

CLASS NOTES

'60s

Philip Raskin (MD '66), an endocrinologist and the Clifton and Betsy Robinson Chair in Biomedical Research at UT Southwestern Medical Center, focuses both his patient care and research exclusively on diabetes. Recently, he and his team found that pregabalin, a drug used to treat fibromyalgia and epilepsy, may also be effective in treating peripheral neuropathy in diabetic patients. The results of the study, which were published in the *Clinical Journal of Pain*, showed that pregabalin reduced pain and improved sleep. "There's half a dozen treatments for peripheral, painful diabetic neuropathy," Raskin says. "Some drugs work where something else didn't. This is another option." Raskin is also the principal investigator of four National Institutes of Health–sponsored diabetes trials that strive to better understand how diabetes treatments work.

Among his more than 600 papers in refereed journals, **Naranjan Dhalla's** (Pharmacology PhD '66) most significant contribution may well be establishing that the oxidized products of catecholamines (rather than catecholamines themselves) contribute to arrhythmia. Dhalla, the principal investigator of experimental cardiology at St. Boniface Hospital in Winnipeg, Canada, credits **Paul McLain** (MD '32) and other Pitt mentors for his success. "Pittsburgh had a long-lasting effect on my career. It gave me experience doing very independent research." An honorary MD and editor in chief of *Molecular and Cellular Biochemistry*, Dhalla also serves as the executive director of the International Academy of Cardiovascular Sciences, which promotes awareness of cardiovascular-health education and research.

One morning, **Mike Lieberman** (MD '67, Pathology Resident '70, Biochemistry PhD '72) wrote a dark short story. Later, he appropriated aspects of Homer's *The Iliad*, rewrote all of it in iambic pentameter, and created a book-length poem set in Houston, his home of nearly 30 years. The result is a 4,500-line poem, *The Houstiliad* (Texas Review Press, 2015). Lieberman—former pathology chair at Baylor College of Medicine and founding director of the Houston Methodist Research Institute—didn't realize that *The Houstiliad* was about the "rage of modern men" until he had finished. Lieberman has authored seven volumes of poetry and three novels.



Lieberman

'70s

Rebecca Hughey (Biochemistry PhD '76), a Pitt professor in the Departments of Medicine, Microbiology and Molecular Genetics, and Cell Biology, as well as assistant dean for medical student research, first began studying MUC1 glycoprotein in collaboration with Olivera Finn, Distinguished Professor of Immunology and Surgery, in 1996. Among Hughey's current research interests is MUC1's role in kidney health, including in kidney epithelia survival and recovery after acute kidney injury. With colleagues, she has shown that MUC1 protects kidney cells by enhancing two pathways (HIF-1 and ß-catenin), causing the organs less injury from restricted blood supply. She's now collaborating with researchers at the Broad Institute of MIT and Harvard to study MUC1 kidney disease.



Hughey

Freddie Fu (MD '77, Orthopaedic Research Fellow '79, Orthopaedic Surgery Resident '82) is easily one of the most storied orthopaedists in Pitt history, and we don't just mean in our magazine. His double-bundle ACL surgery technique inspired Sandy Havercroft, who attended his workshop in Cape Town, South Africa, back in 2007, to write a song (you can catch this catchy tune on our website—or in Fu's OR). In 2012, Tony Siragusa, a former defensive tackle for the Indianapolis Colts, Baltimore Ravens, and Pitt Panthers, gave Fu a shout-out in his autobiography, *Goose: The Outrageous Life and Times of a Football Guy*. And in more recent news, the Pittsburgh City Council declared September 13, 2016, "Dr. Freddie Fu Day." Fu, Distinguished Service Professor as well as the David Silver Professor and chair of orthopaedic surgery, is celebrating 30 years as the head team physician of Pitt's athletic department. In April, he was inducted into the American Orthopaedic Society for Sports Medicine Hall of Fame for his contributions to the field and his innovations in personalized orthopaedic surgery.

