



College of Fellows 2025 – Young Researcher Award

Professor Malebogo Ngoepe

Director – Centre for Research in Computational and Applied Mechanics

Faculty of Engineering & the Built Environment

Professor Malebogo Ngoepe's research focuses on the application of computational and experimental mechanics to biomedical problems on the macroscale. Her work has been enabled by her students, collaborators and funders, who have been generous in curiosity, thought, time and resources – and for whom she is deeply grateful.

Notable contributions include her work on thrombosis modelling, where she has contributed to the development of new methodologies for studying this ailment under pathological conditions, including COVID-19. Her work on hair mechanics was the first to identify and describe the unique mechanical response of curly human scalp hair fibres. In recognition of the pioneering nature of this work, she received a Martha Schwarzkopf Award for Women in Science in 2024.

She holds a BSc (Eng) in Mechanical Engineering with first class honours from the University of Cape Town, funded by an Anglo-American Open Scholarship. She also received her DPhil in Engineering Science from the University of Oxford, funded by a Rhodes Scholarship. Malebogo has also held an Iso Lomso fellowship at the Stellenbosch Institute of Advanced Study (STIAS).