Sekhar says, “so that in the operating room, they’re surgeons to learn the operations first on cadavers, starting in lab at UW. Sekhar first helped develop a similar lab at Pitt and later recreated one at UW. These labs allow students in a cadaver-based training lab at UW. Sekhar first helped develop a similar lab at Pitt and later recreated one at UW. These labs allow surgeons to learn the operations first on cadavers, Sekhar says, “so that in the operating room, they’re well prepared.”

Karna Murthy (MD ‘98), associate professor of pediatrics at Northwestern University, spent a lot of time on the phone in 2006. He called hospitals around the country to help pitch the Children’s Hospitals Neonatal Consortium, an online database for physicians to share information on complex and rare conditions that newborns face. Early on, Murthy called Beverly Brozanski (MD ‘82), professor of pediatrics at Pitt Med and medical director of the NICU at Children’s Hospital of Pittsburgh of UPMC, who signed up. She says the consortium, of which she’s a board member and an executive group member, has since brought “a collaborative spirit and forum” to neonatal intensive care nationwide. Thirty-four hospitals now share their NICU data with the consortium, aggregating information on more than 20,000 babies per year. Murthy serves as vice chair of the consortium.

Brian Keith McNeil (MD ‘01) made TV appearances with NFL Hall of Fame cornerback Michael Haynes in September, prostate awareness month, as part of a Urology Care Foundation campaign called Know Your Stats. McNeil, who is the urology vice chair and residency program director at SUNY Downstate Medical Center, discussed men’s health with Haynes as part of his role as a 2017–18 fellow ambassador with the New York Academy of Medicine. (Fellow ambassadors provide expertise to the media to help improve urban health.) He says it feels good to be in a position to keep men healthy. When McNeil was a teenager in West Philadelphia, his father died from prostate cancer.

Michael Lynch (MD ‘04, Emergency Medicine Resident ’07, Medical Toxicology Fellow ’09) became the Pittsburgh Poison Center’s medical director in 2013. Back then, for the most part, callers needed treatment for ingestion of household toxins. Then calls about opioid overdoses flooded in. Last year, Lynch’s team rolled out a “warm handoff” program. It’s the first poison center in the country to tackle the opioid epidemic in this way, he says. Instead of merely referring callers elsewhere, the team extends a “warm hand” by assessing callers for addiction, connecting them directly to treatment options, and making follow-up calls. “I can’t think of anything more poisonous” than opioids, says Lynch, assistant professor of emergency medicine at Pitt. He has been asked to join the U.S. Department of Health and Human Services Pain Management Inter-Agency Task Force.

The core problem underlying mental illness is communication—not between people, but between areas of the brain—says Alik Widge (MD ’08), assistant professor of psychiatry at Harvard. “Different parts of the brain have intrinsic rhythms,” he explains. When those rhythms get out of sync, people develop conditions like PTSD or OCD. Widge combined his Pitt MD with a robotics PhD from CMU and is now designing an electronic device that fits into the brain to bridge communication gaps. It listens to which areas of the brain are out of sync, then “works with” the brain’s inherent plasticity. Widge says the device isn’t a permanent crutch. After enough therapy, it could be removed. “Our goal is to give people back some control over their own mind.”

Antonia Chen (Orthopaedic Resident ’13) was one of only three physicians to make 2016’s “40 under 40” list for the Philadelphia Business Journal. Chen specializes in hip and knee replacement—“I help grandma and grandpa walk again,” she says. She has also been researching periprosthetic joint infection and working with medical students as an assistant professor at Thomas Jefferson University. She’s now moving to Boston to join Brigham and Women’s Hospital as their director of arthroplasty research and an attending orthopaedic surgeon with an appointment at Harvard Medical School.

When Tom Miller (MD ’14) got lost on a hike in New Zealand back in 2004, his travel mishap turned out to be fortunate after all. “To entertain myself, I imagined several of the characters that ended up in the novel,” he says of his book published in February 2018, The Philosopher’s Flight (Simon & Schuster). It’s a fantastical tale set in World War I-era America about a young man breaking into the woman-dominated field of
For parents of babies who go home with feeding tubes, ventilators, and other artifacts of a stay in the NICU, leaving the hospital can be a daunting prospect. At the Johns Hopkins All Children’s Hospital Simulation Center in St. Petersburg, Fla., newly appointed medical director Jennifer Arnold (Res ’03, Fel ’07) leads a team that helps parents of medically complex infants practice for life at home.

