



ABOVE • A dance performance was part of this year's observance of Asian American Pacific Islander Heritage Month. See story below.

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nih record

Brace Yourself for BRAC-Associated Commuting Challenges

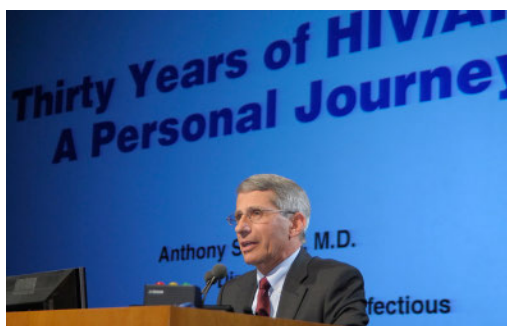
The majority will arrive by car and they aren't waiting until September to get here. Officially, as part of the Defense Base Realignment and Closure (BRAC) process, the National Naval Medical Center across the street will become Walter Reed National Military Medical Center (WRNMMC) on Sept. 15. The new Walter Reed is expected to add approximately 4,300 daily commuters, including nearly 1 million patient visits annually—a doubling of the current rate. Many of these patients and the staff to support them are already beginning to arrive.

Although the increase seems daunting, when viewed against the current 77,000 daily commuters in this area, it amounts to only a 6 percent increase. If NIH staff and others do their part to reduce traffic congestion, everyone benefits and we reduce the chance of gridlock, says the Office of Research Services.

What Can You Do?

As employees, consider teleworking, flexible and alternative work schedules, off-peak commuting, Transshare and alternative commuting options such as vanpool, carpool, bicycles, Metrorail and NIH shuttle, public and subscription bus services. Each option gets one more car off the road during peak periods.

SEE BRAC, PAGE 10



NIAID director Dr. Anthony Fauci

Fauci Provides Perspective on 30-Year Fight Against HIV/AIDS

By Carla Garnett

Marking the 30th anniversary of the first published reports June 5, 1981, of a mysterious ailment that would later be called HIV/AIDS, NIAID director Dr. Anthony Fauci, NIH's—and arguably the nation's—chief medical spokesman on the disease, offered a uniquely personal perspective of the fight against the worldwide pandemic. Fauci presented a 50-minute talk before a packed Masur Auditorium on May 31.

SEE FAUCI, PAGE 4

Asian Heritage Event Features Former NCI Scientist

By Trisha Comsti

Dr. Flossie Wong-Staal's first name, unusual for a Chinese-American woman, was given to her by her father who named her after a typhoon. And like a typhoon of the scientific world, she has been a powerful figure throughout her career. In 1985, she was part of the team at NIH that first discovered and mapped the genetic structure of HIV, a major step in developing HIV drugs and tests. Today, the company she founded is working to cure viral diseases such as hepatitis C.

On May 24, NIH welcomed Wong-Staal as the keynote speaker for this year's observance of Asian American Pacific Islander Heritage Month. The theme was "Leadership, Diversity, Empowerment and Beyond."

"Asian Americans and Pacific Islanders are a critical part of our visionary and innovative workforce," said NIH director Dr. Francis Collins in his welcome remarks. He noted that people of Asian heritage now make up 16

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briefs

OppNet To Hold Forum on Survey Biology

NIH's Basic Behavioral and Social Science Opportunity Network (OppNet) will present its first OppNet Forum on Survey Biology on Tuesday, June 28 from 2-4 p.m. in Lipsett Amphitheater, Bldg. 10. OppNet's Forum series highlights studies with implications across the basic behavioral and social sciences.

The forum will examine the potential for using biopsychosocial surveys to study how social, economic, behavioral and biological factors impact life course trajectories of health, productivity, disability and subjective and economic well-being. After presentations, participants will discuss areas of interest and potential future directions.

Speakers include Dr. Carol Ryff of the University of Wisconsin (principal investigator of the Midlife in the United States study) and Dr. David Weir of the University of Michigan (PI of the Health and Retirement Study).

Registration is not required. Sign language interpreters will be provided. Individuals who need reasonable accommodation to participate should contact Angela Farris, (301) 451-3873, or angela.farris@nih.gov or the Federal TTY Relay (1-800-877-8339).

NCI To Host Immunology, Immunotherapy Conference, Sept. 22-23

The National Cancer Institute's Center of Excellence in Immunology is sponsoring the annual conference, "Cancer Immunology and Immunotherapy: Building on Success," on Sept. 22-23 in Masur Auditorium and Lipsett Amphitheater, Bldg. 10.

The conference will host leaders in the field of cancer immunology and immunotherapy. The program includes recent advances in both translational and clinical research and will provide a forum for discussion on immunologic approaches to prevent and treat cancer. Participants will learn about the latest findings in T cell transfer immunotherapy, immunotherapy based on genetic engineering of lymphocytes, vaccine-based therapies, transplantation-based therapies and immune-modulatory approaches.

Registration is free, but seating is limited. The deadline for abstract submission is Aug. 1. Online registration and instructions for abstract submission can be found at <http://web.ncifcrf.gov/events/Immunotherapy2011>.

FAES Announces Fall 2011 Courses

The FAES Graduate School at NIH announces the schedule of courses for the fall 2011 semester. The majority of the evening classes sponsored by the Foundation for Advanced Education in the Sciences will be given on the NIH campus.

Courses are offered in biochemistry, bioinformatics, biology, biotechnology (daytime courses), chemistry, immunology, languages, medicine, microbiology, pharmacology, statistics, technology transfer, alternative medicine, MCAT, GRE and courses of general interest. Certificates in technology transfer and public health program are also being offered with transfer of credits to a number of different master's degree programs at UMUC (tech transfer certificate program only).

It is possible to transfer credits earned to other institutions for degree work, with their approval.

Classes will begin the week of Sept. 12. Online registration is from July 1-Aug. 23 and mail registration ends Aug. 19. Walk-in registration will be held Aug. 29-Sept. 7 and at an open house at the FAES Social and Academic Center on Aug. 23 from 4 to 7 p.m. Tuition is \$145 per credit hour and courses may be taken for credit or audit. Courses that qualify for institute support as training should be cleared with supervisors and administrative officers as soon as possible. Both the vendor's copy of the training form (SF-182) and the FAES registration form must be submitted at the time of registration.

Note that FAES cannot access training forms entered in the NIHTS system; a signed hard copy (vendor's copy of SF-182) is needed in order to process registrations for classes. Asking your institute to pay your tuition is a preliminary step to registration but does not constitute registration with the FAES Graduate School.

Catalog supplements are available in the graduate school office in Bldg. 60, Suite 230; the Foundation Bookstore in Bldg. 10, Rm. B1L101 (where class textbooks are also available); and the business office in Bldg. 10, Rm. B1C18. To have a catalog sent, call (301) 496-7976 or visit www.faes.org.

