

ABOVE · More than movies entertained attendees at this year's Outdoor Film Festival. See p. 16.

features

Landrigan	Calle	for	Wall-R	actad
		101	Wett-I	esteu
Caregivers				

NIH Expands CTSA Consortium

3

Sequencing Center Marks 10th Anniversary

16

Film Festival Earns More Than \$40K

departments

Briefs	2
Feedback	10
Milestones	11
Digest	14
Volunteers	15
Seen	16

nihrecord

Rest for the Weary?

Shorter Work Shifts Suggested for Physicians

n call in the intensive care unit, Dr. Christopher Landrigan, a second-year resident at Children's Hospital Boston, was getting a rare couple of hours of shut-eye in a nearby break room. Suddenly he was shaken awake by another intern. ICU had been calling Landrigan. "They need you now!" his colleague told him. A 9-year-old with asthma needed to be intubated right away. As fellows and others looked on in amazement, Landrigan jumped up groggily, ran across the hall and—instead of tending to his patient—began to brush his teeth!

The incident—not the first time he'd had no recollection of an emergency call nor of the medical orders he later gave—would be recounted afterwards humor-



Dr. Christopher Landrigan suggests physicians work fewer consecutive hours to improve patient safety.

ously by friends. But it bothered Landrigan. It was, he said, a moment of epiphany. "What am I doing?" he remembered thinking to himself. "Is this really a rational way to be providing care? Am I the only one like this?" SEE MORE SLEEP, PAGE 8

What We Know vs. What Makes Sense

Kramer Spotlights Lung Cancer Screening

By Belle Waring

Dr. Barry Kramer thinks the promise of lung cancer screening has not yet been realized, and that largescale randomized trials of screening are crucial to closing the gap.

"In the field of

cancer screen-



Dr. Barry Kramer accepts plague in memory of his mentor. Dr. Daniel Ihde.

ing," he recently told a Grand Rounds audience in Lipsett Amphitheater, "it's important to sort out what is known versus what makes sense"—to apply science, not intuition.

"A lot of things seem to make sense in lung cancer screening," he said, "and that's why a O. Pioneers!

NIH Invests in Innovation, New **Investigators**

NIH director Dr. Elias Zerhouni recently made a major investment in the future of science with 5-year grants totaling more than \$105 million to 41 exceptionally innovative investigators, many of whom are in the early stages of their careers.

"Novel ideas and new investigators are essential ingredients for scientific progress, and the creative scientists we recognize with NIH Director's Pioneer Awards and NIH Director's New Innovator Awards are well-positioned to make significant—and potentially transformative—discoveries in a variety of areas," he said.

This is the first group of New Innovator Awards and the fourth group of Pioneer Awards. Both programs are part of an NIH Roadmap initiative that tests new approaches to supporting research.

Pioneer Awards support scientists at any career stage, while New Innovator Awards are



The NIH Record is published biweekly at Bethesda, MD by the Editorial Operations Branch, Office of Communications and Public Liaison, for the information of employees of the National Institutes of Health, Department of Health and Human Services. The content is reprintable without permission. Pictures may be available upon request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 2008.

NIH Record Office

Bldg. 31, Rm. 5B41 Phone (301) 496-2125 Fax (301) 402-1485

Web address http://nihrecord.od.nih.gov

Editor
Richard McManus

Assistant Editor Carla Garnett cg9s@nih.gov

Staff Writers
Jan Ehrman

Sarah Schmelling ss1116y@nih.gov

Belle Waring bw174w@nih.goi

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





Emails Will Remind NIH'ers to Renew ID Badges

To facilitate a smooth transition to the new ID badging process, the NIH Enterprise Directory (NED) is now sending a series of 3 automatically generated email alerts to all NIH employees and contractors with ID badges expiring within 45 days. The three notices will go out—at 45 days, 30 days and 15 days prior to the expiration date-alerting individuals to begin the personal identity verification (PIV) process to renew their ID badge. All three emails emphasize that the badge renewal process takes time and urge recipients not to delay. If a person does not have an email address, NED will send notifications to his or her administrative officer. To view the steps for renewing your ID badge, visit security. nih.gov/PIV/index.htm.

Mammography Screening Begins, Nov. 6

The George Washington University Breast Cancer Center will be visiting NIH this fall for mammography screening. All NIH employees, their families, contractors, visiting scientists and others associated with NIH are eligible to participate.

The screening sites and dates are:

Bldg. 10 (lot 10H), Nov. 6

EPN/EPS (parking lot behind complex), Nov. 15

Rockledge (visitor parking behind RKL I), Nov. 19

Neuroscience Center (behind 6001 Exec.), Nov. 27

Bldg. 45 (front), Dec. 3

Bldg. 31, Dec. 5

The van will visit from 9:30 a.m. - 3:45 p.m., taking prescheduled appointments. Appointments should take about 20 minutes. Most insurance companies will cover the cost (about \$350) of the screening. To see if your insurance is accepted or to make an appointment, call (202) 741-3020 and leave a message with your name and phone number. The GWU Breast Cancer Center will call you back and schedule your appointment.

Any woman is eligible if she is age 35 or older, not pregnant, doesn't have breast implants, has no history of breast problems, is not having symptoms such as a lump in either breast or unusual breast pain and has not had a mammogram within the last 12 months.

Individuals with disabilities who need sign language interpreters and/or reasonable accommodation to participate should contact David Browne, (301) 496-6061 ext. 1 and/or the Federal Relay 1-800-877-8339 or email nihrw@ors.od.nih.gov. Requests should be made at least 10 days before the appointment.

APAO Welcomes Award Nominations

The NIH Asian and Pacific Islander American Organization intends to honor an outstanding manager and an exemplary scientist at its annual holiday award luncheon on Tuesday, Dec. 11 in Wilson Hall, Bldg. 1. A review committee composed of APAO members from several institutes and centers will evaluate nominations, which must be received electronically by Friday, Oct. 19 for consideration. To nominate someone, send a 1-page statement and, if applicable, a CV to Sally Hu (management nominations) or to Keiko Ozato (researcher/scientist nominations). For more information about the awards or APAO, contact Prahlad Mathur, (301)-435-4618.

Bike Club Endorses Civil Cycling at NIH

Fall is here and, with the cooler weather, bicycle commuting becomes a more appealing option and a scenic way to get daily exercise. As a public service, the NIH Bicycle Commuter Club reminds everyone about the rules of the road.

- Bicyclists may enter the main campus through the pedestrian portals or any vehicle entrance.
 They must queue along with the traffic and cannot bypass the motorized vehicle line. These rules apply to exiting campus as well.
- On campus and elsewhere, bicyclists have all the rights granted to and are subject to all the duties required of drivers of vehicles. This means they must stop at stop signs.
- Bicycles must be parked at a bike rack or in a locker. Lockers are first-come, first-served and for day use only.
- When conditions merit it, bicyclists must use a white light that penetrates at least 500 feet forward and a rear red light that is visible to traffic.

