SEPTEMBER 16, 2011
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The Second Best Thing About Payday

nih record

ABOVE • *Young women tour a surgical suite at NIH as part of PALS event. See story on p. 12.*

features

departments

Culture, Events Influence Demarcation

Professor Traces Nation's 'Drinking Age Debates'

By Rich McManus

Anyone hoping to make sense of the nation's wrangling over the establishment of a sensible legal age for drinking alcoholic beverages had better be prepared to follow a stumbling, lurching course, not unlike the route traced by—a tippler.

Dr. Joy Getnick

As part of NLM's "Summer of Seminars," Dr. Joy Getnick of the State University of New York at Geneseo presented "The Drinking Age Debates" on Aug. 11. While no one was carded upon entry to the NLM Visitor Center, where the talk took place, dizziness upon exit might not have been inappropriate as Getnick reviewed the weaving, careering 80-year (80 proof?) history of the topic, which grew out of Prohibition.

As early as 1912, Massachusetts established a law prohibiting teenagers from using fake ID cards to get alcohol, Getnick reported. Her own interest in the field emerged during college, when she worked for her school's health promotion office, teaching

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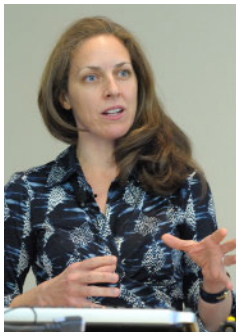

Dr. Susannah Fox

Peer-to-Peer Health Care

Fox Shows How Internet Is Changing Health Care

By Trisha Comsti

People are using the Internet to share information with each other at lightning speed. Combined with mobile technology, it is transforming the way the world works. This influence extends to health care and the way people are connecting to one another to improve their health.

"Just like peer-to-peer file sharing transformed the music business by allowing people to share songs, peer-to-peer health care has the potential to transform the pursuit of health by allowing people to share advice and to share what they know about themselves," said Dr. Susannah Fox, who spoke Aug. 2 at the Office of Disease Prevention's "Mind the Gap" seminar series. Associate director of the

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NIAMS Celebrates 25th Anniversary

The National Institute of Arthritis and Musculoskeletal and Skin Diseases recently celebrated its 25th anniversary with a scientific symposium, Improving Lives Through Discovery, at Lipsett Amphitheater. The occasion brought together more than 300 friends of the institute—including patients, researchers, clinicians and advocates, with current and former staff—to take stock of what NIAMS has accomplished to date and what it can accomplish in the next quarter century.

NIH director Dr. Francis Collins and Research!America chairman John Edward Porter joined NIAMS director Dr. Stephen Katz in delivering introductory talks. Collins praised NIAMS for tackling the nation's "common, chronic, crippling and costly" diseases by anticipating where scientific opportunities lay, exploiting them and shepherding research toward meaningful results.

Porter is a former Illinois representative in the U.S. House of Representatives for two decades and former chairman of the appropriations

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briefs

NICHD Holds 2nd Annual 5K to Draw Attention to Infant Deaths

NICHD invites all HHS staffers to run, walk or roll their wheelchairs to raise awareness for infant mortality. The second annual 5K event is being held Wednesday, Sept. 28 in conjunction with Infant Mortality Awareness Month. The race kicks off at 11 a.m. from the starting line at Bldg. 1.

The three leading causes of infant death are birth defects, low birthweight and sudden infant death syndrome. Research and public health advances by NIH and sister HHS agencies have contributed to a general decline in infant mortality in recent years. Yet poor outcomes still affect certain segments of the population. At the 5K, staffers can learn more about current research efforts. For details, visit www.nichd.nih.gov/about/meetings/2011/092811.cfm.

Community College Day, Oct. 11

The NIH Office of Intramural Training & Education will hold Community College Day on Tuesday, Oct. 11 from 8 a.m. to 4 p.m. at the Natcher Conference Center. The event will provide community college students and faculty an opportunity to visit the NIH campus and to learn about careers and training opportunities in biomedical and health care fields. For registration and details, visit www.training.nih.gov.

NIDA Honors Intel Award Winner

NIDA director Dr. Nora Volkow (l) invited NIDA staff to meet this year's Intel International Science and Engineering Fair/Addiction Science Award winners. Due to Hurricane Irene, however, only the 2nd place winner, Darby Schumacher (r), was able to attend. The young scientist presented her project to Volkow and NIDA staff on Aug. 29. The winner from Tennessee received a crystal trophy and cash award from Friends of NIDA. A date for the other winners to come to NIDA is being scheduled. A list of all of the 2011 award winners and their projects can be found at www.drugabuse.gov/newsroom/11/NR5-13.html.

Outdoor Film Festival Deemed a Success

Gaithersburg residents Louisa Quittman (l) and her daughter, Eva Quittman, 9, enjoy Toy Story 3 *on the big screen during last month's 15th annual Outdoor Film Festival. The festival went on for four out of the five scheduled nights, as* Up *was cancelled due to weather. The best turnout was for* Tangled *on Aug. 5, with approximately 2,000 attendees. The other two big draws were* True Grit *and* Top Gun. *"We truly appreciate the Universities of Maryland at Shady Grove's hospitality for hosting us for a second year," said R&W President Randy Schools. "We would also like to send out a huge thank you to over 80 volunteers who helped us out this year. Without their help we would not be able to pull this event off." Schools also extended thanks to Deutsch, Inc., Ben & Jerry's Rockville, Potomac Pizza and Chick-fil-a, which helped raise money for the NIH Charities.*

PHOTO: KIM GRIMES/ROCKVILLE PATCH

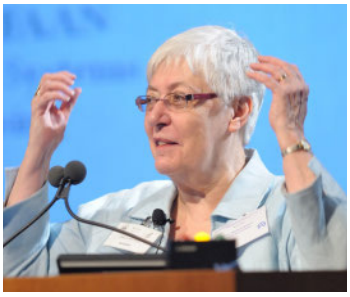
Bluebirds Rebound on Campus, Bats Not So Much

So far, 2011 is "looking like a rebound year from the last 3 years that saw our fledging number of bluebirds plummet," said NIH landscape architect Lynn Mueller of the Office of Research Facilities in a recent email to campus bird enthusiasts. "With a current count of 36, and possibly a few more last nesters, we are coming back up to near our 2006 counts before the West Nile virus hit the songbird populations. Thanks so much for your effort in caring for and protecting this magnificent little bird on our campus."

