

"Still
The Second
Best Thing
About Payday"

The NIH Record

Extramural Program Gets Assurances at STEP Forum

By Rich McManus

If the long-range strategic plan for NIH now under development by NIH director Dr. Bernadine Healy and the ICD directors were thought of as NIH's "Constitution," the peer review system of the extramural program, which is responsible for more than 80 percent of the agency's research capacity, could be considered the Bill of Rights.

This and other assurances were part of an address Healy gave at a STEP Forum May 5 on "Current and Future Issues for the Extramural Program" in Masur Auditorium.

Healy's remarks targeted certain fears at large in the extramural community—that by crafting a strategic plan, NIH is trying to "manage" the future of an essentially unmanageable enterprise; that biotech profits, not the force of ideas nor the demands of public health, will drive future research; that "cost management" imposed on NIH by Congress will punish investigator-initiated research; and that NIH's intramural program is more favored than the extramural program.

Juvenile Arthritis Treatment Found

Small doses of the drug methotrexate effectively treat juvenile rheumatoid arthritis in children who have not responded to first-line medications, according to a report published in the Apr. 16 issue of the *New England Journal of Medicine*. "This is the first advanced medication shown by a controlled clinical study to be effective in treating patients with juvenile rheumatoid arthritis whose disease resists other therapies," said Dr. Edward Giannini, first author on the study and associate professor of pediatrics, Children's Hospital Medical Center, University of Cincinnati College of Medicine.

Juvenile rheumatoid arthritis (JRA) is a crippling joint disease that affects about 1 in 1,000 children in the United States. As many as two-thirds of patients with JRA need aggressive therapy with second-line medications.

The study, supported by NIAMS, included 127 children with JRA under age 18 from 23 centers, 18 in the U.S. and 5 in the former Soviet Union. The patients had disease that could not be controlled with nonsteroidal anti-inflammatory drugs such as aspirin or, for more resistant disease, with second-line therapies other than methotrexate. These second-line treatments included D-penicillamine, hydroxychloroquine, and oral gold. None of these treatments has proven effective in ameliorating JRA in clinical studies.

Patients were assigned one of three weekly treatments: 10 mg of methotrexate per square meter of body surface (low dose), 5 mg meth-

(See **ARTHRITIS**, Page 5)

"The strategic plan is a process to help us participate in the future of NIH and to shape it," she said. "There is no finality to the plan—it must be flexible. It is not a rigid blueprint, but a compass to guide us."

A 14-year NIH grantee herself, Healy gave a history of grantmaking at NIH from its inception in 1945, when some \$142,000 was disbursed, to the present, when about 21,000 grants to some 1,700 institutions claim roughly 80 percent of NIH's \$9 billion annual budget. Though the NIH budget doubled between 1980 and 1992, there has been an increase of only 25 percent in the number of grants in that period, she reported.

Healy defended the peer review system as "accountable, open and fostering excellence," but conceded that NIH must "make it easier to participate in." She also called for a new code of ethics "by peers and for peers," as part of NIH's strategic plan.

(See **EXTRAMURAL**, Page 4)

Imaging: DCRT Technology Meets CC Clinical Expertise

By Greg Wilson

Imaging. In a year when political candidates can undergo chameleon-like changes before our eyes, the term is never far from our consciousness. But when Dr. Steve Bacharach talks of imaging, he's referring to a different notion: using magnetic fields, beams of x-rays, radioactive tracers or sound waves to view living tissues.

Bacharach, the newly named head of



Dr. Steve Bacharach

DCRT's Image Technology Program as well as leader of the Clinical Center's imaging science group, is excited about the collaborative emphasis his joint DCRT/CC appointment brings. Welding DCRT's technical expertise

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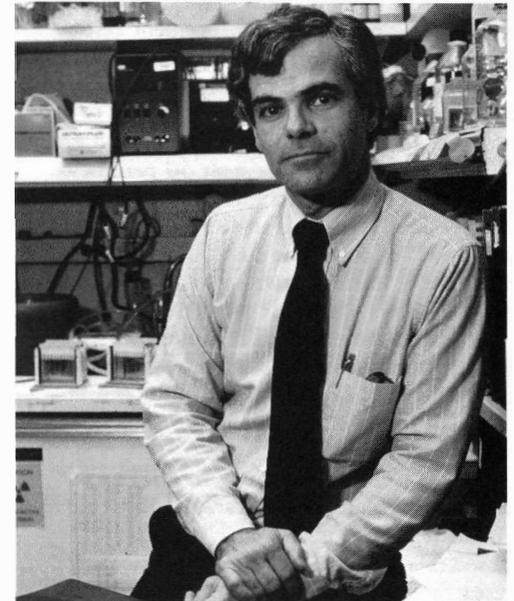
Gottesman Named Acting Genome Project Director

By Carla Garnett

Dr. Michael Gottesman, chief of NCI's Laboratory of Cell Biology, has assumed interim leadership of the National Center for Human Genome Research following the resignation last month of Dr. James Watson. NIH director Dr. Bernadine Healy announced Gottesman's appointment as NCHGR acting director May 4; he will also serve on the search committee for a permanent director.

"Dr. Gottesman has a distinguished career as a molecular biologist," Healy said. "He's very much involved and has a big stake in

(See **GOTTESMAN**, Page 2)



Dr. Michael Gottesman

Healy Gives EEO Goals Boost, Urges NIH'ers To 'Think Big'

NIH director Dr. Bernadine Healy called for a workplace where "decent human relations prevail" during a speech kicking off EEO Awareness Week among employees of the Office of the Director. "I challenge you to think big, no matter what job you may have, and to see yourself as part of magic in the making.

"In this seminar series on EEO awareness, you will have an opportunity to be introspective, and to think about a more personal world—made up of yourself, your colleagues in your office, perhaps the workforce of your branch or division. But I hope that for right now, you will be willing to look further ahead in time and place to imagine something a bit more grand."

Embracing diversity in the workforce as a strength, she envisioned a harmonious workplace. "If we are to live up to the NIH

(See **EEO AWARENESS**, Page 7)

GOTTESMAN

(Continued from Page 1)

gene therapy for his own research. He has become one of the leaders in this field and has generously taken on this role at the national center." NCHGR was formed in October 1989 with a charge to coordinate NIH's role in the discovery of the more than 100,000 human genes. Gene location and interpretation of the structure of human heredity will take an estimated 15 years to complete. NCHGR's fiscal year 1992 budget is about \$105 million; \$110 million has been requested for 1993.

An NIH investigator since 1976, Gottesman traces his interest in genetics back to his medical school graduation from Harvard, where he and Healy were in the same 1970 class. At their commencement ceremony, Gottesman recalled, the dean told the candidates he had good news and bad news for them.

"The good news is that we've learned a lot in medical school and at least 50 percent of what we've learned is certainly correct," said the speaker, according to Gottesman. "The bad news, of course, is that 50 percent of what we've learned is wrong, and furthermore, no one knows what that 50 percent is."

It was at that point that Gottesman, who said he always had been interested in basic research and chemistry, decided to do something to improve that 50-50 ratio for future medical students.

In 1971 Gottesman came to NIH as a research associate in the National Institute of Arthritis, Metabolism and Digestive Diseases—what he calls his first serious research experience—where he worked for 3 years. Since then he has made innovative contributions to molecular genetics in both bacterial and eukaryotic systems. He was the first to demonstrate that resistance to chlo-

ramphenicol was encoded by a transposable element in *E. coli*.

Since 1975, Gottesman has concentrated on cancer cells—most recently using molecular genetic tools to analyze the clinically important problem of multidrug resistance in human cancer. His contributions to the understanding of the normal function of the multidrug transporter, its mechanism of action, and its role in mediating drug resistance in human cancer, as well as the development of strategies to circumvent its activity, are having a major impact on the treatment of cancer.

In announcing the appointment, Healy called the NIH genome program "one of the jewels in the crown" of the institutes, a "trans-NIH effort that is likely to bring enormous returns" toward fulfilling NIH's goal to identify disease-causing genes.

"I don't think there is any aspect of human health or illness that will not be touched by the human genome program," she said.

Healy also reaffirmed NIH's commitment and the high priority given to the genome project, which has not been without controversy in recent weeks. The abrupt resignation of Watson and the public debate over patent approval for NIH genome discoveries are two examples of the rocky road the program has traveled. Acknowledging the rough spots, Healy said anything that is new or looks to bring changes usually begins with controversy, but "I think all of us are impressed by the many fine developments and discoveries that have come out of this program in a relatively short period of time."

A 14-member search committee, cochaired by NIGMS director Dr. Ruth Kirschstein and Dr. George F. Vande Woude of the Advanced Bioscience Laboratories Basic Research Program, has already been formed to assemble candidates for a permanent NCHGR director.

Healy estimated a new director would be named within 6 months. Aside from Gottesman and Kirschstein, other NIH'ers on the search committee include Drs. Raphael Daniel Camerini-Otero, Gary Felsenfeld, and Martin Gellert of NIDDK, Dr. David Rodbard of DCRT, Senior Policy Advisor Daryl Chamblee and NIH associate director for science policy and legislation Dr. Jay Moskowitz. □

Correction

The article that appeared in the May 12 issue of the *NIH Record* regarding temporary parking lots incorrectly stated, "Some 650 new parking spaces have been created in recent weeks in anticipation of Natcher Bldg. construction that will claim lots near Stone House."

The six temporary parking lots, 650 spaces, have been created to provide parking spaces for spaces lost primarily due to construction of the multilevel parking garage (MLP8), which will begin in June; Bldg. 29B, which began early this year; and the current infrastructure projects. The six lots are now paved and essentially ready for use. Landscaping consistent with the remainder of the NIH campus and in consideration of the neighborhood residents will be completed in the near future. □

The NIH Record

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services, and circulated to nonemployees by subscription only through the Government Printing Office. The content is reprintable without permission. Pictures may be available on request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 1992.

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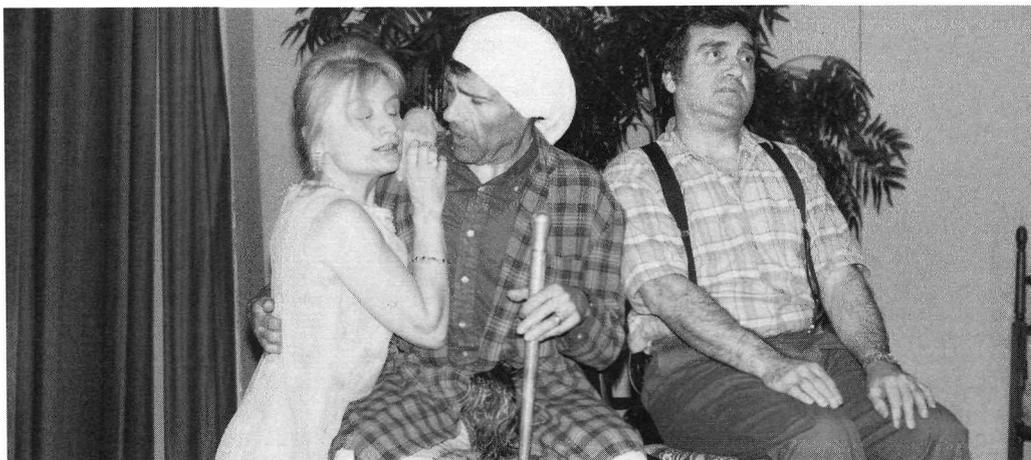
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Actors (from l) Linda Moore (Beline), Elliott Werner (Argan, a hypochondriac), and Fernando Marr (a notary) appear in the Moliere classic *The Imaginary Invalid*. Remaining shows in the performance by the NIH R&W Theatre Group are May 29 and 30 at 8 p.m. in Masur Auditorium, Bldg. 10. Tickets are \$7 for adults, \$5 for seniors, and \$3 for children, and are available at the R&W Activities Desk or at the door. Proceeds benefit the NIH Patient Emergency Fund. For information call (301) 253-3511.

