

"Still
The Second
Best Thing
About Payday"

The NIH Record

NIAID Jumps Into REGO with Both Feet

By Rich McManus

(This is the third in a summer-long series of looks at how NIH has implemented the National Performance Review's challenge to reinvent government.)

If there is any component of NIH that is leaping into reinvention more enthusiastically than NIAID, let them come forward now and stake their claim. No, they didn't exactly invent reinvention, but you'd never know it to look at their REGO projects.

Overseeing much of the extramural reinvention at the institute is Dr. John McGowan, director of the Division of Extramural Activities. The chief weapon in the battle for efficiency—and for getting grants more quickly into the hands of those who know best what to do with the resources—is information. Initially distributed via newsletter, and now sent via computer, the *NIAID Council News* is the proverbial open book: it tells potential grantees how much money the institute has, where it would like to spend it, and who is in charge of spending decisions. The online site literally takes readers by the hand and guides them—through simple graphics and clear text—to more information than the institute has ever publicly divulged in a timely way.

"We asked ourselves how we could communicate more effectively with the outside world in order to build trust, and to get timely, more accurate information out there," said McGowan. "Dr. Fauci wanted us to be more open about what money and opportunities are available in specific areas. It's kind of like truth-in-lending. Our openness should lead to more trust and honesty, more community involvement."

So within the NIAID home page on the World Wide Web, McGowan's group created a site of resource information for the extramural community based on the Council Newsletter. Crafted largely by Maya Hadar with technical assistance from Alex Rosenthal and coordination with the Office of Communication, the site was

(See NIAID REINVENTION, Page 4)

NCHGR Partners with Area Teachers, Students

By Tammy Powledge

If there was a definite cure, I would do it."

"Who makes the decision about what's a disability and what's a trait?"

"It's going to be incredibly messy."

"We need to fix the gene for discrimination."

So spoke some of scores of high school students who gathered recently in Lipsett Amphitheater to wrestle with ethical and social issues surrounding genetic testing. The wrap-up session capped a year in which biology classes from a handful of area high schools immersed themselves in the science and technology of DNA sequencing, the process of determining the relative order of chemical subunits in a piece of DNA. Sequencing the DNA in a typical human cell is the ultimate goal of the worldwide Human Genome Project and a prelude to discovering how DNA functions to produce health and disease.

The DNA Sequencing Partnership for high schools was organized and sponsored by the National Center for Human Genome Research, and students were mentored by NCHGR scientists. The students summed up their work in a series of poster presentations displayed at the Clinical Center. The posters focused on their sequencing projects, the technologies for doing sequencing, DNA synthesis, and ethical issues growing out of the

(See GENOME PROJECT, Page 2)



More than 1,000 employees and visitors turned out for the recent Health Fair '96, which was kicked off by a humorous stress-reduction exercise conducted by Dr. Steve Allen, Jr. (above), who had a crowd in Masur Auditorium laughing as he juggled scarves and balls. The fair was organized by the worksite health promotion action committee and offered authoritative health tips to all who attended. See story on p. 3.



In a scene from The Cutting Edge, a Bethesda Academy of Performing Arts production that premiered at the wrap-up, a DNA repairman makes a housecall to fix some malfunctioning genes. Cast members are (from l) Steve Wannal, Dan Schachner, and Tricia McCauley.

GENOME PROJECT (Continued from Page 1)

Human Genome Project.

One of two posters from the 21st century biology class at Sidwell Friends School in Washington had already debuted at a recent scientific meeting; it described, with photos, drawings, and words, how the students used the Sanger method of DNA sequencing, and technologies like Southern blotting, gel electrophoresis, and color staining of DNA. Sidwell students, supervised by NCHGR scientist Jennifer Puck, also designed and built a working fluorescence microscope. They also sequenced a portion of human chromosome 7, a chromosome being mapped and sequenced as part of the Human Genome Project in the lab of NCHGR's Eric Green.

Senior life sciences and biotechnology laboratory research students at Thomas Jefferson High School for Science and Technology in Fairfax, Va., supervised by NCHGR's Jane Peterson, also depicted their sequencing project on a poster. It featured a graphic of a DNA sequencing flow chart plus a model constructed from colored beads to illustrate the piece of DNA they sequenced. In a poster with the traditional structure of a scientific paper, the molecular biology class at Walter Johnson High School in Bethesda, supervised by NCHGR's Jeff Schloss, described several successes with DNA synthesis.

Posters from the advanced placement biology class at St. Paul's School for Boys in Baltimore, under the supervision of NCHGR's Ginny Szabo, explored ethical issues growing out of genetic research such as who should have access to genetic information and whether it would be beneficial to know about a predisposition to alcoholism. Students at the Charles E. Smith Jewish Day School of Rockville, mentored by Gary Swergold of the Food and Drug Administration, described three genetic diseases common among Ashkenazi Jews: Gaucher disease, familial Mediterranean fever, and Tay-Sachs.

This was the first year for the DNA Sequencing Partnership, which was modeled on an innovative outreach program developed at the University of Washington in Seattle, according to Paula Gregory of NCHGR's Genetics Education Office, who worked with six



Area high school students present results from their DNA sequencing projects as part of NCHGR's recent DNA Sequencing Partnership wrap-up.

high schools to bring high-tech research equipment and genetic technologies into the classroom.

"The partnership was part of the larger effort by NCHGR to increase public understanding of human genetics and the Human Genome Project in particular," she said. "Programs like these, which educate young people about genetic technologies like sequencing, will be an increasingly important part of science education."

The wrap-up opened with the premiere of *The Cutting Edge*, a short play about high school students considering whether to undergo genetic testing. The play, designed to stimulate discussion of the science and ethical issues of genetic research, is a production of the Bethesda Academy of Performing Arts. It is scheduled for future performances at schools and at a meeting of the National Association of Biology Teachers.

