May 24, 1994 Vol. XLVI No. 11

U.S. Department of Health and Human Services

National Institutes of Health "Still The Second Best Thing About Payday"

The NIH Record

The Report Is In

Intramural Programs Face Renovations

By Carla Garnett

Restructure the tenure process, revamp the Clinical Center and revisit resource allocation—these are three of 11 key recommendations for renovating NIH's Intramural Research Programs, according to the report by an outside subcommittee formed to study the IRP. The 10-member group—called the external advisory committee (EAC)—of the advisory committee to the NIH director undertook the 5-month review last October in response to a congressional mandate. Their deliberations concluded in February.

In all, more than 40 recommendations ranging widely from recruitment and retention of minority and women scientists to enhancement of NIH-private sector collaboration were made by the EAC, which was cochaired by Dr. Paul A. Marks, president and CEO of Memorial Sloan-Kettering Cancer Center in New York City, and Dr. Gail Cassell, professor and chair of the microbiology department at the University of Alabama at Birmingham. The cochairs were chosen by NIH director Dr. Harold Varmus and NIH deputy director Dr. Ruth Kirschstein. Several former intramural researchers also served on the panel including NIDDK grantee Dr. Elizabeth Neufeld of UCLA's medical school, Dr. P. Roy Vagelos of Merck and Co., Inc., and NCI scientist emeritus Dr. Maxine Singer of the Carnegie Institution.

Marks, Cassell and Varmus, Kirschstein, and Dr. Michael Gottesman, acting NIH deputy director for intramural research, were on hand at a May 4 Bldg. 1 media briefing to discuss the EAC's final draft report. The full advisory committee to the director will discuss the report at its June 2 meeting here. The IRP "consumes roughly 11 percent of our \$11 billion budget," said

Mary-Claire King To Give Next NIH Lecture, June 1

For most women, breast cancer seems to strike randomly within their circle. But for some, the disease marches through their families with devastating results. Dr. Mary-Claire King, professor of genetics and professor of epidemiology at the University of California, Berkeley, has been in search of the genetic factors that predispose women in certain families to breast cancer. She will present the NIH Lecture, Wednesday, June 1 in Masur Auditorium, Bldg. 10 at 3 p.m. The lecture is



Dr. Mary-Claire King

titled, "Genetics of Breast Cancer."

King's pursuit of the breast cancer gene began in 1974, when as a postdoc at the University of California, San Francisco, she studied 1,500 family histories compiled by the National Cancer Institute. Most of the pedigrees had only one member with breast cancer, but in about 15 percent of them, several women had breast cancer. King's studies showed that the most likely scenario was a rare mutation in a dominant gene on a nonsex chromosome. This

(See NIH LECTURE, Page 6)

Gulf Veterans' Ills Need Further Study, Panel Says

By Bill Hall

A panel of experts convened by NIH has recommended extensive research into the unexplained illnesses being reported by Persian Gulf veterans and called for a health

survey of those who served in the Persian Gulf.

The panel concluded that the "complex biological, chemical, physical, and psychological environment of the Desert Shield/ Desert Storm theater of operations" has produced in Persian



Panel chair Gareth Green Gulf veterans a range of

produced in Persian Gulf veterans a range of illnesses with overlapping symptoms and

(See GULF VETS, Page 6)

'Instructional, Yet Cool'

(See INTRAMURAL PROGRAMS, Page 4)

'Adventure in Science' Completes First Year at NIH

By Robin Macker

ere is your chance to get out of the lab and into—the lab. Only this lab will be one that you create with the sole purpose of having fun and engaging elementary students in the scientific process. Mark your calendar for June 9 to receive tips on working with elementary students from the scientists who brought the Adventure in Science (AIS) Program to the NIH campus.

Adventure in Science, a hands-on science education program for children ages 8-15, completed its first year at NIH after being offered at three sites in the Gaithersburg area over the past 20 years. It is now gearing up to begin its second year at NIH and is depending on volunteers from the scientific community to make it successful once again.

"It's a lot of fun," said AIS volunteer Dan Brady of NIA, "especially when you get to take things
(See ADVENTURE, Page 10)

U.S. Savings Bonds Drive Gets Under Way at NIH

The annual campaign to persuade NIH employees to purchase U.S. Savings Bonds got under way on May 2 with exhortations from several NIH'ers in favor of this form of saving, musical selections by the Richard Montgomery High School jazz ensemble, and platters of tasty cookies underwritten by Geico.

A modest crowd gathered on the Bldg. 31A patio to hear Jack Mahoney, NIH deputy director for management, declare that, like many, he once was skeptical of buying bonds. Three years ago, however, he began purchasing bonds as both a savings instrument and also as a way of putting a small dent in the nation's debt, now greater than \$3 trillion. "Buying bonds can help secure your future today," he said.

NINDS acting director Dr. Patricia Grady called bonds a relatively painless way for employees to save money, particularly if they

(See SAVINGS BONDS, Page 7)



NINDS acting director Dr. Patricia Grady helps kick off bond drive on May 2 outside Bldg. 31.

Abeles Named NIA Associate Director

Social psychologist Dr. Ronald P. Abeles has been named associate director for behavioral and social research at NIA.

The appointment, says Dr. Richard J. Hodes, NIA director, "is a tribute to Ron



Dr. Ronald P. Abeles

Abeles' work in advancing behavioral and social research on aging. In the new post, he will play an even greater role in helping us understand the dynamics between society and older people."

A longtime NIA scientist and administrator, Abeles has guided and encouraged innovative research in the field. Most recently, he has focused on the sense of control-or lack of itthat older people feel in their dealings with society. Research in this area has found that while older adults do not have a diminished sense of their own abilities, society and the way it is structured is less responsive to people as they age. This can significantly affect older adults' view of themselves and their confidence in dealing with others. Findings in this area suggest ways that society may have to change to address important psychosocial needs of older

In 1993, Abeles received the NIH Award of Merit for his contributions to behavioral and social research on aging. For the last 2 years, he has been acting associate director for behavioral and social research, and from 1980 through 1991, served as deputy for that program. He is currently executive secretary of the congressionally mandated task force on aging research, which is expected to issue its final report and recommendations later this

He also has been well known for fostering behavioral and social research throughout NIH and informing Congress about research needs. He is currently vice chairperson of the NIH health and behavior coordinating committee and in 1990 received an NIH Director's Award in recognition of his NIH-wide activities; he was cited for preparing NIH's annual report to Congress on behavioral and social research.

Abeles has held elective office in the aging sections of both the American Sociological Association (ASA) and the American Psychological Association (APA). Today, he is editor of the ASA section on sociology of aging newsletter and is a fellow of the APA.

The organizer of numerous symposia at annual meetings of professional societies, Abeles has published widely. He has edited several books on various aspects of life-course and aging research. Most recently, he coedited Aging, Health, and Behavior (Sage Publications, 1993) and Aging and Quality of Life (Springer Publishing Co., 1994).

He received his B.A. in psychology in 1966

from the University of California, Los Angeles, and his M.A. (1968) and Ph.D. (1972) in social psychology from Harvard University. He was also a postdoctoral fellow in political science and psychology at Yale University in the early 1970's. Before coming to NIA in 1980, Abeles was an assistant professor in the department of psychology at Boston University and held positions at the Social Science Research Council and the American Institutes for Research in the Behavioral Sciences.

Award-winning actress, producer and author Jane Alexander, chairman of the National Endowment for the Arts, will present the NIH Lecture on Wednesday, June 8 at 3 p.m. in Masur Auditorium, Bldg. 10. She won a Tony Award for her performance in The Great White Hope, an Emmy Award for Playing for Time,

and the Television Critics Circle Award for portraying Eleanor Roosevelt in Eleanor and Franklin: The White House Years. In addition she has been nominated for the Academy Award four times for her movie performances, including Kramer

vs. Kramer. Alexander is the sixth chairman of the NEA. On nominating her for the post, President Clinton said, "She will be a tireless and articulate spokesperson for the value of bringing art into the lives of all Americans."



