

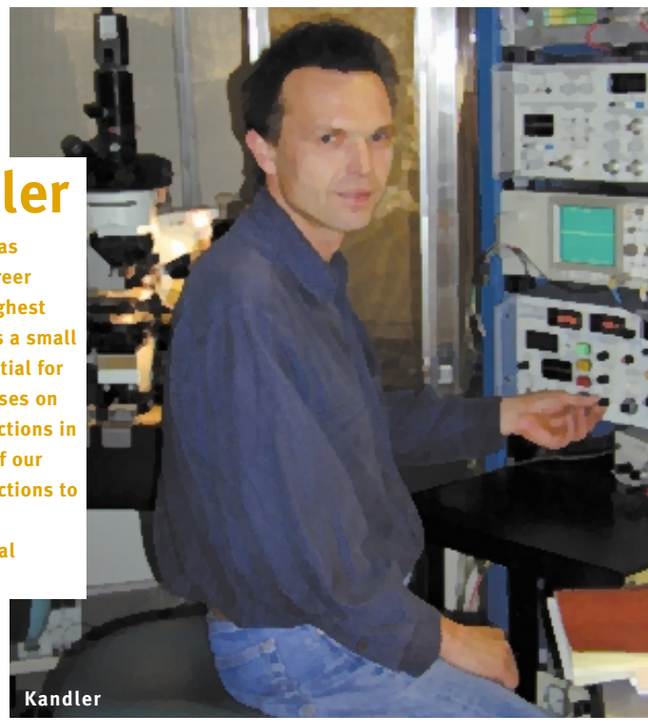
Devoted to noteworthy happenings at the medical school. . . Also, to stay abreast of Pitt health sciences news, including info on faculty and research, see http://www.health.pitt.edu

White House Salutes Kandler

Karl Kandler, assistant professor in the Department of Neurobiology, was invited to the White House in October to accept a Presidential Early Career Award for Scientists and Engineers (PECASE), considered one of the highest honors the US government bestows on researchers. The award identifies a small cadre of researchers who, early in their careers, show exceptional potential for leadership at the frontiers of scientific knowledge. Kandler's work focuses on the development and function of what are known as "inhibitory" connections in the brain. Little is known about these connections—yet probably half of our neuronal connections are inhibitory and our brains rely on these connections to process visual, auditory, and other information they receive.

Kandler was one of only 12 researchers nominated by the National Institutes of Health for the PECASE. *—EL*

FOR MORE INFORMATION: http://www.neurobio.pitt.edu/faculty/kandler.htm



Kandler

FOOTNOTE

Maybe the Nobel committee should check in with Pitt first. Six of the Nobel Prize for Medicine winners were first awarded the School of Medicine's Dickson Prize, including this year's Nobel corecipients, Paul Greengard and Eric Kandel (lauded with Arvid Carlsson for their work on signal transduction in the nervous system).

PSYCH!

No psychiatry department in the country comes close to Pitt's when the subject is National Institutes of Health (NIH) funding. By receiving $59 million last year, Pitt's department was privy to nearly double the funding of Yale's, whose $32 million placed it second on the list. In fact, more than 10 percent of all NIH money awarded to the country's 87 departments of psychiatry was granted to Pitt researchers. About $30 million of the total came from the National Institute of Mental Health (NIMH), making Pitt the largest single recipient of NIMH funding. *—DH*

FOR MORE INFORMATION: http://www.wpic.pitt.edu



FRANK WALSH

THREE BLIND MICE? TAKE A NUMBER.

