



*Devoted to noteworthy happenings
at the medical school*

The Nation Calls

It's the kind of morning most can only imagine: "I walked into the office one day," says Yuan Chang, "and learned the White House wanted me to return their call."

Chang, an MD Distinguished Professor of Pathology in the School of Medicine and researcher at the University of Pittsburgh Cancer Institute, is one of the Obama Administration's five new 2015 appointees to the National Cancer Advisory Board. In this role, Chang will work with the National Institutes of Health to further its cancer-fighting agenda, and she'll review cancer research grants to recommend project funding.

Chang's decades-long resumé of frontline pathology discoveries—including the landmark codiscovery of Kaposi's sarcoma-associated herpesvirus—has prepared her well to help locate and support the next generation of cancer researchers. "I spend a lot of time concentrating on the lab," she notes. "This is a great opportunity to help out the research community as a whole." —*Rachel Mennies*

JOSHUA FRANZOS



Chang



KAREN ARTIS

Preventing Suicide

It's not something parents want to pass down to their kids, but a study in a recent *JAMA Psychiatry* showed that parents who'd ever attempted suicide are more likely to have children who will try it themselves one day—their children are five times as likely to try, in fact. Yet there's good news, too.

"It's really a hopeful message," says David Brent, an MD who led the study, holds Pitt's endowed chair in suicide studies, and is a professor of psychiatry and pediatrics. "The study frames clear targets for intervention, which can guide the clinician to ways to prevent suicidal behavior from being passed from parent to child. Some of the targets we identified are impulsive aggression and mood disorders, both of which are treatable conditions."

—*Robyn K. Coggins*

FOOTNOTE

For second-year med student Gregg Robbins-Welty (above), nothing relieves stress like plucking "Oh, Shenandoah" on the banjo. Gregg's dad, Eric Welty, introduced him to the instrument while Gregg was still in the womb, but it wasn't until his teens that Gregg appreciated the art of twang. In 2013, father and son began playing against each other in state competitions; they tied for fourth place at Nationals. Last we heard, Gregg's new album, *Memoir*, was number 7 on AirPlay Direct's bluegrass charts.



CAMI MESA

Overheard

Abdesalam Soudi on Doctor/Patient/Computer Relations

Abdesalam Soudi grew up in a small village in Morocco, where his family didn't have access to a hospital or a pediatrician. As needs arose, his mother took care of him with herbal medicines. So he never imagined himself in the position he's in today: an expert in the sociolinguistic challenges that arise during a medical interview and how the computer in that setting influences doctor-patient relations. For three years, Soudi was a language coordinator for international patients at UPMC; he's now a PhD faculty member in linguistics at Pitt. He also codirects a master's-level course in cultural competence in medical education with the chair of family medicine, Jeannette South-Paul (MD '79), who is the UPMC Andrew W. Mathieson Professor of Family Medicine.

How did you get interested in electronic health records (EHRs)?

Initially I was interested in medical discourse in general—the language exchange between doctor and patient. But then, when I started transcribing the conversations, I couldn't ignore the sound of typing in the exam room. So that became the topic of my dissertation.

What are the issues?

The needs of the patient and the computer overlap and sometimes clash. So there is a tradeoff in attending to one or the other. . . . It's like texting and driving. If your texting is going well, your driving is suffering and vice versa. Another problem: There is a disconnect that exists between the patient and the computer. The patient doesn't have access to the computer, and the computer, of course, doesn't have access to the patient. They are blind to each other, which leads to problems in turn-taking and coherence. The responsibility to coordinate this three-way interaction mostly falls on the physician.

What might doctors want to keep in mind?

There are times when facing the computer is very good. But that first minute really shapes the rest of the encounter. Shake the patient's hand, *then* "greet the computer." Maybe first spend face-to-face quality time [with the patient] before logging in.

What would improve the situation?

Doctors are trained how to use the software and not how to use it in the patient care context. [Further, when designing systems], we should think about where and with whom the EHRs are going to be used: in the E.D., orthopaedics, etc. And the systems should be sensitive to fostering the doctor-patient relationship.

I don't see my work as a criticism of doctors. What I am critical of is the context in which they have to work. —Interview by Erica Lloyd

Next Generation

Oriana Hunter and Bradley End (MD '15) earned Honorable Mentions in the Gold–Hope Tang,

MD, 2015 Humanism in Medicine Essay Contest. The contest asked medical students to tell a story "about a time when learning a nonmedical piece of information about a patient led to an improved health care outcome." For instance, in her prize-winning essay, Hunter, a PhD and fourth-year medical student, describes caring for a nervous pediatric patient with an artificial heart. By decorating the boy's external heart equipment—which Hunter, a biomechanical engineer, also operated—to resemble Thomas the Tank Engine, Hunter empowered the youngster during a challenging time.