DCRT's Scientific Computing Resource Center (SCRC) received recognition as a noteworthy example of information resources management in the federal government at the Government Computer News Forum's April meeting spotlighting DHHS agencies. David C. Songco (r), chief, Distributed Systems Branch, DCRT, was one of 12 honorees receiving certificates from Neil J. Stillman, deputy assistant secretary for information resources management, at the National Press Club. Songco was cited for piloting a new concept for providing support to bench scientists at NIHa shared-use computing facility for hands-on evaluation and use of scientific software. To use the SCRC, call 4-DCRT.



Dr. Ronald Elin, chief of the Clinical Center's clinical pathology department, will receive the Award for Outstanding Contributions to Clinical Chemistry in a Selected Area of Research at the annual meeting of the American Association for Clinical Chemistry in New Orleans in July. The award is given annually to a clinical chemist who achieves "national and international status for pioneering efforts in an area of research considered fundamental to the science and is considered among the world's foremost experts in that specific discipline." Elin's study of magnesium, an element that works with about 300 different enzymes, began during graduate school at the University of Minnesota. "I chose magnesium for my thesis project because so little was known about it," he said, "and I have been interested in it ever since. I've been fortunate to be able to pursue that interest clinically and experimentally.

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. 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, 1994.

NIH Record Office Bldg. 31, Room 2B-03 Phone 6-2125 Fax 2-1485

Editor Richard McManus

Assistant Editor Anne Barber

Associate Editor Carla Garnett

The NIH Record reserves the right to make corrections, changes, or deletions in submitted copy in conformity with the policies of the paper and HHS.

Correspondents:

CC, Sara Byars DCRT, Mary Hodges DRG, Judith Grover FIC, Irene Edwards NCI, Patricia A. Newman NCHGR, Leslie Fink NCRR, Frances Taylor NEI, Linda Huss NHLBI, Louise Williams NIA, Vicky Cahan NIAAA, Ann M. Bradley NIAID, James Hadley NIAMS, Amy Iadarola NICHD, Carol Florance NIDA, Karen Rogich NIDCD, Gail Blatt NIDDK, Eileen Corrigan NIDR, Mary Daum NIEHS, Hugh J. Lee NIGMS, Wanda Warddell NIMH, Marilyn Weeks NINDS, Shannon Garnett NINR, Marianne Duffy NLM, Roger L. Gilkeson

500 Brothers Needed

NIMH, NCI Collaborate for a Gene Study of Personality Traits

ot a brother?" the ad asks. "... Call Dr. Benjamin, 301-496-3421." These notices can be spotted on doors, elevators, walls and bulletin boards throughout the NIH campus.

The person responsible for the solicitation, Dr. Jonathan Benjamin, a visiting associate from Israel who works in NIMH's Laboratory of Clinical Science, says, "We are looking for 500 brothers for a study and we are using every possible way we can think of to get them enrolled."

Collaborating with Dr. Dean Hamer of NCI's Laboratory of Biochemistry, Benjamin explains the study: "We are trying to find linkage between personality traits and genetic markers. While I had done a small genetic linkage study (17 families) in Israel on the relationship between personality traits and

Dr. Jonathan Benjamin

color blindness, Hamer had done a study looking at genes involved in male sexual orientation. So we decided to join forces and conduct a large study covering both genetics and psychiatry.

"It seemed logical for us to join forces," he

continued, "because while we studied different topics, we were looking at the same place—the X chromosome. It seemed only natural that we should get together."

Hamer and Benjamin are looking for all kinds of brothers—gay, straight, any nationality, as long as they are brothers, 18 years or older, but not identical twins. "We would like to have a spread from young to old. You can be a normal volunteer, a volunteer in another study, whatever," Benjamin says. "Anybody is fine with us as long as they meet our age, relationship requirement, and complete the study."

Thus far, 40 pairs of brothers have been enrolled in the study, but many more are needed. "The recruitment effort has only just begun," says Benjamin. "The study itself will take approximately 2 years."

The study works like this: One brother must come to NIH and be enrolled in the clinical trial, but the other brother may live anywhere in the United States. "If both brothers could come to NIH, that would be ideal," he says. "If not, the same packet that the brother here fills out will be mailed to the other one who lives away." In the packet is a blood-sample container with a box and labels for sending it to a lab for analysis, three questionnaires, and a consent form.

"After reviewing the returned questionnaires, we will compare the answers," continues Benjamin. "If the answers are the same when a

particular gene is the same, perhaps then it is that gene that controls those traits."

Along with putting the notices all around NIH, Benjamin and staff visited the University of Maryland on a recruiting expedition.

Subjects are paid, and they get an additional amount if their parents also give blood.

"Although parents are not required to fill out the questionnaires, just having their blood samples will provide additional information," he said. The questionnaires take approximately 11/2 hours to complete and contain 400 questions.

"We are recruiting males for this particular study because they have only one X chromosome. If we included women in the study, we would need up to four times more people because women have two X chromosomes. That would also cause the cost to increase fourfold."

If you have a brother and are interested in participating in this study or would just like more information, contact Benjamin or Arlene Jaffe, 6-3421—Anne Barber

Herpes Vaccine Study

Healthy individuals age 18 or older are sought to participate in a research study of an experimental vaccine for prevention of genital herpes. Volunteers are needed who do not themselves have genital herpes, but who are in a stable relationship with a partner who is known to have the disease. Both partners will be screened to confirm eligibility. For more confidential information, call 6-1836.



NIH was the site of a congressional field hearing May 2 on "Telemedicine: An Information Highway To Save Lives." Rep. Jimmy Hayes (D-La.) (top, l), chairman of the investigations and oversight subcommittee of the House committee on science, space and technology, conducted the hearing with Rep. Connie Morella (R-Md.). Among the panels of witnesses—all experts in the field—were Dr. Helen L. Smits (bottom, l), deputy administrator of the Health Care Financing Administration, and NLM director Dr. Donald Lindberg. Though not a new technology—20 years ago NLM was using NASA satellites to allow PHS doctors to "see" patients in remote Alaska villages, said Lindberg—telemedicine is expected to become a part of health care reform and to be of particular benefit to physicians in remote, rural sites in both this country and the world.



INTRAMURAL PROGRAMS TO UNDERGO REVITALIZATION PROCESS (Continued from Page 1)

Varmus, in introductory remarks at the briefing. "This is one of the government's proudest possessions. It is a scientific endeavor carried out by government scientists that has a remarkable track record, has trained 50,000 biomedical scientists over the course of its history and has made a number of famous achievements in biomedical science."

In response to a request by the House Labor and Health and Human Services appropriations subcommittee—communicated via its fiscal year 1994 report—the NIH director was directed "to review carefully the role, size, and cost" of the IRP.

Amid tightening constraints on federal funding of biomedical research and stemming from concern expressed by Congress about the overall mission and management of NIH, the IRP review considered tough questions on the process by which NIH evaluates the IRP's quality, the agency's allocation of resources to the IRP compared with the Extramural Research Programs, and the current condition and projected lifespan of the agency's physical facilities-especially the Clinical Center. Congressional concern on these three issues has come to the forefront over the last 2 years, according to the executive summary of EAC's report. In addition, several of the issues raised and recommendations articulated by the EAC had been considered already during internal NIH discussions about its IRP.

Critical evaluation is as important for the intramural program as it is for the extramural program, Varmus said, citing the need for government scientists and grantees to be held to comparable standards of peer review. Varmus also noted "that there has been, at least in some quarters, the perception that perhaps there's been some slippage in quality in the intramural program, some isolation from the mainstream. These views have been articulated in several places, including *Science* magazine."

