saMRC
advancinglife

ANNUAL REPORT **2024/2025**

The art of Science

CONTENTS

PART A
GENERAL INFORMATION

PART B
PERFORMANCE INFORMATION

PART C
GOVERNANCE

PART D
HUMAN RESOURCES MANAGEMENT

PART E
PFMA COMPLIANCE REPORT

PART F
FINANCIAL INFORMATION

PART A: GENERAL INFORMATION

REGISTERED NAME:
South African Medical Research Council

REGISTRATION NUMBER (IF APPLICABLE):
Not applicable

PHYSICAL ADDRESS (HEADQUARTERS):
Francie van Zijl Drive, Parow Valley, Cape Town

POSTAL ADDRESS:
PO Box 19070, Tygerberg, 7505

TELEPHONE NUMBER/S:
+27(0)21 938 0911

FAX NUMBER:
+27(0)21 938 0200

EMAIL ADDRESS:
info@mrc.ac.za

WEBSITE ADDRESS:
www.samrc.ac.za

EXTERNAL AUDITORS:
Auditor-General of South Africa, Western Cape

BANKERS:
Amalgamated Banks of South Africa (ABSA)
ABSA Towers West
15 Troye Street
Johannesburg
Gauteng
South Africa
2000

COMPANY/BOARD SECRETARY:
Mr Nizar Davids
Email: nizar.davids@mrc.ac.za

DEPUTY INFORMATION OFFICERS:
Dr. Seeiso Koali
Email: seeiso.koali@mrc.ac.za
Ms Nobubele Tandwa
Email: nobubele.tandwa@mrc.ac.za

ISBN:
978-1-928340-84-3

DATE OF PUBLICATION:
31 August 2025

LIST OF ABBREVIATIONS/ACRONYMS

AFS
Annual Financial Statements

AGSA
Auditor-General of South Africa

EMC
Executive Management Committee

B-BBEE
Broad-Based Black Economic Empowerment

CEO
Chief Executive Officer

CFO
Chief Financial Officer

PFMA
Public Finance Management Act, Act 1 of 1999

TR
Treasury Regulations

SCM
Supply Chain Management

FOREWORD BY THE CHAIRPERSON

PROFESSOR JOHNNY MAHLANGU

It is with great purpose and institutional resolve that I present the 2024/25 Annual Report of the South African Medical Research Council (SAMRC), marking the culmination of the Council's 2020/21–2024/25 strategic cycle.

This pivotal milestone not only closes a significant chapter but inaugurates a new era, with the strategic plan for 2025/26–2029/30 – duly endorsed by the Honourable Minister of Health – now in active implementation.

This Annual Report reflects the SAMRC's unwavering commitment to excellence, accountability, integrity, and governance – foundational principles that permeate every dimension of our operations. Over the past five years, the Council has tenaciously pursued its mandate to catalyse health research that is rigorous, responsive, and transformative. Our endeavours remain intrinsically aligned with the nation's overarching development agenda, including the National Development Plan–2030, the Sustainable Development Goals, the Medium-Term Development Plan (2024–2029), and the Decadal Plan for Science, Technology and Innovation (2022–2032).

This year also heralded a major leadership transition. On 1 July 2024, Professor Ntobeko Ntusi assumed office as President and CEO. An esteemed clinician-scientist and globally respected academic leader, Professor Ntusi brings to the SAMRC a profound commitment to advancing research excellence, fostering evidence-based healthcare, and championing universal health coverage. His vision has further elevated the SAMRC's global stature and deepened its local relevance.

During the financial year under review, the SAMRC sustained exceptional standards of fiscal discipline, fortified internal controls, and affirmed its uncompromising adherence to ethical and lawful governance. The Board has rigorously executed its fiduciary responsibilities, ensuring that the organisation consistently meets and exceeds its strategic and operational objectives.

The Council's research priorities remain aligned with South Africa's most pressing health challenges. In 2024/25, substantial progress was made in driving transformation and capacity development, notably through investments in the next generation of health scientists and research leaders. Furthermore, the SAMRC's enduring commitment to translating research into policy and practice – the bedrock of our approach – continues to yield tangible improvements in national and global health outcomes.

As a key actor within the global health research ecosystem, the SAMRC reaffirms its alignment with the Rio de Janeiro Declaration on Health Sovereignty, a framework advocating for equitable access to diagnostics, vaccines, and therapeutics across the Global South. This commitment underscores our enduring mission to address health inequities through pioneering research and innovation.

The World Health Organization (WHO) Regional Office for Africa aptly reminds us: "Strengthening health research systems in Africa is not optional; it is indispensable for advancing health, reducing inequities, and achieving sustainable development." This principle animates and guides our collective efforts to produce research that is both meaningful and transformative.

Aligned with the Decadal Plan's call for an open, transparent, and responsive National System of Innovation, the SAMRC has cultivated a research environment that is inclusive, collaborative, and societally responsive. Confronted with the global contraction in health research funding, the Council recognises the urgency of diversifying its funding base. Accordingly, the Board fully endorses the executive leadership's drive to mobilise alternative financial resources and calls upon governmental, private, and philanthropic sectors to partner with us in sustaining health research excellence in South Africa.

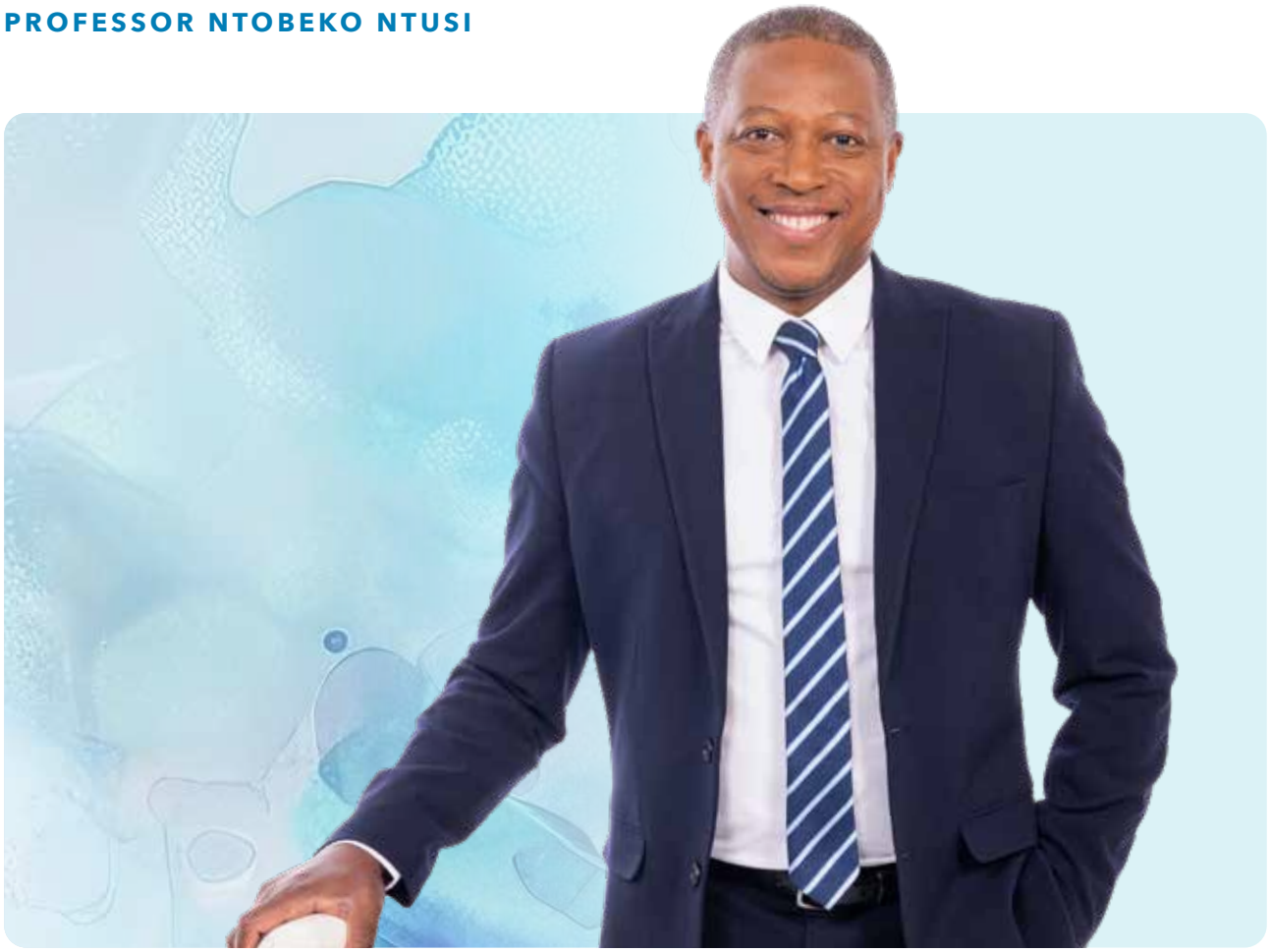
To this end, the SAMRC has strategically reinforced its alliances with prominent funding partners, including the National Research Foundation (NRF), the European & Developing Countries Clinical Trials Partnership (EDCTP), the Bill & Melinda Gates Foundation (BMGF), the Newton Fund, and the UK Medical Research Council (UK-MRC). Moreover, our stewardship as host of the African Health Research and Innovation Funders Forum further exemplifies our leadership in aligning and optimising health research investments across the African continent.

As Chairperson of the SAMRC Board, I am unequivocally confident that the achievements of the 2024/25 financial year have further entrenched the Council's status as a continental and global leader in advancing impactful research across infectious, non-communicable, and emerging health challenges.

Professor Johnny Mahlangu
SAMRC Board Chairperson

A NOTE FROM
THE PRESIDENT AND CEO

PROFESSOR NTOBEKO NTUSI



It is with great pride and a deep sense of responsibility that I present the first South African Medical Research Council (SAMRC) Annual Report under my leadership, for the 2024/25 financial year.

This past year has been marked by strong performance across the organisation. The SAMRC achieved most of its targets, a reflection of the unwavering dedication of our team – people who share in the vision of creating a healthier South Africa. Our commitment to our mandate remains steadfast, guided by our mission, vision and values.

Our research continues to make significant contributions to national and global health priorities. From improving HIV and TB prevention and control, reducing maternal, infant and child mortality, and lowering the burden of non-communicable diseases, to addressing injury and violence – our work is making an impact where it matters most.

In addition to disease-focused research, the SAMRC is deeply invested in tackling the social determinants of health. Our programmes seek to reduce gender-based and interpersonal violence, support alcohol and tobacco control, and promote healthy living for all South Africans.

We are also actively engaged in supporting public health reform, particularly through contributions to the implementation of the National Health Insurance (NHI). We believe that NHI rollout requires thoughtful sequencing and continuous engagement between the public and private sectors.

Human capacity development remains one of our key strategic pillars. We are committed to building and nurturing the next generation of researchers – scientists who will not only be capable but also innovative and forward-thinking in responding to our country's complex health challenges.

Throughout the year, the SAMRC advanced efforts to support and build South Africa's health research and innovation system. We did this by conducting high-quality research, funding promising projects, and enabling research translation.

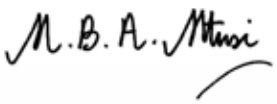
In 2024, our focus on an ecosystem approach helped ensure that research moves beyond discovery to inform policy, influence practice and deliver tangible health solutions. This approach also ensures that South Africa remains ready and resilient in the face of future pandemics.

We welcome South Africa's hosting of the G20 Presidency and are honoured to contribute to the G20 Health Working Group. Our research agenda aligns closely with the G20 health priorities – particularly in strengthening primary health care, pandemic preparedness, workforce development, non-communicable disease control, and using science and innovation to drive health and economic progress.

Despite the many successes of the year, the last quarter brought an unexpected challenge – a "black swan" event – with the abrupt cancellation of key international funding by the US administration. These cuts occurred with little notice, leaving limited room for mitigation. While this has dealt a serious blow to the South African health research ecosystem, we remain resolute. We are already putting in place strategies to diversify and secure long-term funding to ensure continuity in research and support for emerging scientific leaders.

In closing, I extend my sincere appreciation to the entire SAMRC team, our Executives, and the Board for their continued support and resilience. I also wish to thank the Deputy Minister of Health, Dr Joe Phaahla, and the Minister of Health, Dr Aaron Motsoaledi, for their leadership and guidance during this pivotal time.

As we look ahead, the SAMRC remains focused, energised and determined to continue building a healthier, more equitable future for all South Africans.



Professor Ntobeko Ntusi
SAMRC President and Chief Executive Officer

ACHIEVEMENTS AND HIGHLIGHTS

Supporting Health Research and Innovation Ecosystems in South Africa Through Strategic Partnerships

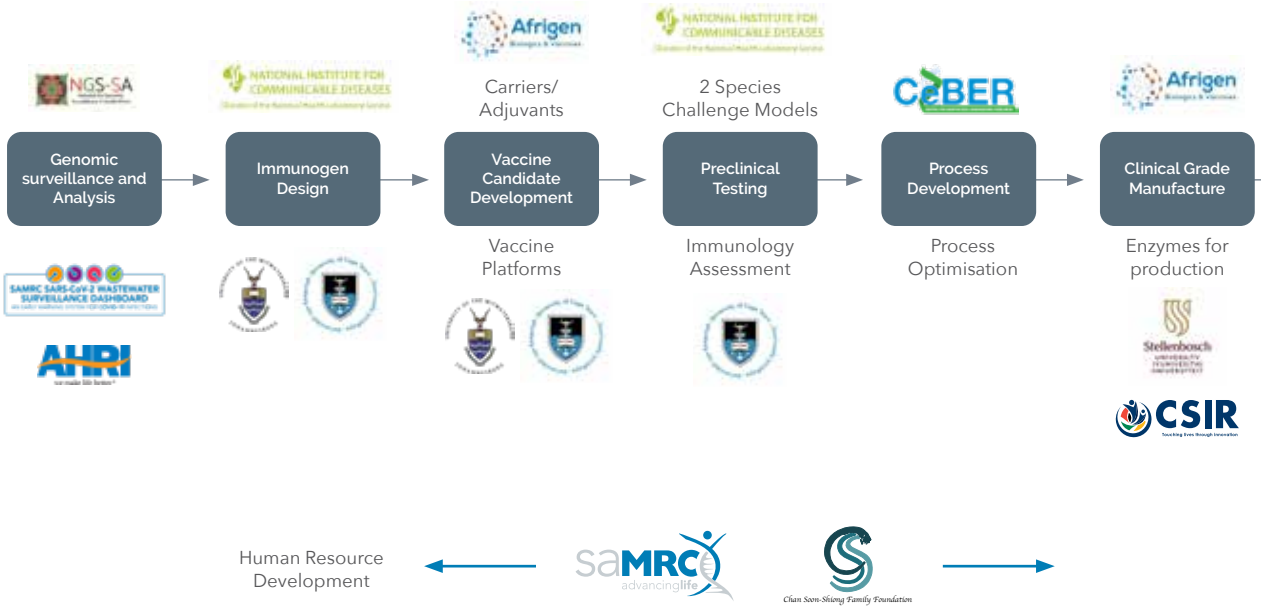
The SAMRC plays a particularly important role in supporting and building the national health research and innovation system in South Africa through its core functions of conducting research, funding research and supporting research capacity development, innovation and research translation. Its funding and innovation activities in 2024 focused substantially on driving an ecosystem approach to ensure that the organisation not only supports cutting edge research but is also able to facilitate the translation of this research into policy, products and practice. Fully capacitated and well-coordinated ecosystems enable aligned and efficient research and development efforts that can be applied in all priority areas to address national health needs, including during pandemics.

The SAMRC's Grants Innovation and Product Development (GIPD) unit has been particularly focused on building research and innovation ecosystems for vaccines, medical devices and diagnostics and indigenous knowledge system/ plant-based medicines. Key to this has been the establishment of local and international partnerships for funding and general ecosystem participation and support.

Vaccines Research and Innovation Ecosystem

South Africa has established, through decades of R&D and infrastructure investments, a Vaccines Research and Innovation Ecosystem that is depicted below.

VACCINES VALUE CHAIN

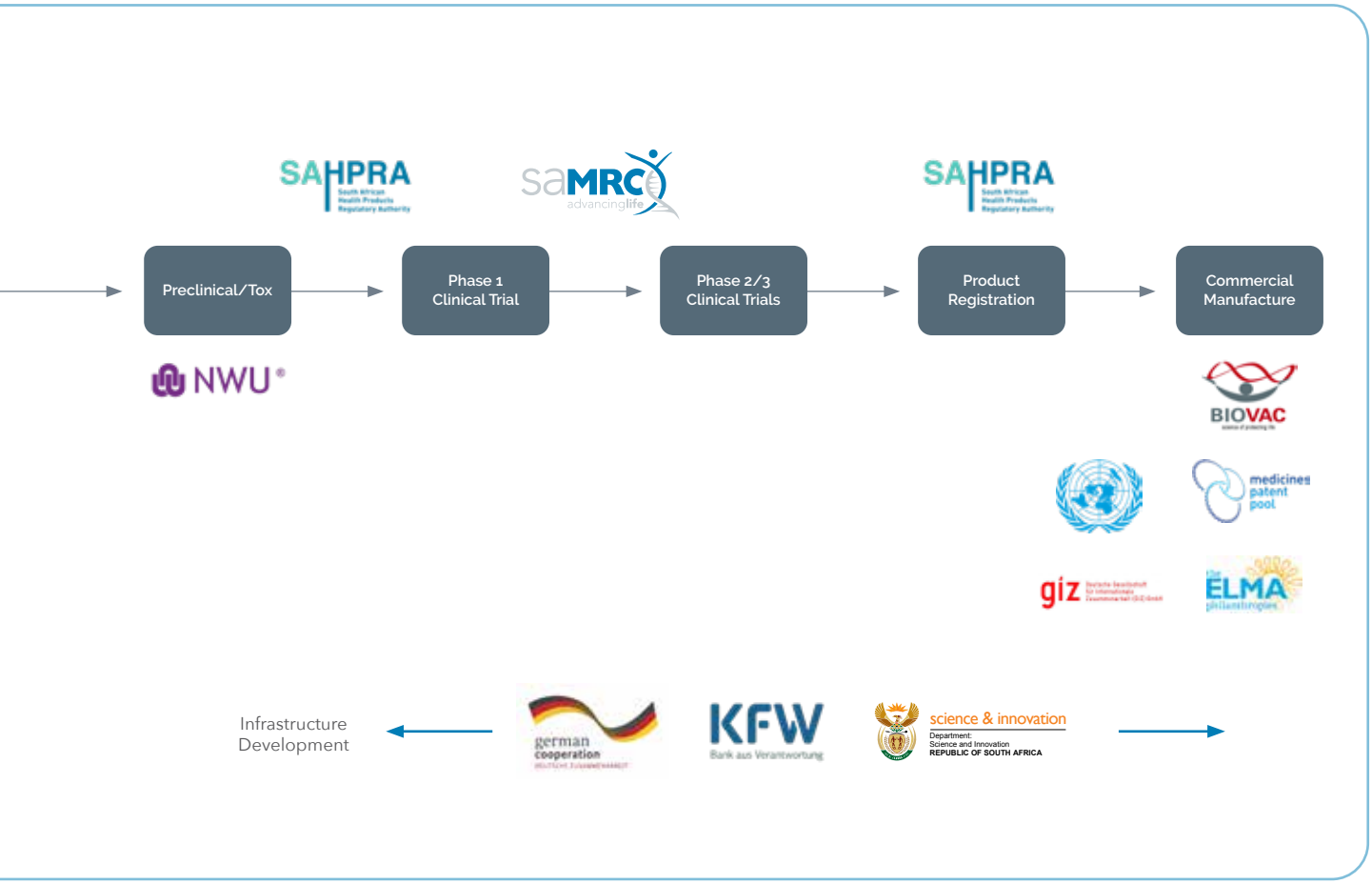


Depiction of the vaccine development value chain and ecosystem in South Africa

The SAMRC has contributed to the development and expansion of this ecosystem through its investments in and coordination of specific vaccine development and human capital and infrastructure projects and programs, together with strategic funding partners such as the Department of Science, Technology and Innovation (DSTI), the ELMA Vaccines and Immunization Foundation, Medicines Patent Pool (MPP), the World Health Organization (WHO), the Chan Soon-Shiong Family Foundation (CSSFF) and the German Government through the KfW Development Bank (KfW). The mRNA Hub Programme has been used to fill gaps in the vaccine development value chain and is testing the ecosystem by taking pilot projects on HIV and TB vaccine candidates through towards clinical studies.

The South African mRNA Vaccine Consortium (SAMVAC), comprises of 10 consortium members, including the University of the Witwatersrand (Wits), Wits Health Consortium (WHC), the University of Cape Town (UCT), the African Health Research Institute (AHRI), the University of Stellenbosch (SU), North-West University (NWU), the National Institute for Communicable Diseases (NICD), the SAMRC, the Council for Scientific and Industrial Research (CSIR) and Afrigen Biologics. Each consortium member plays a role in fulfilling the product development value chain and a key goal has been to fill any existing gaps and ensure that South Africa has the capability to take an mRNA vaccine candidate all the way through the product development process from identification of the immunogens to first in human studies. The key components of the programme are as follows:

- Surveillance to monitor pathogens with epidemic and/or pandemic potential and identify clinically relevant variants for use as immunogens in future vaccines – this includes genomic surveillance (CERI, University of Stellenbosch) and wastewater surveillance (SAMRC and HDI partners)
- Identification and design of immunogens for COVID, TB and HIV (Wits, NICD/Wits and UCT)
- Development of mRNA vaccine candidates (Wits and Afrigen)
- Development and testing of novel ionizable lipids as alternatives to those used in the registered COVID vaccines to work around IP issues, increase stability and reduce cost (Wits and Afrigen)



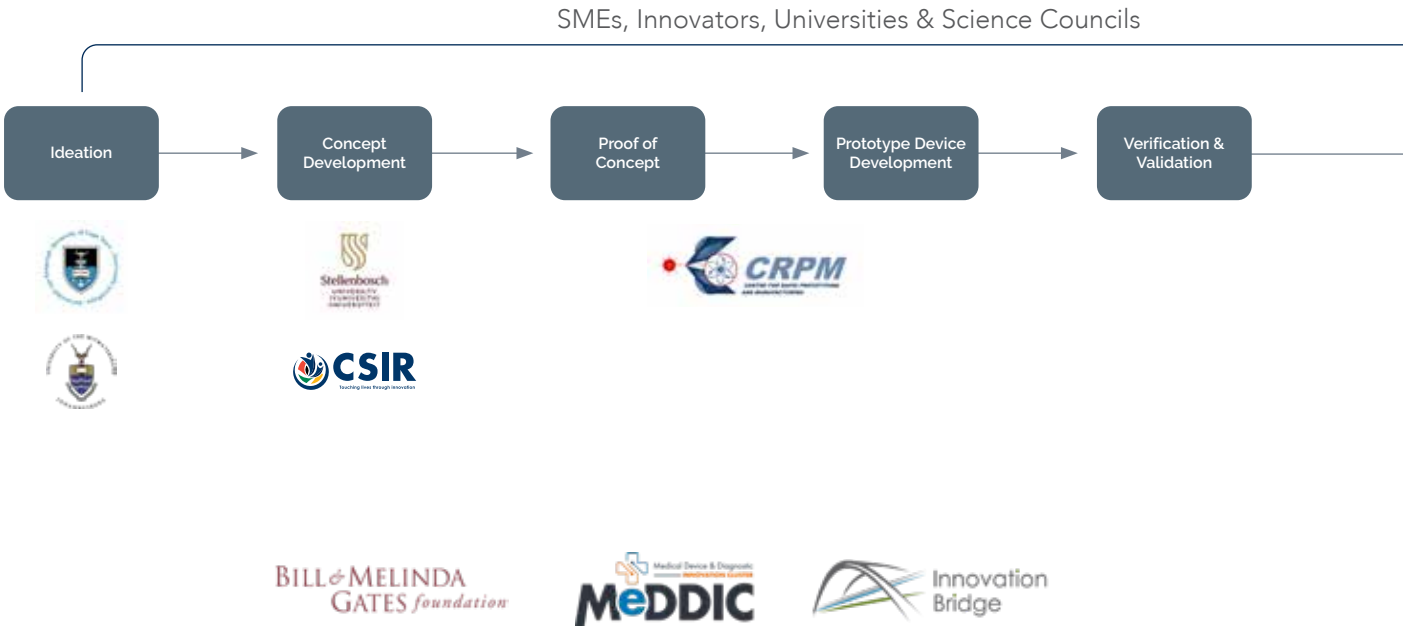
- Immunogenicity testing of vaccine candidates in mice (Wits and UCT), rabbits (UCT) and, where required non-human primates (SAMRC) – immunogenicity assays are conducted by UCT and NICD/Wits
- Challenge studies in hamsters and mice for COVID and TB vaccines, respectively (UCT)
- Preclinical toxicity testing in rodents (NWU)
- Manufacturing process optimization and techno-economic analysis (CEBER, UCT)
- Process development, quality assurance and manufacture for clinical trials (Afrigen)
- Clinical trials (SAMRC)
- Development of microbial strains for manufacture of the enzymes required for mRNA production (SU Biofoundry)
- Scaling up of production of the enzymes (CSIR and Fluorobiotech).

In addition to supporting the above components of the vaccine development value chain, the SAMRC is supporting human capacity development through the CSSFF-SAMRC Biomanufacturing Capacity Development Programme and infrastructure development through the Support for Vaccine Research, Development, Pilot-Scale Production and Regulation in South Africa Programme funded through KfW in partnership with the DSTI. Together, these investments are aimed at ensuring future self-sustainability in responding to emerging health threats.

Medical Device and Diagnostics Ecosystem

It has been long recognized that the medical devices sector in South Africa has enormous potential for growth in terms of both the development and commercialization of novel "home-grown" innovations and increasing the local manufacturing base. Various sector reports over the years, including one compiled by the SAMRC's innovation team, have demonstrated this potential but also revealed remaining gaps and challenges hampering growth of the sector. The SAMRC, through the Global Health Innovation Accelerator (GHIA) and the Medical Device and Diagnostic Innovation Cluster (MeDDIC)

MEDICAL DEVICES VALUE CHAIN



Depiction of the medical devices value chain and ecosystem in South Africa

Programme, has driven a variety of initiatives, together with partners and other funders, to build and support a coherent and functioning medical devices ecosystem, as depicted in the figure below.

Through GHIA, MeDDIC, and various research and product development grant programs, the SAMRC supports early discovery to identify appropriate biomarkers, device and diagnostic development, proof of concept and testing of new medical devices and diagnostics. MeDDIC funds regulatory support for innovators as well as access to technical support from service providers to the sector. The programme also hosts and convenes a national Medical Devices Stakeholder Forum and compiles and makes available information on the sector through the MeDDIC website and the medical devices portal on the Innovation Bridge platform. These initiatives, made possible through the funders and implementing partners listed in the diagram, are ensuring that more innovations initiated and developed in South Africa and right for the local context are successfully deployed to address key health needs in South Africa and beyond.

IKS/Plant-based Medicines Ecosystem

African traditional medicines (ATMs) have been a cornerstone of healthcare for centuries, yet they remain underappreciated and underutilised in modern health systems. With the challenges facing mainstream healthcare in South Africa and across the continent, there is an urgent need to recognise the potential of indigenous knowledge systems (IKS) not only to improve health outcomes but also to boost the economy. For many, particularly in rural areas, traditional medicines serve as the first line of treatment. These remedies, rooted in centuries of practice and observation, are used to manage pain, build immunity, treat wounds, and cure diseases. Despite this, scepticism abounds, primarily because these medicines have not always been validated by modern scientific methods.

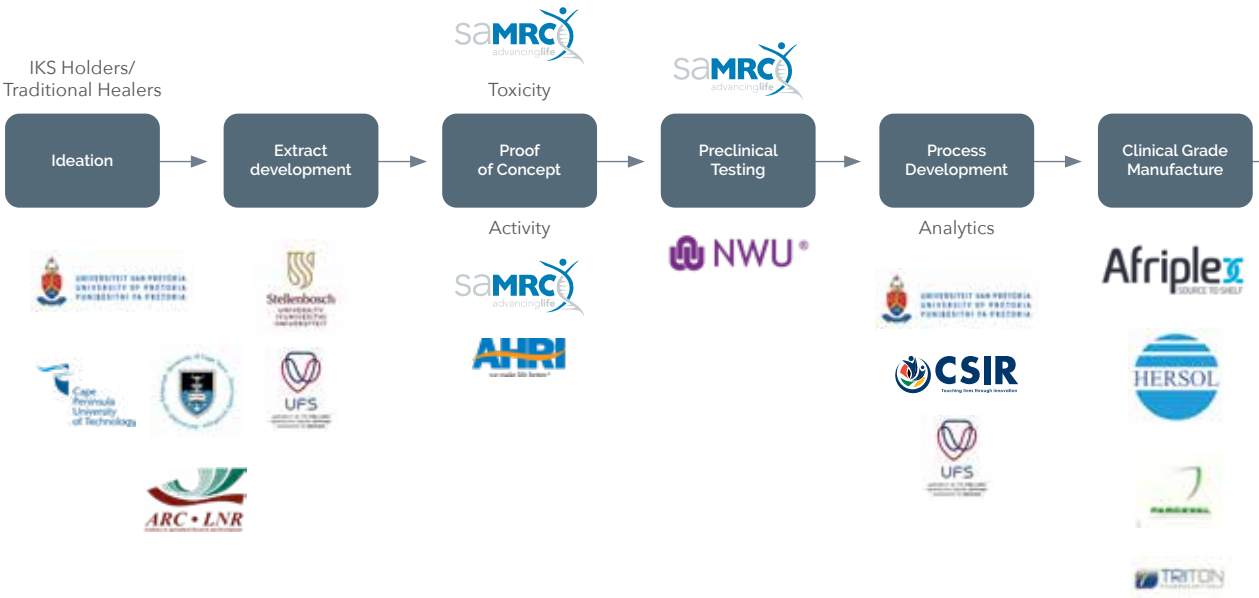
The SAMRC is playing a role in unlocking the potential of traditional medicines to improve health as part of a broader national initiative led by the Department of Science, Technology, and Innovation and co-supported by the Technology Innovation Agency, by supporting a suite of initiatives to establish a validated

value chain for progressing plant-based medicines towards clinical testing. One of these is the SAMRC's Biomedical Research and Innovation Platform (BRIP), which conducts research and development on therapeutics from indigenous resources. This includes the ATM platform, established to facilitate the screening and development of traditional medicines. This platform has also initiated the South African Natural Product Consortium (SANPC), which, in collaboration with partners from historically disadvantaged institutions such as Sefako Makgatho Health Sciences University, University of Limpopo, Tshwane University of Technology and University of Zululand, is advancing efforts to standardize methodologies for ATMs, ensuring scientific robustness and consistency in their evaluation and development.

Other noteworthy projects that have continued in 2024 include Product Nkabinde, a traditional medicine showing promise for HIV management, developed by Mr. Magugu Nkabinde and his family, with further scientific R&D being conducted by a team at the University of KwaZulu-Natal and Africa Health Research Institute. This product has laboratory-demonstrated anti-HIV and immunomodulatory properties and has led to a patent filing. A second project is on a supplement for HIV/AIDS patients, developed by indigenous knowledge holder Mr. David Molefi, with further scientific R&D being conducted by a professor at Tshwane University of Technology, focusing on safety and pharmaceutical validation. For these projects, BRIP/SAMRC is supporting some of the in vitro and toxicity screening, and the SAMRC's Primate Unit and Delft Animal Centre is supporting the in vivo work.

In addition to other national efforts in this regard, notably at the University of the Free State, these projects, co-funded by the SAMRC and TIA, are serving to chart a product development pathway for the scientific validation and SAHPRA-approved first

IKS/PLANT-BASED MEDICINES VALUE CHAIN



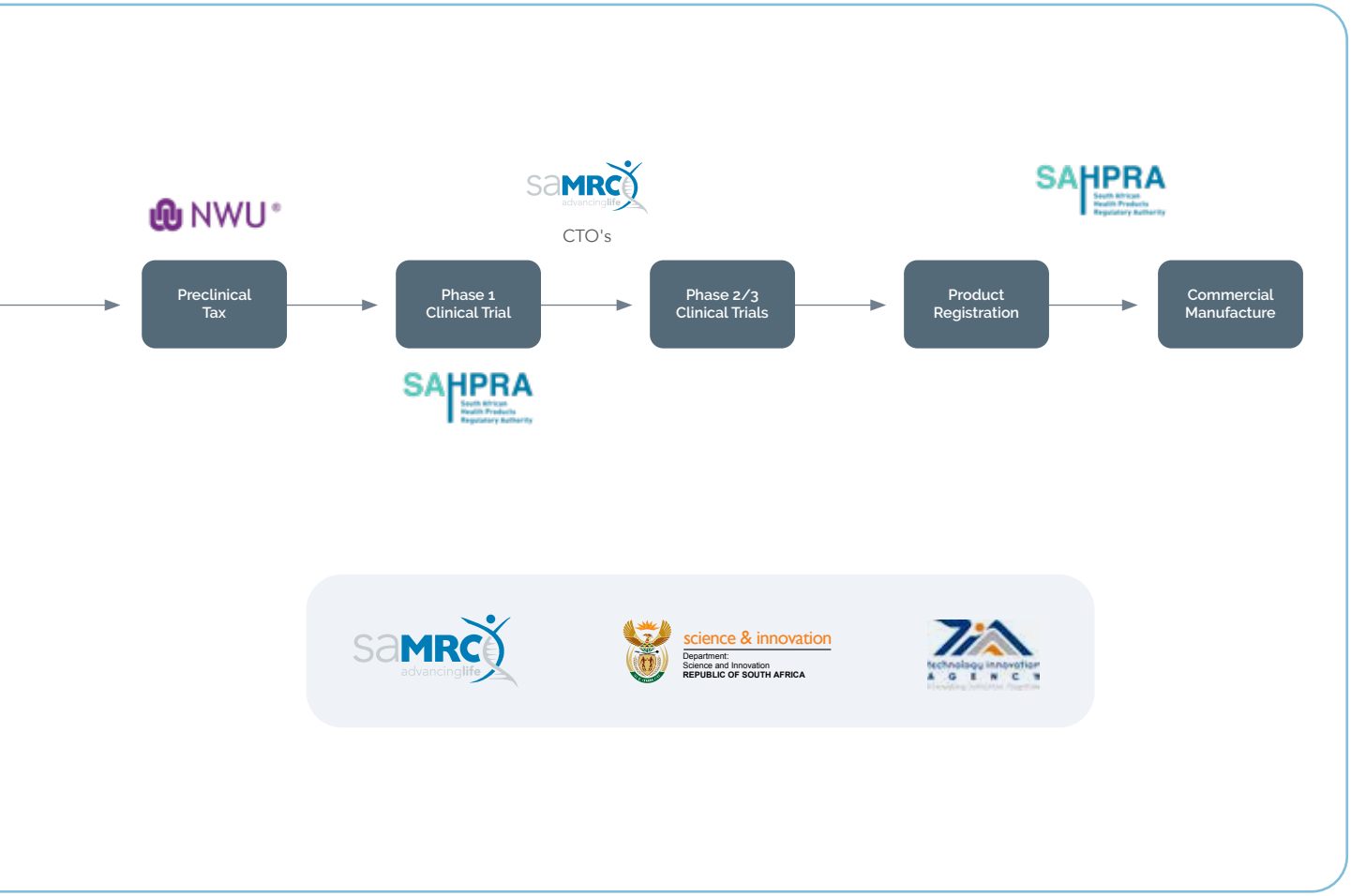
Depiction of the IKS/plant-based medicines value chain and ecosystem in South Africa

in human studies on these products and highlight the potential of traditional healer – academia collaboration. Additionally, the SAMRC continues to fund smaller grants in the IKS and phytomedicine arena through its self-initiated research and capacity development initiatives.

The benefits of scientific validation of plant-based medicines extend beyond health and include the potential for economic empowerment and job creation that will improve the overall well-being of rural communities.

Launch of the 100 Day Mission Report in Partnership with IPPS and the NDOH

Pandemic preparedness is one of SAMRC's key priorities following the COVID-19 pandemic and more recent outbreaks of Mpox, H5N1, cholera, and other pathogens of concern. As such, the SAMRC was honoured to partner with the International Pandemic Preparedness Secretariat (IPPS) and the National Department of Health in January 2025 to launch the 4th Implementation Report of the 100 Days Mission (100DM), an initiative aimed at ensuring global access to diagnostics, therapeutics, and vaccines (DTVs) within 100 days of a Public Health Emergency of International Concern. The report, unveiled at an event co-hosted by IPPS, the National Department of Health and SAMRC in Cape Town, highlights that while there have been bright spots at a national level, the world remains insufficiently prepared for a 100-day response to a future pandemic. The report is accompanied by the 2nd iteration of the 100DM scorecard which shows that critical gaps remain, particularly in the development and deployment of diagnostics and therapeutics for diseases with pandemic potential. As the world continues to grapple with evolving threats, the report underscores the urgency of building a robust and equitable R&D ecosystem.



The launch event provided an opportunity to bring to the fore African efforts in pandemic preparedness and showcase examples of regional leadership across all aspects of the 100 Days Mission as South Africa takes on the G20 presidency. IPPS officials shared key findings of the implementation report and areas for action in 2025 and convened partners from all sectors for discussions on what the enablers are for implementing proposed 2025 priorities. The report highlights three key areas for action in 2025 that would ensure the world is better prepared for future outbreaks, namely, reinvigorate the therapeutics pipeline with a focus on early-stage R&D, collaborate with partners in the diagnostics ecosystem to enhance coordination and implement the 100DM roadmap, and sustain clinical trial infrastructure and strengthen preparatory regulatory approaches. The SAMRC will continue to make key contributions in each of these areas as it implements its new strategic plan.

Attendees at the 100 Day Mission launch at the SAMRC Cape Town on 31 January 2025.

STATEMENT OF RESPONSIBILITY AND CONFIRMATION OF ACCURACY FOR THE ANNUAL REPORT

To the best of our knowledge and belief, we confirm the following:

All information and amounts disclosed in the annual report are consistent with the annual financial statements audited by the Auditor General of South Africa.

The annual report is complete, accurate and free from any omissions.

The annual report has been prepared in accordance with the guidelines on the annual report as issued by the National Treasury.

The Annual Financial Statements (Part F) have been prepared in accordance with the National Treasury standards applicable to the public entity.

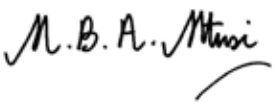
The Accounting Authority is responsible for the preparation of the annual financial statements and the judgements made in this information.

The Accounting Authority is responsible for establishing and implementing a system of internal control has been designed to provide reasonable assurance as to the integrity and reliability of the performance information, the human resources information and the annual financial statements.

The external auditors are engaged to express an independent opinion on the annual financial statements.

In our opinion, the annual report fairly reflects the operations, the performance information, the human resources information and the financial affairs of the public entity for the financial year ended 31 March 2025.

Yours faithfully,



Professor Ntobeko Ntusi
President & Chief Executive Officer

31 March 2025

Professor Johnny Mahlangu
Chairperson of the Board

31 March 2025

STRATEGIC OVERVIEW

Our mandate

The mandate of the South African Medical Research Council (SAMRC), in terms of the MRC Act 58, 1991 (as amended), is to improve the health and quality of life of South Africans. This needs to be realised through research, development, and technology transfer.

Who we are

The SAMRC was established in 1969 and is dedicated to improving the health of people in South Africa, through research, innovation, development, and technology transfer. The scope of research includes laboratory investigations, clinical research, and public health studies.

We conduct research on South Africa's quadruple burden of disease: maternal, newborn and child health, HIV/AIDS and TB, non-communicable diseases, and interpersonal violence. Our work is to acquire evidence-based information to inform health policy and practice and improve the quality and health status of people in South Africa.

We are the largest local funder of health research, medical diagnostics, medical devices, and therapeutics. We are pioneers in cutting edge medical innovations focusing on genomic research, the development of novel treatment regimens, vaccine development, diagnostic tools, and developing new drugs and devices.

Transformation remains an integral part of building sustainable health research capacity in South Africa through Self-Initiated Research (SIR) grants, the Mid-Career Scientist programme, the Bongani Mayosi National Health Scholars Programme, and other programmes and platforms, the SAMRC will continue to address gender, racial, institutional, and geographic parity, and strengthen our capacity to flourish in the 21st century. As a custodian of health research, the SAMRC is building a healthy nation through research and innovation.

Our vision

Building a healthy nation through research, innovation, and transformation.

Our mission

To advance the nation's health and quality of life and address inequality by conducting and funding relevant and responsive health research, capacity development, innovation, and research translation.

Our values

LEGISLATIVE AND OTHER MANDATES

Constitutional mandate

The Constitutional (Constitution of the Republic of South Africa Act, 1996 (Act 108 of 1996, as amended) base that supports the SAMRC's mandate is:

- Section 10 (right to human dignity).
- Section 11 (right to life).
- Section 12 (right to freedom and security of the person).
- Section 14 (right to privacy).
- Section 24 (right to environment that is not harmful to health).
- Section 27 (right to healthcare, food, water, and social security).

In the Constitutional context, the outcome of SAMRC work must translate to some tangible/realisable proposition addressing one of these areas.

Statutory and other mandates

The Legal & Compliance Services Division of the SAMRC has identified 51 Acts of Parliament (with 23 of those characterised as primary (i.e., non-compliance therewith or parts thereof would be catastrophic to the business/ mandate of the SAMRC). Further to that, 7 Good Practice Standards (local and international) have been identified to be applicable to the SAMRC. Last, 10 Regulatory Authorities have been identified to have authority over the business or conduct of the SAMRC.

The 51 acts include the following:

- SAMRC Act 58 of 1991, as amended.
- This is the enabling and founding legislation creating the SAMRC. It is instructive on the mandate of the SAMRC and the prioritisation of its research programmes. The SAMRC Act empowers the functional and authoritative structures of the SAMRC to source/employ such resources and engage the Executive Authority and such other key stakeholders as may be appropriate to give effect to the mandate of the SAMRC.
- The National Health Act 61 of 2003.
- Intellectual Property, Rights from Publicly Financed Research and Development Act, 2008.
- Employment Equity Act 55 of 1998, as amended.
- Labour Relations Act 66 of 1995, as amended.
- Employment Equity Act 55 of 1998, as amended.
- Basic Conditions of Employment Act 75 of 1997, as amended.
- Public Finance Management Act (No.1 of 1999 as amended by Act 29 of 1999).
- The Patents Act 57 of 1978.
- Copyright Act 98 of 1978.
- Trademarks Act 194 of 1993.
- Designs Act 195 of 1993.
- Implementation of Official Languages Act 12 of 2012.
- Promotion of Access to Information Act, No. 2 of 2000.

The Good Practice Codes include:

- King Code on Corporate Governance.
- Good Clinical Practices (GCP).
- Good Laboratory Practices (GLP).

The Regulatory Authorities include:

- Information Regulator created in terms of the Protection of Personal Information Act.
- South African Revenue Services.
- Health Professions Council of South Africa.
- South African Health Products Regulatory Authority.
- National Health Research Ethics Council.
- South African Pharmacy Council
- South African Nursing Council
- South African Dental Technicians Council
- South African Veterinary Council.

Auditors

- Auditor-General of South Africa
- Internal Auditors

Corporate governance embodies processes and systems by which public entities are directed, controlled and held to account. In addition to legislative requirements based on a public entity's enabling legislation and Companies Act, corporate governance, regarding public entities, is applied through the precepts of the PFMA and run-in tandem with the principles contained within the King Report on Corporate Governance.

All these instruments are constantly monitored to attend to necessary reviews as and when public policy, professional practice and legislative changes are initiated.

ORGANISATIONAL STRUCTURE

Executive Management Committee

The SAMRC President heads the SAMRC Executive Management Committee, which the SAMRC Act assigns responsibility for the day-to-day management of the SAMRC.

Executive Management Committee

Prof Ntobeko Ntusi

SAMRC President & CEO

Prof Liesl Zühlke

Vice President Extramural Research & Internal Portfolio

Dr Michelle Mulder

Executive Director: Grants, Innovation and Product Development

Ms Ntoza Bam

Executive Director: Human Resources

Mr Mzimhle Popo

Legal Counsel

Mr Sivuyile Ngqongwa

Chief Financial Officer

Dr Mongezi Mdhluli

Chief Research Operations Officer

Prof Angela Mathee

Executive Director: Transformation

A BROADER APPROACH TO TRANSFORMATION AT THE SAMRC

Over the past year, through resilient processes and ongoing vigilance, the SAMRC has continued its drive toward diversity, inclusion and employment equity, with pleasing results. We are also investing in building capacity for science leadership at the organisation, through holistic approaches that include interventions to promote intrapersonal development. Simultaneously, in the context of our expanded approach to Transformation, we have initiated a range of interventions to increase self-awareness and strengthen resilience and agility, while encouraging a commitment to life-long and self-directed learning in all our employees. For example, we have provided multiple platforms for independent learning on a range of scientific, biostatistical, leadership management and emotional/social intelligence skills.

We are particularly committed to working towards promoting stronger, flourishing research teams. We believe that strengths in this regard may also serve our employees and the organisation as we grapple with the upshots of precipitous terminations in international funding for vital health research projects, and the likelihood of significantly reduced global research funding in the coming years. Similarly, these personal strengths will support our efforts to grasp opportunities, and engage with challenges, posed by the unfolding fourth and fifth industrial revolutions, including artificial intelligence (AI).

SAMRC approach to transformation

Diversity

Focus on increasing diversity at the SAMRC

- Predominantly a quantitative process aimed at fairness in recruitment & career progression.
- Focus on institutional policies & processes

Inclusion

Focus on culture & interpersonal relationships

Key questions:

- Do you feel you have a sense of agency at the SAMRC?
- If not, why not?
- Are you engaging in a powerful and constructive way?
- If not, why not?
- What is needed to support you in doing so?

Personal/team/ institutional flourishing

Focus on self-awareness, personal empowerment & work engagement

- Intra-personal & inter-personal development
- Building a sense of meaning & purpose in the work of the SAMRC
- Developing skills to flourish in times of challenge & change:
- Analytical & creative thinking
- Curiosity & life-long learning
- Pro-silience & agility
- Empathy & active listening
- Leadership & social influence

Equity

- Equity in recruitment
- Diversity in workplace
- Widespread sense of inclusion
- Individual & individual flourishing

True to our values

- Excellence
- Pioneering
- Partnership
- Integrity
- Citizenship
- Respect

Quantitative, Universal

Qualitative, Personal/Teams, Bespoke

SAMRC Transformation Forum

The SAMRC Transformation Forum is a group of employees nominated from across a range of Units and Divisions in the organisation and serve as an important anchor in the Transformation agenda at the SAMRC. The work of the Transformation Forum is government by pre-determined Terms of Reference, and members are appointed for periods of two years to serve the following main roles:

- To propose and consider Transformation interventions for the SAMRC,
- To disseminate information, and obtain input from the broad SAMRC employee body, on proposed Transformation interventions at the SAMRC,
- To bring emerging Transformation concerns to the attention of the Forum and the Transformation Office, and
- To debate any matter related to Transformation at the SAMRC.

SAMRC Transformation Forum: 2023 – 2025

Learning from SAMRC Leaders

As our leaders move toward retirement, we invite them to present a lunchtime online seminar to the SAMRC community to share their experiences, the lessons they have learned, and their wisdom. In particular, we ask them to focus on three key issues:

- Which three achievements are you most proud of?
- Which three personal capacities have been most helpful in your career success?
- What three pieces of advice do you have for emerging scientists/leaders?

The Learning from SAMRC Leaders webinars have been popular and is an initiative we plan to sustain.

Support for transitions from work life through retirement

After hearing that some former SAMRC employees were experiencing a degree of hardship in making the transition from work life to retirement, we initiated group discussions to which employees who have one year to go before retirement are invited. The group discussions focus on two key areas of discussion: 1) financial information, and 2) the topic of finding meaning and purpose during post-retirement life. A specialist on the selected topic is invited to each group discussion. There has been a high level of interest in the initiative from the target group.

Campus Environmental Interventions

We have taken steps to ensure that our campuses are more accessible and that our built environments are more aesthetically pleasing. At our Ridge Road Campus in Durban, we have created more comfortable spaces for dining and informal meetings. In Pretoria, we have provided improved parking for transportation for wheelchair users. At all our campuses, there is now at least one non-binary toilet available. We have started the process of installing a lactation room at each of the SAMRC's main campuses (Cape Town, Durban and Pretoria) for use by employees and visitors. The rooms will be quiet spaces fitted with comfortable seating, hand washing facilities (or have them close by) and refrigeration for milk bottles.

When not in use for lactation purposes, the rooms may be used as quiet reading spaces.

In response to growing evidence of increasing heat and heatwaves associated with our changing climate, we are preparing to educate sun-exposed workers on the hazards of exposure to heat, the distinctions between the stages of heat illness, from heat rashes to heat stroke, and providing them with the tools to keep safe during hot weather or heatwaves.

PARTNERSHIPS WITH OTHER COUNTRIES

BRICS TB Research Network

The Network, established in 2017, is an endeavour to collaborate with BRICS Ministries of Health and scientists to address the problems of TB in BRICS countries and to mobilise resources to find local solutions. Discussions are held to promote collaborative scientific research along the spectrum, from basic to operational, for the development and innovation on diagnostics, vaccines, drugs and regimens, infection control for TB and patient service delivery. Ongoing activities during the reporting period included.

- The Russian Federation hosted a network meeting in Moscow during 23-25 April 2024.
- WHO, at the request of the Russian Federation, hosted a network meeting in Geneva on 4 October 2024.
- BRICS has five additional country members, viz., Egypt, Ethiopia, Indonesia, Iran and United Arab Emirates.

The SAMRC hosts the Network's website https://bricstb.samrc.ac.za/

BRICS Multilateral Joint Science and Technology Research Collaboration

The BRICS STI Framework Programme (FP) aims to support excellent research in priority areas which can best be addressed by a multinational approach.

DSTI invited the SAMRC to manage the call and the awarded projects in the following two thematic areas:

- Antimicrobial resistance: technologies for diagnosis and treatment
- Simulation and big data analytics for advanced precision medicine and public healthcare.

The three (3) ongoing projects are:

Project Title	Principal Investigator	Institution
Novel siderophore fragments and hybrids for the diagnosis and treatment of drug resistant-infectious pathogens	Prof. Rui Krause (late) / Prof. Rosalyn Klein	Rhodes University
Unlocking bacterial resistance to antibiotics with the development of novel metallo-β-lactamase inhibitors	Associate Prof. Tricia Naicker	University of Kwa-Zulu Natal
Target identification and efficacy enhancement of proven MDR overcoming Piper spp derived compounds towards candidate drug development against WHO priority 1 (critical) MDR pathogens: P. aeruginosa, E. coli, K. pneumoniae, and M. tuberculosis	Dr. Awelani Mutshembele	South African Medical Research Council, Office of HIV/AIDS and TB Research

Collaboration with The George Institute, Australia

A Memorandum of Understanding was signed between the SAMRC and The George Institute for Global Health (TGI) on 28 October 2022 for 3 years to expand collaboration between SAMRC and TGI scientists in health research.

The SAMRC and TGI approved seed-funding for seven (7) SAMRC-TGI joint projects starting on 1 December 2023 for a 3-year period. The ongoing projects are:

No.	Title	Name of PI	SAMRC Unit
1	Exploring a syndemic approach to understanding the bi-directional link between type 2 diabetes mellitus and depression, and implications for the integrated care process in South Africa and India	Dr Nasheeta Peer	Non-communicable Diseases Research Unit
2	Collaboration to explore and identify research priorities for enhancing health systems governance and leadership for UHC in South Africa	Prof. Tamara Kredo	Health Systems Research Unit
3	A co-creation-based approach to developing an integrated e-health intervention package for non-communicable diseases and sexual and reproductive health for women and girls in South Africa	Dr Kim Jonas	Health Systems Research Unit
4	An investigation into improving screening, prevention, management, and control of maternal multimorbidity in South Africa and India	Dr Vundli Ramokolo	HIV and Other Infectious Diseases Research Unit
5	Formative work for the design of South Africa's first health-related quality of life (EQ-5D) adult valuation study	Dr Darshini Govindasamy	Health Systems Research Unit
6	Piloting the functionality of the African Network for chronic kidney disease epidemiology: The CKD-Africa Collaboration	Dr Cindy George	Non-communicable Diseases Research Unit
7	ENGAGE-WC: Empowering Non-fatal injury-data Governance, Analysis and Grassroots Engagement in the Western Cape	Dr Megan Prinsloo	Burden of Disease Research Unit

Global Forum on Bioethics in Research (GFBR)

The Global Forum on Bioethics in Research (GFBR) hosted its annual Global Forum in Kuala Lumpur, Malaysia from 19 – 20 November 2024. The focus of the 2024 Forum was on 'Ethical issues arising in research into health and climate change'. The GFBR, with its Secretariat hosted by WHO, is supported by several international research funders including the Wellcome Trust, UK Medical Research Council, the U.S. National Institutes of Health and the SAMRC. The Forum serves as a global platform for debate on ethical issues in international health research bringing together research ethics experts, researchers, policy makers and community members from developing and developed countries. Participants are selected on a competitive basis, based on structured submissions requiring a motivated account of each applicant's engagement.

South Africa admitted to the International Human Frontier Science Program Organization

The Human Frontier Science Program Organization (HFSPO), the National Research Foundation of South Africa (NRF), and the SAMRC entered into a Memorandum of Understanding (MoU) on 24 February 2023. The SAMRC and the NRF serve as joint institutional members. South Africa is the 16th country to be admitted, and the only country from Africa.

This membership underscores the value that South Africa places on supporting fundamental research in the understanding of complex mechanisms in the life sciences to advance industry, health, and human well-being. As a member, South Africa works closely with other HFSPO members to support innovative basic research; apply novel and interdisciplinary

approaches; and enable scientific exchanges across national and disciplinary boundaries to address fundamental biological problems.

In 2024, HFSPO in collaboration with the SAMRC and NRF held a HFSPO Masterclass: Grant writing workshop at the NRF in Pretoria during 26-29 November 2024. The aim was to prepare South African scientists to apply for the HFSPO fellowships and grants in 2025.

The HFSPO Master Class brought together scientists interested in HFSPO for a special workshop offering hands-on training in grant writing led by experienced HFSPO reviewers with integration of examples of HFSPO supported research projects, introductions to HFSPO programs, and interactive live exchanges with scientists in South Korea and India.

The workshop program included pre-meeting writing tasks for scientific abstracts which were assessed remotely by the training team and discussed live at the meeting hub. Onsite writing tasks included individual writing tasks (public abstracts) and team efforts (drafting a research plan for a letter of intent).

This call was open to early stage and established researchers working in the life sciences, as well as Doctoral students/Postdoctoral fellows working on a biological topic who want to embark on a novel and frontier project focusing on the life sciences. A total of 30 delegates from SA universities and science councils participate in the workshop.

SAMRC and AMED sign Memorandum of Cooperation

In 2024, the SAMRC entered into a Memorandum of Cooperation (MoC) with the Japan Agency for Medical Research and Development (AMED). The purpose of the MoC is to promote and support cooperation between scientists in South Africa and Japan related to medical research and development. Some of the activities proposed under the framework of this MoC include joint research projects conducted by researchers from both countries, joint seminars, workshops and other scientific meetings as well as personnel exchanges.

AMED was established in 2015 as a funding agency tasked with promoting medical research and development and improving the environment for research in Japan under their government's Healthcare Policy.

In October 2024, a call for joint projects was published on the topic, "Genomic Insights into the Pathogenesis of Cancer and Infectious Diseases." Proposals received under this call were screened for eligibility and peer reviewed. The names of the awardees will be announced in April 2025.

PART B:
PERFORMANCE INFORMATION

AUDITOR'S REPORT: PREDETERMINED OBJECTIVES

The Auditor General of South Africa currently performs the necessary audit procedures on the performance information and will only report material finding on the selected material indicators in the management report and audit report.

Refer to page 255 of the Auditors Report, published as Part F: Financial Information.

OVERVIEW OF PERFORMANCE

Service Delivery Environment

The SAMRC was established to improve people's health in South Africa through research, innovation, development, and technology transfer. The scope of research includes laboratory investigations, clinical research, and public health studies. The SAMRC conduct research on South Africa's quadruple burden of disease: maternal, newborn and child health, HIV/AIDS and TB, non-communicable diseases, and interpersonal violence. Its work is to acquire evidence-based information to inform health policy and practice and improve the quality and health status of people in South Africa. The organisation is the largest local funder of health research, medical diagnostics, medical devices, and therapeutics. It is a pioneer in cutting-edge medical innovations focusing on genomic research, the development of novel treatment regimens, vaccine development, diagnostic tools, and developing new drugs and devices. The SAMRC's overall performance is reflected under the Institutional Programme Performance Information section of this Part B of the annual report.

Organisational environment

The SAMRC was able to deliver on its mandate due to good governance, under the leadership of the Board, the Executive Management Committee and the dedicated staff.

Key policy developments and legislative changes

SAMRC was ready to adapt to the changes in policies and legislation, including POPIA.

Progress towards achievement of institutional Impacts and Outcomes

The SAMRC achieved its targets set out in the Strategic Plan.

