



Tsungai JONGWE

Home Country
Zimbabwe

Degree
PhD in Medical Virology

Expertise
Infectious Diseases
and Molecular Medicine

Research Focus
Molecular Biology

Host University
University of Cape Town,
South Africa

Fellowship Awarded
2012

Tsungai Jongwe was born in Harare, the largest city and capital of Zimbabwe, and is the last born in a family of six girls and a boy. Her parents retired from lecturing and nursing posts to become full-time farmers.

Tsungai started a BSc in Applied Chemistry at the National University of Science and Technology (NUST), Bulawayo, Zimbabwe, but her studies were disturbed by student and staff strikes. She transferred to the University of Cape Town (UCT), where she gained a BSc in Molecular and Cell Biology, which included research on antibiotic isolation from plant leaves. The thesis for her MSc in Medical Microbiology was on antibiotic resistance patterns in hospital-acquired pathogens. In 2010, Tsungai worked on clinical diagnosis projects for Mycobacterium tuberculosis during a work contract at UCT.

Tsungai's PhD project involves the construction, characterization, and evaluation of HIV vaccines expressing "mosaic" HIV-1 subtype C genes. HIV is one of the leading causes of death in Zimbabwe and in most of Africa. The constructed vaccines will be tested against previously produced vaccines in the hope that they will elicit an improved immune response. A prophylactic vaccine that prevents infection or reduces viral load, produces a broader immune response, or reduces disease progression, will make a significant difference to the lives of African people.

At the end of her PhD, Tsungai would like return to her home country to lecture Molecular Biology courses at NUST while doing research on infectious diseases. She would also like to be involved in initiatives to encourage girls in high school to continue into tertiary education.