Following group discussions of some issues raised by the play, the students turned from fictional characters to the real-life drama of genetic disease. They heard from Suzie Richards, who has osteogenesis imperfecta (also known as brittle-bone disease), and Jim and Judy Daniels. Mrs. Daniels is only mildly affected by neurofibromatosis, but one of her daughters is more severely affected. The disease also predisposes to cancer, which took her son's life at the age of 18 and also afflicted a grandchild.

Much of the morning's discussions centered on society's negative attitudes

toward people with disabilities, but Richards offered an optimistic assessment. "Believe me, it's a lot better now than it was when I was a kid," she declared. Even as a child, the outspoken Richards recalled, "I didn't have a lot of people picking on me—and when they did, I hit them with my crutches!" □

Bottle-Feeding Moms Needed

NIMH needs healthy mothers who are exclusively bottle-feeding 5-week- to 16-week-old infants. Participants must not be using birth control pills or other medications. Volunteers will be paid. Call Yung-Mei Leong for more information, 6-3421. □

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Health Fair '96 a Success

More than 1,000 employees and visitors attended Health Fair '96, held recently in the Clinical Center, and their response was largely positive. The opportunity to interact with experts from a variety of disciplines was the fair's most popular aspect. Authorities were available to answer questions and conduct screenings and risk assessments. "The great thing about the fair was that it offered something for everyone," said Susanne Strickland, fair chairperson and director of worksite health promotion. "No matter what your needs, interests, or stage in life, there was something of interest."

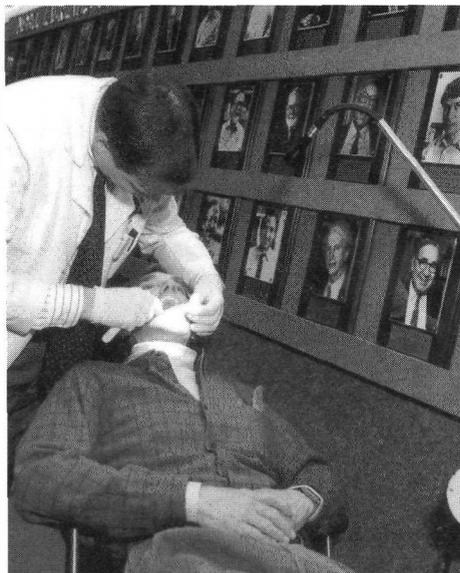
"The ICDs were extremely supportive and wonderful to work with," added Beth Anderson, who helped Strickland plan the fair. "Their enthusiasm and creativity is what made the fair a success."

Since stress is a big concern among NIH employees, fair planners invited Dr. Steve Allen, Jr. to open the event with a humorous message on coping with



Employees, including Marilyn Berman (c), toss scarves during a stress-reduction exercise conducted by keynote speaker Dr. Steve Allen, Jr..

and numerous refrigerator magnets, key chains, and other trinkets that contained a health message. Tart Dickerson of the NIH Police won the door prize, a mountain bike donated by the NIH Federal Credit Union. Other door prizes were donated by Geico.



Dr. Charles Sherman gets a free dental checkup during the Health Fair.

change and using humor to achieve balance in life. Judith Jackson of HR Solutions furthered the stress management message in her presentation on taking control of your career and life. And the first 600 fair participants received stress balls. No one left empty handed. In addition to literature on a variety of topics, there were templates for tracing your family tree, personal health guides for keeping home health records,



Staff from the Clinical Center's rehabilitation medicine department manned a booth at the fair; many of the ICDs sponsored booths offering NIH'ers and visitors the latest information on a variety of health topics.

Overweight Kids Sought

Healthy overweight children are needed for an NICHD study investigating body composition and the causes of overweight: African American and Caucasian boys and girls, 6-10 years old. There will be two visits, one during the day and one overnight. Participants receive a thorough evaluation for medical causes of overweight including a physical exam, blood tests, metabolism tests and x-rays. This is not a treatment study. Participants will be paid. Call 6-4168 for more information. □

Tubing on the Shenandoah River

Relax in an inflated tire inner tube while soaking up the sun and scenery along the Shenandoah River near Luray, Va. This R&W-sponsored trip leaves Saturday, Aug. 3. Cost is \$32 per person and includes tube rental, steak dinner, and lots of fun. Call 6-4600 for details. □

NIAID REINVENTION (Continued from Page 1)

built around five categories of information: newsletter articles, NIAID initiatives and high priority areas, information on council, staff contacts and their research portfolios, and a glossary of NIH terms. Here NIAID bares its interests and resources in an organized, useful way.

"Our general themes in reinvention have been 'Save the Trees,' which means use less paper, 'Cultivate the Land,' which means redefining our partnership role with grantees, and 'Develop the Research Community,'" McGowan explained.

"The environment of REGO said that while RMS funds are being cut, we need ideas to improve the system, so, let's move quicker, eliminate steps of the process that don't add value, and learn to manage by exception," he continued. "Suddenly it was okay to do things differently than in the past. Dr. Fauci's reaction was 'This is a rare opportunity to look at things to see what it makes sense to do.'"

One of the first things to do was bash down the "brick wall" that was posed by the 3-4 month waiting period between when grant applications arrived at NIAID and when its Advisory Council would meet to make funding decisions. Prior to REGO, applications submitted in October wouldn't win award until the following July. By separating council meetings from review, NIAID is able to make awards 3-4 months earlier.

"That was really time wasted," said McGowan. "We could overcome that obstacle by unlinking council review from council meetings. So a subset of 3 council members, out of 21, can do their reviews (by electronically visiting an NIAID server) 2-3 months before the meeting. That means 60 or 70 grantees can begin their work 4-6 months earlier than before. It also means less work for council members—not all 21 of them have to get all that paper.

"It's a radical concept—you don't need a council meeting to do council review—but it's not really radical, it just makes sense," he said.

By the end of next year NIAID council sessions will be totally paperless, forecasted McGowan. "We're going to save at least \$100,000 just in paper costs," he said.

