

THE NIH RECORD

Still The Second Best Thing About Payday

NLM Exhibit, Film Series Spotlight The Internet, Computers

By Melanie Modlin

On May 24, 1844, the first official Morse-code telegraphic message—"What hath God wrought"—was transmitted from Washington to Baltimore. God, or some would say technology, hath wrought many dramatic developments since Samuel Morse's terse message traveled that first inter-city wire. The telegraph connected people to the world around them in a way never before possible; the same can be said of the Internet.

The parallel histories of these electronic communications technologies form the basis of "The Once and Future Web: Worlds Woven by the Telegraph and Internet," a new exhibition at the National Library of Medicine. It will remain in the first floor exhibit space of Bldg. 38 until

SEE NLM EXHIBIT, PAGE 10

Research Festival '01 Slated for Oct. 2-5 at Natcher Bldg.

The 15th annual NIH Research Festival will be held in the Natcher Conference Center on Oct. 2-5. The festival organizing committee, cochaired this year by Dr. Peter Lipsky, scientific director, NIAMS, and Dr. J. Carl Barrett, director, Center for Cancer Research, NCI, has planned a wide-ranging program that once again showcases the scientific diversity of the intramural research program.

A job fair for postdoctoral fellows will kick off Research Festival events on Tuesday, Oct. 2. The fair is sponsored by the Foundation for the NIH and led by the NIH Office of Education's acting director Brenda Hanning and fair coordinator Shirley Forehand. Back by popular demand, William Schrader of XenoPharm, Inc. will

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4-Day Onsite Briefing Is Chock Full

HHS Secretary Gets to Know NIH from the Inside

By Carla Garnett

HHHS Secretary Tommy G. Thompson spent 4 fully packed days Aug. 20-23 on campus getting to know NIH from the inside out.

From all appearances, he was impressed with everything he saw, greeting and offering encouraging words to each employee he encountered.

The working visit began at 8:45 Monday morning, when Thompson arrived with several staff members for a brief campus orientation by NIH acting director Dr. Ruth Kirschstein, acting deputy director Dr. Yvonne Maddox, deputy director for extramural research Dr. Wendy Baldwin and deputy director for intramural research Dr. Michael Gottesman.



No one knows NIH better than its acting director, Dr. Ruth Kirschstein, who guided HHS Secretary Tommy Thompson around NIH on his recent tour.

SEE THOMPSON VISIT, PAGE 6

NHLBI Launches Heart Attack Campaign

Each year, about 1.1 million Americans suffer a heart attack. About 460,000 of those heart attacks are fatal, and for nearly half, death occurs within the first hour of the start of symptoms and before the patient reaches the hospital. Yet, fast treatment can save lives and heart muscle.

Research shows that the main reason for not getting to the hospital quickly is patient delay. Most patients wait 2 or more hours before seeking emergency care—some wait as long as a day or more.

To increase Americans' awareness of the need to act fast, the National Heart, Lung, and Blood Institute has launched a special campaign called "Act in Time to Heart Attack Signs." Partners in the campaign are the American Heart Association, the American Red Cross and the National Council on the Aging.

The campaign officially began on Sept. 11 (9-1-1 Day), chosen to

SEE HEART ATTACK, PAGE 4

NIGMS Publishes Science Booklets

The National Institute of General Medical Sciences has recently published three new science education booklets: *The Chemistry of Health*, *The Structures of Life*, and *Genetic Basics*. They are geared toward an advanced high school or early college-level audience and include questions testing comprehension at the end of each chapter.

The Chemistry of Health (66 pages) describes how basic chemistry and biochemistry research can encourage a better understanding of human health. The booklet also features interviews with a number of chemists and biochemists.



The Structures of Life (60 pages) focuses on structural biology. The booklet contains a general introduction to proteins, a chapter each on X-ray crystallography and nuclear magnetic resonance spectroscopy, and a chapter on structure-based drug design. It also features

“Student Snapshots” designed to inspire young people to consider careers in biomedical research.

Genetic Basics (68 pages) includes descriptions of how genes work, “strange but true” exceptions to the rules of genetics, why basic research is important and worthwhile, some of the connections between genes and diseases, and the excitement of genetics research in the 21st century.

All three publications can be found on the NIGMS web site. Single, free copies of these publications are also available by calling 496-7301 or emailing pub_info@nigms.nih.gov. ■

NASH Study Needs Volunteers

The NIDDK liver diseases section seeks male and female volunteers ages 18 and over for a research study to evaluate the effectiveness of pioglitazone, a new diabetes medicine, in treating people who have nonalcoholic steatohepatitis (NASH). NASH is a liver disorder with fat accumulation and inflammation, which may lead to liver scarring and cirrhosis. Medical history, physical examination, blood samples, chest X-ray, urinalysis, electrocardiogram, abdominal ultrasound and liver biopsy are required to assess eligibility for entry into the study. After NASH diagnosis is confirmed, volunteers will undergo more procedures. For more information, call Dr. Kittichai Promrat, 496-1665 or email kittichai@intra.niddk.nih.gov. ■

NIH Holds Orientation Fair, Sept. 25

All employees are invited to the second annual NIH Orientation Fair, to be held on Tuesday, Sept. 25 from 10 a.m. to 1 p.m. in Bldg. 10, B1 level exhibit area near the Visitor Information Center. Sponsors include the Office of Education, Office of Research Services, and Work and Family Life Center.