Lecture on Bullying-Free Workplace, June 24

The women's health special interest group lecture series will present "Understanding a Silent Nightmare for a Bullying-Free Workplace," on Friday, June 24 from 11 a.m. to 12:30 p.m. in Bldg. 45, balcony A. Speakers will be Dr. Paula Grubb, research psychologist, CDC, and Dr. Loreleigh Keasley, associate professor, department of communications, Wayne State University. Individuals who need sign language interpreters to participate should contact Socorro Vigil Scott at vigilscs@mail.nih.gov.

Seminar Highlights the ‘Social’ in Social Media

The most important elements of traditional media—the emotional power of the story and the credibility of the storyteller—are also the most important elements of new media, Dr. Marin Allen told 175 people who attended a recent seminar on social media in Lipsett Amphitheater. NIH deputy associate director for communications and public liaison, she moderated “Social Media and the NIH Mission” sponsored by the Office of Research on Women’s Health (ORWH) as part of its Women’s Health Seminar Series.

The successful use of social media depends on people, process and technology, in that order, said Jonathan Cho, chief of the Communications Technology Branch, National Cancer Institute. Success requires commitment from an organization’s leadership and a strategy shaped by an understanding of the intended audience and purpose of the program. To employ social media platforms, NIH institutes and centers can tap current communication staff members already skilled at producing credible and engaging messages.

Social media is interactive, Cho said. When your audience asks questions, respond to them in a human, non-institutional way, he advised. He also said that organizations cannot control what people say about them in these new venues. Be prepared for some online criticism and respond to it appropriately, he said.

NCI uses the community-driven qualities of social media as an intervention tool, said Dr. Erik Augustson. NCI’s “Smokefree Women” Facebook page, for example, has become an active online community where women talk to each other about their efforts to quit smoking. NCI regularly responds to posts and offers resources and encouragement. It is important to remain an active member of the community, or you will be forgotten, he said.

Mobile applications are the wave of the future, as more people access the Internet using smart phones and other mobile devices. NCI has created a stop-smoking app for smart phones, Augustson said.

A blog by “Sara Bellum” is among several social media initiatives the National Institute on Drug Abuse has created for teenagers, said Carol Krause, NIDA communications director. The blog has engaged its audience, but requires staff time to post comments and provide information, an issue every organization must consider.



Panelists at the recent seminar on social media included (from l) Dr. Marin Allen, NIH deputy associate director for communications and public liaison; Dr. Jonathan Cho, chief of NCI’s Communications Technology Branch; Dr. Erik Augustson of NCI; and Judy Meehan, CEO of the National Healthy Mothers, Healthy Babies Coalition.

Judy Meehan, chief executive officer of the National Healthy Mothers, Healthy Babies Coalition, described their free text-message service for young mothers—text4baby. The program provides free mobile health information to women who are pregnant or whose children are younger than 1 year.

Laura Bartlett of the National Library of Medicine described the Women’s Health Resources web portal, Twitter and Facebook pages NLM developed with ORWH. ORWH director Dr. Vivian Pinn noted that using new communication technologies and social media to increase understanding and appreciation of women’s health is one of the goals of ORWH’s new strategic plan. 📌



Pinn Honored by Tufts University

Tufts University School of Medicine recently honored Dr. Vivian Pinn, director of NIH’s Office of Research on Women’s Health, for her commitment to the school and its students by dedicating the Office of Student Affairs, on the 4th floor of the Sackler Bldg., in her honor and by launching a scholarship fund in her name. Pinn was also awarded the Dean’s Medal of Honor, TUSM’s highest honor, from Dean Harris Berman (shown above). The medal, rarely conferred, is given to people whose service to the school and medical careers have enhanced TUSM’s national standing. Pinn served as associate professor of pathology, as well as assistant dean for student affairs, in the 1970s and early 1980s. During her 12-year tenure at Tufts she was a role model of mentorship. She also played a pivotal part in recruiting students of color and in expanding financial aid. To read more about Pinn’s recognition, visit www.tufts.edu/med/.



FAUCI

CONTINUED FROM PAGE 1

Top, l:

Dr. Cliff Lane (l) and Dr. Henry Masur (second from l) were two key recruits in the early fight against AIDS at NIH.

Top, r:

Fauci recounts highlights of the past 3 decades of AIDS research; on the screen behind him is a scene from a demonstration at FDA by ACT UP in May 1990.

Below:

Fauci and his wife, Dr. Christine Grady, who was a nurse at the Clinical Center when AIDS broke out in the U.S.

PHOTOS: BILL BRANSON



In often-humorous, often-poignant reflections, he described his personal journey: How “a medical curiosity I thought would go away” transformed a scientific research career, launching it onto the pages of history.

Some highlights:

▼ **Summer 1981**—Fauci decides to “walk away from” the successful work on Wegener’s granulomatosis that his NIAID Laboratory of Immunoregulation was pursuing to redirect all efforts toward this newly discovered infection affecting a rapidly growing population of people. He engages another scientist in his lab, Dr. Cliff Lane, and recruits from Cornell Medical School Dr. Henry Masur, who form the core of the critical care team that will begin admitting AIDS patients to the Clinical Center.

▼ **Early 1980’s**—The self-described “dark days” of Fauci’s career, when the median survival time for AIDS patients was 6 to 8 months. “We can now mathematically model that a 20-year-old HIV-infected patient can live an additional 50 years on appropriate therapy,” Fauci proclaimed at the lecture.

▼ **1987**—AZT, the first treatment for AIDS, is approved; it was developed by NCI’s Dr. Samuel Broder and colleagues. Fauci said the triumph was short-lived, as “we quickly realized that one drug was not enough.” Today, more than 30 anti-retrovirals have been approved to fight HIV/AIDS.

▼ **1987**—NIH, led by Lane, conducts the first-ever AIDS vaccine clinical trial. More than 2 decades later, in October 2009, the *New England Journal of Medicine* publishes “the first good news” about an HIV vaccine that shows “a modest effect” on preventing the disease.

▼ **June 1988**—Fauci is called an “incompetent

idiot” in a *San Francisco Examiner* open letter by AIDS activist Larry Kramer, founder of ACT UP and the Gay Men’s Health Crisis who later became one of Fauci’s closest friends and allies.

▼ **June 26, 1989**—Fauci mentions at a small meeting of AIDS activists that he endorses so-called parallel track: Offering to AIDS patients some anti-HIV therapies that—while at the same time going through the FDA-approval process—are not yet officially blessed. The *New York Times* makes his comment a headline. The FDA is not amused. An inter-HHS agency brouhaha brews. “For the first time, I think I’m going to get fired,” Fauci quipped, looking back decades later. Fortunately, then-President George H.W. Bush intervenes, backing Fauci. So begins the parallel track mechanism for AIDS drugs.

▼ **December 2003**—President George W. Bush announces a “game changer” in Africa. PEPFAR (President’s Emergency Plan For AIDS Relief)—a \$15 billion effort over 5 years—is born. “One of the things I am most proud to have been involved in,” Fauci noted.