Contact the bike club via www.recgov.org/r&w/nih-bike/index.html if you have questions or concerns about bicycling safety at NIH and beyond.

NIH Record Email Updates Now Available

Want to get the *Record* fresh off the presses? Subscribe to our new email list and receive alerts to our latest issue. Every 2 weeks, browse the top headlines and links to our online edition right on your desktop. To get the updates, send an email to listserv@list.nih.gov with "NIHRECORD" in the message body.



Dr. Samuel Klein, professor of medicine, and Jennifer McCrea, research coordinator, offer health and nutrition tips to 10-year-old Van Carter at the Adams Elementary School (St. Louis) Wellness Fair. Klein will be director of the CTSA Clinical Interactions Resources Core at Washington University Institute of Clinical and Translational Sciences. (Photo courtesy Washington University)

NIH Expands CTSA Consortium

The Clinical and Translational Science Award (CTSA) consortium, funded by NCRR, recently added 12 more academic health centers to the 12 announced last year. When fully implemented in 2012, 60 institutions will be linked together to energize the discipline of clinical and translational science.

"As the consortium grows, we are fulfilling our charge to transform clinical and translational research," said NIH director Dr. Elias Zerhouni.

The CTSA program funds diverse and far-reaching approaches to all aspects of the research enterprise. This round of awards includes: partnerships with three minority research centers; three institutions led by women principal investigators; and connections with an additional four national primate research centers, which will help bring discoveries in animal models more quickly into clinical practice. In addition, the newest members of the consortium bring together more than 60 organizations, including health care providers, nonprofit organizations and national laboratories.

"By expanding the consortium, we are better able to leverage expertise and resources across the CTSA institutions," said NCRR director Dr. Barbara Alving.

The CTSA initiative grew out of the NIH commitment to re-engineer the clinical research enterprise, one of the key objectives of the

NIH Roadmap for Medical Research. Funding for it comes from redirecting existing clinical and translational programs and from Roadmap funds. Total funding for the new awards will be about \$574 million.

While NCRR leads the effort, the CTSA program could not succeed without the cooperation of staff drawn from across the multiple institutes and centers, Alving noted. "It is in this waythrough multiple partnerships, collaboration and connectivity—that CTSAs will transform clinical and translational research and apply new scientific advances to real world practice," she said.

A third funding opportunity announcement for CTSAs has been issued, calling for the next round of applications to be submitted by Nov. 7, with awards expected in June 2008.

For information on current members and new grantees, visit www.ctsaweb.org. @

FNIH Honored as Top Charity

The Foundation for the National Institutes of Health is the top-rated charity among the 593 health category charities rated by Charity Navigator. With an overall 69.72 score (out of a possible 70.00), FNIH is the third highest rated among all 5,327 charities evaluated, according to the organization's August 2007 report. Charity Navigator rates charities by evaluating organizational efficiency, capacity and overall financial health.

Its rating system examines how responsibly a charity "functions day to day as well as how well positioned it is to sustain its programs over time...Our ratings show givers how efficiently we believe a charity will use its support today and to what extent the charities are growing their programs and services," the organization reports.

Charity Navigator bases its evaluations on financial information each charity provides in its tax returns, or IRS Form 990. It analyzes a charity's program expenses, administrative expenses, fund-raising expenses and fund-raising efficiency.

During the evaluation period, a high percentage of FNIH's total expenses supported programs; low percentages of expenses were for administrative costs and fund-raising. The foundation spent less than 1 cent of each dollar raised to support fund-raising. Moreover, FNIH experienced 73.2 percent growth in its primary revenue over the last 3 fiscal years cited and 87.5 percent growth in program expenditures during that period.



FUNDING THE FUTURE

CONTINUED FROM PAGE 1

Above:

NIH director Dr. Elias Zerhouni (l) hears from Stanford University postdoctoral researcher Dr. John Arthur (c) about Neurogrid, a bioengineering approach to emulating the way neurons compute that is being pursued by 2006 Pioneer Award recipient Dr. Kwabena Boahen (r) of Stanford.

Below:

2005 Pioneer Award recipient Dr. Clare Waterman-Storer, who is currently working in the NHLBI intramural program, gives an update on her cell biology research to 2006 award recipient Dr. Rosalind Segal of the Dana-Farber Cancer Institute and 2007 award recipient Dr. Thomas Clandinin of Stanford University.

PHOTOS: BILL BRANSON

reserved for new investigators who have not received an R01 or similar grant.

"These awards complement our other special efforts to fund innovative research and support new scientists as they launch their research careers," Zerhouni noted. He announced the 2007 award recipients at the third annual NIH Director's Pioneer Award Symposium, held in the Natcher Conference Center on Sept. 19.

The 12 new Pioneer Award recipients will each receive \$2.5 million in direct costs over 5 years. The 29 New Innovator Award recipients will each receive \$1.5 million in direct costs over the same period.

NIH selected the awardees through special application and evaluation processes that engaged 262 experts from the scientific community in identifying the most highly competitive individuals in each pool. The advisory committee to the NIH director performed the final review and made recommendations to Zer-

houni based on the evaluations by outside experts and programmatic considerations.

"In addition to supporting outstanding research, these programs represent experiments in new ways of identifying and funding promising but unconventional ideas, especially those from new investigators," Zerhouni said. "The approach

is part of our ongoing efforts to enhance the NIH peer review system."

"We hope that these programs also help remind the scientific community, including its newest members, that we encourage investigators to be bold and 'swing for the fences' with their proposals," said Dr. Jeremy Berg, director of NIGMS, which runs the Pioneer and New Innovator Award programs.

Eleven institutes and several OD offices contributed funds to the programs this year. Biographical sketches of the Pioneer Award recipients are at nihroadmap.nih.gov/pioneer/Recipients07. aspx. Information on winners of the New Innovator Award is at grants.nih.gov/new_investigators/innovator_award/fy2007_awards.htm. ②



Designer Wood Honored for Bins

Designer Rayne Ann Wood of the Division of Medical Arts, ORS, was recently honored for her design of the NIH Record distribution bins, which are located in 10 high-traffic places in NIH facilities. Her work was recognized by Graphic Design USA Magazine, which published its American Inhouse Design Awards in its July/August edition. The 200-page annual celebrates "the depth and breadth of inhouse design work and the increasing importance of this segment of the creative community." Wood's work earned her division a 2007 Certificate of Excellence.



NIH Intramural Sequencing Center Marks 10th Anniversary

By Raymond MacDougall

Among the banners currently braced against early fall breezes on lampposts around the NIH campus are those heralding the 10th anniversary of the NIH Intramural Sequencing Center (NISC). The anniversary recognizes the emergence and progress of NISC as a trans-NIH resource for intramural investigators and as a partner in collaborations with leading genomics programs nationally and internationally.