NIH's project to install bird houses in strategic areas on campus began in 2001 as an inexpensive, non-pesticide solution to insect management. The project was later expanded to other NIH properties. Poolesville Animal Center bird counts are due later, Mueller said. "That site, with acres of pastures and forest edges, is very popular with bluebirds," he noted.

The news is not as upbeat for the local bat population, however. [Bats are known to eat their weight in mosquitoes during the course of a night.]

"I think just about all our bats in the mid-Atlantic region have been devastated by the recently discovered 'white nose syndrome' that is killing bats by the thousands," he explained. "It's a pandemic that is affecting all bat species. I have not seen a bat here on campus or [nearby] this summer. The loss of these night-time insect eaters may have a huge impact on our environment that is yet to be recognized."



Above, Drs. Clare Hastings (l) and Patricia Grady at the NINR-CC joint conference. At right, Dr. Pamela Mitchell delivers her keynote, "Promoting Nursing Symptom Management Research within the CTSA Structure," and Dr. Leorey Saligan, deputy clinical director of the NINR Intramural Research Program, answers a question from the audience.

PHOTOS: ERNIE BRANSON

NINR, Clinical Center Hold Conference on Symptom Management

By Ray Bingham

NINR and the Clinical Center recently cosponsored a joint conference, "Symptom Mechanisms, Measurement, and Management." The event celebrated both NINR's 25th anniversary and the 2011 National Nurses Week at NIH. Distinguished lecturers from across the country presented the latest research into methods to help clinicians better identify and treat common symptoms such as fatigue, pain and sleep disorders.

Dr. Clare Hastings, chief of CC Nursing and Patient Care Services, welcomed attendees with an overview of NIH's clinical research program. "One of the philosophies of my boss, [CC director] Dr. John Gallin…is that in order to have a thriving research support process you have to have people who are engaged in clinical research." She outlined the various roles that nurses may take within the research team, from the undergraduate nursing student first learning about research, to the credentialed research nurse assisting with clinical protocols, to the Ph.D. nurse-scientist trained to conduct independent research projects.

In her keynote address, Dr. Pamela Mitchell, a nursing professor at the University of Washington School of Nursing, discussed ways in which the interdisciplinary scope of the NIH Clinical and Translational Science Awards (CTSAs) can promote nursing research. Within the CTSA consortium, which includes research institutions across the country, Mitchell and NCRR program officer Dr. Donna Jo McCarthy co-chair a nurse scientist special interest group to increase collaborative opportunities, particularly in the area of symptom management research. To put the importance of this research into perspective, Mitchell stated, "We talk about symptoms—pain and nausea and so forth—but these [studies] are really about the human experience as people are living with acute or chronic illnesses."

Dr. Leo Saligan, deputy clinical director of NINR's Intramural Research Program, discussed his research on the molecular genetic mechanisms of fatigue. He said his interest in the topic "stemmed from my clinical observations…I want to understand what fatigue is and how to manage it."

In one current project, he and his research team are comparing fatigue reports from patients undergoing treatment for prostate cancer with changes in gene regulation and expression. The goal is to identify particular genetic targets that may be useful for interventions to reduce fatigue related to disease and/or its treatments. This work could help with managing fatigue not only in cancer patients, but also in individuals with other chronic conditions such as fibromyalgia.

Other speakers during the scientific sessions gave talks on a range of topics including pain management during palliative care, daytime sleepiness and fatigue among patients with heart failure, pain and depression among individuals with sickle cell disease and use of the NIH PROMIS and Toolbox in creating standardized measures to advance clinical assessment and research.

In addition to the lectures, the conference included a poster session featuring presentations from both NIH intramural researchers and nurse scientists across the country. Topics included symptom identification in the ICU, diabetes symptom self-care, methods to ease distress among pediatric cancer patients and a variety of programs on symptom management related to cancer and chemotherapy in adults.

In her closing remarks, NINR director Dr. Patricia Grady discussed the importance of symptom management research within the current drive for health care reform. "We recognize now that the one-size-fits-all approach to symptom management really fails many patients."

She added, "Moving forward, we need to define better ways that biology, behavior and environment interact to affect the emergence and severity of symptoms…I want to provide special encouragement to members of the public to join us as partners in our research as we strive to ensure that we are addressing the health care needs and priorities of the families and communities we serve."

A videocast of the conference is available at http://videocast.nih.gov/launch.asp?16660. More information on upcoming NINR 25th anniversary events is available at www.ninr.nih.gov/25years.

ORWH Presents Lecture on Sex Differences, Pain Research

The Office of Research on Women's Health will present "Sex Differences and Pain Research," on Tuesday, Sept. 27 from 1 to 3 p.m. in Bldg. 10, Lipsett Amphitheater. Speakers will be Dr. Carmen Green, professor of anesthesiology, health management and policy, and obstetrics and gynecology in the department of anesthesiology at the University of Michigan; Dr. Roger Fillingim, professor at the University of Florida College of Dentistry and research health scientist for the Rehabilitation Outcomes Research Center at the North Florida/South Georgia Veterans Health System; and Dr. Emeran Mayer, director of the Gail and Gerald Oppenheimer Family Center for Neurobiology of Stress at the University of California, Los Angeles. Individuals who need sign language interpreters to participate should contact Jenny Haliski at haliskij@od.nih.gov or (301) 496-7246.