Funding has been extraordinary overall, Fauci said. NIH has invested about \$45 billion in HIV research over the last 30 years.

His journey as well has been phenomenal, he said.

In July 2010, he and colleague Greg Folkers wrote in *JAMA* words Fauci said no one ever dreamed would be possible 3 decades ago, “Controlling and Ultimately Ending the HIV/AIDS Pandemic: A Feasible Goal.”

Fauci ended his talk by reiterating a statement he made on last World AIDS Day, Dec. 1, 2010:

“I hope that in the not too distant future, World AIDS Day will be a commemoration of something that happened in the past as opposed to a challenge that we still face today.”

To see the full lecture, visit Past Events online at <http://videocast.nih.gov/>. 📺

HHS's Koh Commemorates Minority Health Month

Dr. Howard Koh, HHS assistant secretary for health, recently visited NIH as part of the Health Disparities Seminar Series. At Natcher Conference Center, he discussed national efforts to improve the delivery of health services to all Americans and eliminate inequities in health as outlined in the newly unveiled HHS Action Plan to Reduce Racial and Ethnic Health Disparities.

He provided a backdrop for his interest in public health by recalling his early experience dealing with the health care system as a clinician. He fielded requests of family and friends in the Korean immigrant community to help them obtain adequate health services. He reflected on the fact that, even as a clinician, he had no inroads into the health care system. He said he often thought, "If I am having these challenges helping the people I love and I'm born in this country, and I'm a physician and I'm used to this system, what about people who have other disadvantages with respect to education or income, or culture or language? How are they going to handle the challenges of navigating this health care and public health system?"

Koh briefly reviewed the goals of Healthy People 2020, including promoting healthy behavior and quality of life across the lifespan and creating social and physical environments that promote good health for all. He made it clear that HHS intends to track not only traditional disease outcomes, but also outcomes for such factors as education, the availability of nutritious food, safe housing and reliable transportation. "We have to send a message that health comes much more than from what happens in the doctor's office. It also stems from what happens to you where you live, labor, learn, play and pray, in your homes, at work, at school and in your houses of worship," he said.

Koh described key aspects of the Affordable Care Act (ACA) aimed at sustaining efforts to achieve equity in health—including the provision of "good insurance that's stable and secure and affordable"—before reviewing the five major goals of the HHS Action Plan.

Goal I Transform Health Care Improved access to insurance and expanded eligibility for Medicaid (30 million Americans will be eligible for health care for the first time) would soon have a powerful effect on the health care of racial and ethnic minorities, who are far more likely to lack insurance, medical providers and preventive care.



HHS's Dr. Howard Koh speaks at NIH.

Goal II Strengthen the Nation's Health and Human Services Workforce through a host of training initiatives, especially in the area of primary care and the provision of linguistically and culturally appropriate medical services.

Goal III Advance the Health, Safety, and Well Being of the American People Plans of the Centers for Disease Control and Prevention to provide community transformation grants and the creation of an innovation center in the Center for Medicare and Medicaid Services will focus on popu-

lation health and care coordination and has been funded at the level of \$10 billion over the next decade.

Goal IV Advance Scientific Knowledge and Innovation in the Field of Health Disparities HHS will focus on collecting more granular racial/ethnic data and ensure that progress on eliminating health disparities is monitored adequately.

Goal V Increase the Efficiency, Transparency and Accountability of HHS Programs Creation by ACA of the new National Institute on Minority Health and Health Disparities at NIH and the Offices of Minority Health throughout the HHS agencies will play a lead role in ensuring the implementation of the HHS Action Plan.

In conclusion, Koh reminded the audience, "We have tremendous officials and leaders like many of you who are incredible leaders for the world, but we have a sick care system, not a health care system. We all share a vision of having a nation free of disparities in health and health care and yet in order to get there we need that public health symphony. That's every instrument represented by each of you here. When you get those instruments working together, you can create a product, a harmonized product that is what the public wants. And when you give people good coverage and good care, you give them a chance not to be patients in the first place." 🎵

Volunteers Plant Flowers to Please Patients

A group of volunteers recently planted 22 flats of impatiens flowers and several perennial daylilies in the CRC Healing Garden courtyards. Patient rooms look out over the courtyards and the addition of these annual and perennial flowers will add a touch

of vibrant color to these shade gardens. On hand for the planting were (standing, from l) Elizabeth Sweet, Bekah Geiger, Dr. David Henderson, Peter Cramer, Debby Haynes, Gregory Holcombe and Lynn Mueller. Seated are (from l) Dr. John Gallin, Mengfei Huang, Pat Piringer and Elaine Gallin.



The Shizumi Kodomo Dance Troupe shared Japanese culture through dance at the program.

PHOTOS: BILL BRANSON



ASIAN HERITAGE

CONTINUED FROM PAGE 1

percent of NIH employees, up from 10 percent in 2000.

“NIH has a vibrant Asian community. NIH was my home for 17 years and this is a true homecoming for me,” Wong-Staal said.

Her journey to NIH started on the other side of the globe. Wong-Staal was born in mainland China and left with her family to live in Hong Kong when she was just 5 years old. She made her way to the United States for college and eventually found her way to NIH in 1974.

She describes this time as “the dawn of molecular biology,” during which several important discoveries were made, including the existence of retroviruses—viruses that reproduce in a process backwards from what had been seen in cells up to that point.

Wong-Staal was interested in the question of whether retroviruses can cause diseases in humans. At the time, few labs in the country were asking this question. In fact, some people referred to such viruses as “rumor viruses.” But Wong-Staal did find one such place: Dr. Robert Gallo’s lab at the National Cancer Institute.

“At NIH, scientists can tackle high-risk research,” Wong-Staal said. “What better place to research viruses people didn’t think existed?” This “high risk” paid off, as Wong-Staal and her colleagues isolated the first human retrovirus in 1979—a leukemia-causing virus called HTLV-1—and later unraveled the genetic structure of HIV, the retrovirus behind AIDS.

“We discovered a lot of tricks the virus has up its sleeve,” Wong-Staal recounted. For instance,



Dr. Flossie Wong-Staal

they found out that within each HIV-infected individual there can exist several different versions of the virus. Because of this variation and the complex nature of HIV, it was necessary for patients to take a combination (or cocktail) of drugs to fight the virus.

These drugs have been extremely successful in saving the lives of HIV-infected patients. “We’re doing quite well in this arena,” Wong-Staal noted. But she also said there is still much work ahead. “There is no cure. Patients need to be on drugs for the rest of their lives.”

Wong-Staal created the biotechnology company iTherX to bridge the divide between lab research and drugs to treat people. Today, the company is developing drugs to fight viruses such as hepatitis C, the leading cause of liver disease worldwide.

