



ABOVE • The Building 6 Boys Plus continue holiday entertainment tradition. See p. 7.

nih record

Forum Offers Tips on Managing a Graceful Exit

By Rich McManus

Death be not proud, said the poet; death be not soon, say most of us; but death is something we can nonetheless plan on and plan for, said experts at the STEP forum “One Guarantee in Life—Death: Demystifying the Dying Process,” held Dec. 8 at the Natcher Bldg.

Our cultural squeamishness about facing up to the reality of death is no better handled by caregivers than by commoners, suggested the six panelists. Doctors fight it tooth and nail—often taking extreme and costly measures—and tend to regard death as a professional failure. Ethicists are all for respecting all kinds of cultural traditions at the end of life, but whisper more loudly in our ears now, “At what financial cost to society?” And many people never get around to the routine paperwork and consultation that can prevent confusion and pain at the hour they bow out.

Dr. Karin Kirchhoff, Rodefer chair and professor at the School of Nursing at the

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STEP forum panelist Dr. June Lunney

NIH Hosts Native American Researchers

By Susan Athey

A group of Native American researchers whose work ranges from suicide prevention to interventions to reduce the number of childhood cavities recently gathered at NIH to present their projects, meet with NIH leaders and network with each other.



Dr. Michael J. Carvan, III, of the University of Wisconsin, Milwaukee, discussed his research on the effects of mercury and selenium in Native American diets.

Calling it the “first activity of its kind,” NIGMS director Dr. Jeremy Berg welcomed participants to the symposium, held as part of NIH’s annual American Indian and Alaska Native Heritage Month celebration.

Among the featured presentations were three projects funded by an NIH-Indian Health Service

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International Man of Mystery?

Chen Retires After 50-Year Association with NIH

By Rich McManus

He may have attended more meetings than any administrator in NIH history and belonged to more far-flung scientific committees than anyone who ever wore a coat and tie in federal service, but Dr. Philip S. Chen, Jr., former NIH associate director for intramural affairs, has a side that mocks the image of a career bureaucrat. The same guy who relished service as the HHS Arctic research representative to programs overseen by the National Science Foundation and U.S. State Department is also a back-roads motorcyclist, a trombone player and a shade-tree mechanic who recently spliced the burst fuel line in his van after a varmint bit the line in two.

At age 73, with a 50-year association with NIH (including over 41 years as an employee) behind him, Chen is still as enthusiastic about every topic under the sun as a brilliant grad student. He is a fountain of anecdote, capable

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briefs

Celebrate the King Legacy, Jan. 17

Celebrate the legacy of Dr. Martin Luther King, Jr. at the annual NIH commemorative program on Tuesday, Jan. 17 from 2 to 3 p.m. in Masur Auditorium, Bldg. 10. The 2006 national theme is "In the Spirit of Unity and Service: Remember! Celebrate! Act!" The keynote speaker will be Dr. Clayborne Carson, professor at Stanford University, civil rights historian and senior editor of the King Research Papers Project.

For more information and reasonable accommodation, call Kay Johnson Graham at (301) 451-0859. Sign language interpreting services will be provided.

Inaugural Chen Lecture Set, Jan. 20

In honor of the recent retirement of Dr. Philip S. Chen, Jr., NIH associate director for intramural research, the Office of the Director will present the Philip S. Chen, Jr., Ph.D. Distinguished Lecture on Innovation and Technology Transfer on Friday, Jan. 20 at 1:30 p.m. in Lipsett Amphitheater, Bldg. 10.

Chen retired from NIH on Jan. 2 with more than 41 years of service. He conducted research in an intramural lab within the then National Heart Institute from 1956 to 1959, and has been in Intramural Research Program administration since 1974.

Keynote speaker will be Dr. Maria Freire, chief executive officer, Global Alliance for TB Drug Development and former director of the NIH Office of Technology Transfer, an office that Chen started. She will be speaking on "Innovation and Collaboration: Revolutionizing TB Therapy." All are welcome to attend.

Nanotechnology Seminars Resume

The National Cancer Institute's Nanotechnology Seminar Series will resume on Tuesday, Jan. 24 from 3 to 4 p.m. in the Natcher Conference Center (Balcony B). The featured speaker will be Dr. Michael Hawkins, chief medical officer, American Bioscience, Inc., developers of a nanoparticle albumin-bound (nab) delivery platform most recently applied with paclitaxel (Abraxane). The presentation will be webcast at <http://videocast.nih.gov>.

The lecture series features innovative perspectives on current research and development efforts in nanotechnology applied to cancer diagnosis, treatment and prevention, presented by leaders from both the cancer and nanotechnology research communities. For more

information visit <http://nano.cancer.gov>.

Sign language interpreters will be provided upon request. Individuals with disabilities who need reasonable accommodation should call Travis Earles at (301) 496-1550 or the Federal Relay, 1-800-877-8339.

Wednesday Afternoon Lectures

The Wednesday Afternoon Lecture series—held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features the R.E. Dyer Lecture on Jan. 18. It will be given by Dr. Bruce Beutler, professor, department of immunology, Scripps Research Institute, La Jolla. His topic is "Sensing Infection: Toll-Like Receptors and the Genetic Analysis of Mammalian Innate Immunity."

On Jan. 25, Dr. Mitzi I. Kuroda will discuss "Chromatin Organization: Non-Coding RNAs and Dosage Compensation in Drosophila." She is HHMI investigator at Brigham and Women's Hospital and professor of genetics, Harvard Medical School.

For more information or for reasonable accommodation, call (301) 594-5595.

