



Office of Graduate Studies Prepares Students for National Success

Two Ph.D. students from the University of Miami Miller School of Medicine have been selected for research internships with Eli Lilly and Company, one of the world's leading pharmaceutical companies. Their selection shows not only how nationally competitive the Miller School's graduate students are, but also how the Office of Graduate Studies provides pathway opportunities for careers outside of academia.



Danielle Antoine and Sana Chaudhry

Eli Lilly's internship program provides graduate students the unique opportunity to work in the organization's Drug Discovery and Development program. Representing the Miller School will be Danielle Antoine, a Ph.D. candidate in neuroscience, and Sana Chaudhry, a Ph.D. candidate in cancer biology. Both students will work on projects while building a



more comprehensive understanding of the pharmaceutical industry and the role Eli Lilly scientists play in delivering innovative medicines to patients.

"The selection of Dani and Sana shows that UM has a diverse and uniquely skilled student body," said Ana Fiallos, Ph.D., director of career services for graduate studies. "In these two students, Eli Lilly identified fantastic representatives who demonstrate that you can be highly accomplished in the lab while developing your skill set in the real world."

Pharmaceutical Expectations in Biology and Hematology

Chaudhry, who will participate in the program from May to August 2023, specializes in cancer biology under the mentorship of Justin Taylor, M.D., assistant professor of medicine in the Division of Hematology. Chaudhry's research focuses on understanding nuclear export in myelodysplastic syndrome and using that knowledge to expand on the limited treatment options currently available. After earning her Ph.D., she plans to enter the pharmaceutical industry to focus on drug discovery and development, offering new therapeutic options to cancer patients.



Sana Chaudhry adding final reagent to a plate to test for drug effectiveness in leukemia cells.

"I see myself working in a company where I can impact patients by being on the frontline of drug development," Chaudhry said. "This internship will help me develop useful skills while expanding my network with other top scientists in the field. I am extremely grateful to have a mentor that supports my goals and pushes me to apply for opportunities like these."

Antoine will take part in the program shortly after, from August to December 2023. At the Miller School, under the mentorship of Sabita Roy, Ph.D., professor and vice chair for research and division director in the DeWitt Daughtry Family Department of Surgery, Antoine's research focuses on opioid analgesics and understanding the long-term side effects of neonatal morphine and ways to mediate those effects. Through



the internship, Antoine would like to work on a project that includes bioassay development, biological testing of compounds, and drug product design and performance.



Danielle Antoine transferring the plasma of blood samples from the collection tubes unto new tubes to perform a bioassay.

"I think that my values and interests aligning with those of the company played a significant role in me being a part of Eli Lilly," Antoine said. "I hope to gain expertise regarding the drug development process while looking forward to the personal and professional connections that I will be able to develop."



Facilitating Scientific Careers for Graduate Students

Just like with Antoine and Chaudhry, part of the Office of Graduate Studies' goal is to facilitate career opportunities for its students. These positions are selective, with only 10% of doctoral recipients having a tenure-track job five years after graduation. In addition, most Ph.D. programs offer training that focuses primarily on creating academic scientists and largely ignores training to prepare students for other careers.

"The Miller School is on track to facilitate its graduate students with various career pathways by providing new services to address the broadest possible range of needs for our student population," Dr. Fiallos said. "These programs will give Miller School doctoral recipients a competitive advantage in transitioning into careers within or outside of the research ecosystem."

On the professional development level, the Office of Graduate Studies will introduce seminars to stress the importance of social media and professional branding while providing personal consultations on CV/resume writing. At the level of career exploration, the office provides career panels, seminars from successful alumni, and site visits from potential employers such as Eli Lilly. It has even developed a formalized internship program, launching in 2023, that will enable students to gain in-depth, hands-on experience in a career of their choosing outside of academic research.

"This internship is a great opportunity in which I would like to thank my mentor, Dr. Roy, for her mentorship and guidance,"



Antoine added. "I also want to thank the Office of Graduate Studies, particularly Dr. Fiallos, for helping throughout this process. The various professional events such as the recruiting events, alumni QAs, and CV and resume workshops helped a lot and are very important to graduate students' success."

Content Type Article