WITSIE AT THE CUTTING EDGE: Researcher Profile

Adjunct Professor Johnny Mahlangu

Head of School of Pathology



Who are you and what is your academic/scientific training and background?

I am the Head of School of Pathology at Wits. Professionally, I am a Clinical Haematologist based at the Charlotte Maxeke Johannesburg Academic Hospital. Having done my science and medical undergraduate degrees at Wits, I pursued postgraduate specialist and subspecialist qualifications in Haematology and Clinical Haematology, respectively. I was awarded the University of the Witwatersrand's Arthur Robertson Fellowship in Haemophilia which encouraged me to focus on the bleeding disorders, my area of research.

Explain the nature of the research that you are currently undertaking.

I conduct translational research in the bleeding disorders field. This is an exciting area of research with advances in therapeutic protein therapy having a huge impact on the lives of those with bleeding disorders. Specifically, our focus is in the conduct of clinical trials to evaluate safety, efficacy and pharmacokinetics of genetically modified and recombinant protein replacement therapies. We have

done over 40 phase one to phase four international studies in our research unit to date.

What do you think is the most pertinent/relevant/significant contribution you have made to research/science/your field?

Giving hope and improving the lives of those patients who are born with congenital bleeding disorders due to clotting factor dysfunction or deficiency. The therapeutic proteins we research and evaluate have improved the life span of people with haemophilia from an average of 20 years in the 1980s to close to that of the current nonhaemophilia population.

Did you have a particular mentor or supervisor who inspired you in research?

Professor Barry Mendelow, Professor Emeritus and former Head of Department of Molecular Medicine and Haematology, was my mentor who encouraged academic freedom and allowed all of us who trained under him to find a niche and pursue our passion.

Tell us about what you do when you're not busy at work and carrying out cutting-edge research.

I love hands-on household repair. If I was not a doctor, I would have been a happy handyman.

Read one of Johnny's papers: Mahlangu J, Powell JS, Ragni MV et al (2014). Phase 3 study of recombinant factor VIII Fc fusion protein in severe hemophilia. Blood; 123(3):317-325