Create a Development Plan

The Work and Family Life Center will hold a seminar on "Harnessing Your Potential with an IDP" on Wednesday, Jan. 25 from noon to 2 p.m. in Bldg. 50, Conf. Rm. 1227/1233L. As Casey Stengel once said, "If you don't know where you are going, you'll probably end up somewhere else." Creating an individual development plan (IDP) helps you identify goals and resources as well as develop an action plan. Learn the importance of "beginning with the end in mind."

Get Ready for 'Wear Red Day'

Friday, Feb. 3 is National Wear Red Day, a key activity of NHLBI's Heart Truth campaign. Join Americans nationwide in wearing red to show support for women's heart disease awareness. For more information about the campaign, National Wear Red Day and the Red Dress pin—the national symbol for women and heart awareness—visit www.hearttruth.gov.

Tae Kwon Do Beginner's Class

The NIH Tae Kwon Do School is offering a beginner's class for adults and mature teens starting Feb. 6. The curriculum combines traditional striking arts, forms and sparring with emphasis on self-defense. No experience is necessary. Class will meet in the Malone Center (Bldg. 31C, B4 level, next to the NIH Fitness Center) from 6 to 8 p.m. on Mondays and Wednesdays, and will continue for about 2 months until participants can be integrated into the regular school training. Dues are \$40 per quarter and a uniform costs \$30. Interested persons are welcome to watch regular training sessions. For information call Andrew Schwartz, (301) 402-5197 or visit <http://www.recgov.org/r&w/nihtaekwondo.html>.

nih record

Beutler To Give Dyer Lecture, Jan. 18

Over the past two decades, Dr. Bruce Beutler has been a central figure in the innate immunity “renaissance.” He will deliver the Jan. 18 R.E. Dyer Lecture, “Sensing Infection: Toll-Like Receptors and the Genetic Analysis of Mammalian Innate Immunity.” It will be held at 3 p.m. in Masur Auditorium, Bldg. 10. Beutler is professor in the department of immunology at Scripps Research Institute, where he and his colleagues have established one of the most ambitious and successful mutagenesis efforts undertaken in mice, using the germline mutagen ENU to identify key components of the TLR signaling pathways, as well as genes required for resistance to viral pathogens.

Beutler was the first to isolate mouse tumor necrosis factor (TNF) and the first to recognize the role of TNF as a mediator of inflammation. Using TNF, he went on to identify the principal receptors through which animals sense microbial infections. This is widely regarded as one of the most fundamental advances in immunology and has opened a vibrant new field.

His work in innate immunity began in the 1980s when he isolated cachectin from lipopolysaccharide (LPS)-activated murine macrophages. By protein sequencing and cDNA cloning, he proved its identity to be TNF, the human ortholog of which was cloned contemporaneously by other investigators. Thus, Beutler was the first to realize that TNF could mediate diverse effects of LPS-induced shock. He proved this by passively immunizing mice against TNF and challenging them with LPS; that demonstrated them to be LPS-resistant. This established a causal link between TNF and inflammation and ignited widespread interest in the blockade of TNF for treatment of inflammation.

From 1986 to 1999 at UT Southwestern Medical Center and Howard Hughes Medical Institute in Dallas, Beutler studied the regulation of TNF biosynthesis. He initiated a classical genetic study in 1993 aimed at the positional cloning of two allelic mutations that rendered C3H/HeJ and C57BL/10ScCr mice entirely refractory to LPS. Utilizing TNF production as the signaling endpoint in genetic mapping, Beutler proved that the culpable mutations affected the gene encoding Toll-like receptor 4 (TLR4). The proof that TLR4 was an essential component of the mammalian LPS receptor led to the demonstration that other TLRs sense other conserved molecules of microbial origin and to our present understanding of how the host recognizes most infectious microbes.

Beutler is a strong advocate of the “phenotype

first” approach that has brought biology some of its most spectacular gains. He has received many honors for his work, including the 2004 Robert Koch Prize, which he shared with Jules Hoffman and Shizuo Akira.

The R.E. Dyer lecture is part of the NIH Director’s Wednesday Afternoon Lecture Series. No registration is required. For more information or reasonable accommodation call (301) 594-5595.—Lynn Swanson



Kastner Receives ACR Distinguished Investigator Award

NIAMS’s Dr. Daniel Kastner (c) has received the 2005 Distinguished Investigator Award of the American College of Rheumatology. He was presented with the award at the recent ACR annual scientific meeting in San Diego. Shown with him are Dr. Elizabeth Tindall (l), 2005 ACR president, and Dr. Peggy Crow, 2006 ACR president. The Distinguished Investigator Award is given each year to a basic scientist who makes outstanding contributions to the field of rheumatology. Kastner was recently appointed to oversee the clinical activities of NIAMS. He is chief of the Genetics and Genomics Branch and has conducted research in the genetics of various diseases including Familial Mediterranean Fever, Neonatal Onset Multisystem Inflammatory Disease and TNF Receptor-Associated Periodic Syndrome, which his branch helped define.

Plude Named CSR Bio-Behavioral Chief

Dr. Dana Plude was recently named chief of bio-behavioral and behavioral processes at the Center for Scientific Review. He will have responsibility for 8 study sections providing peer reviews of grant applications in the areas of mental disorders, learning, stress, language and aging. Plude had been a scientific review administrator within the group. Before joining CSR in 2002, he was associate professor and associate chair in psychology at the University of Maryland for 17 years. He earned a Ph.D. in psychology from Syracuse University, where he specialized in lifespan development and mental function in the elderly. His basic and applied research centered on aging, selective attention and memory.