Reviews by outside groups are not new, Varmus pointed out, referring to external committees formed as early as the 1970's to examine the performance of the IRP. Marks agreed, adding that he and

"We have a certain sense of optimism...due to the new leader-ship of NIH."

—EAC cochair Dr. Paul Marks

several other EAC members had also served on some of the earlier committees. The EAC report also mentioned prior reviews: "At least three previous advisory committees have made recommendations for improving the IRP, some of which have been implemented but many of which have been ignored. This may be attributed in part to systemic problems that transcend NIH and require major administrative or legislative remedies and in part to

resistance to change within a large institution."
However, Marks said, the EAC is more
hopeful that current suggestions will be
implemented.

"Some of the recommendations we are making are certainly not new," he commented, "but we feel they are no less important. We have a certain sense of optimism that these recommendations, some of which have been on the books for years, may be implemented this time around. This optimism is due to the new leadership of NIH in the person of Harold Varmus and his staff, and to the support indicated to us from [HHS] Secretary Shalala and Assistant Secretary Phil Lee." Copies of the EAC report were distributed to Shalala, Lee, some congressional staff, the NIH scientific directors and ICD directors several weeks before the briefing.

Ensuring strict quality control was by far the major consideration of the EAC, said Marks.

The first two recommendations addressed enhancing the review process for IRP senior scientists and scientific directors. An advisory group to the deputy director for intramural research should be assembled, chaired by the DDIR and composed of the chairs of ICD external boards of scientific counselors. This committee would "provide ongoing review of

"This is one of the government's proudest possessions."—NIH director Dr. Harold Varmus

the processes of quality control across NIH," said the EAC report. In addition, the appointment process for these counselors should be changed "to assure expert, armslength membership"; the review process itself should be more explicit and the criteria to evaluate scientific directors should be more rigorous.

"One of the criticisms we've had in the past is that sometimes the board of scientific counselors may be too closely wedded to the very groups they're being asked to review," said Varmus, noting that this recommendation was already in early stages of implementation. "While the advisory function has worked well in many cases, there is the general belief that it may not be as stringent as the extramural review process in which there is perhaps less fraternalism."

Of the 11 major recommendations the EAC made, four involve the recruitment, retention and tenure of researchers. Recommendation 3 seeks to strengthen the tenure process by broadening the scientific input into the choice of tenure-track candidates, and by assembling a 12- to 16-member NIH-wide tenure committee to review all potential appointments to tenure and tenure-track positions. In addition, not only IRP scientists would be considered for these tenured posts; ERP researchers also would be actively recruited. These recommen-

dations formed the basis for the new Tenure Program at the NIH, which has already been approved by the board of scientific directors and the ICD directors.

Recommendation 4 endorses limiting training positions to 2 to 4 years. The EAC found that in order to keep a fresh IRP

"We would all agree that the best way to attract the very best trainees is to assure they have the best mentors."

—EAC cochair
Dr. Gail Cassell

scientist pool, trainees should be encouraged to seek positions outside NIH at the conclusion of their training terms. Marks acknowledged that

the IRP "is probably the largest training program of biomedical scientists in the world."

Recommendation 5 pertains to the need to provide ethnic diversity in intramural training programs. The EAC noted that IRP efforts in this area would do well to link better with such successful extramural programs as Minority Access to Research Careers and Minority Biomedical Research Support. Aggressive mentoring was also recommended as a method to lure scientists from underrepresented groups.

"We would all agree that the best way to attract the very best trainees is to assure they have the best mentors," said Cassell. According to the data the EAC used, 5 percent of IRP trainees are minorities and 36 percent are women. "But this is not necessarily enough," said Marks.

In recommendation 11, the EAC suggested that current classification of the IRP as an HHS administrative expense be discontinued. By considering intramural scientists this way, the EAC noted that irrational budgetary procedures that compromise quality ensue. In other words, cost-saving maneuvers such as an across-the-board reduction of GS-14's, which may be effective in other government agencies, would only wreak havoc at NIH, a federal institution in which most top scientists are already compensated beneath their private-industry counterparts.

Recommendation 6 affirms that the IRP should represent no more than the current rate of 11.3 percent of the total NIH budget. A yearly planning process, the guidelines for which should be outlined in writing, was also recommended for each ICD to determine the allocation of resources to both the IRP and ERP.

In recommendation 7, the EAC added its approval to a measure mentioned by Varmus early in his young tenure at NIH: that NIH serve as a model for the president's "reinventing government" proposal, which intends to cut red tape and streamline some federal

administrative procedures including procurement and staff travel.

Recommendation 8 addresses the IRP's partnerships with industry. EAC recommended that the processes for implementing and monitoring cooperative research and development agreements be more broadly and clearly communicated.

The final two recommendations involve NIH's Bethesda campus and physical facilities, specifically the Clinical Center. In short, the CC should gradually reduce from 450 to 250 its inpatient-bed capacity. "There is a need for renewal of the Clinical Center," the recommendation begins. In line with this overhaul should be an evaluation of current IRP projects to elucidate and phase out weaker ones, the EAC found. Funds from this weeding process could then be used to revive the CC. Under no circumstances should ERP funds be diverted to CC renovation, the report noted. If sufficient funds cannot be reallocated from downsizing efforts, then Congress should allocate the balance of necessary resources.

Recommendation 10 is related: As a result of the suggested purging of weak programs, more space and resources should become available to bring off-campus IRP projects back to the Bethesda fold. Marks estimated and Gottesman confirmed that roughly half of IRP research space exists off campus.

The next step for the report—beyond presentation at the ACD meeting—is review by HHS officials, namely Shalala and Lee. Varmus has already voiced his support for several of the recommendations and, in fact, has begun implementation of those within his authority. Official congressional response is also pending, but, the EAC cochairs, Varmus and Gottesman indicated that they anticipate favorable feedback.



Edward H. McManus (r), NEI deputy director since 1981, recently received the Meritorious Executive Award for sustained superior performance as an administrator of a nationally and internationally acclaimed program of research to prevent blindness and visual disability. An expert on the federal budgetary process and health research planning, he was noted specifically for his "crucial role in building the NEI's scientifically excellent and cost-effective research effort, which has sustained the institute's record of productivity against eye disease." NEI director Dr. Carl Kupfer looks on.

Interest Grows in Emerging Field of Glycobiology

The NIH Interinstitute Glycobiology Interest Group is an ongoing, interactive organization consisting of members from many institutes on the NIH campus, and also the FDA, academic institutions, and biotechnology companies in the Washington-Frederick-Baltimore area. The glycobiology group, formerly known as the Carbohydrate Interest Group, was formed about 6 years ago by Gil Ashwell and Vince Hascall who brought together researchers from many disciplines for meetings that are open to all interested persons. Current members of the organizing committee that coordinates activities of the group are Ashwell, Diana Blithe, Gerry Dienel, Rao Thotakura, and Masaki Yanagishita.

Glycobiology is emerging and maturing as a field of scientific endeavor. A few years ago, Ashwell summarized some 20 years of his work at a grand rounds seminar at NIH. He recalled that when early investigators first purified a protein with some carbohydrate attached to it, they were criticized because they couldn't separate the protein from the contaminant that was assumed to be unimportant. He noted that times have changed, and now it appears that some proteins (i.e., mucins) serve only as a backbone to hold the glycans. Furthermore, many recombinant glycoproteins that are synthesized without their appropriate glycan moieties are inactive.

The diverse field of glycobiology, which includes monosaccharides, complex carbohydrates, and various glycoconjugates (e.g., glycoproteins and glycolipids), their synthesis and degradation, structure and function, and clinical applications, is starting to bloom. New analytical technology has helped simplify the awesome task of elucidating the structures of complex carbohydrates. One speaker at a recent 3-day NIH-sponsored symposium entitled "Glycobiology-New Perspectives on Human Disease" alluded to the potential problems associated with determination of structures of complex carbohydrates when he said that his secondworst fear had come true when he found that carbohydrates were critical for sperm-egg fusion (his worst fear was that lipids would be involved).