To commemorate the anniversary, the National Human Genome Research Institute— NISC's scientific and administrative home—will host an all-day symposium on Oct. 16 in Masur Auditorium, Bldg. 10. With the theme, "Genome Exploration by Large-Scale DNA Sequencing: Circa 2007 and Beyond," the symposium will feature talks by nine guest speakers, all international genomics leaders (see www.genome.gov/NISC10th for details).

Symposium speakers represent the spectrum of expertise in the rapidly evolving area of large-scale DNA sequencing. Their talks will span genomic studies of the microbial world, fruit fly and humans, cancer and human evolution and social implications of our expanding genomic knowledge. The annual Jeffrey M. Trent Lecture in Cancer Research is the anticipated highlight of the symposium and will be presented by Dr. Eric Lander, founding director of the Eli and Edythe L. Broad Institute at the Massachusetts Institute of Technology and Harvard University. Lander is an expert in structural and functional genomics and his talk is titled, simply, "Genomic Information."

NISC now occupies the top floor of 5625 Fishers Lane in Rockville. Laboratory and computational staff produce DNA sequence data 24 hours a day, seven days a week.

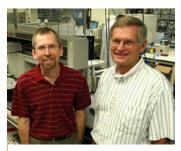
A focus of NISC's current research portfolio is comparative sequencing, which involves sequencing and studying the genomes of vertebrate species. NISC researchers are credited with sequencing a targeted 1 percent of the genomes of 26 mammals, from the hedgehog to the elephant.



More than a dozen of the 45 employees of the NIH Intramural Sequencing Center can reflect on 5 years or more work experience at this trans-NIH facility. Among them are (front, from 1) Dr. Gerry Bouffard, Alice Young, Dr. Baishali Maskeri, Jyoti Gupta and Quino Maduro; (middle, from 1) Beatrice Barnabas and Richelle Legaspi; and rear (from 1) Dr. Jenny McDowell, Charles Brinkley III, Shelise Brooks and Shi-Ling Ho.

Over the past 10 years, NISC has cultivated a large network of more than 100 national and international scientific collaborators. These efforts have engaged NISC scientists in a broad array of research projects ranging from human disease studies to the examination of chromosome structure and evolution. The work has led to publication of more than 60 papers that include NISC staff members as coauthors.

NISC is directed by NHGRI scientific director Dr. Eric Green, who advanced the concept of establishing a high-throughput DNA sequencing facility at NIH and saw to its launch. On Oct. 16, he will preside over the celebratory symposium. "NISC has arrived at an important milestone in reaching its 10-year mark and in expanding the frontiers of large-scale DNA sequencing within a biomedical enterprise like the NIH intramural program," he said. "Much of NISC's success can be attributed to a dedicated and innovative staff who tailor approaches and methodologies to the ever-changing scientific projects that are brought to them."



Dr. Eric Green (1), NHGRI scientific director and founding NISC director, and Robert Blakesley, director of the NISC sequencing group, are pictured in the state-of-the-art sequencing laboratory.

LUNG SCREENING

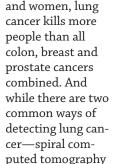
CONTINUED FROM PAGE 1

lot of people don't want to wait for direct proof. There's an assumption that things will work out, and that's not always true."

Kramer's talk, "Lung Cancer Screening: The Clash of Science and Intuition," was the third annual lecture in memory of Dr. Daniel Ihde, NCI deputy director from 1991 to 1994 and a

> renowned clinical researcher in the field of lung cancer. Special guests were Ihde's widow Mary and son Steven.

> The leading cause of cancer death in American men and women, lung cancer kills more people than all colon, breast and prostate cancers combined. And while there are two common wavs of detecting lung cancer—spiral computed tomography



(CT) and standard chest X-ray (CXR)—neither test has been shown to reduce a person's chance of dying of the disease.

There is no recommended screening test to find lung cancer before symptoms begin.

Kramer, NIH associate director for disease prevention, is medical officer for the National Lung Screening Trial, which includes 50,000 men and women at more than 30 study sites across the country. The NLST, sponsored by the National Cancer Institute, is comparing spiral CT and standard CXR.

He is also part of the investigating team for the Prostate, Lung, Colon and Ovarian (PLCO) Cancer Screening Trial, which includes 37,000 men screened for prostate, lung and colorectal cancers and 37,000 women screened for lung, colorectal and ovarian cancers. PLCO is comparing CXR and usual care.

Although screening may yield an earlier diagnosis, Kramer explained, tests don't necessarily help the person being screened. This is borne out by analyses of mortality and survival rates. And while these may sound like two sides of the same coin, they are actually different coins.

"Survival" looks at how long a group lives after being diagnosed. "Mortality" is the probability of death among the entire population at risk for a given disease or cause of death. The terms are defined within epidemiology, the methodological basis of public health, showing how health and disease occur across populations over time.

"Here's a stark demonstration," Kramer said, reviewing cancer statistics over the last halfcentury in the U.S., where changes in cancer survival rates and cancer mortality rates showed no relationship at all. "If I tell you what the trends are in cancer survival," he said, "I've given you absolutely no information about what the trends are for the same cancer mortality, even if you think I have."

The PSA test for prostate cancer, for example, increased survival rates simply because so many new cases were discovered—enough to create "a pseudo-epidemic." Yet death rates did not drop substantially compared to 1973.

Could the same thing happen with lung cancer screening?

Kramer urged researchers to use an analytical framework, a "causal pathway," because no matter how astute we are, we can be fooled by three kinds of bias: selection bias, length bias and lead-time bias.

For example, lead-time bias muddies the difference between survival and mortality. Here's how. Imagine, Kramer said, a theoretical cancer that always kills on the fourth anniversary of its diagnosis, so the 5-year survival rate will be 0 percent. "Now along comes a screening tool, and the only thing it does is advance your date of diagnosis by 2 years, so you know about it earlier."

And the 5-year survival rate? "It has gone from 0 percent to 100 percent...and you haven't saved a single life," said Kramer. "And yet what do you read about in the newspapers...and in prestigious journals about a new screening test? That is, the survival rate jumped dramatically from what would have been expected if you hadn't been screening these people. Unfortunately, it gives you no information about what you can anticipate happening to the risk of actually dying of lung cancer. It's just like Snidely Whiplash"—the mustachioed arch-villain who ties his victim to the tracks.

"When the 5 o'clock train comes by," Kramer explained, "it will kill this victim. Now you develop a new screening tool, say binoculars. They can make the diagnosis of train a lot earlier, but it does not change the moment of impact."



Joining Kramer at the Dr. Daniel C. Ihde Memorial Lecture are (from 1) Ihde's son Steven and widow Mary.

The goal of early detection is to reduce cancer mortality and morbidity—death and disease—while avoiding the added risks of the screening and related treatment.

