

## **Professor Thomas Scriba**

## Professor, Department of Pathology, Division of Immunology Faculty of Health Sciences

Thomas Jens Scriba has been a professor in the University of Cape Town's (UCT) Department of Pathology in the division of immunology, Faculty of Health Science, since 2019; is deputy director, Immunology; Laboratory director; and executive committee member of the world renowned South African Tuberculosis Vaccine Initiative (SATVI). Hosted within the Institute of Infectious Disease and Molecular Medicine (IDM), SATVI is one of the largest URC-accredited research centres within UCT and Professor Scriba has held his position there since June 2011.

His contributions to the critical field of tuberculosis vaccine development and clinical immunology have been internationally recognised, unique, innovative and are directly translational to clinical and public health applications. Scriba's research insights have already made a significant effect on the field of Tuberculosis (TB) vaccinology and have the potential to make a great impact on TB diagnostics.

With a major research focus on vaccine development, he has been a co-investigator on 26 completed clinical trials of nine different TB vaccine candidates and the licensed BCG vaccine, including phase 1b, 2a and 2b trials in infants, adolescents and adults; as well as on multiple efficacy trials of TB vaccines, in collaboration with local and international partners in academia, industry and pharma. He has led immunological analyses in most of these trials and has published many papers in high impact journals that have contributed significantly to advancing vaccine development and our understanding of vaccination against TB. Of note, his multiple papers published in the prestigious *New England Journal of Medicine*, *Nature Medicine*, and *Lancet* are highly cited.

In addition, he has made a major contribution to antigen discovery for TB vaccine development through human immunology research. This has recently led to a mRNA TB vaccine, which is being developed through the SA mRNA Vaccine Consortium (SAMVAC) and is the inventor of two patent filings. His scholarly outputs and traditional research impact bibliometrics are all excellent. 261 publications, Web of Science (Wos) H-index: 55, WoS citations: 11,136 ORCID: 0000-0002-0641-1359.

Scriba has made a substantial contribution to the development of predictive and diagnostic biomarkers of TB. This has led to several high-impact publications, which are very highly cited, and seven patent filings, two of which have been granted. A blood transcriptomic test is being developed by UK BioTech, QuantuMDx. Work on predictive and diagnostic biomarkers has led to a TB risk test that has been assessed in a clinical trial (CORTIS) at SATVI and four other sites in South Africa. This was prominently published in *Lancet Infectious Diseases*.

He collaborates widely with major global players in this field. Scriba is frequently invited to speak at high-profile international conferences and meetings, and he was recently involved in organising the Keystone Symposium on Tuberculosis (2022). He contributes to TB and the World Health Organisation (WHO) advisory groups and decision-making bodies; and has written multiple excellent review articles which are very highly cited.

Scriba has brought in research grants of more than R300 million as Principal Investigator responsible for directing all aspects of the project, including financial oversight, management of teams, administration, scientific focus and reporting. In addition, he has brought in research grants of more than R350 million as a co-investigator.

He is also committed to capacity development. He has built a strong systems biology team at SATVI to markedly advance the understanding of disease progression in TB. This group has collectively published several landmark papers, including in *Nature*, *Nature Medicine* and *Nature Biotechnology*. He has also led a laboratory team that rapidly developed SARS-CoV-2 PCR testing during 2020 COVID-19 surge and assisted NHLS during surge SARS-CoV-2 testing.

Overall, the research Scriba conducts is highly collaborative, which is reflected by the many papers with shared first or last authorship. In addition, he is a very active science communicator and enjoys regular engagement with the public through media and other public engagement fora.

Scriba is recognised locally, regionally, and internationally for his work.