“She’s had a career beginning with basic sci-



The dancers included children from diverse ethnic backgrounds.

ence and resulting in the development of real therapeutics,” said Dr. Michael Gottesman, NIH deputy director for intramural research. He also shared some of Wong-Staal’s recent honors: In 2002, *Discover* magazine named her one of the “50 Most Important Women in Science” and, in 2007, the *Daily Telegraph* named her one of the “Top 100 Living Geniuses.”

Wong-Staal ended her talk with a message for the younger generations of Asian Americans. “Follow your passion and do not be limited by other people’s expectations of you,” she said. “We don’t all have to be scientists or engineers or doctors. I think one underserved area [for Asian Americans] is public service. We need more talent in this area.”

Wong-Staal also responded to a question from the audience asking for advice on how to succeed as a woman scientist. She replied, “Don’t always think of yourself as a woman or a minority. Don’t have that chip on your shoulder. Just enjoy what you do and the rest will follow.”

The event concluded with a performance by the Shizumi Kodomo Dance Troupe, a group that includes children from diverse ethnic backgrounds who share Japanese culture through dance. Their performance conveyed the story of Sadako Sasaki, an 11-year-old girl struck by leukemia who was the inspiration for the children’s book *Sadako and the Thousand Paper Cranes*. 📖

NINR Promotes Nursing Science, Training at Conference

“There is increasing recognition of the critical role that nursing and nursing science will play as we move forward in improving our health care system,” NINR director Dr. Patricia Grady told the audience recently at the Southern Nursing Research Society (SNRS) annual conference.

SNRS is a regional organization that covers 14 states across the southern U.S., as well as the Caribbean, Latin America and the Bahamas. It was founded in 1986, the same year NINR joined NIH. This year marks the silver anniversary for both, and the conference was titled, “Celebrating 25 Years of Nursing Research.” More than 700 nurses, nurse scientists, health care leaders and others traveled to Jacksonville, Fla., to attend.

In addition to her keynote address, Grady participated in an evening networking session about the Robert Wood Johnson Foundation Nurse Faculty Scholars, a new program that aims to advance the career development of junior nurse faculty members. Grady serves on the program’s national advisory committee and provided an overview and answered questions from potential applicants.

In addition, members of NINR’s program and grants management staff presented a pre-conference workshop to help emerging nurse scientists learn to navigate the NIH grant application process and improve their funding success. The institute also sponsored two symposia on preparing training grant applications. NINR program directors also participated in a panel discussion of research funders and conducted one-on-one sessions with students and potential grantees to discuss training options or research proposals.

As Grady concluded, “Nurse scientists truly strive to translate our research into services and methods of care...Without question, the role of nurse scientists as leaders in improving health outcomes will continue to grow in the years ahead.”—Ray Bingham



At the SNRS networking session for the Robert Wood Johnson Nurse Faculty Scholars, NINR director Dr. Patricia Grady (second from l) joins participants (from l) Jennifer Mallow, clinical assistant professor at West Virginia University School of Nursing; Dr. Laurie Theeke, assistant professor at WVU SON and a member of the 2010 cohort of Nurse Faculty Scholars; and Dee Dolan, assistant clinical professor at Texas A&M University Corpus Christi College of Nursing & Health Sciences.



NINR program directors (from l) Drs. Sue Marden, David Banks and Lois Tully enjoy the SNRS 25th anniversary gala.



NINR staff at SNRS workshop include (back row, from l) Brian Albertini, Banks, Dr. Mario Rinaudo and Dr. Paul Cotton; and (front, from l) Dr. Karen Huss, Tully and Marden.

PHOTOS MELISSA BARRETT, ANNE TURNER HENSON



Above, playing defense occasionally required a balletic leap. At right, the audience for the games could sit either courtside or on a patio looking down on the court. Viewers moved wooden chairs from the Bldg. 10 patio to the ledge overlooking the court for a better look..

NIH B-Ballers Take to Court in Heated Competition

By Jan Ehrman

Look out LeBron James and Dirk Nowitzki. We've got your number!

Baseline jumpers, fadeaway bank shots and tenacious defense were all hot items as more than 100 NIH hoopsters went toe-to-toe on a newly built basketball/sports court outside Lipsett Amphitheater in a 3-on-3 basketball tournament, May 25-26. This was the second year that the popular event has been held.

Coping with 90-degree temperatures and high humidity, an assembly of cheering fans supported 32 teams participating in the tourney, which coincided with the semi-finals of the NBA championship series. The event was sponsored by the Office of the Director, Office of AIDS Research, the Office of Research Services and its Division of Amenities and Transportation Services as part of the "Spring into Health" Initiative. The program ran throughout the month of May, offering a variety of wellness and sporting activities for employees.

The coveted NIH roundball crown was secured by "The Expendables," a team that happily proved not to live up to its name. The group won five games to bring home the title. Team captain Terry Mundell, from the Division of Extramural Activities, NIMH, noted that the championship did not come easily. "It was hot, people on every team were tired and sore, but we fought through it all to come out on top. The hunger and determination to win was what led us to ultimate victory in the final round."

Other members of the triumphant squad included OD employees RonPatrick Merriwether, Anibal Watkins and Amira Langham, as well as Jennifer Simmons of NIMH.

Rules for the 3-on-3 tournament were straightforward. Each team had to play at least one female on the court at all times and could consist of no more than five players on each team. A running 15-minute clock was used, fouls would be called, but no foul shots would be taken and winning teams would move on to play another game—single elimination

Each team in the tournament had to have at least one female player.



Hands up on defense was good strategy.



There was not much room out of bounds for players on the outdoor court; one false move and it's a brick kiss.

applied. Qualified referees were on hand to oversee the contests, which took place on half-courts rather than the full court, to accommodate more players.

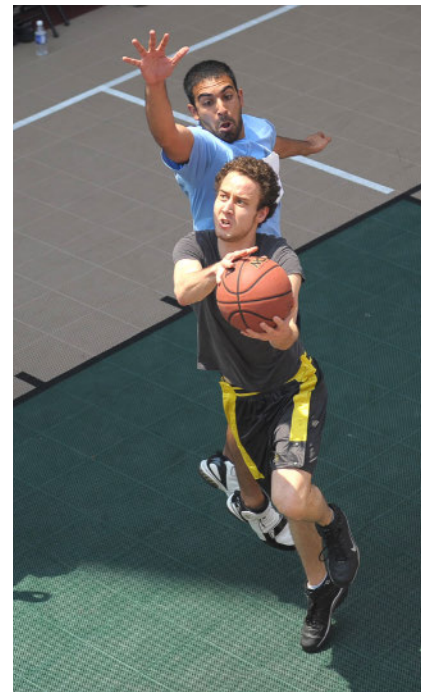
Enthusiasm, passion for the game and camaraderie were apparent to all who participated. "Our win signifies the importance of teamwork and what can be accomplished when you believe in yourself. I will definitely compete again next year," said Simmons, a baller from the winning team.



This is what's known as a clean look at the hoop.