NARCH

CONTINUED FROM PAGE 1

Top:

Symposium participants presented posters of their research on Native American health issues.

Bottom:

Dr. Clifton Poodry, director of the NIGMS Division of Minority Opportunities in Research and organizer of the symposium, is recognized by Dr. Mary Beth Skupien of the Indian Health Service for championing the NARCH program at NIH.

collaboration linking the Native American community with organizations that conduct health research. The collaboration, Native American Research Centers for Health (NARCH), encourages research on diseases relevant to American Indians and Alaska Natives and prepares scientists and health professionals from these population groups to compete for NIH funding.

The NARCH projects included a study on overweight toddlers and tooth decay prevention by the Northwest Portland Area Indian Health Board; a study that uses zebrafish to examine the effects of mercury and selenium in Native American diets by the Great Lakes NARCH; and suicide prevention measures by a group from the White Mountain Apache Tribe in Arizona.

Other presentations described an NHLBI-funded project on heart disease in Indian and Eskimo communities and an NCI breast cancer education program for Native American women.

A clear message throughout the day was the importance of NIH funding to the Native American community.

Katy Aday of the White Mountain Apache Tribe was passionate in her pleas to NIH leadership to continue supporting programs such as NARCH.

She explained that her tribe has a suicide rate 10 times greater than that of the general U.S. population. NARCH funding has helped the tribe develop activities to intervene within the



community to lower the rate of suicides and suicide attempts.

"It feels like we've been fighting alone [until now, but] NARCH makes it feel like there's help," Aday said.

Continued Commitment

Prior to the symposium, NARCH researchers had the opportunity to meet with NIH and IHS representatives including Berg of NIGMS, NIMH deputy director Dr. Richard Nakamura and IHS research program director Dr. Nathaniel Cobb.

Following a traditional Indian prayer and introductions, the visitors got to work describing their research and conveying their enthusiasm for the NARCH program.

Berg emphasized NIGMS's longstanding commitment to research training and increasing the number of minority biomedical scientists. One reflection of this commitment is the \$4.36 million the institute recently allocated to fund new and existing NARCH programs. Nine other ICs contributed an additional \$1.8 million to the program. This funding will support 13 NARCH programs nationwide.





Vaccine Research Progressing

Vaccines aim to prevent diseases by stopping microbes from getting a toehold in your body in the first place. Traditional vaccines use a variety of approaches, including using weakened or killed microorganisms or portions of them to “teach” the immune system to attack if it ever encounters the real thing. Unfortunately, some microbes can elude these methods. HIV, for example, infects the very immune cells that arrive to fight it, making effective vaccine design a particular challenge. But new strategies for developing vaccines are in the works and 2005 saw significant advances in the field.

DNA vaccines are showing great promise, and are already being used to help protect some animals. While none have yet been licensed for human use, DNA vaccines against HIV, Ebola, West Nile virus and SARS are currently being tested at NIAID’s Dale and Betty Bumpers Vaccine Research Center (VRC). DNA vaccines can be manufactured more quickly than traditional vaccines. They also result in antigens being presented by the body’s own cells, so they’re more likely than some traditional vaccines to stimulate both antibody and cell-based attacks from the immune system. One trial that opened earlier this year, for example, is testing an experimental vaccine against West Nile virus. The vaccine, which consists of a DNA plasmid with genes coding for two key viral surface proteins, is injected into muscle, where muscle cells can read the DNA, produce the two proteins and display them on their surfaces.

A safe, effective HIV vaccine is perhaps the most prominent vaccine research goal and several HIV vaccines are now in the pipeline. One such vaccine, developed by scientists at the VRC, moved into its second phase of clinical testing in October. This vaccine contains synthetic genes representing HIV subtypes found in Europe, North America, Africa and Asia that comprise about 85 percent of HIV infections worldwide. For greater potency, the researchers are using a one-two punch strategy, starting out by vaccinating with naked gene fragments, then following up with a booster shot using weakened adenovirus to deliver selected genes.

An innovative vaccine strategy funded by NHLBI aims to bypass the need for helper T

cells, normally a key component in the immune response. Researchers at Children’s Hospital of Pittsburgh focused on a molecule on the surface of helper T cells called CD40L that signals other cells like antibody-producing B cells to mount their attack. The team combined CD40L with a key antigen from pneumocystis pneumonia and showed that the vaccine was able to protect mice lacking helper T cells from pneumocystis. The ability to develop vaccines for humans that could bypass helper T cells would be a major breakthrough for people with compromised immune systems like those with HIV or organ transplants.

Another interesting area of vaccine development comes from the cancer research arena. The immune system generally doesn’t recognize tumors to mount attacks against them. But with a little help, unique or unusually abundant molecules on the surface of cancer cells can prompt the immune system to act. New vaccines are now showing promise for stimulating the immune system to attack cancer cells. According to NCI, several clinical trials are under way to test vaccines for a wide variety of cancers. For more information, visit www.cancer.gov/cancertopics/factsheet/cancervaccine. —Harrison Wein



‘Bone and Joint Decade’ Leaders Assess Progress

Representatives of the U.S. Bone and Joint Decade (USBJD) met recently with members of the NIH community to discuss progress made since 2002 and information on relevant new programs. NIH director Dr. Elias Zerhouni spoke to the group and emphasized the importance of bone and joint research as medicine increasingly makes the transition from treatment of acute to chronic diseases. He also spoke of interdisciplinary approaches to medical research as being more important than ever before. Seated at the table are (from l) Dr. Henning Birkedal-Hansen, acting deputy director, NIDCR; Dr. Janet Austin, director, NIAMS Office of Communications and Public Liaison; Dr. Joan McGowan, chief, Musculoskeletal Diseases Branch, NIAMS; Dr. Stephen Katz, director, NIAMS; Zerhouni; Dr. Nancy Lane, president, USBJD; and Dr. Regis O’Keefe, past president, USBJD.