NIAID has also made a shift away from its traditional use of Request for Applica-

tions (RFAs) and will rely more heavily on Program Announcements (PAs). The institute will use PAs to fund scientifically meritorious applications with percentiles within and above the payline to establish the appropriate balance within its research portfolio. "The PA approach provides applicants multiple receipt dates, review with the Division of Research Grants, and a commitment from the NIAID, its council and constituency," McGowan said. The PA approach was endorsed by the NIAID Council. The new system augments council's role and adds appropriate ad hoc expertise to review NIAID initiatives from a broad advisory base. Much more than previously, council will be involved in whether an initiative should be launched by NIAID and also in yearly assessment of the effectiveness of a PA in meeting the objectives established. The PA also provides everyone the forum for an up front agreement of what areas will be selectively paid by NIAID during the next year. This has helped to tweak the NIAID process. NIAID is "focusing

One of the first things to do was bash down the "brick wall" that was posed by the 3-4 month waiting period between when grant applications arrived at NIAID and when its Advisory Council would meet to make funding decisions.

more keenly on scientific decisions. The process has decompartmentalized how money is allocated between RFAs, PAs, and selective pay," explained McGowan, "so that the focus is more keenly on funding the best science to achieve the desired portfolio."

The institute is also piloting the migration from paper to electronic reviews.

An NIAID team of Rosenthal, Chris Beisel, Paula Strickland, Terry Jones, and Peter Jackson has established a completely Internet-based initial peer review process, based on experience of the expedited council review. The process allows reviewers confidential critiques and scores to be individually pasted onto a secure screen over the Internet, eliminating any formatting, software or

hardware differences caused by the current use of diskettes or email to send documents electronically. The reviewers' critiques are shielded until all are in the system. After that time, the shield is lowered and all reviewers can see the scores and critiques for all applications.

Doing this allows everyone to get an individual picture of each grant application and a total picture of all applications being reviewed that will let the NIH staff and reviewers examine the best way to spend their time at a review meeting or decrease review meeting time. Just eliminating the time required to read each of these critiques during a study section meeting will be a significant savings. The more tricky aspect to be explored for grant reviews is how much will the community accept a virtual correspondence or "chat" over the Internet.

"We need to decide which formats (e-chats, conference calls, meetings) make the best sense," McGowan said. "We're going to play with it and see—we're in the experimental mode for the next year or so."

The dynamics—and quality—of review are changing as institutes adopt REGO austerities and innovations, he noted. For example, the force of personality, body language or other nuances exerted in large group meetings is being traded for smaller discussions conducted in a somewhat more sterile—and perhaps even more bias-free—electronic "environment." It also introduces the possibility to gain reviewers time to examine issues on more controversial applications and resolve them or have a more informed discussion at the peer review meeting. There's the potential for more cards to be on the table in a virtual workspace.

Another mechanism for doing business, the RFP (request for proposals) is also going electronic, said McGowan.

"Proposals will be submitted and reviewed electronically, and the contract award will be made electronically. Nothing will have to be done on paper, except the contract signing, a legal requirement. NIAID established a process of eliminating the mail-out of RFPs over a year ago by making them available electronically through the NIH Gopher and Internet. Now, a team led by Lew Pollack of contracts and review staff is working cooperatively with a small company called ANSER to develop an Internet process."

Regardless of who wins November's

presidential election, REGO is here to stay, McGowan predicts. "The pressure on the government to downsize is nonpartisan," he said. "Harold Varmus and Wendy Baldwin have brought a new mentality of cooperation and improvement to the NIH which Dr. Fauci has embraced and provided the environment to flourish within NIAID," he added. "Our redefinition of how we do business is only in its embryonic phase."

Coming soon at his institute is a "better prioritization of which REGO initiatives to proceed with fastest," he said. "There's a constant need for evaluation. REGO is not going away—it's only just beginning. There's a philosophical battle coming—that's what makes the next couple of years really exciting. What's our core business? How can we do it better?"

Based on its work so far, NIAID is bound to get some answers. □

OEO Sponsors Diversity Workshop

The Office of Equal Opportunity sponsored a successful Workplace Diversity Initiative workshop recently for a cross-section of NIH management officials. The 64 employees who attended the workshop were welcomed by OEO Director Naomi Churchill, who requested their assistance in making the management of diversity a reality at NIH. She said OEO staff cannot bring

ing the NIH Culture," "Raising Awareness—All Dimensions of Diversity," "Managing Diversity," and "Evaluation." All presenters cautioned participants not to take too narrow a view of diversity. NIH, like any other large workforce, has all aspects of diversity and it should be managed so that each person will have an opportunity to reach for the stars.

Participants were divided into smaller work groups to develop a vision statement and definition of diversity applicable to all of NIH. They developed a draft model plan for ICDs to use in implementing diversity in their organizations.

The second Diversity Congress is scheduled for Oct.

30-31. It will consist

of educational and training sessions by experts in the area of managing diversity. For more information contact Joan Brogan, 2-6583. □



NIMH's Joe Whitaker and Janette Gabriel, who handles EEO matters for NIAMS and FIC, participate in workshop.

about diversity on their own.

The workshop, led by Alberta Lloyd of Coleman Management Consultants, consisted of discussion on topics such as "Organizing for Change," "Understand-



Dr. Karyl S. Barron has been named deputy director of NIAID's Division of Intramural Research. Since 1992, she has worked in NIAID's Laboratory of Immunogenetics through an Intergovernmental Personnel Act appointment. Concurrently, she was on the staff of Children's National Medical Center, which is affiliated with George Washington University Medical School, where she was an associate professor of pediatrics. A native of Cleveland, Barron has extensively published articles and book chapters on juvenile rheumatoid arthritis, Kawasaki disease and other autoimmune diseases. She will continue her clinical research studies at the Clinical Center.