Institutional Programme Performance Information

Administer health research effectively and efficiently

Impact Statement

Strengthening of corporate governance processes towards an unqualified audit opinion from the Auditor General

GOAL
1

Measuring Outcomes

Outcome	Outcome indicator	Baseline SP (2015-19)	Five-year target
1.1 To ensure good governance, effective administration and compliance with government regulations	1.1.1 A clean audit opinion on the SAMRC from the Auditor-General	Clean audit	Clean Audit
1.2 To promote the organisation's administrative efficiency to maximise the funds available for research	1.2.1 Percentage of the government allocated SAMRC budget spent on administration	20%	20%

Lead the generation of new knowledge

GOAL 2

Impact Statement

Promote the improvement of health and quality of life (prevention of ill health, improvements in public health and treatment) in South Africa through research

Measuring Outcomes

Outcome	Outcome indicator	Baseline SP (2015-19)	Five-year target
2.1. To produce and promote scientific excellence and the reputation of South African health research	2.1.1. Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors	3 150	3 550
	2.1.2. Number of accepted and published journal articles by SAMRC grant-holders with acknowledgment of the SAMRC	825	930
2.2. To provide leadership in the generation of new knowledge in health	2.2.1. Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC	1 830	1 925
2.3. To provide funding for the conduct of health research	2.3.1. Number of research grants awarded by the SAMRC	750	750

Support, through funding and other mechanisms, technology development and implementation, and innovations in health and technology delivery to improve health

GOAL 3

Impact Statement

To build an innovation community, developing life changing health solutions for South Africa, Africa and beyond

Measuring Outcomes

Outcome	Outcome indicator	Baseline SP (2015-19)	Five-year target
3.1 To support the development of new or improved innovations aimed at improving health and targeting priority health research areas of focus	3.1.1 Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	NEW	20
	3.1.2 Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	NEW	150
3.2 To develop new or improved innovations aimed at improving health priority research areas of focus	3.2.1 Number of innovation disclosures made by the SAMRC intramural research and innovation	NEW	5

Build human capacity for the long-term sustainability of the South African health research

GOAL
4

Impact Statement

To provide research support in the form of funding and supervision to the next generation of scientists in the broad field of health

Measuring Outcomes

Outcome	Outcome indicator	Baseline SP (2015-19)	Five-year target
4.1 To enhance the long-term sustainability of health research in South Africa by providing funding and supervision for the next generation of health researchers	4.1.1 Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs, Early and Mid-Career Scientists	435	660
	4.1.2 Number of awards by the SAMRC to female MSc, PhD, Postdocs, Early and Mid-Career Scientists	NEW	488
	4.1.3 Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs, Early and Mid-Career Scientists classified as African	NEW	495
	4.1.4 Number of awards by the SAMRC to MSc, PhD, Postdocs, Early and Mid-Career Scientists from Historically Disadvantaged Institutions (HDIs)	NEW	368
	4.1.5 Number of MSc and PhD students graduated or completed	NEW	360

Translate new knowledge into policies and practices to improve health

GOAL
5

Impact Statement

To contribute to building public and policymaker understanding of health, drivers of ill-health, and practice, interventions and technologies that can prevent ill health and strengthen health services and encouraging use of research evidence in policymaker, practitioner and public decision-making

Measuring Outcomes

Outcome	Outcome indicator	Baseline SP (2015-19)	Five-year target
5.1. To facilitate the translation of health research	5.1.1. Number of local or international policies, reports and guidelines that reference SAMRC research	27	27
	5.1.2. Number of reports and guidelines (co)produced by the SAMRC intramural researchers	NEW	25
	5.1.3. Number of national or international bodies/ committees that SAMRC employees serve on	NEW	250
	5.1.4. Number of conferences, seminars and continuing development points workshops supported by the SAMRC	NEW	50

OUTCOMES, OUTPUTS, OUTPUT INDICATORS, TARGETS AND ACTUAL ACHIEVEMENTS

No.	Outcome	Output	No.	Output indicator	Audited Actual Performance 2022/2023	Audited Actual Performance 2023/2024
Programme 1 – Administration						
1.1	To ensure good governance, effective administration and compliance with government regulations	Clean audit opinion	1.1.1	A clean audit opinion on the SAMRC from the Auditor-General	Clean Audit	Clean Audit
1.2	To promote the organisation's administrative efficiency to maximise the funds available for research	Efficient expenditure of government allocated budget	1.2.1	Percentage of the government allocated SAMRC budget spent on administration	17%	19%
Programme 2 – Core Research						
2.1	To produce and promote scientific excellence and the reputation of South African health research	Published journal articles, book chapters and books	2.1.1	Number of accepted and published journal articles, book chapters and books by SAMRC affiliated and funded authors	1 455	1 294
		Published journal articles by SAMRC grant-holders	2.1.2	Number of accepted and published journal articles by SAMRC grant-holders with acknowledgment of the SAMRC	445	373
2.2	To provide leadership in the generation of new knowledge in health	Published journal articles with the first or last author	2.2.1	Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC	775	646
2.3	To provide funding for the conduct of health research	Research grants awarded	2.3.1	Number of research grants awarded by the SAMRC	174	221

** As agreed with NDOH, SAMRC APP 2024/25 was not re-tabled*

Planned Annual Target 2024/2025	Actual Achievement 2024/2025 until date of re-tabling*	Deviation from planned target to Actual Achievement 2024/2025	Reasons for deviations	Reasons for revisions to the Outputs/ Output indicators/ Annual Targets
Clean Audit	Clean Audit	N/A	N/A	No revision
20%	19.53%	0.47%	Overperformance because of our efficient and effective processes and directing more financial resources towards the mandate of the SAMRC of conducting and funding research.	No revision
600	1 339	739	By following standard operating procedures, mobilizing additional (financial) resources, and engaging stakeholders, SAMRC was able to increase outputs. When the target was set, SAMRC was not expecting to receive additional resources to conduct and fund more research.	No revision
170	465	295	By following standard operating procedures, mobilizing additional (financial) resources, and engaging stakeholders, SAMRC was able to increase outputs. When the target was set, SAMRC was not expecting to receive additional resources to conduct and fund more research.	No revision
255	673	418	By following standard operating procedures, mobilizing additional (financial) resources, and engaging stakeholders, SAMRC was able to increase outputs. When the target was set, SAMRC was not expecting to receive additional resources to conduct and fund more research.	No revision
170	197	27	Receipt of additional financial resources by the SAMRC from new funding partnerships led to awarding of more research grants than projected.	No revision

No.	Outcome	Output	No.	Output indicator	Audited Actual Performance 2022/2023	Audited Actual Performance 2023/2024
Programme 3 – Innovation and Technology						
3.1	To support the development of new or improved innovations aimed at improving health and targeting priority health research areas of focus	Innovation projects and platforms funded by the SAMRC	3.1.1	Number of new innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	20	26
			3.1.2	Number of ongoing innovation and technology projects funded by the SAMRC aimed at developing, testing and/or implementing new or improved health solutions	44	48
3.2	To develop new or improved innovations aimed at improving health priority research areas of focus	Efficient expenditure of government allocated budget	3.2.1	Number of innovation disclosures made by the SAMRC intramural research and innovation	1	1
Programme 4 – Capacity Development						
4.1	To enhance the long-term sustainability of health research in South Africa by providing funding and supervision for the next generation of health researchers	SAMRC bursaries and/or scholarships and/or fellowships provided for MSc, PhD, Postdocs, and Early and Mid-Career Scientists	4.1.1	Number of awards (scholarships, fellowships and grants) by the SAMRC for MSc, PhD, Postdocs and Early and Mid-Career Scientists	171	184
		Female students and/or Early and Mid- Career Scientists receiving SAMRC funding	4.1.2	Number of awards by the SAMRC to female MSc, PhD, Postdocs and Early and Mid-Career Scientists	120	122
		South African citizens and/or permanent resident students receiving SAMRC funding	4.1.3	Number of awards by the SAMRC to Black South African citizens and permanent resident MSc, PhD, Postdocs and Early and Mid-Career Scientists classified as African	118	121
		SAMRC scholarships/ fellowships provided for MSc, PhD, Postdocs and Early and Mid- Career Scientists at HDIs	4.1.4	Number of awards by the SAMRC to MSc, PhD, Postdocs and Early and Mid-Career Scientists from historically disadvantaged institutions (HDIs)	60	68
		MSc and PhD students graduated or completed	4.1.5	Number of MSc and PhD students graduated or completed	93	120

** As agreed with NDOH, SAMRC APP 2024/25 was not re-tabled*

Planned Annual Target 2024/2025	Actual Achievement 2024/2025 until date of re-tabling*	Deviation from planned target to Actual Achievement 2024/2025	Reasons for deviations	Reasons for revisions to the Outputs/ Output indicators/ Annual Targets
4	28	24	As a result of the mobilization of more funds, from new funding partnerships and programmes, more innovation projects were supported.	No revision
30	50	20	New funding partnerships and programmes initiated in the last few years have resulted in a larger portfolio of ongoing innovation projects carried over to this financial year.	No revision
1	1	0	None	No revision
130	199	69	The projected target exceeded due to resources being mobilized and redirected, which resulted in more scholars being funded.	No revision
108	137	29	The projected target exceeded due to resources being mobilized and redirected, which resulted in more female scholars being funded.	No revision
90	127	37	Projected target exceeded because of mobilization and redirection of resources, and targeted funding strategy leading to funding more Black South African citizens and permanent resident scholars.	No revision
83	71	-12	Underperformance because target was overestimated at the time of development of the strategic plan. However, SAMRC does not intend to adjust the targets as they set the tone for the organisation to significantly drive inclusion of HDI's in building next generation of research leaders. During the reporting period, SAMRC put resources and processes to improve performance on this indicator, hence steady rise in performance over the past three financial years. As part of its transformation strategy, SAMRC aims to continue with this improved trajectory.	No revision
50	113	63	Projected target exceeded because SAMRC funded more scholars and SAMRC researchers supported and supervised more scholars.	No revision

No.	Outcome	Output	No.	Output indicator	Audited Actual Performance 2022/2023	Audited Actual Performance 2023/2024
Programme 5 – Research Translation						
5.1	To facilitate the translation of health research	Local or international policies, reports and guidelines that reference SAMRC research	5.1.1	Number of local or international policies, reports and guidelines that reference SAMRC research	120	231
		Reports and guidelines produced by SAMRC intramural authors	5.1.2	Number of reports and guidelines (co)produced by the SAMRC intramural researchers	68	41
		SAMRC researchers invited/serving on national and international bodies/committees	5.1.3	Number of national or international bodies/ committees that SAMRC employees serve on	205	202
		SAMRC supported conferences, seminars and CPD workshops	5.1.4	Number of conferences, seminars and continuing development points workshops supported by the SAMRC	73	92

** As agreed with NDOH, SAMRC APP 2024/25 was not re-tabled*

Planned Annual Target 2024/2025	Actual Achievement 2024/2025 until date of re-tabling*	Deviation from planned target to Actual Achievement 2024/2025	Reasons for deviations	Reasons for revisions to the Outputs/ Output indicators/ Annual Targets
6	304	298	SAMRC is a world-renowned science council, and its researchers are invariably approached for scientific input into finding solutions for health issues, which led to overperformance. With this overperformance, SAMRC is contributing to the translation of research into policy and practice by producing these documents.	No revision
9	66	57	SAMRC is a world-renowned science council and its researchers were highly involved in production of reports and guidelines; hence the target is exceeded. This overperformance indicates that SAMRC plays a role in research translation by producing these documents that inform health policies and practices.	No revision
50	266	216	SAMRC researchers are well sought after for their scientific expertise. This is evident in the number of committees and bodies that staff serve on. Researchers at SAMRC are good "citizens" locally, nationally and internationally, and they play a critical role in translating research findings.	No revision
10	175	165	SAMRC supported and hosted many meetings and workshops than projected, hence the target is exceeded. This overperformance indicates that SAMRC plays a role in research translation by hosting and supporting these engagements.	No revision

RESEARCH PROGRAMMES AND UNITS WITHIN THE SAMRC

Intramural and extramural research units constitute our six research programmes. Intramural research units (IRUs) are based at the SAMRC campuses, and the scientists are directly employed by the organisation. Extramural research units (ERUs) enable scientists based at tertiary institutions to conduct research funded by the SAMRC. The research programmes and units are specified as follows:

Health promotion and disease prevention

RESEARCH PROGRAMME 1

NSDA 1: INCREASING LIFE EXPECTANCY

RESEARCH UNITS

1. Antimicrobial Resistance and Global Health Research Unit (ERU)
2. Centre for Health Economics and Decision Science-Research Unit (ERU)
3. Environment and Health Research Unit (IRU)
4. Hypertension and Cardiovascular Disease Research Unit (ERU)
5. Mental Health, Alcohol, Substance Use and Tobacco Research Unit (IRU)
6. Microbial Water Quality Monitoring Research Unit (ERU)
7. Non-Communicable Diseases Research Unit (IRU)
8. Risk and Resilience in Mental Disorders Research Unit (ERU)
9. Rural Public Health and Health Transition Research Unit (ERU)
10. Violence, Injury and Social Asymmetries Research Unit (ERU)

Maternal, child and women's health

RESEARCH PROGRAMME 2

NSDA 2: DECREASING MATERNAL AND CHILD MORTALITY

RESEARCH UNITS

1. Child and Adolescent Lung Health Research Unit (ERU)
2. Development Pathways for Health Research Unit (ERU)
3. Gender and Health Research Unit (IRU)

HIV, AIDS, TB and other communicable diseases

RESEARCH PROGRAMME 3

NSDA 3: COMBATING HIV AND AIDS, AND DECREASING THE BURDEN OF DISEASE FROM TB

RESEARCH UNITS

1. Antibody Immunity Research Unit (ERU)
2. Centre for the Study of Antimicrobial Resistance Research Unit (ERU)
3. Centre for Tuberculosis Research Unit (IRU)
4. HIV and other Infectious Diseases Research Unit (IRU)
5. HIV-TB Pathogens and Treatment Research Unit (ERU)
6. Intersection of Non-Communicable Disease and Infectious Disease Research Unit (ERU)
7. Malaria Research Group (IRU)
8. Office of AIDS and TB Research (IRU)
9. Vaccine and Infectious Diseases Analytics Research Unit (ERU)

Health systems strengthening

RESEARCH PROGRAMME 4

NSDA 4: STRENGTHENING HEALTH SYSTEM EFFECTIVENESS

RESEARCH UNITS

1. Biostatistics Research Unit (IRU)
2. Burden of Disease Research Unit (IRU)
3. Cochrane South Africa (IRU)
4. Health Services to Systems Research Unit (ERU)
5. Health Systems Research Unit (IRU)

Public health innovation

RESEARCH PROGRAMME 5

RESEARCH UNITS

1. Biomedical Research and Innovation Platform (IRU)
2. Drug Discovery and Development Research Unit (ERU)
3. Genomics Platform (IRU)
4. Herbal Drugs Research Unit (ERU)
5. Pan African Centre for Epidemics Research Unit (ERU)
6. Primate Unit and Delft Animal Centre (IRU)

Biomedical research

RESEARCH PROGRAMME 6

RESEARCH UNITS

1. Antiviral Gene Therapy Research Unit (ERU)
2. Cardiometabolic Health Research Unit (ERU)
3. Genomics of Brain Disorders Research Unit (ERU)
4. Platform for Pharmacogenomics Research and Translation Research Unit (ERU)
5. Precision and Genomic Medicine Research Unit (ERU)
6. Precision Oncology Research Unit (ERU)
7. Stem Cell Research and Therapy Research Unit (ERU)
8. Wound and Keloid Scarring Translational Research Unit (ERU)

SAMRC STRATEGIC RESEARCH PROGRAMMES

RESEARCH PROGRAMME 1

HEALTH PROMOTION & DISEASE PREVENTION

PURPOSE OF THE PROGRAMME

To conduct research using a life course approach to healthy lifestyles, early diagnosis, and cost-effective prevention and management of diseases through health promotion.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Antimicrobial Resistance and Global Health Research Unit (ERU)
2. Centre for Health Economics and Decision Science Research Unit (ERU)
3. Environment and Health Research Unit (IRU)
4. Hypertension and Cardiovascular Disease Research Unit (ERU)
5. Mental Health, Alcohol, Substance Use and Tobacco Research Unit (IRU)
6. Microbial Water Quality Monitoring Research Unit (ERU)
7. Non-Communicable Diseases Research Unit (IRU)
8. Risk and Resilience in Mental Disorders Research Unit (ERU)
9. Rural Public Health and Health Transition Research Unit (ERU)
10. Violence, Injury and Social Asymmetries Research Unit (ERU)

PROGRAMME STRATEGIC OBJECTIVES

- To contribute towards the body of evidence by gaining a better understanding of how factors such as nutrition, physical activity, mental health, healthy behaviours, environment and stress factors affect life expectancy.
- To be a leader in scientific research by contributing to new knowledge in health promotion and disease prevention.
- To train and mentor high-quality postgraduate students and postdoctoral fellows who can compete in the science, health and/or education sectors locally and abroad to advance the cause of health promotion and disease prevention.
- To assist the National Cancer Registry in producing cancer surveillance statistics and cancer trend reports.
- To translate research results into health and education policy, the practice of healthcare professionals, and the configuration of health and education systems.
- To develop interventions that affect and address poor nutrition, lack of physical activity, excessive alcohol intake, and risky sexual behaviours.
- To add to evidence-based interventions that investigate factors affecting life expectancy.
- To train and educate healthcare staff and community members to manage, control and reduce the incidence of non-communicable diseases.

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Antimicrobial Resistance and Global Health Research Unit

Unit director:
Prof. Pascal Obong Bessong
Pascal.Bessong@univen.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The top priority of the Antimicrobial Resistance and Global Health Research Unit is to co-produce evidence with communities for application in antimicrobial resistance (AMR) stewardship protocols. To this end, we are conducting a community-based, longitudinal, observational, birth cohort stud, with surveillance for illness, treatment, and dietary histories; socio-economic status; stool microbiology and bacterial genomics and hydrometeorological variables over 24 months, to identify determinants of acquisition and diversity of enteric antibiotic resistance profiles, with the investigation ongoing. Through this approach, we expect to identify factors impacting the acquisition and transmission of enteric bacteria antibiotic resistance at the community level. In addition, the evidence obtained will be used to co-develop educational materials for community AMR stewardship.

Key Milestones and Achievements

We organised a symposium on the theme "Antimicrobial resistance and the community", which took place from the 26-27 September 2024. Eighty delegates from academia, government departments, and civil organisations participated (74 in person and 6 virtual), representing 17 institutions from Brazil, Cameroon, South Africa, Uganda, and the United States of America). Nineteen oral presentations were delivered, with Keynote speakers including: Professor Amy Mathers (University of

The Research Unit organised a working session with the traditional and civic leaderships of the study community in Dzimauli, Venda, to begin a process of determining approaches, that are acceptable and preferred by the community, for data sharing about antimicrobial resistance.

Unit members, postgraduate students and research assistants during the symposium.

Dr Mukhethwa Munzhedzi and Mulalo Raphalalani at their graduation.

Ms Mulalo Raphalalani, MSc graduate (Microbiology).

Dr Mukhethwa Munzhedzi, PhD graduate (Microbiology).

Virginia, USA), Professor Hellen McIlleron (University of Cape Town), Dr Emanuel Obasa (Stellenbosch University), and Professor Renier Coetzee, (University of the Western Cape).

Further, the Unit initiated research collaboration with Professor Joel Bazira of Mbara University of Science and Technology (Uganda) on community-level AMR. This collaboration has since led to joint peer-review publications on multidrug-resistant Enterobacteriaceae uropathogens in rural southwest Uganda. Another collaboration was initiated with Professor Jason Farley of Johns Hopkins University, USA. This collaboration led to grant funding for a project entitled "Undisclosed Exposure to Antiretrovirals and Impact on treatment outcomes".

We also published an observational study that showed that the UNAIDS goal of achieving 95% viral load suppression in individuals on treatment by 2030 is not being met in a cohort from Limpopo Province. Recommendations for enhanced adherence and drug resistance testing are suggested for those who fail treatment early on. Through a systematic review, we showed, using Escherichia coli antibiotic resistance profiles as a proxy, that 'younger infants show lower microbiota diversity and higher antibiotic resistance gene abundance compared to older infants and adults.

Building Capacity Through Training, Mentorship, and Support

In the reporting period, the postgraduate student training component comprised of five MSc and four PhD students, with two students (one MSc and one PhD) graduated. The Unit also organised a training workshop which was delivered by Cochrane South

Africa, on: Meta-analyses of Prevalence Studies – An introduction to R-Software. In total, 14 postgraduate students participated.

Navigating the Impact of US Executive Orders on Funding

None, thus far.

Research Translation Through Arts and Science

On 25th September 2024, the Unit organised a working session with the traditional and civic leaderships of the study community (Dzimauli, Vhembe district), with six delegates attending. The purpose was to begin a process of determining approaches, that are acceptable and preferred by the community, for data sharing and for the development of educational and awareness materials on antimicrobial resistance stewardship. This is an on-going initiative.

Chair of a session during the symposium.

Prof Pascal Bessong & Prof Joel Bazira of Uganda.

One of the guest speakers at the symposium.

Guest speakers responding to the questions.

Key Unit Members after a successful Symposium Prof Bessong, Dr Mahopo, Dr Mavhandu Ramarumo and Prof Samie.

Prof Bessong addressing the attendees.

Centre for Health Economics and Decision Science Research Unit

Unit director:
Prof. Susan Goldstein
Susan.Goldstein@wits.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

PRICELESS focuses on best buys and prioritising population health. We are a research-to-policy unit that focuses on the prevention of Non-Communicable Diseases, through preventing obesity throughout the life-course. Our current priorities are looking at policies such as the Health Promotion Levy, advertising of unhealthy foods to children, looking at the food environment at schools and universities. We also focus on health financing – in particular ethics around Health Technology Assessment, and Health Benefits packages for the National Health Insurance (NHI). Our work encompasses policy analysis, stakeholder and public engagement, and partnerships with advocacy organisations particularly around the commercial determinants of health.

Key Milestones and Achievements

During this financial year, we received a grant from the NIHR in partnership with the University of Edinburgh to study the Commercial Determinants of Health, an area critical for the prevention of NCDs. This follows our participation in the Lancet Commission on Commercial Determinants of Health.

We received 2 grants from UNICEF to study the legal and economic feasibility of introducing policies to reduce obesity in Namibia and Tanzania, as well as in partnership with Section 27 to analyse the South African School Nutrition Programme and cost the implementation of a healthy breakfast. Our multidisciplinary team is looking at the economic aspects, the policy aspects and the health impact of introducing a healthy breakfast in the NSNP. We were able to demonstrate that introducing the Health Promotion Levy did not impact jobs as the sugar industry often claims, thus support maintaining and increasing this levy, as it is shown to reduce obesity and NCDs.

Health economics group.

WITS school of public health group.

Prof Karen Hofman the founder of PRICELESS received the Platinum Lifetime Achievement Award from the SAMRC.

Building Capacity Through Training, Mentorship, and Support

We continue to run the Health Economics stream of the master's in public health at the University of the Witwatersrand. We also run an online course on priority setting. In this year, we developed a course

in Public Health Law and Rights in partnership with the Mandela Institute at the University of the Witwatersrand. Many of our staff supervise master's and PhD candidates. Our staff have the opportunity to attend courses locally and globally focusing on our key research areas and methodologies, including a month-long residence at York University. All our staff are encouraged to study; we currently have three PhD candidates and are supervising many more.

Navigating the Impact of US Executive Orders on Funding

Fortunately, they haven't had a significant impact on us directly as we only receive funding from the NIH for one project which is still running. We have no other US funding.

Research Translation Through Arts and Science

We have developed interactive ways of engaging with children and young people to research their engagement with unhealthy food advertising. Two of our staff were involved in the production of "Chew on This "a video series looking at food policy for a public audience. We have often appeared on radio and television to communicate our research to the public and held a public exhibition in the Adler Museum about the History of unhealthy food in South Africa with large visual aids.

The Research Unit continues to run the Health Economics stream of the master's in public health at the University of the Witwatersrand.

Environment and Health Research Unit

Unit director:
Dr. Renée Street
renee.street@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Over the past year, we have led a variety of projects focused on reducing environmental health risks, improving public health, and building resilience in communities, with a primary focus on air pollution, water contamination, and exposure to potentially toxic metals. One recent Environment and Health Research Unit (E&HRU) study revealed that people living in district municipalities with coal-fired power stations are at a 6% higher risk of experiencing health impacts caused by air pollution compared to those living in district municipalities without coal-fired power stations. The findings support phasing out of coal-fired power stations and replacing them with renewable energy sources such as solar, wind and hydropower to eliminate health risks. However, ensuring a Just Transition remains crucial to the process.

E&HRU staff engaging in exhibitions.

Another significant study suggested that public green spaces close to residential homes may help reduce depressive symptoms among urban populations in resource-constrained settings. Our findings underscore the importance of continued efforts by stakeholders, such as policymakers and urban planners, to ensure easy access to public green spaces, which can enhance the mental well-being of urban residents. Through world-class, locally relevant science, the E&HRU will continue to support evidence-informed solutions to improve public health outcomes.

Key Milestones and Achievements

The E&HRU achieved several key milestones that significantly advanced its mission to address environmental health challenges in South Africa. We forged new partnerships and strengthened existing collaborations with local universities, resulting in impactful research projects and joint activities with over ten local universities. We were excited to form new partnerships, including collaborating with DataDrive on the Thrive by Five Index, the largest survey of preschool child development ever undertaken in South Africa. Through this partnership, the E&HRU team will explore potential environmental risks at early childhood development centres. With support from both local and international funders, the E&HRU was delighted to secure grants to support the interdisciplinary nature of our work. One of our recent grants is a multi-country study, funded by the Medical Research Foundation, which will investigate the role of climate in muscle function, physical performance, and the metabolome among older people in South Africa, Zimbabwe and The Gambia. Another new initiative, in collaboration with Pure Earth will support the research of the artisanal

aluminium cookware supply chain in South Africa, focusing on material sourcing, manufacturing, distribution, retail, and end-use. The outcome will identify areas for intervention to support efforts to reduce exposure to toxic metals.

Building Capacity Through Training, Mentorship, and Support

The E&HRU is committed to building research capacity and developing the next generation of leaders in environmental health. Through various training, mentorship, and postgraduate support initiatives, the unit has played a pivotal role in strengthening the skills and expertise of emerging researchers and professionals in the field. These efforts are integral to ensuring sustainable progress in addressing environmental health challenges in South Africa and beyond. In September, the E&HRU team participated in the 13th World Environmental Health Day Commemoration hosted by the National Department of Health in collaboration with the Alfred Nzo District Municipality and the Eastern Cape Department of Health. The theme was "Environmental Health: Creating resilient communities through disaster risk reduction and climate change mitigation and adaptation". Our team supported this initiative by facilitating discussions, delivering presentations and running an exhibition stand highlighting our research. In January 2025, the E&HRUs Climate Change and Human Health Research Programme team participated in a training and skills transfer event in Port Harcourt, Nigeria. The event was hosted by the University of Port Harcourt, in collaboration with the University of Leicester, University of Ibadan, University of Pretoria, among others, and was part of a Wellcome Trust-funded study investigating differentially impactful, multisystemic resilience enablers. As youth are a key stakeholder group, the E&HRU team actively engaged in SAMRC-wide initiatives such as Gen S and STEMmentHER, ensuring that environmental health issues and the multidisciplinary skills needed to address them were highlighted.

Exhibition at World Environmental Day.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders on funding and other key environmental issues, such as withdrawing from the Paris Climate Agreement, will have far-reaching consequences. As it stands, the E&HRU had one project halted. However, we are expecting to feel the effects in the future particularly as the US restricts or reallocates resources for research on climate change, health initiatives, and disease prevention programmes. This reduction in support might also hinder collaboration between US-based researchers and South African institutions working on critical environmental health challenges. Given the potential long-term impact of these funding restrictions, agility will be crucial for E&HRU in adapting to the evolving situation. The ability to quickly pivot and identify alternative funding sources and collaborate with other international partners will help maintain momentum. This adaptability will be essential in navigating the uncertainty brought about by shifting US funding priorities. The journey ahead requires collective action, innovation, and unwavering commitment to improving health outcomes for generations to come.

Training & Skills transfer event in Port Harcourt Nigeria.

Research Translation Through Arts and Science

Within the research community, research translation is key to linking science with policy. However, implementation may be hindered particularly in resource-constrained settings. To address these challenges, stakeholder engagement is critical. The E&HRUs Climate Change and Health Research Programme team collaborated with the NIH-funded CAFÉ (based in the USA) and hosted a joint workshop. The objectives of the workshop included identifying the research translation opportunities and needs of climate-health researchers in Southern African countries. The workshop culminated with a range of climate-health research translation opportunities, priorities, and challenges to share with the CAFÉ Community of Practice, meeting partners and participants, and NIH, to facilitate consideration of further actions in this arena. In another research translation event, the E&HRU's Persistent Toxic Substance Research Programme hosted a workshop that brought together government officials, researchers, occupational health experts, and industry leaders, all united to tackle the growing concern of lead in artisanal aluminium cookware. This important gathering marked an important step towards a collaborative approach to reducing lead exposure risks.

E&HRU hosting learners during the Generation Science job shadowing programme at the SAMRC.

Hypertension and Cardiovascular Disease Research Unit

Unit director:
Prof. Marlien Pieters
marlien.pieters@nwu.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The aim of the Hypertension and Cardiovascular Disease Research Unit is to directly contribute to new clinical and epidemiological knowledge within the field of cardiovascular disease (CVD) risk in different population groups in South Africa to alleviate the CVD burden by facilitating more effective awareness, treatment, and prevention programmes in the future.

We use the latest technology such as polyomics and advanced cardiovascular phenotyping in prospective epidemiological as well as implementation research projects. We aim to contribute to original cardiovascular profiling of all South Africans. With a shift from addressing mainly CVD in the elderly, the EMU has initiated strategies to focus on preventive cardiology, namely; to focus on the early development of CVD risk factors such as raised blood pressure and early vascular aging in children and young adults; to focus on the unique disease profile of South Africans affected by co-morbidities in terms of HIV and CVD and; to address the health implications of the high burden of CVD due to poor awareness and late diagnosis. This enables us to generate new knowledge across the disease spectrum, from early pathophysiological changes to advanced stages of CVD development and to contribute towards improved population-based CVD prevention, as well as better treatment and care for South Africans.

Key Milestones and Achievements

Members from the EMU took part in the 2022 National Dietary Intake Survey (NDIS2022) that was initiated by the National Department of Health. The NDIS2022 investigated the nutritional status of South Africans through dietary intake and anthropometry data collection, analysis, and evaluation. The NDIS2022 will inform the Draft Prevention and Management Strategy of Obesity, the Health Promotion Levy, the School Feeding Programme, to be used in the regulation to prohibit the marketing of unhealthy foods to children.

May Measure Month.

Hypertension Awareness Campaign on NWU Potchefstroom Campus.

In the absence of an internationally accepted standardised method for determining fibrin fibre diameter from scanning electron microscopy (SEM) analysis, large discrepancy in fibre diameters has been reported in the literature. We, therefore, performed an international collaborative study to standardise fibrin fibre diameter measurement using SEM analysis. This entailed development of a standardised protocol and, experimental analysis comparing data from both the standardised and respective in-house methods. Having a standardised method will aid in diminishing discrepancies in fibrin fibre diameter being reported, facilitate interpretation of results, allow direct comparison of data between laboratories and aid in the development of reference ranges for healthy, prothrombotic and haemophilic individuals, as is available for other CVD risk factors.

EMU members were actively involved in a global project, and consequent publications, on raising awareness of hypertension (May Measure Month) resulting in the largest-ever global campaign for any risk factor. To date, nearly 6 million blood pressures, in over 100 countries have been measured of which 6800 blood pressures were measured in SA in 2024.

Building Capacity Through Training, Mentorship, and Support

Our staff complement has shifted towards a young generation of researchers, including more women and staff members from previously disadvantaged groups. These individuals are empowered to lead research projects within the EMU by support provided for research visits to leading international research laboratories to further their training and gain the necessary skills to become experts in their research fields. The NWU furthermore has a Grow-Our-Own-Timber initiative that provides funding to previously disadvantaged students to complete their post-graduate studies while receiving mentoring to fast-track them for permanent appointment, particularly in cases where current staff members retire. An example of such an appointment is Dr Gontse Mokwatsi who was appointed after the retirement of another senior staff member and who is already project leader of the UPRIGHT-HTM study within the EMU. In addition, post-graduate students from previously disadvantaged groups receive scholarships from the SAMRC EMU baseline funding to study full-time.

Dr Gontse Mokwatsi was appointed after the retirement of another senior staff member and is already project leader of the UPRIGHT-HTM study within the EMU.

Lastly, a concerted effort is made pertaining to succession planning for individuals from previously disadvantaged groups. This includes such members forming part of the management team meetings, PI positions in research projects, attendance of management and leadership courses, development of national and international networks and access to research funding.

What impact did the US Executive Orders on funding have on your research unit?

We have not been affected directly in terms of research funding by the US Executive Orders to date. However, students from other African countries who rely on US funding to travel to SA and to attend courses and study here have had to cancel because their funding has been revoked. We are now investigating viable solutions to decide whether we can assist these students, in a sustainable manner, from the SAMRC EMU baseline funding.

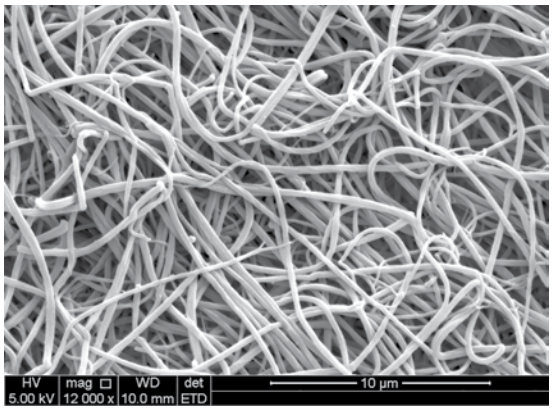
Research Translation Through Arts and Science

We strive to connect with the community by visiting community members at their homes and workplaces, by visiting young research participants in schools and staying connected via social media. The EMU has several outreach activities in the community. For example, a cartoon-type booklet has been developed to teach children how a healthy lifestyle can protect against CVD. These are handed out to schools and clinics in the region. Another example is a comic strip that has been designed to teach the public the importance of salt reduction for blood pressure regulation. In addition, many unit members and post-graduate students are closely involved in the global project on raising awareness of hypertension (May Measurement Month), resulting in the largest ever global campaign for any risk factor.

EMU members also interact with the media (online, print, radio, television) continuously to both inform the public about general aspects of raised blood pressure/hypertension and CVD, and to translate our research findings to the public and other stakeholders. Members of the EMU are senior authors on authoritative guideline documents of relevant international societies, which guide the practical treatment of hypertension by clinicians and health care workers, with a special focus on application in developing countries.

Salt reduction comic strip.

National Dietary Intake Survey fieldworker training.



Scanning electron microscopy image of a fibrin clot.

Mental Health, Alcohol, Substance Use and Tobacco Research Unit

Unit director:
Prof. Jason Bantjes
Jason.bantjes@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Mental Health, Alcohol, Substance Use and Tobacco Research Unit's (MASTRU) primary objective is to advance the nation's health by reducing harmful substance use and promoting mental health. Examples of ongoing work include studying the epidemiology of substance use, evaluating interventions to reduce substance use, and developing novel digital interventions to promote mental health.

MASTRU's tobacco-focused work included: a global survey of adult tobacco use; identifying context-sensitive strategies for a tobacco-free Africa; exploring students' exposure to electronic cigarette advertising; and mapping trends in tobacco control research. MASTRU worked at the intersection of infectious diseases and substance use, conducting studies to understand and mitigate the links between substance use HIV, and TB. MASTRU continued its work as part of an international consortium across 18 countries to map the epidemiology of mental disorders and develop innovative scalable interventions to promote the mental health of university students. MASTRU's work on clinical trials expanded to include randomised control trials of digital mental health interventions, evaluation of a carbon emission tracking tool for clinical trials and contributing to WHO's Global Clinical Trials Forum. MASTRU's intervention research included evaluating novel approaches to address mental health and sexual violence, reduce alcohol consumption among pregnant women, and identifying strategies to enhance engagement with digital mental health apps.

Key Milestones and Achievements

MASTRU played a key role in strengthening substance use surveillance and translating research evidence into policy and practice on the African continent, through initiatives such as the SACENDU Research Uptake and Evidence-Based Information Sharing Platform. engagement with the INL Global Coalition to Address Synthetic Drug Threats, and participation in the annual African Union continental consultations on Drug Demand Reduction.

MASTRU established a productive international collaboration with the Stavros Niarchos Foundation Global Centre for Child and Adolescent Mental Health at the New York-based Child Mind Institute. This collaboration aims to promote the mental health of young people in low- and middle-income countries through a global mapping of the epidemiology of youth mental health, the development of innovative scalable interventions,

Workshop stakeholder engagement.

MASTRU's , Siphesihle Gwambe, with other tobacco control stakeholders at the KwaZulu-Natal public hearings on the tobacco control bill, held in November 2024.

and promoting the capacity of community-based organisations to support the psychological well-being of young people. We are optimistic that this project will include partnering with the Department of Health to conduct a national survey to assess child and adolescent mental health in SA.

MASTRU launched the South African country report for the Global Adult Tobacco Survey and made presentations at the parliamentary public hearings on the Tobacco Products and Electronic Delivery Systems Control Bill in all 9 provinces. The unit also has ongoing engagement with the government on the tobacco control bill.

Building Capacity Through Training, Mentorship, and Support

MASTRU staff have made significant contributions to capacity development through teaching, supervision and mentoring. The unit's staff contributed to several postgraduate programmes at South African universities, including delivering lectures on alcohol and NCDs for public health students, suicide prevention training for psychiatric registrars, seminars for postgraduate diploma students in addiction care, and research methods training for master's students in public mental health.

Additional contributions included: Training lay health workers to deliver evidence-based psychological interventions, with ongoing mentorship and skills development through workshops and supervision; Training tobacco control advocates from 12 African countries; Contributing to a programme for young scientists interested in mental health research; Developing a programme to train medical students in psychological first aid.

MASTRU staff also worked extensively with early-career scientists from historically excluded groups to build research capacity and produce academic outputs. Collectively MASTRU staff graduated for Masters and PhD degrees, reviewed articles for academic journals, served on editorial boards of international journals as well as examined masters and PhD students' dissertations. Currently the unit supervises masters and PhD students.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders on funding have had a significant impact on MASTRU and threaten the ongoing work with vulnerable populations (including the LGBTQ+ community) and or studies focused on intersections of infectious diseases and substance use. Loss of funding for our work


Alcohol Diagnostic Validation for Injury-Related Trauma study workshop.

in these areas could have a devastating effect on staffing and would need a radical downsizing of the unit. The unit is slightly protected by the fact that we have productive partnerships with countries in the global south and the fact that we have funding from European countries.

Research Translation Through Arts and Science

MASTRU staff employed various innovative strategies to effectively communicate their research findings and engage stakeholders. This included: Social Media Outreach. Using social media announcements to celebrate the launch of our studies and increase stakeholder engagement; Innovative Storytelling: MASTRU incorporated narrative-based interviews capturing the lived experiences of pregnant women receiving an intervention, enhancing the relatability and impact of the research.

Community Engagement: MASTRU used creative ethnographic research methods to document the real-life experiences of intervention participants, making the findings more accessible and engaging.

Youth Advisory Boards: MASTRU established advisory boards to co-develop stigma awareness and education training for communities on substance use, HIV, gender-based violence, peer influence, and family challenges through skits and drama.

Community Advisory Boards. We hosted virtual and in-person meetings with Community Advisory Boards, facilitating open dialogue and incorporating feedback to shape our studies.

Protect Our Next (PON) Campaign Collaboration: MASTRU collaborated with a think tank to communicate and disseminate research through community engagements, including school presentations and youth group sessions.

Media Engagement: In the 2024-25 financial year, MASTRU staff gave more than 10 media interviews on topics related to alcohol, drug use, suicide prevention, and mental health helping to disseminate our research findings to the public.

These efforts demonstrate MASTRU's commitment to creatively and effectively communicating their research to diverse audiences.

Microbial Water Quality Monitoring Research Unit

Unit director:
Prof. Anthony Okoh
aokoh@ufh.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Our strategic objectives and priorities strive to be a highly profitable centre of excellence for the development of the next generation of microbial water resource and sanitation specialists, and to be a leader in proffering solutions to the myriads of water and sanitation challenges in South Africa and beyond. Our focal themes include water/ wastewater quality and genomics including related emerging infectious diseases and survival of the pathogens; emerging chemical pollutants and their health implications; reservoirs of antibiotic resistance; and new bioactive compounds of health and biotechnological importance. Our mandate is particularly driven by the serious problem of shortage of skilled manpower in the water and sanitation sectors, especially amongst previously disadvantaged demographic groups, and the need to finding solutions to this reality.

Hence all our research activities are geared toward impacting the South African society and the larger scientific community by contributing to alleviating these challenges. The following are projects we were actively engaged in during this cycle include wastewater coronavirus surveillance team; antimicrobial resistance in the food-water-agricultural products interphase; desalination of seawater by freshwater and marine cyanobacterial strains; environmental pollutants; and surveillance of emerging infectious diseases of zoonotic importance in livestock in the Eastern Cape Province.

Prof Okoh University of Fort Hare graduation.

Key Milestones and Achievements

During the year under review, our EMU achieved several noteworthy milestones. A total of 23 articles were published, reflecting the team's ongoing commitment to research excellence. Our Director, Prof AI Okoh, received several prestigious appointments, including Chairperson of the Membership Advisory Committee (Biosciences) of the African Academy of Sciences and Chairperson of the Programme and

Prof O Okoh Microbial Water Quality Labs Tour.

Drs Msolo and Ebomah (Postdocs).

Scientific Development Committee for the 15th Bi-annual General Meeting and Conference of the African Academy of Sciences held in Abuja, Nigeria, from 9–12 December 2024. He was also appointed as a Mentor in the American Society of Microbiology Future Leaders Mentorship Fellowship (FLMF) Program (May 2024–April 2026) and was inducted as a Fellow of The World Academy of Sciences. Prof Omobola O. Okoh delivered the 37th Professorial Inaugural Lecture of the University of Fort Hare on 9 October 2024 and was awarded the 2024 Vice-Chancellor Senior Research Medal by the Faculty of Science and Agriculture. Dr N. Nontongana secured her first NRF grant, while both Assoc Prof I. Jaja and Dr Mike Ojemaye received NRF Y-ratings in recognition of their research potential. Additionally, Dr Jaja was promoted to Associate Professor effective 1 January 2025. The EMU successfully organized International Microorganisms Day on 17 September 2024, as well as the Science and Technology Research Partnership for Sustainable Development (SATREPS) application workshop on 11 October 2024 at the University of Fort Hare, Alice.

Building Capacity Through Training, Mentorship, and Support

Our unit continues to play a critical role in nurturing and mentoring emerging academics and researchers. Among those currently being mentored are Dr Nolonwabo Nontongana, who serves as our Deputy Director; Mr N. Manene, a lecturer currently

Group Photograph at the end of the review.

Labs Tour Group Photo with Panellists.

Prof Okoh responding to questions from the panel.

Labs Tour Group Photo with Panellists.

pursuing his doctoral studies within the unit; Dr Velisa Qongwe, a Research Assistant; and Dr L. Msolo, who transitioned from a postdoctoral fellow to a Research Fellow within the unit. Additionally, we host three international postdoctoral researchers, one of whom, Dr Mike Ojemaye, has recently been appointed as an Assistant Professor at a university in the United States and will be leaving the unit effective 1 April 2025. Other academics under the mentorship of the Unit Director include Dr U. Heshula, Dr F. Mashau, and Dr S. Mazinyo, among others.

Navigating the Impact of US Executive Orders on Funding

None.

Research Translation Through Arts and Science

We communicated our research findings – 23 in total – by publishing them in reputable peer-reviewed journals and presenting our work at several international conferences. These efforts ensured wide dissemination of our research outputs and strengthened the visibility and impact of our unit's scientific contributions on the global stage.

Non-Communicable Diseases Research Unit

Acting Manager:
Prof. Zandile Mchiza
zandile.mchiza@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The NCDRU focused on 4 strategic objectives namely: To understand the epidemiology, presentation, extent and determinants of NCDs in South Africa, to identify gaps in NCD research and to support NCD prioritisation & policymaking by the South African governments. To engage in the mechanism of producing capable protocols to attract funding that will sustain and advance the unit's academic and scientific endeavours. Further, to commit to scholarly pursuits that make NCDRU research relevant and beneficial to the South African society by conducting implementation research that generates health knowledge that informs the community needs and addresses social issues.

Notable research projects undertaken in 2024/2025 includes:

SmokRED (Smoking Reduction) Study: Evaluating smoking cessation approaches among South Africans with HIV/AIDS: a pilot randomised control trial': This study is being conducted at HIV clinics in the Western Cape and comprises 2 phases that aim to: i) Adapt an existing telehealth intervention for reducing combustible cigarette use in the South African context, and ii) Determine the feasibility and acceptability of the adapted intervention (primary outcomes) and ii]. Estimate and compare the preliminary effects of e-cigarettes and nicotine replacement therapy on Combustible Cigarette reduction in a pilot RCT.

Key Milestones and Achievements

NCDRU projects are funded via national and international funding instruments namely: The SAMRC and The George Institute (TGI) Funding for the CODAD Study, which is a collaborative between SAMRC and the George Institute that has progressed well, such that the Co-Principal Investigator and Co-Investigator on this study from India visited the SAMRC in February 2025, with the plan to hold another collaborative meeting in India to draft the protocol for the development of an intervention and the scaling-up of this project.

The NRF KIC2 and the NRF Rating grants to conduct competitive research that support the SADPP and ECDPP research studies and the NCDRU and NCDART-MC studies that are conducted by our recently C2-rated specialist scientist Prof Perpetua Modjadji.

The SAMRC – UKRI MRC – that funded the study aimed at unravelling the complexity of multimorbidity in South Africa: integrating advanced analytics, capacity building, and collaborative research. The IPD grant to strengthen CKD research collaboration in Africa aimed at facilitating multi-country data collaborations, knowledge exchange, and the development of standardised CKD screening protocols. This collaboration impact: 1) Enhanced regional and international cooperation in CKD research; 2) Improved CKD data-sharing; 3) Strengthened advocacy efforts for CKD policy integration at national and regional levels.

Finally, Germany's Federal Ministry of Food and Agriculture (BMEL) that funds all the activities and collaboration processes of the FoodSAMSA project aimed at understanding the food environment and its role in the development of the DBM and nutrition and cardiometabolic diseases in South Africa.




Three non-profit organisations, Etafeni, Khethimpilo, and ANOVA that oversee the community workers operating in the three townships of Kensington, Nyanga, and Gugulethu, respectively, have been working with us on our FoodSAMSA project initiatives.

Building Capacity Through Training, Mentorship, and Support

In the year 2024/2025 we successfully recruited 1 post-doctoral research fellow and continued mentoring 4 more from previously disadvantaged backgrounds with the support of the SAMRC RCD Division. These research fellows help us drive the mandates of the CODAD, SmokeRed, Diabetes Retinopathy, DPP and FoodSAMSA Studies. They, in turn, gain NCDRU research experience and training, since they are exposed to a learning environment where they learn project management skills, how to engage with communities, healthcare facilities and participants, how to engage and manage fieldworkers, etc. They learn how to work in teams, conduct collaborative research and develop skills such as conducting focus group discussions and key informant interviews. They are exposed to regular scientific meetings in the unit including support from the NCDRU post-doctoral forum. They learn how to analyse both quantitative and qualitative data, conduct scientific presentations and draft scientific papers, among other skills.

In 2024/25 NCDRU financially supported Mph, MSc and PhD students. NCDRU senior researchers also supervise MPH, MMED, MSc and PhD students who graduated during the reporting period. Finally, through our SASUF: SOUTH AFRICA – SWEDEN UNIVERSITY FORUM Virtual Exchange Grant we managed to facilitate exchange of public health education between Sweden and South Africa, under the project title "Capacity development for health education and public health through virtual exchange between Sweden and South Africa".

Navigating the Impact of US Executive Orders on Funding

The SmokRED Study is NIH funded and currently in the no-cost extension period. The fieldwork is currently ongoing; however, we are not sure how long this will go on without being affected by the US executive orders.

Moreover, in collaboration with researchers from the University of Pittsburgh (US), University of Stellenbosch and University of Cape Town, the NCDRU applied for funding from the NIH to support

a training programme. Our application made it to the second round, however due to the current embargo placed by the Trump administration, the outcome is not yet known.

Finally, because NCDRU engages in community-based participatory research: in this case we involve the community in all stages of our research processes, as a form of enhancing its relevance and applicability to community issues. Three non-profit organisations, Etafeni, Khethimpilo, and ANOVA that oversee the community workers operating in the three townships of Kensington, Nyanga, and Gugulethu, respectively, have been working with us on our FoodSAMSA project initiatives. Since the operations of these NGOs are partially funded through the USAID, parts of their structures have since been disbanded. The community worker coordinators and NGO management whose employment contracts were solely funded via USAID have been terminated.

Research Translation Through Arts and Science

Examples of Scholarship of Engagement Activities that NCDRU have undertaken include:

Within the current financial year, researchers at NCDRU published i) Manuscripts and editorials with reputable international journals, ii) edited a book on Metabolic Syndrome with collaborators from UL and Amsterdam Medical Centre, Netherlands with IntechOpen, iii) a book chapter with De Gruyter that explored engagement strategies that are used by South African experts to promote healthy diets to influence policymakers, food producers and the public.

We conducted policy advocacy: by producing policy briefs for the District Health Barometer and these will be published with the Health System Trust. We produced policy briefs to engage various levels of health systems to advocate workable solutions to improve health, well-being and food environment in South Africa. We also convened Formal Knowledge Translation Exchange Sessions (through conferencing, workshops, webinars and seminars) targeting scientists at the SAMRC, students at universities, as well as our international collaborators. We actively engaged the public through various mediums: by hosting public lectures, engaging via health days/campaigns), and publishing health-related articles and media briefs via different forms of media – including formal and social media. Finally, from the FoodSAMSA project we engaged our communities through storytelling using our newly developed Multi-Medi Education-Entertainment instruments that are in the form of entertaining video clips and comic booklets to impart health education.

FoodSAMSA Consortium in-person meeting German partners from Ludwig Maximilian University.

Risk and Resilience in Mental Disorders Research Unit

Unit director:
Prof. Dan Stein
dan.stein@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Our work in the SA MRC Unit on Risk & Resilience in Mental Disorders focuses on mental health. There is growing awareness of the high prevalence and costs of mental health conditions; these conditions contribute to a significant proportion of the global and local burden of disease. Furthermore, as we successfully combat infectious diseases, so we can expect that the contribution of non-communicable diseases, including mental disorders, will continue to increase. There is also an important need to transform health services to address mental disorders. Our work contributes to generating new knowledge in this area, to technology development, to building capacity, and to translating research into policy and practice, in this area.

Our work ranges from basic neuroscience, on to clinical research, and from there to epidemiological and public mental health studies; that is from bench to bedside, and from the clinic to the community. Our research is diverse, ranging from contributions to nosology and epidemiology, to brain imaging and neurogenetics, and on to cohort studies and clinical trials. This diverse portfolio is appropriate, given our focus on building knowledge, technology, and capacity, to transform services.

Key Milestones and Achievements

We advanced work on several projects during the reporting period. First, we continued our work on psychiatric epidemiology, to analyse the country's first national survey of mental health in university students. We have become particularly concerned about problematic internet use in youth, and we have initiated a Lancet Commission to address policies related to this phenomenon.

Second, we continued our work on a range of risk factors for mental disorders, for example, we contributed to several exciting publications on neuroimaging and on neurogenetics during the reporting period. In the Drakenstein Child Health Study, we have noted the impact of maternal HIV, maternal anaemia, and maternal psychosocial problems on child neurodevelopment. We hope that this research provides useful targets for intervention.

Building Capacity Through Training, Mentorship, and Support

Our Unit has a strong focus on capacity development, with significant deployment of funds to support student fellowships. We are also keenly aware of the need for diverse researchers, that represents the local population and strives to reach that profile.

First, this is increasingly seen in the profile of our students, postdoctoral fellows, and staff. Second, examination of the achievements of past mentees of the Unit shows that many black researchers who have been members of our Unit are now national and international authorities in their own right (including experts in posttraumatic stress disorder, substance use disorders, neurogenetics, forensic psychiatry and mental health epidemiology).

Navigating the Impact of US Executive Orders on Funding

We are reliant on NIH funding, and one grant which we thought was funded is currently in limbo. This means a loss not only of finances but also of opportunities for capacity building – and so has negatively impacted morale.

Research Translation Through Arts and Science

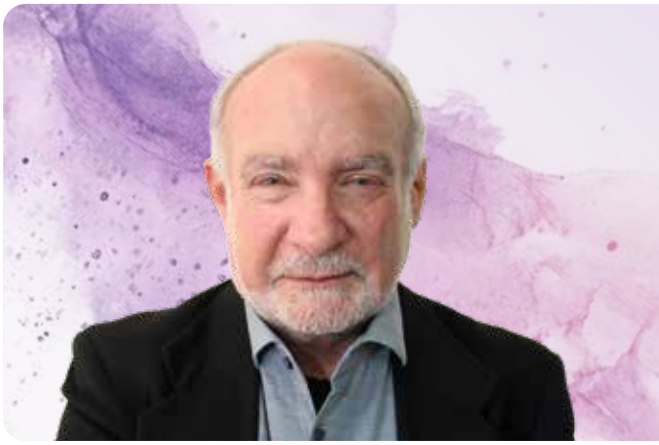
First, our Mental Health Information Centre continues to play a key role in translating our work to relevant stakeholders and the public. It does this through continuous liaison with the media, through taking direct calls from members of the public, and via its ongoing focus on increasing mental health literacy and decreasing stigmatisation of mental disorders.

Second, we work with the Western Cape Department of Health on several different projects, attempting to bring research outputs to services. The Director of the Unit plays a key role in mental health services in the province, as he is Head of UCT's Dept of Psychiatry, which is affiliated with Groote Schuur Hospital, Red Cross Children's Hospital, Valkenberg Hospital, and a range of other facilities. This means that he is in constant interaction with managers, administrators, and other stakeholders, and can continuously lobby for improving mental health services.

Third, we work with the National Dept of Health on several issues, particularly in the area of substance use disorders.

Fourth, we work with the World Health Organization on several projects, including classification and assessment of psychiatric disorders. This has led to the development of a new diagnostic interview for mental disorders, which is being trialled in several different countries.

Participant in Drakenstein Child health study.



Rural Public Health and Health Transition Research Unit

Unit director:
Prof. Stephen Tollman
stephen.tollman@wits.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

At the Rural Health and Health Transition Research Unit, we take a life course approach to the dramatic changes evolving in rural South and sub-Saharan communities undergoing a rapid health transition – driven by profound social changes. As illustrations:

Our projects include an Artificial Intelligence (AI)-informed ultrasound to help discriminate between bacterial and viral cases of pneumonia in children; entails a trial underway in SA, Tanzania and Senegal.

Findings from a large pilot trial to evaluate the feasibility, acceptability and effects associated with a digital intervention to address depression among school-going adolescents. Work is now shortlisted and involves: a fully powered trial; implementation-research efforts in Kenya; and a strategic plan to address scale-up and sustainability within and outside SA. Just published Lancet GH findings involve intense primary research to establish population prevalence of dementias and better understand caregiving patterns.

Novel efforts are underway that exemplify STEM include:

(1) a provincial request to scale-up a structured approach to empowerment of CHWs (workshops underway across Mpumalanga),

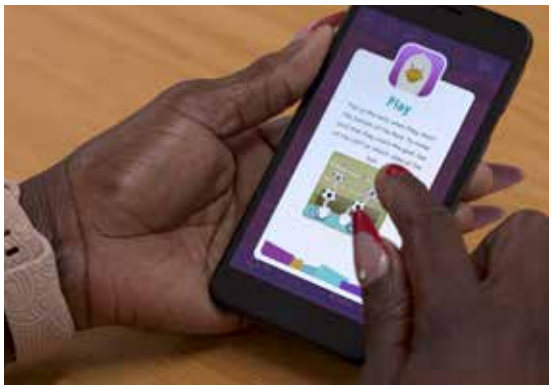
(2) a well-powered trial of PPE use involving traditional practitioners with outcomes focusing on testing for HIV and linkage to care,

(3) formal efforts to introduce (a) machine learning and (b) entrepreneurial approaches to unemployed youth of the Agincourt-Bushbuckridge region (Bank SETA funded).

Key Milestones and Achievements

Key highlights include: IMCI-PLUS is an EDCTP funded trial, with keen WHO interest, addressing antimicrobial resistance through improved management of pneumonias in children (mainly under-5 but extending to 12 years). A novel approach is the use of portable ultrasound to assist in assessment of bacterial vs viral causation; data will also inform machine learning algorithms to build the AI capability of the ultrasound probes, thereby enabling wider application in under-resourced settings. A multisite RCT (SA, Tanzania, Senegal) is now underway (n=3500) and, unusually, first steps of an overlapping implementation-evaluation to be informed by RCT findings.

2024, saw the endline of a large pilot trial (n=200) focused on depression in rural SA. The intervention, co-created with school-going adolescents, involved a games-based app suited to a low-end smartphone, supported by peer counsellors from Limpopo and Witwatersrand Universities. Findings are under review and reflect high feasibility and acceptability, with a clear indication of effect among those with moderate



A new App tackling depression amongst adults.

to severe depressive symptoms. The design of large-scale pragmatic interventions in SA and Kenya is underway.

SAMRC/Wits-Agincourt led some 18 research teams across E, W, Southern Africa and South Asia to establish the mortality impacts of COVID-19; a journal supplement (Population Health Metrics) is soon to appear. Technological innovation is an evolving theme including tablet-based approaches to cognitive assessment; AI-informed ultrasound of respiratory function in children and heart function in adults; and a promising app for management of adolescent depression in remote communities. Just-funded (NIH) portable MRI capability is being installed.

Building Capacity Through Training, Mentorship, and Support

Building/strengthening capacity is integral to the work of SAMRC/Wits-Agincourt. Singling out key aspects: Early-stage career paths, notably doctoral and postdoc levels, are a priority and advanced at scale, with work nested in productive research lines. Moreover, Unit staff are integral to doctoral training in the Wits Public Health School, Prof Kathleen Kahn (principal scientist) heading up a flagship programme of School and Faculty.

Similarly, emphasis is placed on academic advancement of technical, professional and administrative staff whose achievement at honours and masters levels is impressive – and contributes to the professional standards and overall excellence expected of the Unit.

The Unit's health and socio-demographic research platform is amongst the strongest on the African continent. Unit technical and research staff play a leading role in strengthening the longitudinal R&D platforms and related surveillance data across the region. Analytic work on COVID-19 excess mortality, referenced above, had major knock-on effects strengthening data platforms and related technical and analytic capacity of some 18 population-based research centres in West, East and Southern Africa and South Asia (Bangladesh and India).

The Unit is situated among rural communities facing excessively high levels of unemployment. Innovative efforts to support skills development and entrepreneurial activity of unemployed youth is making an impact, working with Wits' School of Business Sciences and supported by government SETA initiatives.

Wits Agincourt member explains data to a community member.

Navigating the Impact of US Executive Orders on Funding

To-date, our research unit has not experienced a direct impact from Executive stop orders (although sister Wits research groups with USAID funding have been directly affected). Since the Unit receives support from several NIH grants, it is 'exposed' to Executive Orders affecting the NIH; the situation continues to unfold amidst considerable uncertainty.

As of now: a notice-of-award, received from the National Institute on Aging (NIA) to introduce portable MRI to rural Agincourt has been received. A just-in-time received by an R21 project focused on climate and migration (from NICHD), which received an excellent score, has yet to hear further – likely because Council meetings to approve such funding have been delayed (and funding cannot be assumed).

Research Translation Through Arts and Science

With the Unit embedded in under-resourced rural communities, sustained feedback, communication and dialogue with participants and involved communities is a priority. The Unit calendar involves regular project-based feedback to participants, community-wide feedback to village communities, and ongoing engagement with key institutions such as schools, civic and traditional associations. Beyond this, dialogue with local, sub-district and district level management/leadership of departments of Health, Social Development, and Education are a constant and rewarding feature.

Creative approaches include: photovoice distribution of cameras to community members to document health priorities and concerns a major initiative to co-develop data-informed dashboards, adapted to both district-level management and clinic operations, and identifying patients with multimorbidity.

Key workshops focusing on stakeholder review of findings and programme development relevant to adolescent mental health, introduction of PREP for reproductive age women and older adults, and youth support for chronic medicines adherence of adults/elders approaches to provide individualised explanatory feedback following complex assessments (for example genomic analyses and MRI readings).

The Unit's research with Traditional Healers – which currently focuses on the use of PPE, testing for HIV and linkage to care – garnered high print, radio and TV interest within and outside of SA. The Unit convened a major public event in February 2024 to share findings and raise the profile of aging, dementias and the related contributions of cardiometabolic conditions as well as HIV/AIDS. Involvement of government (including departments of Health, Science and Innovation, Planning Monitoring and Evaluation, along with SAMRC leadership.

Agincourt Study Site.

Violence, Injury and Social Asymmetries Research Unit

Unit director:
Prof. Ashley van Niekerk
vnieka4@unisa.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Violence, Injuries and Social Asymmetries Research Unit (VISARU) studies the epidemiology, causality, impact and preventability of injuries. The Unit has a special interest in the socio-structural determinants of these injures, including economic inequality, energy poverty, gender inequality and toxic masculinities, and historical community marginalisation. The Unit draws on public health, social science and environmental disciplinary traditions to enable a critical social justice approach to the promotion of safety.

VISARU was launched in 2024 and is hosted within the UNISA Institute for Social and Health Sciences. VISARU's objectives are to:

(i) conduct trans-disciplinary studies into violence and injury, with a focus on the structural determinants of priority injuries;

FPS training group.

(ii) undertake demonstration prevention that contributes to contextually sensitive promotive practices;

(iii) develop innovations and technologies in support of prevention research and practices; and

(iv) promote the use, reach and influence of research to champion prevention, containment and priority advocacy initiatives.

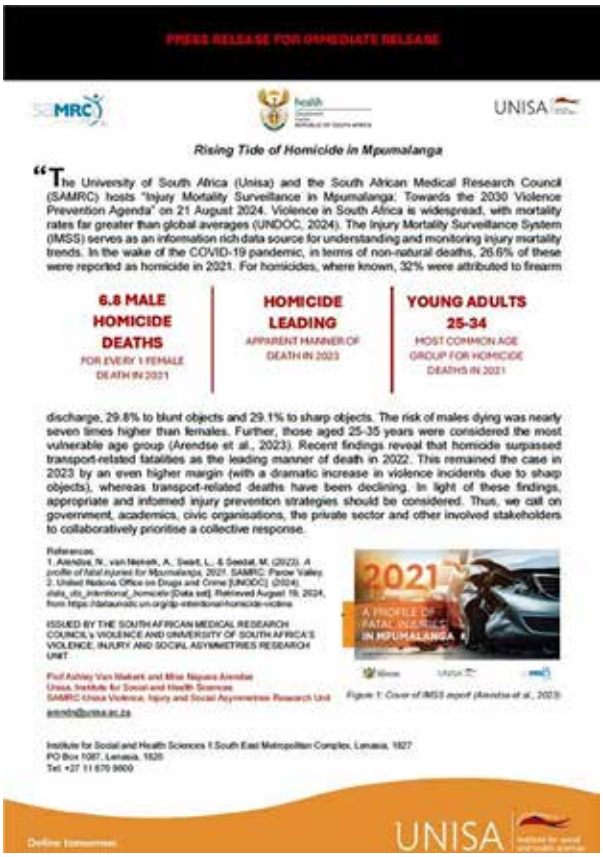
VISARU is organised around two strands, Strand I: Injury Information Systems and Injury Studies, and Strand II: Injury Prevention Research, Translation and Advocacy. Strand I hosts injury information systems. Strand II comprises research groups on key injuries, their priority socio-structural determinants, and preventability. Strand I and II champion innovative prevention and containment efforts through strategic national partnerships.