"Every time we develop a new screening test, we not only change the natural history of the disease itself," Kramer said, "we introduce new risks." These are the minor risks of the tests themselves; overly aggressive treatment; treatment for one problem increasing risk for another; psychological changes; and overdiagnosis, "when you feel you have cured people that didn't need a cure in the first place."

He also pointed out screening's societal outcomes and tradeoffs, including health care utilization and cost effectiveness. "Traditionally we've never had to ask the two completely separate questions," he said. "Does it work? Should we do it? Countries with health systems know these are two separate questions.

"But we don't have a health care system," he quipped, "we have a health care situation."

Any screening benefit has to overcome what he termed "the front-loaded harm of the mortality of surgery." But can there be overdiagnosis in a fast-growing cancer like lung cancer? In fact, the Mayo Lung Cancer Screening Project of 9,200 smokers showed that patients were "heavily overdiagnosed," Kramer noted. "The number of lung cancer deaths in the screened arm was slightly higher than in the control arm, although not enough to be statistically significant.

"This all justifies holding our fire until we get results," he concluded. "The take-home point: recognize that survival and mortality in cancer have nothing to do with each other." Randomized controlled trials are the most efficient way to get the information we need, Kramer said. •

Minority Scholars Present at Scientific Meeting

By George A. Strait, Jr.

A mix of emotions engulfed 18-year-old Jonathan Black as he mounted the stage at Natcher auditorium recently to present the results of research he conducted this summer as part of NIH's STEP-UP program for high school juniors and seniors from minority populations.

"I was excited to show off what I had learned," said Black, a high school senior from Los Angeles, "but I was also a bit intimidated going in front of so many scientists who will be your peers, and in a place with so much science history."

From the same stage where Nobel laureates have presented their findings, Black and 89 other future science superstars presented and defended projects such

as "Sexual Dysfunction As a Cause of Depression in Diabetics," "TRPV1 and TRPA1," "Optical Imaging of Tumor-targeted Natural Killer Cells" and more, in front of a panel of senior NIH scientists.

"This is no typical high school science project. This is cutting-edge research conducted at some of the nation's most prestigious institutions in which these stu-



Supporting the STEP-UP program are NCMHD director Dr. John Ruffin (1), NIDDK director Dr. Griffin Rodgers (r) and Dr. Lawrence Agodoa (rear), who is director of minority health research coordination at NIDDK.



Amy Li, a high school senior from California, gives a presentation in Natcher auditorium.

dents played a serious and substantive role," said Dr. Lawrence Agodoa, director of minority health research coordination at NIDDK, which coordinates the STEP-UP program at NIH. "It is inspiring to see their dedication."

For 8 to 10 weeks, the Short Term Education Program for Under-represented Persons provides mentored research opportunities at 26 research centers in 17 states plus the District of Columbia and Puerto Rico. The goal is to increase the number of ethnic minorities involved in biomedical research.

"They are our future," said NIDDK director Dr. Griffin Rodgers. "There aren't

enough minority scientists in the biomedical research enterprise to ask the relevant questions and to be front and center in leading the effort to eliminate health disparities."

The program is 12 years old and the results have been impressive. Of the approximately 500 students who have taken part, nearly 80 percent have attended or finished college and 90 percent of those who have completed college have gone into biomedical careers.

While NIDDK directs STEP-UP in collaboration with Charles Drew University of Medicine and Science, the University of California at San Francisco and the University of Hawaii, the program was initiated by Dr. John Ruffin, director of the National Center on Minority Health and Health Disparities, Agodoa and Dr. Phillip Gorden, former director of NIDDK, in collaboration with Howard University.

Ruffin says the program's success is like a dream come true. "It's gratifying to see what can happen when vision is matched with superb leadership and resources," he said. Ruffin told the young scholars, "When I was your age, I didn't even know there was an NIH. Now you are part of the NIH. We trust you will take full advantage of this opportunity."

MORE SLEEP

CONTINUED FROM PAGE 1

Wake-Up Call

Such questions early in his career led him to become one of the foremost experts on sleep

> and safety research, a topic given short shrift by the medical community until the last decade or so.

An NIH grantee via the Agency for Healthcare Research and Quality, Landrigan was on campus recently to push for dramatic reform of physician schedules in his lecture, "Shifting the On-Call Paradigm: Translating Sleep & Safety Science into Practice." In addition to directing the Pediatric Hospitalist Fellowship Program at Children's Hospital Boston, Landrigan is an associate

at Brigham and Women's Hospital, where he directs the Sleep and Patient Safety Program.

Over the course of his investigations of fatigue and performance, he discovered his personal experiences with sleep deprivation were shared by other doctors and could be documented.

"There is a large amount of data out there now that suggests people have different susceptibility to sleep deprivation and to elements of adverse schedules in general," he said, "but I in particular was someone who suffered from a phenomenon known as sleep inertia." Difficulty waking up, or problems performing immediately upon awakening define sleep inertia, but many other disorders due to lack of rest or improper sleep exist, Landrigan explained. And all could easily lead to mistakes on the job.

Doctors Are Human

"We now know that physicians-in-training working traditional schedules with recurrent 24- to 30-hour shifts make 36 percent more serious medical errors—and five times as many serious diagnostic errors—as those whose scheduled work is limited to 16 consecutive hours," Landrigan said. "We also know that they have a 60 percent increased odds of suffering a needle-stick injury when working these long shifts, and are twice as likely to crash their cars when driving home. Those working five 24-hour shifts in a month report making four times as

many fatigue-related medical errors that lead to a patient's death."

Landrigan said four major factors determine alertness and performance related to sleep deprivation:

- biological time of day (circadian rhythm)
- consecutive waking hours (the number of hours in a row you have been awake)
- nightly sleep duration (your sleep history over the past days or weeks)
- · sleep inertia.

Research has shown consistently, he said, that reaction time, for instance, becomes severely impaired with fatigue. "Regardless of whether it's 3 in the afternoon or 3 in the morning," Landrigan said, describing data from a National Transportation Safety Board study of truckers, "if you've been up for 24 consecutive hours, you're going to do worse than if you've been up for 3 hours."

In 2000, the Institute of Medicine published a report, To Err Is Human: Building a Safer Health *System*, which drew attention to the problem of mistakes in medical care. "More people die in a given year as a result of medical errors than from motor vehicle accidents, breast cancer or AIDS," IOM said then. Deaths due to medical mistakes ranked 8th among all causes of death that year in the U.S., according to estimates. Fatigue was a likely contributor: Medical residents typically worked 100-hour weeks. Some did shifts of 36 hours straight. Like anyone else, it seemed, physicians need adequate rest to do their job well, Landrigan noted.