NIAAA director Dr. Enoch Gordis (rear, second from l) and deputy director Dr. Mary Dufour (seated, l) welcome four new members to the National Advisory Council on Alcohol Abuse and Alcoholism. They are Dr. Catherine Rivier, research professor, Salk Institute; Dr. Marcus Rothschild (l), consultant in nuclear medicine, VA Medical Center, Miami; Rev. Edward Malloy, president, University of Notre Dame; and Judge Harold Hood of the Michigan Court of Appeals in Detroit.

DCRT Offers Summer Training Program

DCRT's summer classes in computer training, which run from July 8 through the end of August, range from 1-hour seminars to multi-session intensive courses. Students can register by calling 4-DCRT (4-3278), via the Web at <http://www.nih.gov/dcrt>, by submitting a simple 1-page form, or through WYLBUR's ENTER TRAINING command. All classes in the DCRT program are offered without charge.

New courses in tools to access and provide information on the World Wide Web will highlight the summer term. "Macintosh Techniques and Tools for HTML Tables and Forms" and "PC Techniques and Tools for Tables and Forms" will assist those who are developing Web pages. For those about to offer information on the WWW for the first time, a new seminar "Hands-On HTML" will offer an easy introduction to hypertext markup language.

Using the WWW from home via PARACHUTE is of interest to a growing segment of the NIH community, and separate seminars will be offered for Mac and PC users explaining the process of configuring the machines. Accessing information on the Web is the focus of three new seminars, "Introduction to MS Access," "More About MS Access," and "Web Access to Databases."

Client/server database classes for the summer will include "Relational Database and Client/Server Access Overview," "Introduction to Oracle PL/SQL," "Oracle for Application Developers," "Introduction to Oracle Forms," and "Introduction to PowerBuilder." Two new classes are joining the program, "Delphi Overview," a half-day seminar and demonstration of the features of this PC-based client/server software, and "Oracle Data Browser," a 1-day hands-on class to familiarize students with this graphical, interactive data access tool.

The new "Account Sponsor's Orientation" on July 16 will explain what DCRT account sponsors need to know to carry out their responsibilities and will give them the training needed to use ENTER SPONSOR. That afternoon, "Deregistration Official's Orientation" will give additional information needed for those with this important responsibility. All account sponsors, deregistration officials, and their alternates or those who may assume such duties at a later time are welcome to attend these presentations.

Last term's popular "Macintosh Shortcuts and Info" will be given again as will a new seminar, "Advanced Macintosh Operations." The features of the new version of Eudora Pro 3.0 for the Macintosh will be covered in a 1-hour seminar.

For the many PC users interested in converting to Windows 95, there will be an expanded class, "Windows 95 Start-Up," offering a morning lecture followed by a brief hands-on afternoon lab. The popular "PC Trouble Shooting" class will again give students hands-on experience in total system teardown, performing preventive maintenance, and developing upgrade solutions.

Finally, a course with implications for everyone who uses systems dependent on

dates: "The Year 2000 Challenge" will outline NIH's approach to identifying problem areas and planning for specific and NIH-wide resolutions.

Full information is available in the *DCRT Computer Training* brochure, which is available from the Training Program, Bldg. 12A, Rm. 1011, phone 4-DCRT and from ICD personnel offices and the User Resource Centers in Bldg. 31, Rm. B2B47 and EPS, Rm. T10. The information is also available on-line on the World Wide Web at <http://www.nih.gov/dcrt>, from the NIH Gopher Server at gopher.nih.gov, and via WYLBUR's ENTER TRAINING command. If you have questions about classes or the program, call 4-DCRT or send email to 4DCRT@nih.gov. □

NIAMS Council Gains Four

NIAMS recently welcomed three new and one returning member to its national advisory council. They are Dr. Lowell Alan Goldsmith, Kathleen Haralson, Dr. Peter Lipsky and Sharon Monsky.

Goldsmith is dean of the University of Rochester School of Medicine and Dentistry, and also James H. Sterner professor of dermatology and chairman, department of dermatology at the university.

Haralson is associate director of the Washington University Regional Arthritis Center in St. Louis. She has served as president of the Arthritis

Health Professions Association and has a special interest in physical therapy and health education.

Lipsky is director of the Harold C. Simmons Arthritis Research Center at the University of Texas Health Science Center in Dallas, and director of the NIAMS-funded Specialized Center of Research in Rheumatoid Arthritis at the University of Texas.

Monsky, who is being reappointed to the council, is chairman and founder of the Scleroderma Research Foundation in Santa Barbara, Calif.



NIAMS director Dr. Stephen I. Katz (l) welcomes new members to the advisory council for the institute. They are (from l) Dr. Lowell Alan Goldsmith, Kathleen Haralson, and Dr. Peter Lipsky. Not shown is Sharon Monsky.



NHLBI recently conducted a meeting of project directors from its "Stroke Belt" state health department initiative. The Stroke Belt consists of 11 southeastern states where the mortality rate from stroke is significantly higher than in the rest of the U.S., particularly among Blacks. Morgan State University, in Baltimore, hosted the 2-day meeting where NIH speakers such as Dr. John Ruffin, director, Office of Research on Minority Health, talked about research and training opportunities. The meeting also provided a forum for the states to report the results of their community-based projects and explore ways of adapting the most successful elements of their efforts into future health outreach programs for African Americans. Shown above with the Tennessee delegation are (from l) Ruffin; Connie Pearson, director of Tobacco Prevention and Control; Joan Clayton-Davis, director, Nashville Prevention Marketing Initiative; Rev. Ces' Cook, president, Faith-Based Centers of Excellence, Nashville; and Glen Bennett, NHLBI Stroke Belt Project team leader. Below, Mary Frances Spears (fourth from l), director of NHLBI's Office of Special Concerns, pauses with students at Morgan State, of which she is an alumna. She encouraged the students to learn more about the problems and solutions of improving the health status of minorities.



