

University of Missouri South African Education Program Experience Report 2021 -Sheridon Peter Lloyd

In 2020, during my first year of MSc Biotechnology, I was notified that I was selected as the Henry Mitchell Scholar , and that I would be travelling to the University of Missouri in Columbia, MO. This was during the COVID-19 pandemic, and I thought that I would probably miss out on this opportunity due to travel restrictions and consecutive waves of the virus impacting both South Africa as well as the United States of America.

Thankfully, on September 1st, 2021, I boarded the plane at Cape Town International airport and was on my way to Columbia, MO to work alongside fellow Precision Medicine Unit Lab Member, Samantha Cairncross , with Dr. Gregory Biedermann in establishing whether work being done in South Africa could be replicated and viable in the USA. We were met with some challenges as we had to apply and wait for Institutional Review Board(IRB) clearance and could not complete any lab work outside of our last 10 days in Columbia. This however did come with advantages, as I got to witness first-hand the amount of work is required to be done prior to commencing lab work, as well as get some field-specific ethical and biosafety training, which is information I can take with me as I aspire to become a career researcher.



Picture: At the Mizzou Homecoming football game,

This wait to commence lab-work also meant that I had a lot more free-time to experience Columbia and its culture, food and tourist attractions. I was introduced to a fellow South African Mnotho Ngcobo, by the Director of the UMSAEP, who managed to show me around the City of Columbia and all the attractions in and around the city including hiking in Capen Park and attending the Homecoming Football Game which was won by the Tigers. I was also honoured to have travelled to St. Louis, MO with a group of South African students where we

went to the St. Louis Zoo, managed to see the Mississippi river and the Gateway Arch, which is a 190-metre stainless steel monument.



Pictures: At the St. Louis Zoo(Left). Standing under The Gateway Arch in St. Louis, MO. (Right)

This free time did not only allow for recreational time but also educational, as it gave us the opportunity to receive a demonstration of the Linear Accelerator used in the treatment of patients, which was a fascinating opportunity for me. We were shown an overview of treatment planning and the machinery by Medical Physicist Michael Rutsein and were allowed to sit in and observe how our samples were irradiated. We were also allowed to attend the opening of the NextGen Precision Health Institute on the 19th of October 2021, which had various University of Missouri System Leaders, State and National officials in attendance to celebrate the opening of this innovative health initiative. I think these events as well as the IRB application process experience will prove a lot more valuable despite the limited amount of wet-lab bench work we did.



Pictures: At the opening of the NextGen Precision Medicine Institute opening(Left). Being allowed to operate the Linear Accelerator under the supervision of Medical Physicist Michael Rutsein (Right)

Unfortunately, during my preparation to travel back to South Africa, I tested positive for COVID-19, and despite remaining symptomless for the entire isolation period, it still felt like a horrible experience: being in isolation in a foreign country, time passing slow, wondering if I will still get any symptoms and what will happen if things do take a turn for the worse. I think that made the experience worse, having all that time to myself allowing myself to overthink the situation more and more as every second passes. And then things got worse when a Boone County health official advised me that I would not have to re-test to travel back to SA, only to be told at the O'hare Airport in Chicago that I needed one... at 12 in the evening meaning I was not only stuck at the airport but only could not retest until the morning. Fortunately, Ms. Debra Lamson and Prof. Rodney Uphoff remained supportive and helped me, not only get through that night by getting me accommodation and making sure my new ticket was changed but also ensure that I was okay while all of this was happening. I truly appreciate them and everything they did during this time.

I am grateful for the Henry Mitchell Scholarship, the UMSAEP as well as the University of the Western Cape International Relations Office. I would recommend the exchange programme to anyone interested and also recommend the University of Missouri, Columbia as they not only encourage but inspire innovation and excellence that I hope carry with me into the future.