

"Still
The Second
Best Thing
About Payday"

The NIH Record

NIH on the Nile

Researchers Find Hidden Treasure in Middle East

By Elia Ben-Ari

A humbling experience, all in all." That is how one NIH researcher described a recent foray to Egypt to begin a unique collaborative study. Recently, a team of three skin disease researchers from NIAMS and NCI traveled to the Medical Genetics Center at Ain Shams University in Cairo. Their goal was to gather information and material for their research on inherited skin diseases. They came away not only with a wealth of material for their studies, but also with great admiration for what their Egyptian colleagues have achieved—the amassing of a research treasure reminiscent of the treasures of the pyramids.

Dr. Sherri J. Bale, a geneticist in the Laboratory of Skin Biology, NIAMS, coordinated the trip as part of the United States-Egypt Cooperative Health Program. This program is the result of an agreement between the Egyptian Ministry of Health and the U.S. Public Health Service. It is funded by the U.S. Agency for International Development (AID) in Cairo, which paid for the researchers' trip. Bale administers one of 17 projects within the Cooperative Health

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NINDS Grantees Identify Neurofibromatosis 2 Gene

Scientists have identified a gene that normally prevents development of tumors and, when damaged, causes an inherited disorder with multiple brain and spinal cord tumors called neurofibromatosis type 2 (NF2). Their results appeared in the Mar. 12 issue of *Cell*.

"Right off the bat, this advance will improve diagnosis for NF2 patients. With further research, it will help scientists uncover the biological basis of this disorder and should lead to the development of specific treatments," said Dr. Philip Sheridan, chief of the Developmental Neurology Branch, NINDS, which partly funded the study. "Furthermore, this discovery offers a valuable clue about the causes of brain and nervous system tumors in the population at large."

Each year, more than 40,000 Americans develop tumors in the brain and spinal cord. NF2, currently treated by managing the tumors as they occur, affects one of every 40,000 children born in the United States.

"Understanding how a faulty NF2 gene leads to excessive cell growth will teach us about the basic biology of tumors in the brain and elsewhere in the body," said NINDS director Dr. Murray Goldstein. "With such information in hand, scientists may be able to develop new treatments for nervous system tumors, such

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'Science Alliance'

NIH Scientists Ally with Elementary School Teachers, Kids

By Ruth Levy Guyer

Why does a female bee have a stinger and a male bee doesn't? Why are farm chickens so stupid? Why do people and animals die? Tough questions, and when they showed up on the electronic bulletin board of the Science Alliance, a number of NIH scientists scrambled to come up with just the right way to answer them.

The girl who posed the three questions is a 5th grader. She and her classmates regularly sign on to the Alliance Bulletin Board to ask questions, to read the answers to last week's questions, or just to chat with students and teachers in other classrooms and with scientists at NIH. "My mealworm is lazy," one student mused recently. "He eats oatmeal with apples. I think that is gross. He eats anything, like plants. He is not the type of worm that goes under ground, he likes the surface. That's all."

Building the Alliance

Three years ago, NIH staff began talking with teachers and students at two local elementary schools—John Burroughs in Washington, D.C., and Brookhaven in Montgomery

Member of D.C.'s Elite

Jazz Musician Mickey Newman Nears NIH Finale

By Rich McManus

In a matter of weeks, there will be one less member of Washington, D.C.'s inner circle of top-rank jazz musicians on the payroll at NIH. Carl E. "Mickey" Newman will soon retire from a 35-year federal career that, for the past 30 years, mixed x-ray technology in the Clinical Center by day with imaginative jazz percussion at night.

With NHLBI for the past 12 years and with the diagnostic radiology department before that, Newman looks forward to a musical life uninterrupted by the dissonance of a day job.

He admits that the two lives have intermixed: "I'll be walking down the hall in Building 10, or even be working on a case, and musical ideas will cross my mind. Work, too, will cross my mind when I'm on the bandstand."

Whenever this sort of interference occurs, Newman asks a question that may well define his artistry: "How will I deal with it from a musical ingenuity standpoint?"

Newman was born 55 years ago at Columbia Hospital in the District, and with the exception of a 2-year stint in the Army and a year away in college, has been a lifelong Washingtonian.

A professional drummer since age 16, he grew up surrounded by rhythm and melody.

"I was always a musician, I just didn't know it," he recalls of his early years. "One day I woke up and found out I could make sense from note to note. It was like music was telling me, 'You belong on this side of the street, Carl Newman.'"

Newman's father was "what you call a

County—both in person and electronically. The NIH scientists are trying to help the teachers and their schools develop meaningful, topical, interesting science programs. The scientists visit the classrooms regularly, and while they are there they do eye-catching experiments for the kids. Through their classroom visits, they are showing kids and teachers what scientists look like (more or less like everyone else!), how scientists ask questions and think about problems, and how solutions to scientific puzzles are discovered. They are also advising teachers about how best to intertwine science and nonscience topics in the curriculum.

Dr. Irene Eckstrand of NIGMS, who is the creator and NIH coordinator of the program, says that Science Alliance scientists hope to develop lasting partnerships with teachers and their schools. She points out that the impact of a scientist who develops a close relationship with one teacher is much larger than that single relationship. When a teacher gains confidence and becomes enthusiastic about science, the

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Carl E. "Mickey" Newman

'hooper,' a tap dancer. I got a sense of rhythm and time from him. From my uncle—who called me Mickey because of my ears—I got inspired through the melodic and lyrical side. He got me interested in using an instrument in

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NF2 GENE

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as drugs to mimic the gene's normal function."

The current study was conducted by NINDS grantee Dr. James Gusella at Massachusetts General Hospital, Dr. Roswell Eldridge, now-retired NINDS scientist, and 18 other collaborators.—Frances Taylor □

Pinn Honored by Wellesley

Dr. Vivian W. Pinn, director of NIH's Office of Research on Women's Health, was recently honored by her alma mater, Wellesley College, for outstanding achievement in medicine. A 1962 graduate of the college, Pinn was one of four to receive the Alumnae Achievement Award for 1993, an award established in 1970 and granted annually to distinguished graduates. □

Spector Extends Fencing Record

Surpassing his own world record, Dr. Novera "Herb" Spector of NINDS' Division of Fundamental Neuroscience qualified in open competition, for the 52nd year, for the United States National Fencing Championships.

Two of the three top qualifiers from the Capitol Division were charter members of the NIH Fencers Club. Dr. Peter P. Roller, an NCI researcher, will be the second representative of NIH at the U.S. Sabre Championships, which will take place in Florida in June. □

Wound Healing Workshop

The Center for Biologics Evaluation and Research, FDA, will sponsor a wound healing workshop entitled "Clinical Trial Issues of Topical Wound Healing Agents" to be held Apr. 22-23 in Bldg. 10, Masur Auditorium. There will be no conference fee but preregistration is required. Contact Pamela Milan, KRA Corp., 1010 Wayne Ave., Suite 950, Silver Spring, MD 20910; (301) 495-1591; fax (301) 495-2919. □

Meeting on Epigenetic Factors Scheduled, Apr. 26-27

"Epigenetic" factors are a class of genetic control mechanisms that are not inherited in a classical, Mendelian fashion. Epigenetic events are receiving increasing attention because they are known to affect gene expression over large regions of the chromosome and to play a role in certain human diseases. An NIH symposium on "Epigenetic Factors in Inheritance" is scheduled for Apr. 26 and 27. The symposium will focus on work in model systems, such as yeast and *Drosophila*, with the goal of stimulating discussion of how the mechanisms operating in these systems might underlie disease states in more complex systems.

The meeting is organized into four sessions. The first, Epigenetic Factors in Inherited Disease and Cancer, will feature presentations by Drs. Andrew Feinberg, Uta Francke,

Claudine Junien, Charles Laird, Stephen Warren, and Huntington Willard. The session on Heterochromatin and DNA Modification will have talks by Drs. Welcome Bender, Timothy Bestor, and Sarah Elgin. The speakers at the session on Position Effects and Chromosomal Domains are Drs. Daniel Gottschling, Michael Grunstein, Jasper Rine, and Allan Spradling. The final session, Chromosome Cross-Talk, will have presentations by Drs. Vicki Chandler, William Gelbart, Steven Henikoff, and Mitzi Kuroda.

The symposium is being cosponsored by NIGMS, NICHD and NCI. It will be held in Bldg. 31, Conf. Rm. 6, from 8:30 a.m. to 5 p.m. each day. Registration is required; for information or to register, call 594-7773.

Donor Center Revisits '50s

The department of transfusion medicine's Blood Donor Center goes back to the fifties with a sock hop. Come out and enjoy the festivities and rock back to the sounds of that decade. The festivities begin at 11 a.m. in Masur Auditorium followed by the sock hop. It will be a hip time. More details to follow next month.

If you are interested in donating blood, give the Blood Donor Center a call for an appointment, 496-1048. The hours are Mondays through Fridays, 7:30 a.m. to 3:30 p.m., except Tuesdays when the center closes at 12:30 p.m. □

Discount Movie Tickets Available

Movie tickets for all Cineplex Odeon theaters are still \$4 for R&W members. Tickets are available at all R&W locations. □

NIMH Seeks Volunteers

NIMH is seeking volunteers age 40 or older to participate in a study of menopause-related hot flashes. Volunteers must be medication free, including hormonal replacement. Hormonal evaluation will be performed, and payment is provided. For information, call Jean Murphy or Nazli Haq, 496-9675. □

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As part of the annual R&W membership drive, NIH director Dr. Bernadine Healy (fourth from l) received R&W card No. 1. Here she reviews the variety of NIH t-shirts on sale at R&W gift shops with R&W workers (from l) Ruth Sragner, R&W operations director; Bill Stancliff, vice president; Linda Huss, treasurer; Dr. Helen Gift, president; and Randy Schools, general manager.

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Committee Recommends No Change in Vasectomy Practice

In light of inconsistent data regarding an association between vasectomy and prostate cancer, an expert committee convened by NIH has recommended that current clinical practice regarding vasectomy continue unchanged at this time.

"Some studies on vasectomy and prostate cancer have found an association, while others have not," said Dr. Wendy Baldwin, NICHD deputy director. "The strongest evidence for an association suggests, at most, a small one. Because of this inconsistency and lack of a convincing biological mechanism, there is insufficient basis for recommending a change in clinical and public health practice at this time." In addition to NICHD, the Mar. 1-2 conference was cosponsored by NCI and NIDDK.

Approximately one out of five United States males over age 35 has had a vasectomy; in 1991, about 500,000 vasectomies were performed in the U.S. Prostate cancer is the most common cancer in U.S. men and is the second leading cause of cancer-related death in U.S. men after lung cancer.

The conference was attended by experts in many fields, including urology, contraceptive research, oncology, epidemiology, immunology, and health policy. After reviewing and weighing all of the current data, including results from published and unpublished studies, the scientists issued a statement containing two sets of recommendations, one regarding clinical and public health policy, and one regarding future research. The policy recommendations are as follows:

- Providers should continue to perform

vasectomies, after obtaining informed consent concerning risks, including the risk of unintended pregnancy, and benefits, in light of individual circumstances.