NIH Hosts Chapter of Contract Management Association

The NIH-based Bethesda/Medical chapter of the National Contract Management Association recently elected its 1996-97 officers. They include Rosemary McCabe Hamill, national director; Cheryl Jennings and Frank Murphy, cosecretaries; Sharon A. Miller, vice president; Donna Berkowitz, president. The chapter holds brown-bag meetings at lunchtime on the third Wednesday of each month. For more information call Miller, 6-8611. □

Kaiser Health Plan Day, July 25

Kaiser Permanente Health Plan will be on the NIH campus Thursday, July 25 to assist enrollees who have claims or enrollment problems or questions. A Kaiser representative will be available from 10 a.m. to 2 p.m. in Bldg. 31, Rm. 3C05. No appointment is necessary. Assistance will be provided on a first-come, first-served basis. □

Douching May Delay Conception

Douching may reduce a woman's chance of getting pregnant in a particular month by about 30 percent, according to a new study.

The study, published in the June issue of the *American Journal of Public Health*, showed that douching—practiced by many women to cleanse and deodorize the vaginal cavity—is associated with a delay in pregnancy.

NIEHS-backed investigators studied 840 married women from Washington state who had stopped using contraception and eventually became pregnant. Those who douched, the researchers found, took longer to conceive than those who did not. The researchers looked at other personal and environmental factors such as smoking, alcohol intake and medical background but, even after adjusting for other factors that affect fertility, found that women who douched were less likely to conceive in any given month of trying.

The reduction in fertility associated with douching was stronger in young women, 18 to 24, in whom douching was associated with a 50 percent reduction in monthly fertility. The estimated reduc-

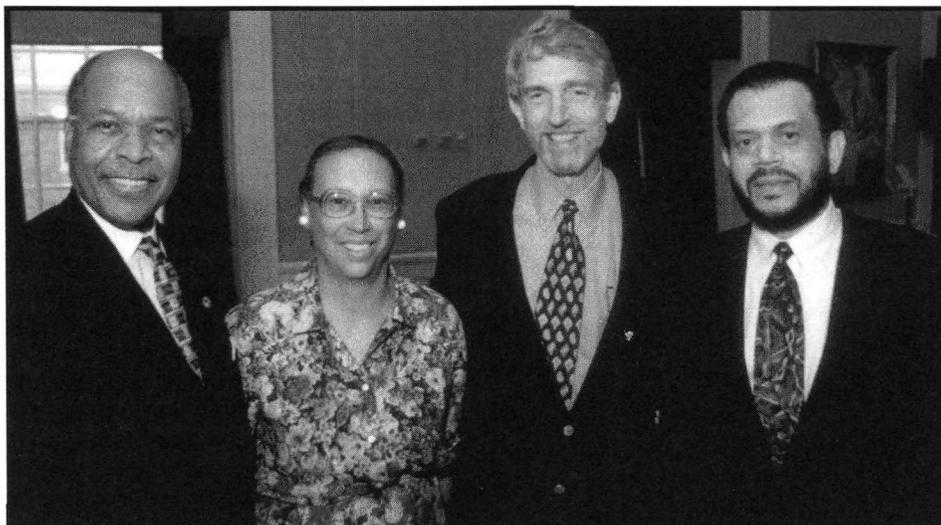
Those who douched took longer to conceive than those who did not.

tion in monthly fertility was 29 percent in women who were 25 to 29, and 6 percent for women 30 to 39.

A 1988 national survey found 37 percent of women between 15 and 44 douched, and 18 percent did so at least once a week. Blacks were twice as likely as whites—67 percent versus 32 percent—to douche and did so more often.

The researchers found that, among women who wanted to become pregnant, those who douched most frequently (more than once a week) had the lowest pregnancy rate: 27 percent were not pregnant after a year. In contrast, only 10 percent of those who never or rarely douched were still not pregnant after a year.

The scientists found no evidence that commercial preparations produced any greater reduction in fertility than a combination of water and vinegar prepared at home. Even water alone was associated with significant reduction in fertility. This suggests that the mechanical process of douching per se may have adverse effects. □



Former HHS secretary Dr. Louis W. Sullivan (l), president of Morehouse School of Medicine (MSM), and Dr. Peter MacLeish (r), director of the MSM Neuroscience Institute, made a special presentation on the institute at the National Advisory Neurological Disorders and Stroke Council in June. The Morehouse program is jointly sponsored by NINDS, the NIH Office of Research on Minority Health, and MSM. With Sullivan and MacLeish are Dr. Zach Hall, NINDS director, and Dr. Audrey Penn, NINDS deputy director.



The Office of Community Liaison held a recognition ceremony recently to acknowledge the partnership between NIH and its neighbors. Janyce Hedetniemi (second from r), director of the office, paid tribute to community members who spent many hours working with NIH on Master Plan revisions and development. NIH director Dr. Harold Varmus (r) acknowledged how far we have come in our mutual understanding and acceptance between NIH and the community.

Ethics Program at NIH Wins Kudos

The Office of Government Ethics has recognized a facet of NIH's ethics program as exemplary: the outside activity approval system. In its newsletter, OGE observed that "the issue of outside activities at NIH is complex and the volume of requests is great. The scientists at NIH tend to be very active within the scientific community, and the requests require a certain level of technical knowledge to review. Despite those challenges, NIH administers a highly effective outside activity approval system."

The OGE continued, "[NIH] effectively ensure[s] that an employee's participation in an outside activity does not adversely affect operations within NIH or involve conduct prohibited by [law]." □

Fetus May Pay for Mom's Early Lead Exposure

Preliminary results from two studies funded by NIEHS suggest that lead accumulated in a pregnant woman's bones over her lifetime can leach out during pregnancy, exposing the developing fetus.

The early data from one of the studies suggests that 40 to 60 percent of the lead in pregnant women's blood comes from lead accumulated in the bones from exposures from years past and leached out, much later, during pregnancy.

Another study suggests that much of the lead is released during the second and third trimester, when the fetus is drawing on its mother's calcium for its own bone development.

