Kalen Hall, who will graduate with a PhD in biomedical sciences from the School of Medicine, co-founded the company Informuta during her second year of grad school. (Photo by Nick Pierre)
Kalen Hall always dreamed of becoming a tenure-track professor. But she could not have pictured the path her academic career would take when she decided to pursue a PhD in biomedical sciences at the Tulane School of Medicine.

Hall grew up near Cocoa Beach, Florida, and went to the University of Florida (UF) for her undergraduate studies, where she majored in biochemistry and anthropology. She knew she wanted to pursue further studies, but took a gap year, working as a research technician in a lab at UF. She debated between pursuing her studies at Tulane or remaining at UF, but ultimately, she said she fell in love with Tulane and New Orleans.

“I loved meeting the faculty and the culture I experienced here,” she said. “It was a big change coming from a large public institution. Here I got the feeling it was a tight-knit and collaborative community.” That feeling was a major deciding factor.

During the summer of 2020, she did a rotation in associate professor Zachary Pursell’s laboratory in the Department of Biochemistry and Molecular Biology. As she was deciding the area of focus for her dissertation, she knew she wanted to look at infectious diseases from a global health perspective. She wrote a long proposal asking both Pursell and professor Lisa Morici with the Department of Microbiology and Immunology to co-mentor her. The project focused on how certain types of bacteria take advantage of losing activity in the DNA repair system, allowing them to mutate and increasing the chance of them becoming drug-resistant.

In her second year as a graduate student, she published a paper on the topic. In the spring of 2023, she formed a company called Informuta along with Leo Williams, a graduate of the Tulane BioInnovation PhD program.

“The company builds off what I did in my PhD work,” she said. “We look at the DNA of bacteria to tell clinicians which drugs would or wouldn’t work. We would also be able to tell clinicians if an infection will become resistant to drugs in the future.”

Informuta has secured more than $470,000 in startup funds, Hall said. Hall and Williams were also the first recipients of the Provost’s Proof of Concept Fund, receiving a $50,000 award.

Hall was also a mentee in the Tulane University Innovation Institute (TUII) Startup Team Mentoring Program and a pitcher in the Equalize pitching program for women
academic entrepreneurs. She named a long list of faculty mentors and supporters, including Morici and Pursell, who have helped her on her path at Tulane, such as Kimberly Gramm, the David and Marion Mussafer Chief Innovation & Entrepreneurship Officer for TUII, and Clay Christian, the executive director of commercialization at TUII.

Hall will be leading Informuta as CEO after graduation. It’s a path she hadn’t envisioned for herself at 18, but makes perfect sense a decade later, she said.

“Having a dynamic and challenging job is very important to me, where I am able to drive research, run my own lab and have the creative freedom to operate,” she said. “So, founding a startup makes sense to me.”