With the theme, “Ask Me about the NIH,” the fair will showcase the wealth of professional and personal services available to trainees and employees. The fair will give all visitors a concise and complete grasp of campus resources, making them more capable and enriching their experience here. There will be more than 50 booths with representatives from the NIH Library, Office of Animal Care and Use, credit union, parking and police, Work and Family Life Center, occupational safety, and many others. Sign up for email lists, pick up giveaways and get your questions answered. Sign language interpretation and other accommodation is available upon request. Contact Deborah Cohen, 402-1907.

Wednesday Afternoon Lectures

The Wednesday Afternoon Lecture series—held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features Dr. Christopher Miller on Sept. 19; he will speak on “Ion Channel Proteins: Function to Structure and Back Again.” He is professor, department of biochemistry and HHMI investigator, Brandeis University.

On Sept. 26, Dr. Richard A. Young will give a talk entitled, “Regulation of Genome Expression in Living Eukaryotic Cells.” He is member, Whitehead Institute for Biomedical Research and professor, department of biology, MIT.

There is no WALS talk on Oct. 3 due to the annual NIH Research Festival.

For more information or for reasonable accommodation, call Hilda Madine, 594-5595. ■

Auditions for ‘Messiah’ Sing-along

The NIH Community Orchestra will hold chorus auditions for its fifth annual *Messiah* Sing-along at 7 p.m. on Monday, Oct. 1. The performance is scheduled for Sunday, Dec. 2 at 3 p.m. Auditions will be held in Masur Auditorium, Bldg. 10. Especially sought are tenors and basses.

It is not necessary to prepare any audition materials. For a rehearsal schedule and other information, call Gary Daum at (301) 897-8184, email gldaum@gprep.org, or visit the orchestra’s web site at <http://www.gprep.org/~music/nih>. ■

RESEARCH FEST, CONTINUED FROM PAGE 1

Heart Disease Study Seeks African Americans

The Heart Disease Risk Factors in African Americans Study is investigating the relationship of obesity to heart disease risk factors in healthy, nondiabetic African American men and premenopausal women ages 18-50. Currently being enrolled are African American men who weigh 180 lbs. or more, and African American women who weigh 150 lbs. or more. There will be a series of four outpatient visits to the Clinical Center in which participants will have body fat analyses, an electrocardiogram, and other tests. If interested, call 402-7119 for more information. All subjects will be paid.

speak on "Career Decision Strategies in the Era of Biotech: How to Decide What Pathway Is Right for You," beginning at 10 a.m. in the main auditorium at Natcher. The job fair will follow, hosting representatives from industry, government, the academic community and nonprofit organizations. Post-doctoral fellows who are completing their research training and seeking permanent employment will have the opportunity to meet with these representatives from 11 a.m. to 4 p.m. Visit the job fair web site at <http://www.training.nih.gov/jobfair/> for a listing of vacancies of the participating exhibitors.

Dr. David Lipman, director of NLM's National Center for Biotechnology Information, will deliver the festival's keynote address on "Why is Sequence Comparison Useful?" at 4 p.m. in Natcher's main auditorium on Tuesday, Oct. 2. Two days of scientific symposia will follow, beginning with a plenary session on Wednesday morning, Oct. 3. Dr. Lance Liotta, NCI, will chair a session on "Proteomics: From Protein Structure to Disease Mechanisms," beginning at 9 a.m. On Thursday, Oct. 4, at 8:30 a.m., a new component of the festival, the institute/center directors seminar, will feature several IC directors discussing their views on the future direction of biomedical research and will be chaired by NIH acting director Dr. Ruth Kirschstein and Dr. Michael Gottesman, NIH deputy director for intramural research. Both of these sessions will be held in the main auditorium of the Natcher center.

Twenty-four mini-symposia with topics solicited from the scientific directors and members of various special interest groups have also been planned for the 2 days. Four poster sessions are also scheduled, featuring presentations by 300 NIH intramural scientists.

The Technical Sales Association will again sponsor the research festival exhibit tent show on Thursday and Friday, Oct. 4 and 5, in parking lot 10D adjacent to the Clinical Center. More than 400 exhibit booths will display state-of-the-art equipment, supplies and services by leading regional and national biomedical research suppliers.

Visit the festival web site at <http://festival01.nih.gov/> for detailed program information and symposia summaries, meeting locations and a complete listing of poster abstracts and special intramural resources. ■

Chamber Singers Need Members

The NIH Chamber Singers need a few tenors to round out its merry band of troubadours. If you are interested, contact Steve Bauer (bauer@a1.cber.fda.gov, 827-0468) or Susan Hauser (hauser@nlm.nih.gov, 435-3209). You can read about the singers at <http://www.recgov.org/r&w/chamber/>. ■



Marianne Davis-Eriksen (c), a nurse practitioner in NIAID's Laboratory of Clinical Investigation, was recently a featured speaker on Lyme disease at a benefit performance in Baltimore that included recording artists Bob Baldwin (l) and Marion Meadows. She gave an overview to an audience of 500 on what Lyme disease is, where it is most prevalent, signs and symptoms of infection, how it is diagnosed and treated, and most importantly, precautions to prevent becoming infected with Lyme disease. The event was put together by family and friends to benefit Sgt. Thaidiem Smith, a Maryland state trooper who contracted Lyme disease and eventually had to leave his job due to illness. In addition to educating the public, the performance successfully raised \$1,000 to contribute toward NIAID research on Lyme disease.

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Langer To Give 2001 Kreshover Lecture

Dr. Robert Langer, internationally known for his work in the fields of biotechnology and materials science, will present the 2001 NIDCR Seymour J. Kreshover Lecture, Monday, Sept. 24 at 3:30 p.m. in Masur Auditorium, Bldg. 10. The title of his lecture is "Biomaterials and How They Will Change Our Lives." Langer is the Kenneth J. Germeshausen professor of chemical and biomedical engineering at Massachusetts Institute of Technology.

