

THE NIH RECORD

Still The Second Best Thing About Payday

Researchers Urged to Avert Millennial Mayhem

By Greg Roa

Biomedical equipment is not immune to the Millennium Bug—that's the urgent message the NIH Year 2000 (Y2K) medical and laboratory work group wants researchers to hear. To help scientists safeguard their research, the Center for Information Technology recently unveiled an interactive clearinghouse that helps them check laboratory and medical equipment for Y2K compliance—<http://oirm.cit.nih.gov/biomedical/>.

"By running a search on this Web site, scientists are able to tell at a glance whether they're ready for Y2K," said Cheryl Seaman, who leads CIT's effort to alert researchers about Y2K issues. "It should

SEE **MILLENNIUM BUG**, PAGE 8

Tufts' Keusch Takes Reins at FIC

Dr. Gerald T. Keusch (pronounced Kersh) has been named new associate director of NIH for international research and director of the Fogarty International Center. He succeeds Dr. Philip Schambra, who is retiring from NIH after more than 30 years, the last 10 as FIC director.

Keusch, who began here Oct. 1, was most recently professor of medicine and chief of the division of geographic medicine and infectious diseases at Tufts University School of Medicine and New England Medical Center, where he established a major research and



Dr. Gerald T. Keusch

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U.S. Department of Health and Human Services National Institutes of Health

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4 Days in China

Infection Outbreak Calls Two NIH'ers Overseas

By Carla Garnett

It started out as an ordinary consultation among colleagues. In early June, two physicians from China attended a conference on current technologies at the Clinical Center's department of transfusion medicine. General transfusion and blood-handling issues were discussed; a few lectures on the state of the science were given. The meeting ended. The Chinese doctors, loaded with conference handouts and other materials, returned home. Business—or rather, science—as usual.

A couple days later, however, Dr. James Shih, supervisor of

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Nurse Consultant Amy Collins confers with health care workers in China.

WALS Talks Target Prions

Nobel Laureate Prusiner To Give Mahoney Lecture

Nobel laureate Stanley Prusiner will present the Florence Mahoney Lecture on Aging at 3 p.m., Wednesday, Oct. 14 in Masur Auditorium, Bldg. 10. His talk is sponsored by the National Institute on Aging and is part of the NIH Director's Wednesday Afternoon Lecture Series.

Prusiner, a professor of neurology at the University of California, San Francisco, will discuss "Prion Biology and Diseases: A Saga of Skeptical Scientists, Mad Cows, and Laughing Cannibals." His

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Stetten Lecturer Sheds Light On Prion Hypothesis

By Alison Davis

Whimsically entitled "Mad Cows Meet Psi-Chotic Yeast: The Expansion of the Prion Hypothesis," this year's DeWitt Stetten, Jr. Lecture will feature Dr. Susan L. Lindquist of the University of Chicago. She will tell how her work on stress-triggered heat-shock, or chaperone, proteins has helped unravel a decades-old genetic mystery: the identity of an unconventional, inherited genetic element in yeast cells called [PSI+]. The talk, sponsored by NIGMS, will be held

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Dr. Kalman F. Salata recently joined the Center for Scientific Review. He comes from Walter Reed Army Medical Center, where he began as a research chemist in 1988 before rising to acting chief of the research operations service. He has also been on the faculties of the Uniformed Services University of the Health Sciences and Bowling Green State University. With his broad range of experience and publications in biochemistry, immunology, pharmacology, transfusion medicine and tropical diseases, Salata joins CSR as an assistant chief of referral, to help assign applications for scientific review and funding consideration.

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training program in infectious diseases and international health. He also served as scientific director of the health group at Harvard Institute for International Development, where he oversaw long-term projects to increase research capacity in developing countries.

As director of FIC, he will oversee an annual budget of approximately \$30 million that supports research and training grants and fellowships with more than 80 nations.

"I am delighted that Dr. Keusch will be joining us," said NIH director Dr. Harold Varmus, who made the appointment. "We will gain the benefit of his many years of basic and clinical investigation into health problems such as HIV, malnutrition and diarrheal diseases that exact such a huge human toll, especially abroad."

Keusch is an internationally recognized expert in infectious diseases. Among other areas, his research has focused on molecular pathogenesis of enteric infections and vaccine development and on the effects of malnutrition on immune response and host defenses.

He has conducted studies in Central America, Asia and Africa, where he directed one of the NIH-supported International Collaboration on AIDS Research projects on the epidemiology and natural history of chronic diarrhea and wasting syndrome ("slim disease").

"I am very grateful for the decades of support NIH has provided to me and my colleagues for international work, and I look forward to helping the agency advance its international scientific objectives," said Keusch. "I hope to pursue several goals such as bringing more young scientists into the field of international health and promoting interdisciplinary approaches. My own studies on bacterial and protozoal diarrhea have shown me the importance of closely linking basic and clinical research pursuits in international health. I also hope to create new partnerships among institutions involved in international health to help ensure that our research efforts translate into public health tools and interventions." ■

Local Historian To Talk on NIDR History

Dr. Ruth Roy Harris will deliver a lecture on the history of NIDR titled, "Dental Research from Fluoridation to AIDS" on Tuesday, Oct. 20 at 2 p.m. in Lister Hill Auditorium, Bldg. 38A. The lecture is part of NIDR's 50th anniversary celebration and is being held under the auspices of the NLM History of Medicine seminar series.

Harris is the author of *Dental Research in a New Age: A History of the National Institute of Dental Research*, which was published in 1988. She is now working on a supplement to the book that will highlight NIDR's craniofacial-oral-dental research during the past 10 years. ■

PRUSINER, CONTINUED FROM PAGE 1

1997 Nobel Prize in physiology or medicine was awarded for his unprecedented discovery of a new genre of disease-causing agents called prions.

Prions, which appear to be infectious proteins, are implicated in a class of neurodegenerative diseases, the transmissible spongiform encephalopathies. These include kuru and Creutzfeldt-Jakob disease in humans, scrapie in sheep, and bovine spongiform encephalopathy (mad cow disease) in cows.



Dr. Stanley Prusiner

Prusiner has created a new field of research that has resulted in new concepts in the understanding of degenerative

diseases of the central nervous system. These results have profound implications for future biomedical research in many areas of investigation.