Two NIH'ers Elected to NAS

Two NIH investigators, Dr. Anthony S. Fauci of NIAID and Dr. Henry Metzger of NIAMS, were elected among 59 new members and 14 foreign associates of the National Academy of Sciences in recognition of their distinguished research and continuing achievements in original research. Election to membership in the academy is considered one of the highest honors accorded a United States scientist or engineer.

A nongovernment organization established in 1863 by Congress, the NAS acts as an official advisor to the federal government on matters of science and technology. The recent election brings the number of current active members to 1,651 and increases the foreign associates' total to 289.

Fauci is NIAID director and chief of its Laboratory of Immunoregulation. He also serves as NIH's associate director for AIDS research. Metzger is director of NIAMS's Intramural Research Program and chief of the chemical immunology section in the institute's Arthritis and Rheumatism Branch. □

NHLBI Hosts Symposium on High Magnetic Field MRI/Spectroscopy

Magnetic resonance imaging (MRI) creates a moving three-dimensional animation that would dazzle Walt Disney. The rapidly developing technology can now give researchers a view not only of what's under the skin but also how it functions and even metabolizes.

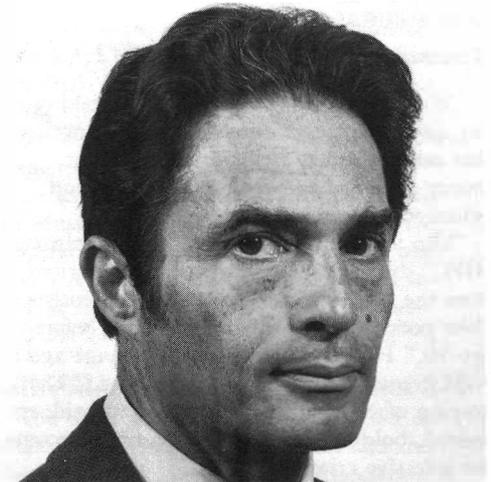
On June 10-11, the National Heart, Lung, and Blood Institute will host a symposium to explore the newest advances and what may lie ahead for this powerful tool. "Magnetic Resonance Imaging (MRI) and Spectroscopy at High Magnetic Fields *In Vivo*" will be held in the Clinical Center's Masur Auditorium and features presentations and a panel discussion by experts from around the world. The symposium is the 18th in the institute's annual "Frontiers in Basic Sciences" series, which disseminates basic science discoveries to clinical researchers in order to improve disease prevention and control.

The MRI symposium's five sessions will cover the technology, safety, and *in vivo* applications of high field nuclear magnetic resonance. Included are sessions on magnetic resonance spectroscopy, which provides observations of *in vivo* concentrations and changes in tissue metabolites, ions, and gases. The symposium will close with a special discussion of MRI's recent advances and future directions.

For more information on the symposium, contact Judy Corbett of Prospect Associates, (301) 468-MEET. □



Dr. Anthony S. Fauci



Dr. Henry Metzger

Clinical Center Opens Eatery, Waitered Dining Room

Patients, staff, and visitors to Bldg. 10 celebrated the grand opening and ribbon cutting of the new B1 level eatery recently, marking the beginning of a new dimension in dining at NIH.

A joint project of the Division of Space and Facility Management, Office of Research Services, and Guest Services, Inc., the new "scatter-system" eatery means food is delivered from many different points of service. Customer flow is greatly improved, and long lines are avoided. With four cashiers operating during the busy lunch hours, customers will spend more of their time enjoying their meal and less time waiting for it.

The new venture provides an expanded variety of foods in a bright, welcoming atmosphere. Customers may choose from a meat carvery, 75-item salad bar, breads, homemade soups, hot entrees, pastas, premium deli sandwiches and salads, frozen yogurt, desserts and sweets of all varieties, and espresso and cappuccino. The eatery has staggered hours and is open from 7 until 9:30

a.m. and reopens again from 11 a.m. until 2 p.m.

In addition the Bethesda Room, a separate dining area accessible from the eatery, opened for diners who prefer a quiet meal with waited service. Open Monday through Friday, the Bethesda Room provides a varied menu at fixed prices. Dining is by reservation only at two seatings: 11 a.m. to 12:30 p.m., and 12:30 to 2 p.m. Reservations may be made at 402-3165; there is a limit of six guests per reservation. The Bethesda Room is also available for small conferences and special functions during mornings, evenings, and weekends. Room capacity is 49 guests.

The clinic cafeteria, located on the 2nd floor of Bldg. 10, is now slated for renovation. A new concept is presently being developed for this, the second of five Guest Services, Inc. cafeterias at NIH. It is expected that within 2 years all five areas will be remodeled to provide state-of-the-art food facilities for the entire campus.



On hand for the ribbon-cutting at the GSI cafeteria grand opening recently in Bldg. 10 were (from l) Jan Van Hoesen, GSI; Sam Bavaro, GSI; Paul Horton, director, Division of Space and Facility Management (DSFM); C. David Hudson, general contractor; Raymond Becich, CC executive officer; Paul Wade, DSFM; Sam Ayoub, GSI; Sib DiMeglio, GSI; John Cini, Cini-Little; John Corchiarino, GSI; Albin Khouw, Cini-Little.

EXTRAMURAL*(Continued from Page 1)*

"We need to encourage more risk-taking in our investment portfolio," she added, noting that relatively new fields receiving grant money included prevention, nutrition and behavioral research.

"You are the unsung heroes and heroines of NIH," she declared, before taking questions from the audience. Observing that scientists, "like poets, often do their best work before age 50," Healy warned that the average age of NIH grantseekers is creeping upward. "The graying of NIH must not proceed to baldness. Indeed, boldness before baldness must become our selective criteria."

Eight members of the extramural program posed questions to Healy and moderator Dr. John Diggs, NIH deputy director for research, in the program's last hour.

Dr. Percy Thomas, director of the Extramural Associates Program in NIH's Office of Extramural Research, told Healy that the nation's 97 women's colleges, 107 historically Black colleges and universities, 103 Hispanic institutions and 24 schools for Native Americans "suffer tremendous deficits in biomedical research infrastructure capability." What plans does NIH have to assist them?

"I am deeply committed to the reality that we will need women and minorities," she said. "There is a manpower crisis in science, and a decline in our intellectual capital base among younger people coming into the system. Science is the ultimate equal opportunity employer, and merit is the coin of the realm. Minorities and women should see science and medicine as the essence of equal opportunity. We need more of these individuals in leadership positions—we have to see that as a priority and a goal, but not as just filling quotas, though."

Healy said there is no infrastructure program for minority institutions per se.

"We need to define more precisely where we want to go—some focused infrastructure support might be appropriate. Another area to focus on is the time between the end of a fellowship and before the first grant—before they break into the club, so to speak. They need seed money and talent development, not an RO1 grant." Healy also targeted pre-graduates as a crucial population to reach with training opportunities. She assured that her staff is "working on data needed to inspire investment in a more comprehensive program" for the schools Thomas identified.

Dr. Michael Rogers, deputy director of NIGMS' Pharmacological Sciences Program Branch, said he sees economic competitiveness rather than science for its own sake becoming a priority at NIH, and asked Healy about NIH's commitment to basic research.

"Your concerns are valid," she said, "but it is not a logical leap to assume that all science must be applied science. The fundamental, precompetitive (science) arena is still NIH's specialty. But I sense a concern on the part of some that it's inappropriate to talk about money. It's a cultural phenomenon that we need to examine and re-examine. Whether we like it or not, NIH has given birth to an industry. Legislation demands that we transfer technology. NIH's goal is to create public benefit, not to make money. It's narrow-minded to think NIH was created to do science for science' sake—it was never established to do that, it's not part of our mission. The NSF (National Science Foundation) can do science for its own sake. Our mission is still primarily health, but we have taken on the added responsibility of playing a role in biotechnology. It is a very noble thing for us to be doing. If we don't do it, who will take the mantle of responsibility? I understand your concern but I don't think it's justified."

Next up was Dr. Janet Heinrich, acting deputy director of NCNR and director of its Extramural Programs; she asked how training programs for extramural staff might be bolstered so that "we keep ourselves full of vitality and passion."

Healy said she strongly supports construction of the Natcher Bldg., which will "immerse the extramural program in the life of the campus, and bring excitement."

Healy then lateraled the question to Diggs, whom she described as "a strong champion of intellectual excitement." He said NIH needs to expand training both for new hires and existing staff, and that the extramural program management committee, which he chairs, has discussed these issues.

"We have to find ways to bring your views into important policy debates and discussions," Healy told Heinrich. "I think we need to improve mechanisms to get that input."

Doris East of NHLBI's Review Branch, Division of Extramural Affairs, asked why minority females are hired as clerks but not in high-level positions.

"If that's the case," said Healy, "there's no reason for it at all." The director mentioned top OD staff who are Black and female, and advised East to consult with Diane Armstrong, director of the Office of Equal Opportunity.

East countered that "the system is not working. Is anything being done to revise it?" Healy said that EEO mandates have recently become a critical element in the performance plans of all NIH supervisors and managers.

Dr. Huber Warner, deputy associate director of NIA's Biology of Aging Program, asked Healy how NIH would handle cost management directives from Congress. She said such management is "mandated, and right," notwithstanding brouhaha in local media over

fiscal matters at NIH.

Dr. Marjam G. Behar of DRG's Referral and Review Branch asked how Healy sees the future of RO1 (investigator-initiated) grants.

"I think it's dangerous that RO1 is seen as the Holy Grail at NIH. It's not our only priority. It's almost as though RO1 is prized above all else, and is the only one in the lifeboat. We're on a collision course if we say that all that matters is RO1. You've diagnosed an important problem. It will be part of the strategic plan."

Dr. Charles A. Miller, director of the Cellular and Molecular Basis of Disease Program Branch, NIGMS, asked, "Why is it we can't convince Congress to put more money in research training?"

Healy conceded that NIH has been timid about addressing this issue but assured that top people on her staff are now involved in the problem, particularly with respect to minority trainees. "There needs to be a psychological as well as intellectual understanding that NIH is truly for equal opportunity," said Healy. Science careers are still seen as "sort of an old boys club," she admitted, but emphasized that the intellectual arena should be seen as wide open to the best talent, regardless of race or gender.