Glycobiology is a field that has a broad impact on many scientific subspecialties, ranging from classical structure-function studies, to analysis of cell adhesion molecules, antitumor and antiparasitic agents, recombinant proteins and hormones, enzymology, trafficking of various proteins, tissue targeting, biological activity, biological half-life, and even patent law. Commercial and regulatory aspects of glycosylated recombinant proteins are growing and evolving rapidly, and national and international symposia are dedicated to the subject "Glycotechnology." The impact of carbohydrate-based therapeutic agents has helped to

drive both basic and applied research into many areas, and has created a new zone for regulatory oversight by the FDA. There are a number of new respected journals devoted to the subject (e.g., Glycobiology, Trends in Glycoscience and Glycotechnology, Glycosylation and Disease) adding to the established journals in the field (e.g., Carbohydrate Research, Glycoconjugate Journal).

Meetings of the Glycobiology Interest Group are generally held monthly on a Thursday afternoon (3:30-5) and are advertised in the "Yellow Sheet"; announcements are also mailed to members. Seminars are usually presented by two or three local members, with occasional outside speakers; a poster session is held once a year. A directory of members with their areas of expertise will be compiled in the fall. Topics have included basic and applied research, biotechnology and analytical methodology, and government regulatory issues and procedures. The group is a rich source for scientific expertise in many areas of glycobiology, and it serves as an advisory group and central resource for problemsolving and exchange of information on current research and new technology. Informal discussions before and after the meeting program have opened lines of communication between scientists in the various NIH institutes and nearby academic and industrial organizations. The membership welcomes "neo-glycobiologists", i.e., those individuals who discover that their favorite protein is glycosylated, and want to know more about the role or function of the carbohydrate portion of their molecule.

The initial and continuing success of the NIH Glycobiology Interest Group has led to formation of glycobiology interest groups in other localities. Joint meetings are held annually with local colleagues from the Georgetown and Johns Hopkins/Baltimore interest groups as a half or full-day symposium with refreshments, seminars, and posters. Last year's combined meeting in Annapolis ("Glycoday") attracted more than 120 researchers from the area. This year a full-day symposium ("Glycoday II") will be held in Annapolis on June 1. The program will feature eight speakers in four sessions as well as demonstrations of scientific instrumentation. Topics include roles of polysaccharides in antitumor activity and infection, the role of hyaluronan in forming and unforming the extracellular matrix, chromatographic analysis of carbohydrates, 3-D mapping of oligosaccharides, and enzymes for synthesis and cleavage of oligosaccharides and glycoconjugates. All are welcome to attend; there is no fee, but advance registration is requested so that coffee and lunch can be provided. For information and registration, contact Diana Blithe, 6-6437, fax 2-0574.—Gerry Dienel and Diana Blithe

GULF VETS (Continued from Page 1)

causes. "The panel was moved by the extent of suffering among Persian Gulf veterans," said panel chairman Dr. Gareth Green, professor of environmental health at Harvard School of Public Health. "There is a clear need for continuing and compassionate care for these veterans as well as concerted research efforts to understand the underlying causes of these illnesses." The group recommended a survey of Persian Gulf veterans to gather information on their personal and family health as well as the location and dates of their service.

Nearly 700,000 troops served in the Persian Gulf theater during the Desert Shield and Desert Storm operations in 1990 and 1991. Many were exposed to a variety of potentially toxic substances such as fumes and smoke from oil well fires, diesel fumes, toxic paints, pesticides, and depleted uranium, which was used in munitions and armor. In addition, some veterans believe they were exposed to chemical or biological weapons, although no confirmation of such exposures has been made.

These exposures have been linked to various combinations of symptoms including fatigue, skin rash, muscle and joint pain, headache, loss



Dr. Lee Riley makes a point during a panel question-and-answer session.

of memory, shortness of breath, and gastrointestinal and respiratory symptoms. However, no one disease or syndrome has been identified as the sole cause of these symptoms being experienced by Persian Gulf veterans.

The panel urged that collaborative government-supported programs be established to study symptomatic Persian Gulf veterans in an attempt to develop one or more case definitions for the unidentified illnesses. The panel emphasized that while no case definition currently exists, eligibility for VA medical care for Persian Gulf veterans should not be dependent on the existence of a case definition.

The panel attributed cases of leishmaniasis (a parasitic infection transmitted by sand flies) and post-traumatic stress disorder to service in the Persian Gulf theater. The latter disorder has been implicated in delayed development of psychological symptoms following combat in Vietnam and other wars. The panel encouraged research into the relationship of deploy-



Dr. Eula Bingham makes a point about the panel's statement while Dr. William Eschenbacher listens. Photos: Ernie Branson

ment and combat stress to delayed health problems such as those seen in Persian Gulf veterans.

"The Persian Gulf War was an experience of unprecedented stress for our military and their families," said panel chairman Green. "The known threat of chemical or biological warfare by the Iraqis had a tremendous psychological impact on our military personnel. We must learn more about the influencing effects of the central nervous system on immunological,

Nearly 700,000 troops served in the Persian Gulf theater during the Desert Shield and Desert Storm operations in 1990 and 1991.

cardiac, respiratory, and gastrointestinal function."

The panel made its recommendations at an NIH technology assessment workshop on "The Persian Gulf Experience and Health" following 2 days of presentations by medical, government, and military specialists, testimony from Persian Gulf veterans, and discussion by a public audience. The meeting was sponsored by the NIH Office of Medical Applications of Research, the Department of Veterans Affairs, the Department of Defense, DHHS, and the Environmental Protection Agency.



David Gorman served as the veterans' representative on the panel.

NIH LECTURE SET FOR JUNE 1 (Continued from Page 1)

gene, which could be transmitted by either the father or the mother, caused about 5 percent of breast cancers in these 1,500 families. The search has been on for 20 years, but as new technologies were developed, King, along with her collaborators, started closing in on the gene responsible for familial breast cancer. Two technologies, PCR (polymerase chain reaction) and DNA markers developed as part of the Human Genome Project, have revolutionized gene discovery methods. Using these new tools, King's group proceeded to check marker after marker on chromosome 17 of 23 NCI pedigrees. The 183rd marker on the long arm has shown clear linkage to the development of early onset breast cancer in some of the families.

Since then, the area containing the gene, called BRCA1, has been narrowed to a few hundred thousand base pairs of DNA, and several candidate genes in the region have been ruled out. Discovery of the BRCA1 gene will likely give researchers an understanding of the basis of inherited predisposition to breast cancer as well as for noninherited forms.

After earning a B.A. degree cum laude in mathematics from Carleton College in 1966, King received a Ph.D. degree in genetics from the University of California, Berkeley and went on to do postdoctoral studies at the University of California, San Francisco, in epidemiology. She is a member of the American Epidemiological Society, a 1993 fellow of the American Association for the Advancement of Science, and received the 1994 Clowes Award for Basic Research from the American Association for Cancer Research.

Pain Meeting Dedicated to Dubner

The 1994 scientific meeting of the American Academy of Orofacial Pain was dedicated to Dr. Ronald Dubner, chief of the NIDR

Neurobiology and Anesthesiology Branch, in honor of his "individual excellence and achievements in pain research." At the dedication recently in Chicago, Dubner was cited as one of the most highly recognized international names in the

dentistry.

pain.



tional names in the *Dr. Ronald Dubner* field of pain, and a leader in both medicine and

He has been chief of the Neurobiology and Anesthesiology Branch since 1973. He also directs the NIH/NIDR Pain Research Clinic. Coeditor of the journal *Pain* and past president of the American Pain Society, Dubner is currently focusing on molecular, neurochemical, and physiological changes in the peripheral and central nervous systems following tissue damage or nerve injury and the role these changes play in the mechanisms of persistent

SAVINGS BONDS KICK-OFF THEME COAXES, 'SECURE YOUR FUTURE TODAY' (Continued from Page 1)

buy them through payroll deduction. The payroll method enables workers to free up their "selective memory" for chores other than recalling to save money each month, she

suggested.