DYING

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Speaking at the recent STEP forum on dying and end of life were (seated, from l) Dr. Marion Danis of the Clinical Center; Dr. Karin Kirchhoff, Rodefer chair in the School of Nursing, University of Wisconsin; Dr. Alexis Bakos, NINR. Standing are (from l) Dr. Etienne Phipps, Albert Einstein Healthcare Network, Philadelphia; Dr. Bruce Himelstein, pediatrics professor, Medical College of Wisconsin; and Dr. June Lunney, associate dean for research in the School of Nursing, West Virginia University.

PHOTOS: ERNIE BRANSON

University of Wisconsin, and perhaps more importantly, witness to what really happens in intensive care units, had perhaps the strongest take-home message: putting your affairs in order toward the end of your allotted three score and 10 is “the gift you give your significant others.” She also pointed to sobering statistics on the ineffectiveness of cardiopulmonary resuscitation in the hospital setting—very few end up the better for it. About 20 percent of Americans will die in an ICU or shortly after transfer from one, she noted.

That’s largely because Americans are living longer and dying more slowly, said Dr. June Lunney, associate dean for research at the West Virginia University School of Nursing. In 1900, the average age of death was 46, and the top causes were infection, accident and childbirth. In 2000, the average death age rose to 77, usually of heart disease, cancer or stroke. “There has been an exponential increase in the number of decedents who reach age 85 before dying,” she reported. Her advice to those in the fourth quarter of anticipated lifespan echoes Kirchhoff: it’s best to get your affairs in order.

Lunney’s research shows that most Americans experience long periods of dependency before dying, and run about a 45 percent risk of disability in the last full year of life once age 65 or older. “Most of us bury our heads in the sand about this,” she said. Thirty-four percent of the people in her study of end-of-life trajectories were likely to need almost constant care for the last year of life, she noted. “That should be a wake-up call for most of us.”

Kirchhoff emphasized the importance of organizing financial records, building an emergency fund and reducing or minimizing debt. “We don’t prepare for death as we do for other significant life events, like pregnancy,” she lamented.

She advised that people in the autumn of their lives draft 4 key estate documents: a will or estate plan; financial durable power of attorney; living will; and health care power of attorney (HCPOA). Both health and long-term care insurance are also priorities.

But if you are only going to do one of these things, she emphasized, designate a health care power of attorney, a person (though definitely not a guardian) with whom you can freely discuss your wishes about treatment at the end of life. That discussion should be summarized in a document that can be shared by both the HCPOA and your personal care provider. And, like so many things in life, there ought also to be a backup person to play this role, said Kirchhoff.

Bioethicist Dr. Marion Danis of the Clinical Center echoed the need for those approaching death to communicate ahead of time their thoughts and wishes to those closest to them. The focus at the often hectic and tense last chapter of life should not be so much on decision-making as on overall strategy of care. She advised, “Don’t leave decisions entirely in either the family or physician’s hands.”

Interestingly, the “most frequent cause of unresolvable conflict at the time of death in my hospital is spiritual beliefs,” said Dr. Etienne Phipps, director of the ethics consultation service at Philadelphia’s Albert Einstein Healthcare Network. An anthropologist and folklorist, she described differing cultural perspectives on the end-of-life experience.

Not everyone lives to a ripe old age before dying, however. Dr. Bruce Himelstein, a pediatrician at the Medical College of Wisconsin, described a series of gaps in care for the estimated half-million children living with life-threatening conditions in the U.S., and the more than 1 million children with special health care needs. For example, whereas 1 in 4 adults will access

hospice care toward the end of life, only 1 in 10 children will. And although pediatricians can define a population of kids with so-called “complex chronic conditions” involving at least the possibility of death, there remain no published guidelines on prognosis for pediatric conditions. “We’re very poor at prognosticating death [in this population],” Himelstein said, which makes it difficult to tailor effective end-of-life care.

Asked, during a brief question period at the forum’s end, whether some kind of spiritual belief is helpful in the case of a child facing death, Himelstein was unequivocal: “It absolutely does help...The whole course of events, even before death, is generally smoother if the family has some sort of transcendent spiritual connection. It’s very helpful to families and children.”

West Virginia’s Lunney noted that, although a lightning-quick exit is “everyone’s dream,” it will be reserved for only a small minority of us. Himelstein suggested that the least fortunate circumstance is to die young, in a territory—at least as far as palliative care is concerned—not nearly as well explored as adult death. But since scripture says death will come “like a thief in the night,” perhaps it’s best to be ready at all ages, cultures and climes.

The full forum is available for viewing at www.videocast.nih.gov.

Expecting a Red ‘Record?’

The *NIH Record* appears today in one of its four seasonal colors. The two-color production began with the Oct. 7, 2005, edition, which was a brownish red. That was the fall hue. The winter shade is purple, and will persist throughout the season. There are also spring and summer colors ahead. Don’t be fooled by the cosmetic changes, though. What you are reading is still “The Second Best Thing About Payday.”



