

CHS RESEARCH SYMPOSIUM 2025 PROGRAMME

25 August	Opening Session	Susser and Stein
8h30	Introduction	Professor Bongani Nkambule Dean: Research
8h35	Official Welcome	Professor Busi Ncama DVC and Head: CHS
8h45	Introduction of Key- Note Speaker	Professor Bongani Nkambule
8h50	KEY-NOTE ADDRESS	Professor Abdullah Ely Wits/SAMRC Antiviral Gene Therapy Research Unit
9h10	Q and A session	Professor Bongani Nkambule
9h20	Closure	

25 August	Session 1: Track 1 Professor Mariza Vorster	K1
9h30	Ata Thabo Mokoena	In vitro immunomodulatory effects of African traditional medicines in H1299-ACE2 cells co-cultured with peripheral blood mononuclear cells in response to SARS-CoV-2 infection
9h45	Zekhethelo Alondwe Mkhwanazi	Dysregulated cytokine profiles and networks in adult African patients living with B-Cell Acute Lymphoblastic Leukemia on Maintenance Therapy.
10h00	Bawinile Hadebe	[68Ga]Pentixafor-PET/CT for imaging of chemokine receptor 4 expression in patients in triple negative breast cancer

10h15	Subhankar Mandal	Design and Evaluation of Quinoline-Schiff Bases Targeting Mtb DNA Gyrase: In Vitro and Computational Approaches
10H30-11H00	TEA BREAK	
25 August	Session 1: Track 2 Prof Kimesh Naidoo	K2
9h30	Nitesh Brijlal	Carbapenem-resistant Enterobacterales at a quaternary public hospital in Durban, KwaZulu-Natal: Ascertaining the clinical and molecular paradigm shift following COVID-19
9h45	Mercilene Machisa	Co-developing mental-health and sexual-violence risk-reduction intervention for lesbian, bisexual, queer womxn students
10h00	Carrie Brooke-Sumner	Exploring mental health of undergraduate sexual minority women on South African campuses
10h15	Ursula Sthembile Ngema	Understanding Misconceptions: The Connection Between HIV/AIDS, Sexual and Reproductive Health, and Teenage Pregnancy Among Learners in uMkhanyakude district, rural KwaZulu-Natal
10H30-11H00	TEA BREAK	

25 August	Session 1: Track 3 Dr Theodore Duxbury	Susser and Stein
9h30	Sabrina Isaac	Uncovering defects in vaccine responses between in utero HIV-exposed and unexposed children using a tonsil organoid model
9h35	Mahlatse Maseeme	Phenotypic Profiling of TST-Induced Immune Responses in Mtb-Exposed Individuals
9h40	Nonelwa Tamara Sotsu	A descriptive observational study of pregnancy outcomes of failed pre-induction cervical ripening using oral Prostaglandin E1 (Misoprostol) in post term pregnancy in King Edward VIII Hospital
9h45	Phiwayinkosi Frank Shongwe	Contraceptive use and associated factors in South Africa
9h50	Nthabiseng Dlamini	From Policy to Practice: Stakeholders' Perspectives on The Enablers And Constraints To NTD Master Plan Implementation In South Africa
9h55	Lunga Xaballg	Assessment of HBV functional cure in patients with chronic HBV on treatment
10h00	Abhay Girdhari	The effects of Oral Contraceptives on Coagulation in diet-induced obesity
10h05	Seyuri Bisetty	Prevalence of Dry Eye in a Diabetic Paediatric Population

10h10	Naledi Shakoane Masalane	Drug resistant <i>Klebsiella pneumoniae</i> from patients and hospital effluent: a correlation?
10h15	Caitlin Ramnarain	Correlation between genotypes and antifungal susceptibility profiles of <i>Candida</i> isolates from pregnant and non-pregnant women in South Africa
10h20	Sanele Mhlungu	Anticancer potential of <i>Cannabis Sativa</i> oils and their nano-emulsions on cervical cancer cell lines.
10h25	Hlelolwenkosi Mlimi	Genetic features that are associated with the development of a better humoral immune response in people living with HIV-1
10h30-11h00	TEA BREAK	