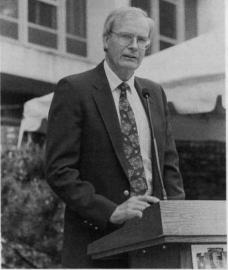
Bond sales are enjoying record high numbers, reported guest speaker Fred J. Mutz of the Department of Treasury's bond marketing office. "Last year was our best ever in sales, with more than \$17.3 billion sold," he said. "Our current holdings are the highest in bond history, at \$175 billion and growing every day."

Some 4,031 NIH'ers currently buy U.S. Savings Bonds, which is roughly 29 percent of the workforce. Treasury is hoping to increase by at least 10 percent the number of NIH enrollees, and by 20 percent the allotments devoted to bonds by current bond holders

employed at NIH.

"All the signs are there for another great year," said Mutz. "Interest rates are going up again. Bonds are as competitive an instrument as you'll find anywhere in the United States."

At a free raffle conducted by R&W following the remarks, several NIH'ers won prizes. First prize of a \$25 Geico emergency road kit went to Debbie Clark of Laurel, Md. Second prize, a \$15 R&W gift certificate, went to Karin Eddy, a Clinical Center employee from Sterling, Va. Third prize, a free roll of film and processing donated by R&W, went to Diane Foltin, an NIDDK worker from Germantown, Md. Five free video rentals at R&W went to Rockville's Diane Baxter, who works for NEI at Executive Plaza.



Jack Mahoney, NIH deputy director for management, explains to fellow NIH'ers that he has been a bond holder for the past 3 years.



A Good Day for Dianes: NIDDK's Diane Foltin (l) won free film processing at R&W in the bond drive raffle. Diane Baxter of NEI won five free video rentals from R&W.



Musicians from Richard Montgomery High School's jazz ensemble perform at the kickoff of NIH's 1994 U.S. Savings Bonds drive. Goals this year include a 10 percent increase in NIH contributors.

OMS Sponsors Skin Cancer Awareness Month

Summer is just around the corner. June is the kickoff for many summer outdoor activities and is also the month for the Skin Cancer

Awareness Program, sponsored by the Occupational Medical Service (OMS). This program highlights the relationship between excessive exposure to sunlight and the development of skin cancer.



In June, OMS provides information regarding skin cancer: warning signs, associated risk factors and advice to reduce your risk of developing skin cancer. This information is available for NIH employees at any of the OMS health units: Bldg. 10, Rm. 6C03 (main unit); Bldg. 13, Rm. G904; Westwood Bldg., Rm. 11; Executive Plaza North, Rm. 103; and Federal Bldg., Rm. 10B08.

Although OMS does not endorse any brandname sunscreen product, employees may also obtain samples of various brands of sunscreen products from OMS.

OMS also offers two videotapes about skin cancer showing the appearance of the disease, and ways to treat and prevent it. The tapes will be shown in the main OMS unit in Bldg. 10 every Wednesday in June at 9, 10, and 11 a.m., also 1, 2 and 3 p.m.

If employees have more questions about skin cancer, Inga Tokar, head nurse in CC dermatology, will be available to answer them, 6-2681. □

Nonsmoking Males Sought

The Uniformed Services University of the Health Sciences' department of medical and clinical psychology seeks healthy, nonsmoking males, ages 18-45, to participate in a task performance and physiologic functioning study. Participants will be paid \$30 for a session, scheduled from 10 to 11:45 a.m., during which blood samples will be taken. If interested, call (301) 295-3278 and ask for Laura.

Molecular Biology, Biochemistry Interest Group Forming at NIH

An interest group to cover the diverse areas of molecular biology and biochemistry is now forming. The purpose of the group is to enhance communication between intramural investigators at all levels, especially at the postdoctoral level, and to provide a forum for distinguished speakers from outside NIH. Similar to other interest groups on campus, this group may also serve as an umbrella organization for existing groups focused on specific topics in biochemistry and molecular biology.

To join this group, send by fax or mail: your name, affiliation, NIH address, phone, fax, and areas of research interest to organizers Gary Felsenfeld and Carl Wu. This information should be sent c/o Cori DeGraff, Bldg. 5, Rm. 324, fax 6-0201.

May 24, 1994

Consensus Conference on Optimal Calcium Intake

Consensus Development Conference on A Optimal Calcium Intake, sponsored by NIAMS and OMAR, will be held in Masur Auditorium, Bldg. 10 on June 6-8. The conference will consider a number of issues related to calcium intake and disease preven-

Over the past decade, both the general public and scientists have been exposed to a great deal of literature about the value of ensuring an adequate calcium intake throughout life. A number of articles in the medical literature have addressed the role of calcium intake in the prevention of disorders including osteoporosis and other bone diseases, oral bone loss, colon cancer, and high blood pressure (hypertension) including preeclampsia, a hypertensive disorder of pregnancy. Results of one recent study indicated that high calcium intake can decrease the risk of kidney stonesa somewhat surprising conclusion, since high dietary calcium intake had been strongly suspected to increase the risk of kidney stones.

Osteoporosis affects more than 25 million people in the United States and is the major underlying cause of bone fractures in postmenopausal women and the elderly. Two important factors that influence the occurrence of osteoporosis are the peak bone density (or bone mass) attained in early life (by approximately age 30) and the rate at which bone is lost in later life. Calcium intake is thought to help build denser, stronger bones in early life and to slow the rate of bone loss with age.

Results from several studies reported in the recent medical literature suggest that increased calcium intake is beneficial for bone health in people in different age groups, from children to the very elderly. The results of this research and studies on other diseases indicate that the optimal level of calcium intake may be greater than the amount consumed by a majority of the American people. This conference will discuss and thoroughly evaluate the information available on calcium intake and disease prevention.

Optimal calcium intake may vary according to the disease being considered; it may also vary according to a person's age, sex, and ethnicity. Optimal calcium intake may be achieved by diet, calcium supplements, or calcium-fortified foods, or by various combinations of these. In addition, various cofactors play a role in achieving optimal calcium intake. These include both substances such as vitamin D, which is needed for optimal calcium absorption, and factors that can negatively influence calcium availability such as certain medications or foods.

The purpose of this conference is to bring together the available data on optimal calcium intake and health status. Conference participants will include specialists in many different fields including osteoporosis and bone health, oncology, hypertension, oral health, human nutrition, and food fortification and labeling, as well as representatives from the public.

After 11/2 days of presentations and audience discussion, an independent, nonfederal consensus panel will weigh the scientific evidence and write a draft statement in response to such key questions as: What is the optimal amount of calcium intake? What are the important cofactors for achieving optimal calcium intake? What are the risk factors associated with different levels of calcium

On the final day of the meeting, the consensus panel chairman will read the draft statement to the conference audience and invite comments and questions.

This conference is cosponsored by NICHD, NIDDK, NHLBI, NIDR, NIA, NCI and the Office of Research on Women's Health. Sessions will run from 8:30 to 5 p.m. on Monday, 8:30 a.m. to 12:15 p.m. on Tuesday, and 9 to 11 a.m. on Wednesday. A news conference at which the final consensus statement will be presented will be held on Wednesday, June 8 at 1 p.m. To preregister, call Technical Resources, Inc.'s conference management group, (301) 770-3153.



Dr. Vincent Dole (l) of Rockefeller University last month presented NIAAA director Dr. Enoch Gordis with the American Methadone Treatment Association's "Friend of the Field" award. Gordis was cited for "profound and positive effects" in influencing alcoholism treatment programs to admit methadone patients.