Bill Schmalfeldt, production manager for the NIH Radio News Service, demonstrates the new ISDN equipment set up in the new studio adjacent to the Visitor Information Center in Bldg. 45.

‘Next Best Thing to Being There’ NIH Radio News Service Installs ISDN Transceiver

Radio stations and news networks conducting telephone interviews with NIH researchers and scientists can now avail themselves of a technology that sounds as if the interviewer and subject are actually in the same room.

The NIH Radio News Service, part of the Office of Communications and Public Liaison, OD, has installed an ISDN transceiver in its new studio adjacent to the Visitor Information Center in Bldg. 45. An abbreviation for “integrated services digital network,” the ISDN line eliminates the traditional degradation of sound usually associated with a telephone conversation. As more radio stations convert to digital audio, their news departments are relying more on broadband communications for long-distance interviews.

Bill Schmalfeldt, production manager for the NIH Radio News Service, said the new ISDN transceiver at the Natcher Center will allow NIH’ers to take part in interviews (where the radio station or network is also using an ISDN decoder) that will sound more clear and natural than the traditional interview by telephone.

“A lot of news directors in radio are getting away from doing telephone interviews because of the way such interviews sound,” Schmalfeldt said. “But with our new ISDN equipment, that negative aspect is eliminated. To the listener, it sounds like the interviewer and subject are sitting down, chatting face to face. It’s convenient for the radio stations, and makes news directors more agreeable to conducting a long-distance interview.”

For more information about using the ISDN transceiver, contact Schmalfeldt at (301) 435-7557.



Building 6 Boys Plus

The campus’s own Building 6 Boys Plus entertained at a number of parties in December, continuing a holiday tradition at NIH. Present at a Dec. 14 gathering at the FAES House were (from l) Jim Nagle, NINDS, dobro; Steve Stahl, NIAMS, guitar; Jim Tomlin, CIT, mandolin; Kate Saylor, NIDCD, fiddle; Ken Weeks, NINDS, bass; and FDA’s Jim Rice on banjo. The group, plus or minus a few members, has been playing bluegrass and other acoustic music for 10 years. A favorite venue, because of its good sound, is a conference room in Bldg. 35. The band also plays outdoors in fair weather.

CHEN RETIRES

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Right:

Dr. Philip S. Chen, Jr., had a hand in many activities at NIH during his more than 41 years of employment. For example, he was responsible, during NIH's 100th anniversary in 1987, for bringing "The Centennial Anchor" to the intersection of Center and South Drives. Chen had the anchor trucked to NIH from the PHS Marine Hospital on Staten Island, from which NIH traces its origins as a one-room laboratory.

of recalling countless episodes of bureaucratic intrigue, the fine points of renal physiology, the drama underlying little-known NIH cooperation with the CIA and learned trivia of every stripe, including that the man who wrote *It Came Upon a Midnight Clear* did so near Chen's boyhood home town of South Lancaster, Mass.

Chen was actually born in St. Johns, Mich. ("the mint capital") to parents who were students at what was then Michigan State College. His dad became a chemistry professor and the family soon moved to Madison, Tenn., home of Madison College. When Chen was 6, his family relocated to South Lancaster, where his dad joined the faculty at Atlantic Union College.

Phil Jr. took to science at an early age and graduated from Clark University in Worcester, Mass., as a physics major. "I actually took more chemistry than physics," he recalls. "But atomic and nuclear physics were my main interests." He did manage a single semester of zoology during a summer course at Harvard.

After graduating with high honors from Clark, he went to graduate school at the University of Rochester, studying pharmacology, including analytical chemistry and toxicology. Following up on the bone-seeking nature of plutonium and uranium, and intrigued by the affinity that many radioactive substances have for bone (recall that this was the height of the Cold War), Chen became a renal physiologist, studying calcium excretion in dogs. One of the first scientific papers that caught his interest was written by Dr. James A. Shannon, who would become both a prominent NIH director and Chen's benefactor. A highlight of his grad school career was participating in two atomic bomb tests in 1953 in Nevada.

Chen earned his Ph.D. in 1954 then embarked on a year-long National Science Foundation postdoctoral fellowship at the Institute of Pharmacology, part of the University of Copenhagen, Denmark. It was there that he met and married his wife, a studio photographer.

Upon returning to the United States, where the draft remained in effect although the Korean War was over, Chen returned to the University of Rochester as a junior scientist but also applied for a commission in all four uniformed services. "Otherwise, I simply would have been drafted," he recalls. Two days before he received his draft induction notice, Chen came to the NIH laboratory of Dr. Frederic C. Bartter as a commissioned officer in the Public Health Ser-

vice. "I was very lucky—I got in by the skin of my teeth."

Back in those days, the head of Chen's branch was Dr. Luther Terry, who would become Surgeon General. The Clinical Center was newly opened and half-empty, Chen recalls. He remembers working with Bartter (discoverer of Bartter's syndrome) in Rm. 8N222, then 7B03, where famed NIH scientist Dr. Sidney Udenfriend was across the hall and future NIH director Dr. Donald Fredrickson roamed the halls smoking foot-long cigars (his wife, Chen notes, was the U.S. distributor for a Dutch cigar company).

Chen spent 37 months in the intramural research program, then was recruited back to Rochester, where he became assistant professor in the departments of radiation biology and biophysics and of pharmacology. The entire radiation biology and biophysics department was supported by an Atomic Energy Commission contract, so no one on staff had to apply for grants, he remembers. He spent 7½ years doing research on bone and vitamin D at Rochester, then returned to Copenhagen for a year's sabbatical, courtesy of a Guggenheim fellowship, at the Institute of Biological Chemistry. Before leaving for Denmark, he had arranged to return to NIH in a year to join the Grants Associate (GA) Program, which became the premier training ground for the next generation of NIH administrative leadership. The switch from science to administration was hastened in part by allergies Chen had developed to laboratory animals.