Busola Oluwole won a 2015 American Society of Hematology HONORS Award.

Pitt's Oluwole is a fourth-year medical student and a Clinical Scientist Training Program fellow. She and her mentor, assistant professor of medicine Enrico Novelli, an MD, are researching the connection between blood vessel changes and the development of cognitive deficits in sickle-cell populations.

Arpan Prabhu was awarded the 2015 Global Changemaker Legacy Award from the Foundation for Global Scholars.

Prabhu is in his second year of medical school. His research recently took him to Bolivia, where he investigated citizens' perspectives on the role of foreign medical workers in intercultural health care exchanges. In Pittsburgh, Prabhu is a volunteer for the Salud Para Niños (Health for the Children) clinic at Children's Hospital of Pittsburgh of UPMC.

—Rachel Mennies

Children Seen and Heard

What's one of the best things you remember about being a kid? For Camill it was a ritual: "My granddad picked me up from preschool, and every day he'd give me a lollipop." For Kailey it was freedom: "We would go to the woods and . . . make clubhouses out of . . . the junk we found." For Jashaun it was a reward: "I lost my tooth and got \$5!"

Recording the stories is the Mobile Giving Booth, which visited more than 20 locations around the city this summer. The booth serves as a reminder that kids need a chance to be kids.

Families are also using the booth to pay tribute to Children's Hospital of Pittsburgh of UPMC as it celebrates its 125th birthday. Denise, whose daughter was treated at the hospital, recalls how good it felt "to be somewhere where you could be comforted and know that your child is receiving the best of care."

You can see these Pittsburghers and others wax nostalgic about their youth at givetochildrens.org/125.

—Rachel Mangini

CATHERINE LAZURE



TOPCATS Roar

Wouldn't it be nice if med schools could hear directly from patients about how students performed? Soon, there'll be an app for that—developed by students themselves.

Four Pitt meders won the National Board of Medical Examiners (NBME) Centennial Prize for "innovation in the future assessment of health professionals" with an app called TOPCATS, short for Trainee-Oriented Patient Communication Assessment System.

"Patients' impressions of their hospital experience largely depend on the quality of their interactions with health care providers," says Myung Sun Choi, who conceived of the project. But those encounters can be hard to evaluate. Using smartphone-based TOPCATS, both docs-in-training and patients would assess their encounters. Data would then be analyzed, and reports and suggested resources would be sent to the student and her school for review.

The NBME will develop TOPCATS through the prototyping stage with the help of the Class of 2016's Choi and codeveloper Jennifer Hu, as well as second-year med students Devan Patel and Abby Koff. Patel says the experience has helped him "believe that medical students can play an active role in their own education."

—Rachel Mangini

CELEBRATE, CONNECT, CATALYZE

At an event this September dubbed A Toast to Diversity and Call to Action, Jeannette South-Paul, an MD, recounted a parable to the crowd: "When you see a turtle sitting on a fence, you know it didn't get there by itself."

South-Paul, cochair of the Physician Inclusion Council of UPMC/Pitt (PICUP) and the UPMC Andrew W. Mathieson Professor and chair of family medicine, added, "We know, no matter how smart you are, how good the pedigree of the institutions you come from, . . . you're successful because of the support and the mentoring of colleagues, friends, leaders in your field."

The dinner event at Heinz History Center aimed to connect and inspire physicians and researchers who identify as members of underrepresented groups within the health care field. Med students from all years, residents, fellows, and faculty were invited to sign up for action groups like the minority house staff council, which welcomes new minority staff to the hospital and brings in speakers like financial advisors to help young docs cope with stressors on the job.

Toward the end of the evening, Ann Thompson, an MD, vice dean of Pitt's School of Medicine, professor of critical care medicine and pediatrics, and member of PICUP, proposed a toast: "To each other—to toast the accomplishments and the potential in this room. The potential for new, creative ideas. The potential to mentor and support those who follow us. And the opportunities that we have to make a huge difference in the lives of each other and people in our community."

"Hear, hear!" the crowd responded, champagne flutes clinking, arms straining to reach new friends across the 20-some packed tables. —RKC

MIKE DRABOZINSKI/UCDDE



Here's to achievement and potential!



AS WE SEE IT

Two stories below Terrace Street, on the mezzanine of Scaife Hall, there was a drab hallway outside the Office of Medical Education. Bland office doors divided a stretch of pale concrete—hardly a spot that represented med ed at Pitt. In 2011, John Mahoney, MD associate dean for medical education, decided to add a bit of life to those halls by collecting and displaying artwork by students, staff, and faculty. And so the Scaife Underground Gallery was born.

