is a community unto itself. “It has 20,000 people including visitors, residents and employees on campus daily, along with a hospital and a full-service police force. Although a smaller community, NIH provides the same services as the surrounding counties offer.”

Rossiter says his number-one goal is to help the community understand it has a safer environment because of the professionalism of NIH’s police department. “These are well-trained officers,” he continues. “NIH’s training far exceeds the training mandated by the state of Maryland.”

He also wants to write a mission statement for the department that would bring it in line with the community. “Serve and assist,” he says, “should be our motto.” He explains that police officers today serve as a conduit to the community, not only to assist with crime-fighting but in all areas of concern.

“Community-oriented police work,” he says, “is police officers taking an interest in the community and being a part of it. I would like to establish something like this at NIH.”

“I think Mr. Sweat, Chief Brightwell and myself are on the same wavelength. We want the best and most professional police force here at NIH, one of which the community will be proud.”

A native of Washington, D.C., Rossiter earned his B.S. in administration of justice from American University, and his master’s degree from Nova University, Ft. Lauderdale. He has received numerous commendations and is a member of various police organizations including FBI National Academy Associates, International Association of Chiefs of Police, and State Office of Strategic Drug Enforcement Coordination.—Anne Barber

Donahoe Gives Falk Lecture

Dr. Patricia Donahoe, internationally recognized both for her clinical work in pediatric surgery and her basic research in the study of fetal growth control by fetal regressors such as Mullerian inhibiting substance (MIS), presented the 8th annual Hans L. Falk Memorial Lecture at NIEHS recently.

Donahoe has pioneered much of the research on MIS, a substance that plays a critical role in determining fetal gender. She described MIS as a possible deterrent to uterine tumors in humans since it has shown this property in mice. She also said these findings could serve as prototypes for investigating other inhibiting factors in the human body.

Donahoe, the only woman who is a full professor of surgery at Harvard University, is a member of a number of prestigious societies, has won numerous awards for her research and was named “Woman of the 21st Century” by a major pharmaceutical company. She also serves on the NIEHS board of scientific counselors.

Inn Garners Attention, Honors

The Children’s Inn at NIH has been chosen as the subject of a case study on how a progressive health care environment can improve the happiness and health of chronically ill children. Kathy Russell, former president of the inn board, made the presentation at the fifth annual Symposium on Health Care Design held recently in San Diego.

She discussed how the inn’s interdisciplinary approach to medical care, involving the body as well as mind, is reflected in the facility’s design and operation.

The inn’s playroom was awarded a 1990 Association of Registered Interior Designers of Ontario Gold Award for medical facilities. The National Recreation and Parks Association has also cited the inn’s new playground as “groundbreaking” for meeting the needs of sick children and their healthy siblings.
NIH Helps Clean Up Toxic Waste Site in Montana

The NIH is pursuing approaches to help clean up a solid waste landfill in Victor, Ravalli County, Mont. The site contains a concentrated area with a high level of the chemical chloroform, which is considered a toxic waste.

From 1981 to 1985, the Rocky Mountain Laboratories (RML), a research facility of NIAID, deposited waste at the approximately 1,500-square-acre landfill. Also, while the Bitterroot Valley Sanitary Landfill was in operation it accepted municipal garbage, which might have contained various hazardous substances. Under Montana law, the landfill was authorized to accept hazardous waste from small quantity generators.

The RML hazardous waste deposited at the landfill totaled 1,295 kilograms, representing 10 percent of the total allowed by state law for a single generator. At no time did the facility exceed preset state limits on waste disposal.

In August 1985, the Montana Department of Health and Environmental Sciences (DHES) notified landfill owner Charles Mann that well monitoring showed some pollution in the groundwater and told him to stop accepting small quantity generators’ hazardous waste. RML has a contractor approved by the Environmental Protection Agency to dispose of the facility’s waste.

In March and April 1991, the Montana DHES notified RML, Ribi ImmunoChem Research, Inc., and Mann (owner of the landfill) that they had been identified as potentially liable parties in the groundwater contamination. Montana DHES requested immediate action, which included sampling domestic water wells near the site, determining the extent of groundwater contamination and providing documentation regarding waste disposal at the site.

NIAID conducted a fact-finding mission at the site in April 1991, and hired Chen-Northern, Inc., to do extensive well-digging and testing in the area. The fact-finding mission found that RML acted in good faith, violated no laws and complied with Montana recommendations.

