Dr Kate Webb

Senior Lecturer, Paediatrics

Dr Kate Webb is a paediatric rheumatologist, clinician scientist and laboratory immunologist at the University of Cape Town (UCT). After completing her paediatric and rheumatology clinical training at UCT, she received a competitive Action Research UK award to complete a PhD at the Centre for Adolescent Rheumatology at University College London in 2014. Her PhD work described how type 1 interferon production changes in females and over puberty in a manner that makes women and girls more likely to develop lupus. This work won the Eric Bywaters prize for rheumatology research at the Royal College of Medicine and a Young Investigator Award from the Paediatric Rheumatology European Society. Eager to plough her skills locally and start her own research group in Cape Town, Kate was awarded a Crick African Network Postdoctoral Fellowship to this end in 2019. During the pandemic, her group led the local discovery of the COVID-related multisystem inflammatory syndrome in children (MIS-C) and generated some of the only immunology data representing African children with this disease to date. She has worked with the World Health Organization (WHO) and the National Institute of Communicable diseases to rapidly investigate and quide the treatment of these children both locally and globally.

Kate's work has been published and presented widely, with more than 2 800 citations to date. She has secured funding from agencies such as the South African Medical Research Council (SAMRC), the Francis Crick Institute (UK), the National Institutes for Health (NIH US) and the Wellcome Trust (UK). She has built a laboratory group with multiple collaborative partners including the SAMRC Genomics Centre, the South African TB Vaccine Initiative, The National Institutes for Health (US) and the Francis Crick Institute. She is part of the 2023 cohort of the UCT Research Leadership Programme.

Recent career highlights include her delivering Grand Rounds at the NIH and being an invited speaker at the 2023 American College of Rheumatology Congress. She is also arranging the first Paediatric Rheumatology Congress at the South African Arthritis and Rheumatology Association meeting in 2024.

Kate aims to train a cohort of multi-disciplinary clinician-researchers with laboratory skills to better represent African children in the global discovery of disease mechanisms and ultimately, new therapies. She hopes that the real impact of her work will be the improved care for South African and African children with immune mediated disease.