Last up was Dr. Robert Silverman, chief of NIDDK's Diabetes Program Branch, who pitched the idea of letting science administrators take sabbaticals in intramural laboratories to satisfy their science appetites. "There used to be opportunities for extramural program scientists to return to the lab, but nowadays we're too busy to do it," he said.

Healy called such sabbaticals, "a fabulous idea. We could rotate administrators to laboratories and clinics, as NSF does, to keep your juices flowing. We need to look at it. It would be constructive to get you back into your native element. I'd like to see more connection between NIH's extramural and intramural programs. It's going to take some creative thinking to overcome the conflicts—your heavy workloads, pressure from your supervisors—that prevent it."

The next STEP Forum will be held May 28 from 1 to 3 p.m. in Wilson Hall, Bldg. 1, on the topic, "Creating Opportunities for Minority Students." Dr. Kenneth Olden, NIEHS director, will moderate. □

Pregnant Women Needed

NICHD seeks pregnant women in their last trimester to participate in study of hormones in late pregnancy. One overnight hospital stay is required. Compensation is available. Call 496-1891 and press 16 to leave a message for Billinda Dubbert. □

ARTHRITIS

(Continued from Page 1)

otrexate per square meter (very low dose), or placebo.

Each patient's outcome was based on three measures. First, investigators performed a global assessment, that is, a comparison of a child's overall condition before and after therapy. As a second measure, investigators used an articular severity score, in which each joint was rated for swelling, limitation of motion, pain, and tenderness. Thirdly, for each patient, the physician's global assessment, a similar global assessment by parents, and the articular severity scores were combined in a composite index, thus providing a rigorous measure designed to identify those individuals who clearly showed improvement.

The low-dose group had a significant improvement in outcome over those who took either the very low dose of methotrexate or placebo. This improvement included a signifi-

cant reduction in the number of joints that were painful when exercised.

"The low dose proved quite effective, yet did not provoke any side effects that are seen with high-dose regimens used to treat cancer," says Giannini.

Juvenile rheumatoid arthritis may manifest itself in several ways, in addition to causing swelling and inflammation of joints. Twenty percent of patients with JRA suffer systemic onset, a particularly dramatic form of the disease that causes rashes, intermittent fevers, anemia, and inflammation of the eyes, liver, spleen, and tissues around the heart.

Recent studies have shown that as many as half the children afflicted with JRA have persistent arthritis 10 years after the onset of disease. Long-term consequences of the disease may include significant functional impairment: tasks such as climbing stairs or dressing become difficult and time-consuming.

"Methotrexate may prove extremely impor-

tant in combatting the tissue inflammation and painful joint erosion that affect children with JRA," said Dr. Lawrence E. Shulman, NIAMS director and a leading rheumatologist.

The research on methotrexate and JRA was conducted under the auspices of the U.S.-U.S.S.R. Cooperative Program in Arthritis and Musculoskeletal Diseases, a part of the Cooperation in Medical Science and Public Health Agreement that was established in 1972 at the beginning of detente.—Lauren Ward and Barbara Weldon □

NIH/PMA Conference Set, June 3-4

The third annual technology transfer conference jointly sponsored by NIH and the Pharmaceutical Manufacturers Association is set for June 3-4 in Washington, D.C.

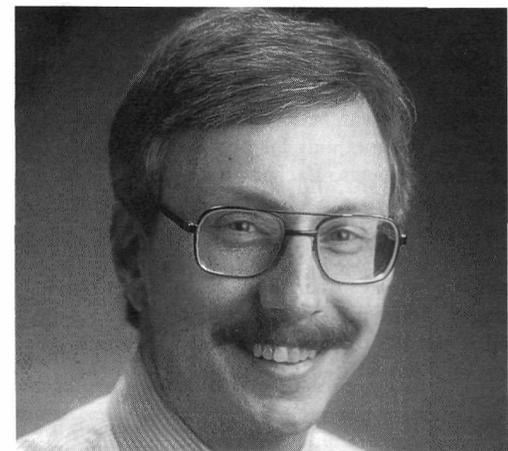
This year's conference focuses on drug discovery partnerships involving industry, government and academia. Specific panels will discuss drug discovery access, information sharing, conflicts of interest, clinical evaluations and reporting of studies, fostering inter-institutional collaborations, and frontiers in technology transfer. Conference cochairs are Reid Adler, director of NIH's Office of Technology Transfer, and Dr. Edwin Gemrich II, senior contracts manager at Upjohn Laboratories. Featured speakers from NIH include Dr. Philip S. Chen, Jr., NIH associate director for intramural affairs; Dr. Jay Moskowitz, NIH associate director for science policy and legislation; and NCI director Dr. Samuel Broder. For information on registration and hotel accommodations, contact Eldred Counts, (202) 835-3547. □



The eighth annual Patient Emergency Fund Auction, held May 1 in the Visitor Information Center, drew a large crowd and garnered some \$16,500 for the PEF, which helps Clinical Center patients meet emergency expenses. Auctioneer Delmas Wood (above, r) conducted the live auction in his usual cheerful, comedic manner. A silent auction, flea market and lunch made the annual event, sponsored by R&W and the Friends of the Clinical Center, enjoyable for all who attended.



Taking the lead in organizing recent Earth Day events at NIEHS were members of the institute's Earth Day subcommittee (above, seated from l) Laurie Johnson, Jerry Phelps, Colleen Anna and Beth Anderson. Standing are (from l) Bob Chapin, Bill Willis, Scott Merkel and Alex Funk. Earth Day events included presentations and exhibits that lined the NIEHS Bldg. 101 mall area.



Dr. Paul B. Wolfe recently joined the staff of NIGMS as a program administrator in the Genetics Program Branch. A former assistant professor of biological chemistry at the University of Maryland School of Medicine in Baltimore, he will administer grants relating to the replication, recombination, and repair of DNA. He earned a B.A. in biology from Elmhurst College in Illinois and a Ph.D. in biochemistry from Johns Hopkins University. He did postdoctoral research in molecular biology at UCLA. Wolfe's primary research interest has been the biogenesis of membranes in yeast.

IMAGING*(Continued from Page 1)*

to the CC's clinical knowledge cannot help but foster innovative approaches to the challenges of imaging. And the challenges are more than enough to keep both groups very busy.

Clinical Challenges

Clinicians and researchers use several different types (modalities) of imaging: magnetic resonance imaging (MRI), computed tomography (CT) and high-speed CT, positron emission tomography (PET), single photon emission computer tomography (SPECT), and ultrasound imaging. Each of these types, however, presents certain processing problems. The computer images that come out of the various imaging machines contain far more information than can easily be perceived by the eye. Extracting and enhancing that hidden information is what "image processing" is all about, and in medicine, it's an exciting and rapidly growing field of research.

Researchers need to be able to extract as much information from the images as possible; some also want to be able to combine images from a single modality into a 3-D image, or to combine images from different sources. For example, CT images show primarily the anatomy of organs, while PET images show the functioning of the organ. If the anatomical and functional images can be combined, conclusions can be drawn that aren't obvious in the separate images. Development of techniques to align multiple images is currently one of the major challenges in image processing.

Since every few years new imaging modalities are developed and made available to biomedical researchers, advances must also be made in the methods for obtaining information from images. Bacharach explains, "Ten years ago when the Clinical Center provided images to the researchers in the institutes, it was sufficient to do exactly that. We provided imaging services and information about those images. Some physician would read the image, call it normal or abnormal, and that would be part of a record that would go back to the institute."

While that might have been good enough a decade ago, "in today's research environment everyone realizes there is a lot of information in the images that we miss if all we do is put the film up on a view box and examine it," says Bacharach. That realization is what caused the CC's radiology and nuclear medicine departments to begin what Bacharach describes as "a unified effort to extract more information from the images."

"Scanners can cost millions of dollars," he explains. "It doesn't make sense to spend that much money and then ignore much of the information that the image contains. In an



DCRT's Bonnie Douglas conducts research in alignment of 3-D cardiac PET data in collaboration with Clinical Center investigators. The first step, shown here, is the definition of a 2-D region of interest on one slice of the 3-D data.

environment such as the NIH, the institute researchers often must have this extra information if they are going to remain competitive in their research fields." These were the motivating factors behind the formation of the CC's new imaging science group, and it was logical for this group to collaborate strongly with DCRT's new Computer Imaging Technology Program. The two entities complement each other well—the former more interested in the particular clinical imaging problems relevant to research in the institutes, the latter working on the computer technology needed to solve these problems.

DCRT: Resources for Advancement

Perry Plexico, who heads the Computer Systems Laboratory at DCRT, explains the genesis of the DCRT Image Technology Program as resulting from an increased interest in imaging at NIH and the opportunity to bring the pool of imaging talent at DCRT to bear on the current research. "We have people here at DCRT like Dr. Benes Trus who are working on macromolecular structure; studying the structure of viruses using electron microscopy and computer image processing. Other people like the division's Bonnie Douglas are interested in medical imaging, which is the processing of images of *in vivo* organs from sources like MRI, CT, or PET. Still others like Ken Kempner are interested in image communications and management activities, again for clinical images, explains Plexico. "It seemed that we could better serve the NIH if we pulled those things together—coordinated them in some more formalized structure."

Imaging scientists at NIH are often hampered by lack of access to some element or elements needed to solve their research problems. The DCRT Image Technology Program,

while offering expertise in computer hardware, software, and imaging techniques, can also direct imaging researchers to DCRT experts in biostatistics, mathematical modeling, database design, or computer science.

For example, members of the high performance-massively parallel computing group are working with imaging scientists to reduce drastically the time it takes to process computerized images. Some processing tasks are computer intensive; assembling a 3-D clinical image on a computer workstation may take hours, but dividing that task among the 128 processors of DCRT's massively parallel

Bacharach Takes DCRT Imaging Post

Dr. Stephen Bacharach of the Clinical Center's department of nuclear medicine has been named to head the Image Technology Program of the Division of Computer Research and Technology. He will hold a joint CC/DCRT appointment, continuing to work at the CC and heading the imaging science group there.

A physicist by training, Bacharach has been with the nuclear medicine department at the CC for 17 years. The department has for many years been involved in collaborative imaging projects with the institutes; Bacharach's initial work at NIH involved brain blood flow measurements with researchers at NINDS. In recent years he has worked closely with NHLBI, specializing in cardiac imaging. He has taught courses in nuclear medicine and imaging at local universities and abroad, and was visiting professor at the Massachusetts Institute of Technology. He was elected to the board of directors of the cardiovascular council of the Society of Nuclear Medicine, serves on the editorial board of the *Journal of Nuclear Medicine*, and has also received the NIH Director's Award.

computer can reduce the processing time to a matter of minutes.

DCRT's networking task group is involved in a long-standing collaboration with the CC and in efforts around campus to provide scientists with the means to move images between computers. Kempner of the Computer Systems Laboratory is also working with the CC to integrate clinical image records into the hospital's medical information system, the system that stores the written medical records of patients. This integration would allow physicians to access x-rays or PET scans for a particular patient as easily as they can pull up medical records. It would also mean that physicians would be able to view those images without having to use a specialized machine in a specific area of the building.