“Suddenly it went from nothing to something,” says Mahoney. “And people liked it.” The hallway now displays artwork, including images of Pittsburgh and of sites around the world: a Viking drowning pool in Iceland, a boy surrounded by pigeons in Kuala Lumpur. Every few months, Mahoney swaps older pieces with new ones. “Whenever visitors come or students go, we say, ‘You’ve got to give us a picture!’” —Susan Wiedel

The batik shown here was created by Jane Phelps-Tschang (MD '14), now a UPMC child psychiatry resident.

Name Dropping

Pitt’s annual science and technology conference, Science 2015, celebrated its 15th year this October with a liberating theme—unleashed!

The Dickson Prize in Medicine lecturer, **Karl Deisseroth**, an MD/PhD, spoke at this same event three years ago as the Hofmann lecturer. His lab developed optogenetic technology, which uses light to precisely control activity in certain cell types in the brains of mammals. Later, in a 2013 *Nature* paper, he described a new method for revealing brain activity. Deisseroth’s new approach, called CLARITY, makes intact brain tissue transparent, allowing researchers to see the responses of large networks of neurons. Among other advances using CLARITY, Deisseroth has made anatomical discoveries and insights into the neural circuit control of increasingly complex behaviors.

Receiving the Dickson Prize is particularly meaningful says Deisseroth, because it supports undirected, basic, nontranslational research—something he believes should have more public support. Deisseroth is the D.H. Chen Professor of Bioengineering and of Psychiatry and Behavioral Sciences at Stanford University and a Howard Hughes Medical Institute (HHMI) Investigator.

James Collins, a PhD, HHMI Investigator, and Termeer Professor of Medical Engineering and Sciences at MIT, presented the

Provost Lecture. He discussed how his lab uses synthetic biology to try to combat and prevent infectious diseases. His lab has engineered *Lactobacillus lactis*—a probiotic yogurt bacterium—so that it will detect cholera bacteria in the intestine and produce antimicrobial peptides to kill them.

This year’s Mellon lecturer, **Pamela Björkman**, is a PhD and the Centennial Professor of Biology and Biological Engineering at the California Institute of Technology, where she established a lab in 1989 that has since solved the 3-D structure of more than 50 proteins and complexes of the immune system. Her research focuses on building antibody-like reagents for use in HIV treatment.

Andrew Feinberg, the Klaus Hofmann lecturer, is an MD/MPH, King Fahd Professor of Molecular Medicine, and director of the Center for Epigenetics at Johns Hopkins University. Feinberg received the 2011 NIH Director’s Pioneer Award, which continues to fund his novel research in understanding stochasticity in evolution, normal development, and cancer, as well as the discovery of nuclear structures that regulate epigenetic randomness and could predispose someone to developing cancer. —Kristin Bundy



NICU VIP

Twenty-nine-year-old Brittany O'Rourke's baby photos are all over the neonatal intensive care unit (NICU) at Magee-Womens Hospital of UPMC. They appear in the parent support book and hang on the unit's "Wall of Fame," an entryway display with hopeful stories for visitors. One photo shows a tiny O'Rourke clutching her own NICU discharge papers. "That's my golden ticket!" she says.

Her special recognition comes with being the NICU's most well-known "graduate": After spending her first 101 days in Magee's NICU, O'Rourke now works there as a registered nurse.

She was born prematurely, at 28 weeks, weighing just 2.8 pounds. Because of damage to her airway, she needed a tracheostomy at 15 weeks old and underwent extensive childhood surgeries.

O'Rourke jokes that she was always "a woman on a mission." Her vocational "training" began at age 3, when nurses would invite her to do small tasks with them at their stations while she was recovering in the hospital.

As a nursing student at Carlow University, O'Rourke began an internship at

Magee's NICU and stuck around. It was easy for her to connect with the place that saved her life as an infant—especially working alongside NICU nurses who'd cared for her as a newborn. She was also drawn to the unit's family spirit. Today, her favorite parts of nursing are making hats for the newborns she cares for and writing "notes" from them to their parents.

In her seven years working in the NICU, O'Rourke has also come to understand the power her presence holds for new parents.

"I knew my story of being a baby here would have some impact, but I never really knew just how much," O'Rourke says.

Once, she shared the details of her birth with the father of another infant born at 28 weeks; he told her afterward that he felt he could go home and sleep through the night.

"That made me feel like, *Okay, I'm where I need to be,*" O'Rourke says.

—Rachel Wilkinson

—Photograph by John Altdorfer