INTERNET

CONTINUED FROM PAGE 1

***Above**:*
Fox said, "If you enable an environment in which people can share, they will. And the benefits of that sharing will entice other people. That's peer-to-peer health care."

PHOTOS: ERNIE BRANSON

Pew Research Center's Internet & American Life Project, she spoke on "Peer-to-Peer Health Care" and shared findings from Pew's recent studies on the social impact of the Internet.

"Peer-to-peer health care is the confluence of two powerful forces," said Fox. "Number one is the ancient instinct to seek and share advice about health. Number two is our newfound ability to do to so at Internet speed and at Internet scale."

The Pew Research Center has been tracking Internet usage for more than 10 years. In 1995, only 1 in 10 adults had access to the Internet. Today, 75 percent of adults, including 95 percent of teens, are online.

The rise of mobile technology adds a new level of interaction. Fox describes the "mobile difference," meaning that mobile users are much more likely to interact and be an active part of the online community instead of simply searching for information.

"If you hand someone a smart phone, they're more likely to contribute, forward, upload a video or update their status," said Fox. "Instead of letting information just wash over us, mobile social technologies are inviting us to participate and jump in ourselves."

Six in 10 people go online wirelessly with a laptop, mobile device or tablet, including 84 percent of 18- to 29-year-olds, according to the Pew Research Center's findings. Forty-seven percent of people report that they get some local news on their cell phones or tablets. Forty-eight percent are looking online wirelessly for information on doctors or other health information.

How are people connecting online to get health information? The Pew Research Center found that one in five Americans have gone online to find people with similar health concerns. This figure is higher—one in four—for people with a chronic illness. In addition, many people have "second degree" Internet access through a caregiver searching online on their behalf. This is an important connection to the online world for older individuals and those who are otherwise offline.

In addition, people experiencing a significant change in health not necessarily related to illness, such as pregnancy, weight loss or quitting smoking, are using the Internet as well. One in four Internet users track weight, diet, exercise routine or other health indicators with online tools.

"Six in 10 American adults seek health information online but doctors, nurses and other health professionals continue to be the first choice for people with health concerns," said Fox. Nine of 10 Americans say health care professionals are more useful than fellow patients, friends and their families in getting a diagnosis.

"The bottom line is that the Internet does not replace health professionals," said Fox. "Peer-to-peer health care is a way to do what they've always done: to lend an ear, to lend a hand, to lend advice," but at a new speed and scale.

According to Fox, several groups of people are acting as "beacons of change," encouraging those who are not yet connected to join the online community. Patient leaders are advocating for the sharing of good health information for the benefit of themselves and, often, their loved ones.

Clinician leaders are sparking interest among health care professionals—the people who already have direct access to health information—and encouraging them to share with other clinicians and their patients. For example, the "Improve Care Now" network is helping health care providers work together with children with Crohn's disease and ulcerative colitis to share new tools and ideas. Since the creation of the network, doctors have seen increased remission rates for patients with Crohn's disease and ulcerative colitis.

Technology leaders are the third "beacon" and they can make it easy, and even fun, to track health data. For example, the online service PatientsLikeMe.com collects self-reported patient data and encourages users to make discoveries about how their own health fits into a broader picture of health and disease.

Fox concluded, "If you enable an environment in which people can share, they will. And the benefits of that sharing will entice other people. That's peer-to-peer health care."

Dr. Lawrence Corey

New Thinking on Herpes Is Subject of Straus Lecture

At NIAID's fourth annual Stephen E. Straus Memorial Lecture on Infectious Diseases, Seattle-based researcher Dr. Lawrence Corey will describe research that is changing conventional wisdom about herpes simplex virus (HSV) infection. "Life Below the Belt and the Pathogenesis of HSV Infection: The Politics Are Mucosal," will be presented on Thursday, Sept. 22, at 3 p.m. in Bldg. 40, Rm. 1201/1203.

For more than 50 years, most scientists have believed that HSV type 2, which causes genital herpes and severe herpesvirus infections in newborns and people with compromised immune systems, established itself in sacral nerve root ganglia located at the base of the spine and that reactivation of latent infection was determined largely by processes inside the infected nerves. It was also generally accepted that reactivation, while rare, invariably led to sores in genital tissues. Corey will describe research that is causing experts to revise previous models of HSV-2 reactivation.

For example, recent data suggest that infected people shed HSV-2 nearly daily but experience no clinical symptoms. Moreover, a pronounced role for immune cells in the genital mucosa is beginning to be discerned. Data modeling suggests that because of this mucosal immunity, less than 15 percent of HSV-2 reactivations result in genital ulcers. This emerging picture gives reason for optimism that immunological approaches to genital herpes therapy are within reach.

Corey is president and director of the Fred Hutchinson Cancer Research Center and professor of medicine and laboratory medicine at the University of Washington. An expert in virology and vaccine development, his research is focused on herpes viruses, HIV and other viral infections, including those associated with cancer. Corey is also principal investigator for the NIAID-sponsored HIV Vaccine Trials Network.

The lecture series honors Dr. Stephen Straus, who served NIAID for 30 years as a lab chief and senior investigator, continuing in the latter role after his appointment as the first director of NCCAM.—**Anne A. Oplinger**

At RML's recent Native Youth Academy, youngsters were able to dissect a fetal pig (l) while parents and clan leaders (r) attended a listening session with NIH leaders.

RML Hosts Native American Youth Academy

The Rocky Mountain Laboratories recently hosted the annual Native Youth Academy, a cooperative initiative of the Billings area Indian Health Service with the Montana-Wyoming Tribal Leaders Council; it is designed to promote wellness among at-risk youth.