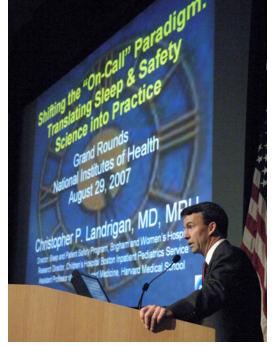
In an effort to improve patient safety, the Accreditation Council for Graduate Medical Education (ACGME) in 2003 mandated new rules for all residency programs. The council limited work hours to 80 per week and on-call continuous duty to 24-30 hours in a row. Landrigan and colleagues argued that ACGME's rules did not go far enough: 24-hour shifts should be eliminated altogether.

Citing a 1997 study published in Nature, Landrigan said that after being awake about 17-19 hours, a person's performance level drops to roughly the same as someone with a bloodalcohol level of .05. By hour 24, you perform as well as a person with a .10 blood-alcohol level, "which is beyond the legal level in every state in this country," he said.



Dr. Robert Lembo (l), executive director of graduate medical education in the Office of Intramural Research, chats before Rounds with guest lecturer Landrigan, a pediatrician who also directs the Sleep and Safety Program at Brigham and Women's Hospital.

PHOTOS: ERNIE BRANSON



Citing a 1997 study in Nature, Landrigan said that after being awake about 17-19 hours straight, a person's performance level drops to roughly the same as someone with a blood-alcohol level of .05.

The Young and the Restless

Pilots get it. Truckers get it. Shouldn't doctors—of all people—get it? It is more sleep. More rest between work shifts. More downtime to regroup. To a lay person, the benefits of a well-rested, fresh-faced decision maker seem obvious, particularly when the decisions being made are about someone's health. Many in the medical community, however, have resisted change, Landrigan said. "Residents used to be just that," he explained in a later interview, pointing out the history of the term. "We've been training generations of doctors this way for more than 100 years. However, with today's acuity of care and the advances in medicine we have made, patients require many more interventions at night and residents are far busier at night than they used to be. Most of the time, residents get fewer than 3 hours of sleep while working in the hospital for as many as 30 hours in a row. This leads to profound performance impairment."

Those opposed to cutting physician hours say other factors should be considered: For example, shorter shifts could result in each patient being treated by a "revolving door" of doctors. Health care systems must weigh the risks of fatigue-related mistakes against the benefits of continuity of care. In addition, traditionalists argue, ultra-long shifts battle-test interns for the job of a doctor as no other training does. Also, hospitals would have to hire more doctors to cover gaps created by the new work schedules. What economic impact would that have on health care's bottom line? Critics of shorter hours say more research is needed before we overturn a training tradition that has worked for more than a century.

This Just In

About a week after Landrigan's Grand Rounds lecture, the *Journal of the American Medical Association* released results of two studies on the ACGME rules. The research, which included more than 300,000 VA patients and over 8.5 million Medicare patients in hospitals around the country, found that the ACGME shift limitations did not cut patient death rates for Medicare patients and were associated with only modest improvements in one subgroup of VA patients. The results seemed to suggest that a shorter shift length had no impact on patient well-being. Landrigan, however, put the data in context.

"First of all," he explained, "the ACGME rules continue to allow shifts of up to 30 hours in a row, a duration well beyond that which the evidence demonstrates to be safe. In addition, prior research has found that compliance with the ACGME duty-hours standards is extremely poor. Therefore it is not surprising that implementation of the standards has not led to measurable improvements in care in most settings."

Landrigan said it's time to stop just studying the problem. There is already an effective way to reduce fatigue-related errors and thereby improve patient safety and cut down on such work-related injuries as needle sticks and scalpel stabs as well.

"We have a tremendous amount of evidence demonstrating that it's dangerous for doctors to work 24-hour shifts," he concluded, noting that Australia and Europe have limits in place. "As a nation, we need to agree on evidence-based rules and enforce them. The Sleep Research Society and the Committee for Interns and Residents have called for maximum shift limits in the range of 16-18 consecutive hours. These recommendations are evidence-based and appropriate."

NIDA's Volkow To Speak, Oct. 23



NIDA director Dr. Nora Volkow will give the third lecture of 2007 in the Anita B. Roberts Lecture Series: Distinguished Women Scientists at NIH, sponsored by the NIH women scientist advisors committee and ORWH. Her talk, "Why Is It So Hard for the Addict's Brain to Just Say No?" will be held Tuesday, Oct. 23 at 1:30 p.m. in Lipsett Amphitheater, Bldg. 10. The series highlights outstanding research achievements of women scientists in the Intramural Research Program at NIH.

Volkow's research employs brain imaging to demonstrate the toxic effects of drug abuse. In a recent *Time* magazine article, she argues that new medications with the potential to reverse the pathology of addiction need to be implemented sooner rather than later.

The seminar series is dedicated to the memory of Roberts, chief of NCI's Laboratory of Cell Regulation and Carcinogenesis from 1995 to 2006. Prior to her death in May 2006, she spent 30 years at NIH as a research leader. The lecture is open to all and will be followed by a question-and-answer session addressing career issues for women in science. Sign language interpreters will be provided upon request. Those who need reasonable accommodation to participate should contact Deirdre Andrews at (301) 496-3891 and/or the Federal Relay, 1-800-877-8339, 5 days before the lecture.

feedback

Have a burning question about some aspect of working at NIH? You can post anonymous queries at www.nih.gov/nihrecord/index.htm (click on the Feedback icon) and we'll try to provide answers.

Feedback: As you probably know, there's some kind of long-term facelift or building repair project taking place outside Bldg. 31A. We've received no information about what the work is supposed to achieve, despite the presence of workmen hanging outside our windows and drilling on the building for more than a month (with no end in sight). The noise has been quite distracting. We'd like to know what is really going on and when the work will be completed

Renard Walker of the Office of Research Facilities, building manager of 31, responds:

"They are recaulking the pre-cast concrete for this building only. I do not know if any other buildings are having this type of work done." The work is expected to end in late October or early November, he added.

Walker informs building tenants via email when projects such as this take place and says he offered advance warning on the caulking project. If you would like to be added to his Bldg. 31 list, contact him at walker@mail.nih.gov.

Feedback: What do people need to do these days when they need to bring their children on campus? What security rules must we follow?

Brad Moss of the Office of Research Servic**es offers the following**: For children of employees—All children under the age of 16 accompanied by an NIH employee or contractor holding a valid NIH ID are allowed to enter the main campus through any employee or visitor entrance where a guard is present. The accompanied child or children will not undergo physical screening and will not have to enter via a visitor's entrance. For details visit www.security.nih.gov/ACVP.htm.

For children of visitors—Any visitor 16 years of age and older is required to provide identification in order to receive a visitor ID. Children 15 years of age and younger are not required to provide photo identification in order to obtain a visitor ID. For more information, visit www. security.nih.gov/securityFAQ.htm#childrenID EnterCampus.