Named in the Aug. 20, 2001, issue of *Time* magazine as America's best in biomedical engineering, and



Dr. Robert Langer

by both *Forbes* magazine and *BioWorld* as one of the 25 most important individuals in the world in the field of biotechnology, Langer was one of the first researchers to apply engineering principles to medical problems. He received his training in the early 1970's in the laboratory of Dr. Judah Folkman at Children's Hospital Medical Center in Boston. Langer

pioneered the encapsulation of protein therapeutics in polymer matrices for controlled-release drug delivery. Not only did he prove the feasibility of the idea, but he also went on to become the founder of an entire field of research based on controlled-release of drugs from devices made of biodegradable polymers.

Most recently, he was part of a team that developed a new microchip that can provide controlled release of single or multiple chemical substances on demand, as reported in *Nature* in January 1999. This is the first device of its kind to enable compounds in solid, liquid or gel form to be stored inside a microchip, with the release of the compounds achieved on demand and with no moving parts.

Langer has written 680 articles and holds 382 patents. He has received more than 80 awards for his invention of novel polymers and medical applications that include the use of polymers as a scaffold for growing tissue. His patents have been licensed or sublicensed to over 80 pharmaceutical, chemical, biotechnology and medical device companies; a number of these companies were launched on the basis of these patent licenses. Langer is the only active member of all three U.S. national academies: the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. He also serves as chairman of the Food and Drug Administration's science board, the FDA's highest advisory board. ■

NHLBI Helps Prepare Future 'Star' Researchers

NHLBI this summer supported five students who were participating in the Minority Access to Research

Careers Undergraduate Student Training in Academic Research (MARC U*STAR) program. MARC U*STAR, which is sponsored by NIGMS, prepares undergraduate college students for advanced training in biomedical research.



Shown with NHLBI director Dr. Claude Lenfant (third from r) are this summer's students (from l) Sayyed Shah of the University of the District of Columbia, Daleik Vaughn of Tuskegee University in Alabama, Robert Drummond of Morehouse College in Atlanta, and Jennifer Johnson and Wesley Brower, both of the University of Maryland Eastern Shore in Princess Anne.

students for advanced training in biomedical research.

NHLBI has recruited MARC U*STAR students to participate in its Summer Internship Program since 1989. Each student conducts an independent research project under the supervision of a mentor in an intramural laboratory.

Mentors were Dr. Marshall Nirenberg, chief of the Laboratory of Biochemical Genetics; Dr. Julie Donaldson, senior scientist in the Laboratory of Cell Biology; Dr. Elizabeth Nabel, director of the Clinical Research Program and chief of the Vascular Biology Branch; Dr. Cynthia Dunbar, head of the molecular hematopoiesis section; and Dr. Neal Young, chief of the Hematology Branch.



MARC U*STAR student Jennifer Johnson conducts research in an NHLBI Hematology Branch laboratory.

Postpartum Depression Study

The Behavioral Endocrinology Branch, NIMH, is seeking volunteer mothers ages 18-40 who have had one or more past episodes of postpartum depression following a full-term pregnancy, but are not currently depressed. Participants must be free of medical illnesses, medication-free and currently not breastfeeding. Volunteers may be asked to participate in a 6-month protocol investigating the effects of hormones on brain and behavior. All participants who complete the study will be paid. For more information call Linda Simpson-St. Clair, 496-9576.

HEART ATTACK, CONTINUED FROM PAGE 1

stress the need for Americans to call 9-1-1 when a heart attack happens in order to get to the hospital quickly. NHLBI director Dr. Claude Lenfant, AHA president Dr. David Faxon, and others announced the campaign at a press conference, held the day before at the National Press Club in Washington, D.C. They also unveiled some of the campaign's special education materials for patients and physicians, including a new web page about heart attack, which can be reached at www.nhlbi.nih.gov. Speakers at the press conference also included a heart attack patient from Pikesville, Md., and Dr. Bruce MacLeod, chairman of the department of emergency medicine at Mercy Hospital in Pittsburgh.

Getting physicians to talk to their patients about heart attack risk, warning signs and how to plan for an emergency is a key part of the new campaign. Lenfant and Faxon hope to reach physicians with a "call to action" published in the Sept. 11 issue of *Circulation: the Journal of the American Heart Association*. The editorial notes that "physicians can and should play a pivotal role in encouraging patients to have a plan of action" and that such discussions can "go a long way toward saving hearts and, thereby, saving lives."

Lenfant and Faxon also write that, in one study, fewer than 10 percent of heart attack patients said they'd ever spoken with a doctor about what to do in case of a heart attack. In the same study, about half of patients recovering in the hospital reported talking to a health professional about recognizing and responding quickly to a future heart attack.

"Our goal is to save lives by increasing the woefully low number of heart attack patients who are treated within the first hour of experiencing symptoms," said Lenfant. "It is during that crucial 60-minute window that clot-busting medication and other treatments are most effective. Unfortunately, only about 3 to 11 percent of heart attack patients are treated in that first hour."

Among the reasons why patients wait before seeking help are a lack of recognition of symptoms. The call to action notes that this is due partly to the mistaken belief that heart attacks occur suddenly, as a crushing chest pain—the "Hollywood heart attack."

"The reality," said Faxon, "is that many heart attacks are much 'quieter,' causing only mild pain or discomfort."

Other reasons for delay in seeking medical help are fear of embarrassment if the problem turns out to be a false alarm and worry about bothering others. Studies show that women, in particular, are likely to delay in seeking medical care.