Thirtieth Thanks: Following DCRT's recent 30th anniversary symposium, "Computing: From DNA to Protein Structure," division director Dr. David Rodbard (1) presented certificates of appreciation to principal speakers Dr. Russell Doolittle (c) from the University of California, San Diego and Dr. Martin Karplus of Harvard University. Doolittle's talk highlighted sequence analysis and molecular evolution. Karplus spoke on the dynamics of protein folding.

Poster Deadline Set, May 27

Friday, May 27 marks the final day to submit applications to display posters at the 1994 NIH Research Festival. The deadline is 5 p.m. Entries are reviewed by the scientific directors and the festival organizing committee, chaired by Dr. Richard Adamson, director of the Division of Cancer Etiology, NCI.

The festival kicks off with NICHD's alumni symposium on the morning of Monday, Sept. 19, followed that afternoon by the poster session. This year there will be only one session, during which presenters will be required to attend their displays for an assigned 1-hour time period.

Scheduled for Tuesday, Sept. 20 and Wednesday, Sept. 21 are several symposia and many more workshops featuring NIH's intramural research.

For more information about the Research Festival, call Gregory Roa, Visitor Information Center, 6-1776. 🗖



The Clinical Center's spiritual ministry department offers a unique experience for theology students through its Clinical Pastoral Education Program. Students and department members work with multidisciplinar; teams to provide care and support for patients and their families. "They learn to help people use their spiritual and religious beliefs to help them deal with chronic health problems," said Chaplain Karen Morrow. Students from area seminaries take part in either the 10- or 16- week program, learning how to work with patients in a hospital setting. Current students of the program are (front, from l) H.G. "Skip" McComas and Edco Bailey with SMD supervisors Morrow and Dr. Ray Fitzgerald. In back are students Marjorie Ackerman, Jack O'Brien III, Patty Toler and Gerald Stone.

Vaccine Strategy Promising in Model of Schistosomiasis By Greg Folkers

A recently discovered immune system protein given in a vaccine might help prevent the organ damage caused by schistosomiasis, a worm infection prevalent in the developing world, according to a research report from NIAID.

Among parasitic diseases, only malaria causes more disability and deaths than schistosomiasis. Schistosomiasis afflicts more than 200 million people worldwide who swim or wade in infested waters. The disease occurs in 74 tropical and subtropical countries, and causes some 800,000 deaths each year.

Free-swimming larvae of the parasite penetrate the skin, migrate toward the liver and mature into adult worms. The serious symptoms of schistosomiasis occur when female worms deposit eggs in a person's tissues. Immune system cells wall off the eggs into cysts known as granulomas, clogging capillaries, blocking blood flow and often resulting in scar tissue (fibrosis) in organs. Complications of long-term infection may include liver cirrhosis, bladder tumors, kidney failure and death.

In experiments reported in the May 1 Journal of Experimental Medicine, NIAID investigators demonstrated that IL-12, a signalling molecule secreted by certain immune system cells, repressed granuloma formation in mice previously injected with eggs from Schistosoma mansoni. S. mansoni is one of three major species of worms carried by fresh-water snails that cause schistosomiasis in man, and it causes a similar disease in mice.

"In egg-injected mice, we found that IL-12 significantly reduced the size of granulomas," says lead author Dr. Thomas A. Wynn of the immunology and cell biology section in NIAID's Laboratory of Parasitic Diseases. "Smaller granulomas might mean less fibrosis and, consequently, less serious disease in people with schistosomiasis."

These results suggest that an IL-12 vaccine might also prevent the formation of schistosomal granulomas. To test this hypothesis, Wynn and his colleagues injected mice with a combination of eggs and IL-12, and 4 to 12 weeks later reinjected eggs alone.

"In the inoculated animals, only small granulomas formed after the second exposure to eggs, and these accumulations of cells were almost completely gone after 14 days," says Wynn. "Our data suggest that it one day may be possible to use certain egg molecules plus interleukin-12 in a vaccine to prevent granulomatous disease in people with schistosomiasis. This approach might help prevent disease in individuals constantly reinfected with schistosomes."

The NIAID researchers are now determining whether the combined egg/IL-12 vaccination can provide lasting protection for mice against fibrosis and other problems associated with granuloma formation. The scientists also are examining whether the approach can protect mice naturally infected with *S. mansoni*, because granuloma formation from natural

infections may be different than that following egg injection.

The NIAID report adds to a growing understanding of how IL-12 and other molecules regulate the immune response to parasitic infections. The investigators found that IL-12 probably prevents granuloma formation by triggering the production of a second immune system protein, interferongamma

"Interferon-gamma is central to cell-mediated immunity, in which cells such as macrophages kill invading organisms directly," explains Dr. Alan Sher, chief of the immunology and cell biology section. "Our studies suggest that interferon-gamma also down-regulates granuloma formation. Through its effects on the production of interferon-gamma, IL-12 has enormous potential as a therapy or vaccine component to manipulate the immune response."

Once in the body, schistosomal worms can live in the veins of the bladder and intestines for 5 to 30 years, and each female can produce 300 to 3,500 eggs a day. Although the three species of schistosomes that cause serious disease are not native to the continental United States, schistosomiasis is often seen in people from countries where the disease is endemic who now live in the U.S., and in travelers who increasingly contract the disease as "adventure" tourism increases. For those who are infected, safe, effective and low-cost oral drugs are available to treat schistosomiasis: praziquantel and metrifonate can be used against all three

species, and oxamniquine is effective against *S. mansoni*. However, "There is now evidence that the parasite can develop resistance to these drugs," says Sher. "Therefore, new approaches for preventing and treating schistosomiasis are needed."

Coauthors of Wynn and Sher include Drs. Isam Eltoum, Isabelle P. Oswald and Allen W. Cheever, all of the Laboratory of Parasitic Diseases. □



Members of the NIH R&W Theatre Group recently presented a check for \$4,000 to the Patient Emergency Fund at the Clinical Center. On hand for the gift were (rear, from l) Randy Schools, R&W general manager; Paul Marshall, John Holmes, Brenda Merson and Alice Smyth of the theatre group. In front are (from l) Patty DiToto and Judith Williams, accepting on behalf of the CC social work department; Elaine Hughes, Mary Graham and John Prue of the theatre group. The gift represents proceeds from productions put on by the troupe.

Cowdry Named Acting NIMH Director

Dr. Rex W. Cowdry has been chosen to lead the National Institute of Mental Health. His appointment as acting director follows the resignation of Dr. Frederick K. Goodwin in April.

Cowdry previously served as deputy director for research at St. Elizabeths Hospital and



Dr. Rex Cowdry

head of the NIMH Neuropsychiatric Research Hospital, Division of Intramural Research. He also was acting deputy director of NIMH from 1986 to 1988 and from February to April 1994.

He is noted for his clinical research advances in mood and personality disorders, particularly rapid cycling bipolar disorder and borderline personality disorder.

"Dr. Cowdry's contributions have led to a better understanding of the pathophysiology of these disorders and the efficacy of pharmacological treatments," said NIH director Dr. Harold Varmus. "I look forward to working with him on the many challenging research and leadership issues that we face."

Cowdry has held a variety of positions of increasing responsibility within NIMH since 1976, including service as NIMH clinical director and as chairman of the medical board of the Clinical Center.

Since 1983, he has also been an associate clinical professor of psychiatry at Georgetown University School of Medicine. Prior to joining the institute, Cowdry spent 3 years teaching biostatistics and psychopharmacology at Harvard Medical School.

He twice received the ADAMHA Administrator's Award for Meritorious Achievement (1985 and 1988) and was an American Psychiatric Association fellow in 1990. He was awarded the Exemplary Psychiatrist Award by the National Alliance for the Mentally Ill in 1992.