The immersive scenarios Arnold oversees feature computerized mannequins and a mix of auditory, visual, and olfactory cues—known as “moulage” in the business—that get participants’ hearts pounding over what to do when, say, the baby has an airway emergency. “We don’t want them so stressed that they can’t learn,” says Arnold, “but we want them stressed enough that their attention is focused.” During a debrief, participants reflect and identify what they’ll do differently in real life. The simulation center provides classes not only for parents, but also for hospital staff (on neonatal intubation and other procedures).

Arnold first encountered simulation during her fellowship at Pitt. “This,” she thought, “is the best way to educate people.” To test that theory, she ran a randomized, controlled trial on neonatal intubation. In their first encounters with real babies in respiratory distress, residents she trained at Pitt’s simulation center had far superior performance to those in the conventional curriculum.

As the star of her own long-running reality show, the 3-foot-2 blonde is no stranger to stagecraft. When Pitt Med last spoke with Arnold in 2011, she and her husband, Bill, were beginning their fifth season as stars of The Little Couple. Since then, the show has followed them as they’ve adopted children, Will and Zoey. Everyone in the family has spondyloepiphyseal dysplasia, a genetic mutation that can lead to dwarfism.

In this season of the show, the Arnolds consider whether to move the family from Houston (where Arnold headed the simulation center at Texas Children’s Hospital for nine years) to St. Petersburg for the doc’s current role. When Arnold goes to Glasgow to give a keynote talk at a pediatric simulation conference, the whole family tags along to take in castles and haggis!

—Sharon Tregaskis
During a summer course in 2005, Bernard Klionsky showed his class of med students a slide that looked like a red, yellow, and brown blot. Klionsky, then a semiretired 80-year-old former vice chair of pathology at Pitt, asked the class to identify what they saw.

When a student suggested correctly that the image was a thrombus, Klionsky pushed her to be more accurate. “Give me a description a blind man could understand,” he said.

Klionsky, who died in November at 92, wanted the student to identify the image as a heart attack. He was fond of saying, “To most students, ‘heart attack’ is just a word. And it’s not enough just to know the word.”

To become effective doctors, Klionsky believed, students need to be able not just to diagnose a medical condition, but also recognize where each particular patient falls along the spectrum of a disease’s possible outcomes. Ultimately, though, this lesson—like all of Klionsky’s—was really about how to approach problems. He showed students how to become, as he put it, “highly trained problem solvers.”

Klionsky, a World War II veteran from Binghamton, N.Y., encouraged his four children to be problem solvers, as well, his son Daniel Klionsky recalls. Although the pathologist disliked sports, he’d take Daniel to Pirates games, where they’d calculate how a hit would affect a player’s average.

Klionsky’s own career as a Pitt pathology professor included numerous hits. Early on, he invented the open-top cryostat for collecting samples in the O.R., forever changing surgical pathology. He identified the structure of Fabry disease. He figured out how to end an epidemic of yellow hyaline membrane disease and low bilirubin kernicterus, once a major cause of death among premature infants. Klionsky was a driving force behind the medical center’s central laboratories and the Central Blood Bank. He served as director of laboratories at Magee-Womens Hospital of UPMC for 27 years.

The pathologist endowed a summer research fund for medical and undergraduate students. George Michalopoulos, MD/PhD, Maud L. Menten Professor of Pathology and department chair, says Klionsky was a mentor who will be missed. “He was universally respected,” Michalopoulos says. “He was successful at everything that he tried.”

—Gavin Jenkins, with reporting from a 2006 Pitt Med story by Hattie Fletcher

ROLF LOEBER
JUNE 5, 1942–NOV. 6, 2017

Rolf Loeb, who gained international renown for his research on delinquency in youth, died Nov. 6. He was a Pitt Distinguished Professor of Psychiatry who also held appointments in psychology and epidemiology.

Through the Life History Studies Program, cofounded and codirected with his research partner and wife of 50 years, Magda Stouthamer-Loeber, he created three longitudinal studies. Beginning in 1987, the Pittsburgh Youth Study followed 1,500 boys to chart antisocial behavior through early adulthood, determining its risk factors and its effect on their lives. The Developmental Trends Study, begun in 1989, looked at similar factors among boys requiring clinical treatment. The ongoing Pittsburgh Girls Study has been examining 2,400 girls’ experiences of delinquency, depression, and substance use since 1999.