Editor of 8 books and author of more than 200 articles, Prusiner received his undergraduate and medical training at the University of Pennsylvania and his postgraduate clinical training at the University of California, San Francisco. From 1969-72, he served in the Public Health Service at NIH.

A reception for him will follow the question and answer portion of his lecture. For accommodation and information, call Hilda Madine at 594-5595. ■

N I H R E C O R D

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More Hispanic Research Participation Urged

Finding ways to increase Hispanic participation in research emerged as a theme at the recent Hispanic Heritage Symposium held in Masur Auditorium to kick off National Hispanic Heritage Month (Sept. 15-Oct. 15). Christina Bruce, director of Diversity and Employment Programs at NCI and chairperson of the observance, began by stating that there is an "imperative need that Latinos and Hispanics in the United States become aware of and participate in the medical research programs which seek them out, not only for their own immediate well-being... but also for the ones who cannot easily speak for themselves."

Racial and ethnic gaps in health are well-recognized. Kevin Thurm, deputy secretary of DHHS, reported that 30 percent of Latino children are not covered by insurance; in addition, Latino women are more likely to die from cervical cancer than whites. He said this is not a Latino problem or an African American problem: "It is an American problem... We cannot treat racial disparities as an unavoidable fact of life—a problem with elusive solutions. Eliminating the health disparities among different racial and ethnic groups will lead to better health for all Americans."

Currently there are more than 29.7 million Hispanics in the United States, or about 11 percent of the population. Larry Salas, president of the NIH Hispanic Employee Organization, stated that Hispanics are underrepresented in the federal work force. Only 2.3 percent of the employees at NIH are Hispanic. NIH is addressing this problem with a program called "Hispanic Agenda for Action: Improving Services to Hispanic Americans." Its mission is to "address a broad scope of issues ranging from service delivery, data collection, customer service capability, Hispanic Educational

Excellence programs, and the underrepresentation of Hispanic employees in the HHS work force."

Dr. Richard Klausner, NCI director, focused on understanding

the burden of cancer. He reported that overall rates of cancer in the Hispanic community are lower than in the white community. Studies show that Hispanics have lung cancer one-third less

frequently than whites, breast cancer rates are 40 percent lower, and colorectal cancer rates are 25 percent lower than in whites.

However, not all cancers are lower in the Hispanic community than in the non-Hispanic community. Prostate cancer is rising in the Hispanic community. Cancer of the liver, stomach and gall bladder are almost twice as high in the Hispanic population as in the white population. Researchers are studying whether or not exposures to cancer-causing agents are at the root of the problem. Klausner declared that there are extraordinary opportunities to learn why cancer rates in the Hispanic population differ from those among whites.

NIA director Dr. Richard Hodes spoke next about new directions in research on aging. He said that in 1990, there were over 1 million Hispanics over age 65 and by the year 2050, this number will increase eleven-fold. He echoed the call to involve this growing Hispanic community in research.

Quite a few radio and television fans turned out to see and hear Dr. Elmer Huerta, medical director of the Cancer Risk Assessment and Screening Center. He spoke about why he presents health information via television and radio. He explained that 87.9 percent of Latinos in the Washington, D.C., metropolitan area listen to the radio daily. Physicians are also highly respected sources of health information in the community. Huerta has produced more than 1,000 radio shows since 1989.

Other symposium topics included smoking prevention in youth, screening patterns in the Hispanic community, Alzheimer's disease, and the need for increasing the number of minority students in scientific careers.—Dilsey Davis ■



Dr. Elmer Huerta, who appears on radio and TV with health information for the Hispanic community in D.C., is greeted warmly by his fans.

PHOTOS: BILL BRANSON



On hand for "Abriendo Puertas—Opening Doors: Biomedical Research and Hispanic Health Issues" were (from l) DHHS Deputy Secretary Kevin Thurm, NIH deputy director Dr. Ruth Kirschstein, NCI director Dr. Richard Klausner, and NIA director Dr. Richard Hodes.



Dr. Derrick C. Tabor has joined NIGMS as a special expert in the Division of Minority Opportunities in Research (MORE). He is currently on a leave of absence from Johnson C. Smith University in Charlotte, where he is an associate professor of chemistry and chair of the department of natural sciences. As a former program director of the Minority Biomedical Research Support Program at the university, Tabor brings to NIGMS an extensive knowledge of MORE's minority programs at the institutional level.

LINDQUIST, CONTINUED FROM PAGE 1

on Wednesday, Oct. 21 at 3 p.m. in Masur Auditorium, Bldg. 10.

Since she was a graduate student, Lindquist, now a professor of molecular genetics and cell biology, has been interested in how cells react to stressful situations such as exposure to heat or noxious chemicals. A key mechanism cells have evolved over time to cope with such stresses is the production of a set of protective proteins called heat-shock proteins, or chaperones. As the name implies, chaperones prevent inappropriate interactions between other cellular proteins while also helping them to fold both properly and efficiently. Over the years, Lindquist's studies have clarified the myriad roles



Dr. Susan Lindquist

chaperones play in the cell. Only recently has her research ventured into the burgeoning new field of prions. In fact, according to Lindquist, her work on yeast prions came about "by sheer accident."

A few years ago, she got a call from a colleague, Dr. Yuri Chernoff of the University of Illinois at Chicago. Chernoff, in the course of his studies of the [PSI⁺] element in

yeast, stumbled upon one of the chaperones, Hsp104, that Lindquist's group had been researching. As it turns out, Hsp104 somehow interacts with the protein encoded by the yeast [PSI⁺] gene, called Sup35. Sup35, it happens, is a microbial analogue of prions, the protein culprits that are intimately involved with the devastating neurological ailment Creutzfeldt-Jakob disease in people and its correlate in cows, "mad-cow disease."

Worldwide interest in prions was heightened last year when Dr. Stanley Prusiner (see story, p. 1) of the University of California, San Francisco, netted the Nobel Prize in physiology or medicine for his two decades of work on prion particles—what the Nobel committee described as a "new genre of disease-causing agents."