EEO AWARENESS EMPHASIZED BY DIRECTOR

(Continued from Page 1)

mission . . . the only way to succeed is to involve in our programs people of every race, sex, age, national origin, and religion, as well as people with mental or physical disabilities.

"I am talking here about diversity in the focus of our research and the populations that will benefit," she continued, "as well as diversity in the people designing and conducting the research needed to accomplish our mission. It is only proper that a diverse workforce serve the needs of a diverse population." But, she cautioned, "We still have a long way to go to reach the kind of NIH we can envision."

Healy wants NIH to be "an exemplary employer of people with disabilities, especially because of the medical nature of our mission." She also wants sexual harassment to be "a despised thing of the past"; at her direction, all OD managers must take a 2-hour briefing on sexual harassment in the workplace—so far, some 80 percent have complied.

She reviewed a year during which NIH has put forth a variety of programs encouraging diversity in the biomedical workforce—the Women's Health Initiative and creation of the Office of Research on Women's Health, the establishment of an Office of Minority Programs, the public launching of a National Rehabilitation Medicine Center within NICHD, and the crafting of supplemental grants to aid minorities and scientists with disabilities.

"We cannot afford to disregard one person," she emphasized. "We need to make full use of everyone's talent and skills. We must have more women and minorities and people with disabilities, and in the higher grade levels. This applies to Hispanics and Native Americans as well."

Healy acknowledged that "OD stacks up poorly with the rest of the institutes, centers and divisions in the number of discrimination

In addition, DCRT's Douglas and Keith Gorlen are collaborating with researchers in the National Center for Research Resources and other ICDs on the MRIPS (multimodality radiology image processing system) project. MRIPS will be a computer platform designed specifically for medical image processing. The main benefit of the project is that it will provide a common hardware and software framework for NIH medical image processing that will facilitate collaboration between imaging researchers.

DCRT has provided a vast computing infrastructure for image processing at NIH and also engages in collaborations that look to the future of imaging. The wide range of resources offered by the division allows on-campus researchers to concentrate just on the

complaints" lodged with the Office of Equal Opportunity.

Her address closed with a message delivered earlier this year during Black History Month by guest speaker surgeon Ben Carson of Johns Hopkins: "By thinking big, we can transform our world."

Workforce demographics are already changing our world, reported a number of speakers on the program, held in Wilson Hall.

"A significantly different workforce is on the way," said Diane Armstrong, director of NIH's Office of Equal Opportunity. "Today, 50 percent of the entrants to the workforce are white males. By the year 2000, that number will shrink to 15 percent." Far many more women, minorities, immigrants and people with disabilities will form the applicant pool in the next century, she said.

Armstrong labeled diversity "a great opportunity. It provides new ideas and innovations, more talented people, and heightened performance on the job. Diversity helps us discover what makes us truly human. By taking note of what makes us different, we discover what makes us similar."

Stephen Benowitz, head of the Division of Personnel Management, said that, by the year 2000, "more than 60 percent of all women of working age will be in the workforce." He urged NIH to be prepared to broaden its notion of who it will tap for jobs in the future.

The program, sponsored by the OD EEO advisory committee, concluded with an awards ceremony. Winning the top two "Recognition Awards" were Dr. Norman S. Braveman, chief of the Planning and Policy Research Branch, Division of Planning and Evaluation, and David W. Snight, chief of the Research Contracts Branch, Division of Contracts and Grants. Receiving certificates of appreciation

part of their problem that interests them. "If you're an institute scientist and want to study three-dimensional patterns of blood flow in the brain," explains Bacharach, "you don't want to spend your time developing 3-D computer techniques."

Bacharach's new role as head of both the DCRT and CC imaging programs creates a healthier environment for future imaging research at NIH. "The basic idea is to have some group of people, whether it's a formal group or not, that gets together and discusses all the imaging activities that are going on," he explains. With such a structure in place, energy won't be wasted solving problems that have already been solved. □

were OD employees: Lucretia Coffey, Anne Gillen, Howard Hyatt, Donald Kemp, Dr. Leamon Lee, Jalil Mutakabbir, Dr. Donald Murphy, Frank Mallalieu, Dr. Charles McCarthy, Dr. Percy Thomas, and Gladys Whitted. Hilda Dixon of OD Personnel received a special award recognizing her service as advisor to the EEO committee.—Rich McManus □

Lecture on Computer Security

Did you know that computer security is everyone's responsibility? If your personal computer contains information important to your day-to-day work, then the confidentiality, integrity and availability of that information is important to NIH.

"Microcrime and Megabucks," a lecture sponsored by DCRT, will address good computer security practices and the ramifications to an organization if these practices are not followed. Dr. Sanford Sherizen of the MIS Training Institute, a Massachusetts-based company that offers training in all aspects of information security and internal audit, will speak June 2 at 1:30 p.m. in Lipsett Amphitheater, Bldg. 10.

Sherizen has been an expert witness on computer security issues before congressional committees and has prepared reports for the U.S. Congress' Office of Technology Assessment. He coauthored a major Department of Justice report on computer crime and security and has prepared numerous other reports and articles on computer abuse, fraud, crime, and privacy protection.

To attend the lecture, contact your ICD systems security coordinator or the NIH information systems security officer, DCRT, Jack Campbell, 496-4887. Seating is by reservation only. □

Clinical Studies Reveal How Antidepressants Relieve Pain

By Jody Dove and Susan Johnson

Researchers at NIH have defined the mechanism by which antidepressant drugs relieve chronic pain caused by nerve damage. Their finding will enable doctors to treat such pain more effectively with fewer side effects.

Dr. Mitchell Max, a neurologist at the National Institute of Dental Research, and his coworkers reported in the May 7 issue of the *New England Journal of Medicine* that the antidepressant desipramine (Norpramin) works nearly as well as amitriptyline (Elavil) in relieving pain in patients with diabetes-related nerve damage. They also found that the antidepressant fluoxetine (Prozac) is no more effective than placebo in providing pain relief.

Together, these findings suggest that antidepressants relieve pain by heightening the action of a specific neurotransmitter called norepinephrine.

Animal studies have shown that norepinephrine and another neurotransmitter, serotonin, act as natural pain relievers by blocking the transmission of pain signals following tissue injury. The drug amitriptyline increases and prolongs the action of both of these neurotransmitters. In contrast, desipramine increases only norepinephrine action, and fluoxetine increases only serotonin action.

The finding that desipramine effectively relieves diabetic neuropathy pain is good news for the many patients who cannot tolerate the side effects of amitriptyline, currently the standard treatment for this pain condition. The side effects include drowsiness, dry mouth, and urinary retention.

"Amitriptyline acts on many different chemical systems in the body, but only one or two of those actions may be needed for pain relief," said NIDR's Max. "By identifying the mechanism of pain relief, we can select drugs that are targeted to those actions and minimize side effects."

Although there have been many animal studies on the role of norepinephrine and serotonin in pain control, the NIH study is the first to compare directly the importance of the two neurotransmitters in relieving pain in humans.

Thirty-eight patients with diabetic neuropathy completed the first part of the study, which compared amitriptyline and desipramine, and 46 completed the second part comparing fluoxetine and placebo. Patients rated their own pain daily, and were interviewed by a psychiatrist before and after treatment to determine if they were depressed.

Moderate or greater pain relief was reported by 74 percent of patients receiving amitriptyline, 61 percent receiving desipramine, 48 percent receiving fluoxetine, and 41 percent receiving placebo. Amitriptyline

and desipramine worked as well in patients who were not depressed as in those who were. Fluoxetine, however, provided pain relief only to depressed patients.

Of the estimated 6 million Americans who have diabetes, 10 percent have symptoms of nerve damage. These patients experience burning, aching, or shooting pains in their feet, legs and, occasionally, hands. When doctors began prescribing antidepressants to relieve diabetic neuropathy pain about 20 years ago, many thought the drugs worked by improving patients' mood. Past studies by NIDR scientists and others have shown that the ability of antidepressants to relieve pain is separate from their ability to elevate mood.

The findings from the study will encourage the development of other treatments for chronic pain that increase or mimic the effect of norepinephrine.

Max and his colleagues already have shown that desipramine is effective in relieving post-herpetic neuralgia—pain that persists after an episode of shingles has damaged spinal nerves. The new findings also may guide the treatment of pain resulting from other causes of nerve injury, including cancer chemotherapy and AIDS, although controlled clinical trials have not been done in patients with these conditions. □

Dental Conference

These findings were presented at the 21st annual Dental Research held in Boston recently. More

Innovative Periodontal Treatments May Reduce

Dental investigators at the University of Detroit and University of Michigan in Ann Arbor report that study patients with advanced periodontal disease who were treated with a combination of deep dental cleaning and oral antibiotics were able to avoid surgery or extraction for approximately 75 percent of their affected teeth.

Periodontal (gum) disease is a progressive infection that when untreated, can destroy the gums and other supporting structures of the teeth and can lead to tooth loss. In a study supported by NIDR, Dr. Walter Loesche and coworkers randomly assigned 74 patients with severe periodontal disease to deep dental cleaning (scaling and root planing) and either a placebo drug or one of two antibiotics—metronidazole or doxycycline.

While scaling and root planing alone reduced some need for surgery, more than one-quarter of the patients (20) required no further treatment and two-thirds (45 patients) showed good improvement from the combination of deep cleaning and antibiotic. In the patients with teeth still needing surgery or extraction, a second round of antibiotics plus some additional root planing reduced the total number of teeth needing treatment down from

Oral Lesions May Predict Survival in HIV-Infected Children

The presence of oral lesions in HIV-infected children may offer important clues about survival and signals the need for more aggressive treatment of the HIV infection, say clinicians who studied a group of children infected with the virus.

The investigation, which took place at the University of Miami and the Oral AIDS Center at the University of California at San Francisco, involved 99 children with perinatally acquired HIV infection. While oral lesions are a common clinical sign of HIV infection in children, little is known about their prognostic significance. Researchers do know that among HIV-infected adults, two types of oral lesions in particular are associated with immune suppression and a faster rate of progression to full-blown AIDS. One of these lesions is a fungal infection called oral candidiasis; the other is hairy leukoplakia, a nonremoveable white plaque.

The study of the HIV-infected children, which was supported by NIDR and NIAID, spanned 3 years—1987 to 1990. On average, the children entered into the study when they were 9 months old, when the presence of HIV-infection could be confirmed. All chil-

dren received thorough oral and physical examinations upon entry, as well as at subsequent visits to the university clinics for treatment of complications related to their illness.

Examinations of the children and review of their medical charts revealed that 72 percent developed oral candidiasis (a fungal infection), 47 percent had enlarged salivary glands, and 24 percent developed herpes simplex lesions, which are caused by the cold sore virus. The



Conference Highlights

Annual meeting of the American Association for Oral and Maxillofacial Surgery conference coverage follows on Page 10.