Answering questions about gene function was never so easy. Med school researchers wanting mice with customized genes need only look next door, now that Pitt's Transgenic and Chimeric Mouse Facility is up and running. There, a litter of genetically altered pups costs as little as $2,500. Researchers buying similar animals from a biomedical firm could pay tens of thousands of dollars per model. And a primary service of the facility is free, i.e., consultation to help researchers refine their experiments and accomplish their goals. "Making animal models or testing experimental hypotheses using genetically altered mice is a very long, tedious process," says J. Richard Chaillet, associate professor of pediatrics and the facility's scientific director. "It often demands coming to grips with results that don't make sense or experimental procedures that don't work. The intention of having the facility on campus is that we can work almost on a day-to-day basis with people, helping them with every particular step along the way." These services also will make it easier for Pitt nongeneticists to expand their parameters of discovery. ***—DH***

Faculty Snapshots

A LOOK AT SOME OF THE PROJECTS SCHOOL OF MEDICINE FACULTY MEMBERS HAVE TAKEN ON OF LATE:

Premenopausal women setting a date to quit smoking may want to consider their menstrual cycle. Women who quit on days one to 14 following menstruation had less severe symptoms of nicotine withdrawal and depressed mood than women who quit on day 15 or later, according to a study by **Kenneth Perkins**, professor of psychiatry.

Stray microscopic calcium crystals float in the inner ear, interfering with nerve signals, causing benign paroxysmal positional vertigo. The condition was the subject of a review article in the *New England Journal of Medicine* by **Joseph Furman**, professor of otolaryngology, neurology, bioengineering, and physical therapy. "Dizziness has a tremendous impact on the quality of people's lives," says Furman. "There aren't that many conditions in the dizziness world that are as easily treatable as this one." Physicians can often relieve symptoms with a head-tilting procedure. "When it works, it's just magic," says Furman of the treatment, which has a success rate of 90 percent.

Hemifacial spasm, which affects one in 100,000 Americans, causes uncontrollable facial twitching, sometimes so severe that a person cannot read or drive. First-line therapy is botulinum toxin (Botox) injections. However, a study by **Amin Kassam**, assistant professor of neurological surgery and codirector of the Center for Cranial Base Surgery, shows that patients who receive Botox injections prior to decompression surgery actually end up twitching more, 13 months later, than those who don't receive the injections prior to surgery. Kassam also is helping to establish a new Surgical Technologies and Training Center, where surgeons will work with companies such as Olympus and Stricker to develop new surgical equipment. Surgeons also will be trained on the equipment through the center.



Kassam

Since May 1990, 143 patients have received 151 intestinal transplants at UPMC Health System. Even here, one of the world's premier transplant centers, 84 percent of those patients experienced at least one episode of rejection and 22 percent of their transplanted organs failed. A new technique developed by **Kareem Abu-Elmagd**, associate professor of surgery and director of intestinal transplantation, may improve organ acceptance rates. His five patients who received intestines irradiated before transplantation, along with a standard bone marrow transplant, have shown no evidence of rejection for up to four months. ***—DH***



Abu-Elmagd

FOOTNOTE

"One of us found anatomy lab so incredibly intriguing that [he/she] threw up the first day."

"It's every week. I just run. There's a trash can right outside the door. I don't make a spectacle of it; and then I just come back in and get down to work."

—Anonymous, MD '04 & Anonymous, MD '04

SCAIFE GRANT FERTILIZES NEURODEGENERATIVE RESEARCH

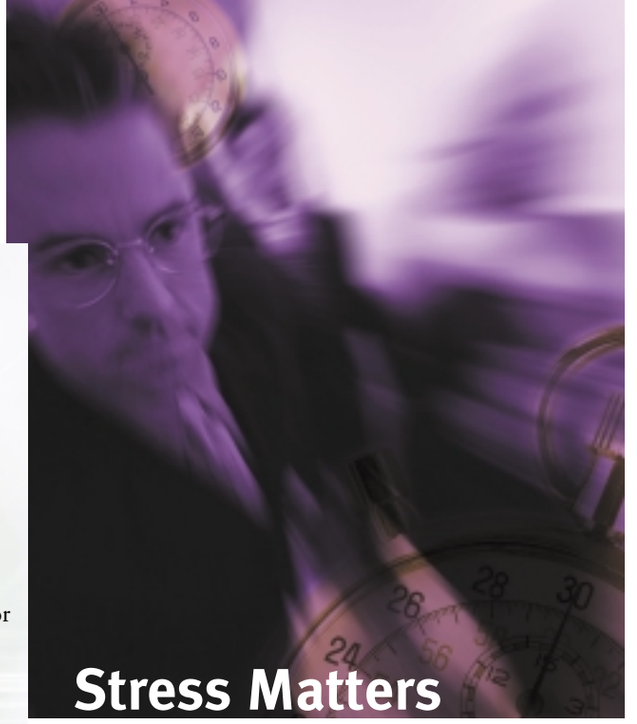
A $10.8 million grant from the Scaife Family Foundation and Scaife Charitable Foundation will help establish the Pittsburgh Institute for Neurodegenerative Diseases.