- Vasectomy reversal is not warranted to prevent prostate cancer.
- Screening for prostate cancer should not be any different for men who have had a vasectomy than for those who have not.

Because of concerns about confounding and various potential sources of bias, the scientists recommended that future epidemiologic studies address methodologic limitations in existing studies of the vasectomy and prostate cancer relationship. They also recommended that epidemiologic studies address the implications of trends in screening and be able to evaluate men at 20 years or more after vasectomy.

In the area of biologic research, they suggested investigating the etiology and pathogenesis of prostate cancer in both men and experimental animals; the relationship between vasectomy and prostate pathology and function; and any relationship between vasectomy and prostate cancer. The scientists also called for integration, when appropriate, between epidemiologic and biologic studies.

Finally, because the results of U.S. studies cannot be extrapolated to certain developing countries that have a low incidence of prostate cancer and a great need for effective contraceptive methods, the scientists emphasized the need for international studies to address the wide geographical differences in vasectomy use and prostate cancer incidence. □

Molecular Genetics in Neurology Is Topic of Fogarty Conference

In observance of the "Decade of the Brain," the Fogarty International Center will sponsor an international conference on "Molecular Genetics and Neurology" on Apr. 5-8 in Masur Auditorium, Bldg. 10.

Organizers of the conference are Dr. Joseph B. Martin, Fogarty scholar-in-residence and dean, School of Medicine, University of California, San Francisco, and Dr. Michael Brownstein, NIMH associate director for basic research.

In the past decade, clinical investigators have used molecular biological methods to determine the genetic defects underlying more than two dozen inherited disorders of the nervous system. The speakers invited to participate in the conference have been selected because of their contributions to scientific understanding of such diseases as Alzheimer's disease, Huntington's disease, multiple sclerosis, and amyotrophic lateral sclerosis (Lou Gehrig's disease). Many other less common or less well-known illnesses will also be discussed.

In addition, talks will be given on the Human Genome Project, ethical issues confronting workers in this field, complex disorders (i.e., disorders produced by alterations in more than one gene), and prospects for gene therapy.

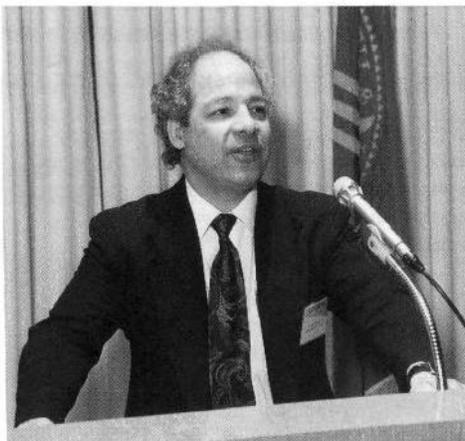
Information on the conference may be obtained from Sheila Feldman, conference coordinator, 496-2968. Preregistration is not required.

DCRT Holds High-Performance Parallel Supercomputing Workshop

Praise for the "marriage" of high-performance, highly parallel supercomputing and computational chemistry was the recurring theme Mar. 6-8 at the workshop, "High Performance Computing in Chemistry," held in Lipsett Amphitheater. Cosponsored by DCRT and DoE's Pacific Northwest Laboratories Molecular Science Research Center (PNL/MSRC), the 3-day series of lectures attracted more than 200 participants from NIH and around the country.

NIH deputy director for intramural research Dr. Lance Liotta opened the Monday morning session, "New Methods," speaking of the "elegant" work coming from the collaborations between ICD laboratory and DCRT computer scientists. This "critical mass of intellectual talent and computer power," he remarked, "now enables us to tackle chemical and biological problems that just a few years ago would have been impossible."

According to Liotta, NIH has made a substantial commitment to high-performance computing because it will "transform the face of biological and theoretical chemistry, and that, in turn, will feed back to alter fundamen-



NIH deputy director for intramural research Dr. Lance Liotta introduces the final day of the High Performance Computing in Chemistry workshop.

tal concepts in computer science." Some of the NIH areas in which high-performance computing is already having an effect, he said, are NMR, cryo-electron microscopy, and drug design to combat serious diseases including

AIDS, cancer, and drug-resistant tuberculosis.

DCRT director Dr. David Rodbard welcomed participants to the opening Saturday morning session on high-performance computing issues; later sessions focused on such topics as macromolecular simulation and quantum mechanical methods. The meeting was capped off on Monday afternoon with presentations by representatives of several major high-performance computer companies. The workshop was organized by DCRT's Drs. Bernard Brooks and Robert Martino, and by Dr. Rick Kendall of PNL/MSRC.

Toward the end of his remarks, Liotta concluded, "We will need high-performance supercomputers for rapid comparisons of gene sequences that are coming out of intramural laboratories and the human genome project. And we will need high-speed computing to model the structures of proteins from those genes, and to interpret and predict the molecular interactions of the proteins in living cells.

"It all starts with creativity, cooperation, collaboration, and teamwork by all the NIH ICDs." □

HIDDEN TREASURE*(Continued from Page 1)*

Program. The goals of this project are to develop a database of genetic diseases in the region, to make this database available to outside researchers, and to help reduce infant mortality and morbidity from these diseases through genetic counseling.

Bale was joined on the trip to Egypt by Dr. John G. Compton, a molecular biologist, also of the NIAMS Laboratory of Skin Biology, and Dr. John J. DiGiovanna, a dermatologist in the Dermatology Branch, NCI. Through their team approach, these three researchers are making great strides in understanding the genetic basis of some forms of ichthyosis—a group of hereditary, scaling skin disorders that involve abnormal thickening of the outer layer of the skin. This knowledge should enable prenatal testing and, ultimately, development of better treatments for these disorders.

The research in Egypt was made possible largely because of the efforts of Dr. Nemat Hashem, director of the Medical Genetics Center at Ain Shams and coinvestigator on the genetics project. Hashem has devoted her life to helping patients with a variety of inherited diseases. She has created a database of more than 16,000 individuals, representing nearly 4,000 families. She has assembled this information over the past 25 years, despite overwhelming odds. Her hard work, devotion, and resourcefulness in obtaining funding for this project over the years have produced a treasure trove of valuable genetic information.

There is an increased prevalence of recessive genetic diseases in Egypt because of intermarriage, particularly between first cousins. Among these diseases are two severe autosomal recessive forms of ichthyosis, lamellar ichthyosis and congenital ichthyosiform erythroderma (CIE). The clinical pictures of these two diseases are similar, and it is sometimes difficult to distinguish between them. Bale, Compton, and DiGiovanna want to determine the genetic basis for these rare skin disorders, as they have already done for an autosomal dominant form of ichthyosis, EHK (epidermolytic hyperkeratosis).

"Because of the consanguinity [kinship, or relationship by blood] we've found a clinical resource that doesn't exist in the United States," says DiGiovanna. Although intermarriage is common in some other societies, he says, "the difficulty is actually finding some way of obtaining those resources."

The researchers went to Cairo hoping to collect blood samples from affected and unaffected individuals from families in which several people had autosomal recessive forms of ichthyosis. Hashem had located these families through her database, and asked them to come to her clinic during the week of the NIH team's visit. Although Hashem had warned the U.S. investigators that she could not guarantee that many people would come, 48 people from 16



The skin diseases research team in Egypt included (from left) Dr. John DiGiovanna of NCI, Dr. Sherri Bale of NIAMS, Dr. Nemat Hashem of Ain Shams University, and NIAMS's Dr. John Compton.

families showed up, even though no treatment for ichthyosis was available to them at the genetics clinic.

In the United States, treatments for ichthyosis include topical moisturizing creams and lotions, and keratolytic agents, which help slough off the top layers of thickened, scaly skin. Without such treatments, the skin of patients with ichthyosis becomes extremely thickened and cracks very easily. More recently, oral retinoids (vitamin A derivatives) have been used successfully to treat the more severe cases of ichthyosis. However, the Ain Shams clinic is a state hospital and many of its patients are very poor. Even the moisturizing creams and lotions that

processing blood samples. Hashem, who has a tremendous rapport with her patients, did all the translating and blood drawing. She also made sure that the group had all the help and materials they needed, which was not always easy. At one point, a source for dry ice could not be found in all of Cairo, and it appeared someone would have to be sent to Alexandria (about 2 hours away by car) to get some. Finally, a supplier was found at the Cairo airport.

Compton set up a laboratory in the clinic so he could isolate DNA (genetic material) from part of each blood sample. From the remainder of each sample he purified the white blood cells and froze them in sterile vials to take back to NIH. At NIH, the cells are being established as long-term cultures, so that more DNA can be obtained from them when necessary. Although these procedures are normally quite simple to perform in an NIH laboratory, their achievement was a challenge at Ain Shams. The researchers had come armed with disposable, sterile materials such as syringes, pipettes, and test tubes. However, the supply of electricity and water was not always reliable, and the nearest deep-freeze was two blocks away. Because of the desert conditions of Cairo, dust was everywhere, making it difficult to maintain sterile conditions.

Despite these challenges, the researchers managed to collect a good number of samples with which to work. By using an approach similar to the one they used to determine that EHK is caused by mutations in certain keratin genes, they hope to pinpoint the exact genetic defects that cause the autosomal recessive ichthyoses. Bale, Compton, and DiGiovanna plan to return to Egypt in June to try to round out their collection of genetic material by

"It's a very sad situation when someone has actually seen what can be done and then it's beyond their reach."—Dr. John J. DiGiovanna, NCI

one can purchase in any U.S. drugstore are unavailable to them. Bale and her colleagues brought some of these moisturizers to Egypt, but they did not have nearly enough to go around.

In one case that the researchers related, a man who brought his four children with ichthyosis to Hashem's clinic told how he had gotten a Saudi prince to sponsor his children's travel to the Mayo Clinic to participate in a clinical study. There, the children received treatment for their ichthyosis, and the results were dramatic. However, after 3 months the study was over and they returned to Egypt, where treatment was unavailable. As DiGiovanna says, "It's a very sad situation when someone has actually seen what can be done and then it's beyond their reach."

The NIH researchers and their Egyptian colleagues spent 15 hours a day for the first 3 days examining patients and collecting and

obtaining samples from additional family members as well as from some new families. Also, notes DiGiovanna, "It's important that we get a good clinical exam on at least one member of each of these families," which was not always possible amid the rush of their first visit.

According to DiGiovanna, the Egyptians "weren't prepared for the level [of detail] with which we wanted to examine the patients. We're trying to study these diseases in great detail—we really want to get a better way of classifying these disorders....If there is clinical heterogeneity, we want to know it and separate it out beforehand." If this is done successfully, the researchers hope that DNA samples from patients with similar clinical appearances can be compared to one another. Otherwise, the methods of genetic analysis the researchers plan to use would be like comparing apples and oranges, since it is very likely that different

forms of the disease are caused by different genetic defects.

