



Tafadzwa Mapiki

2022 STEM Co-op of the Year

For her outstanding experience at the
University of Florida College of Medicine



Tafadzwa Mapiki is a junior (third year) student at Youngstown State University majoring in Biology Premedicine and minoring in both Mathematics and Chemistry. She is originally from Zimbabwe and came to the United States to pursue a career in medicine. In the summer of 2022, Tafadzwa was at the University of Florida College of Medicine where she participated in the Summer Internship in Microbiology Research (SIMR) program. This program is directly associated with NIH National Institute of Allergy and Infectious Diseases-funded “Basic Microbiology and Infectious Disease” T32 training grant. She joined a PhD student who was working on ongoing research that is focused on defining mechanisms by which oncogenic gammaherpesviruses manipulate their hosts to establish chronic infection and cause diseases. Tafadzwa’s main project was to phenotypically characterize mouse model gammaherpesvirus tumorigenesis. She carried out RNAscope in situ hybridization experiments to stain tissues of mice that had been infected a murine virus called Murine Gammaherpesvirus 68 (MHV68). After staining the tissues with eleven different surface markers, Tafadzwa analyzed the tissues under a microscope and did 4X and 10X imaging of the tissues.

The work that she did will be used to understand the tumor’s relationship to gammaherpesvirus-associated lymphoproliferative diseases, and lymphomas that arise in humans. In future, the data that Tafadzwa gathered will help a hematopathologist figure out the exact organelles to target in cells of certain tissues during therapy of gammaherpesvirus-associated tumors. Tafadzwa also had an opportunity to present her research at a symposium at the University of Florida. “Sharing scientific discoveries and procedures using scientific language to a group of knowledgeable scientists is not easy,” said Tafadzwa. However, she said that she learned a lot of skills that will be useful to her as a future scientist. At the end of her internship, Tafadzwa was interviewed by three professors at the University of Florida in preparation for her medical school interviews. She received helpful professional feedback, good reviews on her personal statement and her curriculum vitae. Tafadzwa has appeared on the President’s list and the Dean’s list for all her semesters at YSU. She holds a prestigious full scholarship from the honors college called the Leslie H Cochran Scholarship. Tafadzwa is a resident assistant in Cafaro house since February of 2021. She is the president of the International Student’s Organization (ISO) and the president of the African and Caribbean Student’s Union (ACSU) on campus. She is an active member of the American Medical Students Association and Alpha Epsilon Delta (AED). During her spare time, Tafadzwa enjoys volunteering with Traditions Health Hospice where she visits an assigned patient at least once a week and provide companionship.

After completing her undergraduate studies, Tafadzwa plans to take an MD/PhD program instead of MD only. The MD/PhD program is designed to train physician-scientists in both medicine and research. Later in her career, she plans to specialize in neurology while doing translational research on brain tumors.