The heart attack warning signs are pain or discomfort in the center of the chest; discomfort in the arms, back, neck, jaw, or stomach; shortness of breath; breaking out in a cold sweat; nausea; and

light-headedness. The most common warning sign—chest discomfort—is the same for men and women. However, women are somewhat more likely than men to have some of the other common symptoms, particularly shortness of breath, nausea and vomiting, and back or jaw pain. Also, women tend to be about 10 years older than men when they have a heart attack and to have other conditions as well such as diabetes, high blood pressure and congestive heart failure.

Those who feel heart attack symptoms or notice the warning signs in others should call 9-1-1 at once. The campaign urges Americans to wait no more than a few minutes—5 at most—before calling for emergency medical help.

"Above all, do not drive yourself to the hospital," said Lenfant. "Calling 9-1-1 is like bringing the hospital to you. Emergency medical personnel can begin treating you right away, and they have equipment that can restart your heart if it stops beating. Also, heart attack patients who take the ambulance tend to receive faster treatment on their arrival at the hospital."

The campaign includes information based on materials developed by the Rapid Early Action for Coronary Treatment (REACT) research program. Funded by NHLBI, the 4-year, multi-center REACT program tested ways to increase awareness of the need to act fast to heart attack symptoms.

National 9-1-1 Day was initiated by the National Emergency Number Association to highlight the importance of calling for emergency medical help. ■

Dr. Richard Okita recently joined NIGMS as a program director in the Division of Pharmacology, Physiology, and Biological Chemistry, where he will administer grants in the areas of drug metabolism, transporters, eicosanoids, pharmacokinetics, toxicology, drug delivery, and formulations. He will also manage the institute's clinical pharmacology training grant awards. Okita comes to NIGMS from Washington State University in Pullman, where he was associate chair of the department of pharmaceutical sciences in the College of Pharmacy and a professor of pharmaceutical sciences. His research interests focused on the cytochrome P-450 monooxygenase system—a superfamily of proteins involved in the metabolism of



both exogenous and endogenous compounds including drugs, carcinogens, steroids and fatty acids. He is a member of various professional societies, including the American Society for Pharmacology and Experimental Therapeutics, where he was elected to serve as chair of the society's division for drug metabolism in 2001.

Awards Presented at NIAAA Employee Day

An expanse of field at Clarksburg, Md.'s High Point farm was the setting for NIAAA's 4th annual Employee Recognition Day picnic on June 15. Under a tent that could accommodate every employee, NIAAA's EEO awards ceremony honored numerous staff members for their professional achievements, contributions to programs such as CFC and the Savings Bond drive, and decades of service. The second annual Martin K. Trusty Excellence in Management Award—a tribute to a former NIAAA executive officer, now retired—went this year to Dr. Samir Zakhari, director of the



Dr. Samir Zakhari (l) receives the NIAAA Martin K. Trusty Excellence in Management Award from NIAAA director Dr. Enoch Gordis.

Division of Basic Research, in "recognition of outstanding commitment to and excellence in the management of the National Institute on Alcohol Abuse and Alcoholism."

Lunch barbecued on the premises and games under a broad sky (with souvenir hats offering a break from the sun) gave employees the opportunity to catch up, cut loose and enjoy a warm summer afternoon. ■

Healthy Overweight Women Needed

The Uniformed Services University weight management program is looking for healthy nonsmoking overweight women ages 18-55 to participate in a weight management program as part of an ongoing study examining factors affecting weight loss. In addition, applicants should not be pregnant, have problems with thyroid, kidney or heart disease, diabetes or uncontrolled hypertension. Program and materials are provided free. If interested call (301) 295-9664. ■

Hispanic Heritage Month Observed

The 2001 NIH Hispanic Heritage Month celebration will feature the second annual Hispanic Scientists Day on Monday, Oct. 1. A keynote address titled "Nuclear Hormone Receptors: Molecular Targets to Develop Tissue-selective Molecules with Enhanced Therapeutic Profile," will be given by Dr. Andres Negro-Vilar of Ligand Pharmaceuticals. The talk will be held in Lipsett Amphitheater, Bldg. 10, from 10:30 to 11:25 a.m. For more information on the lecture, contact Dr. Juan Saavedra, 402-0337. There will also be poster presentations and a reception in the Visitor Information Center, Bldg. 10, from 11:30 a.m. to 1 p.m. Contact person is Dr. Marta Leon-Monzon, 496-4564.

'Sharing' Theme of Parkinson's Meeting

Sharing—of information, ideas, data, experiences and resources—best describes the central theme around which the 3rd annual meeting of the Udall Centers of Excellence for Parkinson's Disease Research revolved. Held Aug. 6-7 in Bethesda, the event brought scientists from all 11 centers together to discuss their current work and future directions, and to brainstorm new ideas and possible solutions to research problems.

"One of the mandates to the Udall Centers is to find ways to collaborate with each other and, by so doing, raise their total contributions to Parkinson's disease research above the sum of their parts," said Dr. Audrey S. Penn, acting director of NINDS, which funds the centers. "I am impressed by the enthusiasm generated by the meeting attendees. Their willingness to share information, including unpublished data, and offer ideas and assistance to one another is something we see all too rarely in the scientific community."

All 11 principal investigators provided an overview of their center's research. NINDS staff provided a synopsis of the institute's activities and initiatives over the past year. The concept of developing an NINDS-supported Udall scholars exchange program, which would allow staff from one center to train at a different center, was well received. After a poster session featuring research highlights, the participants broke into groups to discuss high-throughput drug screening, resource sharing and gene discovery.