'90s

Lori Birder (Neuropharmacology PhD '92) has long had a hunch that epithelial cells are more than just a protective barrier. The Pitt professor of medicine first started researching them in the bladder wall two decades ago, and her team has since become one of the first to reveal sensory properties of the bladder uroepithelium. She subsequently expanded the scope of the research to include epithelial cells in other parts of the body. "Neuroepithelial interactions between epithelial cells and the underlying tissues can influence every single tissue, every single organ," she says. In regard to the bladder, Birder's team has been researching the effects of aging on incontinence and other lower urinary–tract conditions. She hopes to provide fundamental insights into how cell-to-cell interactions can alter bladder function.

'00s

Suresh S. Ramalingam (Hematology and Oncology Fellow '03), Pitt assistant professor of medicine from 2003 to 2007, remembers his colleagues here fondly: "I was fortunate to be mentored by Dr. Chandra Belani and the late Dr. Merrill Egorin." In February, Ramalingam was named deputy director of Winship Cancer Institute and assistant dean for cancer research at Emory. He also chairs the Thoracic Malignancy Steering Committee within the Eastern Cooperative Oncology Group–American College of Radiology Imaging Network, funded by the National Cancer Institute. Ramalingam has been involved in clinical trials for several newly FDA-approved treatments for lung cancer, including the immune checkpoint inhibitor nivolumab and epidermal growth factor receptor inhibitor osimertinib.

In child neurology, the patient population

is "unique, because they are very fragile and vulnerable. Many times they go years without being diagnosed," says **Hoda Abdel-Hamid** (Child Neurology Resident '05, Neuromuscular/Neurophysiology Fellow '06). Abdel-Hamid is part of a multicenter trial of a genetic-modifier drug for Duchenne muscular dystrophy, recently FDA-approved for a subgroup of these patients. An associate professor of pediatrics at Pitt, she directs the EMG Laboratory and Neuromuscular Program as well as the Muscular Dystrophy Association Clinic at Children's Hospital of Pittsburgh of UPMC.

'10s

After a residency in anatomic pathology in her native Brazil, **Mariana Morais Cajaiba** (Anatomic and Clinical Pathology Resident '10) came to the United States for further training in pediatric pathology and decided to stay. At Pitt, she worked under Trevor Macpherson and Ronald Jaffe researching disorders of sex development and renal medical pathology. Now an assistant professor of pathology at Northwestern University, Cajaiba leads the team that recently discovered the first two known cases of primary renal myoepithelial carcinoma (both in children)—findings that will help the specialty refine diagnoses of pediatric renal tumors. She is also a central pathology reviewer for the National Cancer Institute–supported clinical trials group COG (Children's Oncology Group). "I review over 800 renal tumors in children every year." *—Imaz Athar, Jessica Boddy, Ali Greenholt, Rachel Mennies, and Susan Wiedel*

ROBERT SANDERS

OF SEA AND SPACE



PHOTO COURTESY OF NASA; WILLIAM BRASSARD

Sanders at NASA's Neutral Buoyancy Laboratory

As 100-mile-an-hour winds blasted across the frozen landscape, Robert Sanders (Res '08) waited out the storm with five other researchers. "If our hut failed, we were dead," he recalls of that time in Antarctica. Still, he didn't regret coming. The skilled diver had been tapped by the New York Department of Health just out of college for the mission; and in the waters among icebergs he went on to catalog 12-inch sea spiders, swimming scallops, and creatures known as *Astrammina rara*—single-celled carnivores that secrete a biological superglue.

"That learning was so enjoyable that it helped set me on the path for med school," he says. An avid diver since age 14, he gained expertise that led to adventures galore. An advocate for scuba diving safety and emergency care, he later worked for the films *Cast Away* and *Stuart Little*, for the Los Angeles County Sheriff's Department, and on Catalina Island, a diver's paradise 22 miles off the LA coast. He helped divers avoid potentially fatal illnesses like decompression sickness and air embolism.

Sanders realized becoming a doctor would offer even more scientific adventures and opportunities to ensure diver health, so he went to med school at Rosalind Franklin University in Chicago, then did an emergency medicine residency at Pitt. While in Pittsburgh, he trained river rescue teams.

Today he's in charge of the NASA medical team's Neutral Buoyancy Laboratory in Houston, a 6 million–gallon swimming pool with a mock-up of the International Space Station (ISS) on the floor. Astronauts train there, lowered in by crane while wearing full space gear, to rehearse station repairs and other tasks in this simulated zero-gravity environment.