Previous studies indicate that lead in the mother's blood crosses the placenta and enters the unborn child's bloodstream but NIEHS scientists said further study will be needed to show that the pass-through is enough to affect fetal development.

Lead is known to cause developmental delays in children even at moderate levels in the blood, and retardation at higher levels. □



Ruth Nowjack-Raymer, a public health research specialist in NIDR's Disease Prevention and Health Promotion Branch, recently accepted the William B. Clark fellowship in clinical research from the American Association for Dental Research (AADR). Sponsored in part by Procter & Gamble, the fellowship provides support for investigators to explore the most recent advances in clinical periodontology. It was presented to Nowjack-Raymer at the AADR meeting held this year in San Francisco.

Monnier Gives NIA's 7th Annual Shock Lecture

By Michael Miller

Dr. Vincent Monnier received the 7th annual Nathan Shock Award recently at a ceremony and lecture sponsored by NIA's Gerontology Research Center (GRC). His talk about cross-linking of sugars, collagen, and aging was entertaining and informative in spite of its daunting title, "From Bjorksten to Kohn: The Collagen Theory of Aging in Light of the Maillard Reaction."

Monnier's talk was introduced by GRC's Dr. George Roth, who characterized the lecture as one that provided a very good historical overview of the field as well as an interesting analysis of current research. Monnier set the tone for his historical overview when he showed a slide of what he jokingly referred to as the "Gerontometer Mach 3," a machine developed many decades ago that could theoretically measure aging but in reality measures heat denaturation, and is still being used by Monnier's team today.

Having broached the main subject of his lecture, Monnier got to the heart of the matter by talking about how collagen cross-linking relates to aging. Cross-linking in Monnier's work refers to the formation of complexes between sugars and larger molecules such as proteins and nucleic acids. He noted that if cross-linking could be prevented in the lens of the eye, it could push the age at which most people have changes in their ability to see clearly from age 60 to 80. He showed a number of contrasting pictures of how lenses yellow with age due to this cross-linking.

He then segued to the concept behind one of the elements in the title of his talk, the Maillard reaction, which involves reduction of sugars such as those involved in collagen cross-linking into two basic end products—one of which is a major product (glycated proteins), and the other of which is secondary and found only in small amounts. This secondary product, called pentosidine, is important, however, because some researchers feel that it could be a major biomarker for aging.

Monnier noted that pentosidine formation is found to be two to four times greater in diabetics, and that the more severe the complications of diabetes, the higher the pentosidine levels. This is true also, sometimes to an even greater extent, in end-stage renal disease.



Dr. Vincent Monnier (l) receives the 7th annual Nathan Shock Award from NIA's Dr. George Roth.

Of particular importance to NIA and work at the GRC was his noting that after age 60, many people show increased pentosidine formation, not unlike that seen in diabetes and end-stage renal disease. In tying cross-linking, diabetes, and aging together, Monnier discussed recent research in his lab with various animal models, including the unusual choice of the shrew, which shows higher levels of pentosidine formation the older the animal becomes. The linking of increased pentosidine levels to human aging is based on historical observations

that have shown that collagen cross-linking increases with age. Since pentosidine seems to be a byproduct of this cross-linking, a rise in pentosidine levels may correlate directly with increasing age.

The question facing Monnier's group now is to determine what is the mechanism of formation of cross-links? Monnier advocates the position that cross-linking is not a major product of the aging process, but, rather, an important marker for studying aging. He's also looking at defenses against the Maillard reaction. He knows that certain chemicals will reverse the reaction, but in doing so will also release harmful hydrogen peroxide. The chemical reversing agents may exist in humans, but they have never been looked for. That is Monnier's next quest. □

Attention Study Needs Vols

The section on clinical and experimental neuropsychology, NIMH, is seeking healthy parents with children ages 6-18 to participate in a study of components of attention. Whole family participation is needed. Parent volunteers should have no more than 12-14 years of education, and will be asked to participate in a screening procedure as well as a 2.5-hour neuropsychological testing session. Children will be asked to participate in the testing session only. All participants will be paid. For more information, call Julie Bullard, 6-7673. □



At a recent meeting of the automatic data processing extramural programs coordination committee, Lynda Bennett (l), chairperson, presented the annual ADP/EP awards to (from l) Nicholas Suszynski, certificate of appreciation for leadership of the IMPAC II migration project; David Scheim, achievement award for evaluation and advising on client/server and other new technologies; Anne Robertson, achievement award for contributions in communications, IRM and listserv technologies; Brenda Vanags, certificate of appreciation for reporting on interface and assistance to the ADP/EP committee; Jim Cain, certificate of appreciation for continuous coverage and updates on the IMPAC II project; and Jackie Sanders (not pictured), award for leadership and service in 1995 as ADP/EP chairperson.

The NIH Life Sciences Education Connection

The old axiom "knowledge is power" may not ring true for everyone, especially people facing a genetic test to determine if they carry a gene for a serious disease. In fact, a study published in a recent *Journal of the American Medical Association* indicates that fewer than half of the people with a family history of breast or ovarian cancer wanted to know if they carry the defective gene that can lead to those diseases.

When the disease has no cure, knowledge gained from a genetic test—the presence or absence of the defective gene—can be frightening. This is true even when the results are accompanied by genetic counseling, which can help individuals understand probability and medical strategies. The psychological implications of genetic testing can be enormous; many individuals do and will have difficulty dealing with the accompanying feelings of grief, fear, anxiety, stress, and even guilt.

Family counselors will play an increasingly large role in helping people cope with decisions and results as genetic testing continues to grow. To help counselors understand the impact of knowledge gained through the Human Genome Project, the National Center for

Human Genome Research recently sponsored a workshop, "The Genetic Self." The 25 participants from across the country included marriage and family therapists, pastoral counselors, social workers, and clinical psychologists.