The institute will bring scientists currently scattered across the campus together in a new facility and build on existing expertise by adding faculty. Construction for the new institute will begin within the next two years.

The simple act of bringing researchers into adjoining laboratories is important, says Michael Zigmond, professor of neurology and codirector of Pitt's National Parkinson's Disease Center of Excellence. "In science, the number of times you bump into people, even on the way to picking up coffee or getting your mail, has a major influence," says Zigmond. "The most important single change that this institute will produce is increasing the frequency of interactions. My experience is that if you put two researchers together for a couple of hours, if they have anything remotely in common, an experiment is going to emerge. That's what we want to foster."

Physicians will treat patients in the institute's clinics and mingle with basic and clinical researchers, learning through casual interactions and formal seminars about research developments and clinical trial opportunities. The goal is to hasten laboratory discoveries and translate them more quickly into better patient care, notes Steven DeKosky, professor and interim chair of the Department of Neurology. "The idea of the lone scientist working in his or her laboratory is, for the most part, an image very much of the past," says DeKosky. *—DH*



Stress Matters

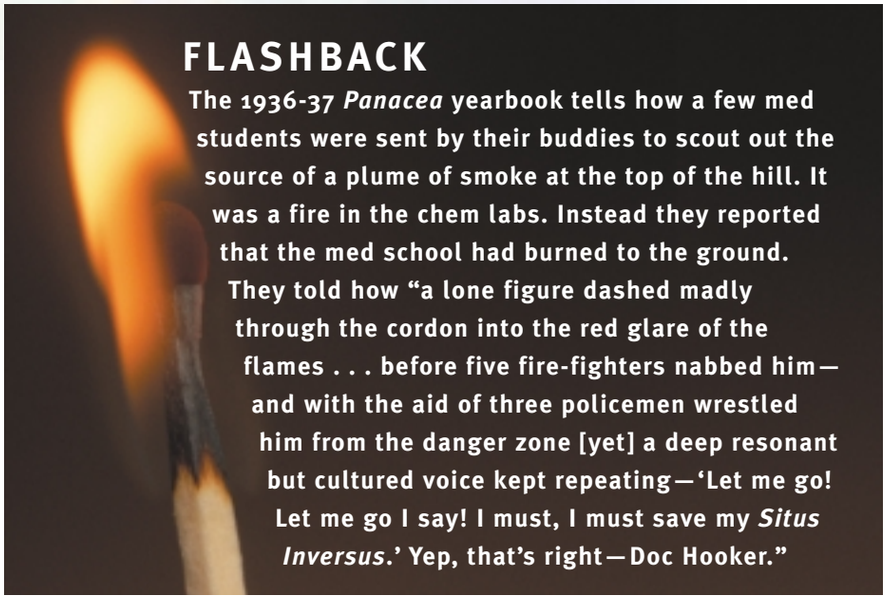
When psychological stress hits, blood hormone levels change, triggering the suppression of the immune system. But what does this mean, say, to a man going through a lengthy and painful divorce? Is he more likely to become sick?