Lindquist's work on yeast chaperones like Hsp104 has introduced a whole new role for these proteins in coaxing prion-like proteins such as Sup35 to aggregate into clumps and stringy fibers. What's more, her work may eventually point the way to new therapeutic targets by offering scientists a simple model system in which to study prion-related diseases and potential therapies. In yeast, for instance, Lindquist has found that titrating the level of chaperones in the cell can actually "cure" affected cells.

In addition, she said, protein folding studies are exceedingly difficult to perform in the cells of higher organisms. She hopes that the yeast system will provide a simpler way to investigate prions. "We can screen yeast cells much more easily, cheaply and quickly than mice," Lindquist said.

Prions are thought to act through a highly unusual mechanism in which a few misshapen prion molecules jostle normal proteins in the same cell and get them to assume the same deformed shape. Lindquist's work has shown that, at least in yeast, the chaperone Hsp104 somehow participates in this chain reaction. The process is unusual in that it is self-perpetuating and it can be passed from one generation to the next without ever involving a nucleic acid.

In mammalian cells, clumps of prions coalesce into knotty tangles, harming brain cells and leading to the spongiform encephalopathies such as Creutzfeldt-Jakob disease and sheep scrapie. In yeast cells, however, the situation isn't so dire, Lindquist said. While the condition may not be entirely harmless, yeast cells can survive with an abundance of prions, she said. In fact, Lindquist and her group have devised a clever way to spot prion-"infected" yeast cells by attaching a glowing green tag to the Sup35 protein and then visually screening cells for signs of clumping.

Lindquist is excited by the remarkable biochemical similarities between yeast and mammalian prions, but she is even more fascinated by yeast prions' ability to serve as a mechanism of inheritance. Prion-containing cells have physiologies distinct from normal cells, and such differences are inherited by a "protein-only" mechanism: heritable changes in protein structure. "This might be a very ancient mechanism in which information is transmitted from one generation to the next," Lindquist said. "We want to know how it works and how broadly it applies."

NIGMS has supported Lindquist's work since 1978. ■

Female Volunteers Needed

The Behavioral Endocrinology Branch, NIMH, is seeking female volunteers ages 18-45 to participate in studies of the effects of reproductive hormones on brain and behavior. Volunteers must have regular menstrual cycles with no changes in mood in relationship to menses, be free of medical illnesses and not taking any hormones or medication on a regular basis. They will complete daily rating forms and be asked to participate in one of several protocols. Payment will be in accordance with the duration of each visit and the type of protocol. For more information, call Linda Simpson-St. Clair, 496-9576. ■

Free Flu Immunizations Available for NIH'ers

Flu season is approaching, and it's time to prepare for this unwelcome visitor. It's a dangerous disease that spreads rapidly and easily. Each year, flu and its complications cause the hospitalization of between 250,000 and 500,000 Americans and the death of almost 20,000. Immunization is necessary every year for two reasons: the prevalent types of flu virus are different every year and the immunization effect lasts only about 6 months.

Employees can get free flu immunizations at the worksite, without an appointment. But you need to bring your NIH employee ID card in order to receive the shot.

Influenza Immunization Clinic Schedule 1998

After Nov. 24, immunizations given by appointment only

Oct. 13 - Nov. 24

On Campus

Bldg. 10, Rm. 6C306

All times are 7:30-11 a.m. and 1-5 p.m. except for Oct. 15, when the afternoon schedule is 1-2.

A B Oct. 19, Mon. C D Oct. 21, Wed.

E F Oct. 26, Mon. G H Oct. 28, Wed.

I-K Nov. 2, Mon. L M Nov. 9, Mon.

N-Q Nov. 16, Mon. R S Oct. 13, Tues.

T-V Oct. 14, Wed. W-Z Oct. 15, Thurs.

Walk in, first come, first served, 7:30-11 a.m. & 1-5 p.m.

on Nov. 17, Nov. 23 and Nov. 24

Bldg. 13, Rm. G904,

Fridays, 8-11 a.m. & 1-3 p.m. last name begins with:

A-D Nov. 6, Fri. E-H Nov. 13, Fri. I-M Oct. 16, Fri.

N-S Oct. 23, Fri. T-Z Oct. 30, Fri.

Off Campus

EPN, Rm. 103, 8:30-11:30 a.m. & 1-3 p.m.

A-L on Nov. 19, Thurs. M-Z on Oct. 27, Tues.

Solar Bldg., Rm. 1C01, 8:30-11:30 a.m. & 1-3 p.m.

A-L on Oct. 22, Thurs. M-Z on Nov. 10, Tues.

Federal Bldg., Rm. 1C05, 1-3 p.m. Oct. 29, Thurs. &

Nov. 4, Wed.

Poolesville, Conf. Rm. Nov. 18, Wed.

Bldg. 102, 8-11 a.m. Bldg. 110, 12 noon to 2 p.m.

Rockledge, Rm. 5054, 8:30-11:30 a.m. & 1-3 p.m. Oct.

20, Tues. & Nov. 3, Tues.

STEP Presents 'Is Your Thyroid Off Track?'

The inaugural session in the Science for All series, sponsored by the staff training in extramural programs committee, is entitled, "Gland Central Station: Is Your Thyroid Off Track?" It will be held Thursday, Oct. 29 in Bldg. 1's Wilson Hall, beginning at 8:45 a.m.

The workshop will feature talks by four researchers, followed by a panel discussion with the audience. Dr. Sam Refetoff of the University of Chicago will provide an overview of thyroid function and its role in metabolism, homeostasis and endocrine function, as well as maternal-fetal interactions and changes during development and aging. Dr. Delbert Fisher of the Nichols Institute will review various causes of thyroid dysfunction. Dr. Carol Spencer of the University of Southern California will discuss symptoms of thyroid dysfunction as well as screening and test methodology. And Dr. Lewis Braverman of Brigham and Women's Hospital will examine some treatment approaches including diet and nutritional supplements, pharmacological strategies, surgery and hormone therapy.