After having completed his GA year, Chen came to Bldg. 1 to work for the Office of Program Planning and Evaluation. Thus began a history of administrative assignments that, for Chen, went like radioactive substances to the bone of the NIH mission: how to enhance training in biomedical science both at NIH and in U.S. medical schools (he visited many of them during one study) and protect NIH's training responsibility from budget-cutters downtown; and an early study of the field of bioengineering that anticipated the creation of NIBIB "long before it became an important subject at NIH—that was very satisfying."

In 1972, Chen was recruited to NIGMS by its then director Dr. DeWitt Stetten, Jr., and served as associate director for program planning and evaluation, a stint that involved more visits to U.S. medical schools where Chen came to appreciate the impact of NIH extramural support. One of his assignments arose out of President Nixon's visit to China—Chen got the job of sorting out responses to acupuncture inquiries from the public.

After 2 years at NIGMS, Chen returned to Bldg. 1 in 1974 and spent the next 31½ years serving a succession of NIH directors and intramural deputy directors in a variety of roles. He is especially proud of having launched the Senior Biomedical Research Service and the Office of Technology Transfer (OTT); proposing the early rules under which NIH'ers could perform outside work; becoming expert in a wide variety of pay and personnel policies (after all, he had been employed under at least three authorities during his NIH tenure—PHS reserve officer, regular Corps officer and Civil Service); stimulating NLM to establish the pioneering Arctic Health Web Site; and having served on an inter-agency committee with oversight of all major federal laboratories. Recalling his stint on a subcommittee investigating high-temperature superconductivity, he observes drily, "Some of the committees on which I served had short lifespans."

Looking back on the eight NIH directors under whom he served, Chen notes that each had his or her strengths. He said that in the distant past, the NIH deputy director for science (now intramural research) was the real second-in-command at NIH, and that the scientific directors at each institute were often considered more powerful than institute directors.

Chen also left his mark on basic science, having written a "most-cited" paper in 1956 on "Microdetermination of Phosphorus" and coauthoring the 1963 monograph, *Biological Effects of Organic Fluorides*.

In retirement, which began Jan. 2, Chen says he plans "to do a little bit of many things." He'll play his trombone, ride his 1984 Honda Shadow 500 motorcycle on rural roads in fair weather, tinker under the hood of his 20-year-old Nissan 300 ZX, make his annual pilgrimage to Scandinavia, and, next fall, journey to Australia and New Zealand to visit an old grad-school classmate. Travel was always an important factor in his acceptance of committee assignments; he recalls with delight a State Department-sponsored trip to Petropavlovsk-Kamchatsky on Russia's Kamchatka peninsula. "It's the land of

fire and ice, with lots of snow-capped volcanoes and geysers—a spectacular display of nature."

The Fogarty International Center in 2005 named Chen its senior advisor for China, so he recently wrapped up work on some international agreements in that role. "Dr. Richard Wyatt [Chen's longtime deputy, whom he recruited out of Dr. Albert Kapikian's laboratory years ago] calls me the 'China desk' of this office."

Chen also plans to write a memoir, which will undoubtedly include the tale of his custodianship on NIH's behalf of a quantity of saxitoxin (also known as paralytic shellfish poison), which the CIA employed for a time in place of cyanide as a way out for agents in peril.

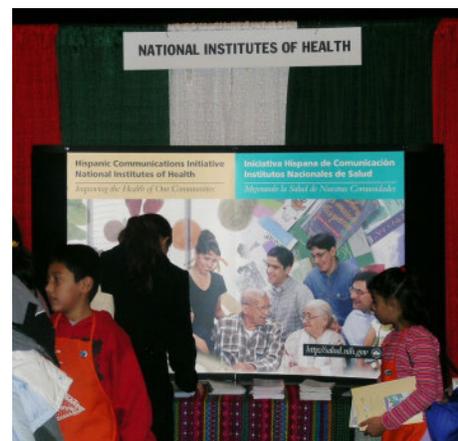
In honor of his founding of OTT, Chen will be honored Friday, Jan. 20 at the inaugural Philip S. Chen, Jr., Ph.D. Distinguished Lecture on Innovation and Technology Transfer. It will be held at 1:30 p.m. in Lipsett Amphitheater, Bldg. 10, and will feature former OTT director Dr. Maria Freire.

Chen looks back fondly on the rich variety of experiences and personalities offered by his NIH career, but notes that he nearly didn't make it to this milestone. On Thanksgiving Day in 1970, he was piloting a Cessna 150 over Rockville when the engine began sputtering. He had run out of gas.

"I managed to land in a Gaithersburg cow pasture, not far from the airport," he recalls. Soon thereafter he gave up his goal of earning a commercial pilot's license. "I became too busy with my NIGMS work," he says. "And I also reckoned that I was not a cautious enough pilot." 🗨️

NIH Exhibits at La Feria de la Familia

The National Institutes of Health participated in Telemundo Washington's La Feria de la Familia 2005 (the Family Fair 2005) held Dec. 11 at the D.C. Armory. An estimated 2,000 people visited the health and fitness section of the feria where they received health information, promotional items, posters and other materials at the NIH booth. In addition to sections on employment, finance, education and other topics, attendees had the opportunity to celebrate the holidays with Telemundo's international stars and with the anchors of Telemundo Washington, D.C.'s local evening newscast, Telenoticias-64.



