IDM
INSTITUTE OF INFECTIOUS DISEASE AND MOLECULAR MEDICINE

Neuroscience Institute

CAPE HEART INSTITUTE
Global Medicine

University of Cape Town
LUNG INSTITUTE

06 May 2026

MULTI-INSTITUTE SYMPOSIUM

Theme: Translation

Cape Heart Institute
Chris Barnard Building 4th and 5th floors
Faculty of Health Sciences
University of Cape Town

Programme

2nd Multi-Institute Symposium

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CAPE HEART INSTITUTE
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2nd Multi-Institute Symposium: Programme

Host: Cape Heart Institute, Faculty of Health Sciences, University of Cape Town
Date: Wednesday 06 May 2026
Time: 09:00 – 20:00
Venue: Chris Barnard Building (CBB), 4th and 5th floors

Time	Event	Venue
09:00-13:00	Pre-symposium career workshop for young investigators (see detailed programme below) with finger lunch	5th floor
13:00-13:15	**Welcome**: • Prof Lionel Green-Thompson, Dean of the Faculty of Health Sciences, UCT • Prof Karen Sliwa, Director of the CHI, UCT	5th floor
13:15-13:45	**Address from the DVC: research and Internationalisation** Chairs: Prof Digby Warner (IDM) and Prof Graham Fieggen (NI) • Prof Thokozani Majozi	5th floor
13:45-14:45	**Session 1: Institutes Translate into Practice** Chairs: Prof Friedrich Thienemann (CHI) and Prof Kirsty Donald (NI) • A/Prof Gasnat Shaboodien (CHI) • Dr Melissa Nel (NI) • Dr Roanne Keeton (IDM) • A/Prof Anil Pooran (LI)	5th floor
14:45-15:45	Tea and graphical abstracts	4th floor
15:45-16:45	**Session 2: The Dreaming Session** Chairs: Prof Sandrine Lecour (CHI) and Prof Thomas Scriba (IDM) • Taariq Salie (CHI) • Dr Caroline Ross (NI) • Dr Ian Mbano (IDM) • Rachael Gachogo (LI)	5th floor
16:45-17:15	**Guest lecture: Translating Science into Practice** Chairs: Prof Graeme Meintjes (LI) and Prof Reto Guler (IDM) • Prof Ntobeko Ntusi (SAMRC)	5th floor
17:15-17:45	**Address from the Vice-Chancellor** Chairs: Prof Karen Sliwa (CHI) and Prof Rodney Dawson (LI) • Prof Mosa Moshabela	5th floor
17:45-18:00	Prize giving and closing	5th floor
18:00-20:00	Cocktail reception	4th floor

LI: Lung Institute - IDM: Institute of Infectious Disease and Molecular Medicine - CHI: Cape Heart Institute - NI: Neurosciences Institute

Pre-symposium Postgraduate Career Workshop

(Pre-registration is mandatory for this event – Limited seats available)

<table>
<tr><th>Time</th><th colspan="2">Event</th><th>Venue</th></tr>
<tr><td>09:00-09:20</td><td colspan="2">Arrival and registration</td><td>5th floor</td></tr>
<tr><td>09:20-09:30</td><td colspan="2">Welcome</td><td>5th floor</td></tr>
<tr><td>09:30-10:15</td><td colspan="2"><u>Session 1:</u> Career Options in Academia and Beyond
Hacks to navigating the postgraduate journey: Dr Hayley Tomes
Spotlight talk: Colin Bouwer (founder & CEO, BIOCOM Africa)</td><td>5th floor</td></tr>
<tr><td rowspan="4">10:15-12:00</td><td colspan="2"><u>Session 2:</u> Parallel Sessions</td><td rowspan="4">4th/5th floors</td></tr>
<tr><td>Postgraduate networking event</td><td>"Meet the Expert"</td></tr>
<tr><td>10:15-10:30</td><td>Tea break</td><td rowspan="2">Pre-booked one-on-one meetings</td></tr>
<tr><td>10:30-12:00</td><td>Directed networking and engagement activities</td></tr>
<tr><td>12:00-13:00</td><td colspan="2">Finger lunch</td><td>4th floor</td></tr>
</table>

For more information about the workshop or to see the profiles of our speakers and experts, visit our website here.