As medical director and crew health and safety flight surgeon, Sanders oversees the safety crew and operates the hyperbaric chamber. He supervised aspects of training for Scott Kelly prior to the astronaut's groundbreaking year-long mission on the real ISS to study the human body's reaction to long-term space travel.

Though Sanders still dives around the world, frequently taking his daughter to her favorite snorkeling spots in the Caribbean, he's hoping for his biggest plunge yet: Perhaps, one day, a trip to space? *—Liberty Ferda*

MAA SAYS, "BRIGHAM BACK!"



Kang

Just over a year ago, seasoned Pitt orthopod **James Kang** (Res '92) left the Burgh for Boston, accepting the mantle of orthopaedic surgery chair at Brigham and Women's Hospital. This fall, he returned to Pittsburgh for a happy homecoming indeed—as the recipient of the William S. McEllroy Distinguished Resident Award. The reception doubled as the Medical Alumni Association's reunion weekend kickoff event at the Phipps Conservatory.

Kang, who studies osteoarthritis of the spine, is interested in the biomechanics as well as the biochemistry of disc degeneration. An international leader in this area, he has been on the forefront of novel disc-degeneration therapies, including stem cell and gene-transfer interventions.

As the spine surgeon blazed these trails in research and clinical practice at Pitt, he rose from trainee to executive vice chair of clinical services, professor of orthopaedic and neurological surgery, and director of the Ferguson Laboratory for Orthopaedic and Spine Research—experiences that prepared him well for his new role in Beantown, he says: "How a department runs and how it fits with the overall enterprise, what levers to push, how to negotiate." His first year marks an exciting time for Brigham and Women's as the hospital grows aspects of its research portfolio, and he's especially excited about one development in particular: a translational orthopaedics and arthritis research center that opened October 3.

This isn't the first time a Pitt orthopaedist has led a Harvard department. Henry Mankin (MD '53) was chief of orthopaedic surgery at Massachusetts General for decades; and Harry Rubash (MD '79, Fel '81, Res '84) was at the helm from 1998 until his retirement this year. Both were also honored with Pitt's Philip S. Hench Distinguished Alumnus Award. *—Imaz Athar and Elaine Vitone*

MEDICAL ALUMNI ASSOCIATION MAA.PITT.EDU
ON INSTAGRAM AND TWITTER: @PITTMEDALUM

MAURICE S. ALBIN

MARCH 18, 1923–JULY 2, 2016

"A Giant of Neuroanesthesiology has Passed," reads the title of a paper eulogizing Maurice Albin this October in the *Journal of Neurosurgical Anesthesiology*. The author, University of Pennsylvania's W. Andrew Kofke (MD '78), is president of the Society for Neuroscience in Anesthesiology and Critical Care, which Albin helped found 43 years ago. Kofke credits the neuroanesthesiologist for inspiring his choice of specialty in the '70s at Pitt.



Albin

After serving in the U.S. Army during World War II, Albin graduated from New York University, completed his MD at Universidad Nacional Autónoma de México, and went on to a residency in anesthesia at the Mayo Clinic. In the 1960s, Albin and renowned neurosurgeon and ethicist Robert J. White did pioneering work in canine brain transplantation. Albin was also a historian of medicine and war, and he published several papers on the use of anesthesia during the Civil War.

A native of Brooklyn, Albin ended his 60-year career at the University of Alabama at Birmingham, with appointments at Case Western Reserve University, the University of Michigan, the University of Pittsburgh (where he was director of the Spinal Cord Injury Research Center), and the University of Texas at San Antonio before that. In 2005, UAB established the Maurice S. Albin, MD, Endowed Professorship in Anesthesiology.

"He was a model physician-scientist," says his son, Roger L. Albin (MD '82), a neurologist at the University of Michigan.