Need for Surgery

9 to 3.4 teeth per patient. Although metronidazole appears to work somewhat better than doxycycline, further testing is needed to show a significant difference.

In related clinical trials, the researchers incorporated anti-infective agents into a film and applied the film directly to severely diseased teeth. This treatment saved an additional two-thirds of the teeth not helped by the initial deep cleaning and antibiotic procedure.

Working with the 54 patients who still had teeth needing surgery or removal (a total of 170 diseased teeth), investigators put anti-infective agents, either metronidazole or topical chlorhexidine, in the form of a film directly into the periodontal pockets. These pockets are infected areas that form around the teeth and gums when the gums begin to recede.

After 2-4 weeks with the film in place, 66 percent of the 170 affected teeth no longer required surgery or extraction. In 21 of the patients, all of their affected teeth responded well to the film treatment. Both anti-infective agents produced equally good results.—Laurie Hall □

average age at which these oral complications appeared ranged from 2.4 years for candidiasis to 4.6 years for salivary gland enlargement and 5 years for herpes simplex lesions.

Of the oral complications, candidiasis was associated with the most rapid rate of progression to death. Children survived an average of 3.4 years after the appearance of oral candidiasis. The average survival time after appearance of herpes simplex lesions was 4.3 years, and the average survival time following salivary gland enlargement was 5.4 years.

"Because the appearance of these oral complications in HIV-infected children signals a poorer survival rate, the children should be treated more aggressively, using new antiviral drugs or prophylactic medicines," says Dr. Mitchell Katz, a UCSF collaborator on the study.

The investigation is part of the nation's largest study of oral HIV-associated lesions, conducted by the Oral AIDS Center at the UCSF. The center is a collaborative endeavor of the UCSF School of Dentistry, the School of Medicine, and other northern California AIDS programs.—Jody Dove

Effects of 'Spiked' Chewing Gums on Whole Saliva

In the future, children and adults may be told not to spit out their gum but instead to keep on chewing . . . specially enhanced gum, that is, which increases salivation and promotes development of tooth mineral.

Dental scientists at the Paffenbarger Research Center in Gaithersburg and NIDR looked for ways to improve saliva production and help reduce cavities in people suffering from excessively dry mouth (xerostomia) and other cavity-prone groups. Dr. Roald Shern and colleagues had six adults chew a sugar-free gum to which two different formulas of calcium and phosphate (natural components of tooth mineral found in saliva) had been added. After only 16 minutes of chewing, both formulas of the experimental gums boosted saliva production significantly and increased tooth

mineral in all participants.

Although many people develop cavities because of our modern diet, individuals with excessively dry mouths are especially vulnerable. In addition to the discomfort of a dry mouth, which can be caused by disease or the side effects of certain medications, a scarcity of saliva makes the mouth more acidic and susceptible to cavity-causing substances. Saliva helps stimulate production of tooth mineral necessary to prevent and heal cavities.

Investigators hope that continuation of this research confirms these encouraging results. Then, cavity-prone adults and children, and people suffering from excessive dry mouth will be able to "chew" their way to better oral health.—Laurie Hall □

Evidence Shows Harmful Effects of Smokeless Tobacco

Dental researchers have shown that smokeless tobacco extract impairs the ability of oral tissue cells to defend against bacteria that cause gum diseases.

Smokeless tobacco use has been previously linked to gum diseases as well as to oral cancer. About 10 million Americans, mostly young men, used smokeless tobacco within the past year.

In a study supported in part by NIDR, Dr. J. P. Babu and colleagues at the University of Tennessee in Memphis recreated the oral environment in the laboratory. The researchers collected cells from the mouths of healthy volunteers. They added tobacco extract, a solution drawn from chewing tobacco, to half of the cells and spinach extract to the remaining cells to serve as controls. Finally, they added bacteria associated with gum diseases to both sets of cells.

The scientists found that 60 to 80 percent more of the harmful bacteria attached to the cells treated with tobacco extract than to the

control cells. Not only did more bacteria attach to the tobacco-treated cells, but also the ability of the "defender" cells to guard against injury and infection was impaired by the tobacco extract. Specifically, the immune system's neutrophils—cells that migrate toward bacteria and engulf them—suffered an 83 percent decrease in their ability to migrate when treated with tobacco extract. In addition, the tobacco extract inhibited the ability of the neutrophils to engulf and kill the bacteria.

Tobacco extract also impaired the functions of the fibroblasts—cells that make collagen, a component of connective tissue that is essential for healthy gums. Tobacco extract inhibited the growth of fibroblasts by 80 percent compared to the controls, and it increased the level of activity of the enzyme that breaks down collagen.

The research team is continuing these investigations to learn more about how smokeless tobacco use damages tissues in the mouth and sets the stage for oral diseases.—Mary Daum □

Nicotine in Chewing Tobacco Increases Risk of Oral Cancer

People who use chewing tobacco may increase their risk of cancer of the mouth, dental researchers say. A recent study at the University of Iowa (Dows Institute for Dental Research in Iowa City), suggests that the high level of nicotine in smokeless tobacco damages the lining of the mouth, allowing the cancer-causing agents (carcinogens) in tobacco easier access to the body.

With support from NIDR, Heather Reid and associates found that hamsters exposed to nicotine in their mouths developed significantly more tumors when exposed to certain carcinogens than those hamsters exposed to carcinogens alone. In addition, the nicotine physically changed the lining of the mouth in this well-recognized animal model. Smokeless or chewing tobacco has much higher levels of

nicotine than do cigarettes.

Approximately 10 million Americans, almost all of them young men, have used smokeless tobacco in the past year, according to the Centers for Disease Control. While public education has made society aware of the dangers of cigarette smoking, the hazards of chewing tobacco have not been well addressed, contributing to the belief that it is a "safe" alternative to smoking. Oral cancer is usually slow to progress, taking 20 to 30 years to develop in individuals. By the time smokeless tobacco has caused damage, the chewer is strongly addicted, older, and more physically vulnerable.

The researchers hope that their study will help firmly establish the role of nicotine in the development of oral cancer.—Laurie Hall □

Oral Lesions Found To Be Similar in HIV-Positive Women, Men

Women and men share many similar oral signs of HIV infection, say researchers at the University of California at San Francisco. In a study conducted at the Oral AIDS Center at UCSF, researchers identified the types of oral lesions that occur among HIV-positive women and have provided the only available prevalence estimates of oral lesions in this United States population.

Oral lesions are significant because they are often the first clinically detectable sign of HIV infection. While investigators have studied the types and prevalence of oral lesions in HIV-positive men, little was known about their incidence in women infected with the virus until now.

The UCSF study, supported by NIDR, included 132 women. Ninety-three of the women were HIV-positive; 39 were HIV-

negative. The women received oral examinations as part of a larger UCSF epidemiological study called AWARE (Association for Womens' AIDS Research and Education), which follows women at high risk for HIV infection.

Together with her colleagues, UCSF dentist Dr. Caroline Shiboski examined the women for the presence of oral lesions, including hairy leukoplakia, candidiasis, aphthous ulcers, herpes simplex, and Kaposi's sarcoma. These oral lesions are known to be associated with HIV infection and frequently occur in infected men.

The researchers found that about one-fourth of the HIV-positive women had oral lesions. The type of lesion found most often was hairy leukoplakia. This nonremoveable white plaque occurred in about 13 percent of the women.

Pseudomembranous candidiasis, a fungal infection, was detected in 11 percent of the women. Aphthous ulcers, or canker sores, were found in 6 percent, and herpes simplex lesions, including cold sores, were found in 2 percent. Erythematous candidiasis, a red form of candidiasis, occurred in 2 percent of the women. HIV-positive men have the same types of oral lesions, with a prevalence similar to that of the women in the study.

Among the women who were HIV-negative, the only oral lesions seen were herpes simplex, which occurred in about 3 percent of the group.

Interestingly, oral Kaposi's sarcoma was not seen in any of the HIV-positive women in the study. This malignant lesion occurs frequently among HIV-infected homosexual men. Its presence indicates a diagnosis of full-blown AIDS. The UCSF investigators are continuing to explore the correlation of oral lesions in HIV-positive women and men with different stages of immunosuppression.—Jody Dove □



In the first program of its kind, 40 students and faculty (top) from Howard University School of Dentistry and St. Elizabeths Hospital General Practice Residency Program visited NIDR recently to learn more about institute research and training opportunities. NIDR staff talked to the visitors about the institute's extramural and epidemiology research programs, clinical dental staff fellows program, the NIDR dental clinic and career opportunities available through PHS. Shown below, from Howard University School of Dentistry, are (standing, from l) Dr. Charles Sanders, Jr., chairman, department of orthodontics and acting associate dean for student affairs; Dr. James Jackson, program director, general dentistry residency program and advanced education program in general dentistry; and Dr. Diane Whitefield-Locke, instructor in the department of pediatric dentistry. Seated are (from l) Dr. Earl Flanagan, chief, dental department, General Practice Residency Program, St. Elizabeths Hospital; and Dr. Jacqueline Brown, assistant professor, department of orthodontics, Howard University School of Dentistry.



Aerosol Fortifies Ailing Teeth

Dental scientists have found an ingenious way to fortify ailing teeth quickly. With a unique method that rapidly replaces the tooth mineral, researchers are able to repair early cavities, make teeth less sensitive, and provide a better and stronger way of bonding restoration materials that improve dental appearance.

With support from NIDR, scientists at the Paffenbarger Research Center in Gaithersburg developed a pressurized carbon dioxide system to coat teeth quickly with calcium phosphate, a basic component of the tooth's hard tissues, which then converts to tooth mineral in a process called remineralization. Dr. M.S. Tung and coworkers found that the carbon dioxide aerosol increased the amount of calcium phosphate that can be applied to teeth and deposited it more quickly than currently available remineralizing solutions. This process helps arrest and repair early cavities by strengthening tooth enamel.

In addition to tooth remineralization, the researchers discovered that the use of the aerosol increased the bonding strength of restorative materials to tooth dentin, a hard tissue surrounding the tooth's soft center and covered by an outer shell of enamel. Although dentin is often involved in tooth repairs, it is difficult to bond restoratives to the dentin surface. Applying the aerosol to dentin during bonding produced high bond strengths, opening new treatment options beyond those available with conventional bonding techniques.

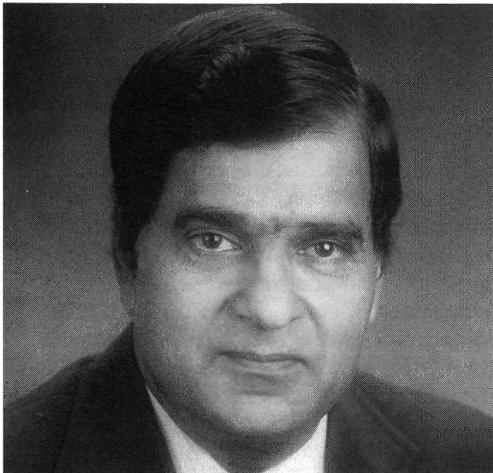
People prone to tooth decay, especially those without fluoride in their drinking water (fluoride strengthens teeth and helps prevent cavities), are good candidates for remineralization.—Laurie Hall □

NIDR Appoints Two New Health Scientist Administrators

Dr. Lois Cohen, director of the NIDR Extramural Program, has announced the appointments of two new health scientist administrators.

