

## Charting Her Own Course

HANNAH CONNOLLY WANTS TO IMPACT HEALTH INEQUITIES BY CHANGING THE WAY MEDICAL STUDENTS LEARN.

The road to becoming a physician is long, and one that most students seek to expedite rather than expand on. But Hannah Connolly '24 has never let the lack of an established path stop her. When she graduates from Upstate Medical University next spring, she will be the first MD/PhD student to earn a joint degree in social science in collaboration with Syracuse University, having also earned an MPH along the way.

"Every time that I've had a passion, there's been somebody at Upstate who has been willing to help me manifest it," she says. "Even though it's been difficult, and I've had to do a lot of legwork, it's only happened because people were willing to support me. It's been such a gift."

From an early age, Connolly became interested in social disparity, particularly related to health care. She says some of that was instilled by her upbringing.

Connolly grew up in Watertown, New York, spending her summers on Grindstone Island, part of the nearby Thousand Islands, where her grandparents were born and her mother had grown up.

"The island is only accessible by boat," says Connolly. "People had to share resources—firewood, gasoline—and it gave me a perspective on community and how we can do better as a society by working together. I thought I could carry that over to health care."

As an undergraduate at Hobart and William Smith College, Connolly played women's lacrosse and double majored in biology and health disparities, a major she created. She applied to Upstate through the RMed Program, with the goal to understand healthcare delivery in a smaller, rural community. "I was very interested in improving care to resource-poor areas," she says.

As a first-year medical student,



Hannah Connolly's experiences in Kenya informed her decision to earn both an MPH and PhD in addition to an MD.

Connolly began reaching out to researchers working in the area of global mental health, inquiring if anyone needed assistance. Through a project being conducted out of the University of California–San Francisco, she spent the summer after her first year of medical school in Kisumu, Kenya, assisting on a maternal and child mortality project.

The project compared the infant/maternal mortality medical records with social histories to try to pinpoint social determinants of health. Connolly worked with community health workers who interviewed people who had lost a baby or family member during pregnancy about the circumstances. "I would compare that with what the medical record said," explains Connolly. "The medical record might say the woman died of sepsis, but through the interview, we'd learn

the woman tried to get to a hospital but couldn't afford the fees to get in. It was a transformative experience."

Upon her return, Connolly sought out Upstate's Office of Global Health and met with Andrea Shaw, MD '09, assistant professor of internal medicine and pediatrics, to find out how she might be able to continue similar work. As fate would have it, Dr. Shaw was in the process of trying to build an educational exchange program for medical students and residents in Kisumu. Connolly began discussions with Shaw to figure out how she could return to have a more in-depth experience.

In the meantime, she spent her third year in Clifton Springs, New York, through the RMed Program. "It was close to where I had gone to college, so I was able to volunteer as an assistant coach for

the William Smith lacrosse team,” she says. “I’m all about community and connections.”

Instead of going into her fourth-year, Connolly took a leave from medical school to return to Kisumu, where she would pilot a distance-learning MPH. During the day, she served as Upstate’s student researcher on the ground to develop a project to train community health workers to identify depression and anxiety in their communities to refer them to the proper resources, especially useful in rural areas.

“Kenyans with mental health issues have few resources to turn to for help,” says Connolly. “There is one psychiatrist per three to five million people in Kenya, outside Nairobi. Many in Kenya do not have a medical understanding of mental illness and those afflicted are often out-cast from their communities.”

Late at night, Connolly would log into Zoom where she joined MPH students on the Upstate campus in real time for classes. “Basically, my face was on a big projector in the front of the room, which was very embarrassing,” she says.

Connolly arrived in Kenya July 2019. She left in early March 2020, to return by the COVID-19 pandemic. Back in Syracuse, she picked up where she’d left off, finishing up fourth-year electives.

With things quieter than usual due to the pandemic shutdown, Connolly says she had more time for reflection. She realized that rather than fulfilling her desire to work with resource-poor communities, earning her MPH and conducting global research only made her want to do more at a higher level. “I craved more theory and methods to drive the types of projects to address the social suffering that I witnessed at home and abroad. To me, that required a PhD.”



Upstate students and faculty in Kenya. Connolly is second from right.

Exploring her options, Connolly discovered that Syracuse University has a unique interdisciplinary doctoral program in social science, combining sociology, anthropology, education and other disciplines that seemed like a perfect fit. She met with administrators at Syracuse and Upstate and was able to enroll through Upstate’s MD/PhD program.

“I jumped ship again,” she laughs.

Connolly’s doctoral research explores how the integration of social sciences in medical education shapes the thinking of medical students around social justice issues. After two years of interdisciplinary coursework connecting social science principles to health equity in medical education, she spent last year conducting a year-long ethnography to study how third-year medical students take up health equity curricula and integrate it into their developing clinical purview.

Connolly spent the year shadowing a cohort of 10 third-year medical students through their rotations to observe how they are being trained to think about social determinants of health. “I went to rounds with them, to surgeries, outpatient clinics, and lectures, and I conducted interviews and focus groups to assess

how these developing physicians perceive their role in social justice,” she says.

“There’s so much evidence that what we do in medical school shapes the type of doctors we’ll become,” says Connolly, the only student appointed to the Dean’s Curriculum Revision Executive Committee at the Norton College of Medicine. “With curriculum work, I got to apply my research in real time about how these students are learning as we designed and developed curriculum to match Upstate’s aims.”

This fall, Connolly is simultaneously writing her dissertation while applying to psychiatry residency programs. She will graduate in May 2024 with a joint MD/PhD/MPH, the first of its kind and the first Upstate MD/PhD in social science. She has been elected to both the Alpha Omega Alpha and Gold Humanism honor societies.

Meanwhile, in Kisumu, Kenya, the mental health outreach program that Connolly laid the groundwork for during her MPH studies is finally getting rolled out, having been stalled by the pandemic. “Fortunately, it was meaningful enough to be sustainable,” she says.

Connolly hopes to specialize in child psychiatry and remain grounded in medical education research and implementation, contributing to training the growing cadre of medical professionals committed to health justice. She aspires to a career in academic medicine leadership so that she can impact future generations of physicians. “If we can push students towards thinking critically about social determinants of health and broader social structures, I believe we can train a cohort of future physicians that are more attuned to addressing social justice issues,” she says.