"An exceptional person in all respects," Maurice Albin was "an unusually warm and generous father" who at one point spoke four languages fluently, Roger Albin says. "He was an excellent example of how to pursue a rewarding life." —*Sarah C. Baldwin*

DONALD A. HENDERSON

SEPT. 7, 1928–AUG. 19, 2016

By the time Donald "D.A." Henderson began to lead the global effort to eradicate smallpox in 1966, the disease had already killed 300–500 million people. The World Health Organization recruited him from his post at what is now the Centers for Disease Control and Prevention to lead the 10-year charge, which would become the first such successful effort in history. As Donald S. Burke—dean of Pitt's Graduate School of Public Health—noted in the jacket copy he wrote for Henderson's 2009 book, *Smallpox: The Death of a Disease*, Henderson's day-to-day tasks in this seemingly impossible effort "were to cajole indifferent health ministers; upgrade woeful vaccine quality control; outflank unsupportive superiors at WHO; bargain vaccination plans with anti-government rebels; snatch funds from other accounts; repair broken-down vehicles. . . . This is the heroic stuff of true public health leadership!"



Henderson

Henderson was a distinguished scholar in the UPMC Center for Health Security, which he helped found and direct at Johns Hopkins University in 1998 as the Center for Civilian Biodefense Strategies before it moved to Pitt in 2005. He was 21st Century Professor of Medicine and Public Health at Pitt, as well as Distinguished Service Professor and dean emeritus at the Johns Hopkins Bloomberg School of Public Health. His work garnered him numerous honors and awards, notably the Presidential Medal of Freedom in 2002, the National Medal of Science in 1986, and the National Academy of Sciences's Public Welfare Medal in 1978.

Tom Inglesby, director of the health security center since 2009, noted that "D.A. . . . always took the time to meet with the rising generation in public health. Just watching him with new students considering careers, mid-career people—he was always generous with his time and spirit." —*Marty Levine*

©2016 University Times. *Reprinted with permission and adaptations.*

SHUNZABURO IWATSUKI

MAY 24, 1940–MAY 14, 2016



Iwatsuki

Shunzaburo "Shun" Iwatsuki was at the University of Colorado when he made the pledge of loyalty that would set the arc of his career. "Wherever you go," he told his mentor, esteemed liver transplant surgeon Thomas E. Starzl, "I come too."

Iwatsuki died in May. A longtime faculty member at the University of Pittsburgh and Pitt's Thomas E. Starzl Transplantation Institute, Iwatsuki authored or coauthored more than 300 papers elucidating the science and surgical techniques behind liver transplantation; 213 were coauthored with the institute's namesake. "If not for Shun," says Starzl, "human liver transplantation likely would have been forestalled for another 50 years, if not permanently. He was also my most valuable ally in establishing the transplantation program in Pittsburgh."

Iwatsuki moved to Pittsburgh in 1981. By that time, Starzl wrote, "One could make the argument that he had undergone the most extensive surgical training of almost any surgeon in the United States." Having already achieved the rank of chief transplant surgeon at Chukyo Hospital in his hometown of Nagoya, Japan, where he had earned his MD in 1965, Iwatsuki spent three years training to pass his boards in the United States.

John Fung, director of the University of Chicago Medicine Transplantation Institute and former head of the transplantation program at Pitt, says, "Shun will be remembered by all who passed through the University of Pittsburgh as the gruff but lovable Jedi master who was a master clinician, a skillful surgeon, and, most of all, a friend." —*Sharon Tregaskis*

IN MEMORIAM

'40s

JAMES R. DORNENBURG
MD '40
SEPT. 24, 2016

EUGENE (CZEMERYS) EMERSON
MD '43
MAY 28, 2016

WILLIAM N. DAVIS
MD '48
NOV. 3, 2015

'50s

MERVIN S. STEWART
MD '53
SEPT. 16, 2016

WILLIAM W. WARING
MD '53
JULY 14, 2016

ROBERT L. EISLER
MD '55, RES '59
JULY 15, 2016

SANFORD M. KLEIN
MD '56
MAY 12, 2016

HOWARD L. HUDSON
MD '57
JULY 15, 2016

'60s

PHILIP P. RIPEPI
MD '60
AUG. 7, 2016

F. DONALD COONEY
MD '63
JUNE 26, 2016

ANTHONY R. HARADIN
MD '63
AUG. 26, 2016

JAMES J. MARKOVICH
MD '63
JULY 6, 2016

DAVID LEE SAWHILL
MD '63
JUNE 19, 2016

ROBERT J. ROMA
MD '66
MAY 5, 2016

ROBERT G. CARROLL
MD '68
AUG. 13, 2016

'70s

ROBERT G. DUNWORTH
MD '76
AUG. 1, 2016

JOHN J. NERNEY
RES '77
JULY 6, 2016

KARL WILLIAMS FORENSICS OF THE OPIOID EPIDEMIC

BY SHARON TREGASKIS



PITTSBURGH POST-GAZETTE © 2016

Williams (right) on the job as Allegheny County medical examiner.