"The central task for counselors in the next decades will be to help individuals live their lives in the face of medical uncertainties," said workshop coordinator Dr. Paula Gregory, chief of the NCHGR Genetics Education Office. "In the next few decades, we will be in an intermediary phase between break-neck speed discoveries of disease genes and the time in which scientists will develop treatments for these diseases."

NIAID Director Honored

NIAID director Dr. Anthony S. Fauci recently received the National Council for International Health (NCIH) Leadership in Health Award for his work in promoting public awareness of international health issues. In a plenary talk at NCIH's awards luncheon, he reinforced the need for a strong commitment to basic and clinical research as part of the nation's preparedness for emerging and re-emerging diseases.

Also, in the first event of its kind, the American Bar Association's AIDS coordinating committee held a reception honoring Fauci for his long and relentless efforts and accomplishments in the battle against HIV infection and disease. In addition, Fauci recently accepted two honorary degrees, a doctor of science degree from Colgate University in Hamilton, N.Y., and a doctor of medical science degree from the Medical College of Pennsylvania and Hahnemann University School of Medicine in Philadelphia. □

Participants were chosen not only for their roles as counselors, but also for their ability to take the knowledge gained from the workshop and share it with their patients, students, and other counselors. The workshop included a variety of sessions, including a presentation by NCHGR director Dr. Francis Collins, a DNA spooling activity, a discussion on disability rights, a presentation by a family with colon cancer, and a play about genetics by the Bethesda Academy of Performing Arts.

The workshop is part of a 3-year series designed to promote leadership in counseling and genetics.—Ellen Orjala □

DCRT Bids Farewell to Bob Brunelle

Amid jokes, laughter, tears, and reminiscences, 150 friends and colleagues said goodbye to DCRT's Robert H. Brunelle at his retirement lunch recently. Accompanied by his wife Anne, he was roasted with a lively parody of *Wheel of Fortune* and some good-natured ribbing about his fondness for chicken wings. Among many other gifts and mementos, he received a certificate of retirement that read, "Thank you for working as a founding member of the Division of Computer Research and Technology and for providing 37 years of dedicated service to NIH."

One of the first computer professionals hired by NIH, Brunelle helped bring leading-edge computing to campus with the first IBM 650, which gave way to medium-sized Honeywell computers and, later, to the interconnected IBM mainframes, culminating in desktop computing and networking of today.

"Recently, I was going through my government file and found the acceptance letter I sent to NIH in 1959. I said, in my youthful exuberance, that I wanted to help build the best biomedical



Robert H. Brunelle

computing facility in the world.

Thirty-seven plus years later, I can say that we have built a place to be proud of. We've grown along with the computing industry, sometimes leading, sometimes following, but always advancing," Brunelle said.

As deputy chief of the Computing Facilities Branch (CFB), Brunelle was responsible for the operation of DCRT's

MVS Enterprise system and was financial planner for the telecommunications computer center. He began his career as a computer mathematician in the Ballistics Research Laboratory at the U.S. Army Aberdeen Proving Ground, joining NIH in 1959 as a research mathematician for the Computer and Data Processing Branch, which later became DCRT.

Perry Plexico, chief of CFB, said, "I've come to admire Bob's quiet effectiveness and to rely on his wisdom and knowledge. It's difficult to think he'll no longer be here."

Brunelle grew up in Plattsburgh, N.Y., and attended the State University of New York at Plattsburgh, where he received a B.S. in mathematics. He attended graduate school at the University of North Carolina.

During his career, he received many awards including several special achievements and the 1990 Director's Award. After retirement he plans to perfect his golf swing, create new woodworking designs, and spend more time on his boat exploring the waterways of the Chesapeake. □

OHRM Training Tips

The Division of Workforce Development, OHRM, offers the following:

Courses and Programs Starting Dates

Management and Supervisory

Budget Execution	7/29
Effective Executive Speaking	8/6
Budget Formulation	8/7
Attitudes: How They Affect Productivity	8/7
Coaching Skills for the 21st Century	8/13
Interacting with Difficult Employees	8/22
The Straight Talk Program	8/28
Successful Management	9/10-12
Practical Management Approaches	9/11-12
Managing Stress, Maximizing Effectiveness	9/17-19
The Winning Leader	9/18-20

Career Transition

Researching Job Leads	8/16
Understanding the Federal Employment Process and KSAs	8/16
Resume Writing & Cover Letter Preparation	9/18
Successful Interviewing Techniques	9/18

Administrative Skills Development

Understanding and Managing Stress	7/30
Effective Writing II	7/31
Fundamentals of Grammar	8/19
Listening and Work Relationships	9/4

Administrative Systems

Foreign Travel	8/12
Basic Time and Attendance Using TAAMS	8/19
TAAMS for System Administrators/Alternates	8/7
Commissioned Officers Leave and Attendance	8/14
Determining Price Reasonableness in the Award of Simplified Acquisition	8/29

Human Resource Management

Intro to Position Classification	8/5
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Communication Skills

Effective Listening & Memory Development	8/8
Ten Secrets to Powerful Business Writing	8/15

Special Courses

NIH Retirement Seminar	8/12, 9/11
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Personal Computing

Intro to PCs for New Users	8/7
Intermediate DOS 6.0	8/7
WordPerfect 6.0 - Advanced Topics (DOS)	8/13
Windows 95	8/14
WordPerfect 6.1 for Windows	8/27
Advanced WordPerfect 6.1 for Windows	8/19
Intro to Windows 3.1	8/6, 9/10
MS Excel 5.0 for Windows	8/13
Lotus 5.0 for Windows	9/4
Microsoft Word for Windows	9/16
Access 2.0 for Windows	8/21
Advanced Access 2.0 for Windows	8/12
Advanced MS Word 6.0 (Mac)	8/6

Networking Courses

Intro to Internet	8/12
Advanced Internet	8/13

Personal computer training is available through User Resource Centers (URC) self-study courses. There is no cost to NIH employees for these hands-on sessions. Additional courses are available by completing the "Training by Request" form in the back of the DWD Catalog. For more information, call DWD, 6-6211 or consult the catalog. □