Key Milestones and Achievements

VISARU successfully applied for UNISA Strategic Funds of ZAR 24 million for 2024-2028. This institutional support enabled the implementation of its research portfolio, several post-graduate placements, and priority research dissemination. The Unit enhanced its national and international visibility and presence.

Highlights included the 15th World Conference on Injury Prevention and Safety Promotion in New Delhi, where Prof. Ashley van Niekerk, Najuwa Arendse and Tiffany Hector, respectively presented on violent burns; the Injury Mortality Surveillance System; and the impact of long-term poverty and financial distress on physical assault. Several post-graduate students presented, including Dr Stela Matsinhe,

15th World Conference Injury Prevention & Safety 2024.



Rising Tide of Homicide in Mpumalanga.

Jose Chidassicua and Dr Casimiro Macucha, on child sexual assault; intimate partner violence and HIV; and incarcerated women's accounts of their intimate partner violence. Dr Macucha, a current PhD student, won the best oral presentation award in the early to mid-career researcher in the violence prevention category.

VISARU's continental visibility was enhanced through Prof Van Niekerk coordination of the injury workstream in the Africa CDC's Non-Communicable Diseases, Injuries Prevention and Mental Health Promotion Division. VISARU's national presence was strengthened through several activities. It successfully hosted "Towards the 2030 Violence Prevention Agenda", an injury mortality surveillance colloquium in Mpumalanga, highlighting research on injury surveillance and injury patterns in Mpumalanga. VISARU also published several studies with specific prevention implications, including "Is methanol a clean, efficient, healthy and safe cooking solution for Africa?", which highlights key safety considerations of methanol adoption, in the light of the fuel's toxicity.

Building Capacity Through Training, Mentorship, and Support

VISARU uses a multifaceted approach to offer a range of capacity development opportunities to build and strengthen safety, peace and health promotion research and intervention capacities. This includes a dedicated training and capacitation portfolio headed by a senior staff member; the supervision and mentorship of postgraduate students registered for master's and doctoral studies; placements for doctoral and postdoctoral fellowships and research master's internships; and the provision of research and community-engagement training for emerging and mid-level researchers working as permanent or contract staff.

VISARU training and capacity development opportunities allow senior researchers to grow and cultivate capacities in specific injury and safety-related niche areas and to develop scientific and organisational leadership capacities. In 2024, VISARU hosted two students in a Master's Internship

Programme, designed primarily for supporting new and emerging researchers enrolled in a research psychology or public health master's programme. The twelve-month internship, which is accredited with the Health Professions Council of South Africa, is a hands-on intensive programme that exposes students to the various phases of research across different projects. VISARU further supervised nine MA and 21 PhD candidates, primarily from UNISA, but also other South African universities, including candidates from several African countries. In 2024, four PhDs and five MA candidates graduated. We hosted two writing retreats to support postgraduate proposals and enable dissertation publications, and organised intermediate and advanced methodological training for students and staff.

Navigating the Impact of US Executive Orders on Funding

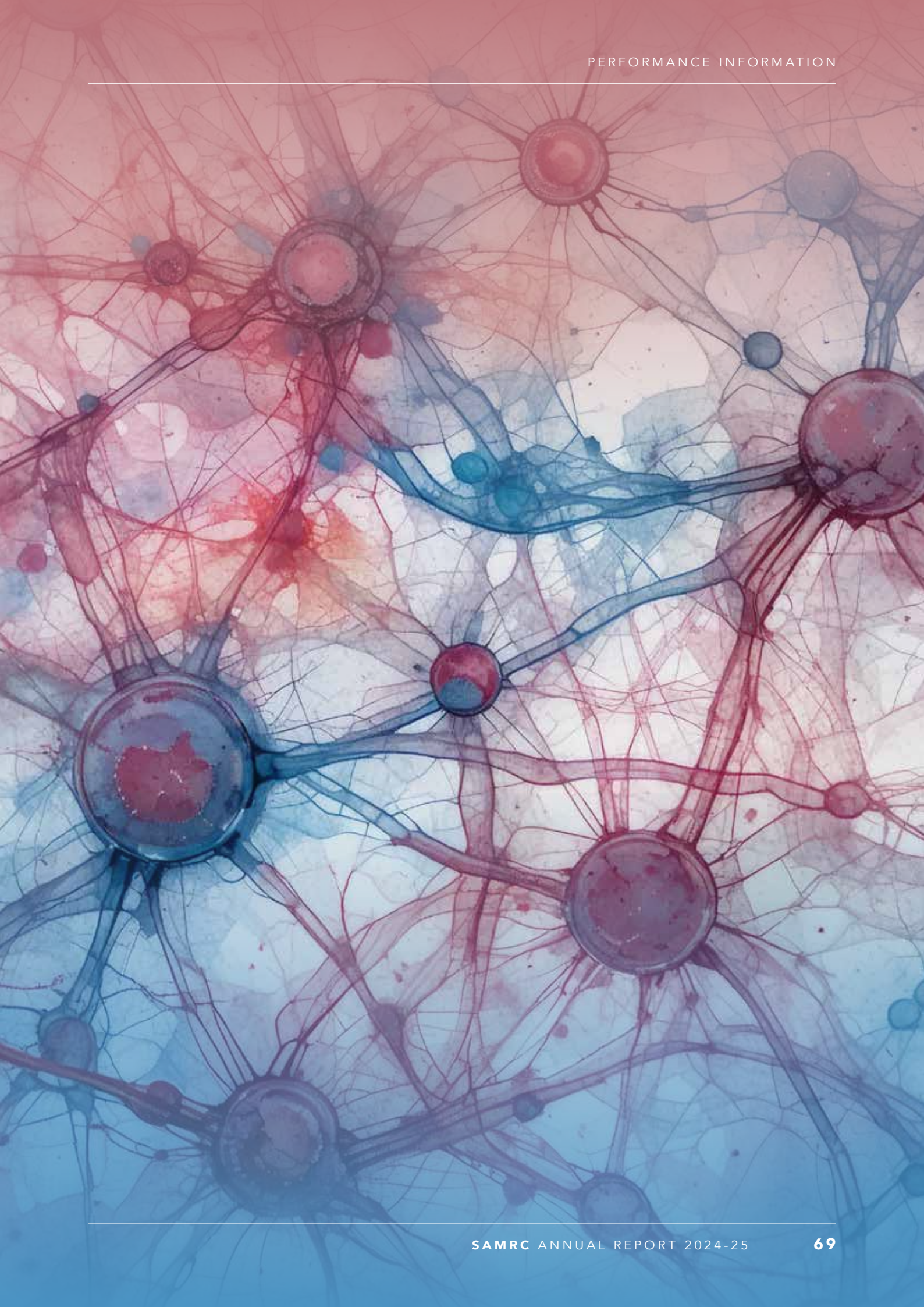
VISARU funding is currently not affected.

Research Translation Through Arts and Science

VISARU uses multiple forms of research dissemination, including through conventional research platforms such as conferences and specialised workshops for professionals, policymakers and community advocates, and through various forms of social media for widespread public access.

VISARU at Unisa Cape Town Campus.

15th World Conference on Injury Prevention and Safety Promotion in New Delhi.



RESEARCH PROGRAMME 2

MATERNAL, CHILD AND WOMEN'S HEALTH

PURPOSE OF THE PROGRAMME

To improve the health status and quality of life of women and children through high-quality scientific research that informs policy and practice, improves health services and promotes health.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Child and Adolescent Lung Health Research Unit (ERU)
2. Development Pathways for Health Research Unit (ERU)
3. Gender and Health Research Unit (IRU)

PROGRAMME STRATEGIC OBJECTIVES

- To conduct and promote research for the improvement of maternal, child and women's health, while also making an impact on gender inequity and gender-based violence (GBV).
- To train and mentor high calibre postgraduate students in the field of maternal, child and women's health.
- To synthesise evidence, optimise information and knowledge flow, influence policy and practice within the health sector and other sectors of government in relation to issues affecting maternal, child and women's health.
- To develop interventions for prevention of gender-based violence for testing and evaluation of effectiveness in affected communities.
- To test or evaluate interventions (programmes) to prevent GBV and reduce maternal and neonatal deaths in primary and secondary levels of care

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Child and Adolescent Lung Health Research Unit

Unit director:
Prof. Heather Zar
heather.zar@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The strategic purpose of the SAMRC Unit on Child and Adolescent Lung Health is to research the key health issues affecting child and adolescent health in South Africa, Africa, and globally. The Unit conducts research in areas of major importance to child health including pneumonia, tuberculosis (TB), HIV-associated illness, Respiratory Syncytial Virus (RSV), and the developmental origins of health encompassing growth, respiratory, neurocognitive, and cardiometabolic health.

The overall aim is to develop better diagnostic, preventive, and treatment strategies to strengthen child health. Studies encompass the epidemiology, aetiology and risk factors that influence child health, improved diagnostic strategies, and the long-term impact of exposures on health. The Unit promotes interdisciplinary work through an extensive network of international and local collaborations with much capacity development through training of health care professionals and development of infrastructure as well as technology transfer.

Key Milestones and Achievements

Highlights from this reporting period include: In paediatric TB, development and testing of a new artificial intelligence (AI) platform for chest x-rays from non-TB LRTI and tuberculosis in children, collection and analysis of exhaled breath samples from children with suspected TB, participation in the third iteration of the South African MRC tuberculosis consortium Report-SA 003 as the only paediatric site and contributing longitudinal lung function data, and samples including new specimens for testing on new, platforms with an emphasis on developing point-of-care testing.

Conducting a nasal swab in a RSV participant.

Studies involve collaboration with other African centres and USA partners. In addition, the long-term outcome of early life PTB is an ongoing focus.

The Drakenstein Child Health Study continues to provide cutting-edge novel data on the epidemiology and early life determinants of childhood illness and the long-term impact of early exposures on health, to inform interventions and policy. Research over the past year has investigated the association between early life exposures and NCD development through adolescence, and underlying mechanisms for disease development as the cohort enters adolescence, to provide unique data from a LMIC.

Studies of RSV preventive strategies for infants have provided important global and local data on the efficacy and safety of maternal immunisation and

Health Induced Sputum Training.

Staff Photo End of Year Function 2024.

of long-acting monoclonal antibodies in infants. These contributed to recent WHO recommendation for global implementation of such strategies as well as National Advisory Group on Immunisation recommendation for use in SA.

Building Capacity Through Training, Mentorship, and Support

The Unit continues to contribute to building capacity in clinical translational science through national and international collaborations. Research has involved technology transfer, skills transfer, and training of many postgraduate students. The unit currently supports the work of 45 post-graduate students (Masters, PhD and Post Doctoral) across the fields of child health, Public Health, general medicine, psychiatry, radiology, microbiology and statistics.

Over the past 5 years, 79% of the graduates have been female, while 56% have come from previously disadvantaged backgrounds. Students and graduates continue to contribute to child and maternal health across these areas. Work has contributed to new knowledge and advances in the fields of childhood pneumonia, TB, RSV, HIV and developmental origins and trajectories of health from birth.

The Unit has supported the development of an ongoing training programme to improve TB diagnostics in paediatrics at district and clinic health facilities in the Eastern Cape, including provision of hands-on induced sputum training.

Capacity in data science has been built through international collaborations, and mentorship training data team members, students and investigators. Data training was done at the REDCap Africa Symposium. Expanded capacity for lung function testing has been done through Australian collaborations with training of a respiratory technologist including novel techniques in lung function testing. Our unit has provided the first African infant and preschool lung function testing. These have also supported further development of African capacity, with knowledge gained was shared with the lung function team over multiple workshops which have strengthened local capacity and processes.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders have created insecurity around funding from the National Institutes of Health. We have experienced delays with the approval of no-cost extensions and confirmation of sub-award funding on one of our projects, which while initially approved by the NIH, is awarded each year of the grant. There is concern that funded projects could be halted and discontinued. Our funding for the 2025-2026 period for these grants is therefore uncertain and remains unconfirmed. Loss of funding will have a direct impact on staff that are funded by that study entirely and that operate essential capacity-building functions in the field of paediatric tuberculosis in one of our underserved satellite sites in the Eastern Cape. For another study we are adjusting timelines to ensure that funding will be available to cover most project costs.

Research Translation Through Arts and Science

Public engagement activities were launched with the overall goal of disseminating information learnt on determinants of healthy development in early life and receiving feedback from the Drakenstein Child Health Study participants and families on their experience of the study. Many activities were organised including: the development of an animation video for the public; two community engagement events that shared study findings on lung health outcomes to families of children born preterm; and the creation of a pupil-led playground mural reflecting positive messaging about health and our environment which involved collaboration between Langabuya school pupils, pupils from a Cape Town high and two local Cape Town community artists. A soccer field is currently under construction at Langabuya School as a key community engagement activity.

Development Pathways for Health Research Unit

Unit director:
Prof. Shane Norris
shane.norris@wits.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Development Pathways for Health Research Unit's (DPHRU) top priority and strategic objective is to continue research activities as part of a high-impact scientific portfolio that advances our understanding of human development and health across the life course. This is achieved by four scientific programmes interlinked across the life course.

Our research addresses problems using both population studies and randomised controlled trials at various stages of the life course. Two of the trials that were completed during the financial period were the IINDIAGO trial, which was a postnatal RCT linked to baby wellness clinics to offset diabetes risk in women following gestational diabetes, and the PLAY study which was an intervention designed to improve infant neurodevelopment and growth by encouraging responsive caregiving practices in the first year of life. The PLAY study was delivered by community health workers using an app called 'Ngeyethu Info' ("This is for us") which will be freely available, and its potential impact will be to improve maternal and child health, optimise early childhood development, and have long-term intergenerational effects.

Key Milestones and Achievements

DPHRU continued to produce substantial scientific output, train postgraduate students and mentor postdoctoral fellows within an extensive research portfolio. One of the highlights is the publication of the book 'Birth to Thirty: A study as ambitious as the country we wanted to create'. The Birth to Thirty cohort has been a strategic research platform of DPHRU since its inception in 1990 with the original cohort including 3273 mothers and their children who have been followed up for more than three decades. The book describes why the study was started, how it is conducted, and the value it has and how it continues to add to science globally and to policy and services in South Africa.

Another highlight is the promotion of Dr Lisa Ware to Reader as well as her success in receiving a Wellcome Trust Mid-career fellowship. This is to fund the GenHeart Cohort which plans to recruit young women in Soweto who intend to have a child within two years and follow the women who become pregnant, and their child postpartum. Another highlight is the conceptualisation and leadership of the Lancet Series on 'Early Childhood Development: the next 1000 days', by A/Professor Cathi Draper.

Building Capacity Through Training, Mentorship, and Support

Currently DPHRU is supervising 17 postgraduate students (15 PhD and 2 MSc students) and continues to collaborate with the DSI-NRF Centre of Excellence in Human Development on the Postdoctoral Accelerator Programme (PAP). The philosophy of PAP embodies structured learning that aims to mentor and develop postdocs to be at the senior researcher level within two years; co-ordinate postdoc mentorship with other senior academics; peer-learning support; support to achieve a high number of publications and an NRF rating; support a career strategy plan. As part of the programme DPHRU is currently mentoring 11 postdoctoral fellows.

Community health worker measuring blood pressure (IINDIAGO).

Prof Linda Richter at the Bt30 book launch with Bt30 participants.

Community health workers visit participants delivering the intervention to women postpartum.

Navigating the Impact of US Executive Orders on Funding

None to date.

Research Translation Through Arts and Science

We continue to actively engage and disseminate scientific findings and create awareness of the importance of developmental origins of health and disease. Our knowledge mobilisation activities include the development of the PLAY 'Ngeyethu Info' app, the prototype of which has been developed. This provides weekly content in the form of infographics, links to existing content from sources such as UNICEF and the WHO, as well as videos created specifically for the App.

DPHRU senior researchers also continue to proactively engage with journalists and publication of articles on The Conversation website which has resulted in extensive media coverage of many of our research outputs during the review period. DPHRU continues to actively engage with the community as stakeholders and co-creators using a knowledge mobilisation model to create a self-perpetuating cycle connecting science-needs-community.

Gender and Health Research Unit

Unit director:
Prof. Nwabisa Shai
nwabisa.shai@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Gender and Health Research Unit (GHRU) advances the health and well-being of women, children, and marginalised populations through research addressing gender inequalities and violence. We conduct innovative studies to understand trends, drivers, and health impacts of gender-based violence, and develop strategies for prevention and response that influence policy and practice locally and globally.

We completed the 4th national Femicide study, which examined femicide trends during the first year of the COVID-19 pandemic, with a focus on alcohol. The findings were shared at a hybrid stakeholder forum in October 2024. The research received widespread media coverage and contributed to the UN's annual report on gender-related killings.

The Unit also completed the Siyaphambili Youth Project, co-developing with young participants from marginalised communities the Stepping Stones and Creating Futures Plus (SSCF+) intervention designed to address intimate partner violence among youth in urban informal settlements. The pilot evaluation showed promising results in reducing IPV and livelihoods among men, and in improving the mental health and livelihoods of women.

Key Milestones and Achievements

The Unit achieved significant milestones in advancing knowledge on the role of alcohol on violence and, development of prevention interventions. We published three key studies linking alcohol consumption to violence against women and girls. 1st year of COVID-19 pandemic, with accompanying alcohol restrictions, provided an opportunity to understand the role of alcohol on femicide. We found alcohol was a definitive risk factor for femicide with restrictions on alcohol sales periods associated with a decrease in intimate partner femicide. A study on young couples in informal settlements also confirmed alcohol's impact on IPV, through disinhibition, economic stress, and infidelity. The 3rd global review of men's alcohol consumption underscored harmful effects on women, including violence and mental health issues.

Our research on integrating mental health in violence prevention resulted in the completion of two pilot studies. Ntombi Vimbela SAMRC flagship project tested two intervention manuals co-developed with university students. The interventions addressed sexual violence and mental health, and were well-received, demonstrating their relevance and acceptability. We also completed RICE 2 feasibility study, adapting two WHO interventions: Self-Help Plus and Problem Management Plus to address the mental health effects of rape and to strengthen effective coping strategies among women who had experienced violence.

Our disability and GBV research team secured a UKRI-funded grant to explore the experiences of gender-based violence (GBV) among women with disabilities in KwaZulu-Natal, in collaboration with Stellenbosch and Leeds universities. Women with disabilities will participate as co-researchers and the study will use art-based methods to critically advance our understanding of GBV among marginalised groups.

Building Capacity Through Training, Mentorship, and Support

In alignment with our Unit's strategic objective of building sustainable health research capacity in gender inequality and violence, the staff provides teaching and postgraduate supervision support to various academic institutions. 21 postgraduate students, i.e., 12 Masters' and 9 PhDs, are under supervision; some students graduated in Masters and PhD in 2024 and 4 master's students are awaiting examination.

In collaboration with the Biostatistics Unit, the unit has provided statistical training to over 30 postgraduate students and public health researchers and awarded five bursaries through our Bill & Melinda Gates Foundation-funded project. The Ntombi Vimbela project also awarded a Master's bursary to a black female student enrolled at a Historically Disadvantaged Institution.

In 2024, the unit also supported emerging scientists and established a community of practice group that fosters leadership development, scientific and research skills building and knowledge sharing across research teams and study sites. This includes monthly journal clubs and scientific writing sessions, which are led by senior researchers.

The Unit also invested in the professional development of its staff and collaborators working on the Fediša Modikologo project. We developed in-house training on IPV research, including a course addressing vicarious trauma prevention for research teams. All Fediša staff have completed a Personal Development Course to promote and support their personal growth and well-being.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders have had a significant impact on two CDC-funded projects within the Unit. The two projects, focused on improving access to quality HIV and post-GBV services for disabled and LGBTQI+ persons, were due to run from January to September 2025 but are now on hold. Recruitment for two new Senior Scientists was completed, but offer letters had to be retracted due to the stop orders. Consequently, these projects are currently lacking additional scientific support and can only operate with service-rendered posts. The uncertainty around the funding raises concerns about the long-term sustainability of these projects.

Additionally, we were informed that to continue, terminology around disability, equity, and inclusion would need to be removed. Another project addressing the impact of GBV when disclosing HIV status also faces similar challenges. Beyond these projects, the broader Unit is experiencing anxiety and uncertainty about future funding and employment. Staff members are concerned that the increasingly competitive funding landscape may hinder the Unit's ability to attract new research funding. The Ntombi Vimbela project, while not directly impacted, also shares concerns about the future funding of planned RCT work with gender-diverse individuals, a research domain typically funded by US sources.

Research Translation Through Arts and Science

We employed creative methods to communicate and engage diverse audiences. The Disability Data Initiative project – a national online platform that produces and catalogues disability data aligned with SDG indicators secured a grant to expand its reach to Eastern and Southern Africa, provide new training fellowships for young researchers. Our disability work was also cited in several policy documents: UNFPA publication on young people with disabilities and South African National Mental Health Policy.

Our unit co-convened Violence Prevention Forum, a multisectoral meeting with government, NGOs and development partners, which utilised journalist-trained storytelling and "coffee table conversations" to facilitate inclusive dialogue on emerging research and its implications for policy and practice, enhancing our research translation efforts and multisectoral engagements for actionable solutions building.

Many of our projects foster community engagement through Community Advisory Boards which bring together diverse stakeholders from our research settings. The Fedisa team has incorporated lived experiences into its research, notably through narrative interviews in the creation of Women with Lived Experience Groups. These approaches humanise the research and deepen our team's connections with our audiences.

We used diverse platforms, including webinars, media interviews, podcasts, and social media to communicate our research. Femicide study results were shared with policymakers at Parliamentary Portfolio Committee on Social Development, amplified through radio, TV, and online outlets.

The Siyaphambili Youth Project webinar series, with participants as co-presenters, reached international audiences thus enabling the unit to translate our research into actionable knowledge, influencing both local and global dialogues on violence prevention

Lepulane Maphutha, presented the Fedisa Modikologo study to members of a local faith-based organisation during the 100 days against GBVF in Modimolle township.

Khomotso Nkwana in action presenting the study to potential participants who are part of the expanded public works programme in Mookgopong.

Phuki Phago engaging with women during community outreach in Bela-bela.

Thabazimbi door to door campaign to raise awareness about GBV with local stakeholders.

Prudence Shiburi presenting the Fedisa Modikologo study enrolment criteria to the local community.

The team was invited to present Fedisa Modikologo study at a wellness event for Waterberg SAPS focusing on IPV to raise awareness and encourage SAPS members to seek help.

RESEARCH PROGRAMME 3

HIV, AIDS, TB AND OTHER COMMUNICABLE DISEASES

PURPOSE OF THE PROGRAMME

To conduct research on preventing HIV and related co-morbidities including TB and other infectious diseases, such as malaria. It seeks to contribute to the national and international science system by testing TB drugs and malaria insecticides, carry out the AIDS Vaccine project through coordinating development and test HIV vaccines in South Africa, in partnership with our funders and our regional counterparts.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Antibody Immunity Research Unit (ERU)
2. Centre for the Study of Antimicrobial Resistance Research Unit (ERU)
3. Centre for Tuberculosis Research Unit (IRU)
4. HIV and other Infectious Diseases Research Unit (IRU)
5. HIV-TB Pathogens and Treatment Research Unit (ERU)
6. Intersection of Non-Communicable Disease and Infectious Disease Research Unit (ERU)
7. Malaria Research Group (IRU)
8. Office of AIDS and TB Research (IRU)
9. Vaccine and Infectious Diseases Analytics Research Unit (ERU)

PROGRAMME STRATEGIC OBJECTIVES

- To increase the body of knowledge informing the development of the response to prevention and curative interventions for HIV, AIDS, TB and other communicable diseases.
- To increase the contribution to the national health system by maintaining national health research facilities that provide services for the prevention of HIV and related co-morbidities, including TB.
- To provide research grants to principal investigators responsible for HIV research in line with European and Developing Countries Clinical Trials Partnership (EDCTP) TESA mandate, provide financial support to researchers within neighbouring countries for training in laboratory and research techniques, utilising funds from sponsors and Unit savings.
- To provide leadership and coordinate activities for training and development of young scientists and employees at different levels and to work towards retention of critical skills and talent management thereof.
- To ensure proper training of clinical, laboratory and other research staff, and communities in and around the research sites.
- To increase the body of scientific knowledge through research translation into products, patents, papers, policy practice and health promotion (including to the public) by organising meetings, seminars, workshops and conferences.
- To design and construct the most appropriate and promising HIV candidate vaccines for southern Africa and to increase the number of interventions developed for TB and HIV.
- To increase the body of scientific evidence that relates to testing and evaluating medical equipment and devices that are developed for the prevention of HIV and related co-morbidities.

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Antibody Immunity Research Unit

Unit director:
Prof. Penny Moore
pennym@nicd.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

During 2024, The Antibody Immunity Research Unit (AIRU) continued to make key contributions to HIV research with less of a focus on SARS-CoV-2 research. Two SAMRC-funded SARS-CoV-2 grants were completed in December 2024. A major emphasis of our HIV research was participation in the BRILLIANT Consortium (BRinging Innovation to cLinical and Laboratory research to end HIV In Africa through New vaccine Technology), a multi-disciplinary collaboration with partners from Nigeria, Uganda, Kenya, Tanzania, Zimbabwe, Zambia, Mozambique, South Africa and Internationally. The overall objective of developing and evaluating HIV vaccine candidates emanating from the African continent.

In preparation for the first trial planned for 2025, AIRU worked to establish a B-cell analytics pipeline, and the unit also worked on novel immunogens for future clinical trials. In addition, research activities on other pathogens such as respiratory syncytial virus, Ebola, influenza and cytomegalovirus continued.

Key Milestones and Achievements

In 2024, we acquired funding from USAID to develop African immunogens and test experimental vaccines for HIV across the BRILLIANT consortium, which spans the African continent, with Prof Moore taking overall responsibility for the immunogen design aspects of this grant and serving as protocol co-chair on the first discovery medicine trial, which will be conducted in 2025. In the last year, we have generated pre-clinical data for our first vaccine candidate, worked closely with international collaborators to implement B-cell analytics, and engaged in significant capacity development across the continent.

Through Gates Foundation funding, we have implemented assays developed by Reithera to assess seroprevalence for gorilla adenoviruses and other human adenoviruses in preparation for a large-scale HIV vaccine trial starting in 2025. This work will also feed into an ongoing study to define the mechanism for the lack of boosting of antibody responses in adenovirus-vectored COVID-19 vaccines.

We focused on mechanistic studies of SARS-CoV-2. This included a study on correlates of protection in infection, which was published in Nature Medicine. This study utilised a household approach and measurements of humoral immunity to show that in the context of reinfection, antibodies accounted for only 10% to 50% of protection, implicating T cells, mucosal responses and Fc effector function as being key for prevention strategies. This high-impact work was led by Dr Jinal Bhiman.

Building Capacity Through Training, Mentorship, and Support

Our primary goal is to address the critical need for enhanced scientific expertise in South Africa to strengthen public health and drive the transformation of the nation's scientific capabilities. The Unit is committed to building scientific human capital and generating novel knowledge in virology, immunology, and bioinformatics, with a particular focus on tackling South Africa's unique public health challenges. This mission is supported by publishing high-quality research findings in international journals, allowing us to share cutting-edge scientific insights with the global community.

One of our key priorities is the sustained recruitment of talented students to build a robust pipeline of emerging scientists at all levels. The Unit is deeply invested in fostering independent research career pathways for young and mid-career researchers and have overseen a systematic restructuring of our laboratory to create collaborative cores led by senior scientists. Each core leader has substantial autonomy to develop niche platforms and projects, ensuring sustainability and fostering creativity. To further strengthen our vision, we hold annual strategic planning meetings where senior staff actively contribute to shaping the lab's direction. Seven students were supported by AIRU in 2024.

Dr Jinal Bhiman.

Tandile Modise.

A slide cover of a presentation done by Prof Penny Moore.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders have had a significant impact on AIRU as the Unit had both IAVI (ADVANCE grant) and USAID (BRILLIANT grant) funding cuts which have resulted in the termination of work related to two clinical trials (IAVI-C112, BRILLIANT-B-001) with significant research funding cuts.

Research Translation Through Arts and Science

The University of the 3rd Age local forum in Johannesburg, invited Prof Moore to give a talk on immunology in September 2024. The talk entitled "The Great Escape – how viruses evade immunity". The University of the Third Age (U3A) is an international movement focused on lifelong learning and social engagement for retired and semi-retired individuals, offering a variety of educational, creative, and leisure activities.

Centre for The Study of Antimicrobial Resistance Research Unit

Unit director:
Prof. Keertan Dheda
keertan.dheda@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Centre for the Study of Antimicrobial Resistance (CAMRA) collaborates with South African and international scientists and clinicians to conduct research into TB and non-TB multi-drug resistant pathogens including (i) studies to investigate the relationship between pharmacokinetic (PK) mismatch and drug resistance development, and subsequent strategies to improve diagnostic readouts to detect mismatch and newer approaches to drug delivery including inhaled TB drug formulations (ii) to investigate treatment outcomes and transmission dynamics of patients with drug resistant TB, including those receiving new and repurposed drugs (bedaquiline,linezolid).

These research activities aim to provide important insights into mechanisms of drug resistance evolution and then lead to better diagnostic and treatment strategies, transmission interruption strategies and to understand the epidemiology of patients who fail treatment, especially those on new and repurposed drugs.

Some highlights for the reporting period include:

(i) completed review of EDRWeb data (an electronic DR-TB register in South Africa) on linezolid interruption and rechallenge in a programmatic setting (submitted for publication to Lancet Global health and presented at Union conference).

(ii) completion of recruitment in the UFO and lung PK study.

(iii) Several papers were also published including a Nature Reviews Disease Primer on MDR-TB, led by Prof Dheda.

Key Milestones and Achievements

We initiated a new collaboration with BioMérieux and Oxford Nanopore Technologies to evaluate their new targeted DR-TB diagnostic sequencing platform (Ampore TB) and compared it to existing platforms. We have received in-kind funding (~R1,000,000) in the form of Ampore kits and a GridION system for the evaluation study. At least one publication is expected to be generated from the study. Stage I of the T3 study was initiated, which aims to evaluate the impact of tNGS Ampore assay on guiding individualised treatment and impact on patient outcomes (awaiting outcome of invited Stage 2 UKRI funding application to support further stages of the project).

The Unit Director has been awarded the DSI/NRF Chair in Interruption of Antimicrobial Resistance Amplification (SARChi). The work here aligns with the goals of the EMU and funding will be used to further support AMR-specific projects and facilitate student/postdoc training.

Prof Dheda has also received several prestigious awards including promotion to an NRF A1-rated scientist, the Alan Pifer award for socially responsible research and the ASSAf Science for Society Gold Medal Award. These awards recognise Prof Dheda and the Unit's contributions to TB research including diagnostics, treatment and healthcare policy in both drug-sensitive and drug-resistant TB.

Building Capacity Through Training, Mentorship, and Support

There have been several training initiatives during the reporting period. Two clinicians have been pursuing their PhD with support provided by the EMU. Dr Ali Esmail has recently completed his PhD and was also promoted to Associate Professor. Dr Suzette Oelofse has completed recruitment on the UFO study and is currently in the data analysis phase of her project (PhD submission in December 2025). Ms Olwethu Matta is currently pursuing her Honours degree in clinical pharmacology (with a bursary provided by EMU funding); she has completed the coursework component and is doing her Honours Project.

We have also been hosting an HSRC intern, Ms Nomaphelo Ketye, who has gained extensive experience including, GCP and GCLP training, proficiency in several laboratory techniques and is involved in the lab component of several clinical trials. Furthermore, several of our clinical research staff such as research nurses and community healthcare workers, who are involved in sponsor-driven clinical trials, have undergone intensive training including GCP document training, informed consent form training, CPR training and research skills development.

Navigating the Impact of US Executive Orders on Funding

While the EMU does not currently hold any grants from US governmental funding agencies, there is a great deal of uncertainty around a few US government funding applications that we have submitted. Furthermore, the executive order has reduced the pool of available international funding which will likely result in increased competition for remaining sources of funding. This will significantly slow down research into diseases of poverty such as TB and HIV.

Research Translation Through Arts and Science

The Unit's community engagement is facilitated via a community advisory board and setup through a community liaison officer. This has allowed us to provide feedback at community forums in areas where we conduct research including districts such as Gugulethu, Klipfontein and Mitchells Plain. Our work is explained in lay terms and feedback from the community is encouraged at these forums to ensure individuals remain engaged and interested. This ensures continued participation in studies and helps to increase awareness and promote a sense of contribution towards improving healthcare in these communities.

We also engage and give back to the communities via Free of TB, a not-for-profit charitable organisation setup by Prof Dheda. Free of TB provides support to TB patients in the community with a specific focus on drug-resistant TB patients in the Western Cape.

Some of these activities include:

(i) World TB Day events where our research is highlighted to patients and the public

(ii) provision of food parcels to patients

(iii) Organising transport for patients who are discharged back to their homes

(iv) assisting patients with obtaining IDs and social grants.

Two of the major ongoing projects at Brooklyn Chest Hospital include the building of a library/reading nook at the paediatric ward and a recreational facility for adult patients. These will assist in reducing boredom during long hospital stays and prevent substance abuse and antisocial behaviour. The interior of both structures will be decorated by an interior designer with artwork that is appealing to the patients and staff.

Centre for Tuberculosis Research Unit

Unit Director:
Prof. Robin Mark Warren
rw1@sun.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Centre for Tuberculosis Research (CTR) in partnership with Stellenbosch University (SU) continues to drive impactful research to bridge the gap between fundamental and clinical sciences, improve treatment and prevention approaches, and develop effective diagnostic tools. The CTR has made substantial strides in evaluating targeted next-generation sequencing to rapidly diagnose drug resistance. This has been expanded to combine whole genome sequencing with AI-driven algorithms to recommend optimised treatment of drug-resistant TB and guide preventative treatment options. This research is complemented by clinical trials to evaluate novel TB treatment options and the development of a new triage test for active TB which showed outstanding performance characteristics in different countries.

The CTR's biomarker research is strongly focused on validating new tools for monitoring TB treatment response as well as investigating host immune responses to mycobacterial infections at the site of human infection. A post-TB lung disease study revealed persistent inflammatory dysregulation following cure, while collaboration with the Genomics Centre has identified host genetic factors influencing TB risk in South African populations.

The CTR's One Health approach focuses on mycobacterial infections in rural HIV/TB-burdened communities through surveillance in communal livestock, humans, and in environmental samples, especially those bordering wildlife parks.

Key Milestones and Achievements

Key Highlights Achieved in 2024-2025, include New Collaborations and Partnerships: One notable collaboration involved organising bioinformatics training and engaging in a project with the renowned HIV Vaccine Trial Network. The CTR has strengthened their collaboration efforts with institutions in the United States and Brazil. These collaborations have resulted in significant progress in molecular identification and sequencing of Mycobacterium bovis isolates. CTR has entered into a strategic collaboration with UCT to develop a magnetic drug-targeting device resulting in advancements in TB research and cross-disciplinary innovation.

Grants and Funding Obtained: A new grant, NIH D43 training grant was secured to develop TB bioinformatics capacity and Prof. Sampson became Director of the VALIDATE Network. Prof N Du Plessis received the SAMRC Bronze award.

AMF Saldanha Bay Career expo 2024.

Animal TB Monitoring immobilized lions for TB surveillance.

Animal TB BMRI Open Day 2025.

The CTR contributed to landmark publications in The Lancet Microbe and eLife, advancing TB susceptibility research and precision medicine.

Technological Advancements: The Bioinformatics Research Unit developed a waste-water metagenomics analytical pipeline for pathogen detection, used by Kenya's national health laboratory. They also built a machine-learning model for a TB triage test and implemented a real-time data capture system for Mycobacterium tuberculosis whole-genome sequencing.

A point-of-care test for childhood TB meningitis and alternative prototype tests for TB, with ongoing optimisations and new international patent applications filed.

A collaboration with the University of Pretoria and the Nuclear Medicine Research Infrastructure to merge nuclear medicine techniques with nanobiotic approaches, improving diagnostics and targeted TB therapy strategies. These highlights have significantly advanced health research, enhancing diagnostic capabilities, fostering international collaborations, and building capacity in TB research and bioinformatics.

Building Capacity Through Training, Mentorship, and Support

The CTR graduated PhD students, MSc students, and BSc Honours students within the academic year 2024-2025, demonstrating their commitment to academic excellence. The CTR enrolled 31 postdoctoral, 57 PhD, 61 MSc and 11 BSC Honours students for the 2024 academic year.

Efforts to advance gender equity and diversity remain a priority, with 67% female representation among the postgraduate students and 50% of the student body consisting of black students. We note that 67% of the student body is South African. Notable academic advancements were celebrated, including Prof Desiree Petersen's appointment as Senior Specialist Scientist. Prof Andre Loxton was awarded the SAMRC Silver for outstanding scientific contribution to health research, and Prof Rob Warren was honoured with a service recognition award.

A total of 220 participations from CTR were recorded in virtual and in-person workshops, conferences, webinars, and training courses. The CTR hosted various training courses, such as hosting a series of Responsible Conduct in Research workshops. Other workshops included One Health discussions and Public Squares brainstorming workshops.

Learners participating in the Generation Science job shadowing programme.

Members of the teams participated and hosted training in collaboration with QIAGEN to advance direct sputum whole genome sequencing for Mycobacterium tuberculosis, streamlining drug resistance profiling and reducing reliance on culture-based methods. These initiatives have contributed to the professional development and knowledge enhancement of staff and students at the CTR.

Navigating the Impact of US Executive Orders on Funding

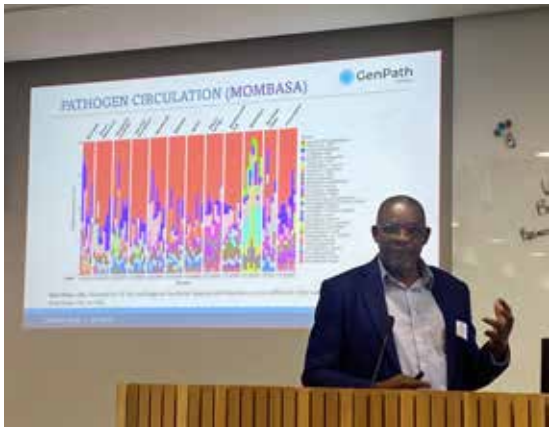
The US Executive Orders on federal funding have created significant uncertainty and challenges for the CTR. Key impacts include the potential loss of funding for (nanomedicine) collaborations and training grants, which could affect the development of pathogen bioinformatics skills. Rejection of travel reimbursements by the NIH and uncertainty about the continuation of collaborations with U.S. researchers and services, such as whole genome sequencing, have also been noted. Delays in obtaining CITES import permits for wildlife samples may hinder research collaborations and outputs.

The situation is particularly dire for groups heavily reliant on NIH funding, with potential retrenchment of staff and collapse of long-established research programmes if funding is not renewed. The halt in funding applications and the postponement of study sections for new grants further worsen the uncertainty.

Despite these challenges, the situation has prompted some groups to pivot, adapt, and explore new funding sources and collaborations, enhancing flexibility and innovation in their research approaches. Overall, the Executive Orders have had a profound impact, threatening the continuity and progress of critical health research initiatives.

AMF Saldanha Bay Career expo 2024.

Upington Outreach.



Wastewater Metagenomics Pipeline.

Capacity building of the Brazilian Tuberculosis Surveillance Network (REVIGET) team in BSL-3 laboratory.

Biomedical Research Institute (BMRI) located on the Tygerberg campus of Stellenbosch University.

Research Translation Through Arts and Science

Creative Communication and Community Engagement: During the reporting period, the research unit employed various innovative methods to communicate their research to a wider audience and engage with the community.

Key activities included:

BMRI Open Day and Academic Presentations: Members of the CTR showcased their work at the BMRI Open Day and the Faculty of Medicine and Health Sciences' Annual Academic Day, engaging with high school learners and university students through interactive Expo stalls and presentations.

Public Science Communication: The (Animal TB Research Group) team participated in several public science communication events, using photographs, videos, and interactive activities to engage learners and the public. They collaborated with professional filmmakers to document field projects for public television and maintained an active online presence through a website and social media.

Community Outreach and Education: Students and researchers engaged in social outreach activities organized by the societal impact task team, fostering meaningful engagement and elevating community knowledge. Activities included exhibitions, radio interviews, and educational sessions with learners, particularly in rural areas. The TB outreach in Upington involved visiting schools and conducting follow-up radio interviews, with positive feedback prompting annual updates and broader communication through newsletters and emails.

This has made the research more accessible and engaging, inspiring enthusiasm for careers and fostering a deeper understanding of health research among diverse audiences. The use of art, storytelling, and interactive methods has enhanced the impact of these engagements, contributing to the overall success of the research unit's communication strategy.

HIV and Other Infectious Diseases Research Unit

Deputy Unit Director:
Dr. Terusha Chetty
terusha.chetty@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The HIV and Other Infectious Diseases Research Unit (HIDRU) is dedicated to reducing the burden of key infectious diseases, particularly, HIV, and tuberculosis (TB) through high-impact research that informs prevention, treatment, and service delivery interventions.

During the 2024-2025 financial period, HIDRU contributed to the HIV and TB focal areas, alongside two cross-cutting themes: socio-behavioural science, and maternal, family, child health, and nutrition (MFCHN). Key achievements included evaluating HIV vaccines (PrEPVacc, HVTN 139, 142) and assessing pre-exposure prophylaxis (PrEP) strategies for young women (HPTN 084, Purpose-1, and PrEPVacc).

The unit also enrolled participants in the Phase 3 M72 TB vaccine trial and investigated multidrug-resistant TB (MDR-TB) treatment outcomes in pregnant women. Further, HIDRU assessed novel TB vaccines and studied interventions to improve maternal and newborn care. These research efforts provide critical evidence for policy, clinical guidelines, and public health programmes, contributing to improved prevention and treatment strategies and ultimately reducing the burden of infectious diseases in South Africa and globally.

HIDRU exhibiting at the G20 Health Working Group meeting in Durban.

University of Limpopo visit to HIDRU at the KZN offices.

Key Milestones and Achievements

During the 2024-2025 financial year, HIDRU achieved significant milestones in HIV prevention research, global collaborations, and capacity building.

A major achievement was HIDRU's involvement in the PURPOSE 1 trial, which evaluated twice-yearly injectable lenacapavir for HIV prevention in cisgender women and adolescent girls. The Independent Data Monitoring Committee (IDMC) recommended stopping the blinded phase early due to 100% efficacy, marking a landmark in HIV prevention. HIDRU's five clinical trial sites contributed 13% of the study participants, emphasising its global research impact.

HIDRU also made strides in paediatric HIV prevention through its work with the PedMAb Consortium, aiming to reduce postnatal HIV transmission via breast milk in high-prevalence settings. In 2024, the consortium achieved two key milestones: (i) completed the six arms of the PedMAb1 trial, including dose escalation of two broadly neutralising antibodies (bNAbs) in neonates; (ii) Administered two bNAbs simultaneously to HIV at-risk neonates for the first time worldwide.

Additionally, HIDRU launched the SAMBULELO Phase 2 paediatric trial, evaluating the safety and pharmacokinetics of a single bNAb to prevent HIV in newborns born to breastfeeding women living with HIV. This trial also explores reducing viral reservoirs in infants with HIV, advancing paediatric HIV research. These achievements underscore HIDRU's commitment to advancing HIV prevention and paediatric research, contributing to global efforts in tackling HIV in vulnerable populations.

Building Capacity Through Training, Mentorship, and Support

HIDRU has significantly contributed to capacity building by supporting both staff and community members. In 2024, 43 staff received support for academic qualifications, including PhDs, master's degrees, and diplomas, along with funding for workshops, conferences, and seed funding for Unit-initiated research. A committee ensures equitable distribution of support, helping foster professional growth.

In 2021, HIDRU recognised a need for mentoring capacity development alongside the Individual Development Plan. A mentorship programme was established with two arms: one to assist with short-term goals (such as preparing a conference poster), and one to assist with long-term goals, such as gaining experience for a new position within the Unit. Thus far, 46 staff have made use of the short-term programme and 56 of the long-term programmes. In the first 18 months of the programme, 15 staff were successful

HIDRU Research Day.

in interviews for new positions and eight were successful in career progression and advancement.

HIDRU also strengthens community partnerships through its Community Working Groups (CWGs), made up of community volunteers who support research by providing input on protocols and advocating for health interventions. The Unit trains CWG members in scientific communication and the efficacy of biomedical interventions. These efforts have led to significant personal and professional growth for many members. For example, one CWG member participated in two international webinars and contributed a community perspective to the PrEPVacc trial update, highlighting the programme's broader impact on community empowerment and leadership. These initiatives illustrate HIDRU's commitment to building research capacity, empowering staff, and strengthening community engagement in health research.

Navigating the Impact of US Executive Orders on Funding

HIDRU's ongoing work in HIV and TB research has made significant progress through clinical trials aimed at improving prevention and treatment options. However, the US executive orders pose a challenge to future clinical trials, which could disrupt critical research on HIV and TB interventions. These trials are vital for developing new therapies, preventive vaccines, and improved treatment options for communities facing a high burden of these diseases.

The executive order could also delay the launch of new trials and affect the availability of life-saving interventions for vulnerable populations. For communities involved in these studies, this disruption could impact their access to cutting-edge clinical care and prevention methods, potentially worsening health outcomes for individuals and families affected by HIV and TB.

The interruption of research would not only hinder scientific progress but also slow down the implementation of life-changing health interventions that could benefit the broader community. Despite these challenges, HIDRU remains dedicated to

HIDRU Research Day.

continuing its research and collaborating with stakeholders to minimise the impact on both ongoing and future trials. The commitment to improving health outcomes remains strong, even in the face of external obstacles.

Research Translation Through Arts and Science

During the reporting period, HIDRU used storytelling, community engagement, and innovative methods to creatively communicate its research to a wider audience. One of the key strategies involved community dialogues and interactive workshops where researchers and community members discussed the impacts of HIV prevention and other health interventions. These sessions featured visual aids and infographics to simplify complex findings and make them more relatable to non-scientific audiences. Researchers also engaged in local and international webinars and interactive online platforms, using animations and short videos to present research findings in an engaging and accessible way.

Feedback from these engagements has been positive, with participants appreciating the humanised approach to research and the opportunity to contribute their voices to the conversation. These creative communication methods have expanded the reach of HIDRU's research and fostered a greater sense of ownership and understanding within the communities impacted by HIV and other infectious diseases.

HIV-TB Pathogenesis and Treatment Research Unit

Unit director:
Prof. Salim S. Abdool Karim
salim.abdoolkarim@caprisa.org

Advancing Research Priorities: Strategic Objectives and Impact

The top priority of CAPRISA's HIV TB-HIV pathogenesis and Treatment Research Unit is to reduce HIV-associated tuberculosis mortality. The strategic goals and objectives of the unit are incorporated in an epidemiologic research approach that includes:

Goal 1:

Addressing high TB mortality. The HARVEST Study evaluates high-dose rifampicin for reducing mortality in patients with TB meningitis.

Goal 2:

Improving DR-TB treatment outcomes: The CAPRISA TRiAD and ADAP-TIV studies aim to reduce DR-TB mortality and enhance therapeutic outcomes through expedited DR-TB diagnosis and optimized treatment.

Goal 3:

To identify novel strategies for TB control and prevention. The TARGET TB study aims to identify TB transmission hotspots while several TB vaccine studies currently implemented such as the, CommuniTB, BNT164-02, MTBVAC and ID93 studies aims to advance TB disease prevention.

Goal 4:

Develop a framework for Long-COVID through a deeper understanding of pathogenesis and long-term sequelae of SARS-CoV2.

Goal 5:

Conduct basic science research to understand immunologic and microbiologic correlations of HIV-associated TB risk and outcomes. Goal 6- Generate evidence to impact TB and HIV policies and treatment guidelines. WHO, SANAC, TAC, ARUA, tertiary institutions, NCAC, NSP, and government sectors.

Key Milestones and Achievements

Unit Director Prof. Salim Abdool Karim was honoured with the 2024 Lasker-Bloomberg Public Service Award for his groundbreaking HIV/AIDS research in South Africa. Prof. Abdool Karim's pioneering work in HIV prevention, treatment, and advocacy has globally impacted AIDS programmes and saved millions of lives. He also received the Michael Faraday Prize and Lecture 2024 from the Royal Society, recognising his exceptional ability to communicate complex scientific ideas to the public.

Prof. Naidoo was appointed Vice Chair of the Tuberculosis Transformative Science Group of the NIH Advancing Clinical Therapeutics Globally Tuberculosis (ACTG). This influential role significantly strengthens the unit's strategic involvement in global TB research, advancing science, TB vaccine development, fostering international collaborations and facilitating the advancement of clinical TB therapeutics. This science group plays a crucial role in the global fight against TB, with the potential to save countless lives and shape future treatment

Caprisa showcase projects at G20 meeting.

protocols. Prof. Rubeshan Perumal received these prestigious accolades namely, SAMRC Broze Medal, GVN Action Award as well as KZN Vice Chancellor's Research Award.

These accolades and leadership roles have elevated the unit's profile, driving TB and HIV research, expanding global health initiatives, fostering collaborations, enhancing policy engagement, and accelerating innovation to address global health challenges. In this funding period, the unit obtained 6 new grants from diverse funders and fostered five new research collaborations. The unit directly supports 15 postgraduate students through supervision: 5 PhD, 5 master's and 5 postdoctoral research fellows. Furthermore, staff and students associated with the unit are offered mentorship and support for higher degree completion.

Lasker Awards Kate Milford Sept 27, 2024.

G20 Health working group meeting.

Prof Rubeshan Perumal received the 2024 UKZN Vice Chancellor's Award.

Building Capacity Through Training, Mentorship, and Support

i. Promoting Equity:

CAPRISA promotes equity through its Employment Equity Committee, achieving clean audits for five consecutive years. The Unit supports five PhD students (N Ndjeka, K Lutchminarain, S Ngema, E Osuala, and Y Kadernani), five postdoctoral research fellows (N Naicker, D Chetty, B Chimukangara, L Amusa, and Z Salod), five Master's students (S Myawe, M Vethakuddikurukkal, S Malinga, S Pillay, and A Gazu), and three research interns (T Durga, N Mzinyane, and N Naidu). Support provided is mainly through research supervision, mentorship, development of written and verbal communication skills, data analysis, presentation and write-up.

ii. Staff Development:

This remains a priority, with many employees pursuing higher degrees, supported by UKZN and CAPRISA. In the 2024/2025 cycle, CAPRISA will award six PhDs, nine master's degrees, ten Honours, and three postgraduate diplomas to staff.

iii. Capacity Development for Research Conduct:

CAPRISA has run an annual clinical trials capacity-building programme for unemployed graduates, focusing on HIV/AIDS, TB, and COVID-19 research. In 2024, three of 13 interns (92% female, 69% African) were appointed as research assistants in 2025.

iv. Community Capacity Development:

CAPRISA prioritizes community outreach and training to members of civil society and community organisations to enhance competency and advocacy. Enhancing the skill and capacity of CAPRISA's Community Advisory Boards (CABs) helps improve their ability to represent the needs of people affected by HIV, TB, and marginalized groups like youth and LGBTQI individuals. These efforts strengthen research capacity, promote equity, and improve HIV and TB outcomes.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders on funding have significantly impacted CAPRISA, particularly in our TB and HIV research. The halt of USAID funding has led to the suspension of two key projects: the BRILLANT HIV vaccine trial and the MATRIX microbicide R&D project. These studies are crucial for advancing HIV prevention, especially for women, and their delay threatens progress in developing new treatments and prevention methods for both HIV and TB, which disproportionately affect vulnerable populations.

While the freeze on PEPFAR funding did not directly impact CAPRISA, the potential loss of NIH funding poses a further challenge, with a risk of an R75 million shortfall. This would severely hinder ongoing research, including critical HIV prevention and treatment trials. Given the high TB and HIV burden in South Africa, disruptions in research funding directly impact our ability to develop innovative solutions to these health crises, delaying life-saving interventions.

In response, CAPRISA has been using reserves to maintain operations temporarily, but these financial uncertainties pose long-term risks to the sustainability of our research and its outcomes for HIV and TB patients. Without necessary funding, the future of our work could be compromised, affecting the health and well-being of those most in need.

Study Team Groups.

Research Translation Through Arts and Science

During the reporting period, the unit made significant contributions to communicating scientific advancements through local, national and international stakeholder engagements. Prof. Naidoo presented abstracts at prestigious international conferences, including the Global Forum on TB Vaccines, The Union World Conference on Lung Health, the AAP/ASCI/APSA Joint Meeting, and CROI 2024/2025. Prof. Abdool Karim delivered several international talks including lectures to the Department of Epidemiology at Columbia University, Hood College in Maryland and The Vatican.

The unit was also active in policy engagement. Prof. Abdool Karim participated in the Pfizer Horizon Summit on Pandemic Preparedness and chaired the Africa CDC Emergency Consultative Committee, which advises the Director-General on declaring a Public Health Emergency of Continental Security. Both Prof. Naidoo and Prof. Perumal delivered presentations locally and globally on TB drug-resistance, Advanced HIV Disease (AHD), and acute and post-viral diseases. Prof. Naidoo serves on the TB Vaccine Working Group of NAGI, several TB initiatives and national strategic plans. Profs. Naidoo and Perumal both serve on NCAC. Dr. A Naidoo was an invited speaker to the WHO High-Level Consultation on AIDS. Mr. Mdletshe continues to play a pivotal role in SANAC, Treatment Action Campaign (TAC), local and provincial AIDS councils and regional initiatives, focusing on HIV prevention, strategic planning and active engagement with the local communities. Mr. Mdletshe has driven CAPRISA's community mobilisation efforts through engagement with stakeholders including SANTACO, tribal chiefs, and educational institutions. These efforts reflect a multi-dimensional approach to global health challenges, from policy advocacy to education, mobilisation, and capacity-building.

Intersection of Non-communicable Diseases and Infectious Diseases Research Unit

Co-director:
Prof. Mpiko Ntsekhe
mpiko.ntsekhe@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The top priority and strategic objective of the unit for the financial period were a series of research projects that investigated the impact of remote tuberculosis (endemic in SA) and HIV (pandemic in SA) and or its treatment (anti-retroviral therapy) on 1] the epidemiology of NCDs (focus on hypertension, diabetes) in the general population; 2] the risk of cardiovascular disease and 3] the development of heart muscle disease in adolescence with perinatally acquired HIV using novel imaging tools (e.g., CMR) and molecular biological approaches.

Highlights included epidemiological analyses that suggest a potential link between prior and latent TB and incident diabetes and heart disease, and CMR studies demonstrating that adolescents with perinatally acquired HIV have more heart muscle disease than controls without HIV. The novel information and results generated from these studies have also helped identify the major gaps and priority research questions to address in the field.

Amid a turbulent time, Ntobeko Ntusi's steadfast leadership was key to steering the department of medicine at the University of Cape Town into quiet waters.

Key Milestones and Achievements

Major highlights from reporting period include a significant number of local and continental training courses in cardiac magnetic resonance imaging that we were able to contribute to. By being able to provide virtual histology and detail structural and functional abnormalities of the myocardium, endocardium, pericardium as well as identify vessel anomalies, and congenital anomalies, CMR is an indispensable tool in the research of cardiovascular disease across South and sub-Saharan Africa.

Building Capacity Through Training, Mentorship, and Support

The research unit has contributed significantly to training, mentorship and postgraduate support. There were 31 masters, PhD and post-docs who benefited directly from EMU research projects and related funding and mentorship support. The areas of academic training and areas research training span a wide spectrum of disciplines that include, infectious diseases, public health and epidemiology, laboratory sciences, cardiovascular science, clinical medicine, (ID, pulmonology and cardiology) and project management and business science (MBA),

Navigating the Impact of US Executive Orders on Funding

4 NIH Grants are under threat, but none have been pulled yet. Ntobeko Ntusi: CTAAC and MUTIMA Grants. Ntsekhe: PHIZA and IMPI-3 RO1 and U01 Grants.

Research Translation Through Arts and Science

Community engagement has mainly taken the form of roadshows and their related public education and engagement activities with organisations such as the Heart and Stroke Foundation, and others promoting World Heart Day, World Diabetes Day, World HIV Day and World TB Day through community events.

Prof Ntusi presentation at Dr Stuart Saunders Memorial Lecture.

Malaria Research Group

Platform director:
Prof. Rajendra Maharaj
rajendra.maharaj@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The priority for the Malaria Research Group (MRG) is to eliminate malaria in South Africa by 2030. This is accomplished by supporting National Department of Health's malaria elimination agenda by conducting research that reinforces interventions in place; generating new knowledge and techniques impacting upon malaria transmission; to create a pool of scientists to achieve the eradication goal. These priorities are relevant to research undertaken during the 2024/2025 period.

Collecting samples for Lubombo Spatial Development Initiative 2.

Lubombo Spatial Development Initiative 2, aimed to find the insecticide resistance profile of vectors in Limpopo, Mpumalanga, and KwaZulu-Natal – Indoor residual spraying (IRS) is a tool employed in SA to control vectors and reduce malaria transmission. For successful malaria control, it is vital to find resistance profile of vectors. No new vectors were found; laboratory tests revealed field-collected mosquitoes were vulnerable to insecticides currently used. Project influences current and future vector control policy.

Cross-border Malaria – As SA strives towards becoming malaria-free, imported malaria continues to drive low levels of transmission in endemic areas, especially KZN. SA Treasury supported a project to implement IRS in southern Mozambique to reduce the importation of malaria into KZN. People crossing the border were screened, and a decrease in imported malaria cases was noted.

Key Milestones and Achievements

The MRG submitted a tender application to the National Department of Health and was successfully awarded R23 million, to continue the monitoring and evaluation work in southern Mozambique. The impact of this funding reduces malaria transmission at its source which subsequently reduces the number of cross-border transmissions into South Africa. Regional and cross-border malaria pose a major challenge to South Africa's elimination goal. This grant will have a positive impact on the health and well-being of people both in South Africa and Mozambique.

The MRG was also a recipient of a sub-award of $714,826 from the University of Washington via the Bill and Melinda Gates Foundation. The study focuses on the feasibility of weekly at-home dried blood spot (DBS) collections as a malaria epidemiology investigative tool in low transmission settings. The study will indicate as to whether people living in areas of low disease burden are inclined to test themselves for malaria as well as whether they would allow a health professional to test them. The impact is three-fold viz. people are capacitated to test themselves, the number of positive cases determined, and reduced dependency on health care personnel.

Building Capacity Through Training, Mentorship, and Support

The MRG provided various capacity-building initiatives for malaria control staff in each of the three malaria-endemic provinces of KwaZulu-Natal, Limpopo and Mpumalanga. The training encompassed the specific areas of:

(1) Entomological surveillance,

(2) Mosquito collections,

(3) Insectary Management,

(4) Project Management,

(5) Diagnostic tools and

(6) Epidemiology.

These areas of capacity development assisted in filling knowledge gaps and empowering field staff to work more confidently and efficiently when conducting various aspects of their work. The MRG also provided infrastructure development to the provinces to facilitate the effective maintenance and running of their insectaries.

The Unit Director currently supervises postgraduate students at the University of Pretoria, University of KZN and University of Stellenbosch.

Navigating the Impact of US Executive Orders on Funding

The MRG has not been affected by the funding freeze as the Group does not receive money from the Federal Government of the US.

Lubombo Spatial Development Initiative 2 is aimed at finding the insecticide resistance profile of vectors in Limpopo, Mpumalanga, and KwaZulu-Natal – Indoor residual spraying (IRS) is a tool employed in SA to control vectors and reduce malaria transmission.

Research Translation Through Arts and Science

The MRG's research activities are predominantly community-based, and the establishment and maintenance of strong collaborations are therefore vital. Thus, the Group works in close partnership with the malaria control programmes within the provincial Departments of Health in Kwa-Zulu Natal, Mpumalanga and Limpopo, as well as with counterparts in Mozambique who liaise and interact on behalf of the MRG with communities in their areas of operation. South Africa has low malaria transmission, and it is important to create awareness and understanding of the need for continued malaria research and its related activities. The MRG staff often capture their work photographically which enhances community engagements and interactions – "a picture is worth a thousand words." These photographs are also used when reporting to funders as they provide visual evidence of the work done.

The MRG publishes a digital monthly Malaria Bulletin which highlights conferences, workshops, meetings, and other events, which is distributed to the malaria community, nationally and regionally. This includes academics, students, researchers, the commercial sector, and bilateral and multilateral agencies.

MRG has hosted a Southern Africa Malaria Research Conference for the past 10 years which was only interrupted by the COVID-19 pandemic in 2020. This conference was established as a platform for new and emerging researchers to showcase their findings and to develop networks with seasoned scientists. The conference attracts delegates from SADC countries as well as the US, UK, and Asia. Awards are given to the best oral and poster presentations by young scientists.

The Group works in close partnership with the malaria control programmes with counterparts in Mozambique who liaise and interact with communities on behalf of the MRG.