In January 2014, a spate of fatal overdoses in Western Pennsylvania sent 17 bodies to the Allegheny County Medical Examiner Facility, run by **Karl Williams** (MD '74, MPH '03). One clue seemed to link the deaths—small packets of heroin, known as "stamp bags" on the street, branded "Theraflu" by the dealer.



Williams

Within three weeks, Williams and his staff had linked autopsy, toxicology, and crime scene evidence to those designer packets and issued a public health warning urging heroin users to beware of the deadly mix of fentanyl and heroin they contained. "Because I was getting bodies, blood, and stamp bags, I could put together a running tally and make it public knowledge—not only what was killing people, but also what stamp bags it was in," says Williams, who credits members of his toxicology and drug chemistry teams for their roles in the case.

Williams also credits a unique feature of the Medical Examiner Facility, the first accredited crime lab in Pennsylvania, which he has overseen since it opened in 2009. In most parts of the United States, crime scene evidence, bodies, and fluid samples from a single case each take a distinct path through the chain of custody, with medical examiners, police, and distant toxicology labs each operating in isolation. It can take weeks or even months for the resulting reports to make their way back through the investigative food chain.

Not so in Allegheny County, where the $26.8 million Medical Examiner Facility—an 80,000-square-foot building in Pittsburgh's Strip District—puts pathologists, toxicologists, ballistics experts, and other scientists under the same roof. Under Williams's leadership, the team investigates well over 1,000 deaths annually, including those of anyone who dies accidentally, suddenly, unexpectedly, or outside of a doctor's care. In 2015, 451 people died due to natural causes in the county; there were also 116 homicides and 179 suicides.

But nothing compares to the accidental overdoses (attributable to 424 deaths last year), the vast majority of which feature opioids—heroin, fentanyl, and their ilk (see our feature story on p. 24). Unlike motor-vehicle accident fatalities, which have plummeted in the past two decades because of improved vehicle engineering and seat belt use, fatal overdoses have climbed precipitously. In Pennsylvania, drug-overdose deaths have increased 14-fold in the last 35 years. "The number of opioid overdose deaths nationwide is getting very close to the total number of Americans killed as a result of the Vietnam War," says Williams. "That's a mind-boggling statistic."

To help public health officials wrap their heads around those numbers—and optimize interventions—Williams has dedicated himself to making data on overdose deaths in Pennsylvania freely available. He takes pride in OverdoseFreePA.pitt.edu, an online collaboration of Pitt's School of Pharmacy with a half-dozen nonprofit organizations and 16 communities.

"It's my belief that that information is essential to trying to deal with the problems," says Williams, who also serves on the Allegheny County Overdose Prevention Coalition's executive committee. "The people at the ground level—working on resources for education, treatment, and prevention—they need an idea of the numbers involved."

Drug trends differ by county, says Williams, pulling up the OverdoseFreePA website and clicking on the data tab. "You can see gender, age, top 10 drugs, even [view the data] by zip code where [overdoses] are happening," he says. "It's different in each county in terms of age, sex, distribution." Allegheny and neighboring Westmoreland Counties currently make their data available through the site. Over time, Williams hopes to recruit other counties. It's an uphill climb, he notes, because most coroners in Pennsylvania are funeral directors without medical degrees and have very limited resources for toxicology analyses.

"This is the single-most important public health issue of my career," says Williams, "and I have the ability to generate a really unique data set." ■

'80s

SAMUEL J. BLACK II
RES '80
JULY 6, 2016

CHRISTOPHER J. LYNCH
FEL '80
JUNE 10, 2016

'90s

STEPHEN D. MULLINS
RES '99
SEPT. 16, 2016