He received his M.D. and M.P.H. degrees from Harvard in 1973, and completed his residency training at the Massachusetts Mental Health Center in Boston. He is board certified in psychiatry and neurology, and is a member of the American Psychiatric Association.

'ADVENTURE IN SCIENCE' COMPLETES FIRST YEAR AT NIH WITH HIGHEST HONORS: 'INSTRUCTIONAL, YET COOL' (Continued from Page 1)



Dr. Donna Messersmith explains "Inside a Frog' to an AIS student. She is a scientist in NIDR's Neurobiology and Anesthesiology Branch.



NIH's Alan Barnett gives instruction during a course on polarized light.



NIA's Dan Brady teaches a course titled simply "Chickens."



Dr. Randall Ribaudo of NCI's Division of Cancer Treatment volunteers his time to teach an AIS course on electric motors.

that kids are familiar with and make them into hands-on science activities...take chickens for instance."

Brady is referring to the class he offered, titled simply "Chickens." In this class, he used his anatomy background to dissect a chicken to demonstrate the similarity between how chickens and humans use their muscles and bones to move around.

"I'd encourage other scientists to work with students," Brady stated. "It's so rewarding and it gives you a chance to move out of your area of expertise and try a new area of science."

Dr. Donna Messersmith, NIDR research scientist, exemplifies this point. Her background is not in anatomy, but that did not stop her from leading some hands-on activities with squids and frogs. At a November neuroscience meeting, she scanned the educational abstracts and found a lesson plan on squids. She thought it sounded like something fun to do for both her and the students.

"So squids it was," Messersmith concluded. "The kids were so excited discovering the different squid parts...especially the ink gland."

The squid's giant nerve cells have been remarkably useful in teaching about the function of our own nerves. "It was a great experiment," Messersmith said. "It was instructional, yet cool."

Dr. Ed Max, the scientist who spearheaded the effort to bring the AIS program to NIH, is very pleased with the level of interest he has received from the NIH scientific community.

"I'm very happy with the way the program went here," he said. "Everyone—teachers and students—seemed to be having a good time."

Max hopes to get enough volunteers at the NIH site to be able to provide four different sessions on each Saturday that the program is offered. He said that no previous teaching experience is required and that the main qualification a scientist needs is enthusiasm for science. He also said the level of commitment a scientist wants to make toward the program is entirely up to the scientist.

"I know how busy scientists are," he stated.
"If they can even commit to teach just one class, that's a big help."

He also said that the program is not one that focuses exclusively on the biological sciences.

Symposium on Cell Cycle Regulation Scheduled

There will be a cell cycle regulation minisymposium at Hood College in Frederick, Md., on July 15. Speakers include Ed Harlow, Tamara Inoc, Wen-Hwa Lee, Kim Nasmyth, Mark Solomon and Helen Piwnica-Worms. Sponsors are scientists at NCI's Frederick Cancer Research and Development Center. Deadline for registration is June 24. For information contact Patti Hall at the Foundation for Advanced Cancer Studies, Inc., (410) 658-2882, fax (410) 658-3799.



Dr. Louis Staudt of NCI demonstrates experimental technique in course on genes and DNA.

Photos: Ed Max



NHLBI's Dr. Silvia Fojo (l), chief of the molecular biology section in the Molecular Disease Branch, teaches a class on "Genes and DNA."

Last year's program had an NIH physicist teach about jet propulsion and another scientist who taught a chemistry class.

Anyone interested in working with this program, or in getting tips on teaching elementary students, should attend an introductory meeting on June 9 at 1 p.m. in Bldg. 31, Conf. Rm. 7. A short video from the American Chemical Society on how scientists might approach teaching elementary school students will also be shown and discussed. For more information about the upcoming meeting or about the Adventure in Science Program in general, contact Max, 2-0484.

Takoma Mandoleers In Concert

The Clinical Center's rehabilitation medicine department will present the Takoma Mandoleers in concert on Sunday, June 5 at 3 p.m. The concert will be held in the 14th floor assembly hall, Bldg. 10. There is no charge for admission and the public is welcome.

The performance will include mandolin orchestral favorites such as classical, popular and ragtime and music of the early 20th century. For more information, call Bob Hammond, 4-7515 (days) or (301) 990-6718 (evenings).



TRAINING TIPS

The NIH Training Center, Division of Personnel Management, offers the following handson personal computing courses:

Course Titles Starting Dates

Personal Computing Training, 6-6211

Welcome to Macintosh	6/21, 7/20
Intro to MS Word (Mac)	6/6
Advanced MS Word (Mac)	6/20
Excel - 4.0 Level 1	7/11
Excel - 4.0 Level 2	6/13
Intro to FilemakerPro	Upon request
Intermediate FilemakerPro	Upon request
Advanced Pagemaker	7/13
Intro to DOS 6.0	6/16, 7/15
Advanced Windows 3.1	6/24
WordPerfect for Windows	6/7, 7/13
Freelance Graphics for Windows	6/21
Harvard Graphics for Windows	7/25
Pagemaker 4.0 for Windows	6/13
Excel 4.0 for Windows	7/12
Intro to Word Perfect 6.0	7/6
WordPerfect 6.0-Adv. Topics	7/25
Intro to Harvard Graphics, Rel. 3.0	7/19
Intermed Harvard Graphics, Rel. 3.0	6/24
Intro to dBASE IV	6/1
Intro to Lotus 1-2-3, Rel. 2.4	7/18
Disaster Recovery & Data	
Security for the PC	7/11
Microsoft Mail (Windows)	6/15
Microsoft Mail (Macintosh)	Upon request
IMPACT System for Admin Staff	6/2
IMPACT System for Professional Staff	6/2
IMPACT System: A-TRAIN (TMS)	6/8, 7/14
Intro to CRISP	5/27
Advanced CRISP	5/27

Additional courses are available by request. For more information, call the Training Center, 6-6211, or consult the NIH Training Center Catalog.

Personal Computer training is available through User Resources Center (URC) self study courses. There is no cost to NIH employees for these hands-on sessions. The URC hours are:

Mon. - Thurs 8:30 a.m. - 7 p.m. Friday 8:30 a.m. - 4:30 p.m Saturday 9:00 a.m. - 1:00 p.m.

R&W Annual Meeting, June 7

Mark your calendar for Tuesday, June 7 at 12 noon to attend the R&W Annual Meeting, to be held in Bldg. 31, Conf. Rm. 9 (sixth floor, C wing). In addition to door prize drawings and free refreshments, you'll learn about what R&W has done in the past year and what it has planned for the future. Meet the board of directors and the individuals who will be honored for their service to R&W. For more information, call the R&W office, 6-6061. □

DCT Training Classes

Mathematical Modeling and Analysis	
with HiQ for Mac and Unix	5/27
Network Services	6/2
System Modeling for Application Development	6/8

Dates

NIDR's Löe Honored with Scandinavian Health Prize

Dr. Harald Löe, who will soon retire as director of the National Institute of Dental Research, was recently honored with the Scandinavian Public Health Award for 1994 by the Scandinavian School of Public Health in Göteborg, Sweden. He is the first dentist to

receive the award since its inception a decade ago. The award citation reads, "Through early and persistent work on the causes and distribution of oral diseases, he has effectively contributed to changing the direction of oral health care from



Dr. Harald Löe

reparative to preventive care in the Nordic countries and internationally."

The prize consists of a check for 50,000 Swedish kroner, or approximately \$6,000. At the award ceremony held recently in Göteborg, Löe spoke on "The Changing Face of Dentistry."

A native of Norway, Löe is an internationally renowned researcher in the field of periodontal medicine. He was the first to prove that bacteria in dental plaque cause gingivitis, the first stage of gum disease. He also developed some of the most widely used methods for measuring the presence, severity, and progres-

sion of periodontal disease in clinical trials and in epidemiological research. Further studies led to the practice of using antibacterial agents to prevent periodontal disease.