Dr. Mohandas Bhat has been appointed director of the NIDR Craniofacial Development and Disorders Program in the Extramural Program. He will oversee the research grants portfolio dealing with craniofacial anomalies such as cleft lip and palate, dentofacial malrelations, and orofacial trauma. The program supports a wide range of research, including basic studies in molecular biology, biomineralization, and genetics. The program also covers clinical studies to evaluate diagnostic procedures and alternative strategies for orthodontic therapy and craniofacial surgery and rehabilitation.

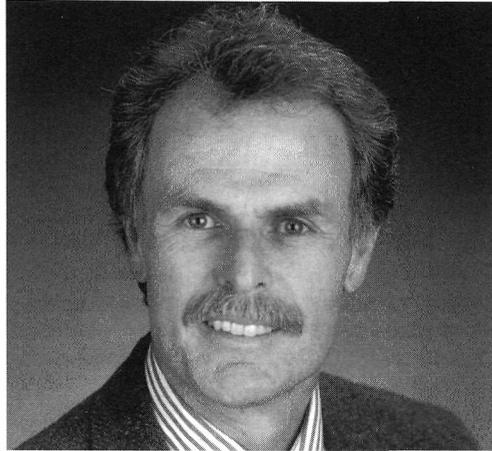
Bhat joined NIDR in 1986 as a visiting scientist. Over the next 6 years, he held positions as an epidemiologist and then a disease prevention research specialist in the institute's Epidemiology and Oral Disease Prevention Program. His investigations focused



Dr. Mohandas Bhat

on the epidemiology of congenital and acquired craniofacial defects. In particular, he looked at oral and facial trauma and enamel defects in primary teeth associated with cerebral palsy, mental retardation, and hearing deficits. He also investigated malocclusion, cleft lip and cleft palate, and periodontal diseases in children.

Bhat was among the leading researchers in the United States to characterize the epidemiology of orofacial trauma, including injuries to teeth. He developed a new index of tooth trauma, which was later incorporated into the National Health and Nutrition Examination Survey (NHANES III), conducted by the National Center for Health Statistics in collaboration with NIDR. He also helped conduct a comprehensive study of periodontal health in relation to alcohol use, cigarette smoking, and smokeless tobacco chewing habits among adolescents in



Dr. Dennis Mangan

Bogalusa, La.

Before coming to NIDR, he held several administrative and teaching positions in the U.S. and abroad. He was professor and chairman of the department of community dentistry at the Dental College in Bangalore, India. He was acting program director for Project HOPE in Natal, Brazil. In addition, he taught at the Federal University of Rio Grande do Norte in Brazil and at Case Western Reserve University School of Dentistry and Medicine in Ohio.

Bhat holds a B.D.S. and an M.D.S. in orthodontics from the University of Bombay, India. He earned an M.P.H. in public health practice from the University of Pittsburgh, and an M.S. in medical informatics from Case Western Reserve University. In addition, he has a Dr.PH. in oral epidemiology from the University of Michigan.

Dr. Dennis Mangan was recently named director of the NIDR Periodontal Diseases Program in the Extramural Program. He will oversee the research grants portfolio related to the causes, prevention, pathogenesis, diagnosis, and treatment of periodontal diseases. A recipient of an NIDR National Research Service senior postdoctoral fellowship, Mangan had been with NIDR's intramural Laboratory of Immunology since 1989.

As a scientist in the Intramural Research Program, his special interests were cellular immunology, cytokinology, and molecular cell biology. His investigations centered on the molecular mechanisms involved in microbial and host-induced cell injury and cell death. He also studied the functions of B lymphocytes, neutrophils, and monocytes and macrophages associated with periodontal diseases, and the regulation of host leukocyte functions by cytokines associated with periodontal inflammatory lesions. He developed new and sensitive enzyme assays for measuring immunoglobulins and bacterial antigens, and he investigated the prevalence of specific bacteria in plaque from healthy indi-

viduals and patients with periodontal disease.

Mangan has both extensive background in periodontal research, and firsthand experience with the NIH grants mechanism process. Between 1982 and 1986, he conducted research through an NIDR New Investigator Research Award. Since 1974, he has been principal investigator on numerous other NIH investigator-initiated research grants.

He has served as an NIH peer reviewer and as a student research advisor for Ph.D., M.S., and Dentist Scientist Program candidates. Prior to joining NIDR, he was an assistant professor in the department of dental research at the University of Rochester, and a postdoctoral fellow in cellular immunology in the department of oral biology at the University of Michigan. He earned an M.S. and Ph.D. in medical microbiology from West Virginia University.—Jody Dove □

Inn Garden To Honor Patients

On June 13, the Children's Inn at NIH will add a new feature to its home-like setting—a garden where all children who participate in treatment programs will be honored.

The Children's Garden is being established as a formal way to let children who received or are currently undergoing treatment at NIH and their families know that they are remembered. The dedication ceremony will provide an occasion for current and former pediatric patients, their families and NIH staff to get together to reminisce, renew and catch up.

The garden area behind the inn features a gazebo, walking paths, flowering and shrub-like plants and a boulder with a special plaque. Located in the inn will be the garden dedication book for inscriptions by donors to honor patients, family members, care providers and friends.

The dedication program will include remarks by Dr. Philip A. Pizzo, chief of NCI's Pediatric Branch, Dr. Lori Wiener, HIV family coordinator, and the Rev. Rebecca Bentzinger, Clinical Center chaplain. Family members of children treated at the CC will also speak.

The garden will be dedicated on Saturday, June 13 at 4 p.m. The inn is seeking volunteer families to host visiting families for 1 or 2 nights. If interested, call Cathy O'Donnell, (301) 231-8685. Reservations for the dedication are requested. □

Barbecue Volunteers Needed

The 10th annual Camp Fantastic Barbecue is scheduled for June 16 (rain or shine), 11:30 a.m. - 2 p.m. on the patio of Bldg. 31A. Volunteers are needed to work 1-hour shifts serving food, selling tickets, etc. Help is also needed selling tickets during lunch hours prior to the event. Persons interested in volunteering can call 496-6061. □

D.C. Science Teachers Learn New Biotechnology Techniques

Biotechnology is revolutionizing health care. Medical researchers are making earlier diagnoses and using more sophisticated treatments to save patients who might otherwise die.

Some progressive United States school systems have introduced biotechnology in secondary and even elementary schools. Because substantial training is critical for teachers of advanced placement biology, NIDDK created a biotechnology program to meet this need in the minority community.

Twenty-four public school science teachers from the District of Columbia are currently enrolled in the fourth biotechnology training course, "Special Topics in Biotechnology," sponsored by NIDDK, the Foundation for Advanced Education in the Sciences (FAES), and the District of Columbia Public Schools. Through lectures and laboratory work, the teachers gain hands-on experience in biotechnology topics that are adaptable to classroom instruction.

The program was the brainchild of two teachers who had participated in another outreach activity sponsored by NIDDK—the Minority Science Teachers' Program. Established by the late Dr. Pierre F. Renault, the institute's former deputy director, this program was the result of his deep commitment to encouraging and fostering biomedical research careers for minority students. Renault hoped that when high school science teachers from D.C. public schools were able to conduct research experiments in NIDDK's laboratories, their new enthusiasm would help to encourage their students to consider careers in biomedical research.

Because of their successful summer research experience, two teachers from Ballou Senior High School in the Anacostia area of Wash-

ington asked Renault to develop a course for high school science teachers to learn the techniques and methodology of modern scientific research. Dr. Roland M. Nardone, director of the Center for Advance Training in Cell and Molecular Biology at Catholic University, helped the teachers develop a proposal for support of a biotechnology program that would not only benefit D.C. teachers and students but also support NIDDK initiatives to increase the number of underrepresented minorities in science.

In March 1990, 24 D.C. public school science teachers received fellowships to participate in "Introduction to Biotechnology and Recombinant DNA," the first course sponsored by the NIDDK through an agreement with the FAES. The courses, which provide both laboratory and classroom instruction, are conducted on eight Saturdays in the Mary Woodard Lasker Center. Teachers earn 3 graduate credits for each course, which are organized and taught by the staff of R/M Nardone Associates, Inc., who also provide biotechnology training for NIH scientists through the Bio Trac program offered by FAES.

According to Dr. Phillip Gorden, NIDDK director, "Much of the success of this program is due to the commitment of our EEO program manager, J. Harrison Ager. We certainly owe him a great debt of gratitude for helping to carry out Dr. Renault's dream."

In the program's 2-year history, more than 50 D.C. public school science teachers have received training and gained new self-confidence in their ability to guide students in laboratory projects. Their classrooms are filled not only with new technologies, but also with new perspectives about science as a challenging and rewarding career.—Eileen Corrigan

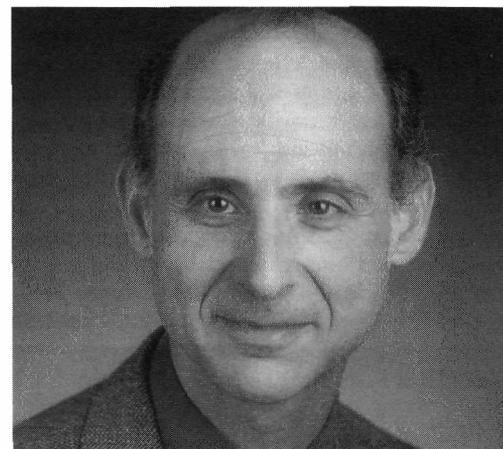


Twenty-four D.C. public school science teachers were honored for their successful completion of the fourth biotechnology training program, "Special Topics in Biotechnology," on Apr. 25 at the Mary Woodard Lasker Center on the NIH campus. Among the participants in the ceremony were NIDDK director Dr. Phillip Gorden (top row, second from r) and superintendent of D.C. public schools Dr. Franklin L. Smith (top row, third from l).

Gorelic Joins NCI Grants Review

Dr. Lester S. Gorelic has recently joined NCI as scientific review administrator within the prevention, epidemiology and control review section in the Grants Review Branch, Division of Extramural Activities.

A native of Chicago, he received a B.S. in chemistry from Illinois Institute of Technology, and a Ph.D. in chemistry from the University of Chicago. Following postdoctoral training at Washington University School of Medicine, where he studied mRNA metabolism in *E. coli*, Gorelic joined the faculty in



Dr. Lester S. Gorelic

the biochemistry division of the chemistry department at Wayne State University as assistant professor. While there, he initiated studies into new applications of photochemistry to elucidation of nucleic acid-protein interactions in nucleoprotein complexes; he was a recipient of a PHS Career Development Award. He left Wayne State in 1978, to join the staff of the Southwest Foundation for Biomedical Research in San Antonio as an associate scientist. There he continued his research program on ultraviolet radiation effects on nucleoprotein complexes, and accepted additional responsibilities as coinvestigator for a 5-year prospective study on prostate cancer.