Office of AIDS and TB Research

Office director:
Dr. Fareed Abdullah
Fareed.Abdullah@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Office of AIDS and TB (OATB) Research has built a portfolio of research and projects that address HIV, TB, COVID-19, pandemic preparedness and health systems strengthening including public sector and innovative health financing and two studies on antimicrobial resistance.

In addition to this portfolio of work, the OATB plays a strategic role with GIPD, SHIP, HSRU and other units within the SAMRC to promote HIV, TB and health financing research across the SAMRC and to make funding decisions about what research priorities should be funded by the SAMRC.

The OATB's flagship project over the last two years has been the Imagine Social Impact Bond which uses an innovative financing instrument to improve performance in an HIV and reproductive health project for school-going adolescent girls and young women. This brings together research on pre-exposure prophylaxis, antiretroviral treatment, contraception and early antenatal care with a unique financing instrument where an investor provides upfront capital and gets a return on investment if programmatic outcomes exceed all expectations.

Other HIV research includes testing azithromycin prophylaxis in advanced HIV, studying the role of retention in care in AHD, dolutegravir adherence and resistance, ART adherence in adolescents and HIV COVID-19 vaccination immunogenicity. The TB portfolio includes support and oversight of two large funding mechanisms in partnership with the NIH and the French ANRS in TB basic science and biomarkers and research in drugs, diagnostics and vaccine development, subclinical TB, transmission and paediatric TB. The OATB leads a multi-unit team on pandemic surveillance and in its health financing work leads the work of Pillar 6 of the Presidential Health Compact and the G20 Joint Finance and Health Task Force.

Invest4Health Workshop co hosted by Genesis Analytics UCT Bertha Centre & SAMRC Dec 2024.

Learners taking part in the development of the development of the Imagine Game.

Through our Learning Action Network, Invest4Health, we have promoted innovative financing mechanisms and outcomes-based contracting approaches to address some of Africa's most pressing health and related social development challenges. We continue to explore the potential of innovative financing strategies for pandemic preparedness, cataract surgery and multidrug-resistant tuberculosis.

Key Milestones and Achievements

The OATB played a leading role in the development of a successful country pandemic fund application which is being funded by the Pandemic Fund through WHO. This was a multi-stakeholder collaboration between SAMRC intra and extramural units (Burden of Disease Research Unit and Environment and Health Research Unit), academics from various institutions and national government departments. This grant is in the region of R60 million and will fund work related to genomic, wastewater, mortality and syndromic surveillance of both human and animal pathogens using a one health approach.

The OATB, together with GIPD, created a partnership with the French ANRS to bring together South African and French TB scientists in the fields of new drug, diagnostic and vaccine discovery as well as subclinical TB, TB transmission and aerobiology and paediatrics. A joint call for proposals was launched and 20 proposals have been reviewed. Successful proposals will be announced in the 2024/25 financial year. A total of R60 million will be allocated to this call for proposals.

The OATB has represented the SAMRC at the Pandemic Treaty Negotiations in Geneva and the G20 Joint Finance and Health Task Force. We will continue to be involved in these important bodies in the next year.

In order to scale up our Imagine Social Impact Bond, we have strengthened our existing partnership with TIKO, a non-profit that leverages technology to transform sexual and reproductive health for underserved girls in urban and peri-urban Africa facing the 'triple threat' of teenage pregnancy, HIV and sexual violence. Together, the SAMRC, NACOSA and TIKO are leveraging their respective strengths to develop a sexual and reproductive health intervention for in-school and out of school AGYW financed through an outcomes-based intervention.

Building Capacity Through Training, Mentorship, and Support

One of the OATB staff is registered for her PhD with Stellenbosch University. OATB staff supervise three public health medicine registrars at the University of Pretoria with Master of Medicine degrees in advanced HIV disease, HIV adherence in adolescents and non-tuberculous mycobacterial disease.

The OATB has enlisted two PhD students in the unit's flagship clinical trial – the COVID vaccine immunogenicity study. The first is studying the cellular and humoral responses to COVID vaccinations in HIV-infected individuals and healthy controls. The second is looking at transcriptomics in the COVIS enrolled cohort. These are both students in the University of Pretoria's Immunology Department. A third PhD student is researching the humoral immunity in the COVIS cohort.

We have also assisted several organisations in their development of Social Impact Bonds to expand the ecosystem of innovative financing strategies in South Africa and Africa.

In the OATB Antimicrobial Resistance Project looking at the development of new drug targets in high-priority pathogens, funded from a BRICS grant, the OATB is supporting two master's students and one post-doctoral researcher.

Navigating the Impact of US Executive Orders on Funding

Our unit has a partnership with NIH through Regional Prospective Observational Research in Tuberculosis (RePORT) International. RePORT South Africa has been part of this collaboration since its inception and it is now in its third three-year cycle, i.e. RePORT SA III. Through this collaboration, the SAMRC funds ZAR 20,999,962 and the NIH USD 2,999,996 over a three-year period for vital TB research in SA. This is better than a 1:2 ratio leveraging of US funds. This is the largest TB consortium globally and allows for extensive multi-county collaboration. Should NIH funding be under threat, this would be devastating for our unit as it is our largest grant. At immediate risk is US$2,5 million for the South African research partners.

StemMentHer learners extracting DNA from split peas.

The OATB is very involved with the SA TB Think Tank providing funding, technical assistance and being part of the EXCO. The TB Think Tank has been hard hit by the funding cuts and the OATB has been requested to find ways to support them financially. In the event that the Global Fund is affected by the US funding cuts, the OATB is at risk of losing approximately R125 million in grant funding from this source (R14 million for the completion of the Imagine SIB, R37 million for health financing, R20 million for the MDR TB SIB and R54 million for the scale-up of the Imagine SIB). The OATB Director is heavily engaged, through his role as the co-chair of the TB Think Tank and as former CEO of the South African National AIDS Council to better understand the impact of the funding cuts and find ways to mitigate this impact.

Research Translation Through Arts and Science

Our Learning and Action Network, Invest4Health, continues to expand and through this we have solidified partnerships with UCT Bertha Centre, Oxford University Government Outcomes Lab and Genesis Analytics. Invitations to our webinars are distributed widely to different organisations and countries and we attract global participation. Additionally, we share knowledge on professional social media platforms such as LinkedIn. We have gone paperless with our marketing material and now just have one glass display medium with a QR code that can be scanned which takes you directly to our I4H platform and allows you to connect to our network.

Vaccines and Infectious Diseases Analytics Research Unit

Unit director:
Prof. Shabir Madhi
shabir.madhi@wits.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Wits VIDA is a globally recognized leader in infectious disease research and vaccine development, with a focus on: Epidemiology and vaccine-preventable diseases; Clinical trials and vaccine evaluation; Immunology research, particularly in people living with HIV; and Basic science to discover new vaccine candidates.

As a premier clinical trial facility, VIDA has played a pivotal role in vaccine development, leading studies that contributed to the licensure of respiratory syncytial virus (RSV) pre-fusion F protein vaccine; and long-acting RSV monoclonal antibody. South Africa became the first African country to license the RSV vaccine and is at a planning stage for its introduction into the public immunisation programme. RSV is the leading cause of hospitalisation in children and contributes to 100,000 deaths globally- mainly in low and middle-income countries (LMICs). Also, ongoing studies on reduced dosing schedule of pneumococcal conjugate vaccine have provided evidence for the adoption of such a strategy, which will be more cost-effective and reduce the number of injectables. Wits-VIDA is also leading the clinical development of a Group B streptococcus vaccine for pregnant women, to protect their young infants against invasive bacterial disease. GBS is a leading cause of neonatal sepsis, with South Africa consistently reporting the highest incidence globally.

Key Milestones and Achievements

The Maternal Immunisation Readiness Network in Africa and Asia (MIRNA) aims to prepare countries in sub-Saharan Africa and South Asia for the introduction of new maternal vaccines to prevent infectious diseases. The project evaluates health system readiness, conducts situational analyses, and addresses vaccine demand and hesitancy in South Africa, Ethiopia, Ghana, Kenya, Pakistan, and Uganda. Coordinated by Wits VIDA, MIRNA partners with LSHTM, Makerere University, Aga Khan University, LSTM Kenya, and Kintampo Health Research Centre, providing expertise in epidemiology, vaccinology, social science, and health systems.

The RSV Maternal Immunisation study assesses the feasibility of a future phase IV trial for an RSV maternal vaccine in LMICs. It evaluates site capabilities for enrolling pregnant women, tracking birth outcomes, and monitoring RSV-related LRTIs in infants. The study also examines transplacental antibody transfer and site readiness for future trials. Conducted in Gambia, Ghana, Kenya, and South Africa, the study aims to generate critical data for RSV maternal vaccination in LMICs, with funding from The Bill & Melinda Gates Foundation.

VIDA's Child Health and Mortality Surveillance Study (CHAMPS) provides valuable data to inform policy, planning, and clinical practice, shared with the Provincial and District Department of Health and Chris Hani Baragwanath Academic Hospital.

Building Capacity Through Training, Mentorship, and Support

Wits VIDA continues to play a key role in training, mentorship, and postgraduate support, strengthening research expertise locally and internationally. During the reporting period, two PhD students graduated, while Wits VIDA further supported 10 other students.

Staff Training Initiatives: Wits VIDA provides staff with essential training in: Research & compliance: Good Clinical Practice (GCP), data management, Zotero referencing. Professional development: Line manager, diversity, and leadership training (Future Leaders & LEAD programs). Workplace safety: Health, fire, and occupational safety courses. External Capacity Development: African Advanced Vaccinology Course (Afro-ADVAC): A 10-day programme for vaccinology professionals across Africa and South Asia, with accreditation in progress at Wits. Masters in Vaccinology: The ALIVE programme continues to thrive, of which Prof Madhi is a founding member and co-director. Additional Research Development Efforts include Postgraduate students attending Wits courses on: Data analysis & statistics (software training, sample size calculation); Research skills (scientific writing, publishing, poster/abstract development), and Good Clinical Practice (GCP) & ethics.

Through these initiatives, Wits VIDA has strengthened institutional, national, and international research capacity, supported the next generation of scientists and advanced global health research.

Navigating the Impact of US Executive Orders on Funding

The impact on Wits VIDA was limited.

Research Translation Through Arts and Science

Wits VIDA uses diverse communication methods to make research accessible and impactful. These efforts include social media, local radio, printed materials, and direct community engagement to ensure vital health research reaches those who need it most. Community Engagement & Outreach includes:

Social Media Campaigns: Wits VIDA used Facebook, Twitter, LinkedIn, and WhatsApp to share research updates, vaccine awareness, and health education materials. Infographics, short videos, and community testimonials simplified complex findings. Engagement metrics showed strong public interest, particularly in vaccine discussions.

Local Radio Broadcasts: Partnering with community radio stations, Wits VIDA conducted interviews and public service announcements in local languages on vaccine safety, maternal health, and disease prevention. Feedback indicates increased awareness and trust.

Posters & Leaflets: Visually engaging materials, with simple language and culturally relevant imagery, were distributed in clinics, schools, and community centres, covering topics like vaccine benefits and disease prevention.

Community Health Days & Events: Wits VIDA participated in local health days, offering free screenings, educational talks, and vaccine science demonstrations. Storytelling from study participants humanized research findings.

Artistic & Interactive Communication: Infographics & Visual Storytelling: Research was transformed into easy-to-understand graphics. Photography & Video Testimonials: Real-life experiences of participants and healthcare workers personalized the impact of studies.

RESEARCH PROGRAMME 4

HEALTH SYSTEMS STRENGTHENING

PURPOSE OF THE PROGRAMME

To contribute to health systems strengthening by undertaking systematic reviews, health policy and health systems research to provide evidence for policymakers, stakeholders and researchers seeking to address today's most pressing health challenges. The programme aims to take advantage of information and technology by exploring and expanding the role of eHealth (health informatics, digital health, tile health, telemedicine, eLearning and mobile health) in strengthening health systems.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Biostatistics Research Unit (IRU)
2. Burden of Disease Research Unit (IRU)
3. Cochrane South Africa (IRU)
4. Health Services to Systems Research Unit (ERU)
5. Health Systems Research Unit (IRU)

PROGRAMME STRATEGIC OBJECTIVES

- To contribute towards the evidence base for national, regional and international health-care decision making by conducting high-quality systematic reviews, and health systems and health policy research reviews to improve health systems effectiveness
- To strengthen research and development through training and mentoring postgraduate students (MSc, PhD, Postdoctoral Fellows) in eHealth, health policy, health systems research and biostatistics
- To contribute to capacity development and training in the use and conduct of systematic reviews, and support of clinical trial registration for the African region
- To synthesise evidence, optimise information and knowledge flow through ICT and other means to ensure that research results are translated into policy, practice, cost-effective products and health promotion
- To develop and enhance health information systems and surveillance through systematic evaluation and identification of processes for improvement
- To provide statistical analysis to ensure scientific validity, relevance and efficiency of health systems interventions and/or service delivery models, and engage in health systems strengthening activities
- To carry out bio-statistical support training projects to assist SAMRC researchers and postgraduate students within the SAMRC

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Biostatistics Research Unit

Unit director:
Dr. Tarylee Reddy
tarylee.reddy@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Biostatistics Research Unit (BRU) has played a pivotal role in collaborative studies through rigorous data management, biostatistical leadership and innovation. Specifically, the Unit has emerged as a leader in the design and analysis of clinical trials, which provide critical insights into the safety and efficacy of interventions, as well as complex national surveys which provide a major source of information for measuring progress in the implementation of South Africa's national strategic plan.

In addition to collaborative research, the Unit has led innovative research with pioneering approaches to study design and data analysis harnessing the use of machine learning technology, joint modelling techniques and small area estimation. In view of the rapid advancement in the fields of Biostatistics and Data Science, the Unit prioritises the capacity development of staff through intensive workshops, mentoring and doctoral supervision. BRU has made significant strides in further enhancing the accuracy, security and accessibility of SAMRC research data through the implementation of established data quality assurance programmes and training sessions lead by the Data Management Division.

Key Milestones and Achievements

The BRU Biostatistics Division has contributed novel statistical methodology to the area of personalised medicine, by incorporating censored longitudinal outcomes in multivariate joint models, thereby facilitating dynamic prediction and the estimation of the optimal biomarker monitoring intervals for HIV/TB co-infected patients. This PhD research project, led by Dr Nobuhle Mchunu, has strengthened the Unit's international collaborative network with Erasmus University (The Netherlands) and was presented at the International Biometric Conference in Atlanta in December 2024.

The Unit earned international recognition for a creative adaptation in clinical trial design, where a parallel cluster randomised trial was adapted into a stepped-wedge cluster randomised trial. The PACK (Practical Approach to Care Kit) trial, published in BMJ Global Health, provided robust evidence that the intervention was effective in improving chronic respiratory care.

In 2024, the BRU Data Management Division and ITSD embarked on the process to establish a 21 CFR Part 11 compliant server at the SAMRC. This certificate, which was awarded in February 2025, ensures secure, regulatory-compliant data management, improving data integrity, auditability, and record-keeping in line with FDA guidelines.

The BRU SAFOODS Division launched the new DIASA (Dietary Intake Assessment Application for South Africa) mobile application in October 2024. DIASA is designed to assist nutrition researchers to capture detailed dietary intake data by means of a multi-pass 24-hour recall methodology, thereby facilitating seamless coding and export for statistical analysis.

Building Capacity Through Training, Mentorship, and Support

BRU led several capacity development initiatives during the 2024/2025 year. To enhance the visibility of biostatistics and data science while fostering

Pretoria GenS mentors participating in the GenS programme.

the development of the next generation, the Unit hosted Grade 10-12 learners under the Gen-S programme in all three regions. During this training, the learners were exposed to data management, GIS, statistical analysis and nutrition research via a practical approach.

The BRU and the Gender and Health Research Unit successfully hosted a 3-day Introduction to Biostatistics short course from September 2-5, 2024, in Pretoria. This course was part of the BMGF-funded project "Strengthening Women's Research Network and Capacity (SWRNAC) to Address Women's Health in sub-Saharan Africa" and was attended by 29 master's and PhD students, as well as health researchers, from both the SAMRC and external institutions. The course covered essential statistical principles and concepts, using R and STATA to explore topics such as data management, study designs in medical research, as well as descriptive and inferential statistics. An additional objective of the SWRNAC project includes increasing the number of female Masters in Statistics graduates in the country. There are currently three students being supervised by Specialist Statisticians within the Unit.

The Data Management Division facilitated an Introduction to REDCap training course in October 2024, aimed at enhancing SAMRC researchers' proficiency in data collection and management. The REDCap training course has empowered researchers with robust tools and techniques, significantly contributing to the accuracy and efficiency of data management within the organisation.

Navigating the Impact of US Executive Orders on Funding

The Biostatistics Research Unit played a key role in the study design and data management of the B001 trial (the first trial planned under the Brilliant Consortium). The termination of this project has severely impacted the Unit and more broadly the country's progress towards finding an effective HIV vaccine. In addition to the USAID-funded Brilliant Consortium, there is uncertainty regarding CDC-funded projects. The Unit is leading the CDC-funded VMMC Modelling study, which aims to produce more precise district-level estimates of circumcision coverage using small area estimation techniques.

Research Translation Through Arts and Science

We have creatively communicated research findings to a wider audience through interactive visual

The BRU and the Gender and Health Research Unit successfully hosted a 3-day Introduction to Biostatistics short course from September 2-5, 2024, in Pretoria.

data dashboards that transform complex datasets into compelling narratives. These dashboards use dynamic visualisations, such as graphs, heatmaps, and trend analyses, to illustrate key insights in an engaging and accessible manner. By incorporating user-friendly interfaces and real-time data updates, we enable stakeholders-from policymakers to community members to explore findings intuitively and draw meaningful conclusions. Feedback from these engagements has been overwhelmingly positive, with users highlighting how the visual storytelling approach enhances understanding and decision-making. This artistic fusion of data and design not only improves accessibility but also fosters deeper engagement with our research.

The Unit's SAFOODS division proudly showcased its work as exhibitors at the biennial National Nutrition Congress in Durban during October 2024. The 2024 updated food composition tables and food quantities manual E-publications, and new data cleaning and coding services, were showcased. DIASA, our 24hr recall mobile app, and D-GenUs. an expert working and advisory group of food composition data generators and users, were also launched at the Congress. As part of an interaction, a fun activity to showcase our work, our services and products were compiled in a Spin the Wheel quiz and giveaways to congress delegates. The exhibition generated a high degree of interest and has resulted in numerous post-conference interactions and requests.

SAFOODS team, exhibiting at the National Nutrition Congress.

Burden of Disease Research Unit

Unit director:
Prof. Richard Matzopoulos
richard.matzopoulos@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Burden of Disease Research Unit's (BODRU) mission is to assess and monitor the country's health status and determinants of disease, which provides an essential foundation for guiding policy, programmes and practice.

Key projects include Rapid Mortality Surveillance to measure excess mortality and estimate the national burden of disease and the risk factors that drive the disease burden to provide information for planning and resource allocation. Our estimates are derived from empirical sources including the National Population Register, Census, research surveys and death notification. Estimates are adjusted for known deficiencies such as underreporting and misclassification (especially HIV/AIDS and injury deaths) to provide information fit for use to improve population health and quality of life. This requires that we also evaluate and support the development and improvement of routine health information systems, civil registration and vital statistics in consultation with government agencies.

Key Milestones and Achievements

BODRU led a large nationwide study to assess the accuracy of cause-of-death data collected through South Africa's Civil Registration and Vital Statistics (CRVS) system by comparing official death records with data gathered from medical records, forensic reports, and verbal autopsy interviews for a sample of deaths. The study found poor agreement between the underlying cause of death identified by researchers and the official recorded cause of death data, with only 36.9% agreement for over 15,000 linked deaths.

It also revealed significant underreporting of HIV/AIDS deaths and misclassification of injury-related deaths, particularly suicides, and that homicides and road traffic fatalities featured prominently among the top causes of death for males but not for females. The revised cause-of-death profile showed that HIV/AIDS remains the leading cause of death, accounting for 23.3% of all deaths and a strong link between TB and HIV, highlighting the need to find, follow up, prevent, and treat HIV/AIDS and TB to reduce mortality. This has particular relevance in light of the recent abrupt withdrawal of US funding support for the Government's HIV/AIDS response.

BODRU hosts the only WHO Collaborating Centre for the Family of International Classifications (WHO-FIC) in Africa. Our 2024-25 application for redesignation by the WHO was successful, and we expect to play a critical role in providing technical support in the implementation of ICD-11 nationally, as well as providing developing country input into the international classifications.

Building Capacity Through Training, Mentorship, and Support

BODRU continues to support capacity development and transfer of skills in burden of disease methodology essential to the work of the unit. In addition to in situ training and elective short courses, staff are encouraged and supported to pursue postgraduate studies to build skills relevant to the unit's needs. In the past year a staff member completed an MPH and four others are currently enrolled in postgraduate programmes, including 3 PhDs and one masters. Furthermore, one of our professional support staff is completing an undergraduate degree and another is enrolled for postgraduate studies. GCP training is ongoing for all research and administrative staff.

BODRU staff are also mentoring and passing on their skills to the broader scientific community to grow the pool of people with research and burden of disease skills in the country through supervision of postdoctoral, doctoral and master's students. Senior staff, some of whom hold honorary positions as research associates and professors, are involved in undergraduate and postgraduate teaching at the Universities of Cape Town, Stellenbosch, the Western Cape, KwaZulu-Natal and Greenwich.

The Unit also provides a free online training platform to doctors to improve medical certification of cause of death. The programme is accredited for Continuing Professional Development (CPD) points by the Health Professions Council of South Africa (HPCSA) and is available at www.deathcertification.org. By the end of January 2025, more than 2 768 medical practitioners and students had registered, with more than 70% successfully completing the course.

Navigating the Impact of US Executive Orders on Funding

BODRU has like most units at the SAMRC been affected both directly and indirectly by the US executive orders. Direct effects include research projects that have been temporarily suspended and uncertainty about the long-term viability of four staff positions partially funded by US government sources. Indirectly, the South African Demographic and Health Survey, which at the SAMRC was being coordinated by BODRU will be substantially delayed by the withdrawal, at extremely short notice, of funding for crucial project inception work, including protocol finalisation, and a collaborative workshop to finalise data instruments that had been planned for February 2025. The broader environmental impact of hollowed-out research funding and infrastructure on the Unit's ability to harness scientific expertise and support should not be underestimated.

WHO Afro Region Kigali training.

Research Translation Through Arts and Science

While the quantitative estimation methods employed by our unit do not easily lend themselves to any form of display that could be considered "artistic", we have made use of a variety of technical tools including interactive software to assist with the display and interpretation of results. This will be a feature of the forthcoming national burden of disease study.

In addition, as part of our work to improve civil registration and vital statistics we convened several workshops with a range of government stakeholders, including Health, Home Affairs, Statistics South Africa, and the National Institute for Communicable Diseases. Among the outputs were business process maps that were co-created during these workshops that graphically display the complex reporting that follows major health events, namely, births, and deaths.

AVIRT 28 March 2025.

AVIRT study 28 Feb 2025.

Cancer Registry Meeting.

Kigali meeting 31 March – 6 April.

Cancer Registry Meeting 26 Feb 2025.

Cochrane South Africa

Unit director:
Prof. Mark Engel
mark.engel@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Cochrane South Africa's (CSA) activities seek to contribute to the strengthening of public health systems, clinical trials and health research and improving immunisation and vaccination programmes (uptake and delivery). Through evidence-based medicine tools as well as empirical research, problems addressed included vaccine hesitancy/access to immunisation services/ vaccination programmes. Publications document (1) reviews of barriers and facilitators for improving vaccine uptake and delivery and, (2) empirical data obtained through cross-sectional studies.

Prof Mark Engel presenting a poster.

Together with our involvement in developing qualitative evidence synthesis tools, our outputs are anticipated as serving to improve evidence gathering and guide stakeholders in strategies for vaccination efforts and, infectious disease research.

Key Milestones and Achievements

Staff from CSA strengthened its role in hosting the GloPID-R Africa Hub under the banner of the GloPID-R initiative where it coordinated the pandemic responses for recent outbreaks such as mpox, Marburg and Ebola, expanding the hub's collaborative engagement with entities such as the Africa CDC, WHO AFRO and, partners on the continent.

Cochrane South Africa embarked on a number of capacity-building initiatives, firming up systematic review training/workshops sessions at a number of HDIs. In addition, we have established a qualitative evidence synthesis hub for supporting SAMRC researchers in documenting qualitative research evidence to build up the knowledge base.

Several grants (including from NRF, EDCTP, NIHR) amounting to around R8M were successfully secured to support projects related to qualitative evidence synthesis, clinical trial registration and pandemic preparedness.

CSA outputs are cited in policies, reports and guidelines influencing policy from WHO, World Bank, UN, European CDC, UNICEF, and Institute of Development Studies. Analysis indicates outputs are relevant to a number of Sustainable Development Goals (SDGs), notably Goal 1 (No poverty), Goal 3 (Good health and well-being), Goal 10, (reduced inequalities) and Goal 16 (Peace, justice and strong institutions).

Building Capacity Through Training, Mentorship, and Support

Staff at Cochrane South Africa delivered a number of training-related webinars and in-person sessions. We placed a focus on increasing systematic review skills across intra-mural units. Topics included evidence-based health research methods, statistical concepts, critical appraisal skills development, and clinical trials registration matters, to name but a few. In addition, staff serve as mentors across a number of universities from Honours degrees through to post-doctorate level (38 in total). A concerted effort saw 16 students from historically disadvantaged institutions being supervised.

Navigating the Impact of US Executive Orders on Funding

None.

Research Translation Through Arts and Science

CSA embarked on a new endeavour to communicate with the lay public, outputs from research, through the medium of Infographics hosted on the SAMRC website. Briefly, the monthly topic is guided by the Department of Health's health awareness calendar. In addition, CSA staff presented findings from their research at conferences, both nationally and internationally during the past year.

Team members manning the Cochrane stand at the Annual SAMRC Health Awareness Walk event in Green Point on 16th November 2024.

Attendees at the launch of the Qualitative Evidence Synthesis (QES) Hub held at the SAMRC Conference centre on 25th-26th November 2024.

Captivating discussion amongst delegates and SACC Team Members.

Health Services to Systems Research Unit

Unit director:
Prof. Helen Schneider
hschneider@uwc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Health Services to Systems Research Unit completed the review of the Western Cape's Healthcare 2030 Strategy, a whole system evaluation jointly with UCT and WC Dept Health & Wellness; completed the problem definition phase of co-design of a district Systems Leadership Development Programme, in North-West Province.

Gender-transformative approaches to address root causes of poor sexual, reproductive and maternal health outcomes (GT4Africa)., together with coordinated implementation research projects in seven countries.

Key Milestones and Achievements

The Unit hosted the first in-person writing workshop for the GT4Africa Cohort in September 2024 in Cape Town involving thirteen institutions across the African continent.

As part of the HC2030 Strategy Review, we hosted a national workshop on Community Oriented Primary Care in August 2024 in Cape Town, involving ~50 decision-makers, researchers and practitioners. Additionally, the unit convened the secretariat of the South African Learning Alliance for the District Health System (SALAD), a national learning network of decision-makers (national and provincial) and higher education institutions coordinating multiple activities (webinars, special series in the SAMJ, annual retreat).

Building Capacity Through Training, Mentorship, and Support

Profs George and Schneider supervised seven doctoral, three post-doctoral and five masters students. Three masters completed their degrees in the period.

Prof Schneider successfully handed over her role in leading the SOPH doctoral programme during 2024/25. She also supported the Faculty of Community and Health Sciences in designing a strategy for supporting early-career researchers.

Navigating the Impact of US Executive Orders on Funding

Not directly, but many of our graduates and students are based in US-funded initiatives across the African continent and have lost jobs or research funding.

Research Translation Through Arts and Science

The COPC workshop referred to above utilised a 'graphic harvester' to capture the proceedings: Available at https://soph.uwc.ac.za/news/copc-workshop-report/

COPC graphic harvest.

Health Systems Research Unit

Unit director:
Associate Prof. Tamara Kredo
tamara.kredo@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Health Systems Research Unit (HSRU) is committed to building stronger health and social care systems through collaborative health policy and systems research promoting equity and transformation to advance Universal Health Coverage and primary healthcare. Our priority research includes:

Respectful maternal-newborn care: The STAR intervention team designed, implemented and evaluated a participatory learning and action intervention in maternity units in nine rural hospitals in KwaZulu-Natal. The findings advance understanding of what works to improve respectful care for mothers and newborns and teamwork in maternity units in rural low-and middle-income settings, learnings that can be scaled-up nationally.

Sexual-reproductive health: The HERStory3 evaluation of the My Journey Programme reported a positive impact on knowledge of HIV status, and coverage of pre-exposure prophylaxis, and was perceived to provide health, educational and career benefits to adolescent girls and young women.

Impacts of social-policy interventions: The Motherload Project uses participatory methods to recognise, redistribute and reduce the health and social impacts of unpaid care work for low-income mothers.

The Caregiver Wellbeing Plus (CWEL+) project is a response to COVID-19 which compromised the well-being of caregivers of children and adolescents with HIV. Results showed that caregivers receiving the CWEL+ empowerment workshops plus cash had increased well-being compared to those receiving cash transfer only.

Key Milestones and Achievements

Networking for health systems research in South Africa: Aiming to grow the network of health policy and systems researchers in South Africa and create opportunities for showcasing research in the field, the HSRU held a Research Symposium from 27-28 August 2024 at the SAMRC Conference Centre. Eighty-one delegates attended, including researchers, policymakers, government officials and representatives from non-governmental and civil-society organisations. The theme was Making UHC truly universal: what are the challenges to achieving UHC in an unequal society and how do we target these now?

A major highlight for the unit is the formalisation of a National Evidence Response Service: The Evidence to Decision (E2D) Initiative aims to add value to ongoing reform at national policy level to be responsive to research evidence needs in support of Universal Health Coverage. Implementation of National Health Insurance (NHI) requires extensive changes to the health system (including funding mechanisms, management structures, delivery platforms, and benefits offered), as well as the policies and regulations that govern healthcare. To ensure the development of transparent and effective NHI policies, it's vital that these are informed by the best available evidence. Building on a decade-long collaboration, the SAMRC, with Stellenbosch University, has partnered with the National Department of Health on this initiative. The aim is to support and build capacity for health and social care decision-making, through timely, responsive evidence production and translation for efficient,

The Caregiver Wellbeing Plus (CWEL+) project. Results showed that caregivers receiving the CWEL+ empowerment workshops plus cash had increased well-being compared to those receiving cash transfer only.

effective and equitable health services and systems, and to learn from the process to inform growth in national health-technology assessment and clinical guidelines development.

Building Capacity Through Training, Mentorship, and Support

HSRU staff facilitated or hosted 20 lectures, four workshops and 16 webinars, as part of its capacity-development initiatives. Forty-two students are being supervised by HSRU staff. Some of the students graduated with Masters and PhDs whilst some of our staff members passed their PhD proposal defences.

The STAR project mentored four midwives from rural district hospitals to submit abstracts to a local conference – all were accepted for oral presentations. This investment in our healthcare providers is a highly valued capacity-development opportunity for these public-sector frontline health professionals.

One project focused on capacity building is the EDCTP-funded Global Evidence-Local Adaptation (GELA) project, a three-year multi-country, multi-stakeholder effort to advance the capacity of researchers and policymakers to develop credible, rigorous clinical-guideline adaptation for child health in Malawi, Nigeria and South Africa. We reached over 150 individuals through tailored, in-depth capacity-building initiatives including guideline-simulation workshops and a community of practice. Respectful collaboration facilitated cross-learning within and across countries, with opportunities for leadership development reported. Overall, formal and experiential learning for guideline panellists, future methodologists, researchers, and students was core to success and completing guidelines for priority child-health topics in each country. Available at https://africa.cochrane.org/projects/GELA.

Navigating the Impact of US Executive Orders on Funding

Fiscal pressures to funding streams triggered by changes in federal funding in the USA have affected several projects and staff. Our teams have collaborated to navigate this challenge; however, uncertainty remains for the future flow of development funds from the USA and other high-income countries. During the year we submitted 13 grant proposals and received more than R43 million in grant funding.

The STAR project mentored midwives from rural district hospitals to submit abstracts to a local conference – all were accepted for oral presentations.

Research Translation Through Arts and Science

In 2024, the unit committed to a new area of work, HSRU's Public Engagement project. This ensures we are deliberate about maximising public access to evidence through sharing research findings with potential impact on policy and healthcare implementation, systematically considering the relevant audiences and channels and sharing results in plain language. This drive resulted in seven articles in newspapers, newsletters, and online publications, social media posts, and one press release as well as several radio interviews.

Using findings from studies evaluating programmes for adolescent girls and young women, we produced research briefs for policymakers, programme designers and implementers, practitioners, citizens, and communities. These outline areas of concern and summarise study findings and their implications for policy and practice in South Africa. With these, we share our research findings beyond the academic community, intending to reach decision-makers with evidence-based practical and actionable information relevant for vulnerable adolescent girls and young women in South Africa.

Our Durban team have been active in community engagement activities. We hosted the GEN S programme with 40 Durban high-school learners. We used participatory adolescent-centred play methods to showcase how we study mental health and well-being. Aga Khan media students visited, developing a short video of our work shared widely on social media – see Bing Videos. Linked to the CWEL+ project, we hosted a Community Engagement Workshop – sharing stories through video, music and dance.

Biomedical Research & Innovation Platform Unit's Annual Symposium held 16-17 Oct 2024.

RESEARCH PROGRAMME 5

PUBLIC HEALTH INNOVATION

PURPOSE OF THE PROGRAMME

To promote the improvement of health and quality of life (impact prevention of ill health, improvement of public health and treatment) in the Republic of South Africa through innovation, and technology development and transfer.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Biomedical Research and Innovation Platform (IRU)
2. Drug Discovery and Development Research Unit (ERU)
3. Genomics Platform (IRU)
4. Herbal Drugs Research Unit (ERU)
5. Pan African Centre for Epidemics Research Unit (ERU)
6. Primate Unit and Delft Animal Centre (IRU)

PROGRAMME STRATEGIC OBJECTIVES

- To establish key modern technology (enabling) platforms to facilitate generation of new drug discovery knowledge through world-class applied research.
- To establish and manage research laboratories and facilities as state-of-the-art national research facilities for research and development.
- To train and mentor a new generation of high-quality postgraduate students and Postdoctoral Fellows in multi-disciplinary research, and in so doing, equip them to compete in the science and/or education sectors nationally and internationally.
- To strengthening research and development to build on and enhance public health innovation.
- To increase the body of scientific knowledge through research translation into products, patents, research papers, policy, practice and health promotion (including to the general public).
- To increase the number of health-care innovations and to produce patents based on new discoveries and new research methodologies.

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Biomedical Research and Innovation Platform

Senior Platform Director:
Prof Johan Louw
johan.louw@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The top priority of the Biomedical Research and Innovation Platform (BRIP) has been to advance research on non-communicable diseases (NCDs), with a particular focus on obesity and cardiovascular disease. Given the growing burden of these conditions in South Africa, BRIP is committed to identifying and developing affordable, accessible, and implementable interventions to treat NCDs and improve public health outcomes.

BRIP has undertaken several key research projects. One notable ongoing study is a randomised controlled trial (RCT) to investigate how fibre-rich Baobab fruit powder affects gut permeability, microbiota composition and cardiometabolic health in individuals with obesity. Baobab fruit is rich in dietary fibre and polyphenols, both of which have been linked to improved glycaemic control, lipid metabolism, and gut health. The study aims to recruit 50 men and women, who will be randomly assigned to receive either active Baobab powder or placebo daily for 45 days. This study could provide valuable insights into the potential of natural, locally available interventions to treat metabolic disease.

Through these research efforts, BRIP continues to drive innovation in NCD management, contributing to the development of locally relevant, evidence-based interventions that could positively impact healthcare strategies in South Africa and beyond.

SAMRC Vevo F2 ultrasound imaging system.

Key Milestones and Achievements

Two notable highlights during the 2024-2025 financial year:

On 18 June 2024, BRIP officially launched the Vevo F2, a state-of-the-art, high-resolution preclinical ultrasound system for small-animal research. The acquisition was made possible through funding from the National Research Foundation (NRF) and co-funding from the SAMRC. The launch event attracted 81 in-person and 60 virtual attendees. VisualSonics provided insights into ultrasound

research, including photoacoustic imaging, followed by presentations from Dr Nonhlakanipho Sangweni on its application in cardiovascular function and Dr Serena Zacchigna on cardiovascular biology. Following the presentations, the Vevo F2 was successfully installed at PUDAC, where BRIP and PUDAC staff participated in hands-on training to enhance their expertise with the new system. This cutting-edge imaging technology is now available as a national platform for researchers interested in conducting small-animal studies at the SAMRC/PUDAC Platform, expanding access to advanced preclinical imaging capabilities.

The 14th Biomedical Research and Innovation Platform (BRIP) Conference took place on 16-17 October 2024 at the SAMRC Conference Centre, Cape Town, with 150 in-person and 99 online attendees. The conference hosted representatives from 35 universities, including six HDIs, as well as international attendees from France, Nigeria, and Spain. Industry representatives from Anatech, Whitehead Scientific, and others also attended. The programme featured six keynote speakers, including one from Sweden. A total of 25 students (13 MSc and 12 PhD) delivered oral presentations, while 23 MSc, PhD, and postdoctoral researchers presented posters with six-minute elevator pitches. Some of the topics covered included cancer, diabetes, TB, cardiovascular disease, and hypertension.

GenS job shadowing programme.

Building Capacity Through Training, Mentorship, and Support

In the 2024/2025 financial year, BRIP demonstrated a strong commitment to capacity building by mentoring and supervising 40 PhD and 22 MSc students, of whom 38 were female and 55 were from previously disadvantaged backgrounds. A number of students successfully completed their degrees including MSc and PhDs.

Furthermore, BRIP has played a pivotal role in enhancing skills development through its involvement in the CSSFF-SAMRC Biopharmaceutical Manufacturing Training Programme, which has significantly strengthened capacity in the Biopharmaceutical and Medical Technology industries. This initiative encompasses curriculum development, recruitment (with over 90% of candidates from HDIs), hands-on training, lectures, assessments, and post-training placements.

In its second year, the programme saw 22 students securing internships. In addition, we were fortunate to have received funding to host and mentor four students from the first cohort, who went on to become trainers for the second cohort. At the end of this third cycle, we can proudly say that 76% of our trainees are working in industry, with 17% studying a related postgraduate degree.

Navigating the Impact of US Executive Orders on Funding

While the broader implications of these funding restrictions were observed within the SAMRC, BRIP's research activities and collaborations continued without disruption. The Platform remained unaffected by the US Executive Orders on funding during the 2024/2025 financial year, as it

does not receive direct funding from the National Institutes of Health (NIH) or other US sources. However, the impact on the SAMRC, which has several US-funded initiatives, led to the pausing of major research projects, which could potentially affect other units and future collaborative opportunities. BRIP continues to monitor the impact of the US funding cuts on research in South Africa and to assess any indirect effects on its research environment.

Research Translation Through Arts and Science

BRIP actively engaged with the broader community to communicate its research and raise awareness of biomedical science through interactive and innovative methods. One notable event was the participation of Drs Nonhlakanipho Sangweni and Elliasu Salifu in National Science Week (NSW) at the Central University of Technology in Bloemfontein on 28 September 2024. The objective was to foster science engagement among school learners and visitors through interactive demonstrations. To illustrate the airborne transmission of viruses, the team used a colour-based experiment where ethanol (representing contaminated droplets) and water (representing uninfected droplets) were sprayed onto filter paper. When exposed to Bradford reagent, a visible colour change revealed the presence of protein, effectively illustrating virus transmission in real-time. This hands-on approach not only simplified a complex concept but also provided a visually engaging experience for attendees.

In addition, BRIP participated in the Job Shadow, Gen S and STEM programme, providing a three-day hands-on science experience for school learners. The sessions included a practical DNA extraction activity using household items, allowing participants to see genetic material, thereby making abstract molecular biology concepts more tangible.

On 28 September 2024, Dr Sylvia Riedel led a health promotion initiative at Rondebosch Common, a popular area for runners. This initiative focused on raising awareness about gut health through an interactive and conversational approach. About 15-20 people engaged in discussions about gut microbiome health, diet, and well-being. This informal setting allowed for direct knowledge exchange and making scientific concepts more relatable to the public.

StemMentHer Outreach Programme.

Drug Discovery & Development Research Unit

Unit director:
Prof. Kelly Chibale
Kelly.Chibale@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Drug Discovery and Development Research Unit's top priority in the reporting period was 2-fold:

First, to understand whether the efficacy of the anti-malarial drug candidate is driven by time or concentration above a defined threshold. This enabled the selection of dosing regimens that would optimize clinical efficacy while suppressing the emergence of resistant malaria parasites and toxicity. Second, to identify quality leads suitable for optimisation as potential agents for the treatment of uncomplicated Plasmodium falciparum malaria, ideally with additional activity against gametocytes, the transmissible forms of the parasite.

Key Milestones and Achievements

In terms of priority, using the Plasmodium falciparum humanised mouse model, we conducted drug dose fractionation studies, i.e. fractionation of a drug dose over multiple days. We investigated the Pharmacokinetic/Pharmacodynamic relationships of UCT594 relative to blood stage activity towards predicting the human dose. UCT594 demonstrated concentration-dependent killing. Using this data and the pre-clinical pharmacokinetic data led to a low predicted human dose of < 50 mg. The results suggested concentration-dependent killing is more likely to afford a better clinical result than maximizing time of exposure. The significance of this finding is that the preference within the malaria community is towards a single-dose oral drug that delivers a cure to ensure maximum compliance, but it may not be predicted to be optimal for efficacy by the dose fractionation study in the humanised mouse. The preference would be fractionation of the dose over multiple days. Doing so would also lower the maximum drug concentration, which is important for addressing toxicity concerns.

In terms of the second priority, we identified and reported on a potent series of acyl-thiourea platinum (II) complexes with dual-stage anti-plasmodium activity and promising pharmacological properties that appear to act via a novel mechanism of action, or via polypharmacology. Further mechanism of resistance studies for lead compounds in this series have led to the discovery of a pathway in Plasmodium falciparum that is being investigated as a potential new anti-malarial drug target.

Building Capacity Through Training, Mentorship, and Support

The Unit, in partnership with the H3D Foundation, concluded a fruitful year of capacity-building and training initiatives. This included the formalisation of the Grand Challenges African Drug Discovery

Accelerator network and a tangible increase in interest in drug discovery research on the continent. By 2024, the network had already linked 8 African countries, 21 research institutions, 32 members and an initial 4 flagship drug discovery projects focused on infectious disease research.

Other strategic capacity building partnerships that continued for 2024, were with the University of Ghana, KNUST (Kwame Nkrumah University of Science and Technology), and Noguchi Memorial Institute for Medical Research working on a three-year malaria drug discovery project supported by the Gates Foundation (May 2022- Apr 2025) and the work with University of Limpopo and University of Venda to establish TB drug discovery capacity (2022-2025) supported by the SAMRC.

The unit also continued with the Global Health Mentorship programme in partnership with BMGF and CP+ Associates. This programme assigned industry mentors to mid-career scientific staff from H3D and the GC ADDA network who met regularly with their mentees for coaching in the following areas: the scientific process, scientific communication, personal interactions, career progression and scientific responsibility. This cohort runs from April 2024 – May 2025, and includes 49 mentee/mentor pairs from 20 countries. A total of 5 PhD students and 17 post-doctoral fellows were supervised and trained during 2024.

Navigating the Impact of US Executive Orders on Funding

The unit has been affected by USAID funding cuts with one of our projects on cost competitive process chemistry optimisation to facilitate local manufacturing of antiretrovirals being stopped. This has had implications on the continuation of this important work, retaining the team members and ensuring the sustainability of the platform.

Research Translation Through Arts and Science

The Unit was involved in an active campaign to promote a positive story about health innovation and the role of intellectual property (IP) in Africa, illustrating the role of strategic partnerships between sectors and across borders, and countering mis- and disinformation. This was done through editorials, blogs and articles:

Furthermore, in May 2024, the Unit Director launched an inaugural podcast 'The Africa HealthTech Podcast' to spotlight important concepts and initiatives. The Unit Director also delivered the First Plenary Lecture at the 65th London International Youth Science Forum, 22-27 Jul, London, UK, and participated in The Conversation Africa's from Telemedicine to AI webinar as part of a panel of experts from across the continent discussing AI health innovations in healthcare throughout Africa in Sept 2024.

5th H3D Symposium held in Livingston Zambia 21-24 May 2024.

Genomics Platform

Platform director:
Prof. Craig Kinnear
craig.kinnear2@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

One of the key focus areas of the Genomics Platform has been to break down the barriers to entry for Next Generation Sequencing. We have optimised DNA and RNA extractions from diverse samples, including plant material, vitreous fluid for ocular diseases, saliva for non-invasive diagnostics, and animal samples for One Health initiatives. These optimisations enhance the accessibility and applicability of NGS across different fields.

In environmental and clinical contexts, we have NGS being applied through wastewater sequencing for public health surveillance and exome sequencing for diagnosing genetic conditions. Our work has also focused on onboarding novel technologies. For example, we have developed an Oxford Nanopore Technologies (ONT)-based methylation testing assay to replace older methods like MS-MLPA, improving diagnostic efficiency and accuracy.

Additionally, we have optimised RNA sequencing from formalin-fixed, paraffin-embedded (FFPE) samples to enhance diagnostics for B-cell lymphoma by providing high-quality genetic data from archived tissue samples. These developments not only improve NGS accessibility but also expand its applications in agriculture, medicine, and environmental science. Overall, these efforts aim at leveraging NGS for better disease diagnosis, environmental monitoring, and agricultural advancements, ultimately contributing to improved public health and sustainable practices.

Key Milestones and Achievements

The Genomics Platform is a key partner in the AMRoots project, which was awarded £500,000 for its innovative approach to addressing Anti-Microbial Resistance (AMR) through the Trinity Challenge. The team is led by Prof Helen Mcilleron from UCT and includes two non-profit organisations and five co-leads. AMRoots focuses on generating new data to holistically understand the development and transmission of AMR in livestock farming communities, which are critical for the future food security of sub-Saharan Africa. The project integrates scalable and community-led approaches to mitigate AMR in these regions. Prof Craig Kinnear will lead the Genomics Arm of this study.

In 2024, the Africa BioGenome project (AfricaBP), which is a pan-African initiative aimed at sequencing the genomes of Africa's biodiversity to support conservation, agriculture, and biotechnology,

In May 2024, the Genomics Platform held a stakeholder event to commemorate the sequencing of the 10,000th sample at the Genomics Platform.

restructured their constitution to create regional nodes that operates autonomously under the AfricaBP umbrella. The Genomics Platform has been appointed by AfricaBP to lead the Southern African Node.

The Genomics Platform is a key partner in the DDD-Africa International Training Programme (ITP), building on the success of Deciphering Developmental Disorders in Africa. The programme aims to establish a network of professionals across Africa to lead genomic research and support families with developmental disorders. Dr. Nadia Carstens contributed to training sessions, where participants learned the diagnostic process from intake to genetic diagnosis. The next phase involves guiding individuals through this process, with the Genomics Platform offering free exome sequencing and variant interpretation training to enhance diagnostic capabilities.

Building Capacity Through Training, Mentorship, and Support

In partnership with DIPLOMICS, the Genomics Platform offers an internship programme designed to provide technical training and capacity development in next-generation sequencing (NGS) and good laboratory practice (GLP). This programme was established in 2023 to equip interns with practical experience in molecular biology techniques, including sample quality control, nucleic acid isolation, and sequencing library preparation. Mr Martin Naicker, a Senior Research Technologist at the Genomics Platform has been taking the lead in training of the interns. Interns become active members of the SAMRC Genomics Platform laboratory team, contributing to significant projects that enhance their skills and employability. Eligible candidates typically hold a BSc or BTech in Molecular Biology, Genetics, or a related field, and possess foundational knowledge in molecular biology techniques. This programme reflects SAMRC's commitment to advancing precision medicine and innovation in Africa by building local expertise in genomics.

Postgraduate training has always been a priority for the Genomics Platform. Our team have been involved in the training of BSc Hons, MSc and PhD students from Stellenbosch University, WITS University, the University of Zululand, the University of Cape Town and the University of Venda. In 2024 we've graduated PhD and MSc students.

Navigating the Impact of US Executive Orders on Funding

The Genomics Platform does not receive any funding directly from any funding agency in the United States affected by the Executive Orders. However, some clients who regularly access the Platform's sequencing services are funded through various US agencies including the National Institutes of Health (NIH). The uncertainty around whether these agencies will be withdrawing funding to current and prospective clients does place some pressure on the Platform's sequencing services.

Africa BP poster.

Trinity Challenge Logo.

DDD-Africa International Training Programme (ITP) trainees celebrate receiving their certificates after completing the coursework component of the 3-year programme, marking a significant milestone in strengthening genomic medicine capacity across Africa.

Dr Nadia Carstens (SAMRC Genomics Platform) will now guide ITP trainees through Phase 3 of the programme, where the Genomics Platform will provide clinical exome sequencing data for trainees to apply their newly acquired genomic medicine skills within their home countries.

In partnership with DIPLOMICS, the SAMRC Genomics Platform offers an internship programme designed to provide technical training and capacity development in next-generation sequencing (NGS) and good laboratory practice (GLP). Pictured here is the 2025 intake, ready to contribute to advancing genomics in South Africa.

Research Translation Through Arts and Science

In May 2024, the Genomics Platform held a stakeholder event to commemorate the sequencing of the 10,000th sample at the Genomics Platform. This event marked a significant milestone for the Genomics Platform, which has grown from sequencing nine human genomes in 2019 to becoming a major hub for next-generation sequencing (NGS) in Africa. The event was attended by clients, collaborators, funders and a delegation from the Chinese Embassy. The event also served to celebrate the pivotal role the Genomics Platform has played in advancing scientific research across the African continent, particularly in areas like precision medicine, pathogen surveillance, and biomarker discovery.

The Platform prides itself on being an enabler of translational science and aims to use sequencing technology to improve the health of all South Africans. This is evident from a recent communication we received from one of our close collaborators, Prof Shahida Moosa, the Head of Medical Genetics at Tygerberg Hospital, who said, "Your team has helped us make an incredible impact in the lives of people who were living with undiagnosed rare diseases: they now have a name for their condition and all the information, care and community that comes with a diagnosis".

Members of our team have also been involved with various media engagements throughout the year. Dr Nadia Carstens was featured in the Women in Science publication, while Prof Kinnear discussed the impact of genome sequencing on the diagnosis of rare diseases on Radio 786.

Herbal Drugs Research Unit

Unit director:
Prof. Alvaro Viljoen
ViljoenAM@tut.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Herbal Drugs Research Unit conducts technologically advanced research in herbal medicines providing scientific knowledge to promote the commercial development and use of high quality, safe and efficacious herbal medicines. Paramount to the provision of quality healthcare is the need to ensure consistently high-quality, unadulterated and correctly identified botanical raw materials. The Unit therefore focuses on developing and optimising quality control protocols for the correct identification and fingerprinting of important medicinal plants in South Africa, that have the potential for commercial development. The importance and relevance of the research in promoting quality healthcare in South Africa has been demonstrated and the work is aligned with several of the SAMRC strategic goals that contribute to outcome 2 of 'A long and healthy life for all South Africans', and Strategic Goal 04 – In trying to build capacity for the long-term sustainability of the country's health research.

Key Milestones and Achievements

Three new collaborations were established in 2024 to enhance the research capacity of the Unit. Dr Pritika Ramharack (Biomedical Research and Innovation Platform- SAMRC) assists with training students on computational methods to identify biological targets and mechanisms of action of natural compounds. Prof Kuan-Chen Cheng (National Taiwan University, Taiwan)'s laboratory specialises in in vitro and in vivo biological assays for anti-pigmentation/melanogenesis of medicinal plants used for skin conditions. Prof Jakub Piwowarski (Medical University of Warsaw, Poland) assists with assays involving interactions of medicinal plants with human microbiota.

Building Capacity Through Training, Mentorship, and Support

The Unit has contributed greatly to research capacity development and transformation over the years through training and mentoring of undergraduate and postgraduate students, as well as postdoctoral fellows. During the reporting period, the Unit hosted and trained five interns (one-year work integrated internships), 9 Masters' students, 11 doctoral candidates and 4 postdoctoral fellows. Prof Ilze Vermaak, a core unit member and staff at TUT received a C2 NRF rating and was promoted from Senior Lecturer to Full Professor in 2024, through her dedication to research within the Unit and teaching.

In promoting women in science, the Unit has welcomed three female staff members from the Department of Pharmaceutical Sciences (Ms Christel Hanson and Drs' Tsholo Mapeka and Carmen Leonard) as core unit members to assist them advance their research careers. Drs' Maxleene Sandasi and Weiyang Chen continue to work as researchers in the Unit under the mentorship of the Unit Director. They have both applied for NRF rating. The Unit Director received a Merit award from the SAMRC for his contribution to capacity development and transformation.

Navigating the Impact of US Executive Orders on Funding

None.

Research Translation Through Arts and Science

The research output of the Unit is often communicated to the scientific community through conference presentations and publications. During the reporting period, the Unit Director attended five conferences and delivered keynote addresses in Mississippi, (USA) (The medicinal and aromatic flora of South Africa – the opportunity, progress and challenges), Balatonalmadi (Hungary) (The value of having a multidisciplinary approach to essential oil research – reflecting on two decades of studying the medicinal and aromatic flora of South Africa), Seoul (Korea) (The application of classic and modern pharmacognosy in monographing African traditional medicines) and Cape Town (South Africa) (Medicinal plant research in South Africa – A celebratory travelogue).

Eleven members of the Unit also presented seven oral presentations and four posters at the 23rd International Congress of The International Society for Ethnopharmacology and the 2nd International Congress of the African Phytomedicine Scientific Society (ISE-APSS2024) in Cape Town, South Africa.

Students from The Herbal Drugs Research Unit (TUT) discussing the medicinal properties of indigenous plants with Prof Alvaro Viljoen.

Pan African Centre for Epidemics Research Unit

Unit director:
Prof. Refilwe Phaswana-Mafuya
refilwep@uj.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The South African Medical Research Council/ University of Johannesburg (SAMRC/UJ) Pan African Centre for Epidemics Research (PACER) Extramural Unit has a unique scientific premise that seeks to close the gap in the HIV response. The vision of PACER is to be the leading producer of cutting-edge scientific evidence for equitable and sustained pandemic response in the African Continent. The mission of PACER is to generate cutting-edge epidemiological and public health evidence for the equitable and sustainable response to local epidemics and future pandemic preparedness strategies.

PACER staff and postgraduate students are actively involved in the mentorship of young scientists at the Eskom Expo for Young Scientists, providing support and leadership on health-related projects.

In this regard, PACER conducts studies that are innovative, ambitious and data-driven mainly involving leveraging and analysing different data types from various sources (big heterogeneous data), including programmatic, research, and auxiliary data. The studies focus on the unmet prevention and treatment needs inclusive of vulnerable and key populations with disproportionately higher risk of onward transmission to inform a tailored HIV response, sensitive to heterogeneity, for greater impact in terms of epidemic control, i.e., reduction of incidence in the population at large.

PACER explores new methods and approaches attuned to the structure of available data including big data, machine learning techniques, small area estimations, integrated analysis, transmission modelling, and cross-sectional and longitudinal analyses.

Key Milestones and Achievements

Scientific dissemination: Eighteen (18) conference papers were presented at the 6th National Big Data Health Sciences Conference, South Carolina, USA. 13-14 February 2025 and 12 posters were presented at the World Congress of Epidemiology, Cape Town, South Africa, 24 – 27 September 2024.

Scientific productivity: a number of articles were published in peer-reviewed journals most of which are linked to the PhD students' work; four have been accepted for publication and some abstracts have been accepted as conference proceedings.

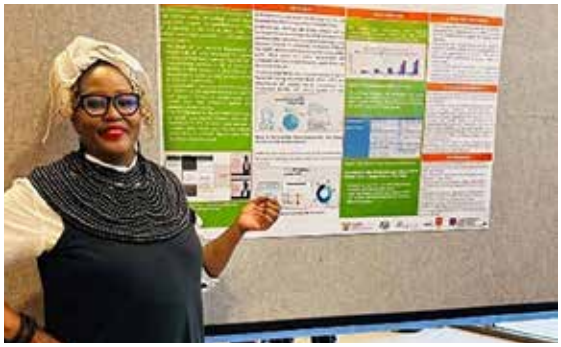
Scientific recognitions: PACER Director was awarded the HERS-SA Trailblazer Award and Lifetime Achiever Award at the Higher Education Women Leaders Awards (HEWLA) in August 2024; was also appointed

as the UJ Deputy Vice-Chancellor: Research and Innovation Designate (1 Oct -31 Dec 2024) and Deputy Vice-Chancellor Research and Innovation (I Jan 2025 to date); and was declared Faculty of Health Sciences Living Legend in September 2024.

The awards attracted a lot of media attention including a media statement released issued by SAMRC after receiving the Lifetime Achiever and Trailblazer Awards from HERS-SA at the 2024 Higher Education Women Leaders Awards (HEWLA).

Building Capacity Through Training, Mentorship, and Support

Supervision: PACER has 12 PhD (Public Health), 17 MPH students and one postdoctoral research fellow (PDRF) from designated groups who are being supervised. This contributes to the transformation agenda, National Development Plan 2030 and UN Sustainable Development Goals 2030.



PACER delegation at the University of South Carolina.

International exposure: PACER, UJ and University of South Carolina, has supported 17 postgraduate students and staff, to present their work at the 6th National Big Data Health Sciences Conference, Columbia (10-19 Feb 2025). Additionally, 12 postgraduate students were supported by PACER to present their research at the World Congress of Epidemiology, Cape Town (24-27 Sept 2024).

Capacity-building workshops: The postgraduate students including MPH, PhD and PDRF completed >45 UJ postgraduate school and external stakeholders' capacity-building workshops/seminars.

Postgraduate scholarships: PACER secured seven supervisor-linked, three UJ Global Excellence Stature, one SAMRC scholarship, and one UJ Merit bursary for postgraduate students from designated groups contributing to equitable scholarship through meeting educational needs.

Science Outreach: PACER staff and postgraduate students are actively involved in the mentorship of young scientists at the Eskom Expo for Young Scientists, providing support and leadership on health-related projects.

Recognitions of emerging scientists: PACER Research Manager/Specialist Scientist as well as PhD Students received Recognition Awards from the UJ Faculty of Health Sciences, Department of Environmental Health, 2024. Dr Edith Phalane: Emerging Researcher with Exceptional Leadership Potential; Mr Musa Jaiteh: The Most Progressive Doctoral Student in PACER; Ms. Betty Sebati: Most Networked Student in PACER; Ms Lucia Olifant: Extra mile Award.

Navigating the Impact of US Executive Orders on Funding

The collaboration with Johns Hopkins Bloomberg School of Public Health (JHSPH) on the "Harnessing Big Heterogeneous Data to evaluate the potential impact of HIV responses among key populations in Generalized Epidemic Settings in Sub-Saharan Africa" might be limited as they used an NIH grant to support PACER's work. However, the grant was wholly used by the JHSPH, no sub-contract was signed with PACER.

Research Translation Through Arts and Science

Golden Key International Honour Society: PACER Director, Prof Phaswana-Mafuya delivered a welcome address to New Members in the Society, University of Western Cape, 2024.

Webinars: PACER Director delivered a talk entitled Country ownership and sustainable programming of the HIV response in South Africa: A scoping review at a webinar on the "Impact of stop-work order of USAID on the PSET sector" organized by Higher Health SA attended by >500 people.

Advisory Committee Member: PACER Director, Prof Phaswana-Mafuya serves on the Advancing Early Career Researchers and Scholars (AECRS) Programme Advisory Committee, Universities South Africa.

Panel memberships: PACER research manager, Dr Edith Phalane and one postgraduate student, Betty Sebati, served as panellists at the AECRS, Universities South Africa webinar, under the theme: Empowering emerging researchers and academics, Science Forum South Africa, 2024.

Satellite session: PACER research manager, Dr Edith Phalane was the Programme Director for Next-Gen Science Careers at the Science Forum Exploring New Frontiers with women leaders presented by OWSD NC.

Task teams: PACER staff serve on the South African National AIDS Council (SANAC) HIV Estimates Technical Working Group, SANAC Key Population Technical Working Group, and NDoH STI Technical Working Group.

In addition to media mentions on HERS-SA awards, Prof Phaswana-Mafuya was featured on SABC news DStv channel 404 on addressing treatment backlogs in SAs public health system. She was also featured on The Mail & Guardian, on NRF Women in Leadership (NRF Women in Leadership – The Mail & Guardian (mg.co.za).

Discussions and workshop at the University of South Carolina.