Among the awards he has received most recently are the Meritorious Presidential Executive Rank Award, the Charles A. Schlack Award from the Association of Military Surgeons, and the Harvard Dental Medal.

New Interest Group Forms

A nucleic acids biochemistry interest group, focusing on structure and mechanism, has been started. Its goal is to bring together scientists of all levels interested in various aspects of nucleic acids biochemistry, especially questions regarding structure, enzymology and mechanism, to learn what others in closely related fields are working on, to make suggestions, to network, etc.

Meetings are monthly, where a short talk is presented in an informal atmosphere with time available for discussion and social interaction. Previous talks were, "The Use of Phosphorothiolate Oligonucleotides in Lambda Site-specific Recombination," and "A Kinetic Model Describing the Homology Search by RecA Protein." Anyone interested may join the group on Wednesday, May 25 at 4 p.m. for a seminar on "Analysis of the Rep Proteins of Adeno-Associated Virus Type 2: Implications for Targeted DNA Integration." Call Janet Yancey-Wrona, 6-2038, or Alex

Burgin, 6-6934 for more information.

NCI EEO Group Sets Goals

The NCI Equal Employment Opportunity (EEO) advisory group met recently with Dr. Samuel Broder, director of NCI. He expressed his commitment to EEO, declaring that EEO offenses are strikes against the institute.

He suggested that the EEO advisory group invite the directors of the Black, Hispanic, Appalachian, and Science Enrichment Initiatives to meet and find ways to bring the information and resources from several NCI-sponsored programs to their respective audiences. The goal is to take full advantage of the programs in place within the Office of Cancer Communications, the Cancer Information Service Outreach offices, the special actions committees, and the cancer centers around the country.

NCI staff willing to help the EEO advisory group improve the flow of science and health information to minorities may call 6-6266 to serve on various subcommittees. One need not be a member of the advisory group to serve on a subcommittee.



Members of the NCI EEO advisory group include (seated, from l) Dr. George Johnson, Carol Smith, Dr. Sandra Zink (chairperson 1993), Dr. Samuel Broder, Dr. Sudhir Srivastava (vice chairperson 1993), Maxine Richardson, Linda Morris-Brown (chairperson 1994), Johnny Lindsay (secretary 1993, 1994). Standing are (from l) Dr. Grace Shen, Pam McColla, Elva Ruiz, Sydelle Zinn, Julia Redmond, Betsy Duane, Veronica Chollette, Nancy Simpson, Dr. Stringer Sue Yang, Jan Maltbie, Mary Cushing, Sheryl Luck, Jeff Hughes, Mirium Hursey, Earl C. Melvin (vice chairperson 1994), Laura Lee, Kevin Washington, Linda Littlejohn, Traci Melvin (assistant secretary 1994).

May 24, 1994

The Record

NIH Mini-Med School: Where People and Science Meet

By Robin Macker

e moves through the crowd a few minutes before seven. He flashes a series of grins as he grasps his two slide carousels, one red and one black, in front of him as he makes his way to his May 5 engagement with almost 300 members of the general public who have been attending the weekly lectures of the NIH Mini-Med School

His casual attire resembles that of many other scientists who roam the halls and laboratories of NIH. But this scientist is different. This scientist, who is about to present a 2-hour lecture on cancer, happens to be NIH director Dr. Harold Varmus.

He walks into Lipsett Amphitheater, hands his slide carousels to the projectionist and makes his way toward the front of the



NIH director Dr. Harold Varmus sizes up the Mini-Med School student body at a recent lecture on cancer he gave in Lipsett Amphitheater.

standing-room-only crowd where he pins on his gray name tag with the medical cartoon on it. Leaning comfortably against a podium, Varmus smiles and listens as Mini-Med School coordinator Dr. Bruce Fuchs quickly reviews the previous weeks' discussion and introduces this evening's lecturer. Within moments both the Mini-Med students and Varmus become comfortable with one another and a nonstop lecture sprinkled with questions ensues. Varmus takes on a role he seems very comfortable with-that of a teacher who loves his subject area.

At about 9:10, the lecture and question-andanswer period come to an end and the crowd of people moves with the Nobel prize winner to the area outside the amphitheater. For almost a full hour he converses with the enthusiastic gathering that just can't seem to get enough of him.

"He had a complicated topic to cover. He prepared us for where we would be going with it, but the amazing thing was... he made sure we were with him every step of the way," said one of the regular 275 Mini-Med School students after the lecture. "I really enjoyed his talk.'

Varmus is one of 12 noted scientists who have volunteered to teach in the Office of



Science Education Policy's (OSEP) 9-week Mini-Med School program. The school is a free evening lecture series that puts the public in direct contact with NIH scientists who teach them the basics of biomedicine and research, while introducing them to the fun and excitement of real science.

'We were delighted that Dr. Varmus agreed to teach in the Mini-Med School," said OSEP Director Bonnie Kalberer. "We all know that he is committed to science education and it's exciting to have him lead by example.'

Other top scientists on the faculty of the Mini-Med School Program include: Dr. Anthony Fauci, NIAID director; Dr. Kenneth Olden, NIEHS director; Dr. Francis Collins, NCHGR director; Dr. Joseph Jacobs, Office of Alternative Medicine director; Dr. Paula Gregory, NCHGR; Dr. Burton Litman, NIAAA; Dr. Stephen Straus, NIAID; Dr. Bruce Fuchs, OD; Dr. Michael Brownstein, NIMH; Dr. David Pickar, NIMH; and Dr. Huber Warner, NIA.

"The Mini-Med School Program was developed to help the public understand more about science and to dispel the rumor that adults aren't interested in science," Fuchs said. Working scientists often buy into that myth also-that the general public isn't interested in what they are doing. It's fun to see that myth overturned week after week as several hundred adults show up to learn more about biomedicine. The public is interested in science and it's up to scientists to provide the forums needed for us to get together."



Varmus chats with Mini-Med School coordinator Dr. Bruce Fuchs, who has enrolled nearly 300 people in the free science education program.

NAS Elects Three NIH'ers

Three NIH scientists are among the 60 new members and 15 foreign associates elected recently to the National Academy of Sciences in recognition of their distinguished and continuing achievements in original research. Election to the academy is considered one of the highest honors that can be accorded a U.S. scientist or engineer.

The honorees from this campus are: Dr. Sankar Adhya, chief of the developmental

genetics section in NCI's Laboratory of Molecular Biology; Dr. Matilda White Riley, senior social scientist at NIA: and Dr. Kyoshi Mizuuchi, visiting scientist and chief of the section on genetic mechanisms in the Laboratory of



Dr. Sankar Adhya

Molecular Biology, NIDDK.



Dr. Matilda W. Riley

The recent election brings to 1,710 the total number of current active members.

NAS is a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare. It was established in

1863 by a congressional act of incorporation, signed by Abraham Lincoln, that calls upon the academy to act as an official adviser to the federal government, upon request, in any matter of science or technology.

Seven NIH'ers Elected to ASCI

Seven NIH intramural scientists were among 80 new members elected to the American Society of Clinical Investigation earlier this

The inductees are Drs.: Genoveffa Franchini, acting head, section on animal models and retroviral vaccines in NCI's Division of Cancer Etiology; Joseph A. Kovacs, head of the AIDS section in the Clinical Center's critical care medicine department; H. Clifford Lane, NIAID clinical director; Charles Natanson, head of anesthesiology in the CC critical care medicine department; John J. O'Shea, acting head, leukocyte cell biology section, Laboratory of Experimental Immunology, NCI; George N. Pavlakis, head of the human retrovirus section in NCI's Molecular Mechanisms of Carcinogenesis Laboratory; and Griffin Platt Rodgers, chief of the molecular hematology unit of NIDDK's Laboratory of Chemical Biology.

U.S. GOVERNMENT PRINTING OFFICE 1994-281-825/90018