Feedback: What's the deal with smoking outside Bldg. 31A? "Smoke-Free" signs are posted and some even specify no smoking within 25 feet. Even so, I regularly encounter smokers in front of signs, in front of nearby pillars without signs and, once, a smoker standing within inches of the secure door into the A-wing (near the ATM). I feel for smokers, who have a serious addiction and few places where they can feed it. At the same time I don't want to breathe second-hand smoke. I often now take a longer, smoke-free route through the building. Are efforts under way to ease the pain on both sides of the issue? Can NIH provide a specially ventilated, comfortable smoking lounge, along with smoking cessation opportunities and enforce the no-smoking rule (law)?

Response from the Office of Research Services: A new proposal revising the NIH Smoking Policy is under development. The key elements of the proposal will establish, on campus, an enhanced smoking cessation support program and further restrict where smoking is allowed by establishing designated smoking areas. The proposal that is being developed to revise the current NIH Smoking Policy is being done at the direction of the NIH steering committee. If you or one of your colleagues is in need of smoking cessation resources, visit tobaccofree.nih.gov/. •







Campus Photographers Hound Foxes

We asked in our Sept. 7 issue for photos of the brown fox that has been seen rambling around campus and found that there is more than one. Michael Garner, NIH assistant fire marshal, has seen several in the vicinity of Bldg. 15 in recent months, including the ones he captured in the top photos. NCI's Gregar Odegaarden snapped the bottom picture of a fox "scratching an itch up against Bldg. 37, near the south entrance on Aug. 21." Images of campus wildlife are popular with readers; if you have some to share, contact us.

milestones



PHOTO: MELBA MCGLAMARY

Burton Named CIT Division Director

Adriane Burton has been named new director of CIT's Division of Computer System Services. "We have every confidence that she will continue the tradition of leadership excellence that she has

established throughout her federal career," said Dr. Jack Jones, acting director of the Center for Information Technology.

Burton is a 2006 graduate of the HHS Senior Executive Service Candidate Development Program, where she led several enterprise architecture initiatives at the Office of Management and Budget. For the past 8 months, she has served as acting deputy CIO (chief information officer) for the Indian Health Service. During her tenure there, she managed IHS's award-winning Electronic Health Record, IT infrastructure, information security, IT strategic planning, capital planning and investment control and the National Data Warehouse.

Burton joined CIT in 2001 as deputy director of the Division of Network Systems and Telecommunications, where she advanced NIH's network, security, video, telecommunications and cabling programs. She began her federal career in 1988 at the Internal Revenue Service, where she served as a computer systems programmer for major tax-processing systems and transformed IRS's network communication systems. In 1996, she transferred to the Department of Justice where she served as branch chief of the Network Service Center and consolidated DOJ's 14 networks into one.

"I am fortunate to take the helm from steady leadership and I am confident that we have excellent opportunities to further our shared mission across the NIH," said Burton of her new post. "My immediate goals are to: increase shared scientific computing power; implement additional IT services to enhance collaboration; expand IT co-location services especially for disaster recovery purposes for critical NIH services; and introduce server virtualization to optimize shared computing opportunities."—
Michele Mulholland France

Tosten Appointed EO at Fogarty

Timothy J. Tosten is the newly appointed executive officer at the Fogarty International Center. He will oversee all administrative operations, including financial management, information technology, general administration, ethics and procurement. In addition, he will manage the Lawton Chiles International House as well as the other international services FIC provides to NIH, including the notice for foreign travel system and the official government passport process.



Tosten comes to FIC from the National Institute of Mental Health, where he was associate director for administration in the Division of Intramural Research Programs. In addition, he was co-chair of the NIH intramural administrative officers group.

He came to NIH as a presidential management intern in 1993 for the Office of Research Services. He spent 12 years at ORS, where he worked in varying areas, including managing the child care programs and food services contracts and the NIH travel contract. He also initiated the first-ever NIH-wide sign language interpreting services contract. He oversaw construction of the East Child Care Center and the Bldg. 35 cafeteria, renovation of Bldg. 10's B1 cafeteria and expansion of the child care center on Executive Blvd.

He is currently a member of the NIH administrative training committee, where he chairs the newly formed Administrative Fellows Program. Tosten holds a B.S. degree in political science from the University of Maryland-Baltimore County, and a master of public administration degree from the University of Baltimore.

Barr To Direct NIA Office

Dr. Robin Barr has been named director of the Office of Extramural Activities (OEA) at NIA. He will oversee the institute's Scientific Review Office, National Advisory Council on Aging and Grants and Contracts Management Office. Most recently he served as deputy director of OEA and as NIA training officer since 1994, following his work as program administrator for cognitive functioning and aging in NIA's Behavioral and Social Research Program.



Over the years, Barr has been influential in NIH policy development, including changes in policy on career awards and development of the Pathway to Independence Award for new investigators. He currently is working with a number of foundations to develop and sustain joint funding in areas of medical research training on aging and has helped establish two partnership initiatives targeting different stages of clinician-scientist training. A native of Scotland, Barr received his undergraduate and doctoral degrees in psychology from Oxford University in England and completed postdoctoral work at the University of Pennsylvania before joining the faculty of Ball State University in Indiana.

Ellwein Retires from NEI, Returns to **Discuss International Eye Research**

By Arthur Stone

After officially retiring at the end of March as associate director for applications of vision research at NEI, Dr. Leon Ellwein returned as

a special volunteer and gave the first vision brown bag seminar on the topic "NEI International Activities." He worked for NEI from 1991 to 2007.

NEI director Dr. Paul Sieving introduced Ellwein, thanked him for his many years of productive service to NEI and the vision community and detailed the

importance of his work in furthering awareness of the "international context of vision needs." Ellwein had a number of major successes in facilitating research collaborations and visual impairment studies in numerous countries.

Sieving emphasized two achievements, both in 2005: the signing of the agreement between the United States and India to collaborate on expansion of vision research and Ellwein's receipt of the International Golden Award from the Chinese Ophthalmological Society for facilitating academic exchanges between U.S. and Chinese vision researchers and for making major contributions to eye disease epidemiology and prevention of blindness in China.

Ellwein discussed the global disease burden, as described in The World Health Report 2003, produced by the World Health Organization. NEI has collaborated with WHO on the global burden of eye disease since 1979 and Ellwein began his involvement in 1993. In the report, eye disorders are ranked ninth in global disease burden, after diseases such as HIV/AIDS, malaria and birth-related health conditions. However, Ellwein explained that if refractive errors (such as nearsightedness, farsightedness, astigmatism and presbyopia, or aging eye) are included, eye disorders would rank fourth.

He described NEI's ongoing collaborations with WHO and participating countries to help them build capacity to deliver eye care services to those in need. This involves assessment of the types and prevalence of visual impairment, the establishment of programs to reduce health care disparities and the delivery of eye-care services in rural and urban settings. In addition to

India and China, Ellwein also has worked closely with researchers, nonprofit organizations and government officials in Mali, Nepal, Peru, Chile, South Africa, Malaysia and Brazil.