Although the autosomal recessive ichthyoses are rare, they can be severe and, in infants, life-threatening. The researchers hope that identifying the genetic cause of these diseases will ultimately lead to improved treatments, such as gene therapy. In addition, notes Compton, "abnormal cornification [development of the outer layer of the skin] is also a characteristic of some more common diseases." Adds DiGiovanna, "Understanding the underlying abnormalities in these diseases will help us understand how normal skin functions [and help us] to understand other skin diseases of abnormal proliferation and differentiation that are more widespread, for example psoriasis." Understanding how normal skin cells grow and develop also may help in the study of wound healing.

The team approach employed by Bale, Compton, and DiGiovanna is obviously working; the researchers expect that this collaborative approach, in which each member of the team provides a certain expertise, will enable them to continue to make important advances in understanding the genetic basis of ichthyosis and other hereditary skin diseases. As Bale puts it, "We share the work, the expertise, and the successes!" □

Liver Disease Deaths on Wane; Reduced Alcohol Consumption Attributed

Between 1979 and 1989, the number of deaths due to cirrhosis of the liver fell 26 percent, according to a recently published report by the National Center for Health Statistics.

Although the decline is significant, its cause is uncertain because cirrhosis is not a disease but the result of many diseases. "Death by cirrhosis," the term often used on death certificates, is only a catch-all phrase that fails to name the intervening disease that led to liver failure.

"Oftentimes, the coding on death certificates is poor and inaccurate because most people do not die of cirrhosis but of something else," said Dr. Jay Hoofnagle, director, Division of Digestive Diseases and Nutrition, NIDDK.

The term cirrhosis is an insufficient diagnosis with unclear implications for both doctors and the general public.

According to Hoofnagle, using the term end-stage liver disease (ESLD) would increase the accuracy of death records and mortality statistics. ESLD, unlike cirrhosis, is a clinical term that helps to identify various causes for the recent decline.

Reduced alcohol consumption among nonalcoholics is one of the reasons attributed to the decline in ESLD. More success in liver transplantation is another development that has helped to increase the ESLD survival rate.

Traditional methods of prevention and therapy such as B-adrenergic blockers for variceal hemorrhage, sclerotherapy, and vascular

NIDDK, Catholic University Form Partnership

Through the NIDDK Science Education Partnership Award, the Catholic University of America has established the Discovery Center for Cell and Molecular Biology. The center was dedicated on Mar. 26.

The partnership between NIDDK and the university will provide teachers and students of the District of Columbia with practical support and information relating to current biomedical research.

The Discovery Center offers six major activities. The "Monthly Discovery Series" gives biology students an opportunity to learn a different biomedical research technique each month. Techniques such as gel electrophoresis, DNA extraction, and other important procedures are part of developing the students' hands-on experience.

The "What-if Research Laboratory" lets students and teachers explore a scientific problem or develop a new teaching tool. The staff of the center will work with students and their teachers to devise a logical approach to an experiment selected by the students or to serve as facilitators of teachers' projects.

The "One Month Student Training Course" will take place during the summer. It is designed to provide selected students an opportunity to receive theoretical and practical information about health-related topics. The

"One Month Teacher Training Course" will complement the design of the student course. Teachers will explore health-related topics with an emphasis on practical applications that can be transferred to the high school biology classroom and laboratory.

Another activity of the Discovery Center will be the "Expansion of CellServ." CellServ is a national service that provides cell biology kits to high school teachers for use in their classrooms. About 24,000 student laboratory units were served in 1992. The program will be expanded and new, innovative kits will be developed, field tested, and distributed throughout the U.S. for a subsidized charge.

Finally, a "Mentor-Advisor Database" of scientists and their specialties will be established. The database can assist teachers who may wish to call upon researchers to visit their classrooms and discuss their work. These scientists will be available to advise teachers and students on a variety of topics.

The NIDDK and Catholic University have collaborated on other efforts to improve biology education in the schools. Many of the university's Center for Advanced Training in Cell and Molecular Biology staff participate in four NIDDK-sponsored biotechnology training courses for D.C. public school science teachers. (See *NIH Record*, May 26, 1992.) □

shunting may also have contributed to the drop in ESLD deaths.

Additionally, new treatments such as glucocorticoids for autoimmune hepatitis, alfa interferon for chronic hepatitis B, C, and D, and hepatitis B vaccine may have improved survival rates. But, further long-term evaluation of therapies such as alfa interferon are needed to prove whether they can significantly prolong survival rates of patients with ESLD.

ESLD prevention, identification of early stage liver disease, and safe and effective treatments could continue the decline in ESLD deaths, Hoofnagle added. □

NIDDK Diabetes Symposium Set

The NIDDK will hold the Third International Symposium on Kidney Disease of Diabetes Mellitus at the Hyatt Regency Hotel, Crystal City, Va., on Apr. 29-30. The purpose is to review basic and clinical research progress and the current state of knowledge in the area. For registration information, address requests to: Dr. Gladys Hirschman or Dr. Gary Striker, ComputerCraft, 6011 Executive Blvd., Suite 211, Rockville, MD 20852. □



NIAID director Dr. Anthony S. Fauci recently recognized 30 individuals for their special contributions to the institute at NIAID's fifth Annual Report and Awards Ceremony. He said the honorees, who received various Presidential, HHS, PHS, NIH and NIAID awards in 1992, "represent the best among the many dedicated and talented people" at NIAID. He also gave an update on the institute's research programs and talked about the challenges ahead.

SCIENCE ALLIANCE*(Continued from Page 1)*

enthusiasm and interest will be transmitted to tens or hundreds of students a year. One teacher wrote: "I think [the Science Alliance] has been a catalyst, a spark that has had a serious rippling effect—from us [teachers] being motivated to the kids."

In the Classroom

Barb Husted, who teaches first and second graders at Brookhaven, waxes exuberant as she talks about the Science Alliance. "It has made a world of difference for the children," she says. "Try science to turn a child on. It's all around us. The children are like sponges, and we teachers must not underestimate their capacity to learn."

Husted notes that teachers are required by the county to achieve certain stated objectives but

"Try science to turn a child on... The children are like sponges, and we teachers must not underestimate their capacity to learn."

that the major objective for any teacher is to help children "love learning." She says that, for her students, science is the "big reward." The children can hardly wait for "their scientist," Dr. John Sogn of NCI, to come each month. Husted says that, in her classroom, "talking science and doing science have gone well beyond science: they have brought the curriculum in focus, stretched vocabularies, stimulated reading, and encouraged interest in math."

Burroughs' principal, Nae Davis, is delighted that her school was chosen for the Science Alliance. She says that, for many teachers and students, science has been difficult and often mysterious. The association with NIH scientists has helped the teachers and the students feel more comfortable with curriculum materials. "Things are easier now," she says, "because we have people to talk with about difficult concepts." Davis also notes that science test scores in her school have begun to rise, another of the positive outgrowths of the Science Alliance program.

Game Plans

On a bright Wednesday afternoon in February, Dr. James Anderson tests his new infectious disease "game" on 18 NIGMS colleagues. He'll use it later in the month at a workshop for Science Alliance teachers. The game illustrates how rapidly viral infections can spread. It's about epidemiology and the life history of an infectious disease; it is also about taking risks, about assessing stakes, and about making decisions to drop out of dangerous situations. It could be used by teachers to make the point once and for all to their third-grade students that it really is not friendly to sneeze on their friends. It could be an effective tool for teachers to use to stimulate discussions about herpes and AIDS in middle and high school classrooms.

Anderson passes around a pot containing 17 clear beads and one blue one (the "virus"). Each

person picks a bead. At the end of the first round, the person with the blue bead is "infected." The others, because they have remained uninfected, get a reward, a chocolate mint. The beads are put back in the pot, and the pot is passed again. Round two ends with two people infected and 16 people getting mints. The infected people must always put a blue bead into the pot, even when they pull a clear one. Extra blue beads for this purpose are sitting on the table. The infected individuals have no chance of becoming uninfected, but they are also not further punished for being doubly infected. Anderson graphs the number of infected individuals at each round. By the fifth round, 13 of the game players are infected, some have a nice collection of mints, and two people have decided to drop out.

There is animated discussion about the game.

Is the "reward" for remaining uninfected big enough or should the number of mints given increase with each round? Should infected individuals have to relinquish their mints? Should there be some form of ostracization for infected individuals? Would there be any pedagogic value in making the game more complicated, perhaps allowing recovery for infected individuals who picked clear beads in two successive rounds? And what about the beads? Are they too small for third graders? Would lollipops, which are shaped like certain viruses, be better? Should the beads be referred to as "beads," "aliens," "viruses," or by some Latin genus-species name?

Anderson thanks everyone for helping him identify some of the technical snafus of his

aquarium. There were cheering squads, aluminum foil boats, hundreds of pennies, ribbons and plaques. Many weeks earlier, Sogn and Finerty had given each child a 12-inch square of aluminum foil. The assignment: Make the "best" boat possible, a seaworthy vessel that could carry a lot of pennies. Over the intervening weeks, various models had been tested and refinements made. At the sinkoff, to much fanfare, the winning boat floated with a cargo of 295 pennies. Sogn says that the winning strategy is not immediately obvious "even to the average, technically minded adult, but, with time, kids will come up with it."

Sogn points out that a simple project like this helps kids "appreciate fundamental concepts of science without having them connected to terribly sophisticated apparatus." The kids learn about trial and error, about developing a quantitative measure of success (counting pennies), and about how hypotheses are designed, tested, and reformulated. They begin to appreciate the benefits of working collaboratively and sharing ideas. Sogn says that, if, through these simple experiments, the children conclude that science is "interesting, fun, and not intimidating, that, to me is success."

Does It Work?

During the 1991-1992 school year, the Science Alliance was evaluated by a committee from the department of educational accountability in the Montgomery County Public School system. The committee looked at whether Science Alliance was worthwhile and how well various features of the program were working—teacher-scientist interactions, classroom visits, the bulletin board, and teacher workshops. The report made specific recommendations for improving the program and for

The value of Science Alliance? "It's given [us] hope, and I think that's very important, because science is about hope."

game. He will spend more time at the drawing board before he presents "Infectious Disease" to the upcoming Alliance teachers' workshop.

Simple Materials, Complex Concepts

Anderson has developed many thought-provoking demonstrations and experiments for kids. His favorite "tool," he says, is the 2-liter plastic soda bottle, which he finds can be adapted for physics, chemistry, and biology experiments. Last year, he and the kids filled soda bottles with wet leaves and watched what happened. A powerful chemical reaction, called fermentation, got under way in the bottles and the leaves deteriorated, turned dark and friable. Anderson says that the high point for him was hearing a second grader say disparagingly, "This looks like dirt!" Exactly!