Primate Unit and Delft Animal Centre

Platform director:
Dr. Chesa Chauke
chesa.chauke@mrc.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Primate Unit and Delft Animal Centre (PUDAC) research focus is on providing primatology expertise in the biomedical research field by utilising laboratory animal models, specifically nonhuman primates (NHPs) and rodents. During this financial term, PUDAC has engaged in providing contract research services, conducting operational activities, and pursuing self-initiated research projects.

Four contract research projects have been successfully completed. The emphasis of these studies was on addressing the burden of non-communicable diseases through dietary intervention and treatment strategies using diet-induced diabetic mice, rats and cancer mice models. These studies have a direct impact on identifying potential natural compounds for the development of more effective anti-diabetic, anti-obesity and colon cancer therapies.

As part of self-initiated research, PUDAC conducted two projects to address the impact of African Traditional Medicines (ATMs) on cardiovascular diseases, as well as that of helminthic worms on the efficacy of candidate HIV vaccines. These study interventions included the identification of cathepsin S inhibitors from South African medicinal plants and the investigation of the effect of concurrent schistosomiasis on the efficacy of selected HIV candidate vaccines.

Key Milestones and Achievements

PUDAC's major achievements are as follows:

Operational: Minor renovations of the rodent experimental facility were completed, which included furnishing with new auxiliary equipment (necropsy table, and scientific scales), 12-hour day/night timers, split aircon/extraction fans, cage washing facility etc.). This allowed the unit to accommodate the four contract research projects that are mentioned above.

Funding: PUDAC was awarded the infrastructural funding by the Germany's KfW Development Bank to renovate the experimental facility (both the rodent and NHP) and to expand the NHP holding capacity of the existing colonies to support a sustainable

PUDAC scientists conduct self initiated research projects in tissue culture lab.

breeding programme that can meet the demand for vaccine and drug research, which became more evident during the COVID-19 pandemic. This funding will assist PUDAC to meet the minimum standards for GLP accreditation in order to support regulated drug and vaccine pre-clinical testing.

New collaborations initiated: PUDAC has formed collaborations with various research institutions. These include but not limited to; Africa Health Research Institute (AHRI), Council for Scientific and Industrial Research (CSIR), University of Pittsburgh, and University of Stellenbosch. These collaborations are focusing on HIV vaccines and related comorbidities.

Capacity development: PUDAC has supported three PhD students (one thesis submitted, reviewed and student to graduate early in 2025) and one administrative support staff (completed Master of Business Administration/MBA course).

Building Capacity Through Training, Mentorship, and Support

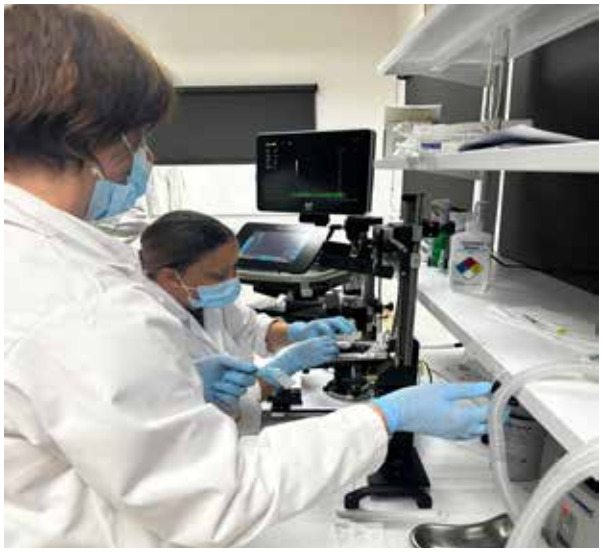
PUDAC's ongoing capacity development initiatives enable continuous monitoring and identification of areas for personal and professional growth. During this reporting period, PUDAC continued supporting the six staff members who were enrolled for the Institute of Animal Technology (IAT) course despite facing challenges with the Institutes' service provider (Venture Forward) regarding accreditation and course continuation. However, all six students have committed to continue with their studies through the new service provider (Cambridge). The IAT programme aims to improve the theoretical and practical skills of our animal technicians and technologists and have more skilled SAVC registered staff.

Moreover, three PhD students received training through participation in self-initiated research projects. This postgraduate programme is designed to support their career development, provide them with the opportunity to develop and strengthen their research and professional capabilities and prepare them for academic careers as emerging scientists. Additionally, one staff member completed his MBA course, and two Animal Chief Technologists received training on the commissioning of the Vevo F2 imaging system, and they will be responsible for training and transfer skills to other staff and students.

Navigating the Impact of US Executive Orders on Funding

Although the impact is minimal and not directly affected, PUDAC is part of the BRILLIANT Consortium's 5-year grant which was awarded to SAMRC by U.S. Agency for International Development (USAID). Our role in the consortium was to perform the final pre-clinical evaluation of candidate HIV-1 vaccines produced by other

A renovated animal housing and experimental facility.

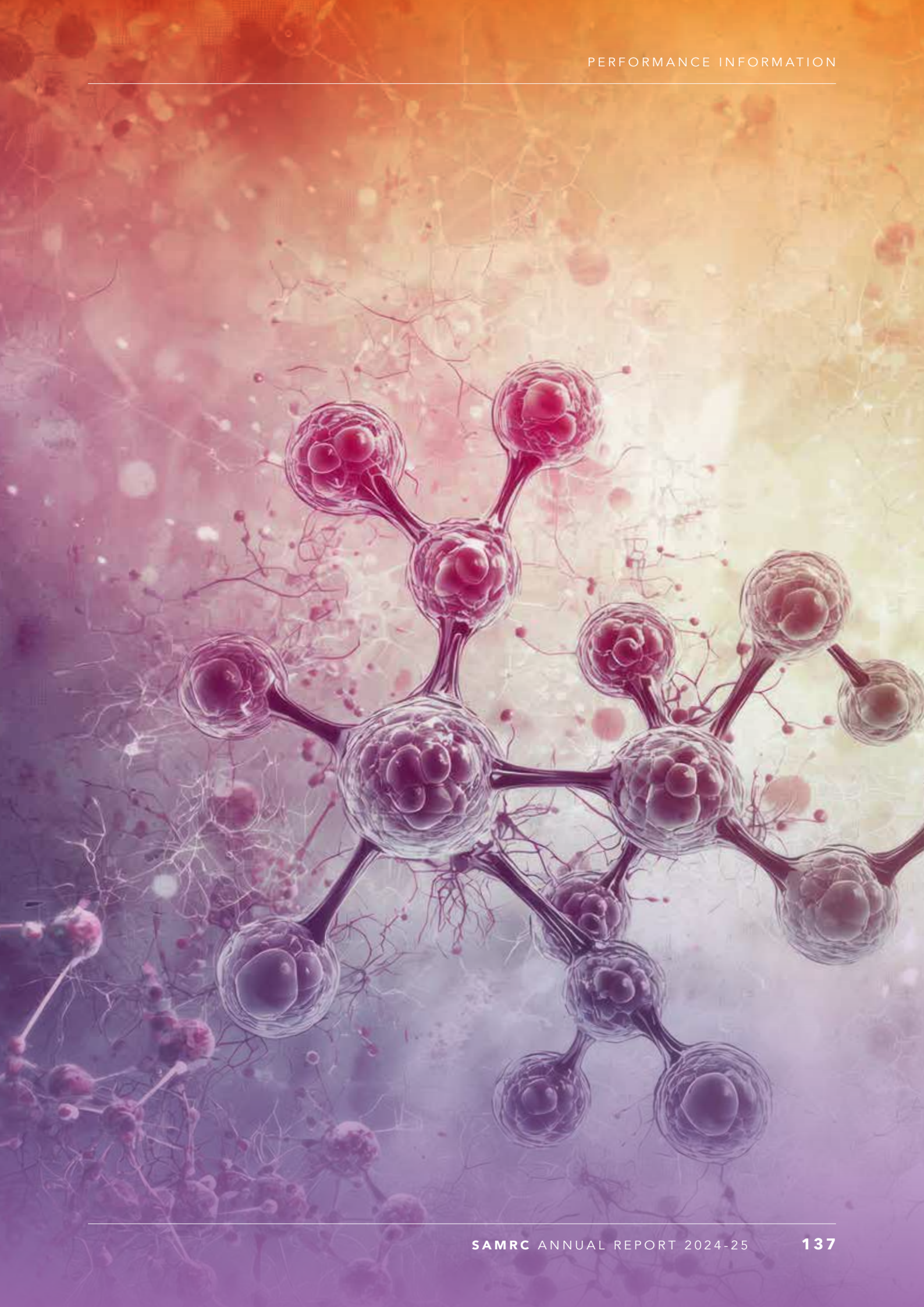


Staff training workshop for the Vevo F2 imaging.

members of the Consortium before the vaccines proceed to clinical testing study. The project had already begun, with ethical approval secured and the animal experimentations scheduled to commence early this year. However, to comply with the US Executive Orders, all the planned pre-clinical activities were suspended. While this suspension will directly affect our projected revenue, we anticipate only minimal impact as no major expenses had been committed for this study. Additionally, we had plans to submit joint grant applications through NIH with two international collaborators and we had other potential clients who were also dependent on these research grants. These collaborative efforts are now uncertain due to the executive order.

Research Translation Through Arts and Science

PUDAC contributed to scientific knowledge by providing research support and animal models to clients as part of research innovation. PUDAC's researchers have shared their findings via conference presentations, publications, collaborations and meetings with stakeholders. Dr Chesa Chauke, the Unit Director, currently heads the Research Ethics Committee Association of Southern Africa (REASA), an organisation committed to advancing ethical practices in human and animal research across Southern African nations. Moreover, Dr Chauke serves on the committee of NHREC, which is responsible for developing policies to guide and regulate research ethics committees throughout South Africa.



RESEARCH PROGRAMME 6

BIOMEDICAL RESEARCH

PURPOSE OF THE PROGRAMME

To conduct basic research, applied research and transactional research to determine predisposition to disease. This understanding is important for planning effective intervention and disease control.

UNITS THAT CONSTITUTE THIS PROGRAMME

1. Antiviral Gene Therapy Research Unit (ERU)
2. Cardiometabolic Health Research Unit (ERU)
3. Genomics of Brain Disorders Research Unit (ERU)
4. Platform for Pharmacogenomics Research and Translation Research Unit (ERU)
5. Precision and Genomic Medicine Research Unit (ERU)
6. Precision Oncology Research Unit (ERU)
7. Stem Cell Research and Therapy Research Unit (ERU)
8. Wound and Keloid Scarring Translational Research Unit (ERU)

PROGRAMME STRATEGIC OBJECTIVES

- To generate scientific knowledge in the field of biomedical science, which will provide insights into various diseases of national priority. This in turn will lead to novel diagnostic, preventive and therapeutic strategies.
- To undertake original research of high quality, which will provide novel insights into acute and chronic inflammatory diseases of national priority, thus leading to novel diagnostic, preventive and therapeutic strategies.
- To train and mentor high-quality postgraduate students who are able to compete in the science, health and/or education sectors locally and abroad.
- To strengthen biomedical research through a policy of enabling researchers from other academic institutions to have access to sophisticated laboratory equipment and supervision. In addition, to provide assistance to national research funding agencies with respect to evaluating applications for research funding.
- To translate research data into policy and practice regarding prevention, diagnosis, treatment and management of diseases.
- To develop and test biomedical innovations that will address various conditions.
- To develop health-care management systems and plan a 'gene therapy' intervention programme for retinal degenerative diseases

RESEARCH HIGHLIGHTS UNDER THIS PROGRAMME

Antiviral Gene Therapy Research Unit

Unit director:
Prof. Patrick Arbuthnot
Patrick.Arbuthnot@wits.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Wits/SAMRC Antiviral Gene Therapy Research Unit (AGTRU) works on developing the use of nucleic acids to treat and prevent serious viral infections of public health importance in sub-Saharan Africa. The strength of the approach is that it is based on rational design, which in turn is informed by knowledge about DNA and RNA sequences. AGTRU has gained experience in this topic, which has been important in building vaccine manufacturing and gene therapy capacity in South Africa.

Our specific priorities have included the following:

Lipid nanoparticle formulations made up using bio-renewable lipids, which can be used for delivery of mRNA in vaccine formulations.

mRNA vaccination against Mycobacterium tuberculosis (Mtb); mRNA Vaccination against HIV, which was part of the now-halted BRILLIANT consortium project; Self-amplifying and conventional mRNA for vaccination against HBV; Recombinant adenoviral vectors for vaccination against hepatitis B virus; and, Gene therapy using silencing and editing to inactivate hepatitis B virus replication.

Key Milestones and Achievements

Lipid nanoparticle formulations. Work on developing the use of bio-renewable material to produce ionisable lipids has progressed well. These lipids are the major component of lipid nanoparticles (LNPs) and are vital for protection and delivery of mRNA. A library of approximately 90 compounds has been prepared and evaluated for its ability to formulate mRNA, deliver reporter genes and elicit an immune response. Results demonstrate that the leads are efficient and have properties like the SM-102 compound used in Moderna mRNA vaccines. Multidisciplinary collaboration with Prof Charles de Koning (School of Chemistry, Wits) has been fruitful and the work is being extended to scale up production as a precursor to GMP manufacture and use in humans.

Natasha Killassy, an MSc student in the Wits/SAMRC Antiviral Gene Therapy Research Unit, is working on generating SARS-CoV-2 virus-like particles to improve evaluation of vaccines and therapies against the virus.

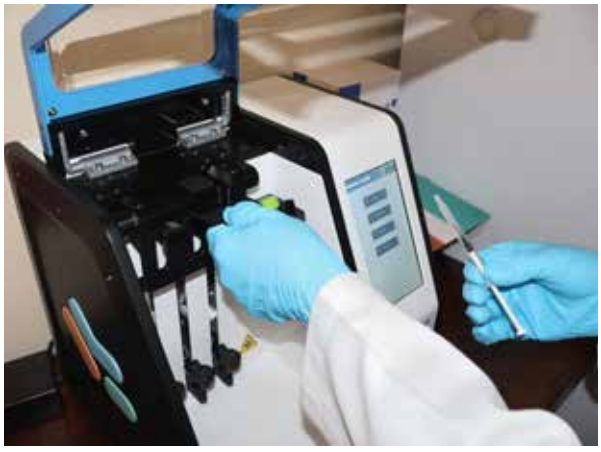
mRNA vaccination against Mycobacterium tuberculosis (Mtb) and HIV. Mtb vaccine development

research continues to advance well and is now also generously supported by the Open Philanthropies and Bill and Melinda Gates Foundation. Challenge studies were recently completed, which entailed immunisation of mice, then exposure of the animals to Mtb microorganisms. Results demonstrated protection was induced by the mRNA vaccines.

The generation of HIV mRNA vaccines that prevent infection with HIV progressed rapidly during 2024/25. However, this work was supported by USAID, and the project was stopped in early 2025 by the new US government administration. Funding. Significant support for the work of the unit was obtained during 2024. A total of approximately R55,000,000.00 has been attracted from various sources that include the German KfW Development Bank, Open Philanthropy, Good Venture Foundation, USAID and Bill and Melinda Gates.

Building Capacity Through Training, Mentorship, and Support

A major focus of AGTRU is training of young scientists to build capacity in the country. During 2024, there were four postdoctoral fellows, eight PhD and seven MSc candidates in the unit. During 2024/25 five students graduated with MSc degrees and one with a PhD. Four of the graduating MSc candidates registered for PhD candidature during 2024/25. One PhD candidate has corrected her thesis after it was examined, and these corrections were approved by the University Health Sciences Postgraduate Office. Graduation is scheduled for mid-2025. Another PhD candidate has submitted her thesis and is awaiting feedback from the examiners.



The microfluidics device, from Precision NanoSystems, is a vital piece of equipment in the Wits/SAMRC Antiviral Gene Therapy Research Unit. It is used to assemble mRNA-containing lipid nanoparticles (LNPs) for application as vaccines and therapies.

Dr Lorato Modise, a visiting postdoctoral fellow from Sefako Makgatho University, is working on characterising replication properties of South African mutant strains of hepatitis B virus (HBV).

Navigating the Impact of US Executive Orders on Funding

Our unit was involved in work with the USAID-supported BRILLIANT consortium, which aimed to develop vaccines against HIV. Generation of anti-HIV mRNA vaccines progressed rapidly during 2024/25. This work has been conducted with the support of USAID and entailed generation of several candidate mRNA vaccines that encoded env and gag proteins from HIV. Preclinical injection of immunogens into rabbits (conducted at UCT) and subsequent assessment of immunogenicity demonstrated some efficacy. These results were used to inform design of the next generation of vaccines, which encoded variants derived from the CAP-256 and CAP-255 patients from the CAPRISA cohort studied in KwaZulu-Natal.

With the US government executive order issued in January 2025, the project was stopped and funding from USAID terminated. Temporary support from the Elma Foundation is being provided to enable continuation of our work for a further 6 months (until August 2025). During this time, alternative sources of funding are being actively sought. The Executive Orders have had a significant negative disruptive effect, but enthusiastic efforts are being made to source alternative funds to sustain the project.

Research Translation Through Arts and Science

Publicity. Numerous interviews were given to local and international news agencies. These pertained mainly to advancing mRNA vaccination in South Africa. The news agencies included the following: BBC, Reuters and TimesLive.

Dr Tiffany Smith, a postdoctoral fellow in the Wits/SAMRC Antiviral Gene Therapy Research Unit, is working under the guidance of Prof Betty Maepa (pictured behind Tiffany) to develop new mRNA and adenovirus vaccines that prevent mpox.

Cardiometabolic Health Research Unit

Unit director:
Prof Tandi Matsha
matshat@cput.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

Non-communicable diseases which include diabetes, hypertension, chronic kidney disease and cancers are increasing rapidly in the Western Cape and South Africa. All these conditions have the potential to result in cardiovascular disease which is life-threatening. This rapid rise is most likely due to complex interactions between genetic and environmental factors which result in chronic inflammation and endothelial dysfunction. Many individuals in Africa and South Africa remain undiagnosed and untreated.

To address this challenge, the Cardiometabolic Health Research Unit's top priority is to investigate the unique risk factors and mechanistic changes that underly this group of diseases and to propose early biomarkers that could identify at-risk individuals. These studies and investigations have the potential to significantly impact the increasing burden of disease and will lead to strategies that could prevent the onset of cardiovascular disease. The unit has investigated cardiometabolic disease using an integrated approach that focuses on 4 areas. These include the role of epigenetic and genetic mechanisms, the oral microbiota, immune and endothelial dysfunction as well as the impact of environment and lifestyle factors. During 2024, the unit completed projects on the oral biome as well as identifying novel MiRNAs in patients with pre-diabetes and diabetes.

Key Milestones and Achievements

Research: The Director, Prof Tandi Matsha, is part of the NCD Risk Factor collaboration which published

MiRNA course sponsored by Fogart grant.

Community outreach activities.

highly impactful articles in The Lancet during 2024. These articles reported on pooled global data collected from several population groups on the global risks of diabetes and obesity. In another impactful publication, the effects of smoking tobacco on the balance of microorganisms within the oral cavity were reported. This publication attracted much attention and resulted in the Co-Director (A/Prof Davison) and first author (Dr Prince) being invited for interviews on both radio and television. It was also republished by several media houses.

Capacity Building: In 2024, Dr Shanel Raghubeer, a young NRF-rated scientist obtained funding from the NRF to support Y-rated scientists. In addition, Dr Prince, another emerging researcher was awarded the Self-Initiated Research (SIR) grant from the SAMRC to continue her research on the oral microbiome. One of our PhD students graduated and has been employed as a post-doctoral fellow at the SAMRC.

Under the guidance of Dr Davids, the unit organised and hosted an international Point of Care colloquium which attracted prominent international and local delegates. In another community engagement, Dr Raghubeer led a team of students and post-doctoral fellows in the organisation of an event at the Shiloh Centre of Learning in Bellville. Here young primary school children were exposed to good nutrition, exercise and healthy lifestyles through interactive games and exercise.

Building Capacity Through Training, Mentorship, and Support

During 2024, the unit supported 8 MSc and 2 PhD students as well as 4 post-doctoral fellows. Senior researchers provided mentorship to the post-doctoral fellows by including them as co supervisors and providing opportunities for teaching. One example was supported by the D43 NIH Fogarty grant which was facilitated by the co-director. Post doctoral fellows from UCT and the unit facilitated and developed a two-week course on cell culture and MiRNA analysis which was successfully offered during September.

Postgraduate students and post-doctoral fellows were encouraged to attend several courses during the year that were offered by the university and outside organisation's including Diplomics. They were further supported to attend both local and international congresses such as the IFCC in Dubai and the AFCC congress in Cairo Egypt. One PhD student graduated during 2024, while 2 MSc students will graduate in April 2025. The co-director also contributes to institutional mentorship programmes and actively participated in the Black academic mentorship programme, which aims to uplift previously disadvantaged female academics.

Navigating the Impact of US Executive Orders on Funding

This has had no impact on the unit.

Research Translation Through Arts and Science

In the reporting period, the unit communicated their research findings by writing an article for the online publication The Conversation. This is an online newspaper that reports on research and is aimed at the broader public. This article was republished by several other media houses and resulted in over 30000 reads both locally, in Africa and internationally. The Co-director as well as the first author Dr Prince were invited to talk about the findings on both radio and television stations, which were positively received and resulted in participation by the public and also an interesting and insightful debate.

To create awareness of good nutrition and lifestyle choices among young school children, Dr Raghubeer led a community event at the Shiloh Centre of Learning in Bellville. Here, young primary school children were exposed to good lifestyle and nutritional choices through interactive games. The unit aims to make this an annual event and include other schools in the area. Other methods to reach broader audiences include having an active presence on social media platforms such as Facebook, LinkedIn, Instagram and X.

To create awareness of good nutrition and lifestyle choices among young school children, Dr Raghubeer led a community event at the Shiloh Centre of Learning in Bellville.

Genomics of Brain Disorders Research Unit

Unit director:
Prof. Soraya Seedat
sseedat@sun.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Genomics of Brain Disorders Research Unit's (GBD) top priority is to generate meaningful insights and impactful data that can inform risk prediction, biomarker discovery, and novel therapeutic targets for neuropsychiatric disorders prevalent in South Africa. During the financial period, the unit has tackled the challenge of understanding the genetic and environmental contributors to psychiatric disorders, particularly in populations of African ancestry, who remain underrepresented in global genomic research.

In addition, our growing neurotechnological capacity has provided a unique opportunity to investigate causal relationships between targeted neural circuits and objective neurophysiological responses and has allowed us to broaden our scope of research and build training capacity in multimodal imaging. Several new VR projects have been planned over the past year to validate context-specific VR paradigms. At the same time, our neuroethics research thrust has driven critical discussions on the ethical implications of neuroscience research, and the acceptability of neurotechnologies for research and clinical therapeutic use, ensuring that investigations are responsible, culturally relevant, and equitably applied in South African and African contexts.

Key Milestones and Achievements

Prof Seedat secured a 3-year SAMRC-UKRI grant together with Prof Eva Loth from Kings College London and Prof Cilla Springer from SU for a project titled "Risk and Resilience Pathways for Transdiagnostic Mental Health Outcomes in Youth

Attendees at the South African Neuroethics Imbizo on the 1st October 2024.

('Safe Passage'). This project adopts a multi-level systems approach to identify the mechanisms by which pre-, peri- and postnatal environmental risk (and resilience) factors lead to (or protect against) early development and progression of mental disorders in 2,000 adolescents combining innovative multivariate methods and examining mediating neurocognitive vulnerabilities and clinical symptoms/ profiles in childhood/ early adolescence.

Prof Seedat and a collaborator Prof Larsya Zasiekina secured a Cambridge Alborada seed grant to conduct a study on continuous traumatic stress and moral injury in high-risk adolescents in Cape Town. This study which is sampling parent-child dyads is currently ongoing.

Numerous new collaborations were initiated, including those between SAMRC Intra- and extramural units (e.g. between our unit and the EHRU) and we are in talks with the CSIR regarding potential collaborations as well.

Building Capacity Through Training, Mentorship, and Support

The Unit's projects have provided opportunities for up-skilling of students and staff in clinical/ psychometric assessments, 'omics' technologies, brain imaging, qualitative and mixed-methods research, and cultural neuroscience approaches. Profs Seedat and Hemmings lead monthly African Neuroscience Alliance (ANA) meetings, with presentations to equip young African neuroscientists with the knowledge and tools to further their careers. The GBD Unit has also provided seed funding for early-career African neuroscience teams and hosted capacity-building events, including "Paper-in-a-Day" and computational workshops.

Through the Cambridge-Alborada partnership, Prof Zasiekina conducted two online workshops (April 2024) on cognitive and trauma-focused therapy, attracting mental health professionals from SU, UCT and UWC, as well as private practitioners. This partnership also provided skills training for a visiting elective student from South Africa (Zach Knowles) in adolescent/parent recruitment, assessment and data collection. Zach Knowles and postdoc researchers, Berte vd Watt have also acquired other methodological skills. Postgraduate researcher Moh Rafique conducted a systematic review with meta-analysis under Prof. Zasiekina's supervision, submitting a first-author manuscript. Dr Matshabane, who leads the unit's Neuroethics Work Group (WG), led 10 hybrid meetings in 2024. Guest speakers included Dr Phila Msimang [SU], Prof. Kate Webb [international] and Prof. Francis X Shen [international] leading to a collaborative grant application, follow-up departmental-wide lecture, and a new member of SU Neuroethics WG.

Dr Matshabane led the Dana Foundation and SAMRC GBD Unit Collaborative Neuroethics virtual webinar (+- 70 attendees) (March 2024) and the UCT Ethics Lab and SAMRC GBD Unit Collaborative Neuroethics virtual webinar (+- 50 attendees) (November 2024).

Dr Nqobile presenting Case study: Neuroethics at Imbizo.

Navigating the Impact of US Executive Orders on Funding

Two NIH-funded projects are ongoing, and the outcome of continuing funding is uncertain, as well as whether carryover of unused funding will be permitted. A 3rd NIH application is awaiting a Council decision on funding. However, the Fogarty Council Meeting which was supposed to have taken place on February 10 was cancelled on account of Trump's administration executive order.

Research Translation Through Arts and Science

Dr Olivia Matshabane held a very successful South Africa Neuroethics Imbizo on the 1st October 2024 to engage people with lived experience with mental disorders as a key component of a research study titled "Towards establishing contextually and culturally relevant neuroethics guidelines in Africa" and is funded by the African Academy of Sciences, Bill and Melinda Gates Foundation and the U.S. National Institutes of Health and is being conducted in partnership with Aga Khan University's Brain & Mind Institute in Kenya, in collaboration with Prof Seedat.

Through the Imbizo, indigenous and decolonial ways of being and doing were addressed through the facilitation of a drum circle, music, dance, poetry and trauma-informed yoga bringing together community participants from diverse cultural, linguistic, gender, age, education-level and socio-economic backgrounds, to connect in meaningful ways that allow the fostering of bi- and multi-directional learning in neuroscience, cross-cultural neuroethics, and brain disorders in Africa.

Prof. Hemmings's research group published a Youth Day Opinion Piece in the Mail & Guardian, titled "Mental health of South African youth needs urgent attention." While not traditionally creative, this piece emphasised the urgent need for mental health interventions, in the context of biological and environmental interactions that contribute to the development of neuropsychiatric disorders.

UCT EthicsLab and SAMRC SU GBD Unit.

Platform for Pharmacogenomics Research and Translation Research Unit

Unit director:
Prof. Collet Dandara
collet.dandara@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The SAMRC/UCT Pharmacogenomics Research and Translation Unit (PREMED) strategic objective is to bring the promise of pharmacogenomics (PGx), on the use of a patient's genetic information to guide optimal drug therapy and dose, which enables prediction of drug response by translating known findings among African patients.

One of the objectives of PREMED is to catalyse the translation of research findings. The objective is to create awareness among the public and policymakers on the importance of pharmacogenomics for its eventual acceptance and uptake. Translating pharmacogenomics research findings will lead to better future outcomes for both patients and healthcare providers through improved medication safety and efficacy.

Key Milestones and Achievements

Dyslipidaemia results of over 1000 samples were sequenced and analysed, currently the team is analysing and interpreting data. The unit successfully received postdoctoral funding from SAMRC to host one postdoc in our unit. The postdoctoral fellow will work on translation, this will contribute to the genetic screening of key pharmacogenomics genes in the clinical settings. Ultimately it will contribute toward better management of our patients.

On a mentorship scale, one of the members (Dr K Mnika) received the Africa Oxford Initiative Fellowship for 2024/2025, this is key for the unit to promote international collaboration. Dr N Soko received a small grant, Pilot Funding for Research on Infection-Related Cancers among People Living with HIV. Five members of the Unit presented their research findings at the African Society for Human Genetics Conference in Uganda (3-7 Feb 2025).

Building Capacity Through Training, Mentorship, and Support

The research within the PREMED unit has resulted in capacity building at different levels. In terms of training students in the reporting period of 2024/25, PREMED has trained and graduated 3 Honours students (awaiting graduation), 4 MSc students who graduated in September 2024, 4 current MSc students, and 4 PhD students, and 1 Postdoc. Every effort is being made to continue recruiting students from disadvantaged backgrounds and female students.

The proposed research under the pharmacogenomics platform, PREMED, brings together researchers working on pharmacokinetics, pharmacogenetics, pharmacogenomics, pharmacomicrobiomics, and cell biology, to unleash this diverse expertise on research that will improve the use of therapeutic drugs.

Navigating the Impact of US Executive Orders on Funding.

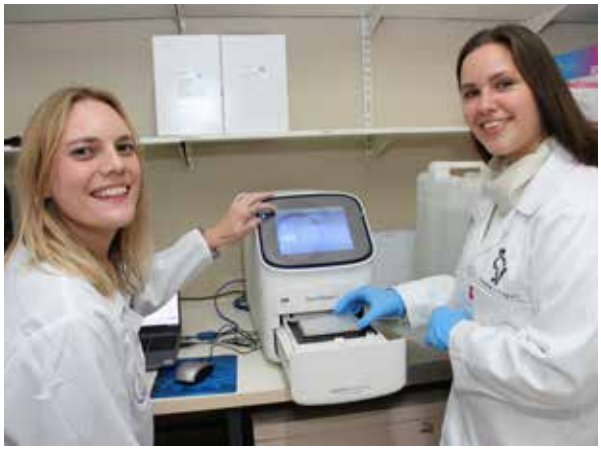
Has discouraged us from applying for NIH funding.

Research Translation Through Arts and Science

The research findings are communicated to a bigger audience by providing the opportunity to students to present the research findings at local or international conferences, and publication of articles in research journals. The work is also shared through

partnership with the African Pharmacogenomics Network (APN) by translating acceptable actionable pharmacogenetics discoveries informed by data from pharmacogenomics research on Africans, and other world populations.

The unit also collaborated with the Division of Human Genetics and hosted about 200 grade 11 learners for an open day. The Event aims to invite students from disadvantaged schools and make the university accessible to all. The unit had a slot where the PI gave a talk about the role of pharmacogenomics in precision medicine. Prof Dandara gave a presentation at Fezeka High School in Gugulethu, Cape Town on the 27th of February, encouraging high school learners to study STEM subjects



Ms Kruger showing Ms Obadic how to use the QuantStudio for Real time PCR.

Migael Mouton & Revina Naicker preparing a PCR run.

Nosipho Mabizela & Prof Tandara working with SeqStudio Genetic Analyser machine Congress.

Students work with the ThermoCycler machine.

Precision Oncology Research Unit (PORU)

Unit director:
Prof. Zodwa Dlamini
Zodwa.Dlamini@up.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Precision Oncology Research Unit (PORU) focuses on mapping HIV and HPV-associated cancers to uncover their underlying causes and identify new therapeutic targets. Given South Africa's high burden of HIV and HPV, PORU's work is vital in advancing precision medicine strategies tailored to the region's healthcare challenges.

During this financial period, PORU conducted key research on cervical and oesophageal cancers, emphasising their links to HIV and HPV. These projects employ genomic and molecular profiling, tumour biology analysis, and biomarker discovery to improve targeted treatments. Major studies include:

Defining the onco-genomics of cervical cancer in South African women; Functional characterisation of tumour biology in HIV and HPV-associated cervical cancer; Investigating aberrant splicing events in HPV16-associated head and neck cancers; Genome analysis of HIV and HPV-associated oesophageal cancer; Identifying splicing signatures in high-risk HPV-infected cervical cancer cells; Examining circular RNA mechanisms in splicing factor inhibition in cervical cancer; and, linking splicing events with long non-coding RNA regulation in cervical cancer.

By addressing knowledge gaps in HIV-associated malignancies, PORU is contributing to the development of targeted treatments and improving patient outcomes. The unit's research enhances early detection, guides personalised treatment strategies, and supports global efforts to combat these cancers in high-risk populations.

Key Milestones and Achievements

PORU, in collaboration with the Pan-African Cancer Research Institute (PACRI), was awarded the prestigious CRUK/NCI Cancer Grand Challenges SAMBAI grant. This initiative will establish a comprehensive database to address cancer disparities in African populations, with a focus on HIV and HPV-associated cancers.

PORU's Director received the 2024 South African Women in Science Award (SAWiSA) for Distinguished Woman Researcher in Natural and Engineering Sciences. She was also appointed to the Technical Review Committee for Genome Canada's Precision Health Initiative and served as a distinguished Cancer Immunology Jury Member for the 2024 Innovators in Science Award, sponsored by Takeda and the New York Academy of Sciences. Additionally, she was invited to join the AACR-AORTIC NCI BIG Cat Scientific Review Committee (2024-2027).

New collaborations will be established at the upcoming 3rd PACRI International Conference 2025, which focuses on advancing equity in precision oncology. Notable grants include awards to Dr. R. Marima (SAMRC SIR, UP UCDP, NRF Y-Rated Researchers) and Dr. T. Marutha (SAMRC Extramural Postdoctoral Fellowship). Capacity-building efforts saw the graduation of five master's students and the mentorship of PhD candidates, alongside the implementation of digital pathology imaging systems for precision oncology research.

Building Capacity Through Training, Mentorship, and Support

PORU has significantly contributed to capacity building by training postgraduate students from historically disadvantaged institutions (HDIs). Five master's students and one PhD successfully completed their research, with training in funding acquisition resulting in competitive bursaries. Their work has gained national and international recognition, including participation in events such as the Deutscher Akademischer Austauschdienst (DAAD) Falling Walls Lab in Tshwane and Dr Cawekzi C. Congo's awarded Dhiren Govender Medal.

Additionally, a PhD student received a competitive SAMRC PhD scholarship. All postgraduate students under PORU have been trained in scientific writing and have co-authored research papers alongside senior members. The students also presented their findings at national conferences such as SASBMB 2024, reinforcing their research exposure and professional development. PORU also played a pivotal role in the University of Pretoria Cancer Research Elective (UPCRE) programme, which provided mentorship and exposure to third-year medical students in cancer research, fostering the next generation of clinician-scientists. The Unit Director also edited 5 books, and postgraduate students were involved in being co-authors of the chapters to build capacity and writing.

Navigating the Impact of US Executive Orders on Funding

Recent US Executive Orders on funding allocations have posed potential challenges to research initiatives reliant on international grants. As SAMBAI is funded by US and UK agencies, these policy shifts may influence the availability and continuity of financial support for cancer research in underserved African populations. While no immediate disruptions have occurred, PORU is actively monitoring the situation and exploring alternative funding sources to mitigate risks associated with policy changes. The CRUK has assured SAMBAI for alternative plans of funding if anything happens as UK is now at the forefront of supporting inequalities research, as of now there is no disruption.

Research Translation Through Arts and Science

The 2025, the 3rd PACRI International Conference, scheduled for March 22-26, will serve as a key platform for communicating PORU's research to a broader audience. This year's theme, Science, Technology, Engineering, Arts, and Mathematics (STEAM) in Health Research, underscores the integration of art and science to foster creativity, interdisciplinary collaboration, and innovative problem-solving in health research.

The conference will bring together African and global experts to explore strategies for transforming cancer research, treatment, and policy reform, particularly in resource-limited settings. A major focus will be on leveraging industry partnerships and international collaborations to advance cancer research and clinical care. Discussions will highlight African experts' insights into the region's socio-economic and healthcare challenges, with sessions covering personalised medicine, emerging cancer treatments, and clinical trials addressing disparities in access to care.

Science communication will be a core aspect of the conference, featuring oral and poster presentations, round table discussions, workshops, and patient advocacy sessions. These interactive platforms will facilitate knowledge exchange among researchers, policymakers, and healthcare professionals. By fostering collaborations and addressing cancer inequalities, the conference aims to drive sustainable improvements in cancer prevention, detection, and treatment across Africa while reinforcing PORU's commitment to scientific excellence and public engagement. During our past annual conferences, we have also involved patient advocates as part of involving the community in our research.

Stem Cell Research and Therapy Research Unit

Unit director:
Prof. Michael Pepper
michael.pepper@up.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The top priority and strategic objective of the Stem Cell EMU is to identify major contributors to South Africa's disease burden to which principles of stem cell biology and cell and gene therapy can be applied. This includes HIV, obesity, cancer and newborn disease.

We aim to contribute to the understanding of disease pathogenesis, the identification of biomarkers, and where possible, the translation into cell and gene therapies. More specifically, we study haematopoiesis and HIV, the relationship between obesity and cancer, and the pathogenesis and biomarker identification in neonatal encephalopathy with suspected hypoxic-ischemic encephalopathy (NESHIE).

Key Milestones and Achievements

With regard to HIV and hematopoiesis, we have documented the significant impact that HIV-1 has on hematopoiesis, particularly through its effects on HSPCs in the bone marrow, which mirror aspects of hematological aging. The reduced number of lymphoid progenitors seen in HIV-infected individuals may contribute to impaired T-cell production, thereby exacerbating immune deficiency.

With regard to obesity and cancer, we have identified a novel gene that appears to be implicated in the regulation of adipogenesis and obesity. We have also studied the impact of mesenchymal stromal/stem cells on breast cancer in a mouse model of spontaneous tumorigenesis and have assessed the effects of 2-methoxyestradiol in this model.

Concerning NESHIE, we closed our period of recruitment of 620 neonates in November 2024. We have recently published our whole genome analysis of the first cohort (interim analysis) and likewise are about to submit our analysis of the proteome and metabolome in the same interim analysis. Work continues on all the omics, as well as on the ultra-low field magnetic resonance imaging of affected neonates.

Building Capacity Through Training, Mentorship, and Support

The Unit is situated in the Institute for Cellular and Molecular Medicine at the University of Pretoria. As a university entity, our goals are to identify talented post-graduate students, and irrespective of their background or needs, to provide all the support (logistical, financial, equipment, computational) and training that is necessary to achieve their research objectives and graduate with their respective degrees.

Navigating the Impact of US Executive Orders on Funding

We are funded by the Bill and Melinda Gates Foundation which works closely with USAID. When USAID was cancelled, the Foundation spent some time (understandably) dealing with the implications, as a result of which we had very limited communication. This was at a critical time when we were reappointing staff and were on the verge of having to let 12 members of staff go.

However, thankfully we were able to reestablish contact and secure additional funding (which is in the pipeline and will hopefully be transferred soon). We have however been privy to the many researchers and staff who have been directly affected, and live and work daily in an atmosphere of uncertainty and fear.

Research Translation Through Arts and Science

There are no apparent artistic elements in our work, which are highly scientific, quantitative and subjected to high levels of rigor. This precludes us from being creative, although a creative representation of our work, outside the boundaries of reality, would be most welcome under the right circumstances.

Dr Candice Hendricks, a paediatric haematologist, received her PhD (Medical Immunology) in 2025. She investigated the impact of HIV and antiretroviral agents (ARVs) on umbilical cord blood-derived haematopoieitic stem and progenitor cells (HSPC)s.

Laurah Guvi, an MSc student, is shown here maintaining HEK293T cells used to propagate HIV-1C molecular clones in order to study the impact of HIV-1C on hematopoietic stem and progenitor cells (HSPCs).

Dineo Raphela, MSc student, is shown here preparing protein samples extracted from mouse tissue for Western blot quantification of proteins involved in obesity and cancer.

Odireleng Mosuwe, MSc student, is shown here analysing transcriptomic (RNA-seq) data from NESHIE (Neonatal Encephalopathy with Suspected Hypoxic Ischaemic Encephalopathy) samples, using a robust bioinformatics pipeline to extract detailed information that will contribute to understanding the pathophysiology of NESHIE.

Precision and Genomic Medicine Research Unit

Unit director:
Prof. Raj Ramesar
Raj.Ramesar@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Precision and Genomic Medicine Research Unit's emphasis has primarily focused on creating evidence that identify hereditary forms of disease, and their pre-symptomatic management, improves the lives of those at highest risk.

In this regard, the project that leads are the 'genomics of familial colorectal cancers' project, which aims to improve the ascertainment of patients with a familial form of the colorectal cancer (as common as 1/300 individuals), from a background of sporadic colorectal cancers. The use of predictive genetic testing and clinical surveillance has proven to be highly effective in the reduction of morbidity and mortality, with associated socio-economic benefits.

Of particular significance, in maintaining a strong research programme attached to our community work amongst rural populations, is the recognition that adherence to invasive endoscopic (i.e. colonoscopic and gynae) screening is counterproductive. Current research has been based on improving this screening by investigating liquid biopsy (i.e. circulating blood) for genetic signatures as markers of neoplasia in those at highest risk. Current indicators are very promising and have the potential of non-invasive surveillance, as well as remarkably reduced cost of such surveillance.

Key Milestones and Achievements

Development of an AI-based app that is used by all in the team who are involved with diagnosing and managing CRCs to improve the ascertainment of all familial CRCs, since they can be managed successfully in families, to reduce morbidity and mortality.

Additionally, the identification of genetic signatures in circulating blood (liquid biopsy) of presymptomatic disease-causing mutation carriers, promises to replace highly invasive and expensive endoscopic surveillance modalities.

The establishment of a national South African National Cancer Prevention Services (SANCAPS) collaborative that involves a wide range of specialists who are involved in the diagnosis and management of familial colorectal cancers (including The National Cancer Registry within the NHLS, Oncologists, Anatomical Pathologists, Surgeons, Gastroenterologists, Family Physicians and Geneticists) with a vision of ascertaining all likely familial CRCs and managing at-risk families preventatively. Importantly, this is a forerunner or will serve to set a template for a Register and management protocols for all familial cancers (including breast/ovarian, amongst others) attached to the National Cancer Register, but with active engagement with the Provincial Departments of Health to ensure sustainability. Of particular importance, this is leading to bright young clinicians (a Surgeon and an Anatomical Pathologist) at e.g. Inkosi Chief Albert Luthuli Hospital/UKZN to register for PhDs on the genomics of colorectal cancers since they have seen the translatability of this work towards reducing morbidity and mortality amongst their patients.

Building Capacity Through Training, Mentorship, and Support

In this reporting period 2024/2025, we have three PhD and two MSc students who have completed their dissertations, and which are currently under examination. This work in the genomics of CRCs has attracted bright young specialists from other disciplines to gain knowledge from genetics/genomics. An example of this is Dr Alessandro produced several manuscripts some of which have been published and others under review, in addition to his thesis. Importantly, is the recognition of the translatability of our work in terms of being clinically relevant and truly reducing morbidity/mortality due to colorectal cancers. This has garnered the interest of our colleagues at UKZN and its affiliated hospitals, to the extent that we have an Anatomical Pathologist and a Colorectal surgeon, registered at their institution for PhDs, under the co-supervision of the Unit Director. This will be expanded to a number of MMed projects for registrars in e.g. Surgery, Pathology, Oncology, Gastroenterology, and so on, and promises to be a sustainable academic/clinical capacity development enterprise. This 'template' of capacity development is also being engaged within the other provinces e.g. the Northern Cape, Gauteng and Free State, for the moment.

Navigating the Impact of US Executive Orders on Funding

It is affecting one of our larger projects i.e. "Genomics of Schizophrenia in the Xhosa Population" since this is wholly NIH-funded.

Research Translation Through Arts and Science

Our work requires active engagement with the community since much of the recruitment for research, as well as patient management, is done on an outreach basis. This requires us to be fully aware and engaging with the health ecosystem, starting at the community level, and accessing/using resources that exist at every level of healthcare. As part of a successful programme, we engage with community nurses and health care workers, since they have a detailed knowledge of families and family members of all ages. This ensures that all relevant individuals, especially pre-symptomatic but at high risk, are ascertained and linked into our network of genetic counselling, genetic testing and subsequent clinical surveillance.

We are increasingly aware of the district and regional health systems and the different levels of general and specialised care that may be provided through these, as close to our patients/communities as possible. all of this is also possible because we are working closely with the Provincial Department of Health, and the National Cancer Registry in terms of planning a sustainable programme for the prophylactic management of colorectal cancers for the moment, but also the broader range of familial cancers (including hereditary breast/ovarian, amongst others).

Our work has also been published in the popular press, as well as on television (e.g. MNet's Carte Blanche, in the last few years). It is perhaps worth noting that the effort to optimally ascertain and manage all familial cancers will serve as a template for all other conditions with a genetic basis.

Wound Healing and Keloid Scarring Research Unit

Unit director:
Prof. Nonhlanhla P Khumalo
n.khumalo@uct.ac.za

Advancing Research Priorities: Strategic Objectives and Impact

The Wound and Keloid Scarring Translational Research Unit at UCT is pioneering innovative treatments for keloid scarring, a debilitating condition that predominantly affects individuals with pigmented skin. Current therapies are largely ineffective, necessitating targeted, high-impact research to develop precision medicine solutions.

Key Interventions: 3D Keloid Model: Enables high-throughput drug screening for anti-fibrotic therapies; Keloid Fibroblast Cell Line: First-of-its-kind, facilitating genetic and molecular studies on keloid progression; Biomarker & Drug Target Discovery: Proteogenomic studies identified novel diagnostic and therapeutic targets; Indigenous Plant-Based Therapies: Collaborating with UCT's Plant Systems Biology Group to explore bioactive anti-fibrotic compounds; and Translational Research: Bridging laboratory breakthroughs to clinical applications through strategic industry and academic partnerships.

Impact Achieved: New treatment pathways for keloid fibrosis and wound healing; Scientific breakthroughs in dermatology and regenerative medicine; Capacity building, training postgraduates in cutting-edge research methodologies; and Economic & healthcare benefits, with potential therapeutic commercialisation.

This research positions the Unit as a global leader in dermatology innovation, delivering clinically translatable solutions that will improve patient outcomes and reduce healthcare burdens.

The SAMRC Wound Healing and Keloid Translational Research Unit hosts National Diploma in Biotechnology interns for hands-on lab experience at the Hair and Skin Research Lab.

Key Milestones and Achievements

Secured Major Research Grants & Industry Partnerships. The unit secured multi-million-rand funding from industry leaders such as Pierre Fabre, RedX Pharmaceuticals, and Avon to support clinical trials for anti-fibrotic therapies. These partnerships accelerate translational research, ensuring rapid development of novel keloid and wound healing treatments. Breakthrough in Keloid Scarring Research & Patents. The unit established the first keloid fibroblast cell line, enabling high-throughput drug screening and genomic research on fibrosis.

Patents granted or under review: Phenyl-Pyrazolo[3,4-B] Pyridine-4-Carboxylic Acid Derivatives for use as 5-Alpha Reductase Antagonists (Patent: 2218325.5 – Awarded); Human Keloid Fibroblast Cell Line (Patent: 2300611.7 – Pending); and Method and Compounds for Treating Keloids (Patent: 2023902059 – Under Review). These innovations pave the way for targeted, effective treatments and potential commercialisation opportunities.

Capacity-Building & Training Future Experts: Trained 20+ postgraduates and postdoctoral fellows, equipping them with advanced skills in dermatological research; and launched the first SAQA-accredited Advanced Diploma in Cosmetic Formulation Science, an industry-specific skills development programme that preferentially accepts unemployed science-enhancing career pathways in dermatology and cosmetic science. These achievements reinforce the unit's role in scientific innovation, collaborations, and improving dermatological healthcare.

Unit hosts National Diploma in Biotechnology interns for hands-on lab experience at the Hair and Skin Research Lab.

Building Capacity Through Training, Mentorship, and Support

The Research Unit has made significant contributions to research capacity building through structured training, mentorship, and postgraduate development initiatives.

Postgraduate Training & Mentorship: Supervised and mentored over 20 MSc and PhD candidates, with research projects spanning wound healing, fibrosis, and dermatology; Ensured high research output, with multiple publications, international conference presentations, and patent applications; And, Facilitated access to state-of-the-art laboratory infrastructure, equipping students with cutting-edge biomedical research skills, through non-traditional fundraising and contract research strategies.

Postdoctoral Fellowship Support: Hosted postdoctoral researchers, fostering scientific independence and leadership in translational dermatology; and, supported career progression, with fellows securing faculty positions at UCT, Wits, and international institutions. Skills Development & Industry Training: Launched the SAQA-accredited Advanced Diploma in Cosmetic Formulation Science, reached over 100 graduates in 2024; and Industry partnerships enabled hands-on training in clinical trials, bioinformatics, and drug discovery. These initiatives strengthen South Africa's research ecosystem, ensuring a pipeline of highly skilled dermatology and biomedical professionals.

Navigating the Impact of US Executive Orders on Funding

The US Executive Orders on research funding have had both direct and indirect implications for the Wound and Keloid Scarring Translational Research Unit. Reduced Access to US-Based Grants. Restrictions on international research collaborations and funding eligibility have limited access to NIH and other US federal grants, impacting potential financial support for dermatological and fibrosis research.

Shift in Research Partnerships – The unit has diversified its funding sources, strengthening collaborations with European, African, and industry partners to mitigate reliance on US-based funding. Impact on Research Infrastructure & Technology Acquisition. Delays in procurement of research equipment and reagents due to regulatory changes have slowed

project timelines, necessitating alternative sourcing strategies. Despite these challenges, strategic industry collaborations and non-US funding streams will sustain the unit's research momentum, ensuring continued scientific progress and innovation.

Research Translation Through Arts and Science

The Research Unit integrates hands-on training, patient-centred engagement, and knowledge translation to maximise research impact while fostering career development and public awareness.

Human Participant Research & Ethical Engagement – Our research involves human participants, addressing real-world dermatological challenges with strict ethical protocols and informed consent to ensure trust and transparency.

In-Service Training & Career Development – Cosmetic Diploma is a blended programme where BSc graduates spend 10 weeks at UCT and undergo an 8-months in-service in R&D labs of cosmetic companies for hands-on industry experience while completing modules online. To date >90% of previously unemployed scientists secure positions within the first few months of graduating. Many graduates transition into industry roles, strengthening South Africa's scientific workforce and at handful have moved to universities in the UK and the US.

Knowledge Translation & Public Engagement -Research findings are shared via health brochures, social media, and clinician-guided discussions for community impact.

Attiya Setai and other 2025 graduate at the Symrise AG Perfumery School in Holzminden Germany.

Attiya Lebogang Setai, grew up in the Vaal Triangle. After completing her BSc in Biochemistry, it was difficult to find employment. She applied and completed the Advanced Diploma in Cosmetic Formulation Science at the Hair and Skin Research Lab, at UCT in 2021. This July, she completed the three-year programme at the world renown Symrise AG Perfumery School, in Holzminden, Germany. Attiya is the first South African to achieve this accolade. She acknowledges the Formulations training team at UCT for preparing her for this once in lifetime opportunity.

FUNDING HEALTH INNOVATION

Grants Innovation and Product Development

The Grants Innovation and Product Development (GIPD) Unit of the SAMRC fulfils two of the core functions of the organisation, namely, to support research and innovation through a variety of grant mechanisms, strategic partnerships, strategic programs and innovation initiatives. These enable the SAMRC to support and build the health research and innovation ecosystem in South Africa, drive cutting edge scientific advancement and facilitate the development and testing of novel health solutions. The total spend on research and innovation grants during the 2024/25 financial year was R185,680,758. GIPD's robust grant management standard operating procedures ensure that health research funding is effectively and efficiently administered by the SAMRC and, together with successive clean audits, have contributed to attracting substantial funding from a variety of local and international funders. Strategic funding partnerships established in the previous financial year are enabling the SAMRC to support an expanded portfolio of research and innovation grants as well as R&D and manufacturing infrastructure and have contributed to the SAMRC again exceeding its targets for indicators 2.3.1, 3.1.1 and 3.1.2. The strategic projects, programs and innovation initiatives managed by GIPD during 2024/25 are depicted on the next page.

GIPD Programme and Strategic Project Updates

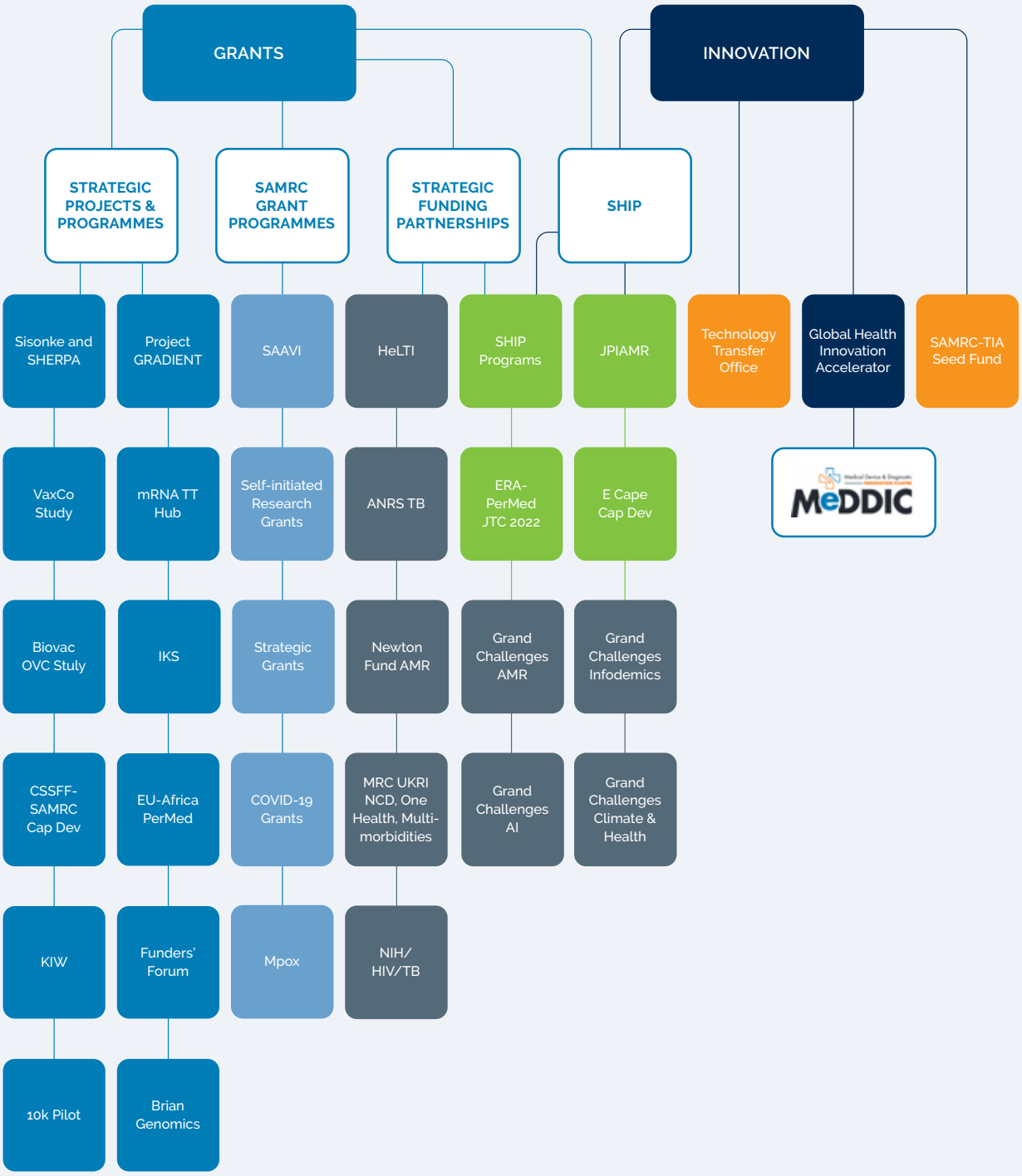
Strategic Health Innovation Partnerships (SHIP)

SHIP was established by the SAMRC and the Department of Science Technology and Innovation (DSTI) in 2013 to facilitate and support health innovation to address national priorities and enable the national system of innovation in a coordinated manner. SHIP is one of the key programs through which the SAMRC supports innovation and technology projects aimed at developing, testing and/or implementing new or improved health solutions for HIV, malaria, TB, Non-communicable Diseases (NCD), Anti-microbial Resistance (AMR), Maternal and Child Health (MCH), and COVID-19.

Some key highlights in 2024/25 include:

- Over 30 postgraduate students have been supported through SHIP-funded projects. Several of these students are receiving drug discovery and development training through a capacity development and transformation initiative funded by SHIP and supported by the UCT H3D team at the University of Limpopo (Prof W Nxumalo) and University of Venda (Prof I Ramaite).
- The UCT H3D team, led by Prof K Chibale, has developed a late lead compound with very good in vitro and in vivo anti-M. tuberculosis activity and safety profile. This has led to a collaborative effort with the Gates Medical Research Institute to advance this candidate toward preclinical candidate development. This new compound would represent a significant contribution towards the global fight against TB, particularly addressing the need for new drugs to respond to the resistance of the pathogen to existing drugs.
- Dr G Munhenga's team at the NICD has made significant strides in optimizing mass-rearing and transportation of sterilized male mosquitoes, resulting in over 230 000 sterile mosquitoes released in a small-scale field trial in KwaZulu-Natal. This was preceded by extensive community engagement which resulted in the community embracing the project and improved general health-seeking behaviour by the population. Early entomological results demonstrate that the released sterile mosquitoes were able to compete against wild-type mosquitoes, and induced sterility in the wild-type population, resulting in a decline in the density of the Anopheles arabiensis population. This is the first demonstration of the success of the sterile insect technique in an African mosquito vector.

With the renewed commitment of funds for SHIP from the DSTI, the SHIP team successfully hosted priority-setting meetings to engage key stakeholders to inform the SHIP and SAMRC funding strategy for the next 5 – 10 years. A priority-setting meeting held in July 2024 focused on HIV, NCD and Precision Medicine, AMR, Digital Health, Mental Health, and Maternal, Neonatal and Child Health. The meeting received excellent support from the National



Overview of the grant and innovation programmes and strategic projects managed by the Grants Innovation and Product Development unit.

Department of Health, led by the DDG, Dr A Pillay, and representatives from each of the thematic areas. A follow up priority setting exercise on HIV was held in January 2025 with the research community and culminated in a request for applications aimed at new HIV-specific product development investments from 2025.

Precision Medicine is a key priority within the SHIP programme that is being advanced through a portfolio of funded projects focused on pharmacogenomics and precision medicine for various cancers and cardiometabolic diseases and is a key example of the application of 5IR to healthcare. In the past year the pharmacogenomics portfolio was evaluated by an expert panel to assess progress, determine the next steps for each project and identify opportunities for further product development. Two projects subsequently received follow on funding for product development of pharmacogenomics solutions in hypertension and breast cancer diagnostics.

An important highlight was progression of planning for the South African 110K Human Genome Programme (SA110K HGP). A workshop in 2024 brought together key stakeholders from research institutions, government agencies, and industry partners to discuss how to advance genomic research and precision medicine in South Africa. The first engagements of the consortium commenced from May 2024 and a proposal was submitted and approved in September 2024 for funding towards the pilot (10k) phase of the SA Human Genome programme. The programme focuses on creating a unified ecosystem, garnering the participation of all national role players to implement a pilot phase and set up a national centralized data repository. An assessment of infrastructure and technology needs, including cyber infrastructure solutions for secure data storage and analysis was completed. The programme will use shared best practices and collaboration models for efficient genomic research workflows to adapt and standardize sequencing workflows across decentralized laboratory operations. Partnerships are being established with industry leaders such as Illumina, MGI, and Oxford Nanopore to foster knowledge exchange, technology transfer, and capacity building.

The South African 110K Human Genome Programme Consortium met with industry partners to share the proposed operational approach to this national effort.

The SAMRC President and CEO and the GIPD Precision Medicine Programme Manager, co-developed and participated in several core plenaries at the Science Summit of the United Nations General Assembly UNGA79 which took place in New York, USA, in September 2024. Presentations from the SAMRC included:

- The role of African science leadership to advance sustainable development in Africa
- How Science and AI can be used to enable Black economic development globally
- A ONE HEALTH Plenary with a progressive discussion on the nexus of climate change and health to address non-communicable diseases and outlining a model to develop Personalised Medicine for low- and middle-income countries
- Round table discussion on the UN AI Report featuring Governing AI for Humanity: The Implication for Health Research
- Advancing Health Outcomes in Africa: Implementing Genomics and Health Security in Africa
- A roundtable on "Certifying Primary Maternal Health Clinicians in Point-of-Care Ultrasound (POCUS) to Reduce Maternal Mortality by 2030."

The SAMRC President & CEO and SAMRC Senior Programme Manager for Precision Medicine presented in-person at several sessions at the Science Summit of the UNGA79 in September 2024.