Beginning with a clinical trial comparing two types of cataract surgery in India from 1993 to 1996, NEI in collaboration with WHO has contributed more than \$7 million for trials since 1979. Nearly \$2 million more will be added to the total for the period 2007 to 2011.

However, Ellwein emphasized that the collaborators in these countries have done most of the work. "The high quality and timeliness of their field work, their openness to sharing data and their commitment to international communication has made all the difference," he said. "The studies are theirs, not ours. We simply made them possible with our technical assistance and financial support."

For the future, Ellwein sees collaborative research agreements being negotiated with other countries such as China. "They are interested, and have several institutions highly qualified to do the work," he said.

Dr. Mary Frances Cotch, chief of NEI's Epidemiology Branch, has assumed responsibility for continuing Ellwein's international vision research facilitation efforts. Ellwein will continue to serve as a special volunteer for the next 2-3 years.



Baird, Pioneer AIDS Nurse Researcher, Mourned

By Jenny Haliski

Barbara Fabian Baird, a Clinical Center nurse who was among the first to treat patients with HIV/AIDS, died Aug. 7 at age 69 after hospitalization for a

brief illness.

She supported and conducted groundbreaking research that eventually led to the identification and treatment of HIV/AIDS. At a time when nurse researchers were uncommon, Baird cared for terminally ill patients, collected and stored biologic specimens, gathered and processed data, coauthored scientific papers and traveled around the country teaching other nurses how to care for AIDS patients. She was a pioneer in developing the role of study coordinator and case manager.



Dr. Leon Ellwein (l) joins NEI director Dr. Paul Sieving after a seminar on NEI international activities.

Originally from Charleroi, Pa., Baird later settled in the Washington area to raise her family. She graduated from George Mason University with a bachelor of science in nursing in 1979 and earned a master of arts in communication from the University of Oklahoma in 1994. She came to NIH in March 1981 after hearing from a patient how impressed he was with the care and research conducted at the CC. Baird started as a staff nurse on OP11 East, the unit for patients with immune disorders and infectious diseases.

In NIH's oral history project, "In Their Own Words: NIH Researchers Recall the Early Days of AIDS," Baird described the challenges of treating patients with unexplained immune dysfunction starting in the winter of 1981, including helping physicians develop infectious disease guidelines and managing the "overwhelming" fear of some staff without stigmatizing or isolating patients any more than they already were.

According to Baird, she "just fell into" her work with HIV/AIDS, saying it "offered an opportunity at a particular time. I was right there and I wanted to take advantage of the opportunity to learn about a new disease."

She described encountering suspicion and stigma for her vocation, "like I wore a big letter 'A'." She remembered the response when she described her work with AIDS research to a neighbor who welcomed her after a move. "I thought she was going to kick me out of the neighborhood. She said, 'I'm surprised you even tell anybody about it.' About the same time, or maybe shortly before that, my dentist and my doctor wrote on my chart, 'Works with AIDS patients."

Despite her precautions, Baird experienced several needle sticks, including one from the first AIDS patient at NIH. "I was used as the index case to show that hepatitis is more infectious than AIDS," Baird said in 1993, noting that despite a subclinical hepatitis case and elevated liver enzymes, her HIV status remained negative. "None of those needle sticks would happen today because of the safety measures that have been instituted. All of the precautions I was using were adapted as the protocol for these patients with AIDS. I did not know that I was protecting myself against HIV because we did not know then that AIDS was caused by a virus."

Bill Barrick, former head nurse of the HIV clinic, recalls that Baird was a pioneer in the role of nurses as study coordinators and data managers and showed how traditional nursing knowl-

edge and aptitude were essential to developing a professional role for nurses in clinical research.

Dr. Henry Masur, chief of the CC critical care medicine department, called Baird "a positive part of NIH history" who "took many young men under her wing in an era when few others would."

Senora Mitchell, an administrative assistant in the HIV clinic on OP8, remembers Baird as an avid tap dancer and a fantastic person who could always make others laugh. "She loved her patients and she gave them hugs and kisses when no one else wanted to touch them," Mitchell said. Sandy Montgomery-Aker of NCI called Baird "the best friend that anyone could have. She was able to heal many troubled souls with her words and wonderful smile."

She is survived by a brother, Stephen Fabian; three sons, Bruce, Bob and Bryan; and 12 grandchildren.

Retired PHS Endotoxin Expert Milner Dies at 94



Dr. Kelsey Milner, circa 1943

Dr. Kelsey C. Milner, who retired from the Public Health Service at Rocky Mountain Laboratories in 1977, died of natural causes at age 94 on Aug. 22 at his home in Hamilton, Mont.

He was one of a key group of scientists in the 1960s and 1970s who helped bridge RML research from primarily tick-related zoonoses to the detailed, modern mechanisms of how pathogens survive immune responses.

"Kelsey worked at RML alongside scientists like Edgar Ribi and Jack Munoz, and he helped solidify RML's reputation for excellence," said Dr. Marshall Bloom, associate director at RML. "He was a great mentor

and friend and a very sophisticated thinker and writer."

Milner's area of expertise was bacterial toxins (endotoxins) and how those secretions killed immune cells. He frequently collaborated on research projects with Ribi, who ultimately opened a private lab in Hamilton, now owned by Glaxo-SmithKline.

In 1975, Milner was awarded the PHS Commendation Medal for outstanding research and leadership. His undergraduate degree was in English, and Milner took great pride in his manuscript writing and editing, often helping others prepare their studies for publication.

The PHS sent Milner to RML in 1951, shortly after he earned his Ph.D. in microbiology from Tulane University. Upon arriving, Milner was immediately detailed to Korea to study infectious diseases plaguing American troops. While working toward his Ph.D. in a hospital microbiology lab in New Orleans, he met Doris, who soon became his wife. They remained married for 65 years until his death.

The Milners reared their four children in western Montana, where they reveled in the outdoors and classical music whenever possible. A highlight for the family came in 1961, when Milner swapped homes and research roles for a year with a colleague at the Karolinska Institute in Sweden—with both families making the 1-year transition. \bullet

digest



According to a multi-nation study funded in part by NIMH, the world's mental health care needs are still largely going unmet.

A Worldwide Gap in Meeting Mental Health Needs

Although mental disorders rank among the top 10 illnesses causing disability worldwide, and depression is the leading cause of disability among people older than 15, the world's mental health care needs are still largely going unmet. According to a new survey of 17 countries, partially funded by NIMH, this is especially true in less-developed nations, but also happens in high-income countries. In the U.S. in particular, the survey showed that while people sought and used services more often, most did not receive adequate care. Other findings: in all countries, women were more likely than men to seek mental health services, middle-aged people were more likely to receive services than those older or younger and married people were less likely to use mental health services than unmarried people. Researchers said their findings highlight a need to help developing countries implement more effective mental health care, but also suggest we need to do a better job at home. The survey was part of the World Health Organization's World Mental Health Survey Initiative and results were published in The Lancet.