In January 1992, Chen-Northern determined from a survey of approximately 20 wells that the predominant hazardous waste was chloroform and its breakdown product methylene chloride, which had spread east from a single spot toward the Bitterroot River, but that the highest concentrations remained within 1,000 feet of the source. Repeat measurements in the summer of 1992 further localized the source of chloroform. NIAID has paid almost all survey costs and related assessments, which have totaled more than $160,000.

Additional monitoring is still necessary to define precisely the boundaries of the primary contamination and depth to which the chloroform has penetrated. Among the possible clean-up plans are excavation of the soil containing the chloroform hot spot, raising groundwater level in the landfill to the surface so that the chemical can evaporate or rimming the landfill with a nonporous seal. Any clean-up decisions will be made in conjunction with the Montana DHES and will be based on expert assessments from engineering firms and toxic waste disposal companies. The Office of Research Services will pursue future activities related to the issue.

Marion Glick

NIDR/NCRR To Develop Research Centers for Minority Oral Health

NIDR, with supplemental funding from NCRR, has awarded six grants to support the development of Regional Research Centers in Minority Oral Health (RRCMOH). The grants will provide $2 million in support this year and additional funds during the 3-year grant period.

"This innovative program will bring together minority and majority schools to form the foundation for advancing minority oral health," said NIDR director Dr. Harald Loe. "Our ultimate goal is to create centers that will produce in minorities the same gains in oral health that have been enjoyed by the general population in recent years."

The aim of the 3-year developmental grants is to enable minority dental schools or dental schools serving large minority populations to form the alliances and organizational structure necessary to compete for RRCMOH awards, which will be issued in 1995. These 5-year awards will be issued to regional centers that have demonstrated expertise in minority oral health research.

The need for the centers is evidenced by the generally poor oral health of ethnic minorities compared to other populations, the scarcity of minority scientists engaged in oral health research and research training, and the absence of an oral health research infrastructure at minority dental schools and at dental schools serving large minority populations.

The developmental grants were awarded to the University of California School of Dentistry at Los Angeles; the University of Maryland Dental School; Meharry College of Dentistry; the New Jersey Dental School, University of Medicine and Dentistry of New Jersey; New York University College of Dentistry; and the University of Texas Health Science Center Dental School at San Antonio.

Each of these centers consists of a consortium of two or more institutions that includes a minority dental school or a dental school serving a large minority population and a school with a research-intensive oral health program. Each center will perform research projects and other pilot studies relevant to the oral health of minorities and will provide opportunities to foster the development of minority investigators.

The diabetes mellitus interagency coordinating committee and the National Diabetes Information Clearinghouse held a joint meeting at NIH recently to discuss "The Diabetes Control and Complications Trial (DCCT): Its Conclusion and Impact on Federal, Voluntary, and Professional Health Care Agencies and Industry." Results from the multicenter 10-year clinical trial involving 1,400 people with insulin-dependent diabetes are expected in mid-1994. Shown are (from l) Dr. Phillip Gordon, NIDDK director; Carolyn Siebert, DCCT program director; NIDDK; Dr. Oscar Crofford, DCCT steering committee chairman, Vanderbilt University; Dr. Sanford Garfield, diabetes centers program director, NIDDK; and Dr. Robert Silverman, diabetes program branch chief, NIDDK.
Workshop Focuses on Physical Activity, Obesity, Dec. 15-17

A workshop on physical activity and obesity will be held Dec. 15-17 at the Lister Hill Auditorium, Bldg. 38A, cosponsored by NIDDK, NIA, NHLBI, the National Task Force on Prevention and Treatment of Obesity, and the President's Council on Physical Fitness and Sports.

The 3-day workshop will focus on the epidemiology, models and measurement of physical activity and obesity, the physiologic effects of physical activity on tissue metabolism, and physical activity as a way of reducing health risks. Weight gain occurs when caloric intake exceeds energy expenditure.

Experts estimate that 34 million adult Americans are overweight or obese. Obesity is particularly prevalent in minority groups and has increased in children.

Because physical activity can account for up to 30 percent of calories spent, the workshop will address several unanswered questions about its potential for preventing or treating obesity. These include whether aerobic and anaerobic activity offer different benefits and whether muscle fiber type can predict risk of obesity.

Moderators for the sessions are Dr. Xavier Pi-Sunyer, St. Luke's Hospital, New York; Dr. Jules Hirsch, Rockefeller University; Dr. Peter Wood, Stanford University; and Dr. Art Leon, University of Minnesota. [image]

UNIX Workstation User Meeting

DCRT invites all current and prospective ALW users to attend a meeting on Dec. 15 at 2 p.m. in the Bldg. 10 Visitor Information Center's Little Theater. DCRT representatives will report on the current status of the ALW project, future plans, projected operating costs, and funding considerations, and will then hold a question-and-answer session. The meeting will also provide the opportunity to organize an ALW steering committee. For more information, contact Keith Gorlen, 496-1111.