The EU-Africa PerMed Consortium: Building links between Africa and Europe in Personalised Medicine (PM). Partners engaged in the 3rd Stakeholder Workshop in Dakar Senegal in June 2024. The outcome of the workshop was the validation of a PM Action Plan and the Launch of the Dakar Declaration to advance the policy agenda in developing the field of PM on the African Continent. The SAMRC Programme manager and project coordinator in precision medicine participated in this large African-European stakeholder event.

The Europe-Africa Personalised Medicine EU-Africa PerMed Consortium

The EU-Africa PerMed is a Coordination Support Action Project, funded by the European Commission Horizon 2020 programme, with the aim to foster research and innovation collaboration and knowledge exchange between Africa and Europe in personalised medicine (PM). It comprises of 13 partners from Africa and Europe. In the final year of the project the consortium focused on building regional networks within Africa, analysing the personalised medicine landscape, driving the policy dialogue – launching the Dakar declaration and developing an action plan to enhance the field on the continent.

The project has given rise to policy briefs and numerous reports enabling an African-centric approach to developing PM on the continent. The EU Africa PerMed Team hosted a side meeting alongside the European Partnerships in Personalised Medicine (EP-PerMed) Annual General Meeting in January 2025. The SAMRC President and CEO, the Department of Science, Technology and Innovation representative from the South African mission in Brussels and SAMRC lead EU-Africa PerMed Programme Manager participated in this high-level side meeting and presented the Action Plan to the European Commission and member states of the EP-PerMed consortium.

The SAMRC President & CEO and SAMRC Senior Programme Manager participated in the handing over of the EU-Africa PerMed Action Plan to the European Commission, EP-PerMed Members and ICPerMed Board.

International Consortium for Personalised Medicine (ICPerMed)

The SAMRC, as a member of the International Consortium for Personalised Medicine (ICPerMed), has taken a leadership position with the SAMRC Programme Manager for Precision Medicine, a member of the Executive Committee of ICPerMed, being elected as Vice Chair of the ICPerMed consortium in July 2024. The consortium includes participation in the largest funding partnership in PM, the European Partnership in Personalized Medicine (EP-PerMed). The Programme Manager joined the SAMRC President and CEO and DSTI Senior International Relations Officer to the SA mission in Brussels at the first EP-PerMed Annual General Meeting in Brussels in January 2024. The SAMRC also participated as an invited funder to

The SAMRC President and CEO, and SAMRC Programme Manager & Vice Chair of ICPerMed at the Annual General Meeting of EP-PerMed in January 2025.

Director General Mr Marc Lamaitre of the European Commission for Research and Innovation, on his first visit to South Africa in November 2024. The SAMRC Senior Programme Manager for Precision Medicine participated. The discussions were focused on potential SAMRC collaboration under the AU-EU research and innovation agenda.

join the second EP PerMed joint transnational call (JTC) 2025 in Pharmacogenomics. The call was launched in December 2024 and awards will be made in late 2025.

Access to the ICPerMed network has fostered stronger relationships with the EU to support South Africa in developing Personalised Medicine. In November 2024, Director General Mr Marc Lemaitre, European Union's DG for Research Innovation and Technology Development, Minister Councilor uiz Laurent Boucherau and EU Mission ambassador Dr Pencho Garrido Ruiz as well as Vincenzo Larusso and Lekovi Seke of the African Union hosted a high-level discussion on the EU-AU Research and Innovation Agenda to build closer collaborations with the SAMRC and South Africa in health research.

In the next financial year, the SAMRC, through SHIP and other programmes, will focus on rendering the National Genomics Programme operational and establishing scaled next-generation sequencing technologies and big data capability to better understand the link between genetics and health in African populations. This will be used to develop more appropriate and relevant health solutions and to enable translational medicine.

Grand Challenges South Africa programme

The SAMRC, through GIPD, has been running the Grand Challenges South Africa (GCSA) programme since 2014/15. This programme has been predominantly co-funded by the Bill and Melinda Gates Foundation (BMGF) and forms part of the global Grand Challenges partner network. During 2023/24, the SAMRC participated in a global Grand Challenges request for proposals to source projects aimed at leveraging artificial intelligence (AI) to improve access to and the delivery of healthcare, and a portfolio of 10 projects was selected for support with a combination of funds from the DSTI (through SHIP), the SAMRC (baseline and SAAVI), and the BMGF. During 2024/25, an additional project focused on using AI to improve sexual and reproductive health outcomes for young women and adolescent girls was incorporated into SHIP's MNCH programme. It is noteworthy that, having received a total of 28 applications with a 50/50 split between male and female applicants, 7 of the 11 awarded projects were led by females. After the resignation of one of the PIs from the host institution, 8 of the 11 projects are now led by females.

During 2024/25, GCSA continued to manage a portfolio of 4 climate and health projects co-funded by Grand Challenges Canada. These projects address a wide variety of topics including development and testing of a next generation mosquito net for control of insecticide-resistant mosquitoes, educating youth at schools about the health impacts of climate and health and co-creating interventions to enable the youth to contribute towards the development of new solutions, creation of advanced warning systems for new malaria threats arising due to climate change, as well as the potential impact of climate change on exposure to air pollutants and

biological allergens, and thus health. This financial year also saw the initiation of 4 grants in the area of infodemics, funded by the BMGF through GCSA. The projects include establishment of an interactive user-friendly interface for visualization and analysis of national disease outbreak and surveillance data, a Measles and Rubella Risk Communication Platform, the expansion of the Public Health Bulletin South Africa to link surveillance data to policy and decision making and linking research data for decision making and combatting misinformation through innovative communication approaches.

During the week of 9 – 13 September 2024, a team from GIPD participated in the Grand Challenges Strategy and Coordination meeting in Tanzania. This is an annual meeting at which the Grand Challenges partners review current programmes and seek to align strategies for the following one to three years. As a result of this meeting, the partners established working groups and are exploring opportunities to raise funds and close gaps in several priority areas, including MNCH; climate and health; genetics and genomics; procurement and supply chain innovation in Africa; and AMR. The SAMRC has been chosen to host the 2025 meeting, which is planned to coincide with the African Health Research and Innovation Funders Forum.

During this period, the Grand Challenges Programme Manager, Zoleka Ngcete, was invited to participate in the Grand Challenges Africa Steering Committee meeting to provide input into the new strategy of the host organization, the Science For Africa (SFA) Foundation.

Grand challenges Strategy and Coordination meeting participants.

GCA Steering Committee with representatives from the Science for Africa Foundation, Grand Challenges partners (GC South Africa, GC Canada, GC Brazil, GC India, BMGF) and other SFA funders (Foundation S and Wellcome).

The Newton Fund and International Science Partnerships Fund (ISPF)

The SAMRC-Newton Fund programmes are the result of a co-funding initiative with the UKRI MRC, established in 2015, that support South African projects that respond to national health priorities while simultaneously contributing to global health advancement for social, economic and health impact. Since 2015, this partnership has funded several programmes focusing on the following areas: Translation Research in Non-communicable Diseases, Mental Health in South Africa, Tuberculosis Implementation Science, and AMR Drug Discovery and Antibiotic Accelerator, supporting a total of 21 projects across 12 institutions. While most of these projects have now come to an end, in 2024, a call was launched to fund additional projects in AMR to either expand on the existing AMR drug discovery projects, collaborate with the AMR principal investigators, or propose projects that expand the existing UK-South Africa Antimicrobial Resistance Drug Discovery Partnership Hub by undertaking drug discovery to address AMR using alternative sources of compounds/ antimicrobials and/or novel assays and/or targeting other pathogens of high relevance in the South African setting. Awards for this request for applications (RFA) will be made in 2025.

The SAMRC has extended its collaboration with the UK through a new partnership with the MRC UKRI under the umbrella of the UK's International Science Partnerships Fund (ISPF) to address African health challenges. In February 2024, three new RFAs were released seeking innovative proposals on non-communicable diseases; co-morbidity or multimorbidity of infectious diseases and non-communicable diseases; and One Health, climate and health. The aim is to support research that further improves our understanding of disease mechanisms, presentation and progression and informs innovative prevention and treatment strategies that are likely to be efficacious, cost-effective, affordable, potentially sustainable, and acceptable to the key stakeholders in Africa. The programme also aims to support collaboration between researchers in South Africa and the UK as well as scientists from other African countries and to strengthen research capacity by supporting training and mentoring of the next generation of researchers, with a focus on those from previously disadvantaged ethnic groups and institutions. Thirteen new awards were made under this programme in 2024, with four in NCDs, three in multimorbidity and six in One Health. The 10 female and 3 male PIs are from Rhodes University, Stellenbosch University, University of Pretoria, University of the Free State, University of the Witwatersrand, SAMRC, the Council for Scientific and Industrial Research (CSIR) and the National Institute for Communicable Diseases (NICD).

US-South Africa Programme for Collaborative Biomedical Research

The US-South Africa Programme for Collaborative Biomedical Research was established through a Memorandum of Understanding between the SAMRC and the US National Institutes of Health (NIH) in 2013 with the intent to establish or expand long-term relations between scientists from South Africa and the United States in order to perform high-quality biomedical and behavioural research leading to scientific discovery, as well as to foster the expansion of health research skills among programme participants, with a particular focus on the transformational agenda in South Africa. Phase 1 of the collaborative programme ran from 2014 – 2019 and supported a total of 34 awards to SA-US collaborative research projects on tuberculosis, HIV/AIDS, and HIV/AIDS-associated malignancies. Phase 2 ran from 2019/20 and supported 18 awards, most of which are now complete or coming to an end. A number of publications had resulted from phase 2 of this programme by the end of the 4th year, with PhD/ Post-docs/students being trained.

Phase 3 of the collaborative programme is now underway with planned contributions of around $1M and $2.8M per annum from the SAMRC and NIH, respectively. The parties collaborated to develop and release the Notice of Funding Opportunity (NOFO) on 17 September 2024, with closing date 12 March 2025. Research areas to be supported under this programme include HIV/AIDS, HIV/AIDS co-morbidities and co-infections, HIV/AIDS-associated implementation science, and HIV/AIDS-associated data science. As with the other phases, the intent of this NOFO is to foster, stimulate, and/or expand basic, translational, behavioural and applied research that will advance scientific discovery and engage US and South African researchers working collaboratively in the priority areas. The collaborating NIH Institutes in this third phase of the programme include the National Institute of Allergy and Infectious Diseases (NIAID), National Cancer Institute (NCI), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Eunice Kennedy Shriver National Institute of Child

Health and Human Development (NICHD), National Institute of Mental Health (NIMH) and the Office of AIDS Research (OAR). It is anticipated that awards will be made towards the end of 2025.

The SAMRC hosted a symposium in January 2025 to showcase the projects from phase 2. Unfortunately, two grant writing workshops planned around the symposium could not proceed due to travel restrictions.

SAMRC-ANRS Partnership to Support Tuberculosis Research

Another new partnership approved in 2023/24 was one with the ANRS-MIE (Agence Nationale du Recherche du SIDA, Maladies Infectieuses Emergentes) in France, to support TB research. ANRS is the principal French Government Infectious Diseases Research Agency and is the main funder of infectious diseases research in francophone Africa. As a means to extend this support to anglophone Africa and to encourage collaboration between researchers from France and South Africa, ANRS-MIE committed up to €2 million over three years to jointly support research in South Africa and France with a contribution from the SAMRC of up to R19.5 million. The call for proposals for this partnership was launched in August 2024, inviting applications from collaborative teams of South African and French researchers in a variety of TB priority areas. The initiative received 20 applications, spanning research and innovation across the TB disease spectrum. Following a rigorous peer review and evaluation process, five projects focused on cutting-edge research on mRNA vaccine strategies; AI-powered assessment of pulmonary and subclinical TB; individualised therapy approaches; innovative screening techniques; and cost-effective case-finding approaches were selected for funding.

Mpox Programme

In April 2024, the Republic of the Congo declared a Clade I Mpox outbreak. Subsequently, on August 13, 2024, Dr. Jean Kaseya, the Director-General of the Africa Centres for Disease Control and Prevention (Africa CDC), declared Mpox a public health emergency of continental security. This declaration stressed the urgency for rapid and decisive global action to contain and eliminate the threat of the disease. On August 14, 2024, Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization (WHO), confirmed the situation as a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations. This global alert emphasized the need for international collaboration and innovative solutions to tackle the disease.

While South Africa has reported relatively few Mpox cases, there were notable concerns linked to the higher morbidity and mortality rates in individuals with HIV disease. This subset of patients experienced severe disease, resulting in increased hospitalizations and, tragically, three reported deaths. These cases underscored the need for focused research to understand the relationship between Mpox and HIV, as well as to develop strategies for prevention, treatment, and surveillance. As a result, the SAMRC, in collaboration with the DSTI through the SHIP programme, launched an RFA to support research on Mpox. After a rigorous peer review process, 6 proposals were selected for funding, with two focusing on vaccine development, one on monoclonal antibodies as a therapeutic, two on diagnostics and one on surveillance. The research and innovation projects funded through this initiative are aimed at providing tools to monitor the prevalence of, diagnose, prevent and treat Mpox to enable South Africa and the continent to prepare for a potential future Mpox emergency.

Project Africa GRADIENT (Genomic Research Approach for Diversity and Optimising Therapeutics)

The Project Africa GRADIENT programme is an innovative funding initiative established through a collaboration between GlaxoSmithKline R&D Ltd (GSK) and Novartis SA (Pty) Ltd and is administered by the SAMRC's GIPD unit. The core focus of this programme is to explore the role of genetic diversity in African populations and how it contributes to variability in drug exposure, efficacy, and safety, particularly for the treatment of TB and malaria. These two diseases remain major health concerns in Africa, and understanding genetic factors that influence treatment outcomes is critical for developing more effective, personalized therapies.

In 2022, the GRADIENT programme awarded funding to nine research projects, all of which are set to conclude by August 2025. Since its launch in 2022, the programme has made considerable strides in both scientific discovery and academic development. To date, the programme has resulted in several peer-reviewed publications that contribute valuable knowledge to the global health community. Additionally, the programme has provided critical

educational opportunities, benefiting a total of 10 PhD students and 8 MSc students, who are gaining essential skills and experience in this cutting-edge area of research.

The GRADIENT programme will culminate with a final investigators' meeting, which is scheduled to take place in April 2025 at the SAMRC. This meeting aims to bring together researchers, stakeholders, and collaborators to review and discuss the outcomes of the various projects funded by the programme. It also offers a platform to further strengthen and enhance partnerships, share research findings, and explore the future directions of genetic diversity research in relation to TB and malaria treatment in African populations. The event represents a key milestone in the programme, marking its ongoing impact and the collaborative efforts that have shaped its success.

Healthy Life Trajectories Initiative (HeLTI)

The Healthy Life Trajectories Initiative (HeLTI) is intended to be a long-term collaborative programme between national research funding agencies in Canada, China, India, South Africa and the WHO that involves linked international intervention cohorts implementing and testing approaches to prevent overweight and obesity in children and risk factors for NCDs and improve early childhood development. The goal of HeLTI is to generate evidence that will inform national policy and decision-making in these areas. The SAMRC is supporting participation of South Africa in HeLTI through the BUilding Knowledge and a foundation for HeALthy lIfe trajectories: BUKHALI Trial led by the University of the Witwatersrand. Bukhali is a randomised controlled trial to test the efficacy of a complex continuum of care intervention. Starting preconception and continuing through pregnancy, infancy and childhood, the intervention is designed to improve nutrition, physical and mental health, and health behaviours of South African women to offset obesity-risk (adiposity) in their offspring.

The project completed its 8th year in 2024/25. Over 6,000 women aged 18-28 years have been recruited from Soweto and baseline data collected. The preconception phase of the trial was completed in December 2024 and the main trial paper from this phase is in progress. The pregnancy and early childhood phases are in progress. The primary outcome of the study is dual-energy x-ray absorptiometry derived fat mass index in the offspring at age 5-years. Community health workers are delivering the intervention randomly to half the cohort by providing health literacy material, dispensing a multi-micronutrient supplement, providing health services and feedback, and facilitating behaviour change support sessions to optimise nutrition, physical and mental health, and lay the foundations for healthier pregnancies and early child development.

The programme included a comprehensive formative phase and involves a number of supplementary studies, including 6 projects funded by the SAMRC through an RFA. Besides substantial informative data collected and substantial number of publications to date, the project has been extremely successful in capacity development of young researchers. The project includes 13 postdoctoral fellows and 9 postgraduate students (4 of whom have graduated).

Following a meeting with the HeLTI investigators and the Minister of Health and WHO Director General in April 2023, a workshop took place in May 2024 at the WHO in Geneva to inform guideline development for preconception care. This coincided with the 9th annual meeting of the HeLTI Council. A further highlight in 2024/25 was a HeLTI Symposium held in September 2024 at the SAMRC in Pretoria where the team presented the baseline data collected and initial analyses highlighting the health burden already evident in young women and factors attributing to the risk of these health burdens to the Deputy Minister of Health, Dr Joe Phaahla, and colleagues from both the National and Provincial Departments of Health.

Lead researchers from the HeLTI Study, the Deputy Minister of Health and representatives from the WHO and the SAMRC gathered at the SAMRC Pretoria Office on 16 September 2024 for the HeLTI Symposium.

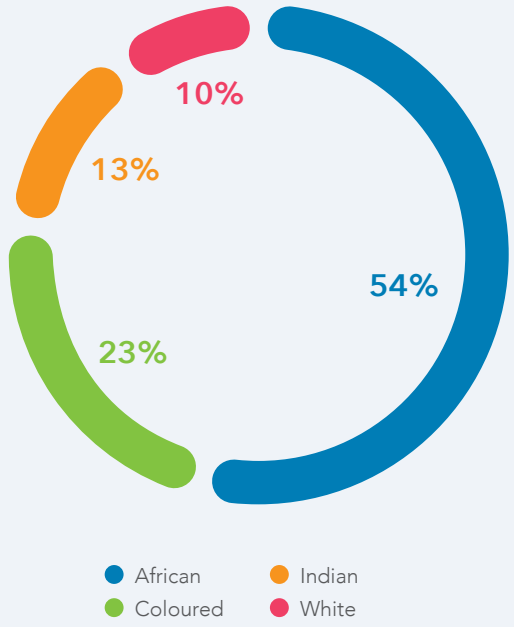
Self-Initiated Research Grants

The Self-Initiated Research (SIR) programme offers grants of up to R200,000 per annum for a period of 3 years to early and mid-career researchers across various health disciplines and priority areas. In the 2024/25 financial year, more than 100 grants were included in the SIR portfolio. The distribution of these grants by ethnic group, gender, and institution is shown in the figures below. The application of a transformation matrix has led to a significant year-on-year increase in awards to black applicants, with the proportion of awards to black applicants rising from 27% in 2012/13 to 89% in 2024/25.

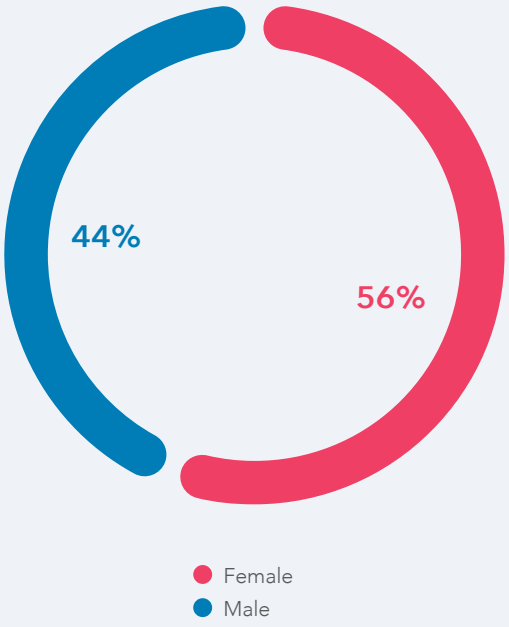
The portfolio is split between early-career scientists and mid-career to established researchers, with 42% of the grants awarded to early-career researchers and 58% to mid-career and established researchers. The SAMRC has actively worked towards increasing the number of grants awarded to early-career researchers, reflecting a significant effort to support the development of emerging scientists.

A new request for applications for SIR grants was issued in July 2024, with a closing date for submissions at the end of August 2024. Proposals were invited in 10 research priority areas: Health Economics and NHI; Brain, Behaviour, and Mental Health; Disease Prevention and Health Promotion; HIV and TB; Maternal, Infant, and Child Health; Non-Communicable Diseases; Other Infectious Diseases, including Antimicrobial Resistance (AMR) and One Health; Vaccines, Diagnostics, and Drug Discovery (including African Traditional Medicines); Behavioural Science in relation to the uptake and use of health interventions; and Climate Change, Environmental Health, and Occupational Health. The online Research and Innovation Management System (RIMS) was used for the first time for this call. Online information sessions with prospective applicants were held prior to the submission date. Despite applicants' unfamiliarity with the system, we received 253 eligible applications. These applications are currently being peer-reviewed by national and international reviewers, and approximately 40-50 awards will be made for the 2025/26 financial year.

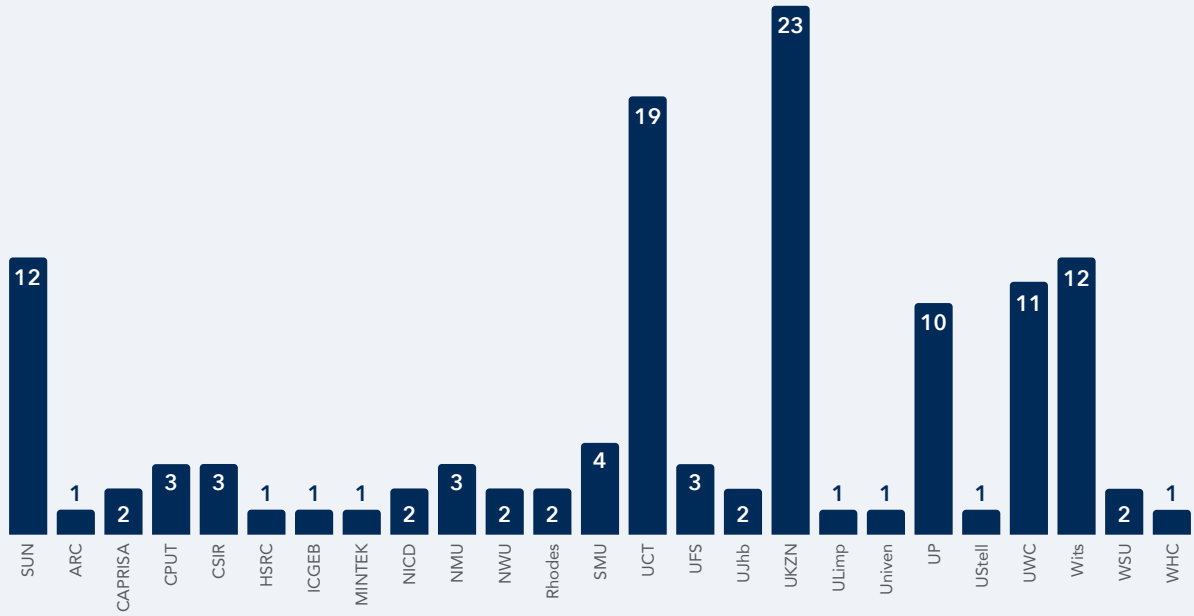
2024/25 SIR Grant Portfolio by Race



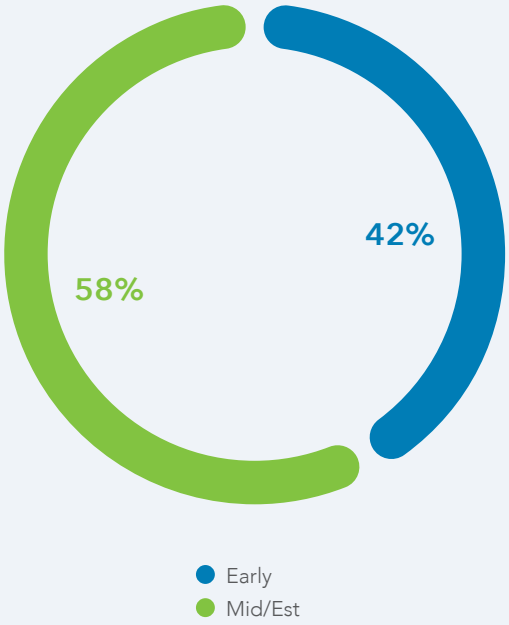
2024/25 SIR Grant Portfolio by Gender



2024/25 SIR Grant Portfolio by Institution



2024/25 SIR Grant Portfolio by researcher category



Supporting a Vaccine Development Ecosystem

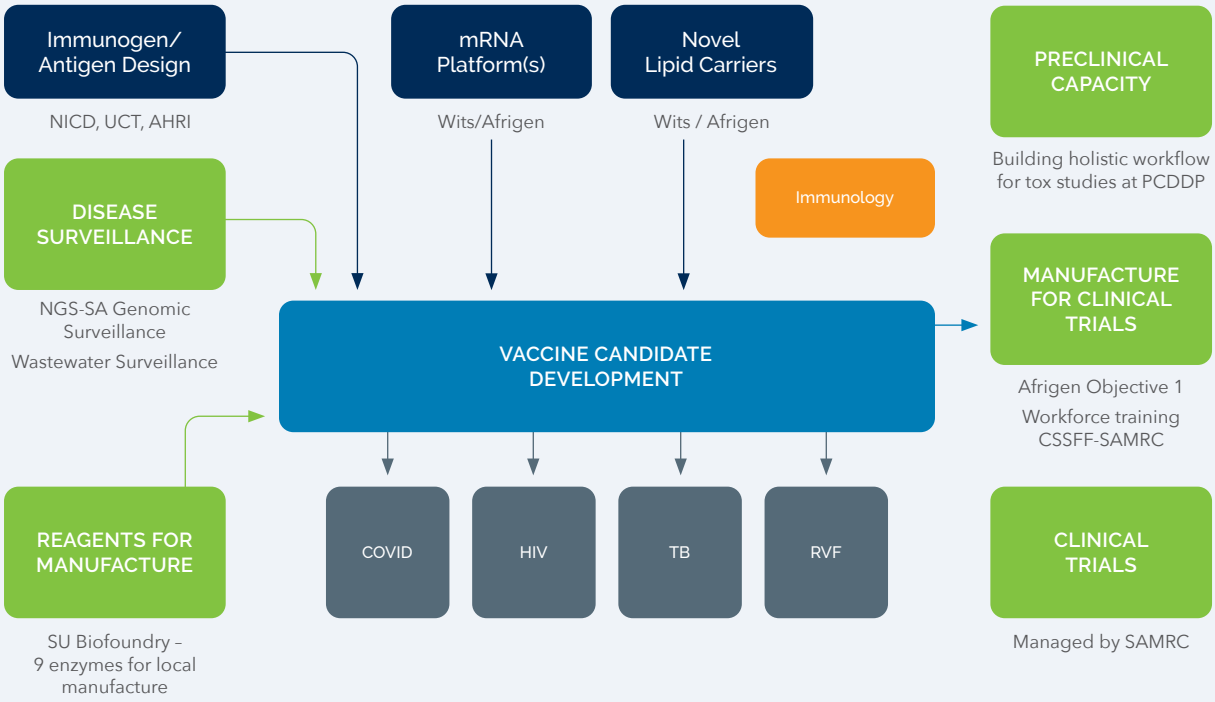
mRNA Technology Transfer Hub

mRNA Hub partners and supporters

mRNA Hub funders

The mRNA Technology Transfer Programme is a global initiative established by the WHO in partnership with the Medicines Patent Pool (MPP) that aims to improve health and health security by establishing sustainable, locally owned mRNA manufacturing capabilities in and for low- and middle-income countries (LMICs) to enable a more equitable response to future pandemics. The South Africa-based hub comprises of Afrigen Biologics, the SAMRC and Biovac, a South African vaccine producer and manufacturing partner in the LMIC network. Within this consortium, Afrigen is the entity mandated to establish mRNA vaccine production technology and to transfer this technology to other LMIC partners, whilst the SAMRC is coordinating an mRNA vaccine research and development programme to contribute to sustainability of the hub.

The SAMRC established the South African mRNA Vaccine Consortium (SAMVAC) in 2022 to drive the research, development and testing of mRNA vaccine candidates, focusing on the priority diseases of South-Africa and Africa. SAMVAC comprises of 10 consortium members, including the University of the Witwatersrand (Wits), Wits Health Consortium (WHC), the University of Cape Town (UCT), the African Health Research Institute (AHRI), the University of Stellenbosch (SU), North-West University (NWU), the National Institute for Communicable Diseases (NICD), the SAMRC, the CSIR and Afrigen Biologics. Each consortium member plays a role in fulfilling the product development value chain and a key goal has been to fill any existing gaps and ensure that South Africa has the capability to take an mRNA vaccine candidate all the way through the product development process from identification of



Key Components of the SAMRC-led Objective 3 Programme

the immunogens to first in human studies. The key components of the programme are depicted in the above figure.

Substantial progress has been made to date on the SAMVAC programmes including the following:

- Wits has developed a novel mRNA backbone and demonstrated proof of concept (in vivo expression of the antigens and elicitation of an immune response) with COVID, HIV and TB immunogens.
- A series of mRNA candidates encoding several Mycobacterium tuberculosis antigens have been developed and tested for immunogenicity and 2 candidates have been down selected for further testing and manufacturing process development. Positive results were obtained in a TB challenge study.
- A series of mRNA candidates encoding HIV envelope antigens from locally derived and well characterised strains have been developed and tested for immunogenicity. Further candidates are in development and will be tested in various prime-boost regimens.
- Afrigen has progressed the development of a vaccine candidate for Rift Valley Fever with seed funding provided by the ELMA Vaccines and Immunization Foundation via the SAMRC mRNA Hub Programme. This has led to the award of funding from CEPI for preclinical development and phase 1 trials.
- Wits has developed a series of novel ionizable lipids from natural waste products and demonstrated that these form lipid nanoparticles and encapsulate and deliver mRNA efficiently.
- UCT has identified areas for improvement throughout the mRNA production process.
- NWU has established and tested in a pilot study on the Afrigen COVID vaccine a framework for a virtual workflow for preclinical toxicity testing.
- SU has established strains for the production of recombinant enzymes required for mRNA production. These are being scaled at the CSIR and Fluorobiotech.
- CERI and the SAMRC's wastewater programme continue to monitor pathogens of concern.

On 30 July 2024, the SAMRC hosted the 2nd SAMVAC Strategic Committee Meeting where the various sub-programmes were discussed. An integrated product development plan is in development for the

TB and HIV vaccine programmes and the novel lipid programme. In November 2024, the WHO hosted a mRNA Technology Transfer Programme: Innovation at the Forefront meeting which brought together all partners from across the world to share project and programme progress. This was followed in March 2025 by a meeting in Geneva convened by WHO and MPP to discuss and coordinate the regional R&D consortia.

SAMRC President and CEO, Prof Ntobeko Ntusi, and GIPD Executive Director, Dr. Michelle Mulder, at the mRNA Technology Transfer Summit held in Cape Town in November 2024.

Afrigen hosting Marc Lemaitre, Director General for Research and Innovation at the European Commission to discuss aspects of the mRNA Technology Transfer Programme progress and a tour of the Afrigen facility. Joining the meeting were representatives from SAMRC, DSTI, EDCTP and MPP (25 November 2024).

Chan Soon-Shiong Family Foundation (CSSFF)-SAMRC Biomanufacturing Capacity Development Programme

The SAMRC commenced a collaboration with the Chan Soon-Shiong Family Foundation (CSSFF) on a Biomanufacturing Capacity Development Programme during 2022/23. The collaboration is funded by a R100 million donation from the CSSFF and a R12 million contribution from the SAMRC. The programme supports studentships, internships and scholarships. The studentships involve providing technical training to graduates to equip them to work in a commercial biomanufacturing environment, including training in laboratory science, process engineering, quality assurance and scientific and research processes, such as experimental design and scientific writing. The training is delivered by the SAMRC's Biomedical Research and Innovation Platform (BRIP), UCT and SU. Promising candidates who complete these studentships are offered industry internships or opportunities for postgraduate studies upon completion of their training. The first cohort of 15 trainees commenced their training in February 2023 and the second cohort of 11 started training in July 2023. The SAMRC offered internships to 4 students from cohort 1 who were trainers of cohort 3 in 2024 with 22 graduates commencing their training in February 2024. In 2024, 5 trainees were offered internships at BRIP. In February 2025, 20 graduates were enrolled in cohort 4 of the studentships. For cohorts 1 and 2, 65% received placements in industry and 10% in academic institutions and for cohort 3, 70% received placements in industry and 7% in academia. The feedback from industry hosts has been extremely positive with the trainees being better skilled for employability. The programme duration has been extended to 10 months to include longer placement in industry and the number of industry partners has increased.

The CSIR leads an initiative to establish a WHO Southern African Biomanufacturing Training Centre. In January 2025, a WHO panel conducted a site visit and engaged the CSIR and its partners, which included the SAMRC, Biovac, Afrigen, UVUBio and UCT Centre for Bioprocessing Engineering Research (CeBER) for the proposed WHO regional centre in South Africa. The CSSFF-SAMRC studentship training programme was presented.

Studentships cohort in 2025.

SAHPRA interns.

In 2024, two new internship programmes were launched. At the CSIR, two mechanical engineering graduates were placed as interns to gain hands-on experience, and subsequently both were offered employment during their internship. Six interns were also placed at SAHPRA to gain experience in regulatory affairs, quality assurance and clinical evaluation.

The programme further includes scholarships for masters and doctoral degrees. A total of 14 candidates (7 MSc and 7 PhD), selected through an open competitive RFA, are being funded from the first round to complete their studies, focusing on a variety of vaccine-related topics with the aim of building the next generation of vaccinology researchers. From this cohort, 8 candidates are anticipated to graduate in 2025 – 2 PhD and 6 MSc candidates. Some of the conferences where the candidates presented include the World Conference on Lung Health, Human Frontier Science Programme, Virology Africa, European Rotavirus Biology Meeting and the South African Society for Biochemistry and Molecular Biology Congress. In early 2025, another 11 scholarships (6 PhD and 5 MSc) were awarded.

In 2024, four candidates were awarded scholarships to study for an MSc in Pharmacy Administration and Policy Regulation at UWC. This is a two-year course with theoretical modules followed by a dissertation. The master's programme provides regulators and those working in the regulatory departments of pharmaceutical companies with the skills to lead the development, licensing, and ongoing pharmacovigilance of drugs in their countries.

A scholarship awardee at the European Rotavirus Biology Meeting.

NMU medical scholars supported through the CSSFF-SAMRC programme.

Finally, the programme includes scholarships for medical students at Nelson Mandela University to complete their medical training. The first cohort of 6 medical students was funded starting in 2023 and a second cohort of 11 students was awarded from 2024 and will be supported for the duration of their studies.

With the above-mentioned initiatives, the CSSFF-SAMRC capacity development programme is growing the next generation of vaccine professionals, researchers, and technical experts, building much needed capacity and infrastructure, and establishing a network through which vaccine R&D and innovation can be nurtured and thrive. Ultimately, this is aimed at growing the industry, contributing to the economy and ensuring that LMICs, including South Africa, are prepared to rapidly respond to the next pandemic. The overwhelming majority of recipients of the CSSFF-SAMRC awards are graduates from HDIs as the programme targets and focuses on realizing transformation and building capacity in health, science and allied disciplines.

Support for Vaccine Research, Development, Pilot-Scale Production and Regulation in South Africa through the KfW-DSTI Infrastructure Programme

The Support of Vaccine Research, Development, Pilot-Scale Production and Regulation in South Africa programme is co-funded by the Government of South Africa through the DSTI and the German Federal Government implemented through KfW Development Bank (KfW). The SAMRC has been appointed by the DSTI as the Project Executing Agent to implement the programme on its behalf. The programme aims to address the fact that Africa produces less than 1% of its annual vaccine requirements, which leaves the continent vulnerable, as witnessed during the COVID-19 pandemic when its governments struggled to source critical vaccines to save lives. The pandemic laid bare the urgent need for the continent to accelerate investments in building vaccine development and manufacturing capabilities to ensure a significant increase in the local manufacturing of the vaccines we consume in Africa.

To date, substantial investments have been made by the South African Government and other funders in research and development infrastructure as well as pilot facilities for vaccine development, testing and production in South Africa which are ongoing. However, there remain critical gaps and bottlenecks that hamper progress in establishing the country as a significant vaccine development and manufacturing hub. It is within this context that the German Government has committed an amount of up to €20 million to fund equipment and infrastructure for vaccine research, development, pilot-scale production and regulation in South Africa. The long-term goal of the programme is to create a more resilient vaccine innovation and production landscape with a higher local content which allows South Africa to deal with current and prepare for future health threats.

The primary objectives of this programme are:

- Improving research infrastructure at public universities and recognized research institutions to enable internationally competitive/world class vaccine research and development throughout the value chain to be conducted in South Africa;
- Establishing and/or improving and/or expanding GMP-accredited pilot production facilities for the smaller scale production of mRNA and non-mRNA-based vaccines, for example for clinical testing;
- Establishing and/or improving and/or expanding training facilities for vaccine research, development and manufacture to build human resource capacity;
- Increasing the capacity and efficiency of regulation of clinical trials and health product registration and use in South Africa;
- Ensuring optimal use and availability of research, development, testing and production infrastructure in the country and encouraging collaboration; and
- Attracting, developing and retaining high-end scientific and technological skills and competencies.

The main anticipated outputs of the programme are as follows:

OUTPUTS

1. Procurement and installation of equipment at a pilot plant for active pharmaceutical ingredients (API) using mRNA technology

   Procurement and installation of equipment at a pilot plant for API with other than mRNA technology

2. Procurement and installation of vaccine technology laboratory training equipment potentially attached to a pilot plant or equivalent facility

3. Procurement and installation of laboratory equipment and support infrastructure for upgrading and modernizing research facilities including animal facilities and laboratories

4. Procurement and installation of equipment supporting the digitalization as well as the regulation capacities of SAHPRA

Project implementation officially commenced on 1 April 2024. For Outputs 1 – 3, a national open RFA process was launched, inviting proposals from role-players involved in vaccine research, development, pre-clinical testing and pilot-scale production in South Africa requiring equipment and infrastructure support to strengthen their capacity to contribute to the country's vaccine innovation and manufacturing ecosystem. Following a rigorous international peer review process, the DSTI with approval from KfW, awarded equipment and infrastructure support to 18 organisations comprising of universities, science councils and private entities.

For Output 4, a closed RFA and Project Steering Committee review process was followed, resulting in an award to the South African Health Products Regulatory Authority (SAHPRA) aimed at leveraging technology to efficiently and effectively execute their regulatory duties in the vaccine R&D, manufacturing and registration/approval processes. Digitalization of SAHPRA's identified business processes will enable SAHPRA to achieve its strategic objective of becoming a WHO ML4 country and WHO Listed Authority.

The SAMRC, as the DSTI's Project Executing Agency, is commencing with procurement of the awarded equipment and infrastructure on behalf of the programme beneficiaries in compliance with the South African and German public sector procurement frameworks. This will result in substantial bolstering of the vaccine development, testing and pilot scale manufacturing capability in the country.

Managing Vaccine Clinical Trials

VC102

The SAMRC was the sponsor for the VC102- Phase 1, Open-Label, Dose-Escalation Study to Evaluate the Safety and Immunogenicity of a Two-Dose Regimen of VXCO-100, a Spike-Functionalized Ferritin Nanoparticle Vaccine Targeting COVID-19, Co-formulated with Aluminum Hydroxide Adjuvant, in Adults in the Republic of South Africa. Vaccine Company Inc. (VaxCo), a biotechnology company based in the USA is the funder and provider of the VXCO-100 vaccine. The South African National Department of Health donated 240 doses of Pfizer-Biontech mRNA vaccine to serve as a comparator in the VC102 study.

In 2024, the study completed enrolment and follow up of 130 participants at 2 sites in South Africa, the Perinatal HIV Research Unit of the University of the Witwatersrand and the SAMRC Botha's Hill CRS. T cell immunogenicity testing was completed by Prof Wendy Burgers at UCT and antibody testing was completed by Prof Penny Moore at the NICD/ Wits. Database lock concluded in September 2024. The GIPD team was responsible for overall project and fund management of the R30 million programme. Final disbursements to all sub awardees were concluded in March 2025. The Final Study Report (CSR), Development Safety Update Report (DSUR) and study progress report were submitted to SAHPRA in March 2025, and the results will be published in due course.

BRILLIANT Consortium

The BRILLIANT (BRinging Innovation to cLinical and Laboratory research to end HIV In Africa through New vaccine Technology) Programme was a Cooperative Agreement with the US Agency for International Development (USAID) initiated in September 2023. The consortium was led predominantly by African women scientists from Kenya, Mozambique, Nigeria, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. The SAMRC was the lead institution and GIPD managed all 17 of the sub-awards during the first 18 months of the programme. The overall objective of the BRILLIANT consortium was to develop and evaluate HIV vaccine candidates emanating from Africa. The Consortium aimed to conduct both "First-in-Africa" clinical development with existing immunogens and adjuvants, as well as "First-in-Human" HIV vaccine discovery medicine studies of novel immunogens. It planned to move the regional and global HIV vaccine field forward by rapidly evaluating and optimising immunogen design with a multi-country discovery medicine clinical trial platform and laboratory research infrastructure.

During 2024 the programme supported HIV vaccine development efforts at Wits and UCT and technology transfer activities at the Joint Clinical Research Centre and Makerere University Walter Reed Project, an extensive community engagement programme, the development of laboratory capacity and preparations for the first clinical study, BRILLIANT-001. The latter included a series of site assessments conducted by the Hutchinson Centre Research Institute of South Africa with the programme leadership to assess the facilities, research operations, clinical safety processes, pharmacy operations, community engagement and laboratory operations of each clinical research site and to establish their readiness to conduct phase 1 HIV vaccine clinical trials in compliance with industry best practices, Good Clinical Practice (GCP) and Good Clinical Laboratory Practice (GCLP) standards. Using information gathered from the site assessments, 4 sites were selected to participate in the BRILLIANT-001 study, which was set to test vaccines and adjuvants supplied by the International AIDS Vaccine Initiative (IAVI), Access to Advanced Health Institute (AAHI), Fred Hutchinson Cancer Research Centre (FHCRC) and Polymun Scientific. The protocol received SAHPRA approval and was registered on the South African National Clinical Trial Registry (SANCTR) and the Pan African Clinical Trials Registry (PACTR). The study preparations were completed, and study activation was planned for the 27 January 2025. However, shortly after the 2nd BRILLIANT Consortium meeting in Zanzibar on 20-23 January 2025, the team received notice to suspend the programme and, subsequently in February 2025 notice of termination of the award. The ELMA Relief Foundation has provided relief funding to continue the vaccine development efforts for a 6-month interim period following which additional funds will need to be secured to continue this critical programme.

SAMRC-IVI-BIOVAC Collaboration

The SAMRC, in collaboration with the International Vaccine Institute (IVI), Korea, and the Biovac Institute, South Africa are collaborating on a Phase I/III, Multicentre, Observer-Blinded, Randomized, Active Controlled Trial to Evaluate Immune Non-Inferiority, Safety and Lot-to-Lot Consistency of BIOVAC Oral Cholera Vaccine to Euvichol-Plus® in 1 to 45 years old Healthy Participants. The team secured a R75 million grant from the ELMA Vaccines and

Attendees at the 4th AHRIFF meeting held in Cape Town in September 2024.

Immunization Foundation as co-funding towards the clinical trial. Additional funding is being finalized to support the full study. The GIPD team will be responsible for grant management and sub awards to the 5 sites that will participate in the IVI Biovac OCV-S 001 study. Between January and March 2025, the SAMRC team worked with IVI and BIOVAC to draft and finalize the protocol, informed consents and other study material required for the clinical trial application and submission to the national regulator. If this trial is successful, it will enable the Biovac Institute to manufacture the oral cholera vaccine for cholera outbreaks and prevention on the continent.

Aligning Research and Innovation Funding in Africa

The SAMRC is involved in a number of forums aimed at bringing together funders to better coordinate and align their investments in research and innovation projects and programmes on the African continent and beyond. They include the African Health Research and Innovation Funders Forum (AHRIFF), described below, the CEPI Medicines Counter Measures (MCM) Forum, GLOPID-R and ESSENCE. In May 2024, GIPD co-hosted the CEPI MCM Forum in Cape Town alongside a satellite meeting of the AHRIFF and in December 2024 the SAMRC's CROO and current Chair of GLOPID-R attended the MCM meeting in Geneva. In February 2025, GIPD attended the annual ESSENCE meeting in Washington DC.

African Health Research and Innovation Funders Forum (AHRIFF)

In early 2022, the SAMRC received a grant from the New Venture Fund to support the coordination of health research and innovation funders in sub-Saharan Africa by hosting meetings to develop a mutual understanding of health priorities and coordinate mechanisms to support projects and initiatives to address major health challenges in the region. The first meeting was held in May 2022, bringing together delegates from over 30 organisations to exchange insights on focus areas and funding strategies for the Southern African Development Community (SADC). The initiative, now called the African Health Research and Innovation Funders Forum (AHRIFF), transitioned to encompassing the entire African continent with the second and third meetings held in November 2022 and August 2023, with over 50 funding organisations represented. The overarching goal of these meetings is to place African health priorities at the centre of funding strategies, minimize duplication and provide funders with a mechanism for collaboration and maximizing impact.

These broader meetings covered critical thematic areas such as Maternal, Neonatal, and Child Health; Precision Medicine; Vaccines and Medical Device Manufacturing; Climate Change and Health, and Infectious Diseases. A notable outcome of these meetings was the introduction of satellite meetings which enable smaller groups of funders to conduct deep dives on specific topics such as Drug Manufacturing in Africa; Climate Change and Health; and Maternal, Neonatal and Child Health; leading to the development of coordinated initiatives to collectively respond to these priorities. The Climate Change and Health satellite meeting was held from 7-8 May 2024 in Cape Town and featured a joint session with the CEPI Medical Counter Measures Funders' Forum. The Maternal, Neonatal and Child Health meeting was organized and hosted by the SAMRC and the Science for Africa Foundation on 2 September 2024 in Cape Town.

The fourth AHRIFF was held from 3 – 5 September 2024, attended by over 70 delegates representing more than 40 global funding organizations, including

development finance, not-for-profit, philanthropy, and government funding sectors.

The SAMRC was fortunate to secure funding in 2024 from the BMGF for a second phase of this initiative, with an increased funding envelope which will enable enhanced focus on even more critical topics and focused events to coordinate a broader pool of funders. The next major event is scheduled for November 2025 in Cape Town and will feature a joint session with the Global Grand Challenges partner network to strengthen ties between global health funders and African-led Grand Challenges programmes.

Innovation

GIPD manages internal and external funding programmes aimed at delivering new health solutions, including the SHIP programme and Grand Challenges South Africa. The innovation component additionally hosts the SAMRC's Technology Transfer Office (TTO), the Global Health Innovation Accelerator (GHIA), the Medical Device and Diagnostic Innovation Cluster (MeDDIC) and the SAMRC-TIA Seed Fund, all of which provide innovation support to protect and advance technologies towards commercialized products in order to address strategic goal 3 of the SAMRC.

Technology Transfer Office

The SAMRC's Technology Transfer Office is responsible for managing the SAMRC's compliance with the Intellectual Property Rights from Publicly Financed Research and Development Act. Its primary mandate is to identify, evaluate, protect and, where possible, commercialize intellectual property (IP) developed by SAMRC researchers and to raise awareness of IP issues within the organisation. The TTO also advises on IP issues in contracts with external parties. One new invention disclosure was received during FY2024/25. This disclosure relates to a novel advanced cell culture method for the development of human-derived left ventricular cardiac spheroids for chronic studies, including drug-screening and development. This work was done in collaboration with the University of Stellenbosch.

Global Health Innovation Accelerator

The Global Health Innovation Accelerator (GHIA) is a partnership between the SAMRC and PATH aimed at driving global health innovation and capacity building. Specifically, GHIA supports the local development and implementation of a portfolio of affordable and appropriate health-focused technologies as well as broader health innovation ecosystem development. GHIA has been supported over the last 8 years, from November 2016 to November 2024, by a grant from the BMGF, which has been the primary catalyst for GHIA's growth, evolution and activities and has been critical to GHIA's success. The grant was also instrumental in attracting other funding and additional partners to support and expand GHIA's activities. In compiling the final report for the grant in January 2025, GIPD was able to reflect on the progress of GHIA and its impact on the health innovation ecosystem in South Africa.

Over the last 8 years, the partnership with PATH has provided an opportunity for the SAMRC to learn from experts how to manage product development projects towards implementation in low- and middle-income countries and to tap into PATH's networks. The grant from the BMGF was targeted at establishing and validating a working model for GHIA, progressing technologies towards commercialization, attracting additional funding and supporting the establishment of a functioning health innovation ecosystem. An important objective of the BMGF grant was also to build the capacity locally to identify, evaluate, develop and commercialize health technologies. Various staff members were trained and moved on to higher posts within and outside the SAMRC. Throughout the grant period, a focus of the GHIA team was on fund raising for additional and future activities. There was also a substantial focus on raising project-specific funding for driving the commercialization and introduction to market of individual GHIA projects. Overall, in excess of R158M was raised by and/or allocated to GHIA and GHIA projects from the start of the grant in 2017 to 2024, including an SAMRC-TIA Seed Fund. In excess of 25 projects have been supported to progress towards commercialization under the GHIA programme.

It was important for GHIA's success to have an in-depth understanding of the local health innovation ecosystem, its role-players, capacity, strengths, barriers and challenges, as well as improved capacity, cooperation and coordination within the ecosystem. GHIA implemented several initiatives towards this goal, some of which were completed jointly with or under MeDDIC (see below). They include completion of a medical devices landscape analysis in 2022; hosting the secretariat for a Medical Devices Stakeholder Forum; and development of a medical

device's portal within the national Innovation Bridge portal (see below).

In 2023/24, the GHIA team launched a new Technical Support Platform aimed at bridging the gap between the identified need for technical support by medical device and diagnostics developers/ innovators and the experienced limited access to the relevant resources and infrastructure that can enable commercialization of their products. The Platform aims to, inter alia, provide a consolidated network of locally available technology, expertise and platforms for medical device and diagnostics development, testing, registration, manufacturing and commercialization. A call for expressions of interest from service providers in September 2023 resulted in submissions from more than 50 service providers who were invited to present at Medical Devices and Diagnostics Technical Support – Service Providers Pitching Sessions held virtually from 22 – 24 November 2023. The innovation team has developed an interactive stakeholder database for all companies involved in the medical devices and diagnostics space, and this will be launched in 2025. Following the pitching session, projects previously funded through the SAMRC (including those supported through GHIA) were invited to respond to a closed call for funding applications to utilize any of these services to further their product development and commercialization. From this call, 6 proposals were approved for funding during 2024.

A second grant from the BMGF that was also completed in 2024 was aimed at continuing and expanding some of the GHIA activities and especially exploring expansion of the GHIA concept and activities elsewhere in Africa. Following desktop landscape analysis of the health innovation ecosystems in Uganda, Kenya, Ghana, Malawi, Botswana, Namibia and Tanzania, the Innovation Programme Manager, Grace Baloyi, conducted in-country engagements to identify champions to design context-specific GHIA models that can be implemented in Kenya and Uganda. She also participated in the second instalment of the Transforming African MedTech Conference, a platform aimed at building a vision for a comprehensive and transformative African medical technology industry. Various opportunities for innovation collaboration were identified in both countries and will be pursued subject to raising additional funding.

MeDDIC

The Medical Device and Diagnostic Innovation Cluster (MeDDIC) is a national initiative supported by the Technology Innovation Agency and the Department of Science, Technology and Innovation to stimulate and intensify technology innovation within the medical devices and diagnostic sector as well as encourage an integrated health innovation ecosystem. The cluster is seeking to address some of the main challenges faced by the medical devices and diagnostics innovation and manufacturing sector through a range of interventions as outlined below.

The MeDDIC regulatory support programme is managed by the CSIR Industrial Sensors Impact Area within the manufacturing cluster due to their ISO13485 certification and extensive experience in medical device and diagnostic development. It is aimed at assisting local companies, entrepreneurs, and higher education institutions to understand and manage the medical device product development process, particularly as it relates to regulations. This programme was awarded additional funds in 2024/5 to continue providing assistance with the regulatory process, including product development in the context of ISO13485, classification of medical devices and related standards. This programme has been very successful in filling a gap in regulatory information and expertise for small companies and entrepreneurs. To date it has supported 19 organisations/individuals with SAHPRA device classification, ISO standards, technical support for device testing from SABS and CSIR, SAHPRA technical file requirements and SAHPRA registration. Where applicable, some companies were also linked to other funding organisations and/or instruments such as the DTIC.

The MeDDIC online platform, launched in February 2023, leverages off the national Innovation Bridge Portal, an initiative of the DSTI, developed by the CSIR and supported by the World Bank Group and the Department of Small Business Development, which is aimed at showcasing technology innovations and opportunities from South Africa and beyond. The dedicated medical devices portal within the Innovation Bridge has been developed to include medical device manufacturers, R&D

capabilities, support services, funding, innovations and other opportunities. It thus has the potential to showcase existing capabilities for medical device development and manufacture as well as partnership, licensing and funding opportunities, with the aim of facilitating innovation partnerships and increasing collaboration within the sector. While the platform was launched under the auspices of MeDDIC, the development of the portal was funded by a grant from the BMGF to GHIA.

INNOVATION BRIDGE

MeDDIC has provided support to SAHPRA to develop a medical devices database from medical device establishment license applications received as part of the implementation of the regulation of medical devices in the country. The resulting database has assisted SAHPRA with defining the total number of companies in the medical devices supply chain (i.e. manufacturers, distributors, importers, exporters and wholesalers); product classes and various product ranges of medical devices/IVDs that are imported and or manufactured in the country; and identifying who is responsible for placing the products in our market and accountable for regulatory compliance to the authority. This work is now complete and a number of information gaps and opportunities for improvement have been identified. The project has also assisted SAHPRA to identify the types of medical devices circulating in the market, the groupings according to risk classification, and the additional spares, accessories and research use only products. The information will further be used to finalise the structure of the medical devices and diagnostics registration fees.

SAMRC-TIA Seed Fund

The SAMRC is an implementing partner for the Technology Innovation Agency's national seed fund programme. In addition, the SAMRC and TIA are co-funding a specific seed fund programme for medical devices and diagnostics. The purpose of these seed funds is to assist in bridging financial requirements that translate research outputs into fundable ideas for further development. The following highlights were achieved during FY2024-25:

A provisional patent application was filed for a system for performing diagnosis, prognosis, monitoring and treatment of loss of cutaneous sensation and neuropathy.

Human Capacity Development. Two students were conferred with a diploma in biotechnology after working on one of the TIA Seed Fund projects as part of the requirement for completion of their studies. Three MSC students, one PhD candidate, and one intern were trained during FY2024/25 on various scientific techniques under 2 different Seed Fund projects.

Fund raising. One SME raised a total of R12,9 million from venture capital and angel investors. One SME won an Innovation Award to the value of R1.4 million. One of the projects undertaken by a science council additionally attracted a parliamentary grant for human capital development valued at R1.2 million. An SME won a grant valued at USD5,000 funded by Villgro Africa under a programme that provided financial support to women-led healthcare start-ups in Africa.

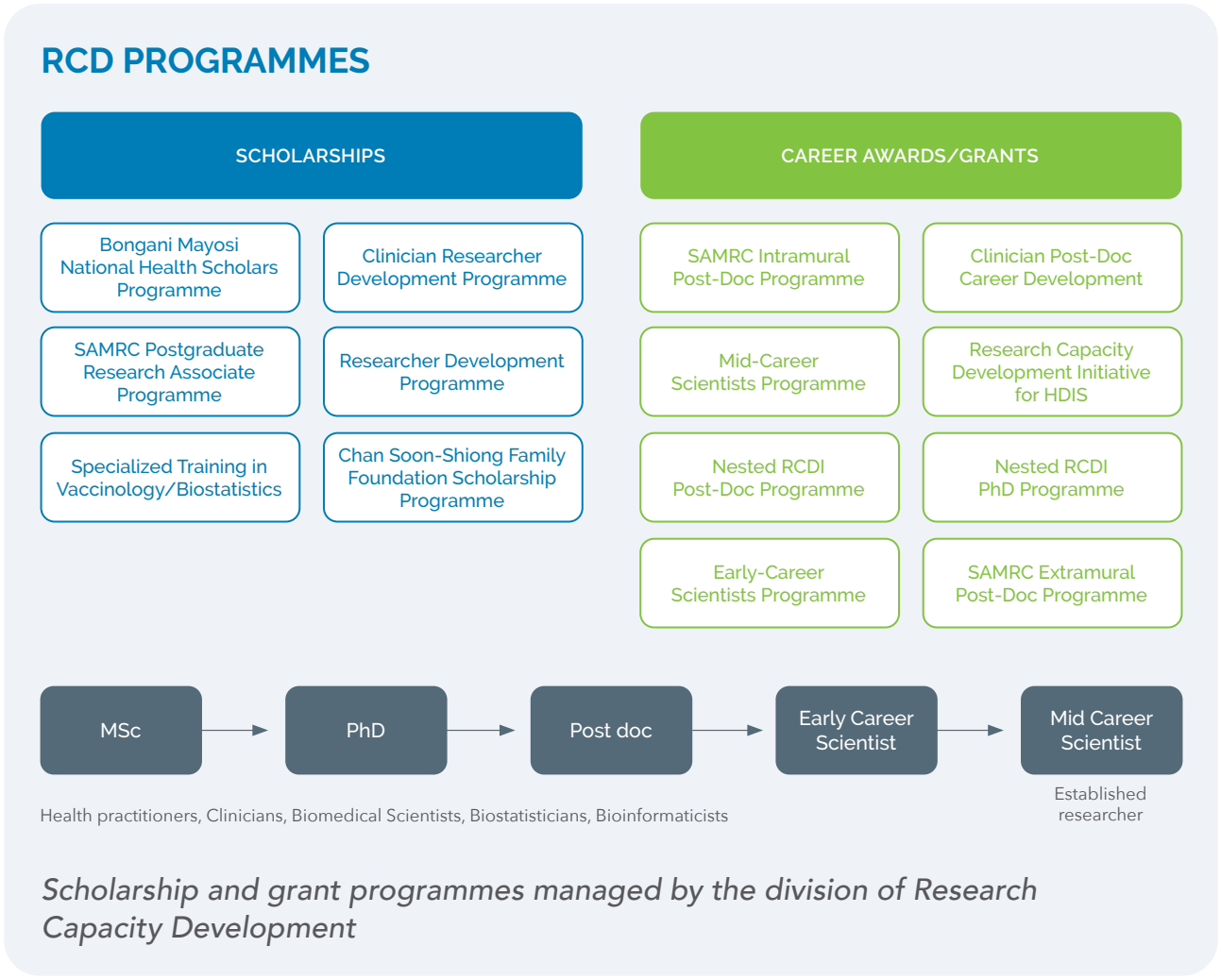
Commercialisation. At least 2 products that were supported under the Technical Support Programme and Seed Fund have entered the market, including award of a 5-year supply contract with the Western Cape Department of Health.

DIVISION OF RESEARCH CAPACITY DEVELOPMENT

Overview

The overarching objective of the SAMRC's Division of Research Capacity Development (RCD) is to enhance the long-term sustainability of health research in South Africa by providing funding for the next generation of health researchers. The division supports health research capacity development by offering scholarships, fellowships and research grants/career awards to post-graduate students, postdoctoral fellows, as well as early and mid-career scientists at South African universities. With most of these awards aimed at individuals from historically disadvantaged backgrounds, the division's activities are also contributing substantially to transformation in health research. In 2024/2025, RCD's programmes have continued to contribute to the SAMRC's strategic objectives of administering health research effectively and efficiently, leading the generation of new knowledge and building human capacity for the long-term sustainability of health research in South Africa.

RCD's programmes are divided into Scholarships and Career Awards/Grants as depicted in the figure below.



Scholarship and grant programmes managed by the division of Research Capacity Development

The number of beneficiaries and the amount invested in 2024/25 for each programme are listed in the Table below. The total number of funded beneficiaries (career awards/grants and scholarships), including new intake for the 2024/25 reporting period, exceeded the annual target of 130 by 69. The total performance for indicator 4.1.1 is 199.

