ACS Professors Named

Patrick Moore and Yuan Chang are two of three newly named American Cancer Society Research Professors. The collaborators search for newly identified viruses and related human tumors. Each professorship carries with it a five-year, $400,000 grant.

“The research funds are not restricted,” says Moore. “This allows us to explore more cutting-edge areas of cancer research that we can’t fund through traditional grants.”

Moore, an MD/MPH, is director of the Molecular Virology Program at the University of Pittsburgh Cancer Institute and professor of microbiology and molecular genetics in the School of Medicine. Chang, an MD, is a Pitt professor of pathology.

Pitt’s Jennifer Rubin Grandis (MD ’87, Res ’93) received an ACS clinical research professorship earlier last year. A professor of otolaryngology and pharmacology, she studies genetic abnormalities associated with head and neck squamous-cell carcinoma. —Joe Miksch

FOOTNOTE

The day before new carpeting was to be installed in Scaife Hall, workers exposed concrete underneath the old flooring. So John Mahoney, associate dean for medical education, posted a sign encouraging students to leave their marks, asking, “Keep it small. Keep it clean.” Some penned their names. Others left messages.

J.D. Zipkin (Class of 2012) wrote, “Dear Future Med Students: You may be smarter, younger, and better looking, but by the time you read this, I’ll be debt free.”

IN THE ICU, FAMILIES SUFFER, TOO

Watching a loved one in the intensive care unit is depressing, draining, and may lead to another troubling consequence down the road—post-traumatic stress disorder.

Researchers at the University of Pittsburgh and the University of California, San Francisco, tracked 50 family members of ICU patients. At a six-month follow-up, 35 percent had post-traumatic stress, and 46 percent of family members of patients who’d died experienced complicated grief, where the pain of losing a loved one becomes debilitating.

It was hard to predict who would work through their grief normally and who would sink into deeper problems that required treatment, says Cindy Bryce, a PhD associate professor of medicine and health policy and management at Pitt.

“Even those who looked fine in the hospital and seemed to be coping might show some signs of problems down the road,” Bryce says.

Surprisingly, post-traumatic stress was not more prevalent among family members whose loved ones had died. —Christina Rouvalis
What We Can Learn from the Anthrax Investigations

When biodefense researcher Bruce Ivins—the man federal prosecutors named as the sole culprit of the anthrax attacks of 2001—committed suicide last summer, the answers to many lingering questions surrounding the incidents may have died with him. However, regardless of the uncertainties, there is still much we can learn from the anthrax investigations, says Thomas Inglesby (shown above), chief operating officer of the Center for Biosecurity of UPMC and University of Pittsburgh associate professor of medicine and public health.

On the science of the anthrax investigations

One lesson here is that identifying the source of biological attacks is an extraordinary and complex problem. And it’s one of great importance, because our success in identifying the sources of bacteria or viruses used against us can deter others from similar attacks.

Also—because at present there are limits to what we can do in forensics and because we don’t yet have a deterrent strategy for bioterrorism like we did in the Cold War with nuclear weapons—another lesson is that we have to be prepared to respond to the consequences of biological weapons used against the U.S. or elsewhere around the world.

On biosecurity policy

We obviously need to make sure we have smart and sensible policies so that we know who is working on these diseases and pathogens. However, what we can’t do in the process is make it so onerous and locked down that scientists can no longer work on developing vaccines and medicines we need. It’s a complicated balance.

In some places in the security community, there’s still a misconception that making or using a biological weapon is beyond the technical reach of all but a very limited few countries or groups. But if it’s possible that one scientist working alone was behind this whole series of events that happened in 2001, then that’s quite obviously not the case.

His question for us

An increasing number of great societal problems in the 21st century are related to the life sciences: the prospect of an emerging pandemic disease or attacks using biological weapons, climate change and the carbon cycle, Alzheimer’s and [caring for] an aging population, and ethical quandaries of stem cell science, to name a few. And we have a vast amount of scientific talent in this country. What can we do collectively to take all that we know and apply it more rapidly to solving these problems? —Interview by Elaine Vitone

—JM

Faculty Snapshots

Paul Rogers says he’d be happy to talk about the national teaching award he recently received, but not at this particular moment. “I have to go teach,” he says.

Later, Rogers, one of four recipients of the Association of American Medical Colleges’ 2008 Alpha Omega Alpha Robert J. Glaser Distinguished Teacher Award, says, “It’s a huge award. ... I have to thank the University of Pittsburgh for giving me the time and resources to teach.”

Rogers, an MD professor of critical care medicine, teaches acute care medicine to third-year students and a fourth-year elective in critical care.

How do we age well? Bret Goodpaster, a PhD associate professor of medicine in endocrinology and metabolism, is trying to answer that question, and his work has earned him the National Institute on Aging’s Nathan W. Shock Memorial Lecture Award. Goodpaster focuses on age-related loss of physical function because of excessive weight. He also hopes to identify molecular and biochemical signals that correlate with good health in our later years.

David Perlmutter was recently elected to the Institute of Medicine. Perlmutter is an MD, the Vira I. Heinz Professor, and chair of the Department of Pediatrics in the School of Medicine. His research delves into the causes of, and treatments for, genetic liver disease in children. He also is largely responsible for expanding the Children’s Hospital of Pittsburgh of UPMC’s basic and clinical research programs.

Barry London thinks that there must be a better way to image the heart than 100-year-old electrocardiogram technology. He recently received one of 16 National Institutes of Health Director’s Pioneer Awards (worth $2.5 million) that will allow him to investigate this idea.