"Stress is a major factor in predisposing individuals to disease development," says Bruce Rabin, professor of pathology. Rabin last year was a coauthor on a review article commissioned by the *Journal of the American Medical Association* focusing on stress-induced immunomodulation.

In one study cited by the coauthors, researchers at the Common Cold Centre in England exposed people to viruses causing upper respiratory tract infections. Subjects who became sick reported more stress-filled lives than those who stayed well.

A few years ago, Rabin and other School of Medicine researchers, in collaboration with Sheldon Cohen at Carnegie Mellon University, repeated the study and determined that chronic stressful events—those lasting a month or longer—increased the risk of developing illness. Chronic social conflicts as well as underemployment and unemployment were deemed especially guilty culprits. Yet people who had social ties in different areas of their lives—at work, at home, and at church, for example—were less likely to become sick.

"If you have a lot of social support and friends, and you're physically fit rather than sedentary, and you're more of an optimist than a pessimist, it's less likely that the stress will have an effect on your health," notes Rabin. *—DH*



FLASHBACK

The 1936-37 *Panacea* yearbook tells how a few med students were sent by their buddies to scout out the source of a plume of smoke at the top of the hill. It was a fire in the chem labs. Instead they reported that the med school had burned to the ground. They told how "a lone figure dashed madly through the cordon into the red glare of the flames . . . before five fire-fighters nabbed him—and with the aid of three policemen wrestled him from the danger zone [yet] a deep resonant but cultured voice kept repeating—'Let me go! Let me go I say! I must, I must save my *Situs Inversus*.' Yep, that's right—Doc Hooker."

IMAGES: EYEWIRE


EYEWIRE

Appointments

As the new codirector of the Brain Tumor Center at the University of Pittsburgh Cancer Institute (UPCI), **Clifford Schold** plans to help enhance the center's visibility and reputation. Schold joined Pitt as a visiting professor of neurology and director of UPCI's Neuro-oncology Program in August, coming from Duke University. He'll also serve as assistant vice chancellor for clinical research. His research into drug therapy for nervous system tumors complements Pitt's strong history in fighting nervous system cancers using radiation therapy and radiosurgery. "Most of us believe there's not going to be one answer to these tumors," says Schold. "It's probably going to take some combination of high dose radiation and chemotherapy, which is why my coming here is a nice match."


Schold

Augustine Choi, a visiting professor of medicine, has been appointed chief of the Division of Pulmonary, Allergy, and Critical Care Medicine. He plans to expand and strengthen clinical and research programs in asthma, sleep disorders, lung transplantation, and chronic obstructive pulmonary disease, also called emphysema. Choi came to Pitt from Yale University in August. His research focuses on the pathogenesis of adult respiratory distress syndrome (ARDS) at the molecular level.


Choi

Visiting professor of medicine **Thomas Kleyman** came to Pitt in October from the University of Pennsylvania. As the new chief of the renal/electrolyte division, Kleyman plans to add more physician-scientists to the faculty and to expand programs in developmental and cell biology. His research focuses on a kidney protein that is key in regulating blood volume and pressure. *—DH*

CNBC AMONG TOP SIX

The Center for the Neural Basis of Cognition (CNBC) sits solidly among the top six cognitive neuroscience programs in the country. CNBC is a collaboration between Pitt and Carnegie Mellon University; it has been ranked by an advisory board that included members of the National Academy of Sciences and was chaired by Mortimer Mishkin, chief of the section on cognitive neuroscience at the National Institute of Mental Health.

NOT THE USUAL SONG AND DANCE

Which thing is not like the others? A violin concerto, a poetry reading, an Indian dance, a baked Alaska. The med school's Annual Talent Extravaganza in December showcased those who perform in the kitchen as well as on stage. Creations of culinary artists were judged during a dessert contest and, more memorably, consumed at a potluck supper. Students' visual artwork was also on display. (An Irish Dream Cake, made by Audrey Lau, MD '03, and MD/PhD student Kasey Eidson won the dessert contest. Yum.) *—DH*


ARTVILLE