In 1988, Gorelic came to the Washington area as a fellow in the DCPC Cancer Control Program at NCI. While in this program, he initiated and completed the analysis of a national health survey conducted on the United States Hispanic population in 1982-1984 (the HHANES). The analysis results describe the lifestyles and health practices of the U.S. Hispanic population, information that will provide a basis for the design of public health and cancer interventions in this population. Gorelic also worked with the Montgomery County public health department, as co-organizer of a breast cancer screening program for indigent women.

On the weekends, Gorelic enjoys cycling through the backroads of Northern Virginia. □

New Library in Westwood Bldg. Opens Doors to Employees

The Westwood Library recently opened its doors in Rm. 7A07 with a ribbon-cutting ceremony that was well-attended by extramural staff, many of whom will be using the facility.

Officials on hand included Dr. John W. Diggs, NIH deputy director for extramural research; Dr. Ruth Kirschstein, NIGMS director; Dr. Jerome Green, DRG director; and Dr. Suzanne Fisher, chairperson of the Westwood Library advisory committee.

Although a new facility, the library has a forerunner. The Division of Research Grants maintained a reference room in the Westwood Bldg. from Feb. 16, 1962, until the mid-1970's, when it was phased out due to lack of space.

The original reference room began as a reading room with contributions from the office literature of Dr. Dale R. Lindsay, former DRG director, and several Westwood scientists. A reservoir of published literature on research accomplishments and related sciences, as well as periodicals, was accumulated to form the core of the library collection. During this period, the extramural staff of five NIH components used the facility, even though it was named the DRG Reference Room.

Today's Westwood Library is a creation belonging to all the NIH components presently housed in the building. According to Fisher, "Plans include the update and expansion of the reference section. The journals collection is good in most areas, but we are assessing areas that need improvement. We plan to maintain a 2-year collection of journals such as *Science*, the *New England Journal of Medicine*, *Nature*, and other peer-reviewed, scientific reporting publications."

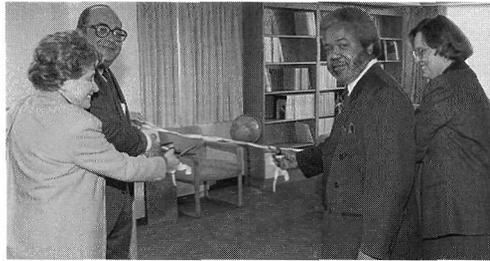
Besides Fisher, representatives from eight NIH components serve on the library committee: Drs. Lynn Amende, NHLBI; June Lunney, NCNR; Richard Lymn, NIAMS; Dan Matsumoto, NIDDK; Louise Ramm, NCR; Wayne Wray, NIDR; Arthur Zachary, NIGMS; and Daniel McDonald, Patricia Bailey and James Cain, DRG. Dr. Donald H. Luecke, DRG deputy director, and Kathleen Vashaw, librarian in the NIH Library reference section, also provided advice and assistance as advisors to the committee.

Committee members would also like to hear from library users; to encourage such input, a suggestion box is being installed on the premises. Fisher says members consider the box an important feature for use in future planning.

Managing the new facility is Joan Reed, who previously worked at the National Library of Medicine. She says the new library includes 13 stacks and a 10-chair conference room.

"With space in the Westwood at a premium, the conference room is a plus for us.

"The library has access to MEDLINE, Grateful Med, and the Bldg. 10 library cata-



Cutting the ribbon for the new library in the Westwood Bldg. are (from l) Drs. Ruth Kirschstein, Jerome Green, John Diggs and Suzanne Fisher.

log. At this time, it has two computers. One is equipped with a CD ROM drive, and we have ordered several CD ROM materials, including an entire encyclopedia on a single disk. The library also has a special copy machine to copy books."

Reed hopes that use of the facility will grow as its contents grow. "We would like to see at least 20 staff using the facility each day." Reed can be reached at 402-3247 or in Rm. 7A07, Westwood Bldg.—N. Sue Meadows □

NHLBI Council Gains Four

Four new members have been appointed to the National Heart, Lung, and Blood Advisory Council. Their terms run until 1995.

Dr. William C. Bailey is professor of medicine at the University of Alabama School of Medicine, as well as director of the lung health center at the University of Alabama. He also serves as assistant dean of education at the university and is director of the comprehensive asthma program.

Dr. Robert L. Frye is chairman of the department of medicine at the Mayo Clinic in Rochester, Minn. He has also served as president of the Mayo Clinic staff and is currently president of the American College of Cardiology.

Barbara M.H. Layman is a member of the board of directors of the National Asthma and Allergy Foundation of America, having previously served as its national president. She is currently serving as vice president for fundraising. She is also a member of the National Health Council and is active as a consumer representative for asthma and allergy patients.

Dr. Elijah Saunders is an associate professor of medicine at the University of Maryland School of Medicine, as well as head of the division of hypertension and director of the hypertension clinic, University of Maryland Hospital. He is also clinical director of the university's hypertension program. □

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 assignments of the grants associates (GAs), HSA trainees and the working experience of selected HSAs.

The office is accepting applications for the 1993 GA/HSA Seminar Series scheduled to begin on Friday, Sept. 25. The series is held weekly on Fridays through June 1993 in Bldg. 31C, from 8:30 a.m. to noon. On approximately 10 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 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."

Those 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 Wednesday, July 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 August.

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

Healthy Women Needed

Women ages 18-40 of normal weight and menstrual cycles, not on birth control pills, are needed to study the effect of a 3-day fast on the menstrual cycle. Will require 7 days and 6 nights of inpatient hospitalization at the Clinical Center. Subjects will be paid. If interested leave message at 496-4244 for Dr. Beatriz Olson or Tannia Cartledge. □

Roald Shern Bids Farewell to NIDR

Dr. Roald J. Shern has retired after 21 years with the Public Health Service Commissioned Corps and the National Institute of Dental Research. His career at the institute has spanned laboratory, epidemiological, and clinical research, beginning in NIDR's National Caries Program (NCP) and concluding in the Clinical Investigations and Patient Care Branch of the Intramural Research Program.

Shern's interest in dental research came into focus in the remote mountain and desert regions of the Southwest. Coming from a background in private practice, he was serving as a public health dentist for the state of New Mexico. "Those were interesting times," he recalled. "We were treating groups of kids over several years as part of a study monitoring the increase in dental caries. The project was limited to locations so out-of-the-way that they weren't readily accessible to private dental care."

Shern continued his study of caries epidemiology with the PHS Commissioned Corps and NIDR, both of which he joined in 1970. Intramural activities in the NCP and its successor, the Epidemiology and Oral Disease Prevention Program, concentrated on laboratory and clinical testing of dental plaque inhibitors such as chlorhexidine and various fluoride compounds. These studies helped develop methods that can be used to detect biological changes in oral hard and soft tissues and predict the clinical effectiveness of anti-plaque agents.

"It is very rewarding to see a product develop from the test tube to human trials," said Shern. "I consider myself lucky to have been involved in this type of research."

Other studies investigated ways to increase the benefits of fluoride. Shern's expertise in measuring tissue fluoride levels contributed to the development of a controlled release device that attaches to the tooth and continuously delivers fluoride to the oral cavity. In 1987, Shern transferred to the NIDR dental clinic, where his activities included measuring saliva flow from minor salivary glands and assisting with the Baltimore Longitudinal Study of the Aging. More recently, he has worked with researchers at the National Institute of Standards and Technology to increase the efficiency of binding fluoride to tooth enamel.

In looking back over his career with NIDR, Shern reflected, "It is exciting to see the strides made since 1970 in understanding what is going on in the oral cavity, and the improvements in diagnosing and treating oral diseases. I have really enjoyed working with everyone in the epidemiology program and the dental clinic and I look forward to continuing these friendships. My wife and I are going to stay in the area, and this will give me the



Dr. Roald Shern

opportunity to continue with some consulting work."

Shern is a graduate of the University of Michigan Dental School and received an M.P.H. and M.S. in dental epidemiology from the University of North Carolina. He also served in Germany in the U.S. Army Dental Corps. He is the author of numerous publications, coeditor of a book on caries prediction, and has lectured in the U.S. and Taiwan.—Wayne Little □

Research Subjects Needed

NICHD is seeking infants for a longitudinal study of cognitive and social development. Infants must be 2 months old between June 1 and Oct. 1, 1992. For more information call Deborah Clay, 496-6832, and ask for information on the infant study. □

NLM Mourns Art Broering

Arthur J. Broering, deputy associate director of NLM's Extramural Programs since 1974, died of cancer Mar. 15 at Georgetown University Hospital in Washington, D.C.

He joined NLM's Extramural Programs Division in 1968 as construction program officer in the Resource Division. In 1970 he was named acting chief of the division. In that position he worked on plans for the establishment of the Regional Medical Library System in addition to grants management. In 1974 he received the Department of Health, Education and Welfare Superior Service Honor Award. Before joining NLM he was an architect with the Health Research Facilities Branch of the Division of Research Grants.

Born in Covington, Ky., Broering attended Vanderbilt University and later received a bachelor's degree in architecture from the University of Cincinnati. From 1959 to 1961 he served in the U.S. Marine Corps.

Friend and coworker Frances Humphrey Howard presented a eulogy at a memorial service held at Arlington National Cemetery in Virginia. "We all remember and admire

OD's Ellett To Retire

After 25 years of service, Bob Ellett is retiring. He has worked in the food management and cost analysis section (now called the Central Services Accounting Branch), the accounts payable section and the accounting section of the Operations Accounting Branch.

Ellett was involved in establishing the first DELPRO reviews for finance and continued



Bob Ellett

reviews in the various administrative offices of all the NIH ICDs. He recently received an Outstanding Service Award from the Clinical Center's department of transfusion medicine in appreciation for 25 continuous years as a volunteer blood donor.

Ellett says he has been fortunate to work in a setting like NIH and to contribute to the patients and research in a personal capacity. □



Arthur J. Broering

Art for his sense of fairness, his kindness, his loyalty, and his steadfast commitment to his work. He was an exemplary public servant ... open-minded and tolerant of others, and always willing to listen to new ideas and different ways of looking at problems ... He was always of good cheer and frequently displayed his spontaneous wit ... We shall miss him very much but we will always carry his smile and warm friendship in our hearts."