DCRT Team Wins 'BOSS' Award for Laboratory Workstation

A team of DCRT computer scientists and engineers has been selected to receive one of the prestigious "BOSS" awards from the Federal Computer Conference for their work in implementing the Advanced Laboratory Workstation (ALW) system on the NIH campus.

The winning team, which garnered the honor in the category of "Innovation in Hardware, Software, and Networking Approaches," was headed by Keith Gorlen of DCRT's Computer Systems Laboratory and Perry Plexico and Dr. John Dickson of the Computer Center Branch. BOSS (Best of Open Systems Solutions) awards are conferred yearly to recognize government agencies that have best applied open systems in becoming more efficient and cost effective. The DCRT winners were honored at a special luncheon on Dec. 8 and showcased the ALW system during the Federal Computer Conference's OpenNet '92 demonstration at the Washington Convention Center on Dec. 8-10.

The ALW system (see NIH Record, Aug. 18, 1992) gives biomedical researchers "plug and play" capability for UNIX workstations made by Sun, Digital Equipment Corp., and Hewlett-Packard. The system relies on the NIH campus-wide network to provide ALW users with access to more than 115GB of managed disk storage, applications software, software maintenance services, electronic mail and news, computation and database servers, and an international distributed file system. ALWs are particularly suitable for scientific applications requiring high-performance graphics or computation, or access to large amounts of data. The most popular applications include medical image processing, DNA and protein sequencing and searching, statistical analysis, and molecular graphics and modeling.

DCRT's ALW developers enhanced and integrated Transarc's distributed Andrew File System with other software developed at Carnegie Mellon University and the Massachusetts Institute of Technology to produce the system, which currently supports 150 workstations and more than 300 registered users. The design of the system emphasizes reliable daily backup of user files, centralized software management, high availability, and provision for customized configuration of user workstations.

A workstation loaner program is in place to allow NIH scientists to evaluate the many features of ALW before investing in their own workstations. If you are interested in a loaner machine or additional information about the ALW system, call 496-1111.

STEP Addresses Office Dynamics

The STEP committee will sponsor a forum on Jan. 12 from 1 to 3 p.m., Wilson Hall, Bldg. 1 on "Dynamics of the Office: Impact of Changing Technology."

The forum is open to all NIH personnel. No advance registration is required. Attendance will be on a first-come, first-served basis. Continuing education credit is not available. Sign language interpretation will be provided. For additional information, call 496-1493.
NIDR’s Harald Løe Honored by Harvard and Helsinki

NIDR director Dr. Harald Løe has received both the Harvard Dental Medal from Harvard School of Dental Medicine and a doctor honoris causa from the medical faculty of the University of Helsinki.

The Harvard Dental Medal, presented at ceremonies marking the 125th anniversary of Harvard School of Dental Medicine, was extended to him for his outstanding contributions to dental medicine nationally and internationally.

“Dr. Løe is being recognized for his eminence in fostering the agenda of dental health through research, culminating in significant advances in the field of dental medicine throughout the world,” said Dr. R. Bruce Donoff, dean of Harvard School of Dental Medicine, announcing the award.

The honorary degree from the University of Helsinki was conferred upon Løe for his “profound contribution in modern periodontology as well as in the training of a whole generation of periodontologists, many of them in Finland.”

The ceremony to bestow the honorary doctorate was held in conjunction with a celebration of the centennial anniversary of academic education in odontology in Finland. Honorees each gave a lecture to the medical faculty; Løe spoke on “Oral Disease Patterns in the U.S. and Abroad.”

A native of Norway, Løe is an internationally renowned researcher in the field of periodontal medicine. He was the first to prove that bacteria in dental plaque cause gingivitis, the first stage of gum disease. He also developed some of the most widely used methods for measuring the progression of periodontal disease in clinical trials and in epidemiological research. Further studies led to the practice of using antibacterial agents to prevent periodontal disease.

Serving as NIDR’s director since 1983, he has been instrumental in developing training programs to rebuild the nation’s supply of dental researchers—an essential step for moving basic science toward clinical studies, with findings eventually applied to dental practice. Under Løe’s direction, NIDR also has focused on the oral health needs of “special care” patients, people whose oral health is compromised by systemic diseases.