A summary of the meeting can be found at <http://www.ninds.nih.gov/parkinsonsweb/index.htm> in the near future. ■

Cognitive Neurosciences Studies

NIH invites volunteers to participate in a variety of neuropsychological tests, brain imaging studies and related neurological evaluations. You must be ages 6 to 80 and diagnosed with either CBD; frontotemporal dementia; Pick's disease; progressive aphasia; Urbach-Wiethe (lipoid proteinosis) or focal frontal lesions due to first stroke, first penetrating head injury or first excised tumor. Call 1-800-1222 for more information.

THOMPSON VISIT, CONTINUED FROM PAGE 1

Thompson announced shortly after his confirmation as Secretary that he would be making his rounds to the various HHS agencies for working visits that could last up to a week per agency. His first visit was in April to the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration) in Baltimore. Months ago Kirschstein, other NIH senior staff and IC directors began to plan a recommended itinerary to make the most of the secretary's time here. Office



OTT's Steven Ferguson (r) briefs the Secretary.

space in the NIH director's office had been cleared for Thompson's use during the 4 days he was on campus.

The timing of the visit—coincidentally only 12 days following

President Bush's announcement regarding the use of stem cells in federally funded research—necessitated several briefings per day here among Thompson, Kirschstein, and NIH associate director for science policy Dr. Lana Skirboll on the stem cell issue. On the Monday after Thompson's visit, NIH announced a plan for implementation of the President's policy.

Alternative Medicine Briefing Has Wisconsin Flavor

By 11:30 on Monday, Aug. 20, Thompson was meeting with Dr. Stephen Straus, director of the National Center for Complementary and Alternative Medicine, and Dr. Richard Nahin, director of NCCAM's Division of Extramural Research and Training, on bringing science to complementary medicine. The Secretary had already that morning completed meetings with Dr. Maria Freire and staff of the technology transfer office, and NCI director Dr. Richard Klausner regarding cancer drug development.

Far from giving a merely ceremonial briefing,

NCCAM's Straus used a series of flashcards to illustrate methods the center uses to determine whether complementary and alternative medicine (CAM) approaches are clinically safe and effective. Straus explained that according to national estimates,



At the Clinical Center, Kirschstein and the Secretary are greeted by (from l) Dr. Harvey Alter of the CC department of transfusion medicine, CC director Dr. John Gallin and DTM chief Dr. Harvey Klein.

approximately 42 percent of Americans use some forms of CAM alone or in combination with conventional medicine, and that many so-called mainstream physicians are prescribing such unproven treatments. NCCAM's role, Straus emphasized, is to "use the tools of science to determine what CAM therapies are safe and effective and to arm the public with this information."

Thompson mentioned that he had toured several Indian reservations—in Alaska, Michigan and South Dakota—during the previous week, and "was amazed at how the clinics were using sweat lodges, herbs and other old Indian traditions. [Do] you think some of these methods work?"

Straus replied, "The question is which of them work and how well."

Thompson asked specifically about such popular CAM substances as St. John's wort, which Straus explained is currently being studied in a 340-patient multicenter trial supported by NCCAM.

What about other herbal drugs? Thompson inquired. "Are you going to be doing research on those?"

Nahin responded that a 6-year placebo-controlled study comparing placebo pills with ginkgo biloba to test whether the herbal product can prevent or delay the onset of dementia in the elderly is currently recruiting patients. The trial is funded jointly by NCCAM, the National Institute on Aging, the National Heart, Lung, and Blood Institute and the National Institute of Neurological Disorders and



Longtime CC elevator operator Annie Harrison welcomes Secretary Thompson with an embrace.

Donning a hard hat, Thompson is shown the Clinical Research Center construction site by NIH Associate Director for Research Services Steve Ficca (c) and CRC Project Director Yong-Duk Chyun.



Stroke. About 1,500 patients have been enrolled to date, Nahin said; a total of 3,000 are sought for the study.

As an example of a popular alternative remedy not yet proven effective but of interest to supporters of conventional as well as unconventional medicines, the NCCAM briefing team had brought a presentation on products used in clinical research such as cranberry juice and other cranberry products.

[Wisconsin—the state where Thompson was born, reared and elected governor for 14 years before leaving in the middle of his unprecedented fourth term to become HHS secretary—is one of the nation's largest producers of cranberries.] NCCAM is putting the final touches on a cranberry initiative, which seeks to assess the effectiveness of cranberry products in the prevention of urinary tract infections.



NHLBI's Dr. Elizabeth Nabel discusses cardiovascular research with Thompson on day three.

"Cranberry juice is one example of the kinds of supplements the public is using," Straus told the Wisconsin native.

Other topics covered during the 30-minute session included acupuncture, ephedra, chiropractic, and ginseng ("Ninety percent of ginseng is grown in three counties in Wisconsin," the secretary pointed out).

"I can't tell you how impressed and appreciative I am of your work here," Thompson said. "I have to admit that I hear very mixed opinions about these things. But, you're probably going to save more lives and more money, and improve health options for the public more than we can even imagine."

Distributing the Fruits of NIH Science

After having lunch Monday with NIH senior staff and IC directors, the secretary met with Dr. Bruce Fuchs, director of NIH's Office of Science Education, who discussed the curriculum supplement series that OSE offers to science teachers nationwide. In 18 months, Fuchs reported, 40,000 copies of the series's first installments on cell biology and cancer, emerging and re-emerging infections and human genetics have been shipped across the country.