Career Award/Grant Programme	Category	Number of beneficiaries	Amount invested
SAMRC Mid-Career Scientists	Scientists (PI)	8	12,000,000.00
SAMRC Research Capacity Development Initiative	Scientists (PI)	16	5,430,000.00
	Post-doctoral Fellows	8	2,800,000.00
	PhD	17	2,700,000.00
SAMRC Extramural Post-doctoral Fellowship Programme	Post-doctoral Fellows	10	3,500,000.00
SAMRC Intramural Post-doctoral Fellowship Programme	Post-doctoral Fellows	16	4,277,082.67
SAMRC Clinician Post-doctoral Career Development Award	Clinician post-PhD	1	550,000.00
SAMRC Early Investigators Programme	Scientists (PI)	12	6,000,000.00
Total Grants		**88**	**37,257,082.67**
Scholarship Programme	**Category**	**Number of beneficiaries**	**Amount invested**
SAMRC Researcher Development Programme	PhD	8	1,566,163.54
Bongani Mayosi-National Health Scholars Programme	PhD	16	4,622,876.18
Biostatistics Capacity Development Initiative	MSc	8	1,395,631.00
SAMRC Clinician Researcher Development Programme	PhD	28	8,148,217.32
SAMRC Postgraduate Research Associate Programme (previously SAMRC Internship Scholarship Programme)	MSc and PhD	33	6,087,367.75
The Chan Soon-Shiong Family Foundation Scholarship Programme	MSc and PhD	13	3,591,347.50
CSSFF-SAMRC UWC MSc in Pharmacy Administration and policy regulation	MSc	2	195,000.00
SAPRIN Nodal PhD Fellowship	PhD	3	520,000.00
Total Scholarships		**111**	**26,126,603.29**
Totals		**199**	**63, 383,685.96**

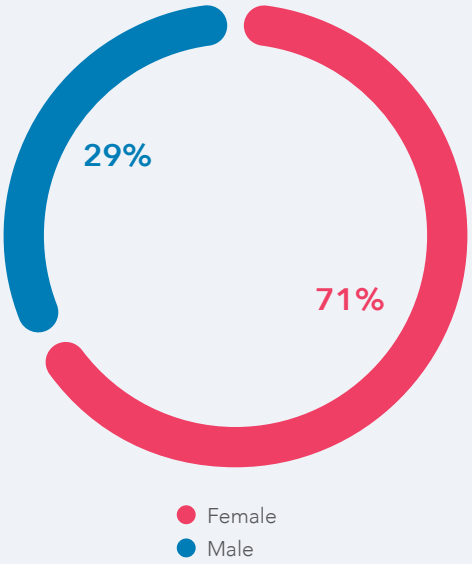
Similarly, for the number of awards to female MSc, PhD, postdoctoral fellows and early career scientists, 137 awards were made against a target of 108, which is 26.9% above the target. For the number of awards by the SAMRC to Black South African citizens and permanent residents for MSc, PhD, postdocs and early career scientists classified as African, 127 awards were made, which was 41.1% above the target of 90.

The number of awards by the SAMRC to MSc, PhD, postdocs and early career Scientists from historically disadvantaged institutions (HDIs), reflected a steady increase from 52 awards in 2021/22, 60 in 2022/23, 68 in 2023/24, to 71 awards in 2024/25 (annual target of 83). This reflects the SAMRC's ongoing commitment to HDIs, in particular through the RCD Initiative.

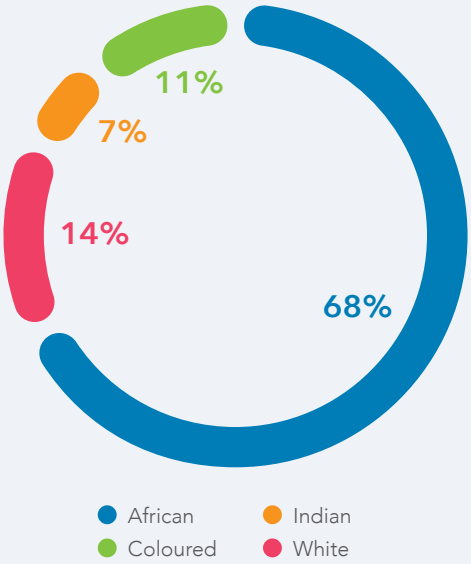
RCD Grant Portfolio

The purpose of the RCD grant programmes is to create an opportunity to fast-track and transition early-and mid-career scientists to independent research leaders. The distribution of grants/career awards by gender, ethnic group and institution for 2024/25 is depicted in the figure below.

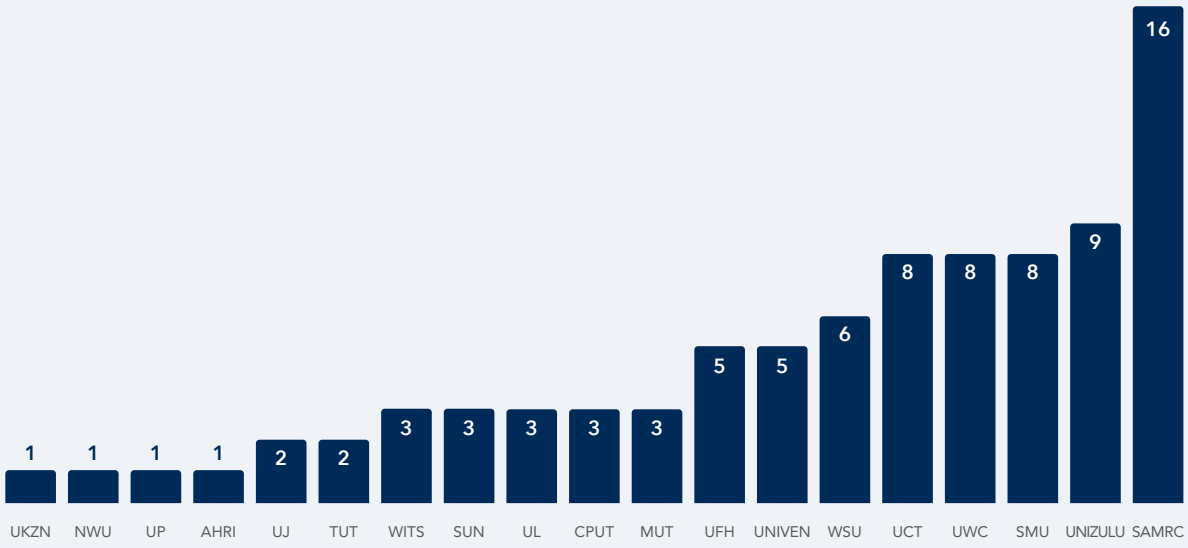
RCD grant award by gender (2024-2025)



RCD grant awards by ethnic group (2024-2025)



RCD grant awards by institution (2024-2025)



Distribution of beneficiaries holding RCD Grant Programme awards in 2024/25 by gender, ethnic group, and institution

The RCD Grant Portfolio has continued to increase the number of beneficiaries supported, with 88 in 2024/25 compared to 85 in 2023/24 and 74 in 2022/23.

During the 2024/25 financial year, the RCD Grant Portfolio ran four requests for application with an overall intake of 26 new beneficiaries in addition to 8 awards to support staff at historically disadvantaged universities (SMU, WSU and UFH) studying for a PhD under the SA-UK DHET Doctoral Training Programme. After a successful pilot, the SAMRC Early Investigators Programme and SAMRC Extramural Postdoctoral Programme enrolled their second intake.

There has been a continued focus on transformation including capacity building in HDIs and other under-resourced institutions, with 57% of all RCD grant awards being hosted by HDIs and other under-resourced institutions. During 2024/25, the RCD Grant/Career Award programmes showed an increase in the number of postdoctoral fellowship and early investigator awards in the extra- and intra-mural research units with 18% and 11% of RCD Grants awards being hosted by SAMRC intramural and extramural research units, respectively.

Overall, 67% of the Grant beneficiaries in 2024/25 were female, while 86% were black and 68% were African black. The priority research areas funded include, inter alia, HIV, TB and other infectious diseases, non-communicable diseases, COVID-19, health systems, public health, maternal and child health, and biomedical research.

RCD Grants programmes account for around 59% of the RCD budget, with more than 51% of grant holders being hosted by previously disadvantaged institutions, including the University of Fort Hare, University of Zululand, University of Limpopo, University of Venda, Mangosuthu University of Technology, Walter Sisulu University, Sefako Makgatho Health Sciences University, and the University of the Western Cape.

Impact of RCD Grant Funding

In 2024/25 RCD Grant beneficiaries contributed a significant amount of papers compared to the 2023/24 reporting period. The total number of students who worked on the funded projects was 209 which constitutes an increase from 186 in 2023/24, with 67% of these being female. This supports the continued RCD commitment to strengthening capacity of the next generation of researchers and the production of new knowledge. The number of postdoctoral fellowship and early investigator programme awards constituted 53% of all RCD Grant awards with 46% of the budget for RCD Grant programmes supporting the priority to grow the research capacity development pipeline. In 2024/45 after two years of their awards, 4 postdoctoral fellows based at historically disadvantaged institutions (including 3 RCDI-Nested Postdoctoral programme and 1 Extramural postdoctoral fellows) secured permanent employment as senior scientists and lecturers while another two attracted research opportunities in the USA.

It is also important to highlight that the impact of RCD career support extends beyond the lifetime of the award. Former and current RCD beneficiaries are generally successful at raising research funding as well as obtaining employment and recognition in their specific field. This is mostly the case with the mid-career scientist and early investigators. All 13 Early Investigators Programme awardees of the first intake who recently completed their funding programme were able to obtain a promotion within three years of participating in the programmes. Amongst them, those who had no permanent positions were able to secure permanent or long-term contracts. The beneficiaries in the Mid-Career Scientist Programme continue to show significant career growth. In November 2024, Prof Jason Bantjies was appointed Unit Director at the Mental Health, Alcohol, Substance Use and Tobacco Research Unit (MAST RU). Prof Phaswana was appointed as Deputy Vice-Chancellor Research and Innovation at the University of Johannesburg in January 2025. In March 2025, Associate Prof Jackson Marakalala was appointed Unit Director of the SAMRC Centre for Tuberculosis Research (CTR).

SAMRC-Funded Mid-Career Scientists showcasing excellence and impact

Recently RCD Grant holders won SAMRC Scientific Merit Awards, showcasing their expertise and national competitiveness. It is worth noting that Professor Zilungile Mkhize-Kwitshana, a beneficiary under the Mid-Career Scientist Programme, received the Research Capacity Development and Transformation Award for her substantial contributions to capacity building and transformation in health research in South Africa.

Prof David Katerere, also a beneficiary under the Mid-Career Scientist Programme, was appointed by the National Research Foundation (NRF) as the Chair of the Health Research Theme Advisory Committee which aims to identify research priorities aligned to a new thematic research support instrument planned by the NRF.

Prof Refilwe Nancy Phaswana-Mafuya.

Prof Salome Maswime.

Beneficiaries of the South African Medical Research Council (SAMRC) Mid-Career Scientist Programme (MCSP) continue to showcase their remarkable achievements. Two notable successes are recent outstanding 2024 Higher Education Women Leaders Awards of Lifetime Achiever and Trailblazer for Prof Refilwe Nancy Phaswana-Mafuya and the appointment of Prof Salome Maswime as the Director of the newly established World Health Organization Collaborating Centre.

Prof Refilwe Nancy Phaswana-Mafuya: a Lifetime Achiever and a Trailblazer

Prof Refilwe Nancy Phaswana-Mafuya, a renowned South African academic and research leader, was recently awarded the Lifetime Achiever and Trailblazer Awards, both at the 2024 Higher Education Women Leaders Awards (HEWLA).

The HEWLA ceremony was held to celebrate women whose leadership and influence have positively impacted universities and the greater community. The award recognized Prof Phaswana-Mafuya's empowerment, hard work, leadership in building the next generation of researchers, and success in health science research. These accolades are just one of her many achievements and solidify her as one of South Africa's most influential figures in academia. She has been previously awarded the NSTF TW Nkambule Award in 2017 in recognition of her outstanding contribution to science, technology and mathematics. Prof Phaswana-Mafuya has served as Chair of the 9th SA AIDS Conference in 2019. She is also the Director of the University of Johannesburg's African Centre for Epidemics Research (PACER), an SAMRC extramural unit.

Prof Phaswana-Mafuya places a strong emphasis on capacity development. With the support of the SAMRC Mid-Career Scientist grant, she has successfully recruited and funded postgraduate students, both MSc and PhD candidates, thereby advancing their development into established researchers. As she continues to lead by example, her work serves as an inspiration to future generations of academics, researchers, and women leaders. Through her pioneering effort, Prof Phaswana-Mafuya has further demonstrated that leadership is not just about personal success but about creating pathways for others to thrive. The HEWLA award is thus a well-deserved recognition of her commitment to excellence, equity, and transformative leadership in higher education.

Prof Salome Maswime: Leading the WHO Collaborating Centre

Prof Salome Maswime is a globally recognised obstetrician and gynaecologist who has made significant contributions to maternal health, particularly in the field of surgery and maternal mortality. She has recently been appointed to lead the newly established World Health Organisation (WHO) Collaborating Centre for Integrated Clinical

Care, based at the University of Cape Town. This significant advancement in her career is a testament to her exceptional dedication and groundbreaking work in global surgery and health systems. The Centre will work to implement high-quality clinical care for vulnerable populations. Additionally, the Centre will focus on pioneering research and evidence generation to support the delivery of high-quality, integrated clinical care on a global scale.

Prof Maswime has credited the Mid-Career Scientist grant with accelerating her career development. For instance, the SAMRC Mid-Career Scientist Programme funding enabled Prof Maswime to establish a new programme in global surgery that hosts both MSc and PhD candidates. She was the winner of the prestigious National Science and Technology Forum (NSTF) SAMRC Clinician Scientist Award for 2023. She is also head of the Division of Global Surgery at the University of Cape Town.

Looking Forward

The achievements of Prof Phaswana-Mafuya and Prof Maswime highlight the SAMRC Mid-Career Scientist Programme's success in enhancing health research and fostering scientific and academic leadership in South Africa. Commenting on this achievement, RCD Division Manager Dr Abeda Dawood states, "We applaud these remarkable accomplishments by the beneficiaries and look forward with great enthusiasm to their continued contributions to advancing scientific knowledge for the improvement of health in South Africa."

SAMRC hosts the University of South Carolina delegation to foster capacity building in the area of big data

The RCD division hosted a delegation from the University of South Carolina (USC) on the 8th of July 2024 at the SAMRC Medicina Campus in Cape Town. This delegation comprised a team of big data experts collaborating with Prof Refiloe Phaswana-Mafuya, a beneficiary of the SAMRC Mid-Career Scientist Programme and Director of the University of Johannesburg's African Centre for Epidemics Research (PACER), an SAMRC extramural unit. The USC team included Dr Bankole Olatosi, Prof Sharon B Weissman, Prof Xiaoming Li, Prof Shan Qiao, and Mr David Reddy.

SAMRC intramural research units presented overviews of their unit's research and interest in big data, providing a platform for the USC delegation to share their research and explore potential areas for collaboration.

The visit was initiated by Professor Phaswana-Mafuya and aimed to deepen the partnership between USC experts and SAMRC units as well as RCD-funded researchers interested in big data. Organised under the theme of "Fostering Capacity Building through Partnership and Collaboration in the area of Big Data", the primary goal was to explore how SAMRC researchers and RCD grant holders can benefit from the capacity-building opportunities provided by the USC Big Data Health Science Centre.

The delegations of University of South Carolina and SAMRC's RCD and Research Units. Prof Phaswana-Mafuya, Dr Edith Phalane, and Prof Jason Bantjes joined the meeting online.

Dr Frederic Nduhirabandi, Programme Manager at RCD, emphasised the importance of collaboration in capacity building. He stated, "Strengthening collaboration is a key mechanism by which research skills and practical knowledge are exchanged, developed, and enhanced for more impactful research." The visit provided a valuable platform for exploring collaborative opportunities, with some participants scheduling follow-up meetings to discuss their interests further.

Inaugural Regional Meeting of the SAMRC Research Capacity Development beneficiaries hosted by the University of Zululand

In an effort to strengthen collaboration and partnership among grantholders, RCD organised the first regional meeting of RCD beneficiaries. This significant event was hosted by the University of Zululand in Umhlanga, KwaZulu-Natal Province, under the theme "Fostering Research Capabilities through Local Partnership and Collaboration."

The meeting brought together RCD grantholders and their teams based in the KwaZulu-Natal region, including those from the University of Zululand (UNIZULU), Mangosuthu University of Technology (MUT), the University of KwaZulu-Natal (UKZN), and the African Health Research Institute (AHRI) to showcase the progress of their research projects. Additionally, this regional meeting included RCD grant holders from the University of Limpopo and researchers from the SAMRC Biomedical Research and Innovation Platform (BRIP), as it coincided with the second annual joint collaborative meeting between UNIZULU, the University of Limpopo, and SAMRC BRIP.

During the opening session, Prof KC Lehloenya, Dean of the Faculty of Science, Agriculture and Engineering, and Prof S Songca, Head of the Department of Biochemistry and Microbiology, both at the University of Zululand, warmly welcomed the participants. They expressed gratitude to the SAMRC for its longstanding support and emphasised the importance of collaboration in enhancing research capabilities to address regional challenges. Prof Johan Louw, Senior Unit Director of the SAMRC Centres and Platforms, highlighted the history of SAMRC research capacity development at historically disadvantaged institutions (HDIs), especially the contribution of BRIP at the University of Zululand, and underscored the significance of joint meetings in fostering collaboration.

Participants of the inaugural regional meeting of SAMRC RCD Beneficiaries held in Umhlanga, KwaZulu-Natal.

Dr. Abeda Dawood, Divisional Manager of the RCD Division, reflected on the division's achievements in building capacity and transforming the next generation of health researchers. She encouraged beneficiaries to provide input on how the RCD can better support them in achieving their objectives and enhancing the impact of their work beyond just providing project funding and scholarships. In the same context, Dr. Frederic Nduhirabandi, Programme Manager of RCD Career Grants, delivered a comprehensive presentation on effective research capacity development and the importance of collaboration, further showcasing the strategic achievement of the RCD grants in strengthening research teams.

As part of the scientific programme, postgraduate students and postdoctoral fellows working on the principal investigator (PI) projects presented the results of their studies. Following student's presentations, RCD-funded PIs, including two early investigators, three PIs in the RCD Initiative (HDI) and two mid-career scientists (Prof Jackson Mohlopheni Marakalala from AHRI and Prof L Mkhize-Kwitshana from UKZN), shared updates of their ongoing research projects, highlighting the progress and achievements made possible through SAMRC RCD funding. Prof Rabia Johnson, Co-Deputy Director of the SAMRC BRIP, presented an overview of BRIP's research, emphasizing their readiness to host students and collaborate with RCD beneficiaries. Dr Pritika Ramharack, a Senior Scientist at SAMRC BRIP, also presented the new training opportunities available at BRIP.

After the presentations, seven students with the best oral presentations received awards in three categories. In the Master's category, the top presenters were Ms Sithembile Sithole (UNIZULU), followed by Ms Siphelele Thethwayo (UNIZULU), and Ms Tshedimosho Kgoadi (UL). In the PhD category, the best presenters included Ms Roxanne Pillay from MUT (1st place), Ms Dolly Kgakishe from UL (2nd place), and Mr. Neo Aphang from UL (3rd place). Ms. Tshwarelo Mohale, a PhD student from UL, won the trophy for the best overall presentation.

The SAMRC Research Capacity Development team and the University of Limpopo staff. The University of Limpopo was one of the Universities visited by RCD as part of the roadshow to promote its work.

Besides the excellent scientific presentations, the regional meeting facilitated networking and exchange of ideas among researchers from different institutions and disciplines, marking an important milestone in promoting regional, multidisciplinary research initiatives and boosting partnerships among local researchers funded by SAMRC. It also offered an opportunity for students and PIs to meet and strengthen their connections while exploring potential collaborations with SAMRC BRIP and other funded PIs. The beneficiaries had the chance to discuss the progress of their projects with RCD officials and explore ways that RCD could better support them.

The event concluded with a farewell dinner organized by UNIZULU to honour the exceptional contributions of Prof Christo Muller (BRIP), who was retiring after more than a decade of service in supervising and mentoring students in the Department of Biochemistry, UNIZULU, which hosts two RCDI PI beneficiaries.

Overall, the inaugural regional beneficiary meeting was highly successful, leaving participants and the RCD division with a strong sense of achievement. The event promoted a spirit of collaboration and established a solid foundation for future regional meetings.

RCD team visit to the University of Limpopo.

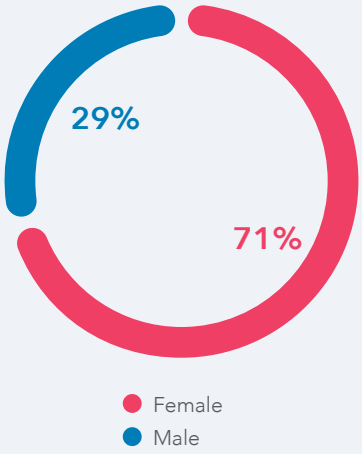
RCD team with the colleagues from the University of KwaZulu-Natal.

RCD visit to the University of Zululand.

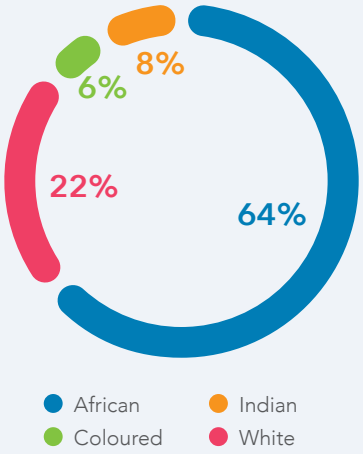
RCD Scholarships Portfolio

The scholarships portfolio at RCD comprised of main scholarship programmes as listed in the table above. During this reporting period, RCD has also assisted with the administration of several scholarship programmes hosted by different SAMRC units i.e., the Chan Soon-Shiong Family Foundation Scholarship programme (GIPD) which is aimed at building biomanufacturing capacity in Africa, the Master's Scholarships in the field of Biostatistics/ Statistics (GHRU) aimed at enhancing statistical modelling capacity among women researchers and students, and the SAPRIN Nodal PhD Fellowship (SAPRIN) aimed at advancing knowledge and capacity development in SAPRIN nodes. All RCD scholarship programmes are aimed at developing and transforming health research capacity in SA. The funded scholars within our programmes are mainly

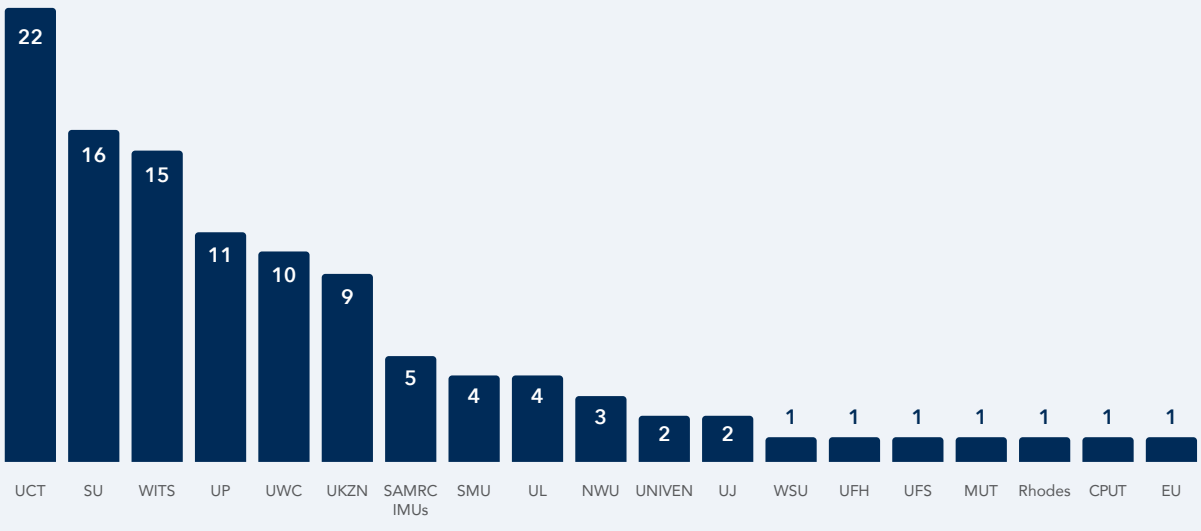
Scholarship awards by gender (2024-2025)



Scholarship awards by ethnic group (2024-2025)



Scholarship awards by institution (2024-2025)



Distribution of SAMRC scholarships by institution in 2024/25

Dr Gabriella Hyman receiving the DSI-Esther Mahlangu Doctoral Fellowship Award in Natural Science.

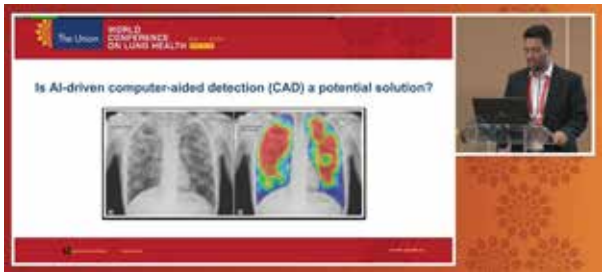
Ms Sinenhlanhla Mthembu receiving the DSI-Esther Mahlangu Doctoral Fellowship Award in Natural Science.

health professionals. By the virtue of being employed in healthcare settings, health professionals are ideally placed to carry out clinically driven research, with an increased likelihood of research findings being taken up by policymakers, practitioners, and other potential users. The scholarship programmes have continued to make excellent progress in transformation and strengthening research capacity. In 2024/25, RCD awarded PhD and MSc scholarships of which, 71% were awarded to female candidates and 29% male candidates. The distribution of scholarships by gender, ethnic group and institution for 2024/25 are depicted in the figure above.

Impact of RCD Scholarship Funding

One of the ways we assess the impact of the SAMRC scholarships on individual recipients is to look at their career progression, research outputs and research awards. During this reporting period, two emerging researchers funded by RCD won awards under the Department of Science and Innovation (DSI) – Fellowships award category at the 2024 South African Women in Science Awards (SAWiSA): Dr Gabriella Hyman, funded under the SAMRC Institutional Clinician Researcher Programme and Ms Sinenhlanhla Mthembu, funded under the SAMRC Postgraduate Research Associate Programme. This year, the event honoured the globally acclaimed visual artist and much-loved cultural ambassador of the Ndebele nation, Dr Esther Mahlangu, by naming a category in her name. Dr Gabriella Hyman is a medical doctor from the University of Witwatersrand (Wits) and an MPH graduate from the T.H. Chan School of Public Health. Her PhD research focuses on investigating the key performance indicators that affect the delivery and quality of surgical care in the South African public health sector. Dr Hyman hopes that her research will inform public health policy and practice and bring about innovative strategies for sustainable health systems strengthening. She has published in peer-reviewed publications in renowned journals including The Lancet, Journal of Pediatric Surgery, and the South African Journal of Surgery, and has presented her work at prominent international conferences. Dr Hyman is the first medical doctor to receive a SAWiSA award under the emerging research category. Miss Sinenhlanhla Mthembu did her first degree and her Masters, which was funded by RCD, at the University of Zululand. She is a Biochemistry PhD student at North-West University (NWU) in collaboration with SAMRC's BRIP. Her PhD research focuses on investigating the implications of Dyslipidemia, one of the major risk factors for cardiovascular diseases in patients with type 2 diabetes. In addition, she is also investigating the potential therapeutic properties of dietary compounds such as Aspalathin and Sulforaphane on their cardioprotective properties. She has published her findings in peer-reviewed articles. The success of Dr Hyman and Ms Mthembu is a clear reflection of the RCD's commitment to nurturing exceptional talent and driving impactful research.

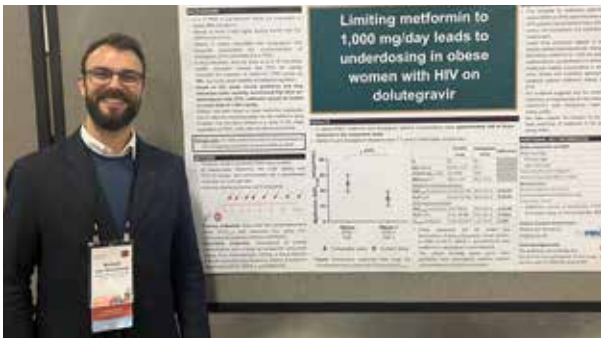
Conference abstract acceptance is also regarded as a key indicator of quality and significance of research in measuring impact. Conferences serve as pivotal platforms for early career researchers to engage with the global scientific community. They provide an opportunity for researchers to showcase their research, gain experience in presenting a paper to an international audience, access cutting-edge research, as well as interact and network with international researchers in their field. Moreover, presenting research at an international level enhances the credibility and visibility of early researchers, paving the way for job opportunities and funding prospects. In this financial year several PhD funded scholars presented their work at prestigious international conferences. RCD also funded four students to attend the Annual Conference of the South African Statistical Association November 2024 in Stellenbosch. The students attended workshops and were exposed to experts in the field. In addition, two students, Megan Rajah and Theodora Amoa, were funded to attend the South African Clinician Leaders Forum 2024, Pretoria. This forum is part of the South African Clinician Scientists' Society, of which Prof Salome Maswime, RCD Mid-Career Scientist Programme beneficiary, is the President.



Dr Alex Scott funded under the Postgraduate Research Associate Programme presented at The Union World Conference on Lung Health held in Bali from 12-16 November 2024.

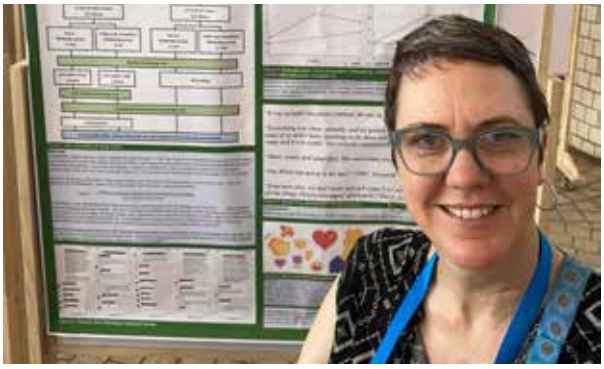
Ms Nkanyezi Masondo funded under CSSFF presented at The Union World Conference on Lung Health held in Bali from 12-16 November 2024.

Dr Theodora Amoa presented at the 8th China-Europe Symposium on biomaterials and regenerative medicine held in Nuremberg Germany from the 15-18 September 2024.



2025 Conference on Retroviruses and Opportunistic Infections (CROI)held in San Francisco, USA from 9-12 March 2025.

Dr Marcel Jooste presented at the International Olympic Committee (IOC) World Conference on prevention of injury and illness in sport, held from 29 February – 2 March 2025.



Ms Briony Chisholm funded under BM-NHSP presented a poster at the INTEREST meeting, held in Cotonou, Benin from 13-16 May 2024.

Strengthening Institutional Collaborations

In line with the SAMRC's commitment to transformation, RCD is committed to broadening participation particularly from underrepresented institutions in our funding programmes. In 2024-25, RCD in partnership with GIPD and the Office of the Vice President, held several engagements with different institutions including universities of technologies and remotely located institutions in the Eastern Cape and Limpopo provinces. The purpose of the engagements was to enhance accessibility and effectiveness in funding programmes, with the goal of ensuring that funding is allocated equitably and efficiently to drive meaningful innovation and societal impact. Outcomes of the engagements include educating institutions and researchers about available funding opportunities, clarifying eligibility, application processes, and evaluation criteria, promoting different funding programmes by engaging with a wide range of applicants, identifying and addressing barriers to funding access and building networks among SAMRC researchers and institutions for collaborative funding applications and student co-supervision. The institutions that were visited this financial year include University of Limpopo, University of Venda, Rhodes University, Nelson Mandela University, Cape Peninsula University of Technology, Tshwane University of Technology, and the University of Pretoria.

On the 17th of May 2024, RCD attended the inaugural Mandela-Rhodes Postgraduate Funding Fair hosted by Rhodes University (RU) in collaboration with Nelson Mandela University (NMU), under the theme "Promoting Access and Success in Postgraduate Education Through Funding". The funding fair provided a platform for Honours, Masters and Doctoral students to learn more about available scholarships. The RCD delegation provided insight into the RCD's diverse funding programmes and research support training to the students. The students had the chance to ask questions, as well as provide feedback on their past experiences with RCD and SAMRC in general. They also engaged in meaningful discussions such as the application process, the documents/requirements needed and the contact details of relevant people for queries.

Rhodes University (RU) in collaboration with Nelson Mandela University (NMU) Postgraduate Funding Fair, 17 May 2024.

Cape Peninsula University Research Day, 14 October 2024.

University of Pretoria Research Day, 28 August 2024.

SAMRC engagement with the University of Venda, 8 October 2024.

SAMRC engagement with the University of Limpopo, 7 October 2024

Furthermore, in terms of capacity building, RCD, the Office of the Vice President and Strategic Research Initiatives Division, together with the National Research Foundation and the Human Frontier Science Programme Organisation (HFSPOO), coordinated the HFSPO Masterclass in grant writing attended by 30 researchers, held in Pretoria, South Africa, concurrently with workshops in South Korea and India. Several RCD current and past beneficiaries attended this workshop, as well as SAMRC staff.

Human Frontier Science Programme Masterclass in grant writing held on 27-29 November 2024, at the NRF, Pretoria.

In another important initiative, RCD staff in collaboration with the Department of Research and Innovation, University of Pretoria, presented a Soft Skills Workshop to postgraduate students as part of the FlyHIgher@UP programme focused on Research capacity strengthening for postgraduate students. The Soft Skills training workshop was conducted to support postgraduate students to enhance their understanding of and awareness of the importance of soft skills in their professional and personal lives. The 2-day training workshop took place on 31 October 2024 and 01 November 2024. Participants were shown how to improve communication and problem-solving skills. They were encouraged to articulate their thoughts clearly and listen to others, enhancing their communication and critical thinking abilities. The activities were designed to foster teamwork, leadership, and trust among participants. The activities also built confidence and improved public speaking and presentation skills. This workshop also helped participants learn how to give and accept feedback gracefully, which is crucial for personal and professional growth. They were shown the importance of building professional relationships. Importantly, they were shown techniques on how to manage stress and maintain a positive mindset. The workshop helped participants handle disagreements constructively, as well as enhanced their empathy and adaptability in diverse environments.

PART C:
GOVERNANCE

INTRODUCTION

Corporate governance embodies processes and systems by which an organisation is directed, controlled, and held to account. As a Section 3A public entity, corporate governance at the SAMRC is guided by its enabling legislation, the SAMRC Act 58 of 1991, the prescripts of the Public Finance Management Act 1 of 1999, as amended and the principles contained within the King Report on Corporate Governance.

The SAMRC is accountable to Parliament for its performance and management of its budget. The SAMRC Act provides for the appointment of a Board by its executive authority, the National Minister of Health. The Board as the accounting authority, in turn, is responsible for the corporate governance of the SAMRC. This includes fiduciary responsibilities and ensuring compliance with legislative and regulatory requirements. Furthermore, the SAMRC Board appoints the SAMRC President, who carries the responsibility for implementing the Board's mandate. The SAMRC President heads the SAMRC Executive Management Committee, which the SAMRC Act assigns responsibility for the day-to-day management of the organisation.

Portfolio Committee on Health

Engagements:

- SAMRC overview presentation on 21 August 2024
- 2023/24 Annual Report presentation on 15 October 2024

Executive Authority

The Executive Authority of the SAMRC is the Minister of Health. The Accounting Authority of the SAMRC is the SAMRC Board, duly appointed by the Minister. The Practice Note issued by National Treasury dealing with the Submission of Corporate Plans requires the inclusion of the following in the Corporate Plan:

a. Five-year Strategic Plan

b. Annual Performance Plan

c. Governance Structures

d. Risk Plan

e. Fraud Plan

f. Financial Plan

g. Materiality/Significance Framework

The Executive Authority requires quarterly reporting on the PFMA and Treasury Regulations Compliance Checklist for Public Entities from the SAMRC on prescribed dates. For the 2024/25 financial year, SAMRC submitted reports according to the following timeline:

- Quarter 1 Report – submitted on 30 July 2024
- Quarter 2 Report – submitted on 30 October 2024
- Quarter 3 Report – submitted 31 January 2025
- Quarter 4 Report – submitted on 30 April 2025

No issues were raised by the Executive Authority on the reports submitted.

THE ACCOUNTING AUTHORITY/BOARD

Our Board

The role of our Board is set out in the South African Medical Research Council Act of 1991 and states that "the affairs of the SAMRC shall be managed and controlled by a Board, which shall, subject to the provisions of this Act, determine the policy and objectives of the SAMRC and exercise control generally over the performance of its functions, the exercise of its powers and the execution of its duties".

Board Charter

The Board Charter sets out the Board's role and responsibilities, as well as the requirements for its composition and meeting procedures.

The Charter is reviewed annually to ensure that the Board remains compliant with legislation and trends in corporate governance. The review of the Charter took place at the Board meeting held on 29 July 2024 and no amendments to the Charter were deemed necessary.

The Board Charter requires an annual assessment to be conducted of the Board, its committees, and individual members, including the Chairperson. The evaluation is in the form of a self-assessment completed by every member of the Board and was conducted in March 2024 February 2025

The Board Charter details the role and responsibilities of the Board, as follows:

1. The Board is ultimately accountable and responsible for the management and control of the affairs of the SAMRC subject to the provisions of the SAMRC Act. The Board determines the policies and objectives of the SAMRC and exercises control generally over the performance of its functions, the exercise of its powers and the execution of its duties.

2. To the extent that it is not contrary to the provisions enabling legislation or the powers of the Executive Authority, the Board or its Committees have the responsibility to manage the conduct of individual members of the Board/Board Committee as the case may be, including referral to the Executive Authority for appropriate intervention.

3. The Board constitutes the focal point and custodian of corporate governance in the SAMRC by managing its relationship with management and stakeholders along sound corporate governance principles. Accordingly, the SAMRC must be headed and controlled by an effective and efficient Board, comprising of Executive and Non-Executive members in order to ensure independence and objectivity in decision-making.

4. The Board must appreciate that strategy, risk, performance and sustainability are inseparable and to give effect to this by:

    a) Contributing to and approving the SAMRC's strategy

    b) Satisfying itself that the strategy and business plans do not give rise to risks that have not been thoroughly assessed by management

    c) Identifying key performance and risk areas

    d) Ensuring that the strategy will result in sustainable outcomes

    e) Considering sustainability as a business opportunity that guides strategy formulation

5. The Board has absolute responsibility for the performance of the entity and is accountable for such Performance. As a result, the Board should give strategic direction to the SAMRC.

6. The Board must appoint and evaluate the performance of the President, Vice Presidents, the Chief Financial Officer and other members of the EMC and ensure that an effective succession plan is in place and adhered to for all key executive posts.

7. The Board must retain full and effective control over the SAMRC and monitor management in implementing Board decisions, plans and strategies.

8. The Board must ensure that the SAMRC is and is seen to be a responsible corporate citizen by having regard to not only the financial aspects

of the business of the SAMRC but also the impact that business operations have on the environment and the society within which it operates.

9. The Board must ensure that the SAMRC ethics are managed effectively.

10. The Board must ensure that the SAMRC establishes and maintains:

    a) effective, efficient, and transparent systems of financial management, risk management and internal control.

    b) a system of internal audit under the control and direction of an audit committee complying with, and operating in accordance with, the regulations and instructions which are set out in Sections 76 and 77 of the PFMA.

    c) an appropriate procurement and provisioning system that is fair, equitable, transparent, competitive and cost effective.

    d) a system for properly evaluating all major capital projects prior to the final decision on a project.

11. The Board is responsible for the governance of risk.

12. The Board is responsible for information technology (IT) governance.

13. The Board must ensure that the SAMRC complies with applicable laws and considers adherence to non-binding rules and standards.

14. The Board must approve and ensure that the SAMRC submits all reports, returns, notices and other information required by Parliament, the Executive Authority and Treasury.

15. The Board must appreciate that stakeholder's perceptions affect the SAMRC's reputation.

16. The Board must approve the SAMRC's five-year Strategic Plan before submission to the Executive Authority.

17. The Board must approve the SAMRC's Annual Report, Compliance Report(s), Strategic Plan and Annual Performance Plan before submission to the Executive Authority.

18. The Board must approve the SAMRC's Annual Financial Statements before submission to the Auditor General and subsequently to the executive authority.

19. The Board must approve the SAMRC's budget for the financial year in the prescribed format before submission to Treasury and the executive authority.

20. The Board must take effective and appropriate steps to prevent irregular and fruitless and wasteful expenditure, losses resulting from criminal conduct, and expenditure not complying with the operational policies of the SAMRC.

21. The Board must ensure that the SAMRC conducts an independent institutional review every five years.

22. The Board must act in the best interests of the SAMRC by ensuring that individual members of the Board:

    a) adhere to legal standards of conduct.

    b) are permitted to take independent advice in connection with their duties following an agreed procedure.

    c) participate in the deliberations and are enabled to vote for the approval or rejection of a motion/proposal/or recommendation placed before them.

    d) disclose real or perceived conflicts to the Board and deal with them accordingly. As such, the Board must compile and retain a register of interests for all Board members and update this register once every year.

23. The Board should do everything necessary to fulfil its role set out above.

BOARD MEMBERS

PROF JOHNNY MAHLANGU
CHAIRPERSON

PROF BONGINKOSI CHILIZA
DEPUTY CHAIRPERSON

PROF TRACEY NALEDI

DR ZINHLE MAKATINI

MS DORIS DONDUR

PROF BRUCE BICCARD

PROF LUFUNO MATHIVHA

PROF MOSA MOSHABELA
(RESIGNED AUGUST 2023)

DR MZIWANDILE MADIKIZELA

PROF EMMANUEL MUKWEVHO

PROF RONELLE CAROLISSEN

PROF THANDISIZWE MAVUNDLA

PROF TIMOTHY TUCKER

PROF EUNICE SEEKOE

ADV DOROTHY KHOSA

PROF TAHIR PILLAY

PROF NTOBEKO NTUSI
SAMRC PRESIDENT AND CEO
(JOINED 1 JULY 2024)

Board Term: 1 November 2022 to 31 October 2025

COMPOSITION OF BOARD

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor J Mahlangu	Member (Chairperson)	1 Nov 2016	n/a	• MBBCH (WITS) • MMED (Wits) • FCPath (SA) • BSc (Wits) • Cert Clin Haem (SA)	• Clinical Haematologist with special interest in haemostasis and thrombosis, clinical trials and other aspects of clinical and diagnostic haematology and pathology.	• BloodSA • Colleges of Medicine of South Africa	• Board • Exco	5 1
Professor E Seekoe	Member	1 Nov 2019	n/a	• D Cur; • MBA Health; • M SocSc Nursing Education; • Advanced Diploma in Psychiatric Nursing Science; • B A Cur Nursing Education and Community Health Nursing; • Diploma in General Nursing Science and Midwifery; • Certificate in Reproductive Health (Family Planning); • Certificate in Quality of Health Services; • Certificate in Decentralisation of Health Services; • Certificate in Strengthening Human Resource in Health	• Health Systems strengthening through mentoring and leadership.	• National Research Ethics Council. • Community Health Care worker Think Tank Committee. • The Association for Health Professions Education and Leadership.	• Board • R&D • Exco	5 2 1

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor E Mukwevho	Member	1 Nov 2019	n/a	• PhD Anatomy and Cell Biology; • MSc Molecular and Cell Biology; • BSc Honours Biochemistry; • Bachelor of Science; • MBA; • Certificate in Project Management; • Certificate in Financial Management.	• Obesity and Diabetes • Metabolic syndrome; • Mitochondrial Energy metabolism; • Epigenetics of the Obesogenes.	• SASBMB (South African Society of Biochemistry and Molecular Biology)	• Board • ARIC	4 5
Professor T Tucker	Member	1 Nov 2019	n/a	• MBChB; • PhD; • F.C.Path (SA)Viro	• Clinical Virology • Health Systems Strengthening • Digital health • Pathology Laboratory Service • Clinic-Laboratory-Interface • Public-private-partnerships	• SEAD Consulting (Pty) LTD • Mothers-2-Mothers NOP – board member • NIH Strategy Working group on HIV/AIDS – US Gov – Committee Member • Tucker Family Trust	• Board • REMCO • EXCO	5 5 1

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor R Carolissen	Member	1 Nov 2019	n/a	• DPhil Psychology; • MA Clinical Psychology; • Higher Diploma in Education; • BA Hons Psychology; • Bachelor of Arts; • Registered Clinical Psychologist.	• Feminist social justice approaches to teaching and learning and critical community psychology perspectives on youth citizenship, identities, belonging and community engagement in educational contexts.	• President of Psychological Society of South Africa	• Board • REMCO	4 1
Advocate D Khosa	Member	1 Nov 2019	n/a	• Bachelor of Laws (LLB); • Master of Management: Public and Development Management; • Practice Management Training; • Design Thinking Course; • Labour Dispute Resolution Practice; • Certificate in Principles of Business and Management; • Diploma in Labour Law; • Certificate in Gender Policy Management; • BA Honours in Human Resource Management: • Labour Relations; • Post Higher Education Diploma; • Bachelor of Arts.	• Human Resource Management; • Law; • Mediation; • Arbitration; • Negotiation; • Research.	• Bula Maseve Trading CC (Directorship) • Council Member of Sedibeng TVET College • Director of Constructive Employment Relations Services (Pty) Ltd • Member of the Legal Practice Council (LPC in South Africa):53419 • Member pf the South African Board for People Practices (SABPP): 48962493 • Commissioner at the General Public Service Sectoral Bargaining Council (GPSSBC) • Commissioner at the South African Local Government Bargaining Council (SALGBC) • Commissioner at Tokiso Dispute Settlement • Committee member responsible for disciplinary matters and an arbitrator/mediator at the Legal Practice Council, Gauteng Region	• Board • REMCO	5 4

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor T Mavundla	Member	1 Nov 2019	n/a	• B Cur (Nursing & Midwifery); • IPHC Intensive Primary Health Care; • PGDEL (Education Management & Leadership) • M Cur Advanced Psych-Mental Health; • AUDNE Nursing Education; • PhD Mental Health.	• Male Sexual and Reproductive Health; • Psychiatric-Mental Health; • Qualitative Research and Theory Development.	• Forum for University Nursing Deans in South Africa – FUNDISA. • Sigma Theta Tau International – STTI. • South African Nursing Council – SANC	• Board • ARIC	5 4
Dr. M Madikizela	Member	1 Nov 2019	n/a	• BSc Biochemistry; • BSc Hons Biochemistry; • MSc Biochemistry; • PhD Biochemistry; • MBA.	• Bioeconomy, Life Sciences, Technology Management and Commercialization of Public Research Results and Business Management	• n/a	• Board • ARIC	4 5
Professor B Biccard	Member	1 Nov 2022	n/a	• PhD; (UKZN); • FCA(SA); • FFARCSI; • MMedSc; • MBChB.	• Anaesthesiology; • Perioperative outcomes; • Global Surgery.	• Safe Surgery South Africa	• Board • R&D	3 1
Professor B Chiliza	Deputy Chairperson	1 Nov 2022	n/a	• PhD, Stellenbosch University, 2015; • Fellow of the College of Psychiatrists of South Africa (FC Psych), 2003; • Bachelor of Medicine and Bachelor of Surgery (MB ChB) University of Natal, 1997.	• Psychiatry; • Psychosis; • Clinical psycho-pharmacology; • Health services research; • Psych epidemiology;	• South African Society of Psychiatrists	• Board • REMCO • EXCO	4 2 1

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Ms. D Dondur CA(SA) CD(SA)	Member	1 Nov 2022	n/a	• Masters in Business Administration; • Honours in Business Administration; • Honours in Accounting; • Bachelors in Accounting; • International Executive Development Programs; • Certificate in Labour Relations; • Chartered Accountant (South Africa); • Chartered Director (South Africa).	• Auditing; • Finance and Accounting; • Combined Assurance and Enterprise Risk Management; • Corporate Governance; • Strategy; • Human Resources and Labour Relations.	• PPS Holdings Trust • PPS Insurance Company • PPS Retirement Annuity Fund • PPS Beneficiaries Trust • South African Institute of Professional Accountants (SAIPA) • Tshikululu Social Investments NPC • Vaal Orange Catchment management Agency (VOCMA) • Doris Dondur Consulting CC (Dormant)	• Board • ARIC • EXCO	5 5 1
Professor Z Makatini	Member	1 Nov 2022	n/a	• BSc (Hons) Univ London (Kings College); • MSc Immunology (Univ of London LSTM&H); MBChB (Univ Sheffield), FC Path Viro (CMSA); PhD Virology (SMU); Dip Travel Med (Univ of Glasgow); • DTM&H (Wits); • Dip HIV in Workplace (Stellenbosch Univ).	• Clinical virology and immunology with focus on HIV and clinical trials.	• SAHPRA Boad – Resigned • SAHPRA Clinical Trials Committee – Member and Chair. • CMSA College of Pathologists – Councillor (Virology)	• Board • REMCO	5 4

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor L R Mathivha	Member	1 Nov 2022	n/a	• FCPaed – Critical Care Medicine; • Post Graduate Diploma in Health Sciences Education; • Diploma in Business Administration; • MBChB; • USMLE 1 & 2 • Course in Mediation in Medical Negligence.	• Critical Care Medicine (Adult & Pediatric); • Fellowship Programme Director • Organizational skills in ICU setting and HR Capacitation; • Principal Investigator in multi-national RCT trials; • Scientific Advisory Committee work (National and International); • Enabling work and research environment; • Utilization of resources in a constrained environment.	• Scientific Advisory Committee Member for GARDP on Antimicrobial Resistance. • Member of the Society of critical care Medicine, USA.	• Board • R&D	5 2

NAME	DESIGNATION	DATE APPOINTED	DATE RESIGNED	QUALIFICATIONS	AREA OF EXPERTISE	BOARD DIRECTORSHIPS	OTHER COMMITTEES OR TASK TEAMS	NO. OF MEETINGS ATTENDED
Professor T Naledi	Member	1 Nov 2022	n/a	• FCPHM(SA); • MBChB.	• Translation of research into policy and practice; Health Equity, Social and Structural Determinants of Health, Youth and adolescent Health; HIV Prevention.	• Children's Institute • SHAWCO • Global Brain Health Institute Governing Board Member (University of California, San Francisco (UCSF) and Trinity College Dublin (Trinity) • Africa Centre for HIV/ AIDS Management (Advisory Board Chair) • Council for Public Health Medicine (South Africa) • Tekano (Founding Board Chairperson) • Perinatal Mental Health Project (Board of Advisors) • Health Justice Initiative – Reference Advisory group • UCT Lung Institute-Secondee Director for the Dean • Colleges of Medicine Board of Directors	• Board • ARIC	4 4
Professor T Pillay	Member	1 Nov 2022	n/a	• PhD (Cantab); • FRCPath (London); • FCPath (SA); • MBChB cum laude.	• Molecular & cellular biology; • Expression cloning of proteins; • Single domain antibodies (nanobodies); • Assay of glycated proteins • Molecular modelling of ligands and receptors.	• Treasurer, South African Association for Clinical Biochemistry & Laboratory Medicine. • Chair, Executive committee, Communications & Publications Division, IFCC. • Clinical Director of International Activities, Royal College of Pathologists, London.	• Board • R&D	5 2

COMMITTEES

Committee	No of meetings held	No of Members	Name of Members
Board	5	15	Professor J Mahlangu
			Professor T Tucker
			Professor R Carolissen
			Adv. D Khosa
			Professor T Mavundla
			Dr. M Madikizela
			Professor E Seekoe
			Professor E Mukwevho
			Ms. D Dondur CA(SA)
			Professor T Naledi
			Professor B Chiliza
			Professor Z Makatini
			Professor L R Mathivha
			Professor B Biccard
			Professor T Pillay
ARIC	5	7	Ms. D Dondur CA(SA)
			Professor T Naledi
			Dr. M Madikizela
			Professor T Mavundla
			Professor E Mukwevho
			Ms. J Williams CA (SA)
			Mr. J Watson CA (SA)
HR & REMCO	5	5	Professor T Tucker
			Professor R Carolissen
			Adv. D Khosa
			Professor B Chiliza
			Professor Z Makatini
R&D	2	4	Professor E Seekoe
			Professor L R Mathivha
			Professor B Biccard
			Professor T Pillay
EXCO	1	5	Professor J Mahlangu
			Professor E Seekoe
			Professor T Tucker
			Ms. D Dondur CA(SA)
			Professor B Chiliza

Remuneration of Board members

Remuneration of Board members is based on the daily remuneration rate prescribed by National Treasury, as amended from time to time.

- Board and committee members receive a meeting fee for attending meetings of the SAMRC Board and Board committees, as well as meetings members are invited to attend to represent the SAMRC Board in an official capacity. The Meeting Fee to be equivalent to the daily remuneration rate prescribed by National Treasury, as amended from time to time.
- Board and committee members receive a meeting allowance in addition to the daily meeting fee as compensation for time spent preparing for meetings, travelling, unavoidable stayovers, follow-up activities relating to meetings etc. The daily meeting allowance is equivalent to the daily meeting fee prescribed by National Treasury, as amended annually.
- Board members are allowed to receive a data allowance equivalent to the allowance payable to executive managers of the SAMRC, as amended from time to time. The data allowance is currently R307 per month.
- The Board Chairperson receives a Cellphone allowance of R700 per month.
- Employees of the State are nor remunerated for serving on the SAMRC Board. There are currently no employees of the State serving on the SAMRC Board.
- The Board reviews annually the dispensation for remunerating Board members. The last review was conducted at the Board meeting held on 20 February 2025.

The SAMRC pays all travel costs related to Board members' attendance at Board meetings and Board Committee meetings.

- Board members make use of economy class on air travel.
- The amount for overnight accommodation and breakfast is in accordance with the amount prescribed by National Treasury, as amended from time to time.
- If required, class A or B car rental is provided.
- Shuttle services is provided only for travel to and from the airport, hotel and meeting venue.
- Members are responsible for their own transportation to and from local meeting venues. Reimbursement for the use of a member's own vehicle for travelling to a local meeting or official event is in accordance with the rate prescribed by National Treasury, as amended from time to time.

The amount of remuneration paid to each board member is as follows.

31 March 2025

	Emoluments R	Vehicle & parking & cellphone allowance R	Accommodation and Entertainment R	Local air travel and parking R	Total R
Professor J Mahlangu	111,150	12,084	4,548	16,548	144,330
Professor B Biccard	35,074	3,684	–	–	38,758
Professor R Carolissen	45,866	3,684	1,331	8,735	59,616
Professor B Chiliza	59,356	3,684	6,026	22,661	91,727
Ms D Dondur	119,700	3,684	7,505	20,002	150,891
Advocate D Khosa	75,544	3,684	2,957	8,920	91,105
Doctor Z Makatini	78,242	3,684	6,026	27,293	115,245
Professor M Madikizela	70,148	4,105	4,548	14,765	93,566
Professor T Mavundla	75,544	4,014	6,139	23,526	109,223
Professor L Mathivha	56,658	3,684	4,435	14,410	79,187
Professor E Mukwevho	72,846	12,964	7,843	16,419	110,072
Associate Professor T Naledi	64,752	3,684	–	–	68,436
Professor T Pillay	56,658	3,684	4,435	19,064	83,841
Professor E Seekoe	83,334	3,684	6,409	29,962	123,389
Doctor T Tucker	125,096	3,684	2,661	–	131,441
	1,129,968	**73,691**	**64,863**	**222,305**	**1,490,827**

ENTERPRISE RISK MANAGEMENT

The SAMRC's Enterprise Risk Management (ERM) Framework provides an integrated, structured and consistent approach to risk management. The framework draws on internationally accepted best practice and aligns with relevant standards, i.e. it considers the ERM principals articulated in the COSO framework, ISO 31000 and King IV.

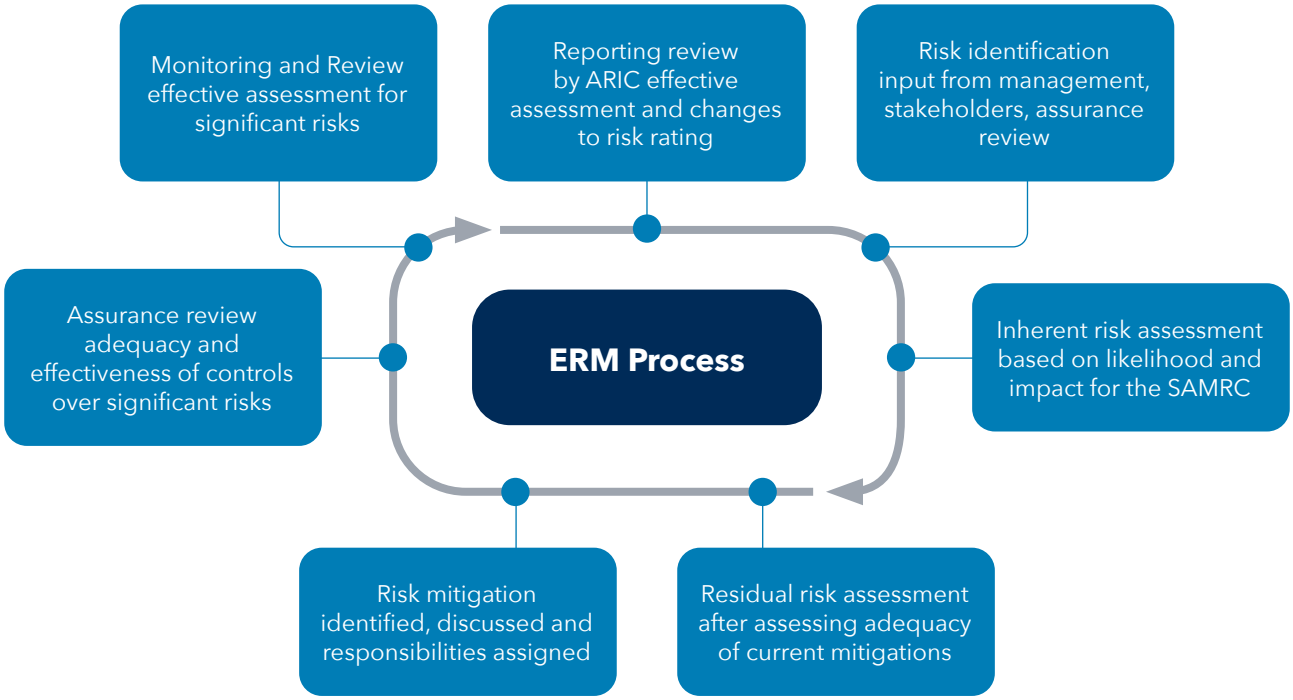
While the Board is ultimately responsible for the maintenance of an effective risk management process, the Audit & Risk and IT Committee (ARIC) while overseeing the efficacy of this process and monitoring the effectiveness of the system of risk management, assists the board in assessing and forming a conclusion on the adequacy of the risk management process. The ARIC's delegated responsibility further extends over that of the SAMRC's internal auditors and external auditors. The strategies adopted by the ARIC allows for the timely review of any internal control weakness identified by these assurance providers. In addition, continual improvements in the development of ERM methodology further enhances the SAMRC's overall risk management coverage and focus.

The Board maintains a strong and regular oversight of the various committees' work and receives regular updates on the activities of the ARIC on the organisation's system of risk management and strategic risk mitigation measures, and reports on its review in the SAMRC's Annual Report.

Risks are reviewed throughout the year, and this continuous process informs any updates to the SAMRC's risk registers, at both strategic and operation level. An ongoing review of the ERM and risk management process ensures that best practice is considered while maintaining a practical and business-minded approach.

The SAMRC's comprehensive risk management system is designed to identify and assess important emerging and significant risks faced by the organisation. The ERM Unit at SAMRC is a dedicated department that reports directly to the ARIC and has primary responsibility for the design, implementation and monitoring of corporate enterprise-wide risk management across the SAMRC

Our risk management process, while iterative, starts with risk identification.



SAMRC's philosophy to ERM entails the proactive management and mitigation of risks and the exploitation of any related opportunities under the guidance of the SAMRC Board, President and Executive Management.

The SAMRC's risk management policies are established to identify and analyse the risks faced by the SAMRC, to set appropriate mitigating strategies, and to monitor risks and adherence to the strategies. Risk management policies and systems are reviewed annually to reflect changes in industry practices and the SAMRC's activities. The ARIC reviews the ERM framework and the related policies and processes regularly.

Risks & opportunities

The Board adopts a balanced approach to risk, without inhibiting or unduly restricting the SAMRC's ability to deploy and capitalise on risk-adjusted opportunities. The Board and President utilise the Executive Management Committee and senior management to manage the respective components of risk.

The SAMRC's significant risks and opportunities are determined through a strategic risk review process where the SAMRC Executive Management and Board assesses its impact on the achievement of the strategic objectives. Where appropriate, further mitigating strategies to further improve the management of these risks have been developed and being implemented. Each business area is responsible for identifying, assessing and managing the risks in their respective area. Mitigations are identified against each risk, and the remaining residual risk is assessed according to defined criteria.

Risks and opportunities are identified throughout the year through regular interaction with the business and assessed on the likelihood of occurrence and the potential impact on the SAMRC (risk exposure).