2nd Multi-Institute Symposium: Speakers

Prof Thokozani Majozi
Deputy Vice-Chancellor: Research and Internationalisation, UCT

Professor Majozi is a leading scholar and seasoned academic administrator. He joined UCT in January 2026 from Wits University, where he was the Executive Dean of the Faculty of Engineering and the Built Environment. He also held full professorship in the School of Chemical and Metallurgical Engineering, where from 2013 to 2022 he was the holder of the prestigious National Research Foundation – Department of Science and Technology (NRF–DST) Chair in Sustainable Process Engineering. His research contributions are extensive and widely recognised. Professor Majozi has published more than 300 scientific works. His work has consistently pushed the boundaries of sustainable engineering and inspired the next generation of scientists and engineers. He is a B1 NRF rated scientist. He currently serves as the president and chairperson of the Academy of Science of South Africa. His numerous awards attest to his significant contributions to science and society. These include the Zdenek Burianec Memorial Award (Italy, 2005), three National Science and Technology Forum Awards (2006, 2011, 2016), two National Research Foundation President's Awards (2007, 2008), the South African Institute of Chemical Engineers Bill Neal-May Gold Medal (2010), the S2A3 British Association Silver Medal (2008) and the AU-TWAS Award in Basic Sciences, Technology and Innovation (2012). In 2019, President Cyril Ramaphosa awarded him the National Order of Mapungubwe (Bronze), South Africa's highest honour for achievements of international significance.

A/Prof. Gasnat Shaboodien
Director of Cardiovascular Genetics, Cape Heart Institute, UCT

Title: Gene Discovery to Patient Impact: Advancing Cardiomyopathy Care in Africa through Genomics and Functional Models

In cardiovascular genetics, improving patient care is the central driver of research, guiding advances in the diagnosis and management of dilated cardiomyopathy (DCM), peripartum cardiomyopathy (PPCM), and arrhythmogenic cardiomyopathy (ACM). Identifying genetic causes enables more accurate diagnosis, refined risk stratification, and targeted family screening, particularly for conditions associated with heart failure and sudden cardiac death. Large studies such as the IMHOTEP registry ensure that findings are relevant to African populations, helping to address critical gaps in global genomic data. Functional studies using zebrafish models provide insight into disease mechanisms, supporting more informed clinical decision-making and improved outcomes for patients and their families.

Dr Melissa Nel

Senior lecturer and director of the Clinical Omics and Informatics (COIN) Unit, Department of Medicine, Neuroscience Institute, UCT

Title: From Reads to Results: Bringing Long-Read Genomics into the Clinic

Translating long-read genome sequencing into clinical practice offers a step-change in our ability to diagnose and understand genetic disease. By resolving complex regions of the genome such as repeat expansions, structural variants and segmental duplications, long-read technologies address key limitations of short-read approaches. In this talk, I will focus on the practicalities of implementation: integrating long-read sequencing into clinical workflows, enabling secure data transfer and analysis, and bridging the gap between laboratory innovation and patient-facing impact. Drawing on our experience in a resource-constrained setting, I will highlight both the opportunities and the challenges of making high-resolution genomics clinically actionable.

Dr. Roanne Keeton

Senior Research Officer, Institute of Infectious Diseases and Molecular Medicine, UCT

Title: Immunogenicity of Locally Manufactured Vaccines

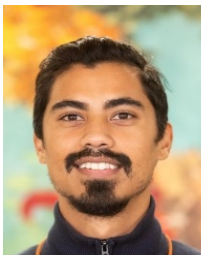
Dr Keeton is a Senior Research Scientist and viral immunologist based in the Division of Medical Virology and IDM at the University of Cape Town. Her initial training was in basic immunology with a particular interest in infectious diseases affecting Sub-Saharan Africa. She completed her PhD in immunology in 2009 and made a change to viral immunology in 2019. She now leads the preclinical work within the Cellular Immunology Platform, a hub established for immunogenicity testing of vaccines for epidemic and pandemic viruses, where the current focus is novel RSV, HIV and MPXV vaccines.