London is the Harry S. Tack Professor of Medicine and chief of the Division of Cardiology at Pitt. He also directs the UPMC Cardiovascular Institute. The MD/PhD plans to investigate the use of tiny magnetic particles coupled with ultrasound, as well as modified adult stem cell implants, to help predict a patient’s risk for sudden cardiac arrest. On these studies, he will collaborate with Fiordeliza Villanueva, an MD professor of medicine and director of noninvasive cardiac imaging. —JM
Different Drummers

The level of excitement in the lecture hall was at a rock-and-roll concert pitch. Instead of teens looking for a nod or handshake from their guitar-wielding idols, scientists were jockeying to have a word with Peter Walter before he delivered his talk on the endoplasmic reticulum.

Walter, PhD professor of biochemistry and biophysics at the University of California, San Francisco, was in Pittsburgh this fall to deliver the 87th Mellon Lecture at Science 2008, the University of Pittsburgh’s annual celebration of science, medicine, and technology. Looking around the packed room at Alumni Hall, the burly and bearded Walter said, in his German-accented English, “This is a fantastic forum for celebrating science. Scientists have failed miserably in communicating what they do to a broader audience, and this gives us a chance to do so.”

Elsewhere in the building, visitors wended their way through a massive poster exhibit, huddled to chat about the state of science funding and the difficulty of nailing down that first R01 grant, and heard other lectures on scores of topics.

After greeting another well-wisher, Walter remarked, “I’ve been at events like this in Europe, but not here. I think we should institute programs like this in other cities.” —JM

ONLINE THERAPY FOR BULIMIA

People suffering from bulimia nervosa have long undergone cognitive behavioral therapy to rid themselves of unhealthy thoughts such as, “Only thin people are worthwhile.”

Now doctors are hoping this therapy will also work through the Internet.

University of North Carolina at Chapel Hill and University of Pittsburgh researchers are testing chat rooms moderated by cognitive behavioral therapists for women and men suffering from bulimia. The study is led by UNC’s Cynthia Bulik, the William R. and Jeanne H. Jordan Distinguished Professor of Eating Disorders.

There are advantages to being behind a computer screen, says Marsha Marcus, Pitt professor of psychiatry and psychology and service chief in the Center for Overcoming Problem Eating of the Western Psychiatric Institute and Clinic of UPMC. For example, a patient might be more open to talking about the pain of binge eating and purging online.

If effective, online cognitive behavioral therapy could reach people in rural areas or those who want convenience. “They don’t have to lose half a day, drive 20 miles, park, and then go to an appointment,” Marcus (PhD ’84) says. —CR

FLASHBACK

In 1934 [Children’s Hospital] handled more nonpaying patients than any other hospital in Pittsburgh. ... a measles epidemic further burdened the staff. Walter Rome, long associated with Children’s as an administrator, recalled that the hospital was so short of funds that its trustees would come in on weekends to run the elevators, help out in the laundry or put a few dollars toward purchase of groceries.

—Barbara I. Paull, A Century of Medical Excellence: The History of the University of Pittsburgh School of Medicine
Appointments

Neil Resnick, an MD professor of medicine, chief of the Division of Geriatric Medicine, and director of the University of Pittsburgh Institute on Aging, has dedicated his life's work to upending the assumption that certain diseases are a necessary consequence of aging. The University recently named Resnick to the Thomas Detre Chair in Geriatric Medicine. During his term as Pitt's senior vice chancellor for the health sciences, Detre, a psychiatrist, established Pitt's now nationally recognized geriatric medicine division. He felt that a multidisciplinary and comprehensive approach was necessary to treat elderly patients who often suffer from complicated and competing health conditions. "Detre was a giant," Resnick says. "He changed the way people in his field thought about psychiatry." Resnick hopes to call upon Detre's multidisciplinary and pioneering spirit as he continues to shape the field of geriatrics at Pitt.

Ira Fox joins the Pitt faculty from the University of Nebraska College of Medicine. Fox will direct the new Center for Innovative Pediatric Regenerative Therapies, a joint program of Pitt's Department of Surgery, the McGowan Institute for Regenerative Medicine, and Children’s Hospital of Pittsburgh of UPMC. Fox is an MD and leading transplantation surgeon and stem cell researcher. His first goal is to build a network of investigators to develop new treatments for pediatric liver dysfunction. He hopes that the center's doors will be open to patients in May.

Even after more than 20 years in the world of science, including a postdoctoral fellowship at the National Institutes of Health and more than 90 peer-reviewed articles, Thomas Smithgall admits that having a paper accepted for publication still delivers a huge rush of excitement. Smithgall, a highly regarded teacher and mentor at Pitt, is known for his work on an enzyme family important in the development of cancer and AIDS. His lab recently identified promising protein-signaling targets for chronic myelogenous leukemia. Smithgall is now chair of the Department of Microbiology and Molecular Genetics. He succeeds prominent gene-therapy and herpes simplex virus investigator Joseph Glorioso, who served as chair at Pitt from 1989 to 2008.

Constance Chu now holds the Dr. Albert Ferguson Endowed Chair in Orthopaedic Surgery in the School of Medicine. (Ferguson, former Pitt chair of orthopaedic surgery, is known for training dozens of the world's leaders in the field.) By using new imaging technologies, Chu has been able to reveal previously undetectable signs of cartilage damage in patients who have torn the anterior cruciate ligament, an injury that dramatically increases risk for osteoarthritis. She has received several major grants from the National Institutes of Health to further her research on tissue engineering of articular cartilage and on early diagnosis and treatment of osteoarthritis. The MD recently won the ABC Traveling Fellowship in Orthopaedics. This is the oldest and most prestigious orthopaedic traveling fellowship and recognizes emerging academic leaders. —Missy Raterman