

## Introduction

As a PhD student in Pharmaceutical Sciences at UMKC, I had the chance to spend a month at the University of the Western Cape in Cape Town, South Africa from April 17th to May 16th. This was my first time leaving the United States, and I went with three main goals: work with Dr. Samuel Egieyeh on research, see how science is done in a different country, and experience South African culture firsthand.

## Research

The research side of things exceeded all my expectations. Working directly with Dr. Samuel Egieyeh and his team on a cancer drug prediction project was incredible. We made real progress, and I'm excited that we're planning to continue this collaboration once I'm back in Kansas City. There's something energizing about working with researchers who bring completely different perspectives to the same problems. We made measurable progress on the data preprocessing and initial model training. The collaboration has continued remotely once I returned to Kansas City.

I also got to sit in on meetings with the Alzheimer's drug discovery working group. Watching their student presentations and discussions gave me insight into research directions I hadn't considered before. It was fascinating to see how they approached problems with different resources and constraints than what I'm used to at UMKC.

One of the best parts was reconnecting with Dr. Keanu Pearce, who came to my lab at UMKC as part of the Henry Mitchell Exchange Program and is now a junior lecturer at UWC. He showed me around the anatomy lab and shared his perspective on the research environment there. It was cool to see how his experience in both places shaped his approach to science.

The bioinformatics department really impressed me. They are working on developing standardized pipelines for use across African laboratories - a practical approach to improving research consistency across the continent. One professor there is researching therapeutic applications of venom peptides. After learning about her work, I introduced her to Dr. Randall from UMKC's biology department since their research interests overlap.

But the most impactful experience was shadowing Dr. Nicole Keuler, a clinical pharmacist who visited my lab in UMKC as part of the Henry Mitchell program, during her hospital rounds. I shadowed her with two pharmacy students from Belgium in the public hospital system. They relayed that it was one of the most impactful rotations they had been on, mainly because they were seeing diseases they would not be able to see in their home countries, in conditions they had not seen before, and because of how much responsibility they were given. Without electronic health systems, the pharmacist relied on in the health care workflow quite heavily. I personally got to observe patients with malaria and tuberculosis.



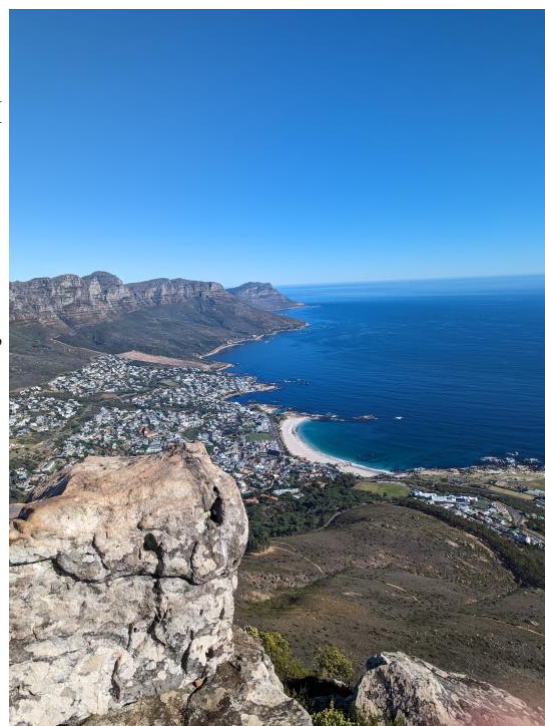
When we discussed potential exchanges, Dr. Keuler mentioned she's received significant interest in hosting UMKC pharmacy students. She explained that while she's interested in establishing a rotation program, she is currently very oversubscribed by universities across the world. However, it would help if there could be an in-kind exchange with pharmacy students coming from Cape Town to the US. She had tried to do that in the past, however, with US universities managing the administrative aspects were difficult for her since she handles the program alone. Offering to do the admin would go a long way. She noted that American students would gain clinical experiences unavailable in the US, making the administrative coordination worthwhile.

### **Exploration of Cape Town**

Outside of work, Cape Town really exceeded expectations. I stayed at an Airbnb in Sea Point, just two blocks from the Lion's Head trailhead, which meant I could hike it whenever I wanted. I ended up going up the mountain regularly, and the views of the city, Table Mountain, and ocean never disappointed.

Dr. Roomany, a Dentist at UWC who visited my lab as part of the Henry Mitchell program, was kind enough to show me around the area, starting with a visit to Babylonstoren wine farm, where I was able to get Cape Town wine for my family who were asking me to bring some back some pretty frequently. She then took me with her family down the coast to Boulders Beach to see the African penguins, followed by a stop in Fish Hoek for some good food and ice cream. These outings gave me a great feel for the Cape Town region beyond just the city.

I also spent an evening at the V&A Waterfront with Dr. Keuler after one of the days rotating through the hospital, trying local food and enjoying the harbor atmosphere. The local cuisine had so much variety to explore, and was consistently so incredibly good no matter what it was or where we went.





## **Acknowledgments**

I owe huge thanks to several people who made this experience possible and meaningful. Dr. Uphoff at UMKC organized every aspect of this exchange program flawlessly—I can't imagine how much work went into making it happen. Dr. Samuel Egieyeh welcomed me into his lab and made me feel like part of the team from day one.

Dr. Keanu Pearce, Dr. Roomany, and Dr. Keuler at UWC were incredibly generous with their time and showed me sides of Cape Town I never would have found on my own. The entire bioinformatics department and the venom peptide researcher were welcoming and engaging in ways that really enhanced the academic side of my trip.

Finally, thanks to both UMKC and UWC for supporting international exchanges like this. These connections between universities create opportunities that change how students and researchers think about their work and the world.