Fifty-six Native American youth ranging from age 11 to 14 attended the 5-day academy. The Office of Equal Opportunity and Diversity Management coordinated a collaboration of four institutes—NIDDK, NIDA, NIAID and NIGMS—that presented a day of science-emphasis programs to participants. OEODM and RML staff organized workshops for youth and conducted mutual "listening sessions" with adults.

Native Americans are underrepresented in the youth-to-maturity pipeline of science, technology, engineering and math (STEM)-trained practitioners. NIH's partnership with NYA is designed to increase opportunities to fill the pipeline as more young Native Americans enroll as science majors in college.

The youngsters observed a fetal pig dissection, learned about the effects of substance abuse and diabetes and enjoyed a whimsical "mystery" about medical forensics. Meanwhile, their parents and clan leaders participated in listening sessions and panel discussions with NIH leaders regarding cooperative efforts to promote wellness for the next generation of Native Americans across Montana and Wyoming.

Dr. Bruce Fuchs, director of NIH's Office of Science Education, explained OSE's K-12 curriculum in order to motivate parents to support their children who aspire in STEM subjects. NIAID's Dr. Marshall Bloom, Dr. Wendy Fibison and Toby Bowland pointed out training opportunities for budding scientists at both RML and Bethesda. NIDA Special Population Office director Dr. Lula Beatty addressed the serious addiction and substance abuse trends in Native American communities. Dr. Sandy Garfield, who directs NIDDK's Diabetes Science Education in Tribal Schools program, underscored the urgency of training Native Americans to manage their special health risks. Dr. Shawn Drew explained how the NIGMS Division of Minority Opportunities in Research program targets Native American students with incentives so they will apply for training and career opportunities in research.

The faces of NYA participants lit up when their leaders asked them what the academy meant to them this summer. One spoke for many when she said, "All of the ideas and labs that NIH staff workers presented helped me to feel smarter… in the future, I would like to work there." Another youngster declared, "I have to say, this saved my life."

DRINKING AGE

CONTINUED FROM PAGE 1

***Above**:*
Getnick suggested that 19 would be her personal recommendation for a legal drinking age, enabling college communities—on which a majority of the nation's 19- to 21-year-olds live—to focus on problematic behavior, not a number.

PHOTOS: BILL BRANSON

a course on "how to host a party without killing your friends."

As a newly minted Ph.D. who will teach this fall at SUNY-Geneseo, Getnick finds herself in front of young students who claim that the current drinking age of 21 forces them—since it is not yet legal for most of them to drink—to imbibe like desperadoes: not all that frequently, but massively when they can.

She observes of today's youth, "There is no cultural shame associated with drunkenness... These kids are convinced it's the law's fault."

As factions such as the Choose Responsibly movement, which argues for lowering the drinking age to 18, compete with more conservative interests, including Mothers Against Drunk Driving (MADD), which insists that 21 is the more appropriate age, Getnick is inclined to call a time-out: "We shouldn't change a policy we don't understand," she said.

The drinking age debates, she said, grew out of Prohibition, which was repealed in 1933. Prior to Prohibition, laws restricting access to booze were largely an attempt "to control youth behavior," she said. "The debate was not 'how much?' but when and where?"

Temperance groups sought to keep bars well removed from schools. Yet by the 1920s, college drinking had become a national concern, and by a dozen years later, almost every state adopted a drinking age of 21, Getnick said. By 21, the so-called "age of majority," young people could vote—and also drink.

Over time, however, states adopted their own policies; New York chose 18. Delaware settled on 20. While the 1930s saw an increase in the amount of research on the impact of alcohol on youth, World War II pushed the issue aside, said Getnick.

In 1953, a landmark, book-length study titled *Drinking in College* was published, examining all aspects of youth drinking. Its principal finding was that youth drinking mimics adult mores; hard-drinking towns tended to produce hard-drinking kids.

The study drew stories in *Time* and *Newsweek*, igniting a national debate. The fear in the America of the mid-1950s was that kids who drank took "a ride on a skid-row toboggan," Getnick noted.

Others argued that, by giving drink the glamour of sin and restricting access to it, authorities were creating the allure of the forbidden.

The issue that made age a principal factor in regulating access to alcohol (which historically had been considered an adult concern) was so-called "border deaths." The highways linking Connecticut, where the drinking age was 21, and New York, where it was 18, were marred by a dramatic upswing in traffic fatalities.

The legislatures in New York, New Jersey and Connecticut became embroiled in controversy and blame, Getnick reported, out of which emerged, for the first time, the solution of a uniform drinking age, as well as regulation of bar hours.

In some states, gender became an issue; Illinois allowed women to drink at 19, since they were thought to be more mature than men, who were restricted before age 21.

With the advent of youth culture and the Vietnam War in the 1960s, the pendulum swung back toward 18 as people argued that anyone fit to die in battle was also fit to drink, and to vote. Twenty-four states lowered their drinking age between 1970 and 1973, Getnick said.

"One of the arguments for lowering the age was 'At least alcohol is not a drug [like marijuana or LSD],'" she added. Alcohol use was often thought to be less harmful than smoking cigarettes, as well.

But teen deaths associated with driving while drunk began escalating; a Wisconsin study showed that teenagers were more likely to die in single-vehicle crashes, alone at night, with alcohol consumption a factor.

Science, too, entered the debate as the association between blood alcohol content and impaired driving was recognized. A BAC of 0.15 had been set as a standard of drunkenness, but was then lowered to 0.1, then 0.08, Getnick noted.

By the later 1970s, as mounting fatalities cast doubt on the wisdom of 18 as the legal drinking age, many states reverted back to 21, or at least raised it from 18.