25 August	Session 2: Track 1 Dr Andile Faya	K1
11h00	Sbongiseni P. Mbambo	Men Who Have Sex with Other Men: An Exploration Of Health Care Workers Perceptions And Attitudes.
11h15	Nokwethemba Monica Ngcobo	The impact of low-dose aspirin on haemoglobin levels during pregnancy
11h30	Nomfundiso Mabhengu	Synergistic antioxidant and anticancer effects of Naringin encapsulated in beaded liposomes with oleanolic acid for targeted delivery in cancer therapy (in silico and in vivo)
11h45	Shirelle Janine Naidoo	Low frequency integrase drug resistance mutations in individuals

		experiencing virological failure while on dolutegravir-based antiretroviral therapy
12h00	Thembelihle Tombo	Evaluation of a single assay for the surveillance of multiple viral pathogens using Next Generation Sequencing.
12h15	Phumzile Mnguni	Exploring the lived experiences of the multidisciplinary team on the management of obesity in children with disabilities.
12h30	Ndzalo Mashabele	The antiviral effects of endophytic fungi secondary metabolites on integration stage and integrase drug resistant variants
12h45	Raeesa Abdul Rahim	Carbapenemase detection in Resistant Gram-negative bacteria
13h00-14h00	LUNCH BREAK	

25 August	Session 2: Track 2 Dr Levin Chetty	K2
11h00	Michelle Mbambo	The oxidative and apoptotic effects of TN-04 on hepg2 cells
11h15	Pinky Mahlangu	Intimate partner violence among lesbian, bisexual, and queer women students on campuses in South Africa: a qualitative study exploring context, drivers, and impacts
11h30	Sumayyah Ebrahim	Exploring faculty and student perceptions of an online surgical teaching programme during COVID-19: a qualitative study
11h45	Sbongumusa Dlamini	Optimization of multifunctional nanostructured lipid

		carriers for enhanced delivery and overcoming resistance mechanisms of ciprofloxacin
12h00	Gugulethu Gcaba	Incidence and predictors of colonoscopy no-shows at a quaternary hospital in KwaZulu-Natal
12h15	Minenhle Siyabonga Buthelezi	Associations between indoor air pollution and asthma, allergic rhinitis, and eczema in a cohort of children in Durban, South Africa
12h30	Nicole Reddy	The impact of early ART on HIV-1 reservoir landscape and distribution in immune cells.
12h45	Siphokazi Silangwe	Assessing the Burden Of Dengue Virus Infection In Northern Kwazulu-Natal, South Africa
13h00-14h00	LUNCH BREAK	

25 August		
Session 2: Track 3		
Dr Siqiniseko Ndlovu & Dr Pragalathan Naidoo		
Susser and Stein		
11h00	Nthabiseng Dlamini	From Policy to Practice: Stakeholders' Perspectives on the Enablers and Constraints to NTD Master Plan Implementation in South Africa

11h05	Sinegugu Shongwe	The determinants of biomedical and traditional medicine use among women with Female Genital Schistosomiasis in sub-Saharan Africa: A Scoping Review
11h10	Jasoda Govender	Lipoic Acid grafted Dextran (LA-D): A Novel Redox Responsive Hybrid Nanostructured Lipid Carrier for enhanced Antibiotic Delivery against Bacterial Sepsis.
11h15	John Alake	Facile fabrication of poly(acrylic acid)-functionalised nickel-metal-organic frameworks nanoplates for electrochemical immunosensor for the detection of prostate-specific antigen
11h20	Mathuli Ngema	Pregestational Prediabetes Induces Maternal Hypothalamic-Pituitary-Adrenal (HPA) Axis Dysregulation and Results in Adverse Foetal Outcomes
11h25	Courtney Barnes	Trigonocephaly-associated hypotelorism: an assessment of orbital shapes and dimensions
11h30	Vensuya Bisetty	Scaphocephaly in a select South African population: An anatomical evaluation of the foramen magnum

11h35	Lilishia Gounder	Geospatial and temporal mapping of detectable HIV-1 viral loads amid dolutegravir rollout in KwaZulu-Natal, South Africa
11h40	Sandiswa Malinga	The Evaluation of the cardioprotective effect of metformin and dietary intervention in diet-induced prediabetic rats model
11h45	Ibrahim Oluwatobi Kehinde	Targeting the TRIM28–EZH2 Protein–Protein Interface with Cysteine-Reactive Covalent Inhibitors: A Computational Blueprint for Cancer Therapy
11h50	Lulama Mthethwa	Association of HBx Mutations with clinical markers of disease in Chronic HBV-HIV coinfectd Patients in South Africa
11h55	Rinae Prisca Gadisi	Immuno-localisation of sodium iodide symporter in adult human limbic regions.
12h00	Sindhisio Clement Sibuyi	Prediction of CBD stones in patients with gallstones using non-invasive parameters in populations with high HIV disease burden
12h05	Nomvuselelo Sikhondze	Fertility intentions among adolescent girls and young women living with HIV in Hhohho Eswatini
12h10	Roxanne Pillay	MicroRNA Expression in Murine Female Genital Tracts Following Helminth–HSV-2 Co-Infection