"We use our scientists here to see what teachers and students need to know about these topics," Fuchs explained. He also pointed out that with each copy of the supplement, OSE estimates it reaches



At the end of day two of his visit, the Secretary rolls up his sleeve for Xin Fu of the Blood Bank.

about 100 students, who in turn may discuss the science with their parents. "We're pleased that a lot more teachers are learning about the material and requesting it."

As a former governor involved with education initiatives, Thompson was asked to help OSE find additional ways to reach teachers, students and others involved in national and state school issues.

Next, the secretary was off to tour the Vaccine Research Center in recently occupied Bldg. 40. After a 40-minute briefing on global health research by NIAID director Dr. Anthony Fauci, VRC director Dr. Gary Nabel, Fogarty International Center director Dr. Gerald Keusch and acting Office of AIDS Research director Dr. Jack Whitescarver, Thompson was led to one of the biosafety level 3 vaccine production facilities in the building.

Fascinated to see where cutting-edge vaccine

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PHOTOS: BILL BRANSON

NIDDK's Dr. Fred Dyda shows Thompson a single crystal x-ray diffraction system in Bldg. 5, following the secretary's introduction to x-ray crystallography.



CONTINUED FROM PAGE 7

science is conducted, the secretary wanted to know why NIH could not be the ultimate distributor of any effective HIV/AIDS vaccine that the agency produces. Fauci explained:

"It's not in the NIH mandate to manufacture and distribute vaccines," he said. "We do the basic research and generally partner with industry in the early development of the vaccine, while FDA approves the vaccine and CDC is involved in the large scale distribution of the product."



NIDA director Dr. Alan Leshner greets the Secretary during lunch with the IC directors on day one.

Continuing to point out features of the production facilities, Fauci and Nabel talked with cautious optimism about a few of the most exciting developments in vaccine research.

"The first vaccine will probably not be a home run," Fauci predicted. "More like a single."

"However, you can do a lot of batting down the epidemic with only a partially effective vaccine," Nabel emphasized, sharing a nod of agreement with Kirschstein, whose early career in research involved testing the efficacy of the polio vaccine.

"If we can lower the peak," Nabel continued, "or even the amount of the virus in a person's system, then we can limit the number of people passing it on."

Thompson was then shown one of the HIV cell analysis laboratories that is housed in Bldg. 40. There, he was told, scientists use flow cytometry and high-speed cell analyzers to examine individual cells in the blood, measure which people respond to a drug and quantify which test vaccines are most effective.

A briefing on the Human Genome Project, tours of a microarray facility in Bldg. 49, the National Library of Medicine and the National Center for Biotechnology Information, and demonstrations of Medline and clinicaltrials.gov concluded the secretary's first day.

NIH Intramural Research In Depth

On day two, Gottesman and NIDDK

Following a briefing on the intramural research program by Gottesman (r), Thompson was introduced to aspects of structural biology by Dr. David Davies (c) of NIDDK's Laboratory of Molecular Biology.



Dr. Marius Clore (l) of NIDDK's Laboratory of Chemical Physics explained NMR and led the Secretary on a visit to one of the high-powered magnets NIH has on campus. Also on hand were (from l) NIDDK director Dr. Allen Spiegel, NIDDK scientific director Dr. Marvin Gershengorn, NIH acting deputy director Dr. Yvonne Maddox and NIH deputy director for intramural research Dr. Michael Gottesman.

director Dr. Allen Spiegel met with Thompson for more detailed talks on intramural research. Gottesman explained the budgetary allocations whereby more than three quarters of NIH's appropriation goes to extramural research and about 10 percent goes to science conducted within the intramural program.

Recalling all he had learned on his NIH visit to date, Thompson asked Gottesman, "You do such wonderful work. Why do you limit yourselves to 10 percent of the budget?"



Dr. David Lipman (l) discusses the National Center for Biotechnology Information.

"Smiling at the compliment, Gottesman replied that a study had been conducted under former NIH director Dr. Harold Varmus to help determine the levels at which intramural, extramural and research support programs should be funded. "Over the years, we [the intramural research program] have grown," Gottesman said, "but not at the same pace as extramural. The numbers of principal investigators have declined as well. And, truthfully, we do not have enough physical space for more researchers. Finding the right balance is key."

Thompson was then introduced to two aspects of structural biology. Dr. David Davies, chief of the molecular structure section in NIDDK's Laboratory of Molecular Biology, discussed x-ray crystallogra-

phy and how scientists discovered the three dimensional structure of such key HIV proteins as protease and integrase. Dr. Marius Clore, chief of the protein nuclear magnetic resonance spectroscopy section in NIDDK's Laboratory of Chemical Physics, explained NMR and how it helped determine the three-dimensional structure of a key protein HIV uses to infect healthy cells. Davies and Clore emphasized the importance of structural biology in drug and vaccine development.

A hard hat tour of the construction site for the Clinical Research Center, and a visit to the Blood Bank to make a donation capped the secretary's second day here.

On Wednesday, the secretary stopped in briefly at the scientific directors' meeting and spent part of the morning on the computer, learning about electronic



Thompson hears about innovative research on obesity by (from l) Drs. Tom Wadden, Christine Olson and Shiriki Kumanyika.

research administration and receiving a hands-on demo of NIH's web site. After lunch with HHS agency heads, Thompson visited several patient care units in the Clinical Center and the NIH-supported Stroke Center at Suburban Hospital.

On a shortened schedule Thursday—Thompson's last day on campus—he had briefings on child health and education, and an update on the spread of the West Nile virus. Lunch was a pizza party and a tour of the Children's Inn, which completed his working visit here.