Getnick said the establishment of the National Institute on Alcohol Abuse and Alcoholism in 1970 "became the public face of alcohol problems" in the U.S. Its first director, Dr. Morris Chafetz, determined that there were some 450,000 teenage alcoholics in the U.S., a figure that spurred much debate: was there really a teen epidemic or was this a phantom problem?

NIAAA also pushed "the medicalization of alcoholism," Getnick said. "It became a diagnosis."

When MADD was established in 1980 with the goal of making drunk driving "socially unacceptable," Getnick said, there was no particular focus on youth. But a 1982 Presidential commission on drunk driving created by Ronald Reagan came up with a list of 39 recommendations. While only one of them dealt with youth, it became a *cause célèbre*: age 21 was pitched as the national legal drinking age.

Within 2 years, spurred on by the emotional message of "saving our children," a bill passed establishing 21 as the national drinking age. Further, states that did not comply with the statute were denied federal highway funds, which no state could afford to forego. By 1988, all 50 states fell in line with the new norm.

That same era saw a "wealth of research on the impact of the drinking age," Getnick reported. Studies showed that youth drank, regardless of the law, and that parental norms were the most powerful factor in regulating it. Setting the bar at 21, another study showed, meant kids drank fewer days per week, but more per sitting.

The mid- to late-1990s were characterized by a focus on the negative consequences of binge drinking, Getnick said. "There was a shift away from the law, toward the behavior." Social norms campaigns sprang up with the message that "not everyone was binge drinking every night."

But quandaries remained: how do you promote safe drinking when, for many, it's illegal? One group, a committee of college presidents, suggested issuing "drinkers' licenses" that, like drivers' licenses, would show that the holder was trained in the art of safe drinking. Two states, Wisconsin and South Carolina, moved to lower their drinking age to 18, for active military only. And last year, Congress lowered the drinking age for military bases near Canada, to lower the incidence of border deaths.

Getnick said that, at the moment, the national age of 21 has firm legal footing, but acknowledged that, historically, the tides change. During a brief Q&A session, she suggested that 19 would be her personal recommendation, enabling college communities—on which a majority of the nation's 19- to 21-year-olds live—to focus on problematic behavior, not a number. Her audience included not only NIAAA acting director Dr. Kenneth Warren, but also NIAAA epidemiologist Dr. Ralph Hingson, whom Warren labeled a world authority on the issue at hand. Hingson reported that raising the drinking age to 21 has resulted in a lower rate of traffic deaths for all ages.

Hingson noted that raising the drinking age to 21 partly contributed to alcohol-related traffic deaths among persons of all ages being cut in half per 100,000 persons in the last 25 years, with the steepest decline in the 18-20 age range. He highlighted a recent study showing each alcoholic drink consumed increases a driver's risk of being in a fatal crash; the risk increases more for drivers under 21 than 21 and older.

Hingson also underscored the "second-hand effect" of youth drinking and driving and indicated approximately half of the people who die in traffic crashes involving drinking drivers under 21 are people other than the young drinking drivers. He finally called for a wider consideration of alcohol's deleterious effect beyond the drinking driver, noting that injuries are the leading cause of death among people ages 1-44 in the United States, with alcohol misuse being the leading contributor. Of 44,000 injury deaths attributable to alcohol misuse annually, 13,800 are traffic deaths.

"Just as most fatally injured drivers have been tested for alcohol, thereby facilitating research on what laws reduced alcohol-related traffic deaths, we need to more consistently test other injury deaths for alcohol so that we can learn which of myriad interventions can also reduce those deaths," he said.

PAN Honors NINDS's Landis

NINDS director Dr. Story Landis recently received the 2011 Morris K. Udall Award for Public Service from the Parkinson's Action Network (PAN). One of two Udall Award recipients, Landis was recognized for having made important contributions to public policy.

"You will find no greater champion of Parkinson's disease research at the NIH than Story Landis," said Amy Comstock Rick, PAN chief executive officer. "It is an honor to work with her on a wide range of issues surrounding biomedical research, particularly her thoughtful and thorough approach in working with the scientific community in pursuit of ways to accelerate the development of more effective diagnostics, measures and therapeutics."

PAN, a grassroots education and advocacy organization, focuses on health care policy issues that affect the Parkinson's community. Parkinson's disease is a chronic, progressive neurological disease that results from degeneration and premature loss of dopamine-producing brain cells. Dopamine is a brain chemical that controls motor function.

The award is named for the late former congressman Udall, who served in the U.S. House of Representatives for 30 years. He was diagnosed with Parkinson's disease in 1979 and died in 1988.

"I am so honored to be given the Udall Award for Public Service because this is a community that is close to my heart," said Landis. "Parkinson's research is important not just to people with the disease but to the broader research community. The things we learn in one field of study have the potential to shed light on other areas of research, and we want to keep moving forward toward finding a cure."— **Shannon E. Garnett**

ANNIVERSARY

CONTINUED FROM PAGE 1

***Above, l**:*
Hundreds of researchers, health care providers and patients from across the U.S. came to NIH for NIAMS's 25th anniversary scientific symposium held in Lipsett Amphitheater.

***Above, r**:*
NIAMS director Dr. Stephen Katz discusses the institute's many partners.

subcommittee on labor, health and human services, and education. He encouraged the bench scientists and clinicians in attendance to create opportunities to share stories of medical research and breakthroughs with the public and Congress.

The agenda included scientific sessions featuring outstanding senior and early-career investigators, followed by patient perspectives on how peoples' lives have been affected by NIAMS-supported research.

The program highlighted an array of advances made by NIAMS extramural and intramural researchers. Topics included progress in muscular dystrophies, Marfan syndrome, JAK inhibitors, lupus, osteoporosis and the genomics of inflammation.

