



Personal Profile: I'm an ambitious, hard working and enthusiastic PhD research student who is passionate about science and love challenges. My research focuses on understanding the physiology of drug resistant and tolerant *M. tuberculosis* and their host response in the context of the host macrophage. I explore these by the use of proteomic analysis, fluorescence dilution and macrophage-model experiments and integrate resulting data using bioinformatics.

Key Strengths: completed scientific writing and life skills workshops and acquire good communication and leadership skills. Computer literate: EpiCenter software technology; Statistica: version 11; Stata: Biostatistics software; Pymol Viewer and Python terminal directory, Autodock4 software.

Membership of Professional Societies: Research & Co-development Director at The Governance NGO (2012-2014); Junior Volunteer Scientist at South African Women in Science and Technology (SAWISE) (2012-2014); Junior Volunteer Scientist at Women in Science Technology Engineering and Mathematics (STEM) (2014); Volunteer Counsellor at Women and Beyond NGO (2011-2014); Member of "Green Committee" at Stellenbosch University, Tygerberg Campus (2012); Member of SA National Youth Service (2008-2014)

Educational qualifications: **2014** PhD degree (1st year): Molecular Biology; Stellenbosch University; **2012–2013** MSc degree: Molecular Biology (1st class pass); Stellenbosch University; **2011** BTECH degree: Medical Biotechnology (2 distinctions); Cape Peninsula University of technology; **2008-2010** ND: Biotechnology (8 distinctions); Cape Peninsula University of technology; **2007:** S2 Certificate: Horticultural Science (4 distinctions); Cape Peninsula University of technology

Short training course qualifications: (i) completed novartis drug discovery and development (d³) simulation (SU, September 2013); (ii) biostatistics training (samrc biostatistics unit, Durban, august 2013); (iii) clinical Research Skills Training (SU, August 2012); (iv) Biosafety Level III (P3) Training (SU, March 2012); & (vi) NIH Web-based Human Ethics Training course (NIH, November 2011) & (vii) First Aid Training (CPUT, August 2009).

Research Experience: Current: 2014 Stellenbosch University and MRC (SA)

Position: Full-time PhD student/Research Junior Scientist; **Duties:** To apply molecular biology techniques to address MTB pathogenesis and TB treatment issues. Also submit progress reports and complete thesis and dissertation.

Recent: 2013-2014 A*STAR Bioinformatics Research Institute (Singapore)

Position: Research Assistant; **Duties:** To apply molecular modelling techniques (Pymol Viewer; Python terminal directory and Autodock tools) to design and validate small molecules that act as inhibitors of Mdm2-complexes; Cancer Therapy Research. Also submit progress reports

Recent: 2012-2013 Stellenbosch University and MRC (SA)

Position: Full-time MSc student/Research Junior Scientist; **Duties:** To apply molecular biology techniques to address drug resistance and TB treatment issues. Also submit progress reports and complete thesis and dissertation.

Recent: 2011 Task Applied Sciences (CCTR): Centre of Clinical Tuberculosis Research (SA)



Position: Research Lab Technologist; **Duties:** Working in a BSL3 safety laboratory with TB specimens for EBA clinical trials. Main duties were processing of sputum specimens, inoculation of culture media, microscopy staining and reading of results including CFU counts on a colony counter.

2010 SAB Limited - Newlands Brewery: Microbiology and Chemistry laboratory (SA)

Position: Laboratory Technician and Ferment General Duties: Media preparation, sampling and analysis of beer to detect growth of *Saccharomyces cerevisiae* (microbiological contamination). Taking swaps and doing microscopy for environmental surveys. Calibration of laboratory instruments, responsible for ensuring lab technicians comply with 5S (lab clean), lab audits and assessments.

Selected conference presentations:: (i) Oral Presentation: entitled “Defining the effect of Efflux Pump Inhibitors anti-TB drugs in rifampicin resistant clinical Mycobacterium tuberculosis isolates (MSc Project) TB research (A*STAR BII, January 2014); (ii) **Oral presentation:** entitled “The Docking studies of MDM2 ligand complexes” cancer therapy research (A*STAR BII, January 2014); (**iv) Poster Presentation:** entitled “Careers in Health Care” with Prof. Valerie Corfield on behalf of the NRF’s Centre of Excellence at the Science and Technology Minister’s Budget Vote Exhibition (CT, May 2013), (**v) Centre of Excellence (CoE) Review:** SU representative for interview and discussions with DST/NRF CoE International Programme Panel (UCT, March 2013), (**vi) Oral presentation:** MSc project at the 2012 Annual Medical Research Council Early Career Scientist Conference

Selected Scientific Awards and Achievements: (i) Awarded Scientific Travel Award to attend and do oral presentation at the 4th SA TB Conference (SU, March 2014); (ii) Awarded Singapore International Pre-graduate Internship Attachment Award (SIPGA) to work at A*STAR Bioinformatics Research Institute (Singapore, November 2013) (iii) Awarded 18 General Continuing Education Units (CEU) in level 1 at 3rd Annual Novartis Clinical Science training workshop (SU, September 2013); (iv) Awarded 2nd prize for runner-up oral presentation (MSc project) at the 2013 Annual Academic Year Day (SU, August 2013) (v) Awarded 1st prize for best oral presentation (MSc project) at the 2012 Drug Resistant TB Biennial Conference (UCT, October 2012) (vi) Awarded Medical Research Council of South Africa (MRC) Internship Programme grant (SA, 2012)

Voluntary Work Experience: Qualified First Aider (2009-2011, CPUT), Tutor, Mentor, Peer Helper & Residence Housing Committee (2008-2011 CPUT); was a Master of Ceremony at Academic Giants Awards (CPUT 2010). Was Civil Guard of Honor at state address by SA president (2008); Helper in Children Ministry (COM, 2010-2011). Extramural activities: Journal clubs, **motivational speaker**, dance choreographer, D&A talent model, Miss CPUT 2009,, play guitar, prayer ministry and involved in sport.

References are available on request.