The Expendables took the title in this year's 3-on-3 basketball tournament. They are (from l) Terry Mundell, Amira Langham, Anibal Watkins and RonPatrick Merriwether. Jennifer Simmons is not pictured. At right is Chris Gaines of ORS, who helped organize the event.



All eyes are on the ball in these scenes from the May 25-26 tournament, played on a new outdoor court on the east side of Bldg. 10.

PHOTOS: ERNIE BRANSON



BRAC

CONTINUED FROM PAGE 1

Utilizing one or more of these strategies helps make the roads accessible, lowers utility, parking, rent and Transshare costs and improves air quality by reducing greenhouse gas emissions. If you look at it strictly from a personal standpoint, with a federal pay freeze and rising gas prices, reducing commuting costs keeps more money in your pocket. In addition, there are health and work/life benefits resulting from less commuter stress, reduced risk of accidents and the advantage of social distancing when fellow employees are ill.

Transshare—The NIH Transshare program is the single most effective tool to reduce traffic congestion around NIH. This environmentally friendly means of commuting allows for up to \$230 per month in a tax-free commuter subsidy by using public transportation options such as Metrorail, Metrobus, Ride-On, vanpools, carpools and other public transportation tools.

Carpool and vanpool members have the added benefit of convenient, reserved parking spaces on campus and, where applicable, the use of high-occupancy vehicle (HOV) lanes on public roads. For vanpool, fuel costs are split among the riders.

Currently, more than 5,000 employees are enrolled in Transshare. The program is open to all qualified NIH federal employees.

Telework/Flexible Work Schedules—In light of the recently enacted Telework Improvement Act as well as advances in technology, many employees can work from home for at least a portion of the pay period. It can be especially beneficial for tasks requiring concentration such as scientific writing and scientific literature research. Telework and flexible work options lead to higher employee retention and morale and less absenteeism. Patients find less congested roads. Non-teleworkers find more ample parking.

NIH Bicycle Subsidy Program—Just introduced in June, the subsidy allows for \$20 per month to qualified federal employees who bike to work and surrender their parking permits and do not participate in the NIH Transshare program.

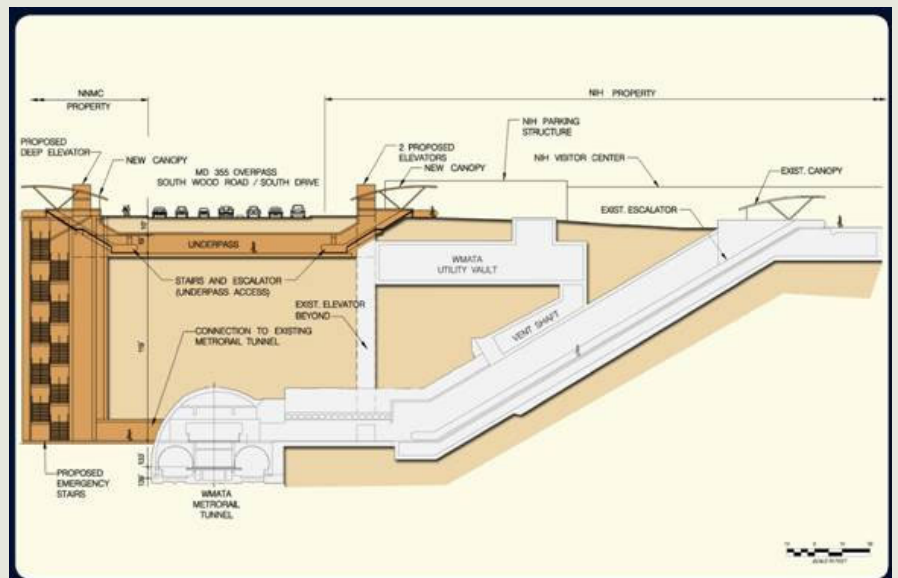


BRAC is predicted to add 4,300 commuters to a daily total of 77,000 commuters in the vicinity of NIH and the new Walter Reed.

Tunnel Under Pike To Ease Pedestrian Access

A pedestrian tunnel under Rockville Pike is in the planning stages, near the South Dr. intersection. The tunnel would allow for safer pedestrian access between the new Walter Reed National Naval Medical Center and NIH. This “Multi-Modal Crossing Project” also includes a new, high-speed elevator from the Medical Center Metro station to the east side of the roadway and an emergency egress stairwell.

The shallow tunnel scheme segregates pedestrian traffic and bicyclists from vehicles on Rockville Pike and was unanimously selected from dozens of designs by a group consisting of county, state and federal representatives and citizens. The plan also includes intersection improvements including a pedestrian “refuge island” on Rockville Pike and realigned crosswalks to shorten crossing distances for pedestrians not using the tunnel.



Off-Peak Commuting—The variation in traffic between peak and non-peak commuting is startling. Employees can further consider teleworking for a portion of the workday and commute during off-peak hours.

NIH Shuttle Buses—With open parking spaces on the main campus becoming a rare commodity, if you work in leased facilities in Montgomery County and need to come to the main campus, the shuttle bus is your best option. In addition, if you need to attend a meeting at a leased facility, you are encouraged to use shuttles to reduce congestion, pollution and parking challenges.

The Mid-Pike Commuter Parking Lot and shuttle route continue to be a viable option with 150 parking spaces and a number of bicycle racks for employees to use free of charge. The shuttle operates throughout the day from 5:40 a.m. to 6:56 p.m. The lot is conveniently located along Rockville Pike at the Montrose Rd. intersection. Employees who live within walking distance are welcome to catch the shuttle. The shuttle stops at the Medical Center Metro station, Bldgs. 31, 10 and Natcher.

Choose Your Route Wisely—If employees need to drive to the Bethesda campus, NIH recommends avoiding the Rockville Pike/Cedar Ln. intersection if possible. It is considered to be the most congested intersection in Montgomery County and is projected to get even worse until the State Highway Administration completes planned road improvements later in this decade.

If arriving to campus from points east, use Connecticut Ave. to Jones Bridge Rd. If arriving from points north or west, use Old Georgetown Rd.

The South Dr./Old Georgetown gate reopened to employees on June 13 for outbound traffic from 3 to 7 p.m. This change should lighten the burden of exiting the campus during the afternoon/evening rush hour.

Be Considerate—Have your badge ready to scan when you reach an NIH gate. It makes a big difference for everyone, especially those behind you, if an employee doesn't delay entry by searching through briefcase or purse to find the badge once reaching the card reader.

Ultimately, it will be up to each employee to determine which strategies work best in his or her own situation.

What Is NIH Doing?

NIH meets regularly with state, local and fed-

eral officials to plan measures to alleviate overall congestion in the area. State and county funds are now available for road improvements set to commence later this year. A number of these projects have already begun. Even though these projects will be done predominantly during off hours, they still create their own temporary disruptions—and even after completion, the traffic will still exceed capacity. The FY 2011 federal budget includes \$300 million available for BRAC-impacted military medical facilities. Maryland hopes to receive one-third or more of these funds to complete all phases of the projected roadway traffic improvements.