The session is free and open to all on a first-come, first-served basis. No advance registration is necessary. For more information, call STEP, 435-2769; make requests for reasonable accommodation by Oct. 22. ■



The recent WGAY Outdoor Film Festival at NIH, coordinated by R&W for the benefit of several NIH charities, was a huge success, garnering more than \$12,000. Ten films were shown on the lawn behind the Natcher Bldg. from Aug. 14 to 23, drawing more than 30,000 people. "It's the best thing in Washington in August," said Channel 4's Arch Campbell. "Make sure you go to the movies outside—it is great!" Citing the warmth and feeling of open-air movies, Randy Schools, R&W president, said, "Our community is closer because of the festival." Attendee surveys were very positive, with many urging, "Do it again next year!" In the photo at top, early arrivals find groundspace close to the silver screen. Below, moviegoers spread blankets, pillows and sleeping bags for a night under the stars.



Brenda J. Velez has been named chief of NIAID's Contract Management Branch. She is responsible for oversight of the institute's research contract activities. She has held various contract positions at NIAID since 1986, including chief of the AIDS clinical research contract section. Prior to joining NIAID, she was a contract specialist in NIMH from 1981 to 1986. Velez is the recipient of numerous awards including the NIH Merit Award, HHS Recognition Award and PHS Special Recognition Award. She is currently chair of the NIAID EEO advisory committee and a member of the NIH Hispanic American advisory committee. She earned her bachelor's degree from the University of Puerto Rico in 1973.

OUTBREAK, CONTINUED FROM PAGE 1

molecular diagnostics, DTM, received a message from China: Upon returning home, the two physicians had been met with something of a crisis. A series of persistent infections had broken out in a hospital in Shenzhen, a metropolis in southern China, bordering Hong Kong. Were there some NIH'ers familiar with this particular infection who perhaps could discuss treatment options and methods for controlling the outbreak? Shih directed the message to the CC's Hospital Epidemiology Service, where Nurse Consultant Amy Collins offered preliminary outbreak control information to the Chinese physicians.

In the meantime, the doctors were also busy searching for additional resources in the pages of one of the NIH booklets they'd brought home—the 1998 *Clinical Studies*. They looked up the disorder's causative agent—mycobacterial infection—and found that clinical trials were being conducted by NIH scientists. The services of NIAID's Dr. Steve Holland were requested.

Fielding such consultations was pretty much routine for both Collins and Holland, and they began collaborating via email for several days to determine the extent of the problem.

At the outset of these communications, though, it seemed that the outbreak was still occurring. The Chinese government extended an urgent, formal invitation: Please come to Shenzhen ASAP. The two were headed to Hong Kong by week's end.

On the Road to China

"I didn't want to go," Holland recalled, during an interview weeks after his return. "My wife was pregnant, going into the ninth month. I'd just gotten back from a meeting in Switzerland. I really



Enjoying lighter moments of the whirlwind visit to China are (from l) Dr. Junan Zhou, a thoracic surgeon who also serves as public health chief for the city of Shenzhen; Dr. Wei-Tao Zeng, head of the infection treatment team; NIAID infection researcher Dr. Steve Holland; Nurse Consultant Amy Collins of the Clinical Center's Hospital Epidemiology Service; and Dr. Guo-Guang Wu, a transfusion medicine specialist who coordinated the trip.

wanted us to try and handle it from here. But they weren't sure they were treating it properly, and it didn't seem to be clearing up. They also needed Amy to do the epidemiology."

"There was a sense of urgency and essentially we just realized we needed to go," Collins summed up. "It took us about a week to decide what was needed—clearing it with both governments, getting visas, and working out the travel arrangements."

Mycobacterium infections, due to the rapidly growing species, are occasionally reported in association with problems in disinfection techniques, or inadvertently contaminated fluids used in hospital procedures, explained Collins. Basically, patients contract it while in the hospital for something else. An infection that can form around recent surgical incisions, *Mycobacterium abscessus* can be persistent, prying sutures open and working its way inside the body. While not generally life-threatening, Holland continued, the infection is a nuisance, not allowing routine wounds to heal and further delaying rehabilitation and release from the hospital. Clearly visible on the skin, the infection can also cause disfiguring scars in some, if left unchecked. It is extremely uncommon in the United States.

When Collins and Holland arrived at the women's and children's hospital in Shenzhen at 9 on a Saturday morning—following an evening meeting with several grateful Chinese medical specialists—they began examinations of 71 inpatients with evidence of the infection.

"That was a lifetime's experience," said Holland, recalling his surprise at the sheer number of cases. "It was only surpassed by the 81 outpatients we saw the next day."

The patients ranged from a toddler who had recently undergone a hernia operation to new moms who had delivered by caesarean section. All had one thing in common—a poorly healed incision, discolored, inflamed and oozing. A few had infections that had spread beyond the local site to nearby

Holland (top, fifth from l), shown with the medical team that recently combatted an outbreak in China, said he witnessed a lifetime's worth of mycobacterium infections in Shenzhen.



lymph nodes. As it turned out, the doctors there were in fact doing nearly all that could be done to control the infections.

"They had made a concerted effort to treat the problem," Holland said. "They had already put the patients on a variety of antibiotics. This infection can be obnoxious, though. They wanted to collaborate on how long to treat it. Unlike a lot of other infections, this one gets treated for months, not days. I recommended a few other antibiotics that might be useful, and an immune modulator. They were basically doing the right things, they just needed to do more of them."

NIH'er Gains National Spotlight

During the 4-day journey, Holland conducted several conferences with the hospital's medical staff, lecturing to groups of 35 and 75 people at a time on infection therapies under current review at NIH. Warmly welcomed for his expertise, he was also interviewed by several representatives of the national news media there, including China's equivalent of *Good Morning, America*.

One concern voiced most often involved which antibiotics were safe for women to use while breastfeeding. "I had to place a call to NIH's pharmacy for that one," Holland said. "They searched the NIH databases and came up with the answer."

Collins, meanwhile, was collecting data for the epidemiological evaluation that could shed light on the origins of the outbreak and perhaps reveal how future infections like it could be prevented. The clinical photographs and information would also be a boon for research efforts in this country, which does not often witness such an outbreak. Contacts with the Chinese physicians will continue, Collins stressed, as both NIH'ers maintain communications. All involved also remain curious about how the situation will be finally resolved.

"After much investigation and discussion," she said, "we identified a probable source of the organism. Control measures were implemented and changes in disinfection practices were made with the assistance of many local hospital professionals. They are well on their way to eradicating this occurrence of infections." ■



Collins and her colleagues in Shenzhen, China, keep communication lines open.