12h15	Ernest Oduro-Kwateng	Phytochemicals from <i>Euclea natalensis</i> Modulate Th17 Differentiation, HIV Latency, and Comorbid Pathways: A Systems Pharmacology and Thermodynamic Profiling Approach
12h20	Sthembiso Msane	The Effect of the 14:10-Hour TRF Regimen on Selected Markers of Glucose Homeostasis in Diet-Induced Prediabetic Male Sprague Dawley Rats
12h25	Lungile Buthelezi	An Oculomics-Based Machine Learning Model for Retinal and Visual Risk Stratification in Immunocompetent Adults Living with HIV
12h30	Nonhlanhla Nzimande	Performance of CAD4TB artificial intelligence technology in TB screening programmes among the adult population in South Africa and Lesotho
12h35	Bongeka Ntombi Nomaswazi Mshengu	Neonatal programming of maternal pre-gestational prediabetes on hepatic and skeletal muscle insulin receptor (INSR) gene expression in the offspring at birth and in the postnatal life
12h40	Nondumiso Michelle Dlamini	Establishing a mental health Lived Experience Group for adolescents living with HIV in rural KwaZulu-Natal: Processes and Insights

12h45	Saieshni Pillay	Western-style diet-induced obesity impairs glucose homeostasis in C57Bl/6 mice
13h00-14h00	LUNCH BREAK	
25 August	Session 3: Track 1	K1
	Dr Keshena Naidoo	
14h00	Fave Yohanna Tata	Flavonoids Allosteric Modulation of ACE2 and Its Implications for COVID-19: Computational Insights and Experimental Perspectives on the Membrane and Mitochondrial Effects of Rutin
14h15	Kakudji Kisimba Claudine	An integrated computational bioprospection of flavonoids as modulators of Mycobacterium tuberculosis decaprenylphosphoryl- β -d-ribose-2'-epimerase 1
14h30	Gaysheen Kistan	Renal function in African women receiving Tenofovir Disoproxil Fumarate as Pre-Exposure Prophylaxis for HIV during pregnancy and postpartum: A Postpartum Safety Analysis in the CAP016 Randomised Control Trial
14h45	Nokuthula Mtshali	The effects of resistance training on metabolic parameters, muscle strength, and physical function among individuals with Type-2 Diabetes Mellitus
15h00	END OF DAY 1	

25 August	Session 3: Track 2 Dr Zama Msibi	K2
14h00	Chauntelle Bagwandeen	The Association Between Circulating Magnesium Levels and Hypertensive Disorders Of Pregnancy In Black South African Women: A Cross-Sectional Study
14h15	Karishma Naidoo	Investigating the effects of gossypetin on cardiovascular function in diet-induced prediabetic male Sprague Dawley rats
14h30	Jihada Cassim	Antenatal heat exposure and small airways dysfunction in early childhood: the Mother and Child in the Environment (MACE) birth cohort
14h45	Lungile Sinazo Xesibe	Hepatic Srebp-2 Gene Expression In Pups Born From Pre-Gestational Prediabetic Mothers At Birth And In Later Postnatal Life: Neonatal Programming
15h00	END OF DAY 1	

26 August	Session 4: Track 1 Dr Paradise Madlala	K1
9H00	Syethemba Nkosi	Exploring Treatment Adherence In Adolescents Living With HIV Aged 16-19 Years In uMkhanyakude District: An Application of The COM-B Model
9H15	Vino Dorsamy	The Impact of Low-Dose Aspirin On Haemoglobin Levels In Pregnancy: A Secondary Analysis Of A Randomized Controlled Trial For Prevention Of Hypertensive Disorders Of Pregnancy

9h30	Nimallen Naicker	Invasive Breast Carcinoma with DCIS-Like Morphology: A Series Of 32 Cases Highlighting The Pitfalls Of This Unique Morphologic Subtype.
9h45	Nqobile Mthembu	Adapting The Illumina COVIDSeq for Whole Genome Sequencing of other Respiratory Viruses in Multiple Workflows and a Single Rapid Workflow
10H00	Mohammed Ali Gafar Mohammed	Hyaluronic acid-Silybin conjugate as a multifunctional self-assembled Vancomycin nanocarrier against bacterial sepsis
10H15	Kellicia Courtney Govender	Prevalence and determinants of apparent treatment-resistant hypertension among patients in South African primary care: a single-centre observational study
10h30-11h00	TEA BREAK	

26 August	Session 4: Track 2 Dr Carmen Rennie	K2
9h00	Mukanda Gedeon Kadima	Rational Design and Antimycobacterial Evaluation of Aryl Sulfonamide-Linked Isoniazid Hydrazones Against Mycobacterium Tuberculosis
9h15	Prem Prakash Sharma	Machine Learning-Based Classifier Model for Predicting Potential ERK2 Inhibitors in Cancer Therapy
9h30	Pavithra Sampath	Latent Tuberculosis: Understanding the Prevalence in a High Burden Area and Evaluation of Detection Assays

