



Kebaneilwe LEBANI

Home Country
Botswana

Degree
PhD in Biomedical Engineering

Expertise
Bioengineering

Research Focus
Antibody Engineering
for Diagnostic Purposes

Host University
University of Queensland,
Australia

Fellowship Awarded
2012

Kebaneilwe (Keba) Lebani was born in Palapye, Botswana, and grew up in Gaborone, Botswana. Keba attended a boarding school in Zimbabwe before returning to Botswana to attend an international high school that is currently the only fully accredited International Baccalaureate (IB) School in Botswana. She then received a scholarship to study in Australia.

Keba undertook a pre-university program at Trinity College, University of Melbourne, and subsequently completed a Bachelor of Biomedical Science at Monash University, Melbourne. Following this, she spent two years as a laboratory technologist in Botswana before returning to Australia to undertake a Master of Biotechnology (Advanced). She is currently working towards a PhD at the Australian Institute of Bioengineering and Nanotechnology, University of Queensland.

The PhD research investigates immunological translational technologies. Antibodies are increasingly used in diagnosis, therapy and vaccine development, and account for the majority of the income made by pharmaceutical companies from biologics. Keba's research focuses on engineering antibodies to allow sensitive detection of Dengue virus antigens for blood-screening purposes. This research is especially important for areas where Dengue virus infections are endemic, as it will help curb inadvertent transmission of the virus via blood transfusions.

After completion of her PhD, Keba plans to take up a junior teaching role in her home country. She hopes to be able to make progress in the research of biotechnology in Botswana, and also improve the way science is taught.