“Rolf was clearly a pacesetter internationally in the origin of several extremely important large longitudinal studies of development,” says psychiatry department chair David Lewis, who collaborated with Loeb on a study of cannabis use in adolescents. Lewis notes that Loeb’s findings will continue to inform public policy, while the many investigators he trained will move the field in new directions.

Born in the Netherlands, Loeb earned a PhD in clinical psychology at Queen’s University in Ontario and joined the Pitt faculty in 1984. He was also a professor of juvenile delinquency and social development at the Free University of Amsterdam, Netherlands. He and Magda were intensely interested in the history of Ireland and its arts; together, they produced A Guide to Irish Fiction, 1650–1900.

Loeb also published a biographical dictionary of 17th-century Irish architects.

When the couple was interviewed by Pitt Med magazine in 2007, he reflected on their research. “Our mission,” he said, “is to try and figure out the causes of violence in a community and the parameters through which we could actually bring about change.” —Marty Levine

©2017 University Times. Reprinted with permission and adaptations
Waiting for “the one” may not be the best strategy when it comes to kidneys. Ron Shapiro (Fel ’88) coauthored a 2016 New England Journal of Medicine article that marks a significant step forward in improving immunosuppression.

The NEJM authors reported on the outcomes of transplants for patients who underwent desensitization, a process that removes antibodies that contribute to organ rejection. Those who were desensitized before receiving kidney transplants from live donors who were deemed incompatible were more likely to survive (by 13.6 percent) than patients who remained on the transplant waiting list or received a kidney from a deceased donor. They were also more likely to survive (by 32.6 percent) than those who stayed on the waiting list and did not receive a kidney from a deceased donor.

In the United States about 100,000 people are on the waiting list for a kidney, yet only about 17,000 compatible kidneys are transplanted each year (of which only about 5,500 are from living donors).

Two leading nephrologists from Grenoble called these findings “revolutionary.” Shapiro is a bit more circumspect. The results are promising, sure, he notes, “compared to sitting on the waiting list, because [those patients] have a 5 to 6 percent mortality rate annually. More patients die waiting for a kidney than those who are waiting for a heart, lung, and liver combined.”

Yet at the end of the day, says Shapiro, “transplantation is a drop in the bucket.” Some 660,000 people in the United States have end-stage renal disease, and more than 400,000 of them are on dialysis. “Their mortality at five years on dialysis if they’re not referred is 70 percent, which is worse than most cancers,” says Shapiro.

He’s more optimistic about potential advances, such as growing organs in test tubes. Better yet, he says, would be preventing end-stage renal disease in the first place.

Shapiro has delivered more than 600 lectures and grand rounds. More than 400 articles, 70 book chapters, and four textbooks bear his name. Much of his focus has been on immunosuppression protocols. And he’s transplanted, by his estimation, between 1,600 and 1,700 kidneys. Shapiro’s assessment of his career trajectory? “It all kind of worked out.”

Richard Simmons, chair emeritus of Pitt’s Department of Surgery and a kidney transplantation specialist himself, hired Shapiro almost 30 years ago. He’ll tell you, “Dr. Shapiro is the epitome of . . . calm, cool, competent, and kind.”

Shapiro notes that he trained with “the greats,” including the late Thomas E. Starzl and Robert Corry, a trailblazer in pancreas transplantation, whose endowed chair Shapiro occupied at Pitt from 2007 until 2014. Earlier, Shapiro did a stint as a research fellow with Richard Lower, who in the 1960s, ’70s, and ’80s paved the way for heart transplantation at the Medical College of Virginia.

In July 2014—the day he turned 60, in fact—Shapiro accepted an offer to become surgical director of Kidney and Pancreas Transplantation at Mount Sinai’s Recanati/Miller Transplantation Institute. Three decades in the Steel City notwithstanding, it was a homecoming of sorts: Shapiro did his surgical residency at Mount Sinai in the mid-’80s. In addition to overseeing more than 200 adult and pediatric kidney transplants a year, he continues to transplant “a fair number” of kidneys himself, “as well as the odd pancreas.”

After Starzl’s death last March, Shapiro wrote an article in Clinical Transplantation, of which he is editor in chief, praising his mentor’s contributions to the field and adding that “everything that he did was focused on improving the welfare of his patients.”

The student of greats learned well. According to Richard Simmons, Shapiro is “a perfect product of the Starzl genius in training.”