Sogn's dazzler last year, done in collaboration with Dr. John Finerty, was the Great Boat Sinkoff. Five classes of first and second graders gathered together in a large room with a clear

smoothing out certain rough spots. Although Science Alliance is considered a pilot, recommendations were made for how to start up the program most effectively in other schools.

There was general consensus that "more" would be better—more scientists spending more time in more schools and more training and support for participating scientists. (Currently there are 15 scientists visiting the two schools, and they work their visits in to their busy NIH schedules.) But, there was also consensus that Science Alliance is a worthy endeavor.

One teacher's personal experience of the program was summed up this way: "[The students] know that there are NIH scientists working on [diseases such as cancer and AIDS], and that they are going to come up with something one day. So it's given [us] hope, and I think that's very important, because science is about hope." □



Findings from the IADR/AADR Joint Session in Chicago, March 1993

By Laurie Hall and Pat Sheridan

Quick, In-Office Test for Periodontal Disease Developed

Dentists in the future may be able to offer their patients a quick and accurate in-office screening test for periodontal (gum) disease. Recent studies supported by NIDR have linked the presence in the mouth of high levels of interleukin-1B (IL-1B), a chemical that helps regulate immune response, with active periodontal disease. In related research, dental scientists used this information to develop a simple, quick test to measure the levels of IL-1B.

Dr. Patricia Murray and colleagues at the New Jersey University of Medicine and Dentistry and Cistron Biotechnology examined samples of gingival crevicular fluid (GCF), fluid leaked by the gums and found around the base of teeth, from three groups of patients—those with healthy gums, a group with gingivitis (mild gum inflammation), and patients with periodontitis. The investigators found that the periodontitis group had much higher levels of interleukin-1B in their GCF than the other groups. The researchers believe that, because of interleukin-1B's role in the body's response to inflammation, the high levels of IL-1B indicate ongoing destruction of the bone that surrounds the teeth.

In a related study at the dental school, Dr. J.J. Jandinski and colleagues developed a quick test for periodontal disease that simply requires removing a small amount of GCF and analyzing it for high amounts of interleukin-1B. The "Star Tube" test uses color changes to indicate IL-1B's presence and is nearly as accurate as current diagnostic methods.

Standard periodontal examination typically involves checking for gum inflammation or bleeding, x-rays, and probing and measuring

depth of pockets around teeth. The results, however, may vary from one practitioner to another, depending on their technique. Moreover, the examination cannot really tell the practitioner if the disease is currently active. The Star Test would permit uniform diagnosis of periodontal disease among practitioners with the convenience of a quick and accurate in-office test.

Additional studies are planned to ensure the accuracy of the test in a broad population and to streamline the testing process to make it a cost-effective component of routine oral health screening. □



Gum Disease and Diabetes: A Risky Relationship

If you have diabetes, you are at risk of developing periodontal (gum) disease as a complication of the diabetic condition. Dr. Sara Grossi and colleagues at the State University of New York (SUNY) in Buffalo now report that if you are diabetic, age 45 or older, and smoke, your chances of developing severe periodontal disease with loss of tooth-supporting bone are 20 times higher than for people without these risk factors.

The investigators, supported by NIDR, further found that when these patients are infected with either of two specific bacteria commonly found in gum disease, their risk of severe periodontal destruction jumps to 30 to 50 times greater than for younger nonsmokers without diabetes.

A related NIDR-supported study also points to a relationship between the severity of

diabetes and the rate of periodontal destruction. Dr. George Taylor and associates at the University of Michigan School of Public Health and SUNY Buffalo report that people with severe noninsulin-dependent (type II) diabetes and periodontal disease lose tooth-supporting jaw bone at a faster rate than those with moderate diabetes. Their findings suggest that as diabetes increases in severity, the rate at which vital tooth-anchoring bone is lost accelerates as well.

These findings are a major step toward a better understanding of the complex relationship between periodontal disease and diabetes. The research teams also hope that these studies will inform people with diabetes about factors that place them at high risk for additional health problems. □

National Survey Asks: What Don't Americans Know About Oral Cancer?

Regardless of education, background, or race, most people cannot accurately list the possible causes or the early warning signs of oral (mouth or lip) cancer.

Fewer than one-half of adults surveyed were able to correctly identify symptoms of oral cancer. Furthermore, people with at least some college education did not generally believe that regular alcohol consumption is a risk factor for mouth cancer.

More than 41,000 people were asked on a national health survey about causes and early warning signs of oral cancer. When Dr. Alice Horowitz and colleagues at NIDR reviewed the results, they found that regular alcohol use, a major risk factor, was noted by fewer than half of the respondents. Blacks and people with less

than a high school education were more likely to know that regular use of alcohol was a risk factor than whites and those with some college education. Most respondents correctly identified tobacco use and excessive sun exposure as significant risk factors for oral cancer.

Only 46 percent of the adults surveyed were able to name a correct sign of cancer of the mouth or lip. Thirty-two percent correctly identified a major sign—a sore or lesion that will not heal.

Other possible warning signals include a lump or thickening in the cheek, white or red

patches in the mouth, difficulty in chewing or swallowing or in moving the jaw or tongue, soreness or a feeling that something is caught in the throat, numbness in any area of the mouth, and jaw swelling. The researchers stress that if any of these symptoms persists for more than 2 weeks, see a dentist or physician.

Oral cancer is a serious problem with more than 30,000 new cases and 8,000 deaths annually. Five-year survival is generally poor (about half of those diagnosed) and is substantially lower for Blacks (about 30 percent) than whites. Knowing the early warning signs of oral cancer is important because treatment works best before the disease has spread. These study findings emphasize the need for a broad health education campaign to alert the public to facts they should know about oral cancer. □

NEWMAN

(Continued from Page 1)

an improvisational manner. He played all the instruments—guitar and piano, mostly. He was just a natural, gifted person.”

As he grew up, Newman found himself attracted mainly to drummers. He was fascinated by their “independent coordination, which basically means playing four different things with four different limbs, but they all come into being at once.”

By the age of 3 or 4, he realized that drumming would be his future.

“I remember listening to my dad tap his knife on the table at dinner. That turned on lights in my head, I guess.”

Self-taught for much of his youth, Newman acquired bits and pieces of a full trap set of drums by his mid-teens. Before owning a complete set, he turned professional.

“I was 16 when I first played in a nightclub,” he recalls. “It was at the Melody Inn (now Jimmy McPhail’s Gold Room) out on Bladensburg Rd. in Northeast. A trumpet player named Billy Fair led the band. I had a job cleaning the club after school. One day, the regular drummer didn’t show up and Fair asked me to do the show. I went home, got dressed and came back. I told my mom where I was going and she said, ‘Fine, as long as you stay out of trouble.’”

Newman cheerfully admits that he was underage for playing club dates.

“Yeah, we were breaking the rules,” he laughs. “I wouldn’t have cared if we got busted. I was having the time of my life.”

Newman went to Spingarn High School, where he was a good enough guard on the basketball team to earn a scholarship to Harbison Junior College near Columbia, S.C.

His Spingarn tenure was bracketed by hoop legends Dave Bing, who was a year younger, and Elgin Baylor, who was a senior when Newman was a freshman.

“I liken improvisational music to a fast break in basketball,” he observes. “It’s a mental telepathy type of thing, anticipating one another’s movement.”

Following high school, Newman spent a year in South Carolina then returned to Washington to attend radiology school at Howard University for 2 years. According to the liner notes of an album he recorded on the Riverside label with Washington’s JFK Quintet, he finished first in his class at Howard.

While days were devoted to academic excellence, evenings were reserved for jazz.

“We played a club called the Bohemian Caverns, down at 11th and U Northwest, at nights while I was in school,” he recalls. “Six nights a week, with practice on Saturday morning.”

That legendary band included current jazz scholar Andrew White, then an A student at Howard’s music school, on saxophone (Newman says White, who has perfect pitch, would stand on the street corner during breaks and tell his friends what key passing car horns and sirens were in), pianist Harry Killgo, whose day job was supervising NIH’s mail room, bassist Walter Booker, Jr., and trumpet player Ray Codrington. Julian “Cannonball” Adderley produced their first LP.

“At the time, President Kennedy was just coming into office, and our manager thought it would be appropriate to name the band after him. It was a new era in politics and we were launching a new era of jazz.”

Newman says the band played both originals and standards. “We used to learn at least five

original tunes each week. That was the pace we were setting.”

Poet Al Fraser, who is the late Dizzy Gillespie’s biographer, wrote after seeing the JFK Quintet:

To the “JFK” Quintet

*I dug you
off red and brown
in the light behind,
five bundles of controlled panic
short-suited, fire-brained, and young.*

*I dug you
tear from startled notes
nascent little secrets of blue
so fast, I thought that you
might stumble.*

...

*I dug you
screaming bitter blue boys
deep underground:
dug you and knew that I
was like you—
short-suited, fire-brained, and young.*

In the 9 months that he played with the quintet before being drafted into the Army, Newman mingled with major contributors to American culture—listened to then-unknown stand-up comedian Bill Cosby, filled in for 10 days as drummer in Art Blakey’s Jazz Messengers, made music with sax giant John Coltrane’s bandmates McCoy Tyner and Jimmy Garrison, and accompanied pianist Dorothy Donegan. He also witnessed performances at the Bohemian Caverns (and its predecessor, the Crystal Caverns) by such legends as Duke Ellington, Jelly Roll Morton, Pearl Bailey and Billy Eckstine. As he grew older and more proficient, Newman would associate with a virtual who’s who in American jazz.

But first, the military. Boot camp at Ft. Jackson, S.C. Eleven weeks at Ft. Sam Houston in San Antonio. “Then the rest of the time at Walter Reed Army Hospital, where I worked in radiography.” But every free moment was spent playing jazz, wherever, whenever. “I stayed a jazz musician—I never stopped.”

In December 1963, a week after completing his Army gig, Newman came out to NIH on the advice of his wife at the time, to begin work in the diagnostic radiology department. Still itching to give himself more creative avenues of musical expression, he took the advice of his friend and mentor Joe Leavitt, principal percussionist with the National Symphony Orchestra and author of several instructional texts, and enrolled at Peabody Conservatory of Music in Baltimore for night classes.

“That’s where I met my second instrument—the marimba,” Newman remembers. “Joe told me that Peabody was ‘marimba-land.’ He told me to learn it first before going on into other areas of music.”

The marimba, a cousin of the xylophone, is a



On one side of his living room is Newman’s drum set...

big instrument consisting of flat bars of wood arrayed like piano keys that are struck with padded mallets; beneath each bar is a cylindrical resonator that gives each bar its tone.

"I have a 3.5-octave set and a concert-size, 5.5-octave set," says Newman. "It's a real beautiful instrument."

With its rich palette of tones, the marimba gave to Newman's percussion playing a new lyricism.

At NIH, too, Newman was learning new instruments. He was last featured in the *NIH Record* in July 1976 with his department's new whole-body x-ray scanner.

"We called that the EMI scanner, because it was made by European Musical Instruments, the same company that produced the Beatles. It was a precursor of the CAT scan," he recalls.