In one panel, National Marfan Foundation co-founder and chair emeritus Priscilla Ciccariello, who has lost her husband, eldest son and a grandson to complications of Marfan syndrome, described how new surgeries and other treatment advances have given a more hopeful future to her surviving two sons as well as the many others living with the disorder

In another panel, George Beach, an artist and former NIAMS advisory council member who was diagnosed with rheumatoid arthritis 44 years ago, shared how new biologic treatments gave a second act to his career. After 25 years of being unable to paint, in 2001, his "biologics kicked in" and his "brushes came alive again," inspiring him to create his award-winning painting *Indivisible*, about the World Trade Center tragedy.

Mentorship and collegiality were other themes of the day. Many of the scientific speakers shared how they trained, with NIH support, in their respective fields and how that experience has shaped how they now encourage and support their own junior staff. Orthopaedic surgeon and long-time NIAMS grantee Dr. Cato Laurencin described how receiving the 2009 Presidential Award for Excellence, given to science mentors, prompted him to reflect on how NIAMS's work on the "people side" of science contributed to his achievement.

It simply "brings people who are bold and smart together in different ways," he said, "which allows them to explore their passions." Today, Laurencin said, "My passion is not only science work, but mentoring." Dr. Helen Lu of Columbia University preceded him at the podium, sharing her research and her gratitude for the opportunities she gained by training with Laurencin.

Throughout the symposium, Katz emphasized the role of NIAMS's many partners who make its work possible, including patients, the public and the professional and advocacy groups that make up the NIAMS Coalition. He also noted that most of the work honored by the symposium is the result of trans-NIH partnerships, saying, "These collaborations are really how NIH works, and how NIH works best."

Celebrations continued into the evening with a dinner program—"Bringing Medicine and Science to the Public"—featuring a conversation with special guest and National Public Radio talk show host Diane Rehm. She shared with Katz and the audience her candid opinions on medical science and its relationship with the public and Congress through her unique vantage point as a prominent public radio host and as a patient living with the voice disorder spasmodic dysphonia.

digest

Uterine Stem Cells Used to Treat Diabetes in Mice

Researchers funded by NIH have converted stem cells from the human endometrium into insulin-producing cells and transplanted them into mice to control the animals' diabetes.

The endometrium, or uterine lining, is a source of adult stem cells. Normally, these cells generate uterine tissue each month as part of the menstrual cycle. Like other stem cells, however, they can divide to form other kinds of cells.

The study's findings suggest the possibility that endometrial stem cells could be used to develop insulin-producing islet cells. These islet cells could then be used to advance the study of islet cell transplantation as a treatment for people with diabetes. If the transplantation of islet cells derived from endometrial cells is perfected, the study authors write that women with diabetes could provide their own endometrial tissue for such a transplant, sidestepping the chance of rejection posed by tissue from another person. Endometrial stem cells are readily available and can be collected easily during a simple outpatient procedure. Endometrial tissue could also be collected after hysterectomy, the surgical removal of the uterus.

"The study findings are encouraging," said Dr. Louis DePaolo, chief of the Reproductive Sciences Branch, NICHD, which funded the study. "Research to transplant insulin-producing cells into patients with diabetes could proceed at a much faster pace with a relatively accessible source of donor tissue."

The authors note that such a treatment would be more useful for people with Type 1 diabetes, in which no insulin is produced. The treatment would be less useful for Type 2 diabetes, in which insulin is usually produced, but in which cells have difficulty using the insulin that is available. The findings appeared in *Molecular Therapy*.

Model Predicts Weight with Varying Diet, Exercise Changes

Researchers at NIH have created a mathematical model—and an accompanying online weight simulation tool—of what happens when people of varying weights, diets and exercise habits try to change their weight. The findings challenge the commonly held belief that eating 3,500 fewer calories—or burning them off exercising—will always result in a pound of weight loss.

Researchers at NIH have created a mathematical model of what happens when people of varying weights, diets and exercise habits try to change their weight.

Instead, the researchers' computer simulations indicate that this assumption overestimates weight loss because it fails to account for how metabolism changes. The computer simulations show how these metabolic changes can significantly differ among people. Findings were published Aug. 26 in a *Lancet* issue devoted to obesity.

However, the computer simulation of metabolism (available at http://bwsimulator.niddk.nih.gov/) is meant as a research tool and not as a weight-loss guide for the public. The computer program can run simulations for changes in calories or exercise that would never be recommended for healthy weight loss. The researchers hope to use the knowledge gained from developing the model and from clinical trials in people to refine the tool for everyone.

Researchers Discover Genetic Link to Mesothelioma

Scientists have found that individuals who carry a mutation in a gene called BAP1 are susceptible to developing two forms of cancer—mesothelioma and melanoma of the eye.

Additionally, when these individuals are exposed to asbestos or similar mineral fibers, their risk of developing mesothelioma, an aggressive cancer of the lining of the chest and abdomen, may be markedly increased.

The study, published online Aug. 28 in *Nature Genetics*, describes two U.S. families with a high incidence of mesothelioma, as well as other cancers, associated with mutations of the BAP1 gene. The research was funded by the National Cancer Institute and led by scientists at the University of Hawaii Cancer Center, Honolulu, and Fox Chase Cancer Center, Philadelphia.

Mesothelioma tumors are typically associated with asbestos and erionite exposure. Erionite, a naturally occurring mineral fiber similar to asbestos, is found in rock formations and volcanic ash. Deposits have been located in at least 12 states.

Only a small fraction of individuals exposed to erionite or asbestos actually develop mesothelioma, one of the deadliest forms of cancer that kills about 3,000 people each year in the United States, with half of those diagnosed dying within 1 year. Additionally, rates of new cases of mesothelioma in parts of the world, including Europe and China, have risen steadily over the past decade.

"This discovery is a first step in understanding the role of the BAP1 gene and its potential utility when screening for mutations in those at high risk," said Dr. Michele Carbone, study co-leader and director of the University of Hawaii Cancer Center. "Identifying people at greatest risk for developing mesothelioma, especially those exposed to dangerous levels of asbestos and erionite worldwide, is a task made easier by virtue of this discovery."

milestones

Dr. Constantine Stratakis is the new NICHD scientific director.