1998-1999 NHGRI Human Genome Lecture Series Begins Oct. 15

The National Human Genome Research Institute's 1998-1999 Human Genome Lecture Series begins Thursday, Oct. 15. The nine speakers will focus on genome sequencing, genome architecture, sequence variation, comparative genomics and issues associated with genetics research in particular populations. All lectures take place from 11:30 a.m. to 1 p.m. in Lipsett Amphitheater, Bldg. 10. For more information call the NHGRI Office of Communications, 402-0911. To schedule an appointment with the speaker, contact Dr. Lisa Brooks, 496-7531, lisa_brooks@nih.gov. CME credit is available. The schedule follows:

Oct. 15

Dr. Stephen O'Brien, National Cancer Institute
"Comparative Anatomy of the Mammalian Genome"

Nov. 19

Karen Rothenberg, University of Maryland School of Law
"Genetics Research and the Jewish Community"

Dec. 17

Dr. David Cox, Stanford University
"Single Nucleotide Polymorphisms"

Jan. 21, 1999

Dr. Evan Eichler, Case Western Reserve University
"Pericentromeric Duplications and the Complex Architecture of the Human Genome"

Feb. 18

Dr. Lincoln Stein, Cold Spring Harbor Laboratory
"Web Access to the *C. elegans* Genome"

Mar. 18

Dr. Robert Waterston, Washington University
"Sequencing the *C. elegans* Genome"

Apr. 15

Dr. Ira Herskowitz, University of California, San Francisco
"Using the Yeast Genome Sequence to Learn about Biology"

May 20

Dr. Gail Geller, Johns Hopkins University
"Involving Children in Genetic Susceptibility Research: Implications for Informed Consent"

June 17

Dr. David Schwartz, New York University
"Whole Genome Analysis by Optical Mapping" ■

Male Teens Needed

You and your 12-16 year old son may be eligible to take part in a research study on adolescent emotions at the National Institute of Mental Health. Payment will be provided. Volunteers should have no current or past psychological treatment. For details, call Barbara Usher, 496-4431. ■



Dr. J. Ricardo Martinez, a physician with dual research interests in salivary gland function and minority access to health care, has been named director of the Division of Extramural Research, NIDR. He comes to NIH from a post as deputy chairman for research and professor of pediatrics, physiology, and cellular and structural biology at the University of Texas Health Science Center in San Antonio. He has a long association with NIH, having served on such groups as the NIH oral biology and medicine study section and NIDR's National Advisory Dental Research Council. His first grant was funded by NIDR in 1968 and the institute continues to fund his work on salivary gland function. He began his tenure at NIDR Sept. 13.

prove very helpful to the scientific community."

Nonnegotiable Deadline

The Year 2000 problem, a computer glitch lurking in some computer hardware and software, could cause machines to malfunction or shut down at the end of the century. Scientific equipment often contains embedded microchips that can handle

intramural research equipment suspected of having a Y2K problem. First, ICs must conduct a complete inventory of equipment where noncompliant use could adversely affect the health and well being of humans and animals.

For all other types of equipment, laboratory and branch chiefs will certify that their scientists are aware of Y2K issues; know what type of equipment could be affected; seek compliance information from the biomedical clearinghouse or manufacturers; make necessary remediation; and have contingency plans in place.

Right Tools for the Job

Though ultimate responsibility for investigating equipment lies with individual researchers, the new NIH Y2K Biomedical Clearinghouse makes their job much easier. The Web site database boasts over 13,000 records that visitors can search by product or manufacturer name. If a piece of equipment is not indexed, scientists can use the interactive form to file a request for Y2K compliance research. Clearinghouse operators will then contact the manufacturer and post the information within 30 days. The clearinghouse also includes an Excel spreadsheet file that can be downloaded to facilitate inventory activities and emailed back to the contractor for compliance assessment research. Updates to the clearinghouse will occur weekly.

Scientists who find their equipment is non-compliant will be able to upgrade, repair, replace or surplus machines. By determining early on whether to purchase new hardware or software, they can avoid costly, extended backorder delays.

"The NIH Clearinghouse augments similar lists from the FDA, VA hospitals, and others," noted Jaren Doherty, chairman of the NIH Year 2000 working group. "It really places a vast reservoir of information at the scientist's fingertips."

It also features links to other useful sites, including the NIH Information Technology Clearinghouse at <http://www-oirm.nih.gov/itclear/>. This contains Y2K compliance information concerning Unix and other computer systems and software.

For a live demo of the Biomedical Clearinghouse, visit the special Y2K booth during the NIH Research Festival poster sessions, Oct. 7-9, 1:30-4:30 p.m. For more information, researchers can also contact their IC's Year 2000 working group representative listed in the clearinghouse. ■

FAES Concert Set, Oct. 18

The FAES Chamber Music Series will present the St. Petersburg String Quartet at 4 p.m. on Sunday, Oct. 18 in Masur Auditorium, Bldg. 10. Tickets are \$20 at the door; \$10 for students and fellows. For more information call 496-7975. ■