Newman waxes as enthusiastic about highlights of his NIH career as he does about music. Now in NHLBI's cardiac catheterization laboratory, he recalls with pleasure protocols originating with dogs that eventually led to today's common coronary dilatation procedures.

"I've seen it go from research to having a direct impact on the community," he says. "I get a big kick out of that. I'm glad to tell people I was a part of it. It's an exhilarating feeling to be part of something new and useful."

Few of his colleagues knew he was a musician until the afternoon Dr. Julio Panza, an NHLBI cardiologist with an interest in alto sax, happened across Newman playing at a Sunday afternoon jazz workshop at the One Step Down jazz club on Pennsylvania Ave.

"Then the word spread pretty quickly throughout the department," Newman laughs.

In the past decade or so, Newman's most inspired collaborations have been at the One Step with pianist Lawrence Wheatley's trio, and with visual artist/poet Yvonne Pickering Carter, for whose "installations" Newman provides an improvisational background of marimba music.

"Carter's from Charleston, S.C., and she paints three-dimensional canvases to recreate aspects of her childhood for her performance pieces," Newman explains. "She recites poetry about growing up there, and I play along. It's almost free-form, but with some structure. I play with her as I would with another jazz musician. We've been collaborating since 1984."

Another favorite collaborator is NHLBI's Reuben Brown, a pianist of considerable accomplishment and renown whose performances at area clubs regularly win critical acclaim.

"I've known Reuben since we were teenagers," says Newman. "I like to put him on the spot (while playing) and reveal his talents. He's an amazing player."

Newman has also worked with such local and national legends as singers Ronnie Wells, Shirley Horn and Roberta Flack, and saxophonist Buck Hill, himself a career postal employee



...while on the other is his prized concert-size marimba. Says Newman, "I touch my instruments daily."

during the workday.

"Sure, I've thought about quitting my day job a lot," chuckles Newman. "But, with two daughters, I needed a financial base. I couldn't be without work for 3 months when the kids needed new shoes. I needed a structured salary."

These days, Newman remains committed to growth as a musician. "I try to stay in shape as much as I can, to keep my chops up to a level where I can play with other people." The living room of his Southeast Washington home features a marimba and drum set, which he plays regularly.

"I touch my instruments daily. If I'm not out in the streets doing it (playing music), I'm at home doing it."



Newman will soon bid adieu to the high-tech cardiac catheterization laboratory in Bldg. 10.

Newman says he can lose himself for 12 to 16 hours at a time playing music. There is even a term he uses to describe what motivates him to play: "I call it a musical abreaction—a big psychological surprise that comes from being able to project yourself musically. It frees me up. I lose my inhibitions and can go places."

How long does it take to attain such a catharsis? "It can take 4 months for a strong abreaction, if I'm diligent, committed and focused." Further defining the state, Newman says, "It's a central nervous system process that takes place within you. It's reaching a place where you can make sense out of nonsense."

"Music's a phenomenal thing, in terms of what it does for you," he continues. "It really can keep you balanced, physically, as a human being."

Never aspiring particularly to fame or fortune, Newman puts his ambition simply: "How much ingenuity can I get in my head in terms of expressing myself musically?"

He laughs to recall moments when he thought he truly invented an original lick.

"I'll think I just played something new, then I'll put on a record from about 1947 and hear that somebody else got there before I did."

Newman's home boasts a treasure of classic jazz LPs, many of whose covers have been worn away by practice sessions that would find Mickey playing along with the record by using the LP's dust jacket as a practice pad. On a sunny Saturday in February, he demonstrates this discipline, keeping lustrous time to Miles Davis' *Saturday Night at the Blackhawk* by using a pair of brushes to swirl out the rhythms.

Though he has no immediate concert schedule, Newman says he plans, in retirement, to immerse himself in music. "It just com-

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pletely absorbs me," he confesses. "I'm just going to go home and deprogram, then reprogram and take it from there. I'm definitely headed for just playing and writing music."

Newman says he couldn't let the door shut on his NIH career without acknowledging the many friends he made here. "I'd like to thank all my coworkers and wish them well, the many nurses and technicians and doctors I've worked with over the years. Can't forget the support groups too, like the housekeeping staff. You need them, too. I just want to recognize the (value) of everybody's input."

Leave it to a lover of ensemble improvisation to leave the bandstand with a nod to his fellow bandmates. □

NIDDK Hosts Lab Tour

When the Beta Kappa Chi Scientific Honor Society (BKX), the National Institute of Science (NIS), and the Brookhaven Semester Program hold their 50th joint annual meeting Mar. 31 to Apr. 4 in Baltimore, a visit to NIH is included. The meeting is designed to enhance attendees' knowledge of science through the exchange of ideas and information.

Baltimore's Coppin State College and Morgan State University will act as hosts to students, many of whom are in the NIH MARC and MBRS programs, and faculty of historically Black colleges and universities.

On Apr. 2, J. Harrison Ager, EEO program manager at NIDDK, will bring students and faculty to the NIH campus for a tour. Between 9 a.m. and noon, the group will visit the laboratories of some of the world's most renowned scientists.

BKX and NIS are Black scientific organizations that have made valuable contributions to the growth and development of all historically Black colleges and universities. The organizations' goals are to promote and increase the participation of minorities in science. □

Life Insurance Open Season

The Office of Personnel Management has announced an open enrollment period under the Federal Employees Group Life Insurance (FEGLI) Program. The period begins Monday, Mar. 29 and ends on Friday, Apr. 30. All eligible NIH employees may elect to enroll in FEGLI (if life insurance coverage was previously waived) or increase their current coverage.

No physical examination is required for employees to elect or increase their life insurance coverage. Employees who are satisfied with their current level of life insurance coverage do not need to do anything to retain this coverage. Those who want to increase current coverage will need to call their servicing personnel office during the open enrollment period to get an election form (SF 2817). The new FEGLI booklet and a brochure, which describe the FEGLI program, will be distributed prior to the beginning of the period. □

NIH Library Gives Free MEDLINE Access

By Kathleen Canavan

Say good-bye to long computer lines in the library and user fees. Starting Mar. 15, the NIH Library started providing free, unlimited access to NLM's MEDLARS databases as a basic service.

The NIH Library, a component of NCRR, has developed a program in collaboration with NLM and DCRT to remove any barriers that would prevent NIH staff from using the databases.

"This new service is a prime example of the great strides that can be made in facilitating research when ICD's cooperate," said Dr. Judith Vaitukaitis, NCRR acting director.

The first barrier eliminated by the program is cost. Through the Management Fund, which is paid by the ICD's, the NIH Library will pay NLM an annual fee for unlimited access to its databases beginning FY 1994. Individual users, however, will no longer be charged for search time on MEDLINE—NLM's leading MEDLARS database.

The other barrier removed is restricted access. The new service will allow users to conduct searches from labs, offices or homes, as long as their computers either have a modem, are connected to the NIH computer network, or have access to Internet, a high-speed international telecommunications network supported by the National Science Foundation. The databases are accessible anytime except from 11 to 11:30 p.m. ET.

For NIH staff unfamiliar with MEDLINE, the NIH Library will offer training classes on how to search it with Grateful Med—the user-friendly software developed by NLM to search the MEDLARS system.

Employees can also schedule personal tutorials



Suzanne Grefsheim, NIH Library director, spearheaded efforts to provide free network access to the MEDLARS system.

for two to six people in their own labs, offices, or in the NIH Library training room.

"The goal we're striving for is to make information easy to get," said Suzanne Grefsheim, NIH Library director. "This is just an extension of other free services offered by the library."

The NIH Library will give new user codes to NIH employees who are eligible for other library services. Only the employees who obtain a user code from the NIH Library will have free access to NLM's databases.

DCRT will teach all technical LAN coordinators how to download Grateful Med from its



Long computer lines in the NIH Library will be a thing of the past when it begins providing free access to NLM's databases as a basic service.

mainframe computer to their local area networks. Individual users will then be able to download the software to their own computers.

"NIH scientists will now be able to use their Internet connection to bring the entire medical literature to bear on any question arising from the laboratory or bedside," said Dr. Donald Lindberg, NLM director. "Colleagues and other information sources around the world will be a few keystrokes away."

Additionally, NIH employees may now freely copy Grateful Med to use at home whether or not they are connected to a local area network, the NIH network, or Internet.

"This joint project should reintroduce Grateful Med and MEDLINE as valuable information tools that many employees might not have considered using in the past," Grefsheim said.

Through the new service, NIH'ers will also be able to request photocopies of articles from the NIH Library using Grateful Med's Loansome Doc feature. This means an end to filling out loan and copy request forms.

"I'm delighted to see this collective venture come to fruition to the benefit of the entire campus," said Dr. David Rodbard, DCRT director. "These kinds of collaborations are crucial in this era of fast-paced changes in technology."

Grefsheim launched her effort to provide free network access to MEDLINE in September, shortly after being appointed director of NCCR's Library Branch, which operates the NIH Library.

Before coming to NIH, Grefsheim implemented a similar program at the University of Michigan where she served as director of the Alfred Taubman Medical Library and coordinator of Health Sciences Libraries.

"When I left Michigan, they were averaging

For Direct-Dial MEDLINE Users

NIH'ers on campus who access the NLM MEDLARS computer using the direct dial numbers (i.e., 480-3150 for 1200 bps or 480-4360 for 2400 bps) should switch to the new 5-digit dialing procedure now that NIH has replaced the old 7-digit pattern. This includes those located in buildings local to NIH such as Westwood, the Executive Boulevard corridor, etc. The NIH Telecommunications Branch made the switch at midnight on Friday, Mar. 26. Remember to change any direct dial numbers in your Grateful Med SETUP area or in other telecommunications software scripts if you use direct dial to access MEDLINE/MEDLARS. To direct dial the MEDLINE/MEDLARS system, use 03150 for 1200 baud and 04360 for 2400 baud.

15,000 searches a month on MEDLINE. That program was very successful," Grefsheim said. "By having that same kind of service available at NIH, everybody is going to win."

The NIH Library is offering a helpline for queries about new user codes, database searches, document requests using Loansome Doc, database content, or other software and database-related problems.

Callers can reach the NIH Library helpline at 496-1080, Monday-Friday, 8:30 a.m. to midnight and during the day on Saturday. For information about this service and about obtaining a registration form, call this number or stop by the NIH Library in Bldg. 10.

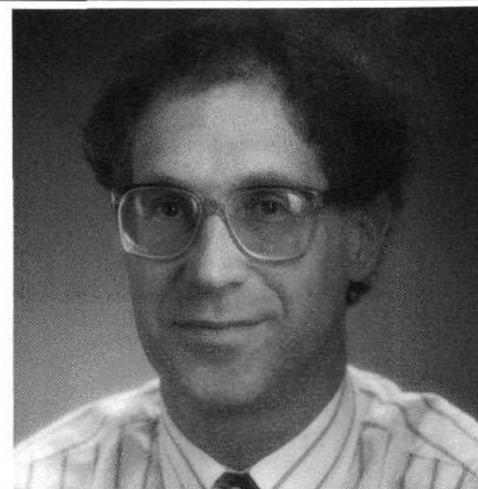
Technical questions about equipment or installation of the Grateful Med software should be directed to local technical LAN coordinators.