Stratakis Named NICHD Intramural Director

Dr. Constantine Stratakis has been named scientific director of the Division of Intramural Research at NICHD. He had served as acting scientific director since June 2009.

"Dr. Stratakis brings extensive research experience and a broad clinical background to the position," said NICHD director Dr. Alan Guttmacher. "While there were an impressively large number of extremely well qualified applicants for this position, it was clear that—even apart from his outstanding performance as acting scientific director—Dr. Stratakis was the candidate best suited to lead the intramural program over the coming years."

Stratakis will oversee the research programs of 85 scientific investigators and more than 300 trainees. NICHD's DIR is made up of 11 research programs with approximately 79 units and sections. DIR's objective is to ensure the birth of healthy infants, to ensure the health of infants and children as they develop into adulthood and to optimize the health of women. Research focuses on acquiring information to enhance understanding of the full range of human development and reproduction.

"I am humbled to have been chosen to lead one of the largest, most distinguished, of the NIH's intramural programs, but I am also looking forward to it," Stratakis said. "I have already served in an acting capacity for more than 2 years, but every day I discover new things at NICHD and feel great admiration for the variety and strength of the research taking place within the division."

A native of Greece, Stratakis received his M.D. and D.Sc. degrees from the University of Athens. He trained at the Hospital Cochin in Paris, France, before coming to NICHD, first as a student, then as a visiting research associate and then as a research fellow. He completed his pediatrics residency, as well as fellowships in pediatric endocrinology and clinical genetics, at Georgetown University.

In 1996, he returned to NICHD as a senior fellow, was promoted to staff scientist in 1997 and appointed tenure-track investigator in 1998.

Stratakis is well known for the identification and characterization of the gene for Carney complex, a disorder that increases the risk for benign tumors of the heart and adrenal glands. In subsequent work, he deciphered the genetic underpinnings of a number of other endocrine disorders, among them primary pigmented nodular adrenocortical disease, a rare disease affecting the adrenal glands, as well as a class of disorders causing overgrowth of the adrenal glands (bilateral adrenocortical hyperplasias).

Stratakis is director of NICHD's Program in Developmental Endocrinology and Genetics. Within that program, he heads the section on genetics and endocrinology. Stratakis and his colleagues in the section focus on tumors and other abnormalities of the endocrine glands. Recent studies by his group have determined that variations in a particular gene appear to increase the risk for tumors of the adrenal glands, testes and prostate. Other recent work by the group has identified variations in a gene for a part of the enzyme succinate dehydrogenase as leading to rare tumors of the digestive tract, called gastrointestinal stromal tumors.

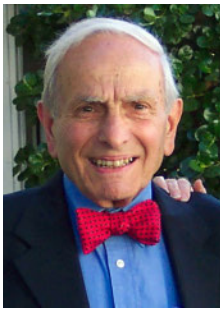
In previous work, he and his mentor and friend J. Aidan Carney showed that abnormalities in genes for other parts of the succinate dehydrogenase molecule underlie the rare, tumor-causing disorder later named for the two scientists, Carney Stratakis syndrome.

Stratakis has written or co-written more than 300 publications and received numerous awards, including the Ernst Oppenheimer Award, one of the highest honors for scientists in the field of endocrine research.

Regarding his work at NICHD, as well as other aspects of his life, Stratakis said he's often guided by a quotation by Albert Einstein.

"'There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle,'" quoted Stratakis. "I am honored to have been chosen to lead the NICHD Intramural Division. The accomplishments of the institute are nothing short of miraculous."

Since its establishment, he noted, NICHD has supported or conducted research that greatly reduced the infant death rate, reduced the transmission of HIV from mother to child and nearly eliminated intellectual disability from such causes as Haemophilus influenza type B, congenital hypothyroidism and the genetic disorder phenylketonuria. In addition, he said NICHD-funded work has advanced reading research, improved knowledge of learning disabilities and improved drug safety tasting for children and pregnant women.



Former NICHD Center Director Yaffe Dies

Dr. Sumner J. Yaffe, a former center director at NICHD, has passed away.

Yaffe began his tenure as director of NICHD's Center for Research for Mothers and Children in 1980, a position he held until his retirement 20 years later. His research career focused on the role of drug-metabolizing enzymes in nutrition and drug metabolism in the developing fetus, bilirubin metabolism and the secretion of drugs in breast milk. He wrote or co-wrote numerous scientific articles and several books. Two of his works are considered landmark pharmacological references, *Drugs in Lactation* (with Gerald G. Briggs and Roger K. Freeman) and *Pediatric Pharmacology* (with Jacob V. Aranda).

"Sumner Yaffe was a good friend to his NICHD colleagues and a patient mentor to many young scientists and administrators," said NICHD director Dr. Alan Guttmacher. "His knowledge of pediatric pharmacology was instrumental in establishing a research network that met the crucial need for the thorough evaluation of drugs before they are used in children."

Under Yaffe's leadership, the Center for Research for Mothers and Children established the Pediatric Pharmacology Research Units Network in 1994. The network's mission was to conduct studies of how drugs previously approved for use in adults affect children. Because of their smaller size and faster metabolism than adults, and because they are still developing, children may react differently to many drugs than do adults. Similarly, children may require different doses of a drug than do adults, even when their smaller size is taken into consideration.

The network provided a research infrastructure for the clinical trials needed to conduct the necessary testing for drugs to ensure their suitability in children.