Maria Klebanoff (standing, second from I), an administrative officer for the Epidemiology and Biostatistics Program of NCI’s Division of Cancer Etiology and DCE CFC coordinator, offered keyworkers in her division a tasty incentive—a pizza party to the first group to achieve its dollar goal. Shown here with Klebanoff are winning keyworker Lisa Bandiera (seated, second from r) and her team, members of the Office of the Associate Director and the Administrative Office of the Biological Carcinogenesis Program, DCE. Bandiera’s group exceeded its dollar goal of $1,025 within 2 days of the start of the campaign, averaging $114 per contributor. In addition to encouraging Domino’s to donate the pizzas, Klebanoff urged several other local businesses to donate gift certificates to be raffled to CFC keyworkers who achieve at least 95 percent participation for their groups. The incentives are working—at the end of week 4, DCE had almost 80 percent participation and 90 percent of its dollar goal.

NIDR Investigators Lauded

NIDR director Dr. Harald Løe (l) poses with Dr. R. Bruce Donoff, dean, Harvard School of Dental Medicine, where Løe was honored with the Harvard Dental Medal for fostering the agenda of dental research worldwide.

Drs. Hynda Kleinman and Yoshihiko Yamada of NIDR and Dr. George Martin, formerly with NIDR and now scientific director at NIA, recently won the Debio Peptide Award. The scientists were honored for their peptide research in NIDR’s Laboratory of Developmental Biology.

Debiopharm created the award to recognize and encourage scientists who are conducting research that may lead to the therapeutic use of peptides. The first of its kind given by the pharmaceutical company, the award includes 30,000 Swiss francs, or about $25,000, some of it earmarked for support of laboratory research. Kleinman recently accepted the honor on behalf of the group at the 22nd European Peptide Symposium in Interlaken, Switzerland. The ceremony included a formal dinner and a laser light show.

The research team identified a laminin-derived, five amino-acid-peptide called YIGSR that they showed could block cancer metastasis in laboratory animals. The peptide works, in part, by inhibiting the formation of blood vessels that would normally help the tumor cells to grow. Monsanto, Inc., has licensed YIGSR and is developing it as an antitumor agent.

Kleinman and her colleagues are now investigating another laminin-based peptide that works in the opposite way that YIGSR does. The new peptide, known as SIKVAV, encourages tumor cells to grow by promoting blood vessel growth. The scientists say that this peptide will be useful for enhancing the development of tumors on which they can test therapeutic agents.

Undergraduate Poster Session Set

Undergraduate students from nine institutions will present the results of their research at a poster session on Tuesday, Dec. 15. NIH scientists are invited to view posters from noon until 2 p.m. in the main corridor of the Clinical Center.

The 22 students are participants in the Research Semester for Undergraduates in the Biomedical Sciences program, sponsored by the NIH Office of Education. The semester program has allowed the students to receive college credit from their home institution for their laboratory work. In addition, students are enrolled in an advanced molecular biology course and a seminar focusing on the development of biomedical science public policy. This combination of laboratory and course work has allowed the students to maintain full-time enrollment in their undergraduate program.

Mentoring has been provided to the students by scientists from NCI, NHLBI, NIA, NIAID, NIDDK, NIMH, NICHD, and NINDS. Institutions represented by the students include Carnegie Mellon, Colgate, Colorado State, Dartmouth, Earlham, Hampshire, Swarthmore, University of Arizona, and University of Colorado.
The Record

December 8, 1992

William Harrington, Esteemed Biochemist, Dies

Dr. William F. Harrington, a prominent biochemist long associated with NIH activities, died suddenly on Oct. 31. Most recently, he served with distinction as a charter member of the National Arthritis and Musculoskeletal and Skin Diseases Advisory Council (1987-1991). During this period, he provided outstanding advice regarding research on muscle biology and connective tissue proteins. He also served on a special committee that developed plans for future directions for the NIAMS intramural research program.

Harrington made important contributions to understanding the structure and function of proteins responsible for muscle tension development and contraction, and of collagen, the major protein of the body's connective tissues. In recognition of his scientific achievements, he was elected to the National Academy of Sciences in 1976 and became a fellow of the American Academy of Arts and Sciences.

His many friends will remember him most for his thoughtful concern for others and his easy smile and friendly manner. Nobel laureate Dr. Christian Anfinsen, a friend since the two men met in Cambridge, England, in 1954 and with whom he began work in 1956 in the National Heart Institute, recalls that Harrington was always polite and patient with everyone, even in the midst of serious technical disagreements. Harrington was a productive young scientist for 4 years as a biochemist in NIH, 1956-1960.

