IN MEMORIAM

SHERILYN GORDON-BURROUGHS
AUG. 23, 1968–MARCH 19, 2017

Sherilyn Gordon-Burroughs (Fel ’95) was fresh out of her residency at Howard University when she landed a research fellowship at Pitt. “It was her tenacity, determination, and curiosity that struck me,” says Henri Ford, former surgeon-in-chief at Children’s Hospital of Pittsburgh of UPMC, who supervised her and remained in close contact throughout her career. “I tried to convince her to pursue pediatric surgery, but transplant medicine really captured her.”

Gordon-Burroughs became a nationally recognized liver transplant specialist, associate professor of surgery at Houston Methodist Hospital, and director of the hospital’s general surgery residency program. She was also the hospital’s designated institutional official, overseeing all 40 of its residency programs, and served as assistant dean for graduate medical education at Texas A&M. She died in March, the apparent victim of a murder-suicide. She was 48.

Gordon-Burroughs was a role model in a field where women are rare and women of color are rarer still, a colleague told the Houston Chronicle. “She was beloved because she was approachable and kind and thoughtful, someone who was always willing to take time out of her busy schedule to help students,” said Patricia Turner, director of member services for the American College of Surgeons and a surgical residency classmate of Gordon-Burroughs’s.

Ford, now vice dean of medical education at the University of Southern California, urged many of his own students to continue their training with Gordon-Burroughs. “I was very impressed with the quality of the surgical residents that she had recruited,” says Ford, who was a visiting professor at Houston Methodist in 2016. “It was a great source of pride to see the second research fellow who ever worked in my lab ascend and be on the trajectory to achieve even more recognition as a leader in the field.

“Her loss is particularly tragic,” he adds. “I lost a friend, and we’ve lost a rising star in the society of black surgeons and academic surgeons in general.”

A fund has been established to support Gordon-Burroughs’s preschool-age daughter and her guardians. Visit bit.ly/sgb2017 for details. —Sharon Tregaskis

HERBERT L. NEEDLEMAN
DEC. 13, 1927–JULY 18, 2017

In the early 1960s, Herbert Needleman was a self-proclaimed “cocky” resident at Children’s Hospital of Philadelphia, and a young girl, we’ll call her Vanessa, was admitted to his ward with severe lead poisoning. She had eaten the lead-based paint peeling from her inner-city home, and her story was all too common. Her brain had swollen to a point where she was dangerously near death. She didn’t cry, didn’t smile, just lay there, comatose. Needleman treated her with the only drug available to counter lead poisoning. Soon, she woke up crying, and Needleman breathed a small sigh of relief. Within a few days, she smiled the sweetest smile Needleman could remember. He felt proud, even smug. When he knew the girl was going to make it, he turned to her mother and calmly told her she had to move from her home.

“If Vanessa eats more paint,” he said, “there’s no question she’ll be brain damaged.” Her mother shot Needleman an angry look and snapped, “Where can I go? Any house I can afford will be no different from the house I live in now.”

Needleman’s smugness vanished. “I realized,” he said, “that it wasn’t enough to make a diagnosis and prescribe medication. I’d treated her for lead poisoning, but that was not the disease—the disease was much bigger and...
caused by forces embedded in the child’s life. Her disease was where she lived and why she was allowed to live there.”

In those days, the Centers for Disease Control and Prevention had determined that children with 60 micrograms of lead or more per 100 milliliters of blood met the definition of having been lead poisoned. Back then, 20 percent of inner-city children had blood lead levels of 40 to 50 micrograms per 100 milliliters, and that was considered normal. This made no sense to Needleman. Listen, he said, if we know for a fact that high-dose lead poisoning causes obvious problems—like coma, intellectual disability, and death—why should we assume that lower levels cause no injury to a child’s brain? He asked this question repeatedly for about five decades. Almost every time he did, he designed a study to examine it from a new angle.

Today, the CDC advises that “no safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. And effects of lead exposure cannot be corrected.”

Needleman’s life’s work demonstrated that environmental lead exposure—even at low doses—is linked to cognitive deficits and behavior issues. The pediatrician and emeritus professor of psychiatry at the University of Pittsburgh died July 18 in Pittsburgh at the age of 89.

He joined Pitt in 1981 after leaving Harvard University. Two years earlier, in 1979, he’d published a landmark study in the New England Journal of Medicine showing that Boston-area children with higher accumulations of lead also had, on average, five or six fewer IQ points than those with lower lead accumulations who were of the same neighborhood, ethnic background, and economic status.

“That study really changed the whole way the world thinks about lead poisoning,” Philip Landrigan of Mount Sinai, a long-time lead researcher who worked alongside Needleman, told Pitt Med in 2001.

“He really made the world consider the possibility that subclinical exposure to environmental pollutants could have a serious societal impact,” said David Bellinger of Harvard. Bellinger and Needleman were also collaborators.

In 1996, Needleman conducted the first in-depth study on lead and delinquency. He measured bone lead levels in children and collected reports of aggression and delinquent behavior from the subjects, their parents, and their teachers. The results of this study showed an association between lead and delinquency.

The lead industry and experts paid questioned his work. Yet he continued to fight for the health of children. (His determination did not surprise people who knew him well. He was jailed in 1967, with pediatrician Benjamin Spock, for protesting the Vietnam War.)

For 40 years, through governmental committees, editorial boards, and other means, Needleman helped make the case against leaded gasoline. Needleman also pushed for lead to be removed from paint and for re-mediation of houses where lead paint was used.

“The thing about lead toxicity is it’s completely preventable,” he said.

—Compiled from Rebecca Skloot’s Summer 2000 Pitt Med feature “Houses of Butterflies” and Pitt’s obituary.

**JULIUS YOUNGNER OCT. 24, 1920—APRIL 27, 2017**


Youngner was being interviewed for a Summer 2000 Pitt Med article about his work that led to type A and equine influenza vaccines and yielded more than 15 patents. Although the world-renowned virologist was impassioned about stopping pandemics, he was also soft-spoken about his own contributions to doing so. When asked about his invention of trypsinization, a technique for culturing animal cells on a large scale—which made the killed-virus polio vaccine possible and ultimately changed the face of tissue culture investigation—he responded with characteristic humility: “Well, it was just a technical advance.”

Youngner, Pitt’s Distinguished Service Professor Emeritus of Microbiology and Molecular Genetics, died in April at age 96. During his 60-year career, he witnessed the birth and growth of the field of virology and always seemed to be on the edge of the “next big thing.”

After earning his doctorate in microbiology from the University of Michigan in 1944, Youngner was drafted into the army and selected to work on the Manhattan Project studying the effects of uranium salts on human tissue. He then worked at the National Cancer Institute until 1949, when he was recruited to Pitt to join Jonas Salk in the quest for an effective polio vaccine.

Youngner not only developed trypsinization for producing polio on a large scale; he also figured out how to inactivate the virus for the vaccine that was deemed a success in 1955.

The virologist went on to chair Pitt’s microbiology department from 1966–1989. He became the first to demonstrate that non-viral agents could trigger interferon induction, which led to the idea that interferon could have important functions beyond its use as an antiviral. Interferon is now used in a variety of cancer therapies. His work on persistent viral infections made vaccines for type A and equine influenza possible.

Countless lives have been saved by Youngner’s work.

—Adapted by Cara Masset from Rebecca Skloot’s Summer 2000 Pitt Med feature, “To Stop Death in Its Tracks.”