**College of Fellows 2025 – Young Researcher Award**

**Dr Simon Mendelsohn**
**Senior Clinical Researcher at the South African Tuberculosis Vaccine Initiative and a Fellow of the Institute of Infectious Disease and Molecular Medicine, Faculty of Health Sciences**

Dr Simon Mendelsohn is a Senior Clinical Researcher at the South African Tuberculosis Vaccine Initiative (SATVI) and a Fellow of the Institute of Infectious Disease and Molecular Medicine (IDM) at the University of Cape Town (UCT). Since 2017 he has contributed as an investigator to more than 30 tuberculosis (TB) diagnostic, therapeutic and vaccine trials, including six novel vaccine candidates and BCG [Bacillus Calmette–Guérin]. Following medical training at UCT, Simon worked in a hospital in Mpumalanga – at the height of the HIV/TB epidemics. He then read for two master's degrees in Immunology: International Health and Tropical Medicine at Oxford as a Rhodes Scholar, before completing a PhD in Clinical Science & Immunology at UCT.

After Oxford, Simon joined Médecins Sans Frontières and was posted to Malawi to help implement HIV/TB programmes in the country's severely overcrowded prison facilities. In that setting – marked by high rates of HIV and malnutrition, with cells packed to as much as four times capacity – TB was rampant. Even regular mass symptoms and chest radiographic screening, alongside the introduction of routine molecular testing, made only modest inroads into transmission. In that crucible, his research focus crystalised: preventing disease and interrupting transmission depend on finding and treating TB earlier, including *Mycobacterium tuberculosis (M. tb)* infection and asymptomatic disease. However, the requisite tools were not yet available.

Since then, Simon has established himself as an international expert in the host blood transcriptomic response to TB; transcriptomic biomarkers for diagnosis, prognosis, and treatment response; and non-sputum diagnostics for early and asymptomatic TB.

His work develops practical tools for earlier detection to apply through community-based screening and active case-finding strategies, such as exhaled breath and oral rinse molecular testing. Earlier detection – particularly of *M. tb* infection and asymptomatic disease – is essential to interrupt transmission, improve outcomes and move us closer to global TB elimination goals.