PHOTOS: CALVIN JACKSON

CIT Computer Classes

All courses are given without charge. For more information call (301) 594-6248 or consult the training program's home page at <http://training.cit.nih.gov>.

Intermediate Photoshop	1/18
NCBI's MapViewer Quick Start	1/18
FileMaker Pro 7/8 Advanced	1/19
From Scan to PDF: Composing Scientific Figures with Adobe	
Photoshop and Illustrator	1/23-24
Analyzing Microarray Data Using the mAdb System	1/24-25
Dreamweaver MX 2004: An Introduction	1/25
MATLAB Fundamentals and Programming Techniques	1/25
Bioinformatics with MATLAB	1/26
NIH IT Enterprise Architecture 101	1/26
Introduction to mAdb	1/31

NIH Training Center Classes

The Training Center 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 (301) 496-6211 or visit <http://LearningSource.od.nih.gov>.

Travel for Admin. Officers/Approving Officials	1/18 and 2/1
NBS Travel System for Organizational Administrators	1/17-18
Price Reasonableness in Simplified Acquisitions	1/19
Merging Minds: Special Expert Teams in Bio. Sci.	1/19
Travel for NIH Travelers	1/19
Knowledge Management and Strategic Human Capital	1/25
Purchase Card Training	1/27
Time and Attendance for Supervisors Using ITAS	1/30
Travel Refresher Course	1/30
Simplified Acquisitions Refresher	1/30
Professional Service Orders	1/31
Review, Update, on EEO Policies and Processing Laws	1/31
Cultural Diversity at NIH	2/1

American Indian, Alaska Native Workshop Held

The American Indian and Alaska Native (AI/AN) workshop held in the Natcher Bldg. recently gave the NIH communications community an opportunity to meet with Native health professionals to discuss ways to better communicate health messages to AI/AN populations. The meeting was sponsored by the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Institute on Aging, the National Institute of Dental and Craniofacial Research and the National Institute of Child Health and Human Development.

NIH-Duke Training in Clinical Research

Applications for the 2006-2007 NIH-Duke Training Program in Clinical Research are available in the Clinical Center, Office of Clinical Research Training and Medical Education, Bldg. 10, Rm. B1L403.

The NIH-Duke program, implemented in 1998, is designed primarily for physicians and dentists who desire formal training in the quantitative and methodological principles of clinical research. The program is offered via videoconference at the CC. Academic credit earned by participating in this program may be applied toward satisfying the degree requirement for a master of health sciences in clinical research from Duke School of Medicine.

For more information about course work and tuition costs, visit <http://tpcr.mc.duke.edu>. Email queries about the program may be addressed to tpcr@mc.duke.edu. The deadline for applying is Mar. 1, 2006. Applicants who have been accepted into the program will be notified by July 1, 2006.

Women's Baseball Team Needs Players, Coach

A women's baseball team consisting primarily of players from NIH is looking for new players and a coach. The Lasers are located in Rockville and play in the Eastern Women's Baseball Conference. They play one game most weekends, May to September, on a regulation ballfield with professional umpires.

The team will train locally in the coming months, indoors and outdoors. The Lasers have a core roster of women 18-52 years old, from all walks of life and with a range of previous baseball and/or softball experience. If you are interested in playing or coaching, contact Susan McCarthy at mccarths@mail.nih.gov.



Panic Disorder Treatment Study

The anxiety disorders research lab at American University seeks individuals who experience panic attacks to participate in a 7-week psychotherapy treatment study. Participants must be 18 or older and have experienced panic symptoms for more than 1 month. The initial assessment to determine qualification may take 1-3 hours. Qualified volunteers may be eligible for compensation. For more information call (202) 885-1729.

Parkinson's Disease Study

You may qualify for this study if you are 30 to 80 years of age and are diagnosed with Parkinson's disease. No charge for study-related tests or treatments. Travel assistance is available. Call 1-866-444-2214 (TTY 1-866-411-1010).

Study of Eosinophilic Gastroenteritis

If you have eosinophilic gastroenteritis, consider joining an NIH treatment study. Call 1-866-444-2214 (TTY 1-866-411-1010).

Siblings with Rheumatic Disorders

Siblings with systemic rheumatic disorders are invited to participate in NIH study 03-E-0099. Compensation provided. Call 1-866-444-2214 (TTY 1-866-411-1010).

Volunteers Needed for Anthrax Vaccine Study

NICHD is seeking healthy volunteers, ages 18-30, to participate in an investigational anthrax vaccine study conducted at NIH. Medical tests will determine eligibility. Compensation provided. Call 1-866-444-2214 (TTY 1-866-411-1010). Refer to study 04-CH-0283.

HIV and Hepatitis C Study

HIV and hepatitis C virus patients may consider participating in NIH research study 04-I-0187. Transportation assistance is available. Study-related tests and treatments are at no cost. Call 1-866-444-2214 (TTY 1-866-411-1010).

Patients with Myositis Needed

Patients with myositis are invited to participate in an NIH research study. Study-related tests are at no cost. Study treatment may be available. Call 1-866-444-2214 or TTY 1-866-411-1010. Refer to study 91-AR-0196.