A/Prof Anil Pooran

Senior Research Officer, Centre for Lung Infection and Immunity, UCT Lung Institute

Title: A Human Mycobacterial Lung Challenge Model to Understand TB Immunopathogenesis

Tuberculosis (TB) remains a major global public health priority. We have developed a human lung challenge model involving pulmonary delivery of BCG in healthy participants with different TB susceptibility biophenotypes to understand TB immunopathogenesis at the site of host-pathogen interaction. Results showed that immune responses were highly compartmentalised. Several lung- and blood-specific pathways were identified that are associated with susceptibility including increased neutrophil/Type I IFN signals and reduced T-cell-mediated control of mycobacterial containment. Finally, the route of BCG administration influences lung-specific immunity. This model can potentially aid in identification of correlates of protection and design of new vaccines.



Taariq Salie
PhD Researcher, Cape Heart Institute, UCT

Title: From Blood to Bedside: Biomarkers for Early Detection of Rheumatic Heart Disease

Taariq's research focuses on advancing the understanding of Group A Streptococcal (GAS)-related diseases, particularly rheumatic heart disease (RHD). Through systematic reviews, he has characterised GAS strain diversity, immune responses, virulence factors and antibiotic susceptibility to inform vaccine and prevention strategies. The experimental work uses proteomics and immunological assays to identify and validate host biomarkers associated with RHD, revealing signatures of persistent inflammation and potential diagnostic targets. He has also contributed longitudinal data on immune responses following GAS infection. Collectively, this work aims to bridge molecular insights with clinically relevant tools for earlier diagnosis, improved risk stratification and better disease management.

Dr Caroline Ross
Lecturer, Molecular and Cell Biology Department, Neuroscience Institute, UCT

Title: Rewiring Gene Dosage in the Brain: Targeting lncRNAs to Treat Neurodevelopmental Disorders

The human genome produces thousands of long noncoding RNAs (lncRNAs), many highly enriched in the brain. Although they do not encode proteins, these molecules play key roles in regulating gene expression by shaping chromatin structure, controlling transcription, and fine-tuning gene output. This regulation is especially important in the developing brain, where small changes can have lasting effects.

Dr Ian Maheti Mbano
Postdoctoral Research Fellow, Jacobs Experimental Tuberculosis Research Group, Institute of Infectious Diseases and Molecular Medicine, UCT

Title: Fortress Within: Re-Programming the Lung to Defeat Tuberculosis

For decades, the fight against Tuberculosis (TB) has relied on training circulatory immune cells to identify and eliminate the bacteria. However, TB preferentially targets the lungs. While many can clear the infection, for a significant proportion, the battle is lost by the time TB-specific T cells migrate from the lymph nodes to the lungs. By using custom viral vectors to deliver targeted genetic instructions, we are reprogramming the lung’s microenvironment to construct "pop-up" immune arsenals, Tertiary Lymphoid Structures. By localising the immune response where it is needed most, we are creating long-lasting, resident, TB-specific memory directly within the lung.