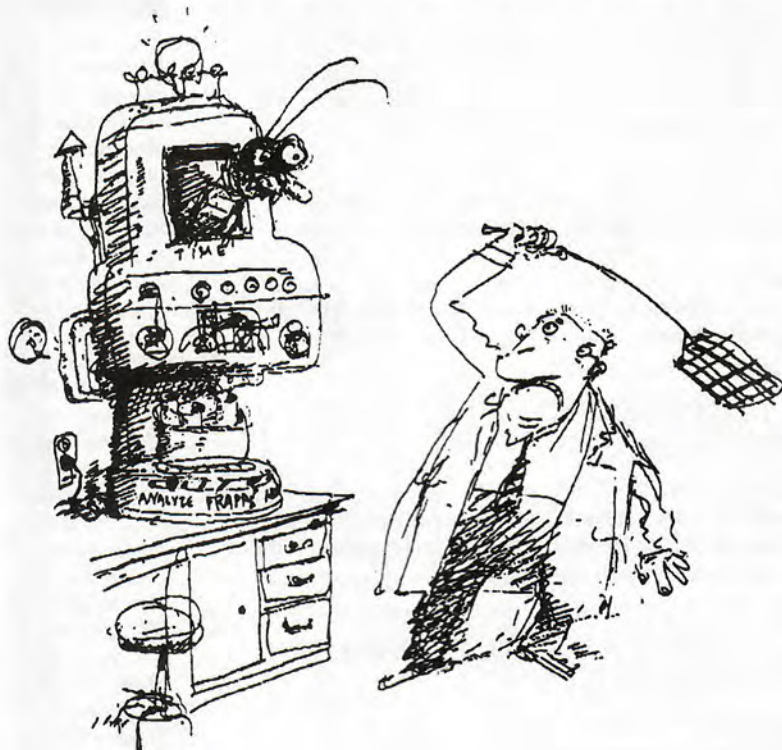


ILLUSTRATION:
RICHARD THOMPSON

anything from simple date-stamping tasks to complex operations such as interfacing with other machines. Consequently, researchers must be concerned about the Y2K compliance status of all their systems—not only PCs but also biomedical equipment. Otherwise, months or years of data and costly experiments could be jeopardized.

A few researchers learned firsthand about the pervasive Y2K bug when CIT helped survey parts of the Clinical Center and NIA's Gerontology Research Center earlier this year. The participants first thought only computers were at risk. But after surveyors inquired about instruments that used date/time functions, including some that relied on unexamined microchips, their dragnet widened.

"No one should panic over Y2K," said Seaman, "but by the same token, it's good scientific practice to check your equipment carefully. We can only solve problems we know about—and the time to identify them is now."

Preemptive Measures Planned

NIH has taken a two-part approach to assessing

NIH Library Offers Online Journals

New additions to the NIH Library include electronic access to *Cell*, *Immunity* and *Neuron*, and access to several hundred full-text journals via ScienceDirect. All these journals can be reached via the library's Web page at <http://nihlibrary.nih.gov>. Just click on Electronic Resources, then choose the link for Online Journals.

Full text is now available on the above-named journals from January 1996 to the present. Abstracts are available for prior years, going back as far as 1988 in the case of *Neuron*. Timeliness is a key feature, as articles appear online before the print version arrives in the library.

The new service has been enthusiastically received. Says Dr. Nava Sarver of NIAID, "I am delighted with having *Immunity* on line. I am a diligent reader of this journal and having it at my fingertips is most useful. I also read *Cell*, and the same comments apply here."

Notes Dr. Joe Callicott of NIMH, "Of all of the numerous resources provided by the library, the availability of journals like *Neuron* online is very much appreciated. In fact, I would hasten to say that I am now dependent on them for my work—saving time for myself and my research assistants."

Since late 1997, a group of NIH'ers has been testing ScienceDirect, a product of Elsevier Science,



"Cell and Neuron are absolutely indispensable to my research," says Dr. Steven J. Zalcman of NIMH.

the world's largest scientific publisher. The test proved a success and the rest of NIH can now access ScienceDirect. "Elsevier Science was very excited about having NIH as a beta site. With the database going live, it's the largest implementation in the world," said Stephanie Publicker, electronic resources team leader at the library. ScienceDirect offers immediate access to the abstracts and full text of more than 1,000 journals in a wide variety of subject areas, both current and past. As of July, NIH staff have desktop access to these journals, including some of the most popular: *Biochimica et Biophysica Acta*, *FEBS Letter*, *The Lancet*, *Brain Research*, *Immunology Today*, *Life Sciences* and *Neuroscience*. "Speed of delivery and desktop access allow the user's information need to be filled immediately," said

Publicker. "The researcher in the lab doesn't have to wait, and can get access to the article right at the bench."

Larry Wright and Ellen Leadem of the NIEHS Library share their enthusiasm for ScienceDirect: "Elsevier's ScienceDirect service provides exactly what our researchers here have come to expect in the delivery of electronic journals: dependable access, immediacy and timeliness of delivery over the print counterpart, convenience of desktop delivery, articles available in PDF format and the facility to quickly browse and/or search the contents of journals."

For more information, call 496-1080.—Kathryn Dudley ■

International Team Explores Hypertension

Half of all adults in some South African Black populations have hypertension. By contrast, hypertension affects about 32 percent of African Americans—and 24 percent of all Americans.

To find ways of reducing high blood pressure's toll, leading South African and American scientists gathered at NIH for the second joint workshop on hypertension in Blacks. Funded by NHLBI, the 2-day workshop was held recently at Lawton Chiles International House. The scientists shared findings and discussed methodologies to improve the prevention, diagnosis and treatment of high blood pressure in both countries. Also attending was U.S. assistant surgeon general Dr. Roscoe Moore, who expressed his support for future collaboration between U.S. and South African researchers.

Dr. Edward Rocella, coordinator of NHLBI's National High Blood Pressure Education Program (NHBPEP), said, "Hypertension may be one of the most pervasive chronic diseases in developing countries." His presentation focused on some of the strategies used by NHBPEP to increase awareness among clinicians, patients and the public of the threat posed by hypertension.

Other topics covered at the workshop include: the epidemiology of hypertension in South Africa; the primary prevention of hypertension; the management of hypertension when it occurs with other conditions such as diabetes, stroke and heart failure; hypertension in pregnancy; and the endocrinology of the vascular system.

The scientists are planning joint studies such as comparing salt responsiveness among African American and South African Black hypertensives, and investigating the possible relationship of body composition to cardiovascular disease risk factors. Added activities will include implementing community organization and educational components of NHBPEP within South African populations.



Christine Steyer recently joined NIAMS as its personnel officer. She had been acting personnel officer at NINDS since 1997, and a personnel management specialist there since 1987. She also serves as cochair of the NIH day care oversight board. Previously, she was a staffing specialist at the U.S. Department of Treasury. She joined NIH in 1982 as a personnel assistant at NIMH. Steyer grew up in Chevy Chase and is a 1982 graduate of the University of Maryland, with a degree in personnel management.

Have Work-Related Pain?

Do you have work-related pain in your neck, shoulders, arms or hands? Do you work in an office environment, and are you between ages 21-65? If so you may be eligible to participate in a study of a new approach to reduce symptoms and improve function. Study involves six visits to Georgetown University Medical Center and is free. You will also receive up to \$100 for participating. If interested, call (202) 687-3076.