Other Databases Also Available

When the NIH Library began offering free access to the MEDLARS system this month, Grateful Med—the user-friendly software developed by NLM—became the primary method for searching the databases. Although MEDLINE is the most frequently searched database, scientists and administrators now have access to the following databases as well: AIDSLINE, AIDSDRUGS, and AIDSTRIALS—databases devoted to HIV-related information; BIOETHICSLINE—citations covering ethics and related public policy issues in healthcare and biomedical research; CATLINE—records of books in NLM's collection; AVLINE—audiovisuals; CHEMLINE and ChemID—chemical dictionaries; HEALTH—information about the organizations and delivery of health care services; CANCERLIT—references to cancer literature; TOXLINE and TOXLIT—toxicological information; DIRLINE—a directory of some 18,000 "information resources"; and SERLINE—information about biomedical journals.

Grateful Med also offers access to: PDQ—a database produced by the National Cancer Institute with information about cancer, including clinical trials, and a physicians' directory; and TOXNET—a system of factual databases containing toxicological and environmental information. Clinical Alerts—highlights of important findings from NIH clinical trials—are also easily accessible.

For more information about Grateful Med and database accessibility, call the NIH Library Helpline, 496-1080.



Dr. Steve Gordon, chief of the Musculoskeletal Diseases Branch, NIAMS, recently received an award from the American Society for Bone and Mineral Research "in grateful appreciation of his exemplary guidance and service in directing research support in the field of bone and mineral metabolism." He has been chief of the branch since 1979. He has contributed greatly in organizing several national and international scientific workshops in osteoporosis, Paget's disease, and related bone disorders, including a landmark Consensus Development Conference on Osteoporosis in 1984 and subsequent major meetings. Research programs supported by the Musculoskeletal Diseases Branch evidenced significant growth under Gordon's direction such that a Bone Biology and Bone Diseases Program was created within the branch in 1989; it was elevated to a separate branch in 1992.

Extramural Grantsmanship Workshop

A workshop on extramural programs and grant support, designed to help postdoctoral fellows understand the research grant process, will be held on Wednesday, Apr. 14 from 8:30 a.m. to 5 p.m. in Masur Auditorium, Bldg. 10.

The workshop, sponsored by NIGMS, is intended for intramural postdoctoral fellows, staff fellows, clinical associates, and research associates who are planning to leave NIH and will be preparing research grant applications in the future.

The workshop will cover the NIH review process, tips on preparing a grant application, programs available for new investigators, and names of appropriate people to contact with problems or questions.

Small group discussions designed to answer individual questions will be led by experienced staff from the Division of Research Grants and several other NIH components.

Attendance will not be limited as in the past, although preregistration is recommended. The deadline for preregistration is Apr. 9.

For more information or to preregister for the workshop, contact Deborah Sickel, 594-7808. To discuss the agenda for the workshop, contact Dr. Lenny Dawidowicz, 594-7738, or Dr. Rochelle Long, 594-7808. □

Two New Grants Associates on Board



Dr. George Stone



Dr. Kenji Nakamura

Drs. George Stone and Kenji Nakamura have recently assumed positions in the Grants Associates Program.

Stone's research experience is in neuroscience and cell biology. He received his Ph.D in biological sciences from the University of California, Irvine, before postdoctoral training at the University of Miami Medical School and City of Hope National Medical Center. During this time he developed a research emphasis in nervous system protein metabolism with specific interest in the cellular basis of fast axoplasmic transport. In 1986, he moved his research program to the Nathan S. Kline Institute for Psychiatric Research in New York state, where he joined the staff as a senior research scientist. Stone left the Kline Institute in 1989, entering the private sector in the area of asset management, where he worked until joining the GA program.

Nakamura received his Ph.D in microbial physiology and biochemistry from Oregon State University. His primary research effort, conducted at the University of Illinois and at the National Center for Toxicological Research, has been in the area of tumor biology with specific interest in the mechanism of action of viral oncogenes. Prior to joining the GA program in November 1992, he led an R&D group in a private biomedical research products company.

Nakamura and Stone will be among five grants associates to be brought into the GA program this year. Their training will include inservice assignments at NIH and elsewhere in the federal government, courses, and attendance at the GA/HSA seminar series. □

Medical Pathological Waste 'Burn Box' Methods Change

Disposal of medical pathological waste (MPW) requires special packaging and handling. The Occupational Safety and Health Branch of the Division of Safety, ORS, has developed a new MPW burn box to make the disposal process safer for everyone at NIH.

Handling and disposal of MPW boxes will be easier because the new boxes are designed to assemble easily, close simply and fit together tightly. When the box is assembled, the bottom automatically folds into place. The new boxes close securely with specially designed flaps. No tape is required with the new boxes, eliminating tape-related problems associated with the old style boxes. In addition, the old MPW boxes were sometimes assembled incorrectly, leaving gaps that allowed plastic bag liners or actual waste to stick out. Occasionally liner bags were torn and waste fluids leaked out.

The new bright white MPW boxes are imprinted with instructions and logos printed in

blaze orange. These distinctive colors were selected to eliminate the problems caused when MPW boxes were confused with boxes supplied for moving and storage. A word of caution—investigators who put research records or lab equipment in MPW boxes risk having valuable data or equipment incinerated.

Acquiring this new MPW packaging system will be easy.

The new boxes are part of a kit that includes 5 boxes, 10 plastic bags and 12 closure ties. The previous system required separate purchases of boxes, liner bags, ties and tape. These kits should make it simpler to meet a new requirement to double-bag MPW to prevent leakage during transport and disposal. The new kits will be available beginning in April at the NIH Self Service Store, Bldg. 35, and through the NIH Stock Catalog (#8115-00-L04-0680). □

1993 Parklawn Classic Scheduled

The annual Parklawn Classic 5-Mile Run and Health Walk will be held on Friday, Apr. 30 at 11 a.m. This is the 10th anniversary of the walk and the 18th yearly footrace. All PHS employees in the Washington area are invited to participate. All, including mobility impaired persons, are welcome.

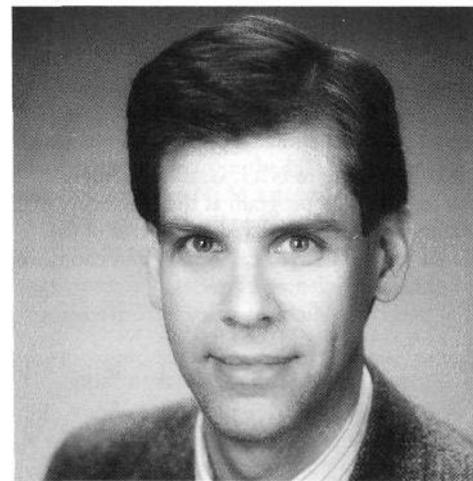
This year, as in years past, the HHS assistant secretary for health challenges all agencies to compete for a participation award. The Indian Health Service won the 1992 award with 80 percent participation.

The 5-mile run starts in Rock Creek Park and ends on Fishers Ln. The walkers' event begins in the north parking lot on Fishers Ln. and follows a marked course.

Trophies and medals are awarded to top finishers of the race while health walk ribbons are given to those who complete the walk. The 5-mile run also includes a 2-man, 2-woman agency team competition.

Round trip transportation to the Classic is provided for NIH'ers. Call the Classic hotline, (301) 443-5350, for details.

To sign up for the events, or to volunteer, look for Classic registration forms to be distributed to each office. Return forms to R&W Gift Shop, Bldg. 31, Rm. B1W30. □



Dr. William J. Sharrock recently joined the NIAMS staff as a program director within the Bone Biology and Bone Diseases Branch. He will be managing a portfolio of grants in basic bone research, including the cellular, molecular, and developmental biology of bone cells; mechanisms of mineralization and growth; bone structure and architecture; and regulation of bone cell metabolism by local and systemic hormones and growth factors. He will also administer training and career awards in these areas. Sharrock is a 1992 graduate of the NIH Grants Associates Program. He received his Ph.D. in biochemistry from the University of California at Berkeley and subsequently was a postdoctoral fellow at the Medical Research Council Laboratory of Molecular Biology in Cambridge, England. Prior to coming to NIH, he was assistant professor in the department of biochemistry at the University of Minnesota.

Your Own Blood Is the Safest, Says CC's Klein

By Sue Kendall

You're scheduled for an operation. You know you're going to need some blood during surgery, but you're concerned about the risks of blood transfusion. Can you donate your own blood? According to Dr. Harvey G. Klein, chief of the Clinical Center's department of transfusion medicine, you not only can, but you should, whenever circumstances permit.

At a recent CC grand rounds, Klein explained that despite the fact that volunteer donor (allogeneic) blood is safer than ever, thanks to rigorous screening for infectious agents, problems still lurk that can be avoided by using self-donated (autologous) blood. Even though each unit of blood currently undergoes seven tests, unknown pathogens could still creep into the blood supply and go undetected. The human immunodeficiency virus (HIV), which causes AIDS, is an example of how this has

infections than those who received their own blood." Patients who have cancer surgery fare less well if they receive allogeneic blood. Other complications of blood transfusion include fever, chills, urticaria (hives), mild to fatal antibody reactions caused by incompatible blood, and reactivation of latent viruses in the transfusion recipient. "The bottom line," he says, "is that you should limit exposure to allogeneic blood" by using autologous blood whenever possible.

That being the case, who can safely self-donate? Since the amount of blood one person can donate is limited by the amount of time before scheduled surgery, gender, and medical condition, the best candidates are those contemplating elective surgery, such as hip replacement or coronary artery bypass grafting. Some mandatory operations can be scheduled

You not only can (donate your blood) but you should, whenever circumstances permit, says Dr. Harvey G. Klein, chief of the Clinical Center's department of transfusion medicine.

occurred in the past. Another problem is that HIV, hepatitis, and other viruses have a "window period" in which the donor can be infectious but the virus is undetected even by the best screening tests, Klein explained. Because of this window, viral hepatitis remains a potentially serious complication of blood transfusion, with approximately 1 in every 3,000 units of blood transmitting the virus, despite all precautions.

