

PROFESSOR TAKAFIRA MDULUZA, BAppSc (1991) MSc (1994), PhD (1998)

Professor of Biochemistry & Immunology; Fulbright Scholar/Alumni; Fellow of the Zimbabwe Academy of Science; Fellow of the African Academy of Science, EDCTP Alumni.

Area of Expertise: Immunology, HIV, NTD

Short biography:

Dr. Takafira Mduluza is Professor of Biochemistry and Immunology at The University of Zimbabwe. His scientific research concentrates on the area of immunobiology and epidemiology of NTDs course of infection, immunology and vaccine targets. The work concentrates on the immunological consequences of infections in endemic populations and immuno-epidemiological studies on the relationship between defined immune responses and acquisition of clinically protective immunity. The aim is to characterize the effector mechanisms of both innate and acquired immunity to NTDs, to understand how these mechanisms are induced and regulated in order to promote parasite clearance without inducing immunopathology. Polyparasitism has been a great challenge and more information is required to contribute towards vaccine development. A major development has been the determination of the mechanisms of infectious diseases that is likely to influence underlying genetics of resistance or susceptibility to infections pronounced in cytokines profiles. Cytokine gene polymorphism analysis may explain the course of infection and severity in different populations. Further challenges of genital schistosomiasis reported by our group is the male and female genital pathology that predisposes individuals to other infections, HIV and genital cancers. He has published more than 123 articles and supervised over 28 PhD and 83 MSc research students.