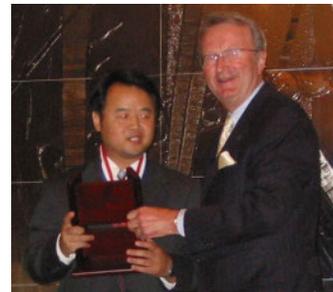
Healthy African Americans, Africans

Healthy African Americans and Africans are needed for a blood count study. You can help researchers at NIH understand why individuals have different white blood cell counts. Call 1-866-444-2214 (TTY 1-866-411-1010) and refer to study 03-DK-0168. Compensation is available.

Healthy Volunteers Needed

Doctors at NIH are conducting a study that examines the tongue. Call 1-866-444-2214, (TTY 1-866-411-1010). Refer to study 01-CC-0135. Compensation is provided.

NIA's Wang Receives Fanconi Anemia Research Award



NIA's Dr. Weidong Wang (l) receives the Award of Merit from Dave Frohnmayer, founder of the Fanconi Anemia Research Fund.

Dr. Weidong Wang, a senior investigator in the National Institute on Aging's Laboratory of Genetics, recently received the Award of Merit from the Fanconi Anemia Research Fund (FARF) for his groundbreaking work on the genetic disorder that affects about one in every 300,000 children. Fanconi anemia (FA) leads to bone marrow failure and is associated with birth defects such as missing or extra thumbs and skeletal abnormalities of the hips, spine or ribs.

Wang was recognized for taking FA "from the realm of an orphan disease into the much broader scientific arena of the cancers that affect the non-FA population," according to Mary Ellen Eiler, FARF executive director. The group's board of directors presented the award at the recent FA scientific symposium in Geneva.

Wang's discovery of a new gene *FANCM* that plays a role in the development of FA could lead to insights into other conditions including ovarian and pancreatic cancers, as well as leukemia. Discovery of this gene and its protein provides a potential target for the development of drugs that can prevent or alleviate FA and a variety of cancers, according to Wang's findings published in the September 2005 journal *Nature Genetics*. This is the third FA gene and protein combination identified in the last 3 years by Wang and his colleagues.

"FA is a disease that appears to be the result of a breakdown in vital DNA repair mechanisms," Wang said. "Some scientists theorize that DNA damage, which gradually accumulates as we age, leads to malfunctioning genes and deteriorating tissues and organs as well as increased risk of cancer. We believe that this new gene, *FANCM*, may be a potent cog in the DNA repair machinery. It is possible that we could learn how to promote the function of DNA repair complexes and thereby prevent the age-related accumulation of DNA damage." Wang's work received support from NIA, FARF and the Daniel Ayling Fanconi Anemia Trust. ①

Recording Program Opens Up a World of Learning

You might never guess that a little recording studio can be found tucked away in the basement of Bldg. 31, offering a volunteer opportunity for NIH employees. Recording for the Blind & Dyslexic, a nonprofit organization that provides recorded textbooks for students with print disabilities, established a satellite studio there 5 years ago. With headquarters in Princeton, N.J., RFB&D units in cities around the country rely on more than 5,800 volunteers to produce recorded textbooks in all subject areas.

The Washington, D.C., unit, located at 5225 Wisconsin Ave., NW, hosts about 400 volunteers weekly who read, direct the recordings, prepare books for production and do a variety of other jobs. In recent years, the organization has been faced with a much greater demand for high-level science texts than can be fulfilled at the main studio. To help meet this demand, RFB&D established the recording space at NIH for the convenience of scientists and medical experts who can record college and post-graduate-level science texts. NIH volunteer readers fill a gap by sharing their science and medical expertise.

Longtime volunteer and current board secretary Dr. Henry Metzger, scientist emeritus at NIAMS, first heard about RFB&D through a board member who put him in contact with Celia Hooper, special assistant for communication in the Office of Intramural Research. Hooper and others were recording books in the first temporary studio at NIH.

“The project of recording biomedical and related technical books at NIH seemed like such a perfect match that I started working with the staff of RFB&D to get support for a bit of dedicated space so we could increase our hours of recording,” said Hooper. “With the help of Dr. Michael Gottesman and the Office of Equal Opportunity and Diversity Management, a permanent space was finally established.”

Cristina Poscablo, a post-baccalaureate trainee who works in the Laboratory of Mammalian Genes and Development, NICHD, is a new volunteer in Recording for the Blind & Dyslexic’s NIH recording program. After an hour a week of training for 3 weeks, she is ready to read on her own.



Portrait of a volunteer: *Cristina Poscablo enjoys her work as a volunteer reader for RFB&D. Of her stints in the NIH studio, she says, “Time goes by so quickly! I wish I didn’t have to leave.”*

“We take for granted what is so second nature to us,” Poscablo said. “We do a lot of our learning through reading. For the blind and dyslexic, it’s not so easy. This is such a great opportunity to give them another avenue for learning...to gain the same knowledge that I’ve been able to learn and enjoy.”

Poscablo heard about the recording studio in Bldg. 31 through a friend in her lab who also volunteers. She is currently reading a college-level laboratory book on human anatomy and physiology and is excited about volunteering her time so close to her place of work. During her years at Rutgers University, she enjoyed volunteering at the local rescue squad. In recent months—with moving to D.C. and getting settled in a new job—she hasn’t had much spare time. “It’s been about a year since I’ve been able to volunteer regularly and I’m glad to be doing it again. I love using my expertise in sciences and math to help those who have difficulty with reading.”

Science Readers Needed

RFB&D’s most critical need is for specialists such as chemists, physicists, physicians, computer scientists and mathematicians. It provides all necessary training on recording equipment and asks for a 1-hour per week commitment for a minimum of 6 months. If you can help, contact Kathryn Sparks at (202) 244-8990 or ksparks@rfd.org.