He was recruited by Johns Hopkins University as professor of biology in 1960. At that time he submitted a grant application to NIH, which has since provided his major research funding. The grant, originally entitled "Biophysical Chemical Studies of Fibrous Proteins," was awarded MERIT status, a 10-year award, upon competitive renewal in 1987. At the time of his death, the award was in its 33rd year of continuous support by NIH.

Harrington was chairman of the department of biology and director of the McCollum-Pratt Institute at Johns Hopkins from 1973 to 1983. He was named to the Henry Walters chair in biology in 1975. In 1989, he became director of the Institute for Biophysical Research on Macromolecular Assemblies.

He was important in the establishment and organization of a joint NIH-Johns Hopkins University advanced degree program. He also maintained contact with NIH prior to his appointment to the NIAMS council through his leadership in the Foundation for Advanced Education in the Sciences and provided expert service to NIH as a member of the biophysical chemistry study section and as an ad hoc member of the board of scientific counselors of NHLBI's Division of Intramural Research.

OD's Polly Gillette Mourned

Helen E. "Polly" Gillette, 57, a computer specialist in the Office of Information Resources Management (OIRM), OD, died of pneumonia Oct. 29 at Sibley Memorial Hospital. She had a post-polio syndrome.

A 20-year veteran of NIH, she was employed by the Division of Computer Research and Technology and the Division of Management Policy before moving with her section to OIRM earlier this year. Gillette participated in the design and programming of systems dealing with personnel minority data, property accountability, and risk management of data processing resources. She also served as an assistant instructor at the NIH User Resource Center and directed the Computer Security Personal Computer Fair.

A native of Fort Leavenworth, Kan., and a resident of Wheaton, Gillette was well known and respected as a dog obedience trainer at the Capital Dog Training Club (CDTC), where she was a member of the board of directors and coordinator of the club's weekend classes. Her own pair of golden retrievers won the highest AKC obedience award, for Utility Dog, and other obedience titles under her training. She had been affiliated with CDTC since the late 1970's.
Miss America 1990, a Veterinarian, Visits NIEHS

Debbye Turner, Miss America 1990, who is also a veterinarian, was a recent guest at NIEHS.

Her appearance was part of her nationwide program, "Motivating Students to Excellence." Her visit augmented an NIEHS initiative to encourage students, starting at the formative years, to consider careers in science and health. Her host for the visit was Dr. Marian Johnson-Thompson, NIEHS associate director for institutional development.

Nearly 300 students in their junior and senior years from high schools in Chapel Hill, Durham and Raleigh N.C., filled the NIEHS conference center to hear Turner speak. She challenged the students to be "everything that you can be," and not let anything stand in the way of their goals. "Obstacles are to be looked at as challenges to overcome in seeking final goals," she said. "Don't listen to people who say your goals are too difficult for you. If your goal is to become a scientist, or a human doctor, or a veterinarian, don't be intimidated by things such as organic chemistry. If you can't get an A by studying 2 hours, study 3.

Gender Differences Seminar Series To Begin Jan. 5

The Women's Health Seminar Series, sponsored by the Office of Research on Women's Health (ORWH) in collaboration with the advisory committee on women's health issues and the working group on health and behavior, will sponsor a four-part seminar series on gender differences in contemporary health issues. Each seminar will present current research findings by three nationally known experts.

The first seminar, "Gender Differences: Stress and Cardiovascular Disease," will be held on Tuesday, Jan. 5, from 2 to 4 p.m. in Lipsett Amphitheater, Bldg. 10. The three presentations at this seminar will be:

- Dr. Jay R. Kaplan, department of comparative medicine, Bowman Gray School of Medicine, will speak about stress and cardiovascular disease in animals: "Monkeys, Sex, and Atherosclerosis: Lessons from the Jungle."
- Dr. Karen A. Matthews, department of psychiatry, University of Pittsburgh School of Medicine, will talk about "Gender Differences in Response to Psychological Stress: Fact or Fantasy?"
- Dr. Margaret A. Chesney, UCSF prevention sciences group, University of California at San Francisco, will interpret the data presented and their relationship to behavior, health, and illness by examining the question, "Is the Stress of Today's Lifestyles Increasing Women's Risk?"

A question-and-answer session will follow the presentations. Future dates and topics in the series include:

Mar. 2, "Gender Differences in Addictive Behaviors: Alcohol, Smoking and Other Drugs."
Apr. 20, "Gender Differences in Stress: Immunologic Aspects."
May 27, "Gender Differences in Medical Decisionmaking."

Attendance is open to the NIH community and public. For more information, contact Joyce Rudick, ORWH, 402-1770.