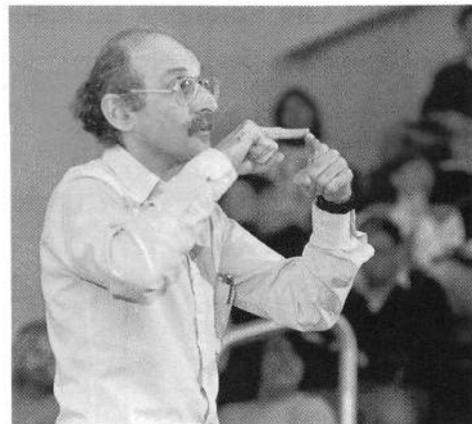
In the last 15 years, however, screening blood has reduced the risk per unit of blood transfused by up to 99 percent for most transfusion-transmitted diseases (TTDs), says Klein. For example, if blood today were not being screened for HIV, we could expect over 70,000 new infections this year from transfusions alone. However, with more than 18 million units of blood transfused annually, only 100-400 HIV infections will result. Isn't this incidence still too high, you ask? If you get one of those units, yes. "Until we can sterilize cellular blood components, there will always be a risk" from infectious agents, Klein says. Other countries face an even greater problem with many other TTDs, such as malaria, that are rare in the United States.

Another problem is that despite all precautions, patients who receive allogeneic blood seem to develop more clinical problems after surgery than do patients who receive autologous blood.

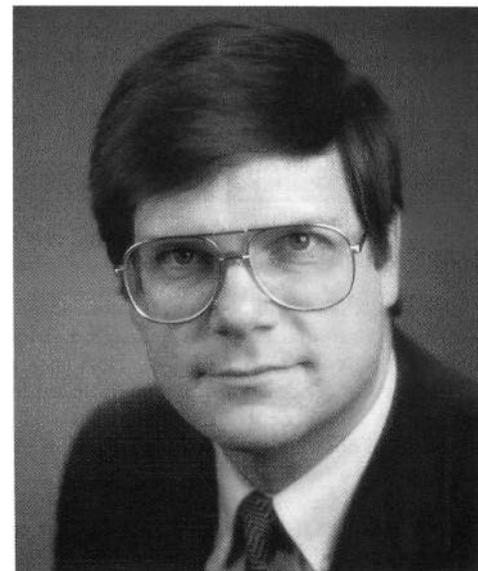
"If one looks at the few studies that have autologous blood as a control," Klein explains, "the patients who received allogeneic blood had a significantly higher number of postoperative

far enough in advance to allow adequate blood donation if the patient's health permits. If predonation is not possible, another method of autologous blood use is to salvage blood lost during surgery and reinfuse it. Patients who need blood after surgery must usually rely on allogeneic blood, but the physician should prescribe it prudently. Says Klein, "There is no single measure that can replace good clinical judgement, and no laboratory test that can tell you when to transfuse your patient."

Unfortunately, even well-planned autologous donations do not always meet the surgical needs of many patients, and some allogeneic blood must be used. Current research is investigating a way to enable patients to predonate larger volumes of blood by mimicking the body's own blood-making machinery. The technique is to use iron in tandem with recombinant human erythropoietin, a hormone that stimulates red cell production, thus preventing anemia from frequent blood draws. Klein cited a placebo-controlled, randomized, multicenter trial that demonstrated this method's effectiveness: 41 percent more blood was collected from the group that got the erythropoietin than from the group that got placebo. Says Klein, "If you need to collect large volumes of blood, more than four units over 3 weeks, you can do so. [Erythropoietin] also allows you to collect the required number of units of blood from patients who are unable to donate blood because of low hematocrits or other factors." The Food and Drug Administration has not yet licensed erythropoietin for this use, so it is still considered experimental. □



DCRT's Dr. Adrian Parsegian gave a "friendly but intense introduction" to intermolecular forces in a recent short course in Lipsett Amphitheater entitled "Physical Forces Organizing Biomolecules." He described the measurement and computation of several forces governing the behavior of biomolecules: electrostatic, electrodynamic (van der Waals), solvation, and configuration forces. DCRT's Physical Sciences Laboratory and the Biophysical Society cosponsored his presentation. The weekend course, which coincided with a meeting of the Biophysical Society, was well received and may be repeated next year.



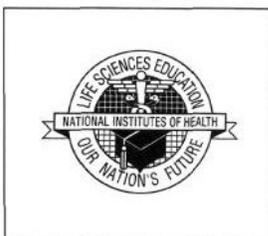
DCRT's Dr. Bernard Brooks was honored recently as the guest speaker at Howard University's 27th annual Percy L. Julian Memorial Lecture. Following his talk, "Molecular Dynamics for Problems in Structural Biology," Brooks was presented with a special commemorative plaque by Howard's chapter of the Sigma Xi Research Society, which sponsored the lecture. Head of DCRT's molecular graphics and simulation section, Brooks has been collaborating since 1991 with Dr. William Southerland, a Howard biochemistry professor, on a study of the molecular dynamics of HIV-1 protease inhibitors in solution.

The NIH Life Sciences Education Connection

Science Alliance is a pilot program that establishes partnerships between scientists and elementary school teachers (see story on p. 1). One component of the program is an electronic bulletin board where teachers, students, and scientists can ask questions, provide information, suggest experiments—in short, carry on a discussion about science. The bulletin board system has been pilot tested for 2 years with two schools and a small crew of scientists.

Now, the Science Alliance Bulletin Board is ready to expand. A dozen or more elementary schools are expected to join the system this spring, and scientists are urgently needed to respond to postings from students and teachers. If you like electronic communications, enjoy the questions of small children, and have a commitment to improving science education in elementary schools, you may be just the person to join Science Alliance. Call Dr. Irene Eckstrand (496-7137) or Dr. James Cassatt (496-7463) if you are interested.

In celebration of Maryland Science Week (Apr. 25- May 1) and National Science and Technology Week (Apr. 26-May 3), NIH and the commission on life sciences of the National Research Council/National Academy of Sciences will sponsor a talk on the role of the scientific community in precollege science education by Dr. Bruce Alberts, president-elect, National Academy of Sciences, at 9 a.m. on Apr. 28. Alberts is



currently professor of biochemistry at the University of California, San Francisco Medical Center. The event, with a location to be announced shortly, will be open to the public. A precollege science education workshop for scientists will follow. For more information, contact the Office of Science Education Policy, 402-2469.

Several NIH institutes will exhibit at the fourth annual Rockville Science Day at Montgomery College on Sunday, Apr. 25. The event, which will be hosted from noon to 5 p.m. at the Rockville campus, is being sponsored by the Rockville Consortium for Science. The consortium is a nonprofit educational organization whose purpose is to promote interest and literacy in science and technology within and beyond the Rockville community. The public is encouraged to attend.

Another way that NIH will be observing Maryland Science Week is by joining with the governor of Maryland in hosting the "Mysteries of NIH."

"Mysteries" will be a full-day conference at NIH for leaders and scientists from Maryland's 2- and 4-year colleges and universities to learn more about the magnitude of NIH's work and accomplishments. The event is by invitation only, but additional accommodations may be available. For more information contact Dr. Anthony Rene (402-0593) or Dr. Vera Zdrakovich, (301-322-0432).

Smoking Outside CC Restricted

If you've ever considered quitting smoking, now would be a pretty good time to do so. Effective Apr. 15, all smoking in the immediate vicinity of the Clinical Center will be restricted to the sun deck, located outside the NIH Library near Masur Auditorium. The sun deck has recently been made handicap-accessible. Employees, patients, and their families may no longer smoke at or around any entrance, including any garage level, any patio area, the front door, or outside B1 cafeteria. Signs will be posted as reminders.

"This decision is in response to numerous complaints about the odor and litter generated by smoking near entrances to the CC," says Ray Becich, CC executive officer. "It is also in keeping with NIH's smoke-free policy, initiated in 1987." Says Dr. Jack Kalberer, Office of Disease Prevention, "While these policies may seem inconvenient or unfair to smokers, bear in mind that smoking goes against what NIH and the Clinical Center represent, which is maintenance and restoration of health."

Any employee who needs help quitting smoking may take a course offered through the NIH Training Center. "Break the Smoking Habit" consists of six weekly sessions of about 2 hours each. Before the course, there is an orientation where participants meet the instructor, learn more about the program, and receive a schedule of weekly meetings. You can register after you know all the facts. The next course begins in May. For information, call 496-6211, or pick up the bright pink brochure titled "Professional Development, Supervisory, and Management Training," found in information displays around NIH. □

GA Seminar Series Seeks Nominees

Each year, the Health Scientist Administrator Development Program (HSADP) Office, in the Office of Extramural Programs, manages a series of seminars to complement the training assignment of the grants associates (GAs), HSA associates, and the working experiences of selected HSAs.

The HSADP office is accepting applications for the FY 1994 GA/HSA seminar series scheduled to begin on Friday, Sept. 24. The series is held weekly on Fridays through May 1994 in Bldg. 31C, 8:30 a.m. to noon. On approximately five of the Fridays during the series, the seminars will be scheduled for a full day.

The series addresses a broad spectrum of philosophical, political, and policy issues relevant to the administration of federal programs in support of biomedical and behavioral research. Topics to be covered include the roles and interactions of HHS, NIH, other PHS and non-PHS agencies; policy and ethical considerations in research; factors affecting extramural programs and their administration; program planning and evaluation; and the legislative/budget process.

HSAs with 1 to 3 years experience are expected to profit most from, and best contribute to the series. Nominees who have spent less than 1 year in NIH extramural activities should first take the course, "Fundamentals of NIH Extramural Activities."

Individuals interested in participating in the series should, by means of memo, state their interest as it relates to their current duties. It should be sent through their supervisor to their ICD director. Include current title, ICD organizational component and office address, and a current C.V. ICD directors are asked to forward no more than two nominations (in priority order) with the above information and other supporting documents by May 1, to Dr. Donald G. Murphy, director, HSADP, Bldg. 31, Rm. 5B35.

Only a limited number of participants can be accommodated. All nominees will be notified of final action in June.