Male Volunteers Needed

The Laboratory of Psychology and Psychopathology is seeking healthy male volunteers, ages 22 to 44, for research on types of learning and memory. Participants will go through a structured clinical interview and complete a number of computer tasks. Subjects will be paid. For more information, call Craig Fisher, 6-2979. □

Depressed People Wanted

The section on clinical neuropharmacology, NIMH, is seeking individuals with depression between the ages of 18 and 60 to participate in a 1-week, outpatient research study. For more information, call Julie Dearing or Ben Greenberg, 6-3421. □



Dr. Leo A. Whitehair, director, Comparative Medicine Program, National Center for Research Resources, was recently inducted as an honorary member of the American College of Laboratory Animal Medicine. He was recognized for his program leadership and was called "a steadfast and persuasive supporter of federal funding for research to improve how animals are used in research. He has carried a large part of the responsibility for articulating the NIH position on the use of animals in biomedical research."



Ruby Ross recently retired after nearly 29 years with NIGMS. She began her career in 1967 as a calculating machine operator trainee, and at the time of her retirement was a supervisory grants technical assistant in the institute's Division of Extramural Activities. For the past 12 years, Ross led the grants operations team responsible for grants assigned to the NIGMS Division of Genetics and Developmental Biology. She received numerous awards during her career, including the NIH Merit Award in 1983 and the Assistant Secretary for Health's Special Citation in 1993.

DCRT Training Classes

SCRC Orientation	7/17
Disaster Recovery	7/17
Using SAS/STAT Procedures to Perform Categorical Response Data Analysis	7/17-19
Introduction to the Helix Systems	7/18
Database Technology Seminar	7/19
More About MS Access	7/22
Using SQL to Retrieve Data	7/22-23
Producing Graphs with the SAS System	7/23-25
BRMUG Macintosh Users Group	7/23
HTML Tables and Forms Using the Macintosh	7/24
Macintosh Shortcuts and Info	7/24
Advanced Formatting of Internet Documents	7/25
The Year 2000 Challenge	7/25
Densitometric Analysis of I-D Gels	
Using NIH Image	7/26
Windows 95 Startup	7/26
Overview of the SAS System for Windows	7/29
Getting Started with C	7/29-8/1
Using System Managed Storage (SMS)	7/30
Introduction to Mathematica	7/30
SQL for Database Administration	7/31-8/1
Netscape for the PC	8/5
Hands-on HTML	8/6
LISTSERV Electronic Mailing Lists	8/6
Mac Configuration for PARACHUTE Network Access	8/7
Electronic Forms Users Group	8/7
Windows NT Hands-On Workshop	8/7-8
Configuring Windows and Windows 95 for PARACHUTE	8/8
Introduction to Networks	8/8
Windows 95 Startup	8/9
Introduction to PowerBuilder	8/12-16
WIG - World Wide Web Interest Group	8/13
PC Trouble Shooting	8/13-14

All classes are held on campus and are given without charge. Call 4-DCRT (4-3278) for information. □

NINR, CC Nursing Department Collaborate on New Course

This summer, 23 nurses with advanced research training but limited research experience will come to NIH from around the country to learn practical strategies for conducting clinical research. As participants in "Research Training: Developing Nurse Scientists," a newly developed 5-day training course cosponsored by the National Institute of Nursing Research and the Clinical Center nursing department, these beginning nurse scientists will hear presentations from more than 30 nursing research and other experts.

The course runs July 22-26 in the Natcher Conference Center and covers a wide variety of topics. Included are sessions on how to define and develop a program of research, write a grant, seek funding, manage data, and disseminate findings, as well as discussions of ethics, scientific conduct and implementation issues. The course was coordinated by Dr. Ann R. Knebel of the CC nursing department, and Dr. Christine Grady of NINR's Division of Intramural Research, who say, "Our goal is to provide beginning nurse scientists with some of the practical information they need to embark on a career of research, to increase the visibility of NIH as a nursing research facility, and to advance opportunities for women in science." □



The recent Camp Fantastic Barbecue was a great success as always. The R&W was able to raise money to send some children with cancer to summer camp. R&W thanks everyone who donated their lunch time to this event and hopes to see everyone back next year. Enjoying the barbecue are guest chefs (from l) Linda Doty, R&W president; George Abbott, owner of Bldg. 38 cafeteria; NIAAA director Dr. Enoch Gordis; NINR director Dr. Patricia Grady; NIDCD director Dr. James Snow; Paul Horton, director of the Division of Space and Facility Management, ORS; and Sparky the Fire Dog.

Look for Changes Soon...

The NIH Record will soon adopt its first new design makeover since September 1985. In the next few weeks, we will debut our new look, which has been in the making during the past 6 months. Keep an eye out for the change!



Several NIH charities, including Camp Fantastic, Camp Funshine, and Friends of the Clinical Center, recently received more than \$43,000. The money was raised through the Jeff Bostic Celebrity Golf Tournament sponsored by R&W and General Electric's Elfun Society. Pictured above are (from l) Larry Signora (GE), Colleen McGowan (Camp Fantastic camper), ex-Redskin Jeff Bostic, Michael Bergin (Camp Funshine), R&W General Manager Randy Schools, Jerry King (Friends of the CC), and Dave Smith (Camp Fantastic).



Dr. Matilda White Riley, senior social scientist at NIA, was honored recently by Bowdoin College with dedication of a building in her name to house the college's department of sociology and anthropology. A pioneer in the sociology of age, she was the first woman to serve as full professor at Bowdoin and is now its Daniel B. Fayerweather professor of political economy and sociology emerita. The 85-year-old Riley, shown here attending the day-long event, says the event's focus on gathering various generations of Bowdoin's current and former students and faculty reflects her lifelong work on aging and structural change, which promotes communication among people of all ages.