This marks the secretary's fourth official visit to NIH since assuming the reins of HHS and the third in the month of August. His first official press briefing was held in Wilson Hall in February; he announced the results of a major diabetes prevention trial at a press conference in Lister Hill Auditorium on Aug. 8 and answered questions about stem cell research and the President's policy announcement on Aug. 10. ■

Drug Treatment for INCL

Help doctors at NIH determine if a drug called Cystagon can be an effective treatment for INCL—infantile neuronal ceroid lipofuscinosis. For more information call 1-800-411-1222 or 1-866-1010 (TTY). ■

Information for Cervical Cancer Screening

Because of recent Medicare changes to pay for Pap tests more frequently, the National Cancer Institute, in partnership with the Centers for Medicare and Medicaid Services (formerly HCFA), has launched a new packet of educational materials to help physicians communicate with women 65 and older about cervical cancer and Pap testing.

The packet contains clear and useful cervical cancer information for health professionals to use with their patients. It includes a new brochure on Pap tests designed for older women and a resource guide, which includes statistics of cervical cancer and lists written materials available for health professionals to use in their practice. The kit also features a Pap test reminder pad in English and Spanish. Similar to a prescription pad, the reminder pad can be used by physicians who can tear off a sheet to write in the date for the patient's next Pap test on top. It also discusses why a woman should have routine Pap tests. Women can leave their health professional's office with this fact sheet that also serves as an appointment reminder.

NCI encourages physicians and health professionals to order not only the pad, but also the entire contents of the kit as a tool for patient education. Research suggests that older women rely on their physicians to inform them about the need for cervical cancer screenings. At age 65, most women incorrectly believe that they no longer need a Pap test and that the risk of cervical cancer declines with age. The packet dispels that notion.

Over the next year, the packet will be distributed nationally to medical societies, health care organizations, consumer groups and government agencies. To view a sample packet, visit <http://cancer.gov/publications>, search under key word "Pap tests" and click on "Health Professionals Pap Test Packet." ■

HRDD Offers Voucher Program

HRDD can help you master the ever-changing software and computer technology necessary for the successful completion of projects. Through its Technical Consultation Voucher program, you can obtain one-on-one technical expertise and assistance in completing a project by working together with a consultant.

The consultant will not only advise and assist you in completing the project, but will also train you on the software that is being used. Technical consultation and/or training can be provided on a wide variety of projects and software such as: database design and customized reports; spreadsheet development; presentation design; brochures, catalogs, manuals, posters, and other publications. For more information, see <http://trainingcenter.od.nih.gov/tcd/voucher.htm> or call 496-5026. ■

Workshops for Women in Science

The Human Resources Development Division announces a new workshop series designed for women scientists. Negotiating, networking and mentoring lead to increased visibility and career opportunities. The workshops will target the development of these skills for women.

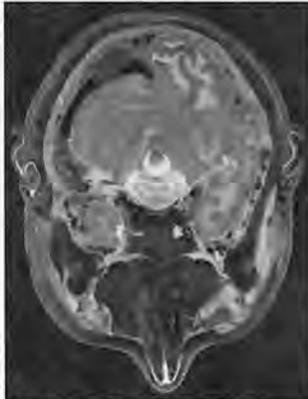
The first workshop is Communication and Negotiation for Women in Science. Topics include negotiating professionally with intramural and extramural scientists, supervisors, journal editors, and others; and maintaining ethics and learning specific characteristics of successful negotiators.

The 2-day workshop will be offered in December. For more information, contact HRDD at 496-6211.

NLM EXHIBIT, CONTINUED FROM PAGE 1

July 2002. Visitors are welcome Monday through Friday, 8:30 a.m. to 5:30 p.m., and Saturdays 8:30 a.m. to 12:30 p.m.

"This exhibit is a testament to the vital role communication plays in our lives," said NLM director Dr. Donald Lindberg. "We live in an amazing time in terms of the speed of technology development but it's important to understand how we got here. Few people realize the telegraph's dramatic impact on commerce, war, societal mores and health care."



At "The Once and Future Web" exhibition, visitors can examine the head of the Visible Human male.

"Telegraphic communication greatly quickened the pace of transmission of health information and improved public health," noted Dr. Elizabeth Fee, chief of NLM's History of Medicine Division, which created the exhibition. In 1925, an urgent telegraphic message set in motion the famous dog-sled relay that supplied icebound Nome, Alaska with lifesaving diphtheria antitoxin. With a clatter of telegraph keys, reporters sent news of the race to a world suddenly transfixed by the drama in the far north. Telegrams also helped arrange the relay's complex logistics.

Free Fall Film Series at NLM

In conjunction with the exhibition, *The Once & Future Web: Worlds Woven by the Telegraph and Internet*, the library is also hosting a free public film series. The fall 2001 series will address the impact of computers and the Internet on society. Each film will be introduced by a speaker with expertise in the film's subject area, and an audience discussion will follow the screening.

The films will be shown selected Thursdays at 7 p.m. (but schedule may change without notice; call 594-1947 to verify the dates, times and titles for each Thursday) in Lister Hill Auditorium, Bldg. 38A.

Oct. 18—*You've Got Mail* (dir., Nora Ephron, 1998; Warner Brothers) Speaker: Katie King (University of Maryland, College Park)

Oct. 25—*Johnny Mnemonic* (dir., Robert Longo, 1995; Columbia/Tristar) Speaker: To be announced

Nov. 1—*The Matrix* (dirs., Andy and Larry Wachowski, 1999; Warner Brothers) Speaker: Lisa Lynch (Catholic University)

Nov. 8—*Fail Safe* (dir., Sidney Lumet, 1964; Columbia/Tristar). Speaker: Janet Abbate (University of Maryland, College Park; author of *Inventing the Internet*)

Nov. 15—*Enemy of the State* (dir., Tony Scott, 1998; Touchstone) Speaker: Marc Rotenberg (Georgetown University School of Law; president, Electronic Privacy Information Center)

Telegraph wires, New York City, 1880s. (Photo: Brown Brothers.) After Morse demonstrated the electric telegraph in 1844, the rush was on to string telegraph wires across continents. By the early 20th century, the telegraph network crossed and linked every landmass except Antarctica.