For more information, contact Murphy or Susan O'Brien, 496-1736. □

DCRT Computer Training Classes

Classes	Dates
SAS Fundamentals I for Nonprogrammers	4/1-4/2
SAS Fundamentals II for Programmers	4/5-4/6
Computer Data Structures	4/5, 4/7, 4/12, 4/14
Usage of Applications of Molecular Quantum Mechanical Programs	4/5, 4/12, 4/26, 5/3, 5/10, 5/17, 5/24
Andrew File System	4/6
PC Viruses	4/7
SAS Fundamentals II for Nonprogrammers	4/7, 4/8
LISTSERV Electronic Mailing Lists	4/8
Getting Started with C	4/12-4/15
Physical Models of Cell Locomotion	4/13
Microsoft Mail	4/13
Mainframe Services at NIH	4/15
C Language Fundamentals	4/19-4/23
Intro to WYLBUR	4/19, 4/21, 4/23, 4/26, 4/28, 4/30
Networks for the Scientific Community	4/20
Topics in Flow Cytometry	4/20, 4/27
Gopher	4/22
Windows Application Strategies	4/22
Experimental Data Analysis	4/22, 4/27, 4/29, 5/4
Designing Tables and Managing a DB2 Database	4/26-4/28
Inside Image	4/27
PC<->Mainframe Communication with Kermit	4/29

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



TRAINING TIPS

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

<i>Personal Computing Training</i>	<i>496-6211</i>
<i>Course Titles</i>	<i>Starting Dates</i>
Welcome to Macintosh	4/7, 4/19, 5/11
Intro to WordPerfect 2.0 (Mac)	4/20
Intro to Microsoft Word 5.0	4/6
Excel - 4.0 Level 1	4/12
Excel - 4.0 Level 2	4/21
Excel - 4.0 Level 3	5/20
Excel - 4.0 Level 4	4/26
Lotus for Mac - Levels 1 and 2	Upon Request
Intermediate Filemaker PRO	4/14
Intro to 4th Dimension	4/1
FoxBASE 2.01-Levels 1 and 2	Upon Request
DeltaGraph PRO	4/13
Intro to Pagemaker	4/27
QuarkXpress - Level 2	4/15
MORE III	Upon Request
3Com PC Network-Level 2	4/7
3Com PC Network Management	Upon Request
Microsoft Mail	4/13
Intro to Personal Computing for New Users	4/30
Disaster Recovery and Data Security for the PC	4/27
Intro to DOS	4/12, 4/30
Intro to Windows 3.1	4/29
WordPerfect for Windows	4/14, 5/11
Lotus for Windows (new)	4/28
PageMaker for Windows (new)	4/1
Project Leadership Workshop (new)	4/20, 4/22
Intro to WordPerfect 5.1	4/20
WordPerfect 5.1 - Adv. Topics	4/6, 5/4
Printing With WP 5.1 and Laser Printers	4/13
Desktop Publishing w/WP 5.1 (new)	4/15
Intro to Harvard Graphics, Rel. 3.0	4/26
Intro to Paradox	4/13, 5/10
Adv. Paradox	4/19
Intro to dBASE III+	Upon request
Intermediate dBASE III+	4/14
Intro to Lotus 1-2-3, Rel. 2.4	4/5
Lotus 1-2-3, Rel. 2.4 - Adv. Tops.	4/21
Intermediate Symphony	4/26
Intro to CRISP	4/2
IMPACT for MSCs	Upon Request

FAES' Lanterman Mourned

Stephanie Lanterman, assistant registrar of the FAES Graduate School at NIH, died suddenly Mar. 10 of a heart attack. She had been employed by the Foundation for Advanced Education in the Sciences for the last 22 years, more than half of her life. "The staff, faculty and students will long remember Stephanie's cheerful, cooperative manner as she effectively dealt with the many details and problems entailed in the operation of the evening classes at NIH," said Lois Kochanski, FAES executive officer and registrar. The Lanterman family requests that those wishing to make a gift in Stephanie's memory send a donation to the Children's Inn at NIH, Bldg. 62.

DRG's Twyman Retires After 30-Year Career at NIH

Emma Twyman, EEO officer for the Division of Research Grants, said goodbye to NIH on Mar. 3 after a career that spanned more than 30 years.

She began working for NIH in 1963, in the Clinical Center nutrition department. In 1970, she took a position at DRG as a clerk typist, and later became the library technician and EEO counselor for the division. In 1973, she participated in the NIH Upward Mobility Program and returned to college at the University of the District of Columbia, where she received her bachelor's degree in social welfare and rehabilitation and psychology in 1979.

Appointed the first DRG EEO officer in 1981, Twyman made the EEO office an integral and indispensable resource in the division. She was instrumental in increasing the promotion potential of the grants technical assistant position. She implemented a training program covering EEO policies and processes for managers and supervisors, and in 1992, implemented a training and sensitivity program on the prevention of sexual harassment.

Her advocacy efforts and sensitivity to people reached far beyond her capacity as EEO officer. She spent many years as an ad hoc advisor to DRG's employee advisory committee, and has been an active volunteer for the Prince George's County crisis hotline.

Throughout her years at DRG, Twyman was respected and admired by her coworkers. Her people-oriented abilities made her an exceptional EEO officer, and she was available for all



Emma Twyman

DRG employees who had problems or concerns. Twyman reflected on her experiences at DRG, saying that "the most rewarding thing about working here is not only informing employees of their EEO rights, but being here for people when they just need to talk."

In retirement, she plans to devote more time to her love of gardening and will be visiting her second home in Lumberton, N.C., more often. She also plans to continue helping those in need by serving in the volunteer community in Prince George's County. Twyman intends to continue living by her motto: "Let me live in a house by the side of the road and be a friend to all." □

DCRT Offers Guide to Resources

The Division of Computer Research and Technology just released a publication that describes the myriad computing resources and services available to the NIH community. Titled *Computing Resources*, this guide highlights the support services and facilities offered by DCRT for those needing assistance in such areas as hardware, software, networking, and scientific computing. This booklet features a user grid that provides a quick cross-index to types of programs (molecular biology, computational chemistry, virus protection, databases, statistics, etc.) and types of computer systems.

Copies of *Computing Resources* are available by contacting the DCRT Information Office, Bldg. 12A, Rm. 3025, 496-6203, or one of the following distribution centers: DCRT Technical Information Office—Bldg. 12A, Rm. 1015, 496-5431; DCRT Personal Computing Branch Help Line—496-2282; DCRT Scientific Computing Resource Center—Bldg. 12A, Rm. 1050, 402-3488; User Resource Center—Bldg. 31, Rm. B2B47, 496-5025; Visitor Information Center—Bldg. 10, Rm. B1C218, 496-1776. □

NIAMS-Supported Grantees Honored

The 44th annual presentation of the Kappa Delta Sorority Awards, which recognize excellence in orthopaedic research, took place recently at the annual joint meeting of the Orthopaedic Research Society and the American Academy of Orthopaedic Surgeons. All three winners were supported by NIAMS.

Dr. Alan J. Grodzinsky, professor of bioengineering, department of electrical engineering and computer science at Massachusetts Institute of Technology, received the Ann Doner Vaughn Award for research on "Physical Regulation of Cartilage Matrix Metabolism."

The Elizabeth Winston Lanier Award was received by Dr. Gary S. Stein, professor and chairman of the department of cell biology, University of Massachusetts Medical Center, for research on "Molecular Mechanisms Regulating Osteoblast Growth and Differentiation."

Dr. Dale R. Sumner, Jr., associate professor in the department of orthopaedic surgery at Rush-Presbyterian-St. Luke's Medical Center in Chicago, was recipient of the Young Investigator's Award, as principal investigator on the project "Influence of Femoral Component Design on Interface Histology and Bone Remodeling in Cementless Total Hip Replacement." □

'The NIH Catalyst'

New Periodical Focuses on Concerns of Intramural NIH

To extend the spirit of NIH's research festival year-round, a newsletter called the *NIH Catalyst* has recently been published. The brainchild of Dr. Lance Liotta, NIH's deputy director for intramural research, and Dr. John Gallin, director, Division of Intramural Research for NIAID, it fills an important need to stimulate exchange among NIH scientists.

Liotta, serving as editor of the newsletter, says: "The *Catalyst* hopes to serve as a forum for ideas and opinions, promote collaboration across institutes and allow scientists at all levels to advise policy development."

Also on the masthead are Gallin serving as deputy editor; Seema Kumar, managing editor, and Dr. Celia Hooper, scientific editor. "The purpose of the newsletter," explains Kumar, "is to catalyze interaction among intramural scientists and to facilitate communication."

The contents will include a mixture of research and policy issues including scientist-written mini-reviews, debates and commentary, and staff-written news stories on science, policy and workplace issues. In addition, the newsletter will feature profiles on new, existing and visiting faculty.

Excited about the first issue already distributed, Kumar says, "We wanted to give the scientists something to look at and hoped to get some feedback before the next issue is published."

And feedback they got. According to Kumar, they have received many phone calls and letters, all supporting the newsletter and some requesting publication more often. Right now, the *NIH Catalyst* is scheduled for publication bimonthly.

"We want to encourage scientists to write about their research results, which in turn will foster collaboration, cross-fertilization and perhaps debate. We are also soliciting their insight, advice and input on policy matters. We want the newsletter to provide the audience with what it wants, and hope that it will evolve to reflect their interests and needs."

An advisory board will be established to help identify scientists with exciting ideas and suggest issues for discussion in the newsletter.

Kumar, no stranger to NIH, had worked as a graduate intern on the *Journal of NCI* before she left to cover basic science at Johns Hopkins. She came back to work for NIAID through contractor R.O.W. Sciences before joining the *Catalyst*. As managing editor, she will cover science news and policy issues and



The *NIH Catalyst* staff includes (from l) Seema Kumar, managing editor; Dr. John Gallin, deputy editor; Dr. Lance Liotta, editor; and Dr. Celia Hooper, scientific editor.

oversee the newsletter's production and design.

Hooper previously worked for the *Journal of NIH Research* before joining Liotta's office. Serving as scientific editor, she will be responsible for the scientific sections of the newsletter such as laboratory papers, science news, and mini-reviews.

The first issue of the *NIH Catalyst* came out on Feb. 22.

Some 9,000 copies were printed and distributed via various mailing keys. If you would like a copy or have your name added to the mailing list, call Kumar, 402-1449. The next issue is slated for publication in April.—

Anne Barber □



Workshop on Animals in Research

NIH will host a workshop on "Medical Progress: A Miracle at Risk," on Apr. 22. Sponsored by the American Medical Association, it will provide the tools and information necessary to better educate the public about the critical role that animals play in medical research.

Participants will receive a comprehensive resource kit containing sample speeches with slides, fact sheets, and videotapes. The program is intended for scientists, laboratory technicians, and other health care professionals interested in countering the damage done to medical progress through widespread misinformation about the care and use of laboratory animals.

Preregistration is required. For more information, contact the Office of Laboratory Animal Research, 402-1058. □

Duster Gives Genome Lecture

Dr. Troy Duster is the ninth speaker in NCHGR's Human Genome Lecture Series. His talk, entitled, "The Socio-historical Context of Genetic Explanation of Behavior," will be held Apr. 15 at 11:30 a.m. in Lipsett Amphitheater, Bldg. 10.

Duster is currently professor of sociology and director of the Institute for the Study of Social Change at the University of California, Berkeley. He also serves on the Institute of Medicine's committee on social and ethical impact of advances in biomedicine.

He received his bachelor's degree in journalism and his Ph.D. in sociology from Northwestern University. A member of the assembly of behavioural and social sciences of the National Academy of Sciences, he has been a recipient of a number of research fellowships including awards from the Swedish Government (1962), and the Guggenheim (1971) and Ford foundations (1979), and has served on the Council of the American Sociological Association. For more information or to schedule an appointment with Duster, call Dr. Carol Dahl, 402-0833. □

Bicycle Commuters To Meet

The NIH Bicycle Commuters Club will hold its annual "Spring Fling" on Apr. 8 from 5:30 to 8 p.m. at the FAES Social and Academic Center on the corner of Old Georgetown Rd. and Cedar Ln. There will be wine, cheese and other munchies along with a speaker and/or videos and door prizes. Come and socialize with other cyclists and hear what the club has been up to this past year and its plans for next year. □