9h45	Relebohile Mautsoe	Nanocarrier-mediated co-delivery of ciprofloxacin and anemoside B4 for targeted treatment of bacterial infections and sepsis
10h00	Sanyuktha Harisingh	Antibody classes/subclasses and antigen reactivity of lung vs plasma from TB infected participants
10h15	Sphilile Mbhele	Functional Balance in Deaf School-Aged Children
10h30-11h00	TEA BREAK	
26 August	Session 4: Track 3 Dr Siqiniseko Ndlovu Dr Kimera Suthiram	Susser and Stein
9h00	Tebello Violet Sarele	Compliance of antibiotic prescriptions with standard treatment guidelines in four public hospitals in Lesotho
9h05	Nqobile Mkhize	Investigating the Changes in Selected Markers Associated with Calcium Homeostasis on Patients with Prediabetes.
9h10	Darko Kwabena Adu	Electrochemical detection of miltefosine in urine using amino functionalised multi-walled carbon nanotubes and [Fe(CN) ₆] ^{3-/4-} as a redox couple.
9h15	Zahrah Ebrahim	Developing Guidelines for a Water Safety Training Manual for Public School Educators, Focusing on Land-Based Training Methods with Essential Water Skills for Grades 1-3

9h20	Mohammed Husain Anderson	Characterization of a Mycobacterial zinc metalloprotease MSMEG_1134
9h25	Lufuno Jesica Badzhi	Correlation of Clinical and Radiological Findings on Patients with Spinal Trauma in Inkosi Albert Luthuli Central Hospital
9h30	Koobashnee Pillay	Comparative Evaluation of GST and HIS-Tag Fusion Systems for the Recombinant Expression and Purification of Mycobacterium tuberculosis Proteins
9h35	Londeka Xaba	Ergonomic Risks for Work-Related Musculoskeletal Disorders among Sugar Refinery Workers in KwaZulu-Natal, South Africa
9h40	Angel Thandokuhle Cele	Morphometry Analysis of the ventricular system in patients with Scaphocephaly in a select KwaZulu-Natal population: A comparative CT study
9h45	Joyce Adidja	Understanding the burden of HIV within a cancer cohort in KwaZulu-Natal, South Africa
9h50	Zesuliwe Jule	Evolution of the extensively mutated SARS-CoV-2 BA.3.2 Omicron subvariant
10h30-11h00	TEA BREAK	

26 August	Session 5: Track 1 Dr Nompumelelo Mkhwanazi	K1
11h00	Bertha Cinthia Baye	Molecular Characterization and Phylogenetic Analysis of Dengue Fever Viruses in Cote d'Ivoire
11h15	Luyanda Mthethwa	Investigating the Association Between Biomarkers of Intestinal Permeability and the Development of Prediabetes
11h30	Rivesh Maharajh	The Identification of novel adhesin-related The Structural Interactions and validation of novel Mycobacterium tuberculosis Adhesins with Associated Extracellular Matrix Components
11h45	Rayishnee Pillay	Integration of Planetary Health in the Health Sciences Curriculum: A Mixed-Methods Study
12h00	Sphamandla Hlatshwayo	Anti-postprandial hyperglycaemia and antioxidant effects of Sclerocarya birrea leaf crude extract and silver nanoparticle on in vitro cell lines
12h30-14h00	LUNCH BREAK	

26 August	Session 5: Track 2 Dr Sibusiso Senzani	K2
11h00	Anele Shange	Tissue and Plasma Dipeptidyl Peptidase 4 (DPP-4) Changes During Prediabetes: An Investigation of a Potential Role in Glucose Homeostasis Using a Diet-induced Prediabetic Rat Model.
11h15	Abdelrhaman Elhassan	A biomimetic redox-responsive hybrid lipid polymer antibiotic-nanocarrier against bacterial sepsis
11h30	Lisanthini Naidu	Strengthening HIV Programme Data: Quality assessment of Viral Load and CD4 data in TIER.Net using NHLS
11h45	Samukelisiwe Prudence Magoso	Profile and Risks for Lower Back Pain in a Rural Community of KwaZulu-Natal, South Africa
12h00	Tilahun Asena	Genetic Diversity and Mutation Profiles Across Pan-African Populations: A Systematic Review
12h30-14h00	LUNCH BREAK	

26 AUGUST

14h00-15h00 AWARDS CEREMONY SUSSER AND STEIN