The hero of that expedition was Balto, lead dog of the sled team that delivered the medicine. The team's mercy race to Nome is now memorialized in the annual Iditarod dog sled race.



Celebrated sled dog Balto with Gunnar Kaasen. (Photo: Brown Brothers.) Norwegian immigrant Gunnar Kaasen was the musher on the dog team that successfully delivered diphtheria antitoxin to Nome, Alaska in 1925. Lead dog for that final leg of the 600-mile trip was the indomitable Balto.

After Balto died in 1933, his body was preserved and is now on permanent display at the Cleveland Museum of Natural History. The famous dog's visit to NLM, to be part of this exhibit, marks only the second time he has left his permanent home.

"In most tellings of the story, Balto is the dog that saved the city, but the way we tell it, the telegraph deserves a share of the credit," said Dr. Michael Sappol, one of

the exhibition curators. "Almost as soon as it was invented, the telegraph was applied to nearly every conceivable realm of human activity—business, love, war, time standardization, traffic management, weather forecasting, emergency medicine and disease prevention. But it was never widely accessible to members of the public in the way that the Internet is." (Balto returns to his permanent home in Cleveland Nov. 13.)



The Internet, to a far greater extent than its predecessor, has revolutionized the field of medicine, bringing such breakthroughs as telemedicine, computer-assisted surgery and the development of massive databases of consumer-friendly medical information. "Never has so much medical information been available to so many for so little a cost,"



said exhibition co-curator Dr. Hunter Crowther-Heyck. "The opportunities it brings are truly amazing. But, if the history of the telegraph is any guide, making the most of these opportunities will depend on the choices we make: will we ensure that there is wide access, as with the telephone, or will access be limited, as with the telegraph? Will our rights, such

as freedom of speech and the right to privacy, be protected online, or will we live in a network of digital company towns?"

In addition to physical objects, The Once and Future Web features 11 touch-screen interactive stations. These deliver text, images, music, videos and a searchable exhibition library for subjects ranging from Morse's original invention to the role that the Internet plays today in delivering medical information to the public. Visitors will also be able to send a Morse-coded message, learn about digitizing and manipulating online images, participate in a virtual conversation, and see a demonstration of "virtual anatomy."

The exhibition is grouped in four thematic areas: "Networked Worlds," which tells the story of the creation and diffusion of the technologies; "A Part of Our Lives," which describes the many uses and users of the telegraph and Internet; "A Part of Our Dreams," which explores the ways these technologies have changed how we understand ourselves and our world; and "Saved By the Wire," which looks at the medical applications of the telegraph and the Internet. Objects on display include early devices and key documents as well as photographs, cartoons, songs, films and stories. ■

HRDD Class Offerings

The Human Resource Development Division supports the development of NIH human resources through consultation and provides training, career development programs and other services designed to enhance organizational performance. For more information call 496-6211 or visit <http://LearningSource.od.nih.gov>.

IPMA HR Competency Model Training	9/24-26
Introduction to MS PowerPoint 2000	9/26

Find Information for Your Research

The NIH Library offers several modes of training to suit your learning styles:

- ◆ Classes on how to use electronic resources effectively. The fall schedule includes many seminars on such topics as accessing full-text journals, searching databases, ordering and receiving articles via email, setting up a literature alert service, creating instant bibliographies for your manuscripts, and using the new NLM Gateway.

- ◆ Tutorials offering one-on-one assistance with a librarian in your office or in the library.

- ◆ Web-based tutorials on how to use electronic resources, including conducting a cited reference search in the Web of Science database to find out who has cited a particular article, setting up a Porpoise profile to receive weekly updates from the Web of Science database, and organizing your research files for creating instant bibliographies for your manuscripts using Reference Manager.

Go to <http://nihlibrary.nih.gov/training.htm> for more information on classes and tutorials, or call 496-2184. The training opportunities are free and available to NIH staff only.

WFLC Presents 'Phases' Seminars

The NIH Work and Family Life Center and the Employee Assistance Program present the fourth annual "Faces and Phases of Life" personal and professional development seminar series. The weekly seminars are given for free. Preregister for any session by calling WFLC at 435-1619. Sign-language interpretation is generally provided; call ahead to check. For more information about the series, visit <http://wflc.od.nih.gov>.

Hands-On Federal Applications Wednesday, Sept. 19, 12-2 p.m., Bldg. 31, Rm. 6C10

Basics of the College Application Process Wednesday, Sept. 26, 12-2 p.m., Bldg. 31, Rm. 6C6 ■



Dr. Patricia Greenwel has joined the Center for Scientific Review as scientific review administrator for the alcohol and toxicology subcommittee-1 scientific review group. This group reviews applications for grants to study the cellular and subcellular effects of toxicants and alcohol. She received an M.S. and a Ph.D. in experimental pathology from Albert Einstein College of Medicine, where she showed that interleukin-6 accelerates liver cirrhosis (scarring of the liver). This discovery has clinical relevance for individuals afflicted with liver cirrhosis. During her postdoctoral training at Mount Sinai School of Medicine in New York City, she showed how type I collagen, the major scar component produced during liver cirrhosis, is regulated at the genetic level.