Dr Rachael Gachogo
Postdoctoral Fellow, Prof. Jonny Peter Group, UCT Lung Institute

Title: Hidden Signals: Discovering Multi-modal Biomarkers to Predict Angiotensin-Converting Enzyme Inhibitor-Induced Angioedema (AE-ACEI) in Africa

Angiotensin-converting enzyme inhibitors (ACEI) remain a mainstay in the management of hypertension globally. However, their use is associated with the risk of potentially life-threatening angioedema (AE) leading to emergency healthcare visits and potential mortality. AE-ACEI is five-fold more common in certain Black Africans, making this a locally relevant problem given the growing burden of cardiovascular disease in Africa. Currently, there are neither biomarkers to predict which patients initiating ACEI therapy will develop angioedema, nor those that can guide the best treatment once angioedema develops. Therefore, our research is employing multi-omics approaches to identify biomarker signatures associated with AE-ACEI. We are focusing on minimally invasive samples including saliva, urine and plasma to enhance clinical applicability. We envision to translate a potential proteomic signature into a point-of-care test that could be deployed in primary healthcare settings. This will enable early and timely identification of patients at risk of AE-ACEI as well as guide the identification of the best treatment modalities in the emergency setting. Our aim is to tailor precision medicine approaches for Africans and make them affordable.

Prof Ntobeko Ntusi
President and CEO, SAMRC and Principal investigator at the Cape Heart Institute, UCT

Title: Translating science into practice

Professor Ntusi, president and CEO of the South African Medical Research Council, is a distinguished leader in medical research. Prior to this role, he served as chair and head of the Department of Medicine at UCT and Groote Schuur Hospital. He is the principal investigator of the Cardiac Imaging and Inflammation research group at the Cape Heart Institute, UCT. His groundbreaking research has significantly advanced the understanding of heart failure and cardiomyopathy, the cardiovascular phenotype and pathophysiology of autoimmune inflammatory heart disease, as well as HIV-associated cardiovascular disease across diverse global clinical settings. More recently, he led pioneering studies on the biology and immunology of COVID-19, with impact extending beyond South Africa's borders. A member of the South African Academy of Sciences and a Fellow of the Royal College of Physicians, the Royal Society of South Africa, and the UCT College of Fellows, Prof Ntusi's accolades include the prestigious South African Medical Research Council Gold Medal, the Walter Siegenthaler Medal and Memorial Lecture from the University of Zurich, and the University of Oxford's Oppenheimer Fund Academic Exchange Award.

Prof Mosa Moshabela
Vice-Chancellor & Principal, University of Cape Town

Professor Moshabela is a South African medical doctor, academic, and researcher specialising in public health and primary health care. He has held key academic administrative roles and began his appointment as Vice-Chancellor of UCT on 1 August 2024. Prof Moshabela has held various academic positions throughout his career. This includes Dean of the School of Nursing

and Public Health at the University of KwaZulu-Natal and subsequently Deputy Vice-Chancellor for Research and Innovation. His academic work is characterised by a commitment to improving health care delivery and addressing the social determinants of health, particularly in sub-Saharan Africa. Prof Moshabela's research spans several critical areas in public health, including HIV/AIDS, tuberculosis, and health care delivery in resource-limited settings. He has led and participated in numerous research projects aimed at enhancing the understanding and management of these diseases. His work often involves interdisciplinary approaches, combining insights from medicine, public health, and social sciences. In addition to his academic and research roles, Prof Moshabela is actively involved in health advocacy. He works closely with various governmental and non-governmental organisations to improve health care access and quality. His leadership extends to several professional associations and health committees, where he contributes to shaping health policy and practice. He is the chairperson of the National Research Foundation Board.

Presenters for Graphical abstracts:

Pheletso Letuka	CHI
Caitlin Meyer	CHI
Julia Hahnle	CHI
Carly Young-Baillie	IDM
Ditshego Ralefeta	IDM
Keisha De Gouveia	LI
Tafadzwa Chimbetete	LI
Tahlia Perumal	LI
Zethembiso Ngcobo	NI
Ziphozihle Ntwatwa	NI

Yandiswa Mabhude	CHI
Husnaa Bux	CHI
Thobekile Leyane	IDM
Ntombi Benede	IDM
Shantelle Claassen	IDM
Suzette Oelofse	LI
Andre Swanepoel	LI
Khadija Jamal	NI
Tess Derrick-Sleigh and Nokwanda Mngxitam	NI
Hayley Marais	NI

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