Dr. Margaret I. "Peggy" Johnston has returned to NIH to assume two key posts at NIAID. In the newly created position of assistant director for HIV/AIDS vaccines, she will serve as a liaison between the extramural and intramural research communities, and ensure a well-coordinated program. As associate director of the Vaccine and Prevention Research Program in the



Division of AIDS, she has primary responsibility for extramural research programs focused on HIV/AIDS vaccines, topical microbicides and other biomedical prevention approaches. She will facilitate the development of multiple promising vaccine and prevention strategies; remodel and unify NIAID's clinical vaccine research programs; and foster new prevention research activities. She will direct the creation and implementation of an overall HIV/AIDS vaccine and prevention research agenda, and research initiatives to address its needs. In 1996, Johnston left NIAID as deputy director of DAIDS to become scientific director (and later vice president for scientific affairs) of the International AIDS Vaccine Initiative, a scientific and advocacy organization that focuses on the needs and concerns of the developing world.



The Oakland A's mascot Stomper signs an autograph at the National Spit Tobacco Education Program (NSTEP) booth during Major League Baseball's recent FanFest '98. For the second time, NIDR cosponsored the NSTEP exhibit, where booth personnel distributed information on the dangers of spit, or smokeless, tobacco use and mascots signed autographs. The exhibit's theme, "Just play the game," reminds youngsters that spit tobacco does not have to be a part of the sports experience. Seen on the video screen is former major league ballplayer and broadcast hall of fame member Joe Garagiola, national chairman for NSTEP. Since 1991, NIDR has been a co-leader, with NCI, on an educational initiative aimed at steering young people away from spit tobacco.

Children's Inn Web Site Opens

The Children's Inn at NIH has opened a new site on the World Wide Web. It was developed to accomplish four things: give an overview of what the inn is and does; prepare families for their first visit to NIH; give information on volunteering; and explain how to make a contribution. The site can be visited at <http://www.childrensinn.org>. For those who have never visited the inn, tours are given the second Wednesday of each month. To arrange a tour, contact Jan Mayes at 496-5672. ■

Male Volunteers Needed

The Behavioral Endocrinology Branch, NIMH, is seeking male volunteers ages 18-45 to participate in a 5-month study of the effects of reproductive hormones on brain and behavior. Volunteers must be free of medical illnesses and not taking any medication on a regular basis. They will complete daily rating forms and be asked to participate in one of several protocols. Payment will be in accordance with the duration of each visit and the type of protocol. For more information, call Linda Simpson-St. Clair, 496-9576. ■

Look for DWD Catalog

The Division of Workforce Development catalog for FY 99 includes 32 new courses and offers a wide variety of training opportunities in supervision, administration, human resource management, communication, career planning, computer skills, and quality of work life. Look for copies of the catalog soon. For information about other services, visit DWD online at <http://www-urc.od.nih.gov/dwd/dwdhome.html> or call 496-6211. ■

Alzheimer Study Recruits

NIMH's Geriatric Psychiatry Branch is offering the opportunity to participate in a longitudinal study of Alzheimer's disease. Sought are men and women age 50 or older who have a first degree relative diagnosed with AD, and those who don't have the illness in their family. The initial evaluation takes about 2 hours and includes a physical examination and cognitive testing. Call Judy Friz for more information, 435-6058. ■

Get Ready for Pumpkin Chase 5K

The 7th annual Great Pumpkin Chase 5K run and 1-mile fun walk will be held Sunday, Oct. 25 at 9 a.m. Presented by the NIH Federal Credit Union and R&W Association, it will benefit the Friends of the Clinical Center. Site of event is the National Naval Medical Center, across the pike from NIH. For more information call (301) 230-4819. ■

Management Cadre Program Now Accepting Applications

The leadership development committee and the Division of Workforce Development announce the availability of applications for the NIH Management Cadre Program. The program is designed to provide leadership training and developmental opportunities for high-potential NIH employees and to prepare them for future leadership positions at NIH. It represents an important component of NIH's efforts to develop a diverse group of well-qualified candidates for management positions.

Applications to the MCP will be accepted from successful and highly motivated employees at grades 12, 13 or 14, who have been in a career or career-conditional full-time appointment for at least 1 year prior to Dec. 4, 1998. The program is open to employees in intramural and extramural programs, offices of the directors of the ICs, and the Office of the Director, NIH.

Application packages are available online at <http://www-urc.od.nih.gov/dwd/mcp> or by interoffice mail (to request a mailing, call DWD at 496-6211). Completed applications must be submitted to the appropriate IC personnel office by close of business on Dec. 4.

For more information, contact Pauline Irwin, DWD program manager, 402-3385 or email irwinp@odepsm1.od.nih.gov. ■

NCRR welcomes two new scientific review administrators, Drs. John Meyer and Grace Ault, to the Office of Review. Meyer will manage special emphasis panels for biomedical technology and assist with

reviews of the General Clinical Research Centers. Ault will manage Research Centers in Minority Institutions and help with GCRCs and special emphasis panels for the Science Education Partnership Award. In 1968, Meyer received his Ph.D. in chemistry from the University of Missouri. After 3 years as a consultant for Mayo Clinic and Foundation, he came to NIH as an NIDR scientist to study formation and disease of mineralized tissues. He later became a scientific review administrator and worked for CSR, NIAID and NCI. Ault earned her Ph.D. in molecular genetics from the University of North Carolina in 1988. She began her NIH career in 1991 as a senior staff scientist in NINDS where she studied the human polyomavirus JCV and how it infects the central nervous system. Since then she has worked as a health science policy analyst in NCI and OD/NIH.



CSR's Gilbert Meier Retires

Dr. Gilbert W. Meier has retired after 11 years as a scientific review administrator with the Center for Scientific Review. When he came to CSR (then the Division of Research Grants), he was well-known as, in his own words, "a developmental psychobiologist." His scholarly efforts had focused on the "elaboration of behavior in the physical and social contexts in which development usually occurs, and on the environmental contingencies by which behavior is controlled." He had published extensively in this area.