Finally, the Office of Research Services and the Office of Research Facilities have developed a web site, <http://traffic.nih.gov>, to inform you of the various roadway improvement projects and to offer tools and resources to help with your commuting choices. The site includes timelines on construction projects, more about BRAC and handy widgets to map your best commute routes, complete with live traffic cameras across the region. 📍

Daniels, Milgram Win AWIS Mentoring Awards

Dr. Susan A. Daniels and Dr. Sharon L. Milgram recently received the Award for Excellence in Mentoring, an honor presented annually by the Bethesda chapter of the Association for Women in Science (AWIS). The award recognizes men or women who have made significant contributions in mentoring to young scientists.

Daniels, a member of AWIS Bethesda, whose background is in molecular and cell biology moved into science administration and is currently acting director of the Office of Autism Research Coordination at the National Institute of Mental Health. In her nomination letter, she was described as a person who provides guidance and insight, who listens and is supportive and above all who cares about her mentee's personal and professional development.

Milgram, a senior investigator at the National Heart, Lung, and Blood Institute and an adjunct investigator at the National Human Genome Research Institute, joined AWIS while at the University of North Carolina at Chapel Hill. Her growing interest in student training and mentoring led her to apply for and accept a position as the first director of the NIH Office of Intramural Training and Education. In that post, she oversees a trans-NIH component dedicated to the career advancement of more than 5,000 trainees, ranging from college students to postdoctoral and clinical fellows.

The NIH Office of Research on Women's Health, the Office of Community Liaison and the National Library of Medicine support AWIS Bethesda. For information about the organization, visit www.awisbethesda.org. 📍



Dr. Sharon L. Milgram (l) and Dr. Susan A. Daniels (r) accept mentorship awards from AWIS Bethesda award chair Pat Connelly.

milestones

Chemist, Mentor, Musician **NIGMS's Schwab Retires**

By Erin Fults

Over the past 15 years, Dr. John Schwab has been more than a program director. He has been a mentor, a communicator and—in his non-work time—a musician. He hopes that after his retirement, the chemistry initiatives he spearheaded will continue to foster the field.

During his tenure in the NIGMS Division of Pharmacology, Physiology, and Biological Chemistry, Schwab says, “I’ve benefitted from having more of an overview of science and more influence over the course of science than I did as an individual faculty member and NIGMS grantee.”

That perspective enabled him early on to spot some disturbing trends in chemistry—the number of grants was dropping, the average age of grantees was increasing and the number of early stage investigators was declining significantly.

He explained his findings to established researchers, who worked to reverse the trends. To further nurture the talents of young scientists, Schwab established a mentoring workshop for junior chemistry faculty that has been well received. The workshops easily fill up each year. “It’s been very rewarding. I feel like I have been able to make a difference in the community,” said Schwab.

“John brought a deep understanding of the chemical community and its potential to contribute to the NIH mission,” said NIGMS director Dr. Jeremy Berg. “He was particularly passionate about developing the careers of young chemists and created programs that helped early stage investigators learn how to shape their research programs to increase their likelihood of success, both in general and within the NIH funding system.”

Another focus of Schwab’s has been promoting good science through collaboration. In 2002, for example, he helped launch the Centers of Excellence in Chemical Methodologies and Library Development. He has also communicated effectively about NIH-funded chemistry research to a range of audiences and was recognized with an inaugural NIGMS Outstanding Communicator Award in 2005.

Before joining NIGMS to manage grants in synthetic organic chemistry, Schwab served as a review chemist at FDA. He earned a B.S. from

the University of Michigan and a Ph.D. in bioorganic chemistry from Brandeis University. After conducting postdoctoral research at Harvard University, Schwab was a faculty member for 16 years at Catholic University and Purdue University.

When he takes off his scientific hat, Schwab enters a very different venue. He plays guitar in two old-time music bands—the Mostly Mountain Boys and the Hoover Uprights. In February 2011, the Mostly Mountain Boys performed as the headliner band at a music festival in Gainsborough, England. The Hoover Uprights have twice won first place in the traditional band contest at the Appalachian String Band Music Festival in Clifftop, W.Va.

Schwab’s involvement in music transcends his own playing. He is working on an instructional book and CD/DVD project to teach back-up guitar. He is also involved in a volunteer organization called the Field Recorders Collective, which uncovers field or home recordings by traditional musicians and makes them available on CD, shedding light on important, often underappreciated musicians from past generations.

Retirement will offer him more time for musical pursuits and travel.

Despite the pleasures of music and traveling, he knows he’ll miss the numerous bonds he’s formed and the daily interactions he’s had with the scientific community. The feeling is clearly mutual. After he announced his retirement, he received a hefty pile of appreciative emails from grantees in his portfolio.

“John has been a strong and effective advocate and administrator for support of organic chemistry and has articulated the importance of chemistry to the mission of NIH,” said Dr. Michael Rogers, director of the Division of Pharmacology, Physiology, and Biological Chemistry. “He has had a substantial impact on advancing research and is leaving very large shoes to fill for his successor.”

But Schwab isn’t exiting the science stage completely. He’ll remain in the D.C. area and intends to stay involved in the mentoring workshops. “It will be great to continue to interact with and help the development of the scientific community,” he said.



Dr. John Schwab

Swartz Named Director of CSR Division

Dr. Karyl Swartz now leads the Division of AIDS, Behavioral and Population Sciences at the Center for Scientific Review. She came to CSR from the Great Ape Trust of Iowa, where she was associate program director and a researcher.



“Dr. Swartz brings to CSR an incredible breadth of experience managing scientists and scientific programs in academia and beyond,” said CSR director Dr. Toni Scarpa. “And she brings a dynamic ability to develop positive relations with a large and diverse constituency and workforce.”

In her new post, Swartz coordinates five integrated review groups, which review grant applications for scientific merit.

While at the Great Ape Trust, she also was a research associate at the Smithsonian’s National Zoological Park as well as an affiliate professor of anthropology at Iowa State University.

Swartz previously served as a professor and chair of the psychology department at Lehman College, City University of New York. Her research has focused on cognition in non-human primates; specifically, learning, memory and perception by macaque monkeys and orangutans and cognitive factors in mirror self-recognition by great apes.

Swartz earned her Ph.D. in psychology from Brown University. She did postdoctoral research at the Regional Primate Research Center at the University of Washington and then conducted research with gorillas and chimpanzees at the Centre International de Recherches Médicales de Franceville, Gabon, Africa.



NCI’s Helman Honored With Pediatric Oncology Award

Dr. Lee Helman, scientific director for clinical research, Center for Cancer Research, NCI, has received the 2011 Pediatric Oncology Award from the American Society of Clinical Oncology (ASCO) for his scientific achievements in the field of pediatric oncology. During

ASCO’s annual meeting, he gave his award lecture

titled “Pathways to New Targets for Pediatric Sarcomas.”