Bipolar Disorder Help from Breast Cancer Medication

A very different mental health finding: the medication tamoxifen, primarily known as a treatment for breast cancer, dramatically reduces symptoms of the manic phase of bipolar disorder more quickly than many standard mental illness medications. A study conducted by NIMH and published in *Bipolar Disorders* found that tamoxifen blocks the enzyme protein kinase C (PKC) that regulates activities in brain cells; this enzyme is thought to be overactive during the manic phase of bipolar disorder. Current medications for the manic phase generally take more than a week to begin working and not everyone responds to them. Tamoxifen itself might not become the treatment of choice because it also blocks estrogen and may cause endometrial cancer if taken over long periods of time. But researchers said that by pointing to PKC as a target for new medications, the study raises the possibility

of developing faster-acting treatments for the manic phase.

Adult Stem Cells Isolated in Tendon

A small subset of previously unknown adult stem cells has been discovered in tendon, the cord-like tissue that connects muscle to bone. Published online in *Nature Medicine* and conducted by NIDCR scientists and their colleagues, the research points to a natural source of tendon-producing cells in adults and raises the possibility that, with further studies, these cells could one day help mend torn or degenerating tendons that are slow to heal. Scientists said the study also sheds new light on an unexpected biochemical habitat—or niche—that harbors stem cells and explained that the importance of such niches can be overlooked.

Insight into Job's Syndrome

Job's syndrome, a rare immunodeficiency disorder, is caused by a specific genetic mutation that both overstimulates and understimulates the human immune system, leading to harmful bacterial and fungal infections and to the physical features characteristic of the syndrome. These findings—from two groups of scientists, one from the Tokyo Medical and Dental University, and one made up of researchers from NIAID, NHGRI, NCI and NCBI, among others—were published in the New England Journal of Medicine and Nature. Researchers said that understanding the genetic cause of such a rare disorder holds promise not only for Job's syndrome, but also for new leads in treating other immunodeficiency diseases.

A Genetic Link to Smoking-Cessation Treatment

Scientists supported by NIDA and NCI have found that a genetic variant present in nearly half of Americans of European ancestry is linked to greater effectiveness of the smoking cessation medication bupropion (Zyban). The study, published in *Biological Psychiatry*, showed that people with this variant were less likely than those without it to have resumed smoking 6 months after treatment with bupropion. Researchers said this finding is a promising step toward crafting treatments that will most benefit the individual patient based on his or her genetic makeup.—compiled by Sarah Schmelling



volunteers

The phone numbers for further information about the studies below are 1-866-444-2214 (TTY 1-866-411-1010) unless otherwise noted.

NIH Pediatric Clinic, Allergy and Asthma Care

This is an allergy and asthma study for children ages 3 months to 19 years.

Totally Blocked Artery to the Arm or Leg?

Participate in an NIH clinical research study. Compensation is provided.

Have Enlarged Gums?

Do you have enlarged gums and are you taking dilantin, cyclosporine or calcium channel-blockers? Take part in an NIH study.

HIV+ Volunteers Needed

HIV+ volunteers off anti-HIV medications, CD4+ count 300 or greater, needed for research study at NIH. Compensation is provided.

Adults with Neurofibromatosis

Adults with neurofibromatosis type 1 are asked to consider participating in NIH studies. All study-related tests are provided at no cost.

Do You Have Ankylosing Spondylitis?

Consider volunteering for an NIH research study. Compensation is provided.

Have Trouble Swallowing?

Are you 20-90 years old and have problems swallowing? Swallowing studies are being conducted at NIH. Transportation is available.

NIH Turner Syndrome Study

For girls and women with Turner syndrome—comprehensive evaluation (including cardiac, ovarian function) is offered at no cost to participants.

Fibroid Study Seeks Women

Women ages 25-50 suffering with fibroids are asked to consider participating in an NIH study. Compensation is provided. Refer to study o6-CH-0090.

Neck Pain Study Needs Volunteers

The Clinical Center's rehabilitation medicine department is seeking individuals with neck pain and healthy volunteers between the ages of 18-65 to participate in a natural history study of neck pain (02-CC-0245). Participation involves 4 monthly visits (about 1 hour each) for a comprehensive cervical musculoskeletal examination. No compensation is provided. Contact neckpainstudy@gmail.com or (301) 451-7514.

Anthrax Vaccine Study

NICHD is seeking healthy volunteers 18-45 years of age to participate in an investigational anthrax vaccine study (04-CH-0283) conducted at the Clinical Center. Medical screening will determine eligibility. Compensation will be provided. Call 1-800-411-1222 (TTY 1-866-411-1010).

Benner Named OBSSR Communications Specialist

Ann Benner has been named communications specialist for the NIH Office of Behavioral and Social Sciences Research. In this newly created position, she will be responsible for developing a strategic plan to best communicate the cutting-edge research and



discoveries in the behavioral and social sciences.

"There is a pressing need to inform various audiences about the discoveries in basic and applied behavioral and social sciences that can greatly improve the nation's health and quality of life," said Dr. David Abrams, OBSSR director. "Ann's public relations experience from both the public and private sectors makes her well-qualified to spearhead our communications initiatives and serve as the OBSSR liaison to the NIH Office of Legislative Policy and Analysis."

Benner was most recently a communications specialist in NCI's Office of Communications and Education, where she developed and implemented plans for communicating and disseminating clinical trial results. Prior to that, she was in NCI's press office, where she worked with reporters and NCI scientists, responding to media inquiries, arranging interviews and developing communication strategies.

Before joining NCI in 2004, Benner was a media specialist at several public relations firms in New York, including Chandler Chicco Agency, Ogilvy Public Relations and Weber Shandwick, where she developed and managed strategic communication plans for pharmaceutical and biotech clients such as Amgen, Pfizer Inc. and Deborah Heart & Lung Center. Benner began her communications career publicizing books and authors for major publishing houses in New York.

She holds a B.A. in sociology with a minor in women's studies from Duke University, where she graduated Phi Beta Kappa and *magna cum laude*.



Film Festival Brings in More Than \$40,000 for NIH **Charities**

This year's Comcast Outdoor Film Festival, hosted by the NIH Recreation and Welfare Association on the grounds of Strathmore Hall, raised more than \$40,000 for the Children's Inn at NIH, Special Love/Camp Fantastic and Friends of the Clinical Center. More than 55,000 people attended over the 10-day event. The biggest draw was the James Bond movie Casino Royale, which attracted more than 7,000 people.

Other films that brought in the crowds were The Devil Wears Prada, Dreamgirls and an advance screening of Resurrecting the Champ.

More than 100 volunteers many clad in "Got Movies?" Tshirts—helped make the festival a success. "A big thanks goes out to the volunteers, many of whom were there all 10 nights and stayed late into the night," say R&W organizers. "We couldn't have done this without you."













