I matriculated in 1992 and registered at the US in 1993 for a BSc in Psychology. I continued my studies part-time from 1995 through UNISA, while working at Virgin Active in Paarl as an administrative clerk. I finished my BSc degree in May 2002 and continued the following year with an honors degree in Psychology (HSc) (UNISA). While still busy with my BSc (Hons), I applied for a part-time position at the US as a research assistant for a project that investigated the cardio protective effects of the drug, Levosimendan. This project lead to a publication in May 2008 (Br J Pharmacol.) and ultimately a thesis for my MSc degree in December 2008. I also received my BSc (Hons) from UNISA in May 2008. I then pursued another very promising and interesting project that was available for a PhD at that time and registered for a PhD in 2009, with the title: "Exposure of Cardiac Microvascular Endothelial Cells to harmful stimuli: A study of the Cellular Responses and Mechanisms". This is the project and study I am currently working on. My supervisor is Prof Hans Strijdom, who has completed his PhD in 2006 on "Hypoxia and the heart: the role of nitric oxide in cardiac myocyte and endothelial cells". He has done extensive research on nitric oxide and has decided to further explore the role of this in the microvascular endothelium. Our team further consists of three PhD students, two MSc students and two Honors students. Collectively we are exploring the cellular responses and mechanisms of cardiovascular endothelium to circulating harmful stimuli. We further aim to explore the role that nitric oxide plays in this scenario and investigate the endothelial cell responses and mechanisms from various angles, utilizing different models and techniques. So far, I have presented this work at various local conferences (PSSA- best poster 2011, SA Heart – best poster 2008 and Annual Research Day at US) as well as two international meetings in Kyoto, Japan in 2010 (ISHR), and Birmingham, UK in 2013 (IUPS). I am also involved in postgraduate training in several techniques, such as western blot analysis and basic laboratory methods. I have also co-supervised two honors projects thus far. I am serving as de facto laboratory manager of the tissue culture laboratory in our division. I have completed my PhD at the end of 2013 and am now the principal investigator of a research project on: Investigating the cardiovascular effects of antiretroviral drugs in lean and diet-induced obese, insulin-resistant rats: An in vivo, ex vivo and in vitro approach. Results from this study have already been presented by two of the students involved at the Academic Year Day of Stellenbosch University 2014. One of these students graduated at the end of 2014, receiving his Honors degree - Cum Laude. The other student involved, an MSc student presented his data at the annual meeting of the Physiological Society of South Africa (PSSA) and Annual Academic Year Day of Stellenbosch University in 2015. He also received his MSc degree (Cum Laude) at the beginning of 2016. During 2015 - 2016 I have co-supervised an MSc student who had an epidemiological as well as in vitro focus to her study. The title of the study was: "Investigating the effects of first line and second line antiretroviral drugs on HIV exposed endothelial function - A clinical study, supported by a mechanistic in-vitro approach". This student presented her work at the Physiological Society of South Africa (PSSA) in 2016 and received her degree (Cum Laude) in March 2017. I have supervised another MSc student who continued with the in vitro side of previously mentioned study and her focus was be to investigate the effects of HIV-1 proteins as well as antiretroviral therapy (1st & 2nd line) on cardiac endothelial cells exposed to HIV proteins. She presented her work at the First Conference of Biomedical and Natural Sciences and Therapeutics (CoBNeST) in October 2018 and received her degree in April 2019 (Cum Laude). I am currently supervising an MSc student who is investigating the effects of HIV-1 proteins and antiretroviral therapy (1st & 2nd line) and combination thereof on vascular function as well as the possible ameliorating effects of a Rooibos extract on oxidative stress caused by HIV and antiretroviral therapy. I am also the supervisor of a PhD student who will be investigating the effect of charged particle radiation on tumor angiogenesis.