Helman’s research focuses on three major themes related to the biology and treatment of pediatric sarcomas, specifically rhabdomyosarcoma, Ewing’s sarcoma and osteosarcoma. His laboratory studies IGF signaling, trying to identify mechanisms of acquired resistance and to identify patients who are likely to respond to IGF-1 receptor antibodies; investigates the molecular/biochemical determinants of the biology of these sarcomas; and uses the insights gained in clinical trials of novel therapies.

“This award is a wonderful acknowledgement by my peers that my work is considered valuable to the field,” Helman said. “All science is by nature collaborative, so this honor also goes to my colleagues and many postdoctoral fellows and students.”

During his years at NCI, Helman has made many important contributions to understanding the role of IGF signaling in pediatric tumors. He also identified ezrin as a key regulator of metastases in osteosarcoma.

Helman began his fellowship training at NCI in 1983, where he has remained. He became head of the molecular oncology section of the Pediatric Oncology Branch in 1993, and chief of the Pediatric Oncology Branch in 1997. He was also named a deputy director of the Center for Cancer Research in 2001. He served as acting scientific director for clinical research, Center for Cancer Research in 2005 and was named permanent scientific director in 2007.

In addition to his position at NCI, Helman is a member of the board of directors of and clinical advisor to the Children’s Inn at NIH. He is a past member of the board of governors of the Clinical Center and was a founding member of the Connective Tissue Oncology Society.



NICHD Councils Gains Five Members

NICHD director Dr. Alan Guttmacher (l) and deputy director Dr. Yvonne Maddox (r) recently welcomed five new members to the National Advisory Child Health and Human Development Council. They include (from l) Dr. Kimberly Leslie, professor and chair, department of OBGYN, University of Iowa; Dr. Jere Behrman, professor, department of economics, University of Pennsylvania; Dr. Richard Greenwald, president and founder, Simbex LLC, Lebanon, N.H.; Dr. Frances E. Jensen, professor and director, department of neurology at Children’s Hospital, Boston. Not shown is Dr. Renee R. Jenkins, professor and chair emeritus, department of pediatrics and child health, Howard University College of Medicine.

Folic Acid Supplements Not Likely to Affect B12 Deficiency

Taking folic acid supplements or eating fortified grain products is unlikely to worsen problems related to low levels of vitamin B12, according to researchers at NIH and five other institutions in the U.S., Ireland and Norway.

In the U.S., bread, cereal and other enriched flour products have been fortified with folic acid (the synthetic form of the vitamin folate) since 1998. Women with low levels of folate are at increased risk for conceiving a child with birth defects of the brain and spinal cord known as neural tube defects. The number of infants born with these birth defects has fallen since fortified foods were introduced.

Researchers have been concerned that the level of folic acid in fortified grains—needed to reduce women's risk for conceiving a child with a neural tube defect—might be too high for other people. These concerns stem from earlier studies that found higher rates of anemia and other blood abnormalities in people with low B12 levels who also had high folate levels. The people with low B12 and high folate levels were more likely to have anemia than did people with low B12 levels and normal folate levels.

However, many of these studies were conducted in older people, a group more likely to have difficulty absorbing B12. Researchers were uncertain whether these blood abnormalities were due to the high folate levels or to medical conditions common to older people.

“Our findings are reassuring for people who have low vitamin B12 levels,” said first author Dr. James Mills of NICHD. “We found no evidence that folate could worsen their health problems. Consuming higher amounts of folate does not seem to interfere with the body's use of vitamin B12 in otherwise healthy individuals.”

Experimental Drug Benefits Patients with Rare Cancer

An experimental drug, cediranib, may benefit patients with a rare, slow-growing cancer called alveolar soft part sarcoma (ASPS), according to results from a clinical trial. The NCI trial showed tumors shrank in more than 50 percent of ASPS patients who were treated with cedira-

nib. These findings were presented at the American Society of Clinical Oncology annual meeting in Chicago on June 6. ASPS accounts for less than 1 percent of soft tissue sarcomas and forms in tissues that connect, support or surround the organs of the body. It is usually diagnosed in children and young adults, developing as a painless mass in the leg or buttock.

XMRV Origins Deciphered, Undermining Claims for Role in Human Disease

Delineation of the origin of the retrovirus known as XMRV from the genomes of laboratory mice indicates that the virus is unlikely to be responsible for either prostate cancer or chronic fatigue syndrome in humans, as has been widely published. The virus arose because of genetic recombination of two mouse viruses. Subsequent infection of lab experiments with XMRV formed the basis of the original association.

Reporting in *Science* May 31, Dr. Vinay Pathak and his NCI team in collaboration with other researchers, described when and how XMRV arose and explain the original, incorrect association. XMRV stands for xenotropic murine leukemia virus-related virus.

This study is being reported in the same issue of *Science* as another study of XMRV (Knox et al.) that finds a lack of association between the virus and CFS even in the same patients from a 2009 study. “Taken together, these results essentially close the door on XMRV as a cause of human disease,” said Tufts University School of Medicine professor Dr. John Coffin, a coauthor with Pathak.

Murine leukemia viruses are retroviruses that cause cancers and other diseases in mice. They are divided into different classes, one of which is xenotropic murine leukemia viruses. Although viruses in this class cannot grow in or infect cells from most mice, in the laboratory they can infect cells from other species, including human cells.

XMRV was first reported in samples from a human prostate tumor in 2006, and has been reported to be present in 6 percent to 27 percent of human prostate cancers. Later research reported XMRV in the blood of 67 percent of people with CFS.

Upon careful examination in Pathak's study, it was shown that initial prostate tumor xenografts did not contain XMRV but later tumors that had been derived from them did, demonstrating that XMRV was not present in the original human tumor as previously supposed. Instead, the virus appears to have infected tumor cells while they were in mice.—compiled by Carla Garnett



Taking folic acid supplements or eating fortified grain products is unlikely to worsen problems related to low levels of vitamin B12, according to researchers at NIH and five other institutions. The finding was reported in the American Journal of Clinical Nutrition.

feedback

Have a 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: There are lots of construction projects taking place on the NIH campus—Bldg. 35, utility tunnels, a run-off pond, parts of Bldg. 10, etc. When is a new child care center going to be built? It's been promised for 10+ years and it still hasn't been built. I even heard that funds from FY 10 were designated for it.

Response from the Office of Research Services and the Office of Research Facilities: Currently, NIH sponsors three child care centers with independent operators in the Bethesda/Rockville area to serve the main campus and nearby offices. One of the centers, the NIH Infant Child Care Program (Childkind, Inc.), has been located in a "temporary" structure for more than 10 years and is showing signs of age and needs to be replaced.

In FY 2010, NIH received congressional appropriations to design and build a new 21,000-gross-square-foot Northwest Child Care Center (NWCCC) in the northwest quadrant of the campus at the intersection of Convent Dr. and Center Dr., just across the street from the Safra Family Lodge. The new NWCCC will provide a permanent home for the infant center and begin to address the urgent need for more child care on campus.