Yaffe was born in Boston and attended Harvard College before leaving to serve in the Armed Forces during World War II. After his military service, he returned to Harvard to earn a B.A. in chemistry, and later, an M.A. in pharmacology. He received his M.D. degree from the University of Vermont and completed his training in pediatrics at Children's Hospital in Boston. In 1963, he was appointed professor of pediatrics at the State University of New York at Buffalo. In 1975, he moved to Children's Hospital of Philadelphia, where he established the division of pediatric clinical pharmacology.

His tenure here also saw the establishment of NICHD's Neonatal Research Network and Maternal Fetal Medicine Network. After his retirement, Yaffe remained active, serving as an advisor to the institute and in collaborative efforts with pediatric researchers.

Campus Fitness Icon Snoy Mourned

Dr. Phil Snoy (r) was a fixture at campus running events for decades, including the 2008 NIH Institute Relay, where he volunteered along with (from l) Dr. Alison Wichman, Randy Schools, then NIH principal deputy director Dr. Raynard Kington, and longtime running partner Jerry Moore.

Dr. Phil Snoy, 59, who was virtually a daily sight as a midday runner on the NIH campus and in nearby Bethesda for the last few decades, died Aug. 15.

Though the NIH campus was his training ground, Snoy was employed by the Food and Drug Administration, where he directed the Division of Veterinary Services. He attended Colorado State University and received his D.V.M. from the University of Illinois Veterinary School. He was board-certified in pathology.

"Phil Snoy was a friend, a leader with the NIH running community and our trusted advisor for the NIH Institute Relay," said Randy Schools, president of the NIH Recreation & Welfare Association. "Phil was one of the Health's Angels [campus running club] leadership team and, for over 27 years, was part of the team that brought joy to the relay." This year's relay, on Sept. 22, will be held in his honor.

"If you know Phil, he brought his smile to our many runs," Schools continued. "He brought his dedication to fitness through his running and cycling and, more than anything, he brought his friendship."

"It's an incredibly sad day for me and all those at FDA and NIH who knew Phil Snoy," said Jerry Moore, another original Health's Angel, now with the Office of the NIH Director. "I've known Phil as a friend, a fellow runner in the NIH Health's Angels Running Club, a teammate and a lunchtime running buddy for many years—decades in fact. We ran together for many years and with other friends at lunchtime through Rock Creek Park in all kinds of weather and in all seasons of the year.

"He was a great person, very friendly, very kind, always happy with a big smile on his face, always positive—and loved by everyone who knew him including me," Moore continued. "I can't think of a nicer guy than Phil."

Snoy's athletic achievements were documented in the *NIH Record* on multiple occasions over the years as he participated in triathlons, cycling events (including Bike to Work Day—he pedaled in from Poolesville), sailing and equestrian activities.

Survivors include his wife, Dr. Francie Dougherty; daughter, Julia Victoria Snoy; three sisters and his parents, of Machesney Park, Ill. The family suggests that memorials take the form of contributions to the Parent Encouragement Program, 10100 Connecticut Ave., Kensington, MD 20895; Coronado Performing Arts Center, 314 N. Main St., Rockford, IL 61101; or to the Newark Boys Chorus School, 1016 Broad St., Newark, NJ 07102.

***Above, l**:*
Dr. Julia Drake (r) leads a tour of a surgical suite for a group of high school students from the Program for Academic and Leadership Skills (PALS).

***Above, r**:*
NIH PALS group includes (from l) Michelle Datiles (FSCA), Shirley Anghel (PALS), Dr. Mary Frances Cotch (NEI) and (second from r) Alicia McCord (NEI).

***Below**:*
NIH scientists (from l) Drs. Myra Derbyshire, Maria Morasso and Patricia Becerra were among those who spearheaded the PALS field trip.

PHOTOS: JASMINE WHITING

Field Trip to Their Future

NIH Women Scientists Host Students in Leadership Program

By Michelle Datiles

Visitors from all over the world take guided tours of NIH every month, but a group of high school students from the Program for Academic and Leadership Skills (PALS) recently explored not only the NIH campus, but also its daily world of research and science. Drs. Patricia Becerra, Mary Frances Cotch, Myra Derbyshire and Maria Morasso of the NIH women scientist advisors committee spearheaded this unique field trip.

"The NIH women scientist advisors committee wanted to develop an outreach initiative to introduce high school girls to NIH," explained Becerra. "We approached the Foundation for Social and Cultural Advancement, which led us to develop a field trip experience for teenage girls participating in its Washington, D.C. Program for Academic and Leadership Skills."

Foundation SCA is a Washington, D.C.-based nonprofit that partners with institutions around the world to help girls and women live with dignity and build brighter futures for themselves, their families and their communities. For the past 3 years, FSCA has joined with PALS's umbrella organization, the Youth Leadership Foundation, which serves disadvantaged youth in D.C. by boosting academic performance while developing character and strong morals.

The PALS field trip was an appealing opportunity for the young women. Cotch explained, "We wanted to expose the girls to a variety of activities to give them a broad perspective of NIH's mission in science and health and to make it a fun, memorable experience for them."

The students were given an overview of NIH, the health and medical research being done and the wide array of non-science work within the institutes by Sheria Washington of the NIH Office of Communications and Public Liaison (OCPL). On their tour, the students met several scientists, including Drs. Jessica Bermudez and Gail Seabold, who spoke about their own backgrounds, offered education and career advice and described their research.

Participants also enjoyed an introduction to genetics with a hands-on exercise extracting DNA from strawberries with Dr. Carla Easter. Donning scrubs, the students toured labs with Drs. Julia Drake, James Pickle and Ginger Tansey. The day ended with a tour of the Clinical Center with OCPL's Tara Mowery.

"At the end of the field trip, the girls were amazed at the many career options at NIH," said Cotch.

Each PALS student received a souvenir bag with science education information, health pamphlets and a primer on women's health. In addition to offering the keepsakes, organizers hope the field trip encourages the youngsters to work hard and perhaps pursue a career in the health professions.