Previously, Meier had been on the faculty of the University of Puerto Rico, where he had been an adjunct professor in the department of psychiatry as well as a professor in the School of Medicine; the director of the Caribbean Primate Research Center; and managing editor of the *Puerto Rico Health Sciences Journal*. Earlier positions had been with: Vanderbilt University, NIH (he was chief of the neuropsychology section and acting chief of the neurology institute's Laboratory of Perinatal Physiology), George Peabody College for Teachers, and the University of Nebraska Medical Center, where he was a professor of medical psychology and research director of a children's rehabilitation institute.

At CSR, Meier managed the visual sciences 2-A study section before moving to a study section in the AIDS and related research group, where he stayed until retirement. During this time, he also became a referral officer responsible for the assignment of AIDS applications. In all, Meier found his work at CSR a wonderful, all-consuming "end of career career."

His retirement plans include an imminent move to Austin, Tex., where his son and daughter-in-law are on the University of Texas faculty, and where his grandchildren live. While Meier plans to be a consultant, his major effort will be to prepare for some extensive "fathering and grandfathering." ■



Dr. Gilbert W. Meier

Long, Short Sleepers Needed

The Clinical Psychobiology Branch, NIMH, is looking for volunteers ages 18-31 who either routinely sleep 9 or more hours, or 6 or fewer hours. Volunteers must have no sleep disturbances or insomnia, plus no history of mental illness. Volunteers must be in good general health and not taking any medications or birth control pills. The study requires living on the NIH research unit in Bethesda for 4 consecutive days. For more information call 496-6981.

Men Needed for Arousal Study

University study seeks healthy men, 18-60, for 3-hour laboratory assessment. The purpose of the study is to gain a better understanding of factors that affect sexual functioning. Two types of volunteers are needed: men with erection problems and men without any sexual problems. A \$40 payment is provided. If interested, call Jay Stone at (301) 295-3672 for more information. ■

Hearing with Your Eyes

Workshops Highlight Deaf Awareness

Some 75 NIH'ers recently learned that working together with deaf or hard of hearing colleagues, while often awkward at first, can be mutually enriching as well as productive. The pairing of hearing and nonhearing workers demands creative alternatives to speech that most workers appear to relish constructing; it's simply another occasion for human creativity to come into play.

A morning seminar—"Working Together: Deaf and Hearing People"—was conducted Sept. 14-16

and featured exercises that both acquainted hearing employees with the frustrations encountered by those who can't hear, and enlightened the hearing attendees to the richness of communication in deaf culture. Several deaf employees addressed the group, proving that sign language can be as robust, nuanced and rapid as any exchange between out-loud speakers.

Because signing is naturally theatrical, relying as it does on gestures, expressions and body movements, it is inherently fascinating to nondeaf people. Thus few in the audience drifted off—there was no droning to lull them. The hearing folks saw dramatic evidence that communication among deaf people is active or "intentional" in nature, both for "speaker" and "listener." To be in a deaf conversation is to be a bit more rigorously engaged than for those capable of letting talk flow in one ear and out the other.

Which is not to glorify disability, however; there are undoubtedly instances of boring communication among deaf people. What is remarkable is the human capacity to adapt to hearing loss, and to adapt so convivially that deaf culture is preferred by those who embrace it; none of the deaf speakers had any interest in an implant that would fling them into the alien world of the hearing.

Take-home lessons were plenty, as delivered by brief video clips and exercises: deaf employees very much appreciate their colleagues' willingness to learn some sign language, it's essential to look at the deaf person to whom you are speaking, even in the presence of an interpreter. "Don't fear looking a little foolish in making the effort to communicate," advised Linda Iacelli of the National Technical Institute for the Deaf, who led the seminar. "Don't be afraid to come out of yourselves a little bit."

She also advised against faking comprehension, on the part of both deaf and nondeaf workers—it's

counterproductive.

According to Carlton Coleman of the Office of Equal Opportunity, there are 69 NIH'ers who identify themselves as hard-of-hearing, and 35 who say they are deaf. "Many people don't want to admit to hearing problems, so this is probably a low estimate," he cautioned. "There are a whole lot of hard-of-hearing folks at NIH, but most haven't identified themselves as such."

There is also a stigma attached to hearing problems, noted participant Lester Gorelic. He surmised that there are quite a few NIH'ers with obvious hearing loss who don't want to admit it.

Biologist Sue Smith, who was born deaf, said that deaf people don't think of themselves as disabled. They simply acknowledge being a linguistic and cultural minority. Added another deaf NIH'er, Sally McDougall, deaf culture is extremely important to deaf people, but is by no means homogeneous; it is as diverse within its own ranks as any subset of the population. The two workers reminded the audience that there is a rich cultural heritage of poetry and art in American Sign Language, and a National Theater of the Deaf. Deaf people invented the huddle in football, and the baseball umpire's gesture for a strike. Deaf culture, in summary, is as natural and American as sports on Sunday afternoon, except you can't hear the National Anthem.—Rich Mc-

Manus ■

Wednesday Afternoon Lectures

In addition to the two talks on prions featured on p. 1, the Wednesday Afternoon Lecture series—normally held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features a special Thursday session Oct. 15 when Dr. J. Bruce Beckwith, professor and head, division of pediatric pathology, Loma Linda University School of Medicine and director, National Wilms Tumor Study Pathology Center, discusses, "The Link Between Teratogenesis and Carcinogenesis: Lessons from the Wilms Tumor Model." This is the first NIH Director's Astute Clinician Lecture.

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

CFC Kickoff Set, Oct. 19

The 1998 NIH Combined Federal Campaign kickoff will take place on Monday, Oct. 19, at 11:45 a.m., in Bldg. 1, Wilson Hall. This year's theme is, "It All Comes Back to You." Due to campus construction and space limitations, the kickoff will be on a smaller scale this year, and for CFC keyworkers only. Hosting the event will be the National Institute of Nursing Research; NASA employee Terry Morris will also speak on behalf of the national CFC.



Interpreter Martin Hiraga signs as instructor Linda Iacelli makes a point at one of the three recent morning sessions on "Working Together: Deaf and Hearing People." The workshops, part of NIH's 1998 Deaf Awareness Day Program, were cosponsored by several institutes and centers.