TRAINING TIPS

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

Personal Computing Training 496-6211

Course Titles	Starting Dates
Welcome to Macintosh	6/9, 6/25, 7/9
Advanced Macintosh Techniques	6/18
MacWrite	6/2
Intro to WordPerfect 2.0 (Mac)	6/10
Intro to Microsoft Word (Mac)	6/3
Excel Level 1	6/4, 7/13
Excel Level 2	6/17
Excel Level 3	6/23
Filemaker PRO	7/14
4th Dimension	6/15
FoxBASE-Level 1 (Mac)	(upon request)
FoxBASE-Level 2 (MAC)	(upon request)
CricketerGraph	7/15
PowerPoint	7/8
HyperCard Authoring & Scripting-12	6/22
3Com PC Network-Level 1	6/11, 7/10
Intro to Personal Computing for New Users	6/24, 7/16
Disaster Recovery and Data Security for the PC	6/26
Introduction to DOS	6/4, 6/23
Introduction to Windows 3.0	6/11, 7/8
WordPerfect for Windows (New Course)	6/3, 6/8
Introduction to WordPerfect 5.1	6/22, 7/14
WordPerfect 5.1 — Advanced Topics	6/16
Intro to Harvard Graphics, Rel. 3.0	6/22
Intro to Harvard Graphics, Rel. 2.3	6/29
Intro to Paradox	6/1, 7/9
Intermediate Paradox	6/2, 7/10
Paradox PAL	6/25
Intro to Lotus 1-2-3, Rel. 2.2	6/15, 7/13
Intermediate Symphony	7/16
IMPACT System for Personnel Staff	6/10
IMPACT System for Admin. Staff	6/18, 7/13
IMPACT System for Professional Staff	7/13

Phone Book Format Changes

In June, the NIH Telephone Book will change to a new 3-ring loose leaf recyclable format. The new version will be distributed in the normal manner, but must be inserted into binders. New, attractive binders for the telephone book are now available through the Supply Branch, Division of Logistics.

The white binder will have Bldg. 1 silk-screened in blue on the cover and comes with laminated color-coded tab dividers. The binders will cost about \$3 each and may be in short supply during the first few months. The self-service stores will carry a limited supply but the most efficient method of ordering will be through DELPRO using stock number NSN-7510-00-LO5-0205. There will be 16 binders per carton. For more information, contact Reginald Russell, 496-6077. □

Five New Council Members Named to NIAID

Five new appointments have been made to the National Advisory Allergy and Infectious Diseases Council.

The new members are: Drs. Lawrence Corey, professor of laboratory medicine, microbiology and medicine at the University of Washington, Seattle; Philippa C. Marrack, professor of medicine at the National Jewish Center for Immunology and Respiratory Medicine in Denver; M. Michele Manos, associate director of the department of infectious diseases at Cetus Corporation in Emeryville, Calif.; Gilbert M. Schiff, president of the James N. Gamble Institute of Medical Research in Cincinnati; and Patricia N. Whitley, interim chair of the department of pediatrics at Morehouse School of Medicine in Atlanta.

Corey earned his medical degree from the University of Michigan Medical School. Since 1977, he has directed the virology division in the department of laboratory medicine at the University of Washington and at Children's Hospital and Medical Center, Seattle. From 1987 to 1992, Corey has chaired the NIAID executive committee of the AIDS Clinical Trials Group.

Marrack holds a doctorate degree in biological sciences from New Hall College in Cambridge, England. In addition to her appointment at the National Jewish Center, she is an investigator at the Howard Hughes

Medical Institute and a professor in the department of microbiology and immunology at the University of Colorado Health Sciences Center in Denver. She is a member of the National Academy of Sciences.

Manos completed her graduate work at the Cold Spring Harbor Laboratory in New York and received her doctorate degree in microbiology from the State University of New York, Stony Brook. She serves on the editorial board of *Molecular and Cellular Probes* and on the public relations committee of the American Society for Microbiology. Her primary research interest is molecular epidemiology of human papillomaviruses and herpes viruses.

Schiff has both his bachelor's degree and medical degree from the University of Cincinnati College of Medicine, where he is now a professor of medicine. He is a fellow of the American College of Physicians and a member of the American Association for the Advancement of Science and the American Public Health Association.

Whitley earned her medical degree from Johns Hopkins University School of Medicine. She served her internship and residency at Children's Hospital Medical Center at the University of Cincinnati. She completed a research fellowship in pediatric infectious diseases and taught pediatrics as assistant research professor at Boston University School of Medicine.



NIAID director Dr. Anthony S. Fauci (second from r) welcomes new advisory council members (from l) Drs. Gilbert M. Schiff, M. Michele Manos, Philippa C. Marrack and Lawrence Corey. Dr. Patricia N. Whitley is not pictured.

Bulletin Board Established for Foreign Scientists

A bulletin board to post announcements of interest to visiting foreign scientists at NIH has been set up outside the B1-level cafeteria in Bldg. 10.

The board is available for all visiting foreign scientists to communicate with one another, post notices of mutual interest, provide information from or about scientists' home countries, and announce Fogarty International Center activities of interest to the foreign scientists and their families.

The board was suggested by Dr. Michele Carbone, an NIH visiting scientist, and will

be maintained by the FIC's Volunteer Services Office. Rules for posting items on the board are:

- Notices should fit on one page and be no larger than 8½ inches by 11 inches.
- All notices must be dated.
- Notices must be submitted to and reviewed for appropriateness by the FIC's Volunteer Services Office, Bldg. 31, Conf. Rm. 3, attention Linda Beach, volunteer services coordinator.

Further information can be obtained by calling 496-7357. □

May Is Asthma and Allergy Awareness Month

By James Hadley

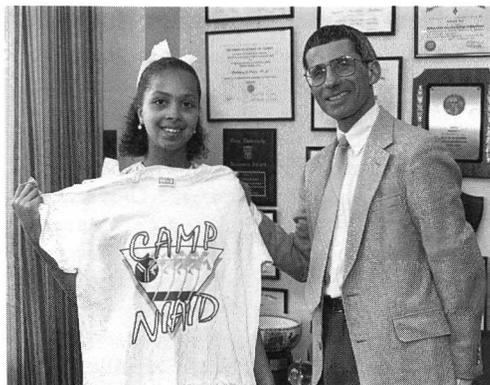
May is the month eyes start to itch, noses run, congestion becomes a common complaint and sneezing a major preoccupation as the pollen count skyrockets and spring moves into full swing. For millions of Americans, this signifies peak allergy season, and it marks the beginning of Asthma and Allergy Awareness Month.

NIAID joins the Asthma and Allergy Foundation of America in focusing public attention on the scope and nature of asthma and allergic diseases, the progress of research and clinical care, and future directions of research.

Dr. Anthony S. Fauci, NIAID director, says, "Asthma and Allergy Month is a time to focus on the fact that people with asthma or allergic diseases can improve their health if they have continuous monitoring and therapy, instead of episodic care."

Allergies and asthma are among the nation's most common and expensive health problems, accounting for one out of every nine visits to physicians. An estimated 45 million-50 million Americans—about one of every five—suffer from allergies to one or more substances. Hay fever, or allergic rhinitis, affects an estimated 22.1 million people. More than 33.3 million persons in this country suffer from chronic sinusitis.

Asthma affects between 10 million and 15 million Americans. It is the most frequent cause of hospital admissions. Asthma is the most common chronic condition in persons under age 18 and the number one cause of



Amanda Rachel Johnston, the 1992 Asthma and Allergy poster child, receives a t-shirt from Dr. Anthony S. Fauci, NIAID director. The 12-year-old is a straight-A, sixth-grade student athlete and dancer, who has had several bouts of chronic disease. Today, armed with a better understanding of asthma, Amanda better controls her illness.

school absenteeism—10 million lost school days—which cost approximately \$1 billion in lost wages for parents who stayed home to care for asthmatic children. Adult asthmatics who stayed home from work because of illness lost wages amounting to \$850 million. Each year more than 4,000 deaths in the United States are caused by asthma.

Asthma makes it difficult to breathe and asthmatic episodes may range from mild to life threatening. Asthma is caused by a temporary blockage of the lung's bronchial airways, the tubes that make breathing possible. The obstructions are caused by inflammation and mucus in the airways, a contraction of the muscles surrounding the airways and swelling of the airway.

Free Car/Van Pool Information Available for Employees

NIH's Division of Security Operations has joined the Ridefinders Network, a computer link that offers free commuter transportation information for employees in the Washington metropolitan area.

The network can provide NIH employees a match list of potential car/van pool partners who have similar work hours and home locations. Also, mass transit schedules are available for all major transit systems in the area. This new initiative for NIH employees could help alleviate the campus parking problem, according to NIH Traffic Management Specialist Gail Thorsen of DSO's Employee Transportation Services Office (ETSO).

"If we could get half our employees in car or vanpools, or to ride the bus or Metrorail," she said, "our parking problem would be virtually eliminated."

NIH currently has 0.5 parking space per employee—one spot for every two employees. By getting half the campus to share rides or take public transportation, the remaining

After a decade of steady declines, asthma mortality rates have been increasing, and children who live in the inner city are particularly affected. Because of the urgency of this problem, NIAID has established the National Cooperative Inner-City Asthma Study to design and evaluate a comprehensive intervention program to reduce recurrent asthmatic episodes and asthma-related deaths among African-American and Hispanic children, ages 4 to 11. This 5-year project is under way at eight institutions in seven U.S. cities.

Through the institute's Division of Allergy, Immunology and Transplantation, NIAID supports research throughout the country at seven Asthma and Allergic Disease Centers, three Asthma and Allergic Disease Cooperative Research Centers and four Centers for Interdisciplinary Research on Immunologic Diseases. □

Seminar Explains EPMS System

An in-service seminar on understanding the Employee Performance Management System (EPMS) process will be held on Tuesday, June 16, from 11:30 a.m. to 1 p.m. in Bldg. 31, Conf. Rm. 7.

The seminar, sponsored by the NIH advisory committee for women and the Office of Equal Opportunity, is open to all employees. A 30-minute overview of the system provided by Mimi Blitz, personnel staffing specialist in the Division of Personnel Management, will be followed by a question-and-answer period. No registration is necessary. Sign language interpretation will be provided. □

Beware of Bogus Requests

NIH researchers are cautioned about responding to requests from Nigerian medical students. As reported in the Apr. 14 issue of the *NIH Record*, two investigators here have received letters from Abia State, Nigeria, students asking for money to help complete their education. Those letters, the students and their dire circumstances could not be substantiated after several informal efforts.

Recently another NIH'er received a similar communication dated Mar. 30, which also could not be confirmed.

The May 2 issue of the British journal *Lancet* reported that a "Nigerian Sting"—a letter-writing campaign remarkably similar to NIH's—has been discovered in England at the Royal College of Physicians (RCP). According to *Lancet*, the Nigerian Embassy in London declared that there is no medical school in Abia State, and neither the University of Leeds nor RCP has listings for the students in the letters.

If any other NIH'er has received a similar letter, he or she should contact Robert Eiss, 496-4784. □

drivers would then have a parking place on campus.

A "Security Watch" leaflet has been distributed desk-to-desk throughout the NIH community; employees interested in receiving carpool, vanpool, or transit information need to complete the application and return it to ETSO by mail (Bldg. 31, Rm. B3B08) or fax (402-0394), or call Thorsen, 402-RIDE (7433), for more information. □

Lecture Explores DNA Sequencing

DCRT announces a seminar entitled "Software for Automated DNA Sequencing: A Pattern Recognition Approach Using Neural Networks." Clark Tibbets, a professor of microbiology at the Vanderbilt University School of Medicine, will speak. The Thursday, May 28, seminar will take place in Lipsett Amphitheater from 1:30 to 2:30 p.m. For more information, call 496-2972. □