The new 2-story NWCCC will have a maximum capacity of 170 children and contain administrative areas, a multi-purpose room, classrooms, outdoor play areas and a parking/drop-off area for parents. The new structure will meet the licensing requirements of the Maryland state department of education, Office of Child Care and the accreditation requirements of the National Association for the Education of Young Children.

The Office of Research Facilities has completed concept plans for the new Northwest Child Care Center in partnership with the Office of Research Services, which oversees the NIH Child Care Programs. A contract award is anticipated later this summer. Upon completion of the design phase by the contractor, construction should start in late 2011 and the center should open in early 2013.

Feedback: As potential bearers of Lyme disease-bearing ticks, the deer on campus present a health risk to employees and visitors and especially to Clinical Center patients, notably those with compromised immune function but who may feel well enough to spend a little time outdoors. Does NIH plan to do anything about our potential exposures to Lyme disease and if so, what and when?

Response from ORS: In February 2010, NIH hired a wildlife consultant to conduct a site assessment of the white-tailed deer population on the NIH main campus. One of the areas they were asked to address was the potential of the deer as a vector for Lyme disease.

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks.

Lyme disease occurs throughout the Washington, D.C., area. However, you are much more likely to contract Lyme disease in a wooded area near your home or at your local park where larger deer populations reside than

on the NIH campus. As the consultant reported, "Lyme disease is not likely to be an issue on the NIH campus due to the small number of deer present. In addition to deer, white-footed mice, which are present on the campus, also carry Lyme disease. Since the mature, wooded areas of the campus are protected, employees should have very little contact with the natural vegetation in which deer ticks would be living. The low number of deer present on the NIH campus does not warrant either lethal or reproductive management in relation to...the likelihood of the transmission of Lyme disease."

As long as employees, patients and visitors stay on the sidewalks and do not venture into the wooded areas, it is highly unlikely they would ever contract the disease on this campus. For more information about Lyme disease, visit <http://health.nih.gov/topic/LymeDisease>. ●

NINR's Saligan Wins Nursing Research Award

Dr. Leorey Saligan, deputy clinical director of NINR's Intramural Research Program, recently received the 2011 Rear Admiral Faye G. Abdellah Award for Nursing Research. The award recognizes publications by civilian nurses and nurse officers within HHS or from tribal nurses that stimulate the development of nursing knowledge and practice through research. Saligan received the award for his article, "Quality of life in sarcoidosis: comparing the impact of ocular and non-ocular involvement of the disease," which appeared in the August 2010 issue of the journal *Ophthalmic Epidemiology*.



Sarcoidosis is an inflammatory condition of unknown cause that can affect almost every organ in the body including the eyes (ocular sarcoidosis), which can lead to the development of cataracts, secondary glaucoma or inflammation of the structures of the eye (uveitis). There is limited information about the quality of life of individuals with ocular sarcoidosis. Saligan's research found that the vision changes associated with ocular sarcoidosis can decrease both vision-related and overall quality of life; this effect is greater for patients of lower income. This study was conducted while Saligan was a nurse practitioner for NEI, where he helped develop the sarcoidosis clinic.



At NIMH's Children's Mental Health Day event are (from l) moderator NIMH director Dr. Thomas Insel and panelists Drs. Jay Giedd, Danny Pine, Ellen Leibenluft and Ben Vitiello.

Experts Answer Questions on Children's Mental Health Day

By Charlotte Armstrong

One of the take-away messages of a recent NIMH-sponsored webcast on children's mental health was that studying mental health and development in children is important not only to improving the lives of children, but also for understanding the roots of adult illness and how it can be prevented. The webcast took place on Children's Mental Health Day, May 3, and featured a panel of NIMH scientists whose research has focused on brain development and mental health in children. Scientists answered questions from an audience gathered in a Bldg. 31 conference room and over 400 participants online nationwide.

The panel members' research has helped demonstrate that mental illnesses are common in children, but has also shown that children are markedly resilient; most of those with problems in childhood will grow up to be healthy adults. NIMH director Dr. Thomas Insel moderated the discussion with panelists Dr. Jay Giedd, Dr. Danny Pine, Dr. Ellen Leibenluft and Dr. Ben Vitiello.

Giedd has done long-term studies of children and adolescents using non-invasive brain imaging, genetic studies and behavioral tests to track the growth of the young brain and investigate the relationship between brain development, behavior and mental illness. He opened by noting that one of the key ideas emerging from their work is the possibility of harnessing the plasticity of the brain at this age—its capacity for change—to support or restore health. Also, it is the path or trajectory of development, Giedd said, not the size or function of any one part of the brain, that separates health from illness.

A central focus of Pine's research has been anxiety disorders in youth. Mental disorders, he

said, are common in children—occurring in as many as 20 to 30 percent—but researchers are beginning to be able to identify which children have problems that will persist and which will recover more readily.

Work on anxiety suggests that resilient children are those who, while anxious, face their fears rather than avoid them. This provides the basis of one approach to therapy, which involves having a child do the things that scare him or her, in manageable doses, similar to treatment of anxiety disorders in adults. A goal of continued research is to understand more about the biological bases of anxiety disorders and use that information to target new treatments.

Leibenluft addressed childhood bipolar disorder, which has become a more common diagnosis in recent years. Just because a child is irritable, she said, does not mean that he or she has bipolar disorder. These children have a disorder, but it is likely that it can be helped with treatment that is less toxic than those used for bipolar disorder, so the distinction is important. The manic phase of bipolar disorder—a speeding up of thoughts and activity—is central to diagnosis.

Vitiello said that as a result of many recent studies in children, we have much more information—specific to children—on treatments. In the past, treatment of children was often based on information derived from adults. For attention deficit hyperactivity disorder, stimulants are effective and behavior therapy is helpful for some but not all children. Some studies suggest that controlling ADHD can decrease the risk of substance abuse.

All four speakers commented on questions from the audience:

- ✔ Right now imaging is a useful research tool, but is not yet useful as a diagnostic tool.
 - ✔ The line between health and illness is not distinct. There is a huge range of normal behavior; one measure of whether difficult behavior represents an illness is whether the behavior prevents a child from engaging in the normal activities of youth, like going to school. A pediatrician can be helpful in making an assessment.
 - ✔ Genetics play a role in mental illness, but they do not determine who will become ill. Environment is very important. Animal research has shown that the same gene can be beneficial or harmful depending on the environment. Although bipolar disorder is strongly associated with genetic inheritance, the vast majority of children of parents who are bipolar will not have the disorder.
 - ✔ For many disorders, both talk therapy and medications can be helpful. The use of medication gets more controversial in very young children. There is information from research on medication use in older children, but not enough yet on the very young.
- The speakers emphasized that mental illnesses are complex disorders; studies of the brain are only beginning to scratch the surface of what we need to know to understand them. 🗨️