The risks with the highest exposure are presented to the ARIC for review. The outcome of the review is submitted to the Board for challenge and approval. Risk dashboards are utilized to report quarterly to the Executive Management Committee and ARIC on the status of implementation of the organisation's risk management plan. These quarterly reports form the basis of the ongoing communication of new and emerging significant risks and opportunities and the monitoring on the status of implementation on management mitigation strategies Further support is provided by internal audit in the form of assurance on the effectiveness of control procedures in place to reduce the possibility and outcome of the known risks.

Related risks, opportunities and issues are aggregated and grouped to determine the significant risk category/context and are depicted below in the heat map, rated in respect of inherent impact and likelihood. Selected significant business risks and opportunities (grouped by strategic priorities), together with key mitigating measures, aligned to the strategic objectives are also explained in more detail below.

Our risks and opportunities

Strategic priorities	Risk context to value creation	Risk mitigations	Opportunities to create value
Administer health research effectively and efficiently in South Africa	**POPIA Compliance**		
	Onerous legislative requirements and complexity of the POPI Act requires further capacitating user's appreciation and understanding of the relevant legislative requirements	• Policies, guidelines, and manual in place • Legislative compliance framework and tool in place • Internal POPIA site available to all staff where awareness materials are regularly uploaded	• Dedicated legal compliance staff and appointed Deputy Information Officers • Bespoke training across the SAMRC to enhance compliance and increase support from stakeholders
	Data management		
	Cyberthreats and loss of SAMRC research data/ intellectual property	• Firewall protection and penetration testing • Up-to-date data security protection tools • Management monitoring and oversight • Policies, guidelines and SOPs	• Continuous monitoring and innovation • Cyber-prevention policies and training in place
	People management function		
	Lack of understanding of the complexity of the research ecosystem and remuneration structures within academia and science council to allow people to flourish	• Accelerated development programme to enhance capacity building initiatives • Database of available management and leadership skills training programs • Study support and ongoing digital and in-house training provide easily accessible learning opportunities	• Actions and strategies developed based on outcomes of organisational culture survey • Revision of the remuneration & benefits system • Establishing appropriate remuneration strategies and guidelines for scarce and critical skills

Strategic priorities	Risk context to value creation	Risk mitigations	Opportunities to create value
Lead the generation of new knowledge	**Maintaining research integrity**		
	Application of inconsistent data management processes; inadequate structured mentorship and onerous new legislative requirements imposed	• Establish Research Integrity Office • Human and animal ethics committees • Policies, guidelines and SOPs • Internal and external peer reviews	• Establishment of an organisational-wide data management guideline to support key stakeholders • Ongoing digital and in-house training provide easily accessible learning opportunities
	Transformation		
	Progression of staff transformation across the organisation at senior research level impacted by various factors, including low staff turnover, limited budget and scarce skills shortage in medical science	• EE Strategy & Plan • Strengthened Transformation forum with inclusion of the EE and Skills development Committee • Designated Transformation Executive and Office • Diversity intervention initiatives and leadership programs	• Enhanced leadership development programs providing accessing to learning and workplace opportunities
	Funding		
	Inability to maintain and appropriately diversify incoming funding to generate future funding opportunities	• New/extended co-funding partnerships • Quarterly management report includes proposal activities and new awards	• Dedicated on-going investigation for further local and international funding opportunities in both the private and public sector

Strategic priorities	Risk context to value creation	Risk mitigations	Opportunities to create value
Support, through funding and other mechanisms, technology development and implementation, and innovations in health and technology delivery to improve health	**Lack of further development and commercialization of (a) SAMRC-owned and (b) SAMRC-funded innovations**		
	Limited funding for/value proposition of innovation, reducing interest from industry to commercialize or target market to implement the innovation	• IP and Commercialization Policy, Strategy and Procedures • Regular review of the SAMRC IP portfolio • Active follow on SAMRC-funded projects to progress to next stage of development	• Active engagement for external partnering to pursue commercialization opportunities
Build human capacity for the long-term sustainability of the South African health research	**Limited research capacity in scarce skills**		
	Further development of research scientists needed to assist in growing the pool of South African HDI medical research scientist	• Capacity building strategy for supporting the development of HDI research scientist	• Continuous engagement with Universities to identify scholarship and bursary candidates • Established strategic relations with institutions for collaboration and accessing researchers to build clinical research capacity
Translate new knowledge into policies and practices to improve health	**Ensuring knowledge translation**		
	The risk of funding invested in interventions not progressing into the next phase of development/ translation leading to missed opportunity to impact nations health/sub-optimally designed studies not meeting key stakeholder requirements	• SAMRC strategic and business plans in place • Understanding Units needs and identifying and sharing success of research translation stories	• Dedicated on-going investigation for further international funding opportunities

INTERNAL CONTROL UNIT

The Board is responsible for the organisation's internal control system, its annual review and ensuring its efficiency. As such, the Board approved certain governance functions and structures that achieve the goal of effectively undertaking the ERM function and ensuring the efficiency and effectiveness of internal control aspects within the organisation. The SAMRC's comprehensive risk management and internal control system is designed to identify and appropriately mitigate the emerging and significant risks of the business and ensure the accuracy and reliability of the SAMRC's financial reporting, while facilitating the delivery and sustainability of the strategic goals.

Key features of the SAMRC's financial reporting internal controls include:

- clearly defined delegations of authority and lines of accountability;
- policies and procedures governing financial resource management, financial reporting and key IT projects;
- assurance on key processes and audits as part of the internal audit coverage;
- an annual IT general control assessment conducted by the external auditors on the business applications which support the financial close process; and
- a detailed review by the Audit and Risk and IT Committee (ARIC) and the Board of the financial statements and disclosures within the annual report.

The ARIC assists the Board in overseeing the organization through, among other things, monitoring the soundness and integrity of the financial statements as well as reviewing the systems of internal audit and compliance. In addition, the ARIC oversees the implementation of internal audit and compliance systems and functions. The ARIC is therefore required to ensure that management has adequate controls in place over assets, risk and financial systems, and has systems to allow for timeous and accurate financial reporting that complies with all applicable requirements and legislation.

Internal Audit provides objective assurance and insight on the effectiveness and efficiency of risk management, internal control and governance processes. The function provides the Audit Committee with an annual assessment on the efficiency and effectiveness of the internal control environment across SAMRC. In addition, Internal Audit report to Executive Management and the ARIC, at least quarterly, on the status of the internal control environment, including reporting of any significant control issues and the status of actions to address deficiencies.

The outsourced Internal Audit function is completely independent from the Executive Committee and reports functionally to the ARIC and is overseen by the Internal Audit Charter. Internal Audit has unrestricted access to the Chairperson of the ARIC and the SAMRC President. The Internal Audit function works closely with the Risk Management function and engages with the external auditors on an ongoing basis.

The work of Internal Audit focuses primarily on areas that present the greatest risk to the SAMRC. This is achieved by following a risk-based assurance approach, focus on the key risk exposure as approved by the Board. Its audits cover internal controls and risk management processes relating to the financial and operational, as well as IT and compliance activities of the SAMRC. Internal Audit monitors and tracks the implementation of agreed control actions arising out of these audits and ARIC oversees the progress on quarterly basis to ensure timely implementation of actions to mitigate risks. Focus areas are determined and updated annually using a risk-based approach considering the risk assessments conducted in the SAMRC and ensuring the work is appropriately aligned to and coordinated with the activities of other relevant assurance providers. The ARIC receives quarterly reports on progress against the Internal Audit Plan and corrective actions taken by management in response to audit findings.

Based on the results of the planned and adhoc audit activities undertaken during the financial year, it can be concluded that for the performed audit activities the key internal controls were generally effective in all material aspects and reported findings did not expose the SAMRC to significant risk.

The Auditor-General South Africa (AGSA) is responsibility for expressing an opinion on the financial statements and to report on findings relating to the audit predetermined objectives, and material non-compliance with specific requirements in key applicable legislation. The AGSA is invited to all ARIC meetings and receives copies of all relevant papers and meeting minutes.

FRAUD AND CORRUPTION

The SAMRC has a zero tolerance to unethical behaviour and is committed to the prevention of unethical business conduct. In particular, the SAMRC places a priority on the identification and eradication of fraud, corruption, and misconduct of any sort. The fraud prevention plan developed by the ERMU includes a fraud strategy as one of the outputs of the plan. The components of the SAMRC's fraud strategy consist of prevention, detection, investigation and response. The prevention of fraud is the most important component of the SAMRC's strategy in dealing with fraud.

The core fraud risks facing the SAMRC as part of the Fraud Prevention Plan Strategy were revisited as part of the annual fraud risk assessment. The identified controls to mitigate these were evaluated for effectiveness, and where deemed necessary, action plans to further strengthen certain areas were developed to further strengthen the control environment.

The SAMRC has developed an on-line whistle-blower hotline where staff can report fraudulent activities/ incidents anonymously. The webpage, 'Report fraudulent activities at the SAMRC', is available to all staff on the SAMRC Intranet home page. Staff who have knowledge of an occurrence of fraud or corruption, or who have good reason to suspect that a fraudulent or corrupt act has occurred, have a duty to promptly report any reasonable suspicions. All reported cases are directed to the appropriate governance structures per the Fraud Prevention Plan and are treated with the utmost confidentiality to protect the rights of both the whistle blower and the alleged party.

Minimising conflict of interest

The SAMRC's commitment to high standards of business conduct and ethics is set out in the SAMRC's values and is supported by the Board approved Code of Business Conduct Framework Policy (Code).

The Code is intended to prevent unethical behaviour and encourage ethical behaviour. This balance of business conduct is directed at the SAMRC's internal stakeholders (Board, managers and employees) and external stakeholders, such as suppliers. The Code helps to define the parameters of the spirit of the SAMRC business and research conduct, ethics and personal ethos of staff.

The Code is available to all employees on SAMRC's in-house intranet and to external stakeholders on the SAMRC external website. In an event where an employee breaches the provisions of the policy, this will be addressed in terms of the SAMRC's Employment Relations Policy.

SAMRC employees are required to declare any potential conflicts of interest on an annual basis. Failure to disclose their interests, or the wilful provision of incorrect or misleading details can lead to charges of misconduct. It is important to note that an 'interest' declared is not necessarily considered to be a conflict of interest. It is understood that, in general, individuals who are involved in a particular activity have a professional interest in the subject. By implication, all employees of the SAMRC, and its Board and sub-committees have a professional interest in the work they are undertaking and in the outcome of these activities. All outside work, financial and private interest, and any other business activities, including gifts, must be declared when completing the SAMRC staff annual On-line Declaration of Interest.

In addition, a code of conduct for supply chain management (SCM) practitioners and other role players is in place, whereby conflicts of interest are declared on an annual basis in addition to the SAMRC-wide annual on-line declaration process.

SAMRC'S MATERIALITY AND SIGNIFICANCE FRAMEWORK: 2024/2025

The Materiality and Significance Framework for the SAMRC, in terms of the Treasury Regulation 28.3.1 and the National Treasury Practice Note on Applications under of Section 54 of the Public Finance Management Act (PFMA), is as follows –

Section 50: Fiduciary duties of accounting authorities:

1) The accounting authority for a public entity must –

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(c) on request, disclose to the executive authority responsible for that public entity or the legislature to which the public entity is accountable, all material facts, including those reasonably discoverable, which in any way may influence the decisions or action of the executive authority or that legislature;	Disclose all material facts.	The Board will disclose to the National Department of Health all material facts as requested and all material facts not requested, including those reasonably discoverable, which in any way may influence the decisions or action of the National Department of Health, at the discretion of the Board.

Section 51: General responsibilities of accounting authorities:

2) An accounting authority for a public entity –

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(g) must promptly inform the National Treasury on any new entity which that public entity intends to establish or in the establishment of which it takes the initiative, and allow the National Treasury a reasonable time to submit its decision prior to formal establishment; and	Disclose all material facts timeously.	Full particulars to be disclosed to the Minister of Health for approval after which it is to be presented to Treasury.

Section 54: Information to be submitted by accounting authorities:

2) Before a Public Entity concludes any of the following transactions, the Accounting Authority for the Public Entity must promptly and in writing inform the relevant Treasury of the transaction and submit relevant particulars of the transaction to its Executive Authority for approval of the transaction:

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
a) establishment of a company;	Any proposed establishment of a legal entity.	Full particulars to be disclosed to the Minister of Health for approval and National Treasury for noting
b) participation in a significant partnership, trust, unincorporated joint venture or similar arrangement;	Qualifying transactions exceeds R15Mil (based on 1% – 2% guidance of total average SAMRC assets, as at 31 March 2023). This includes research collaborative arrangements	
c) acquisition or disposal of a significant shareholding in a company;	Greater than 20% of shareholding.	

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
d) acquisition or disposal of a significant asset;	Qualifying transactions exceeds R15Mil (based on 1% – 2% guidance of total average SAMRC assets, as at 31 March 2023). Including Financial Leases	Any asset that would increase or decrease the overall operational functions of the SAMRC, outside of the approved strategic plan and budget.
e) commencement or cessation of a significant business activity; and	Any activity not covered by the mandate/core business of the SAMRC and that exceeds the R15Mil transaction value (based on 1% – 2% guidance of total average SAMRC assets, as at 31 March 2023).	Full particulars to be disclosed to the Minister of Health and Minister of Finance (National Treasury) for approval (simultaneous submission).
f) a significant change in the nature or extent of its interest in a significant partnership, trust, unincorporated joint venture or similar arrangement.	Qualifying transactions exceeds R15Mil (based on 1% – 2% guidance of total SAMRC assets, as at 31 March 2023)	

Section 55: Annual report and financial statements

2) The annual report and financial statements referred to in subsection (1) (d) ("financial statements") must –

b) fairly present the state of affairs of the Public Entity, its business, its financial results, its performance against predetermined objectives and its financial position as at the end of the financial year concerned;

b) include particulars of–

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
(v) any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year:	All instances	• Report quarterly to the Minister of Health. • Report annually in the Annual Financial Statements
(v) any criminal or disciplinary steps taken as a consequence of such losses or irregular expenditure or fruitless and wasteful expenditure;		
(v) any losses recovered or written off;		
(v) any financial assistance received from the state and commitments made by the state on its behalf; and		
(v) any other matters that may be prescribed.	All instances, as prescribed	

Section 56: Assignment of powers and duties by accounting authorities:

PFMA Section	Quantitative [Amount]	Qualitative [Nature]
1) The accounting authority for a public entity may – (e) In writing delegate any of the powers entrusted or delegated to the accounting authority in terms of this Act, to an official in that public entity (e) Instruct an official in that public entity to perform any of the duties assigned to the accounting authority in terms of this Act.	Values excluded from the Delegation of Authority Framework Policy.	Instances that are excluded from the Delegation of Authority Framework Policy.
1) A delegation or instruction to an official in terms of subsection (1) – (e) Is subject to any limitations and conditions the accounting authority may impose; (e) May either be to a specific individual or to the holder of a specific post in the relevant public entity; and (e) Does not divest the accounting authority of the responsibility concerning the exercise of the delegated power or the performance of the assigned duty.	Values excluded from the Delegation of Authority Framework Policy.	Instances that are excluded from the Delegation of Authority Framework Policy.

Treasury Circulars and Guidelines related to Supply Chain Management

2) National Department of Health and National Treasury are to be notified of procurement transactions exceeding R15 Million;

2) Notify National Treasury of variation amounts in excess of:

   a. 20% or R20 Million (including applicable taxes) for construction related orders; and

   b. 15% or R15 Million (including applicable taxes) for goods/service related orders

The materiality level mentioned above was calculated using the guidance practice note of the National Treasury. Using these guidance parameters below, the SAMRC materiality level calculation outcomes are as follows:

Element range	% to be applied against R value	Audited Value at 31 March 2023	Calculated Materiality & Significance Value
Total Assets (1%-2%)	1.28%	R1 171 836 882	R15 000 000

The SAMRC materiality and significance value will be R15 Million based on the percentage range of the total asset element and the significant fluctuations in the month-to-month total asset value. This is the most stable element, given the performance statement outcomes associated with the current economic climate challenges.

COMPANY/BOARD SECRETARY

The SAMRC's Board Secretary plays a crucial role in overseeing various aspects of board operations. This includes facilitating both Board and Board Committee meetings, as well as orchestrating the induction process for new Board members. He is responsible for managing processes related to the Board Plan, agenda, meeting documentation, and logistics, ensuring smooth proceedings and operations of the Board. Additionally, he offers guidance during meetings and ensures adherence to proper decision-making protocols, meticulously documenting outcomes. Moreover, he prepares action lists and accurate Board and Board Committee meeting minutes. Acting as a formal conduit of communication, the Board Secretary liaises between the Board and management, as well as with the Executive Authority, particularly on administrative matters. Throughout his duties, the Board Secretary remains committed to acting in the best interests of the SAMRC.

SUSTAINABILITY REPORT

In line with Section 24 of the Constitution of the Republic of South Africa, Act 108 of 1996, which places a duty on the state, business, and all citizens to prevent environmental harm and to promote conservation and sustainable development, the SAMRC remains committed to responsible environmental stewardship.

As part of our core values, Citizenship underpins our responsibility not only to the community, the nation, and the world – but also to the environment. This principle guides our efforts to embed sustainability into our operations and decision-making.

The SAMRC continues to implement practical and impactful solutions to reduce our environmental footprint, with a particular focus on energy and water efficiency, responsible waste management, and environmentally sustainable procurement.

To reduce reliance on municipal water sources, the SAMRC maintains rainwater harvesting systems and uses borehole water where available. These initiatives contribute significantly to reduced water consumption at our campuses.

Additionally, the installation of electronic water metering devices at SAMRC-owned sites has enhanced our ability to monitor water usage. These meters assist in detecting anomalies in consumption patterns, enabling prompt investigation and resolution of potential leaks or inefficiencies.

SAMRC's ongoing building refurbishments and maintenance activities incorporate various energy-saving technologies. These include:

- Installation of electronic electricity metering and monitoring systems across SAMRC campuses, enabling more effective management of energy use.
- Commissioning photovoltaic (PV) systems for the IT server room and the Biomedical Research and Innovation Platform (BRIP) laboratories, which are now fully operational.
- Ongoing feasibility studies into the expansion of PV system installations across additional facilities.

In support of sustainable practices, SAMRC has adopted the following environmental initiatives:

- Progressive replacement of air conditioning units with CFC-free, energy-efficient models during renovations and regular maintenance.
- Replacement of two petrol combustion vehicles with two hybrid vehicles.
- Incorporation of waste minimisation strategies wherever practicable.
- Continued use of biodegradable eating utensils at the Conference and Event Management Office, reducing single-use plastic waste.

Hazardous waste is generated as a result of the nature of SAMRC's research projects and during facility renovations and maintenance. To ensure safe and compliant handling of this waste, the SAMRC adheres to strict disposal protocols that align with national environmental legislation and health and safety regulations.

Hazardous materials are identified, segregated, and stored securely in clearly marked containers. Approved and certified waste management service providers are contracted to collect, transport, and dispose of this waste responsibly. Documentation and tracking of hazardous waste disposal are maintained to ensure accountability and regulatory compliance. Ongoing staff training ensures that personnel involved in waste handling are informed about proper procedures and potential risks.

SOCIAL RESPONSIBILITY

The SAMRC has implemented several initiatives aimed at uplifting communities and fostering sustainable development during the 2024/25 financial year.

To support Youth Empowerment through sport, the SAMRC Football Club participated in the Inter-School Festival held in Khayelitsha. This initiative aimed to empower young girls through sport, promoting mental wellness and equal opportunity while addressing issues such as low self-esteem, social isolation, and mental health challenges. The event was a success, reinforcing the positive role of sport in youth development and strengthening the SAMRC's footprint in community health promotion. The SAMRC Soccer Team remains actively involved in outreach programmes in communities like Nyanga and Khayelitsha, demonstrating our commitment to holistic well-being.

The SAMRC HIV and Other Infectious Diseases Research Unit hosted a series of impactful roadshows across four clinical sites: Verulam, Phoenix, Isipingo, and Tongaat. These events were designed to increase public health awareness through collaboration with local healthcare professionals, community teams, and civic stakeholders. Activities included health screenings, interactive workshops, and educational sessions on vaccines, HIV/AIDS, gender-based violence, chronic illnesses, and maternal and child health. Each roadshow was tailored to address local needs and improve access to relevant health information.

In Cape Town, the SAMRC also hosted a Health Awareness Walk at the Green Point Promenade, attended by over 350 participants. This initiative encouraged healthy lifestyles and drew attention to the importance of physical activity and nutritious diets in preventing chronic diseases such as diabetes and cardiovascular disorders. Staff, families, and members of the public came together to take active steps towards a healthier future.

As part of our commitment to capacity development, the SAMRC continues to host a robust internship programme. Interns are integrated into various units across the organisation and play an important role in supporting research while gaining hands-on experience. The Annual Intern Day is a key moment to celebrate their contributions and recognise the fresh perspectives and energy they bring to the SAMRC.

The Generation Science (Gen S) Job Shadow Programme continues to grow, providing Grade 11 and 12 learners with the opportunity to engage with scientists and researchers across SAMRC offices in Cape Town, Durban, and Pretoria. Held annually during Youth Month, this initiative offers an immersive experience over 3–5 days, fostering interest in science, research, and innovation among South Africa's future leaders.

In commemoration of Nelson Mandela Day, SAMRC staff participated in several acts of service. 'Jars of Hope' – nutritious meal kits comprising dry soup ingredients – were distributed to shelters and clinics that serve vulnerable communities. Staff also provided health research information and shared warm soup with homeless individuals in the surrounding areas.

To raise awareness on Tuberculosis., the SAMRC led a community engagement event in Emalahleni, Mpumalanga to mark World TB Day. In partnership with the SANAC Civil Society Forum (CSF) Mpumalanga, local NGOs, and key stakeholders – including traditional and faith leaders – the event raised awareness about TB and mobilised community involvement. Discussions were held in accessible languages and cultural contexts to drive behavioural change, promote early detection, and improve treatment adherence. The initiative also laid the groundwork for future collaborations that support policy implementation and enhance health outcomes in underserved communities.

SAMRC Football Club – SAMRC FC's community Engagement & tournament Journey Nov 2024.

SAMRC Football Club donating school shoes and personal hygiene materials.

SAMRC Health awareness walk.

Gen S job shadowing programme.

Nelson Mandela Jar Of Hope initiative.

Exhibition at the TB conference in June 2024.

AUDIT COMMITTEE REPORT

We are pleased to present our report for the financial year ended March 31, 2025.

Audit committee members and attendance

The audit committee consists of the members listed hereunder and should meet at least 4 times per annum as per its approved terms of reference. During the year 2025, 5 meetings were held. The unaudited annual financial statements were reviewed and discussed at a meeting held on 29 May 2025.

Name of member	Number of meetings attended
Ms D Dondur	5
Prof T. Mavundla	4
Prof E. Mukwevho	5
Prof T. Naledi	4
Dr M. Madikizela	5
Ms J Williams	5
Mr J Watson	5

Ms Doris Dondur
Chairperson of the Audit Committee
South African Medical Research Council
31 August 2025

B-BBEE COMPLIANCE PERFORMANCE INFORMATION

The following table has been completed in accordance with the compliance to the BBBEE requirements of the BBBEE Act of 2013 and as determined by the Department of Trade, Industry and Competition.

Has the Department/Public Entity applied any relevant Code of Good Practice (B-BBEE Certificate Levels 1 – 8) with regards to the following:		
Criteria	**Response Yes/No**	**Discussion** *(include a discussion on your response and indicate what measures have been taken to comply)*
Determining qualification criteria for the issuing of licences, concessions or other authorisations in respect of economic activity in terms of any law?	No	Not Applicable
Developing and implementing a preferential procurement policy?	Yes	The SAMRC complies with the Preferential Procurement Regulations of 2022
Determining qualification criteria for the sale of state-owned enterprises?	No	Not Applicable
Developing criteria for entering into partnerships with the private sector?	No	Any Public-Private Partnership (PPP) that the SAMRC may enter into will be in line with the Treasury Regulations. However, SAMRC receives some funding from the private sector, and these funds do not constitute PPP
Determining criteria for the awarding of incentives, grants and investment schemes in support of Broad Based Black Economic Empowerment?	No	However, two of the indicators of Programme 4 address the issue of capacitating black/historically disadvantaged individuals

B-BBEE CERTIFICATE

NTSIKELELO
VERIFICATION AGENCY

Company Address: Unit 3 and 4B Pinevalley Junction, 81 Stapleton Road, Pinetown 3610.
Registration Number: 2012/221535/07
VAT Number: 4460287826
TEL : 031 701 5269

B-BBEE Verification Generic Certificate
SOUTH AFRICAN MEDICAL RESEARCH COUNCIL
Registration Number:Schedule 3A, Public Entity : VAT Number:4890103718 Address: Medicina Campus,Francie Van Zyl Drive, Parrow, 7500

Legally assured verification

THE SCORE OBTAINED COMPRISES THE FOLLOWING:

Element	Actual Score	Target Score
Management Control	11.45	20
Skills Development	15.20	25
Enterprise and Supplier Development	43.37	50
Socio Economic Development	05.00	05
Total Points	75.02	100

B-BEE CONTRIBUTOR STATUS LEVEL: LEVEL 5
B-BEE PROCUREMENT RECOGNITION LEVEL: 80%

Scorecard Sector	DTI Generic Codes of Good Practice - Specialized of B-BBEE Act (Act53 of 2003) as amended on 11October 2013- Generic (Gazette No: 36928 and 42496)
Financial Period Measured	1 April 2022 to-31 March 2023
Enhanced Recognition Level	NO
Discounting Principle applied	NO
Modified Flow Through Applied	NO
Exclusion Principle applied	NO
Empowering Supplier	YES
Designed Group Supplier	NO
Black New Entrant	0%
Black Ownership	0%
Black Women Ownership	0%
Participated in Y.E.S	NO
Y.E.S Enhancement Level	N/A
Verification Number	1 NVA G10 REV 0
Technical Signatory	Sibongile Mahlangu

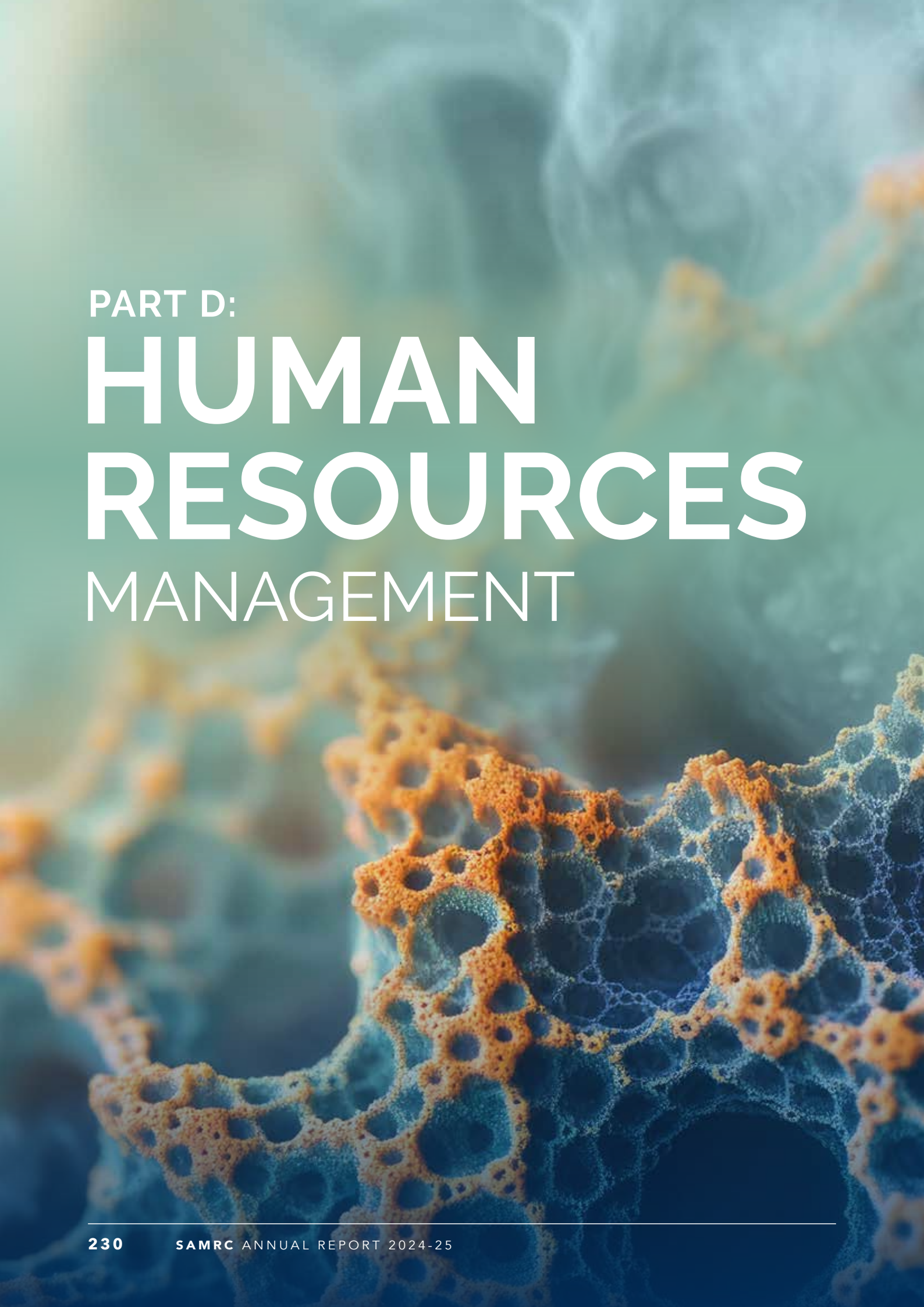
Designated Group Ownership	0.00%
Black Disabled Ownership	0.00%
Black Military Veterans	0.00%
OwnershipProcurement	0.00%
Recognition	0.00%
Black People Living in Rural Areas	0.00%
Black Unemployed	NO
Achieved Y.E.S Target & 2.5% Absorption	NO
Achieved 1.5 x Y.E.S Target & 5% Absorption	NO
Achieved 2 x Y.E.S Target & 5% Absorption	NO
Initial Issue Date:	31 August 2023
Revision Date:	N/A
Expired Date:	30 August 2024

Signature:

sanas
BVA294

This certificate is valid for 12 months from the original date of issue.

1NVA.COR.21.2a 16/12/2022 Page1 of 1



PART D:
HUMAN RESOURCES MANAGEMENT

INTRODUCTION

Overview of HR matters within the context and challenges as a public entity:

The South African Medical Research Council (SAMRC) delivers its work in an environment that has a scarcity of jobs related to specific skills set, knowledge and level of experience. Jobs affected by skills shortages are Epidemiologists, Medical Demographers, National Data Managers, Specialist Statisticians, Research Clinicians, Study Nurses and certain Information Technology jobs. These jobs tend to demand high salaries, owing to careers that are not only scarce but critical for completing important tasks. As a public entity with a modest budget, it can be challenging to acquire these skills in the highly competitive labour market.

It is in this context that the Human Resource Management function remains committed to delivering impactful science through its people by means of deploying a transformative and human capital-enhancing Integrated Talent Management Framework (ITMF) to attract, retain and develop current and future capacity of healthcare research skills. Furthermore, at the SAMRC, we are committed to remedying the skewed distribution in job opportunities and resources, thus, we do not only promote equal opportunity and fair treatment in employment as enshrined in the Employment Equity Act. SAMRC is committed to advancing an inclusive organisational culture that welcomes and promotes a diversity of ideas, experiences and perspectives.

Amidst the dynamic and evolving landscape of increasing volatility, uncertainty, complexity, and ambiguity, all of which demand organisational agility and resilience, the SAMRC appointed a new Chief Executive Officer and President. This leadership transition, with the recruitment and selection that unfolded seamlessly, marked a pivotal milestone for the organisation. The appointment deepened the ambitious mission of advancing the nation's health and quality of life. In addition, the SAMRC's design is undergoing tremendous leadership changes with the ongoing retirement of more than 50% of our senior management team. These transitions have a profound impact on organisational culture and present valuable opportunities for innovation, renewal, and strategic alignment.

The Human Resource Management function cannot ignore the rapid evolution of technology, particularly the growing relevance of artificial intelligence (AI), which continues to reshape the research and innovation landscape. Digital transformation opportunities enhance human resource efficiency and future readiness, which are essential to ensure the organisation remains not only responsive to change but also positioned as an employer of choice in an increasingly flexible knowledge-based economy.

While we acknowledge that change can bring challenges, it also presents a valuable opportunity for growth, alignment, and renewed purpose. The recent leadership transition and the evolving culture within the SAMRC mark an exciting time for creative resilience while remaining steadfast in a commitment to delivering high-impact results through its people.

HR priorities and the impact of these priorities while highlighting achievements:

As a public entity operating within a complex and dynamic environment, the SAMRC recognises itself as a complex and adaptive social system facing challenges that are multifaceted, multidimensional, and reflective of both national and global shifts. These challenges present not only significant risks but also transformative opportunities, necessitating systemic change and organisational agility.

In line with the ITMF, the SAMRC acknowledges that no improvement initiative can be considered in isolation. The interrelated and interdependent nature of all organisational elements requires a holistic and coordinated response. Within this context, three HR strategic priorities were identified:

i. Driving cultural and organisational change.

ii. Building human capacity for the long-term sustainability of South African research.

iii. Investing in HR technology to strengthen digital capabilities.

Concerning the cultural and organisational change, the SAMRC continued to embed a culture of adaptability and inclusivity, driven by

a commitment to values-based leadership and organisational alignment. During the period under review, significant cultural shifts were observed – shaped by both evolving workplace dynamics and leadership transitions at senior levels, as mentioned above. These ongoing shifts require a focused approach to values and organisational alignment while encouraging value-based behaviours and continuous support.

Organisational culture is further shaped by the day-to-day experiences of employees, underpinned by both tangible and intangible elements such as policy, practice, and shared workplace ethos. In support of this transformation, leadership models were reviewed and adapted to reflect SAMRC's commitment to inclusive and values-driven leadership. A central focus was placed on reinforcing a philosophy of distributed leadership, which positions every employee as a potential leader, regardless of formal job title. This approach aims to cultivate initiative, accountability, and collaboration across all levels of the organisation, fostering a culture in which leadership is defined by contribution and impact rather than hierarchy.

The priority to build human capacity for sustainable research excellence as aligned to the long-term strategy to strengthen South Africa's research ecosystem requires the development of a robust talent pipeline. Customised leadership and management programmes are implemented to build depth in critical skills and promote transformative leadership across all career streams. These initiatives specifically support the development of emerging and independent researchers with an emphasis on diversity and inclusivity.

Capacity development initiatives also sought to cultivate a culture of continuous learning. Initiatives such as the Lunch and Learn series, a voluntary one-hour knowledge-sharing session, remained a popular platform for peer-led skill development and awareness. In parallel, an online educational platform was piloted, offering expert-led video courses on leadership, behavioural science, digital literacy, and creativity. This platform encourages lifelong learning and enables employees to take ownership of their professional development.

To further strengthen this pipeline, ETDP SETA discretionary grants were successfully accessed following its WSP/ATR submission to support skills development initiatives during the 2024/2025 financial year. Additionally, the SAMRC partnered with the ETDP SETA to host interns as part of its formal Internship Programmes, offering unemployed South African graduates practical work experience to enhance employability and address future capacity needs.

A strategic investment in HR technology as the third priority area aims to enhance data-driven decision-making and operational efficiency. This includes the transition from manual, paper-based processes to digitised systems that promote accuracy, transparency, and real-time access to information. A key milestone during the reporting period is the sourcing of an integrated Human Resource System, designed to streamline core functions such as recruitment, payroll, leave management, learning and development, performance management, and employee records. The system also provides robust HR analytics to support strategic workforce planning and drive continuous improvement across the employee lifecycle.

This digital transformation marks a significant leap forward in the SAMRC's ongoing commitment to innovation and operational excellence. In today's evolving world of work, digital capability not only supports employee engagement but also empowers individuals to take charge of their development through enhanced self-service functionalities and access to learning tools.

Workforce planning and key strategies to attract and retain a skilled and capable workforce:

The first and critical component of the ITMF is intrinsically linked to effective workforce planning, i.e. adopting a structured and strategic approach to managing talent in alignment with the organisation's overarching goals. Progress has been made in addressing the longstanding challenge of achieving equity targets at the senior management level. This advancement is the result of a strategic approach that includes internal appointments to retain critical skills, ensure business continuity, and maintain performance. Additionally, efforts have been made to acquire external talent to enhance and diversify our capabilities.

Employee performance management framework

The SAMRC's approach to performance appreciates a philosophy of engagement that requires continuous strategies to strengthen the performance engagement principles by supporting

all employees and managers in understanding and navigating the process. Significant progress has been made to implement practices that reflect consistent and transparent performance alignment of individual, team, and organisational performance that further ensures equality in measurement across the organisation.

As a key strategy to embed the desired organisational culture, the integration and standardisation of key values and behaviours into individual and team key performance areas (KPAs) as part of the performance contracting process has been identified as a key strategy. This represents a significant shift and will require thoughtful and proactive change management.

Employee wellness programmes

With a holistic and proactive approach to employee wellness, the SAMRC appreciates the benefits of promoting a healthy and productive work environment. The employee wellness programme offers a variety of wellness initiatives to support the physical, mental, and emotional well-being of employees.

A Wellness Awareness Road Show was conducted to embed a culture of well-being across the organisation by raising awareness and promoting and encouraging employees to take proactive steps toward their well-being. This initiative allowed the opportunity for reflection and review of the employee value proposition (EVP).

While a range of offerings, such as a toll-free 24-hour counselling service, was available to employees and their families, customised support programmes were also facilitated to support employees who experience vicarious trauma due to their research fields. This included training of team leaders on conducting defusing (initial trauma debriefing). As the first point of contact, it involves educating first-line managers on trauma symptoms and how to contain and then refer employees. Additional trauma debrief sessions were further conducted to support employees when working with difficult, emotional, sensitive or potentially traumatic research material and information.

Amidst rising inflation and the increasing cost of living, the SAMRC remains committed to supporting employee well-being through thoughtful and responsive benefits. During the reporting period, a voluntary funeral benefit was introduced in partnership with a financial services organisation, enabling employees to access affordable group cover. Uptake has been strong, reflecting both the relevance and value of the benefit offering.

Following a medical benefits audit, affordability challenges were identified among certain employees. In response, the SAMRC partnered with a healthcare service provider to introduce an affordable medical insurance plan aimed at improving access to healthcare coverage. The benefit has been well received, with strong interest and uptake across the organisation.

In addressing the broader challenges of attracting and retaining critical skills, the SAMRC also explored group benefit schemes and compensation packages that remain responsive to market conditions while reinforcing its commitment to being an employer of choice.

Policy development

While no policies were due for review during the reporting period, updates and amendments were made as needed in order to navigate through important organisational decisions, including the amendment to the Recruitment and Selection Policy and the Remuneration and Benefits Policy. In addition, updates were made to Standard Operating Procedures (SOPs) and Guidelines to ensure effective policy implementation, such as the Relocation SOP, Long Service Awards, and Internship Programmes, together with a Guideline to implement a customised Leadership Development Programme.

Future HR plans/goals

The successful implementation and sustainability of key strategic initiatives as aligned to the SAMRC's talent management agenda will form the foundation of a focused approach for the upcoming performance cycle and financial year.

Of particular strategic importance is the implementation of the integrated HR system, which will enhance operational efficiency and data-driven decision-making. This is complemented by targeted capacity development initiatives designed to support and embed the desired cultural and organisational shifts. The success of these efforts will depend on effective change management practices to ensure alignment, minimise disruption, and enable long-term impact.

HUMAN RESOURCE OVERSIGHT STATISTICS

PERSONNEL RELATED EXPENDITURE

Personnel Cost by programme/activity/objective

PROGRAMME/ ACTIVITY/OBJECTIVE	TOTAL EXPENDITURE FOR THE ENTITY	PERSONNEL EXPENDITURE	PERSONNEL EXP. AS A % OF TOTAL EXP.	NO. OF EMPLOYEES	AVERAGE PERSONNEL COST PER EMPLOYEE
Programme 1: Administration	R278,891,000.00	R110,612,884.53	7.75	229	R483,025.70
Programme 2: Core Research	R788,356,000.00	R393,015,212.44	27.52	994	R395,387.54
Programme 3: Innovation and Technology	R294,248,000.00	R77,905,691.39	5.46	181	R430,418.18
Programme 4: Capacity Development	R66,646,000.00	R5,421,196.03	0.38	16	R338,824.75
Programme 5: Research Translation	R0	R0	0.00	0	R0
TOTAL	**R1,428,141,000.00**	**R 586,954,984.40**	**41.10**	**1420**	**R413,348.58**

Personnel cost by salary band

LEVEL	PERSONNEL EXPENDITURE	% OF PERSONNEL EXP. TO TOTAL PERSONNEL COST	NO. OF EMPLOYEES	AVERAGE PERSONNEL COST PER EMPLOYEE
Top Management	R21,736,234.69	4.25	8	R2,717,029.34
Senior Management	R104,015,834.04	20.33	73	R1,424,874.44
Professional qualified	R206,616,437.00	40.39	228	R906,212.44
Skilled	R137,318,482.73	26.84	307	R447,291.47
Semi-skilled	R36,684,055.46	7.17	169	R217,065.42
Unskilled	R5,230,612.38	1.02	45	R116,235.83
TOTAL	**R511,601,656.29**	**100.00**	**830**	**R616,387.54**

Personnel cost for Personnel expenditure for Postdocs, Interns, European and Developing Countries Clinical Trials Partnership (EDCTP) and Post retirement contracts

LEVEL	PERSONNEL EXPENDITURE	% OF PERSONNEL EXP. TO TOTAL PERSONNEL COST	NO. OF EMPLOYEES	AVERAGE PERSONNEL COST PER EMPLOYEE
EDCTP	R9,965,734.90	25.88	7	R1,423,676.41
Post Doctoral Fellowship	R10,230,518.19	26.57	39	R262,320.98
Post Retirement	R12,810,725.89	33.27	10	R1,281,072.59
Interns	R5,426,894.91	14.08	77	R70,479.15
Post Retirement Performance Bonus	R75,641.29	0.20	3	R25,213.76
TOTAL	**R38,509,515.18**	**100.00**	**133**	**R289,545.23**

**Head Count remains unchanged as performance bonus is listed separately with a head count of 3 employees.*

Personnel cost for Temporary employees

LEVEL	PERSONNEL EXPENDITURE	% OF PERSONNEL EXP. TO TOTAL PERSONNEL COST	NO. OF EMPLOYEES	AVERAGE PERSONNEL COST PER EMPLOYEE
Temporary Employees	**R30,150,296.56**	**100.00**	**457**	**R65,974.39**

Performance Rewards

PROGRAMME/ ACTIVITY/OBJECTIVE	PERFORMANCE REWARDS	PERSONNEL EXPENDITURE	% OF PERSONNEL EXP. TO TOTAL PERSONNEL COST
Top Management	7	R268,132.18	0.05
Senior Management	51	R1,505,182.52	0.29
Professional qualified	158	R2,705,325.33	0.53
Skilled	219	R1,776,532.86	0.35
Semi-skilled	85	R374,624.92	0.07
Unskilled	30	R63,718.56	0.01
TOTAL	**550**	**R6,693,516.37**	**1.31**

**The above table excludes the 3 employees in head count and expense covered under post retirements.*

Training Costs

PROGRAMME/ ACTIVITY/OBJECTIVE	PERSONNEL EXPENDITURE	TRAINING EXPENDITURE	TRAINING EXPENDITURE AS A % OF PERSONNEL COST	NO. OF EMPLOYEES TRAINED	AVERAGE TRAINING COST PER EMPLOYEE
Learning and Development Initiatives, including: • Study Support (bursaries) • Coaching • Leadership Development – People Management and Change Management • General Training (Technical and Behavioural competencies), incl. Health and Safety training • Online (LinkedIn Learning)	511,601	4 906	0.96	401	12

Employment and vacancies

PROGRAMME/ ACTIVITY/OBJECTIVE	2023/2024 NO. OF EMPLOYEES*	2024/2025 APPROVED POSTS	2024/2025 NO. OF EMPLOYEES**	2024/2025 VACANCIES	% OF VACANCIES
Top Management	8	8	8	0	0
Senior Management	52	64	60	4	6.2
Professional qualified	209	221	211	10	4.5
Skilled	278	294	280	14	4.7
Semi-skilled	119	147	146	1	0.6
Unskilled	36	42	40	2	4.7
TOTAL	**702**	**776**	**745**	**31**	**3.9**

*Note: The table above excludes postdocs, interns, post retirees and EDCTP. *Includes the terminations as of 31 March 2024 **Includes the terminations as of 31 March 2025.*

Three Unit Director positions (Senior Management) were all filled from the internal talent pool during the period of reporting. All Deputy Director positions were filled from the internal talent pool as part of an important effort to develop the SAMRC's senior leadership pipeline. Furthermore, a structured capacity development programme has been designed to enhance the skills and potential of internal employees, enabling them to take on senior leadership roles when opportunities arise.

When a vacancy arises, the relevant manager uses the opportunity to analyse the position in order to ascertain if there is still a need for such a position, or if any restructuring of the role is required. At a minimum, vacancies have remained unfilled for a month except for scarce of critical skills posts were this could take a bit longer.

Employment changes

SALARY BAND	EMPLOYMENT AT THE BEGINNING OF THE PERIOD*	APPOINTMENTS	TERMINATIONS**	EMPLOYMENT AT END OF THE PERIOD
Top Management	8	1	0	9
Senior Management	63	4	7	60
Professional qualified	201	22	12	211
Skilled	269	33	22	280
Semi-skilled	116	51	22	145
Unskilled	37	8	5	40
TOTAL	**694**	**119**	**68**	**745**

*Note: The table above excludes postdocs, interns, post retirees and EDCTP. *Employment at beginning of period, excludes appointments with a start date of 1 April 2024 and includes staff movements e.g. CPA and the terminations **Exclude the employees with a termination date of the 31 March 2025.***The employee in Top Management was not terminated but employment conditions changed that resulted in a change in occupational level.*

Reasons for staff leaving

REASON	NUMBER*	% OF TOTAL NO. OF STAFF LEAVING
Death	1	1.5
Resignation	27	39.7
Dismissal	1	1.5
Retirement	12	17.6
Ill health	2	2.9
Expiry of contract	24	35.3
Other	1	1.5
TOTAL	**68**	**100**

Note: The table above excludes postdocs, interns, post retirees and EDCTP.
**The above terminations exclude the employees with a termination date of the 31 March 2025.*

Based on the exit interviews that have been conducted, employees have resigned due to varied reasons such as lack of career advancement opportunities; SAMRC culture and lack of Management support and workload (overworked). Where there is still a need for the position, the job will be advertised in accordance with the Recruitment and Selection Policy of the SAMRC.

Labour Relations: Misconduct and Disciplinary Action

NATURE OF DISCIPLINARY ACTION	NUMBER
Verbal Warning	1
Written Warning	5
Final Written warning	0
Dismissal*	1

Note: The table above excludes postdocs, interns, post retirees and EDCTP.

Equity Target and Employment Equity Status

It is important to note that the Employment Equity targets are in line with the EE reporting period from 01 October 2024 to 30 September 2025. These targets are continuously monitored to intervene and minimize variances. The development and implementation of the customised leadership development programme to equip SAMRC leaders and develop a pipeline for senior leaders in the organisation, is a key strategy to address the challenges identified at senior management level.

LEVELS	MALE							
	AFRICAN		COLOURED		INDIAN		WHITE	
	CURRENT	TARGET	CURRENT	TARGET	CURRENT	TARGET	CURRENT	TARGET
Top Management	4	4	0	1	0	0	0	0
Senior Management	3	8	7	7	3	3	9	9
Professional qualified	22	60	10	11	6	6	4	7
Skilled	53	99	22	21	8	8	2	14
Semi-skilled	45	81	10	10	2	2	0	9
Unskilled	8	12	2	2	0	0	0	1
TOTAL	**135**	**264**	**51**	**52**	**19**	**19**	**15**	**40**

Note: The above total excludes the foreign nationals as at March 2025: Total Males – 15.

LEVELS	FEMALE							
	AFRICAN		COLOURED		INDIAN		WHITE	
	CURRENT	TARGET	CURRENT	TARGET	CURRENT	TARGET	CURRENT	TARGET
Top Management	1	1	2	1	0	0	1	1
Senior Management	6	8	7	7	5	5	13	12
Professional qualified	53	59	40	40	30	30	28	25
Skilled	144	144	44	44	22	22	10	11
Semi-skilled	81	81	23	23	3	3	3	7
Unskilled	15	15	12	12	0	0	0	0
TOTAL	**300**	**308**	**128**	**127**	**60**	**60**	**55**	**56**

Note: The above totals exclude the foreign nationals as at March 2025: Total Females – 12.

LEVELS	DISABLED STAFF			
	MALE		FEMALE	
	CURRENT	TARGET	CURRENT	TARGET
Top Management	0	0	0	0
Senior Management	3	3	0	0
Professional qualified	0	2	3	5
Skilled	1	3	1	3
Semi-skilled	0	1	3	4
Unskilled	0	0	0	0
TOTAL	**4**	**9**	**7**	**12**

PART E:
PFMA COMPLIANCE REPORT

IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE AND MATERIAL LOSSES

Irregular expenditure

a) Reconciliation of irregular expenditure

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Opening balance	–	–
Adjustment to opening balance	–	–
Opening balance as restated	–	–
Add: Irregular expenditure confirmed	217	–
Less: Irregular expenditure condoned	–	–
Less: Irregular expenditure not condoned and removed	–	–
Less: Irregular expenditure recoverable	–	–
Less: Irregular expenditure not recoverable and written off	–	–
CLOSING BALANCE	**217**	**–**

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Irregular expenditure that was under assessment	–	–
Irregular expenditure that relates to the prior year and identified in the current year	–	–
Irregular expenditure for the current year	–	–
TOTAL	**–**	**–**

b) Details of irregular expenditure (under assessment, determination, and investigation)

	2024/2025	2023/2024
DESCRIPTION[2]	R'000	R'000
Irregular expenditure under assessment	60 874	–
Irregular expenditure under determination	–	–
Irregular expenditure under investigation	–	–
TOTAL	**60 874**	**–**

Following discovery of 2 transactions as being procured in contravention of legal prescripts in the 2024/2025 financial year, a decision was taken to subject all transactions that were carried out mainly via a Request for Quotes procurement process to assess and determine if they were procured irregularly or not.

c) Details of irregular expenditure condoned

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Irregular expenditure condoned	–	–
TOTAL	**–**	**–**

[1] *Transfer to receivables*
[2] *Group similar items*

d) Details of irregular expenditure removed – (not condoned)

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Irregular expenditure NOT condoned and removed	–	–
TOTAL	–	–

e) Details of irregular expenditure recoverable

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Irregular expenditure recoverable	–	–
TOTAL	–	–

f) Details of current and previous year irregular expenditure written off (irrecoverable)

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Irregular expenditure written off	–	–
TOTAL	–	–

Details of non compliance cases where an institution is involved in an inter institutional arrangement (where such institution is not responsible for the noncompliance)

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
N/A	–	–
N/A	–	–
N/A	–	–
N/A	–	–
TOTAL	–	–

Additional disclosure relating to Inter-Institutional Arrangements

g) Details of non-compliance cases where an institution is involved in an inter-institutional arrangement (where such institution *is not* responsible for the non-compliance)

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
N/A	–	–
N/A	–	–
N/A	–	–
N/A	–	–
TOTAL	–	–

h) Details of disciplinary or criminal steps taken as a result of irregular expenditure

There were no disciplinary or criminal steps taken for 2023/2024 and 2024/2025 due to no IE.

Fruitless and wasteful expenditure

a) Reconciliation of fruitless and wasteful expenditure

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Opening balance	0	0
Add: Fruitless and wasteful expenditure confirmed	47	1
Less: Fruitless and wasteful expenditure recoverable[5]	-2	0
Less: Fruitless and wasteful expenditure not recoverable and written off	-45	-1
Closing balance	**0**	**0**

Reconciling notes

	2023/2024	2022/2023
DESCRIPTION	R'000	R'000
Fruitless and wasteful expenditure that was under assessment	–	–
Fruitless and wasteful expenditure that relates to the prior year and identified in the current year	–	–
Fruitless and wasteful expenditure for the current year	47	1
TOTAL	**47**	**1**

b) Details of current and previous year fruitless and wasteful expenditure

	2024/2025	2023/2024
DESCRIPTION[3]	R'000	R'000
Fruitless and wasteful expenditure under assessment	–	–
Fruitless and wasteful expenditure under determination	–	–
Fruitless and wasteful expenditure under investigation	–	–
TOTAL	**–**	**–**

c) Details of fruitless and wasteful expenditure recoverable

	2024/2025	2023/2024
DESCRIPTION	–	R'000
Fruitless and wasteful expenditure recoverable	-45	–
TOTAL	**-45**	**–**

d) Details of fruitless and wasteful expenditure not recoverable and written off

	2024/2025	2023/2024
DESCRIPTION	R'000	R'000
Fruitless and wasteful expenditure written off	-2	-3
TOTAL	**-2**	**-3**

There were no disciplinary or criminal steps taken for the current and previous year.

e) Details of disciplinary or criminal steps taken as a result of fruitless and wasteful expenditure

There's no disciplinary or criminal steps taken for current and previous year.

Additional disclosure relating to material losses in terms of PFMA Section 55(2)(b)(i) &(iii))[4]

a) Details of material losses through criminal conduct

No material losses through criminal conduct were incurred during the period ended 31 March 2024.

Late and/or non-payment of suppliers

	2024/2025	2023/2024
MATERIAL LOSSES THROUGH CRIMINAL CONDUCT	R'000	R'000
Theft	–	–
Other material losses	–	–
Less: Recoverable	–	–
Less: Not recoverable and written off	–	–
TOTAL	**–**	**–**

b) Details of other material losses

	2024/2025	2023/2024
NATURE OF OTHER MATERIAL LOSSES	R'000	R'000
(Group major categories, but list material items)	–	–
	–	–
	–	–
	–	–
TOTAL	**–**	**–**

Include discussion here where deemed relevant and criminal or disciplinary steps taken by the institution.

c) Other material losses recoverable

	2024/2025	2023/2024
NATURE OF LOSSES	R'000	R'000
(Group major categories, but list material items)	–	–
	–	–
	–	–
	–	–
TOTAL	**–**	**–**

Include discussion here where deemed relevant.

d) Other material losses not recoverable and written off

	2024/2025	2023/2024
NATURE OF LOSSES	R'000	R'000
(Group major categories, but list material items)	–	–
	–	–
	–	–
	–	–
TOTAL	**–**	**–**

Include discussion here where deemed relevant.

[3] *Group similar items*
[4] *Information related to material losses must also be disclosed in the annual financial statements.*

Late and/or non-payment of suppliers Disclosure

DESCRIPTION	NUMBER OF INVOICES	CONSOLIDATED VALUE R'000
Valid invoices received	20 553	1,552,353,580.07
Invoices paid within 30 days or agreed period	–	1,550,576,502.55
Invoices paid after 30 days or agreed period	–	1,777,077.52
Invoices older than 30 days or agreed period (unpaid and without dispute)	–	–
Invoices older than 30 days or agreed period (unpaid and in dispute)	–	–

Include reasons for the late and or non-payment of invoices, including reasons that the invoices are in dispute, where applicable.

SUPPLY CHAIN MANAGEMENT

Procurement by other means

PROJECT DESCRIPTION NAME OF SUPPLIER	TYPE OF PROCUREMENT BY OTHER MEANS	CONTRACT NUMBER	VALUE OF CONTRACT R'000
JDE Annual Licence Renewal Oracle Corporation (SA) (Pty) Ltd	Sole Source	SS6045	R 6,320,430.90
Purchase of New England Biolabs Kits & Reagents Inqaba Biotechnical Industries	Sole Source	SS6049	R 10,000,000.00
Brilliant Conference Venue and Accommodation Booking in Zanzibar, Tanzania,Sea Cliff Resort & Spa	Single Source	SS6050	R 2,000,000.00
Procurement of ONT Products Whitehead Scientific	Sole Source	SS7052	R 10,000,000.00
Procurement of Agilent Products, Instruments, and Consumables Diagnostech	Sole Source	SS9057	R 10,000,000.00

Contract variations and expansions

There were no expansions and variations above 15% for goods/services and 20% for construction-related for 2024/25 Financial Year.

OTHER NOTABLE RELATIONSHIPS

National government departments who provide contract/grant funding to SAMRC:

Dept. of Science and Technology
Dept of Social Development

Board members	Term start	Term end	Employed by universities who contract with SAMRC for grant income or collaborative research	Other entities	Board member	Director
Prof. J Mahlangu (Chairperson)	1 November 2019	Current	University of Witwatersrand	None	None	None
Prof. B Biccard	1 November 2022	Current	University of Cape Town	None	None	None
Prof. R Carolissen	1 November 2019	Current	University of Stellenbosch	None	None	None
Prof. B Chiliza	1 November 2022	Current	University of KwaZulu-Natal	None	None	None
Prof. C Dandara	1 November 2022	Current	University of Cape Town	None	None	None
Ms. DT Dondur	1 November 2022	Current	–	None	None	None
Adv. D Khosa	1 November 2019	Current	–	None	None	None
Dr. M Madikizela	1 November 2019	Current	University of Pretoria	None	None	None
Prof. Z Makatini	1 November 2022	Current	University of Witwatersrand	None	None	None
Prof. LR Mathivha	1 November 2022	Current	University of Witwatersrand	None	None	None
Prof. T Mavundla	1 November 2019	Current	University of South Africa	None	None	None
Prof. M Moshabela	1 November 2022	31 August 2023	University of KwaZulu-Natal	None	None	None
				Africa Health Research Institute	√	None
				CAPRISA	√	None
				National Research Foundation	√	None

Board members	Term start	Term end	Employed by universities who contract with SAMRC for grant income or collaborative research	Other entities	Board member	Director
Prof. E Mukwevho	1 November 2019	Current	North West University	None	None	None
Associate Prof. T Naledi	1 November 2022	Current	University of Cape Town	None	None	None
Prof. T Pillay	1 November 2022	Current	University of Pretoria	None	None	None
Prof. WID Rae	1 November 2016	31 October 2022	–	None	None	None
Prof. E Seekoe	1 November 2019	31 October 2022	University of Fort Hare	None	None	None
Prof. B Shaw	1 November 2016	31 October 2022	–	None	None	None
Prof. L Skaal	1 November 2016	31 October 2022	University of Limpopo	Public Health Association of South Africa	None	√
Prof. T Sodi	1 November 2016	31 October 2022	University of Limpopo	None	None	None
Dr. T Tucker	1 November 2019	Current	University of Cape Town	None	None	None
Prof. S Velaphi	1 November 2016	31 October 2022	University of Witwatersrand	None	None	None
Ms. J Williams	1 November 2019	31 October 2022	–	None	None	None
Prof. L Zungu	1 November 2019	31 October 2022	University of South Africa	None	None	None

Executive management

Name	Position	Entity	Board member	Director	Other
Prof. N Ntusi	CEO/PRESIDENT	–	None	None	Researcher
Mr, S Ngqongwa	Chief Financial Officer	–	None	None	None
Ms. N Bam	Executive Director: Human Capacity Development	–	None	None	None
Prof. A Matthee	Executive Director: Transformation	Public Health Association of South Africa	None	None	None
Dr M Mdhluli	Chief Research Operation Officer	–	None	None	None
Prof M Mulder	Executive Director:	The Biologicals and Vaccine Institute of Southern Africa	None	None	None
Adv. M Popo	Legal Counsel	–	None	None	None
Prof. L Zulke	Vice President	–	None	None	None

SAMRC staff members who are directors of suppliers or debtors

Staff member	Entity	Director	Board member	Other
Mr. P Charls	Tertiary Education and Research Network of South Africa	√		
Dr. Andre Rose	Public Health Association of South Africa	√		
Prof. G Gray	Hutchinsons Centre Research Institute of South Africa	None	√	
	University of Cape Town			Researcher
	Wits Health Consortium			Researcher
	National Research Foundation		√	
	GARDP Foundation		√	

	2025				2024			
	TRADE RECEIVABLES	TRADE PAYABLES	DEFERRED INCOME	COMMIT-MENTS	TRADE RECEIVABLES	TRADE PAYABLES	DEFERRED INCOME	COMMIT-MENTS
Dept. of Science and Innovation (DSI)	–	–	168,841,896	None	7,153,574		192,350,052	None
African Health Research Institute	–	–	–	None	–	–	–	None
Caprisa	–	–	–	None	–	–	–	None
Hutchinson Centre Research Institute of SA	–	223,400	–	None				None
National Research Foundation	–	–	2,923,977	None	–	4,721,375	3,288,920	None
North West University	–	–	–	None	–	–	–	None
Public Health Association of South Africa	–	–	1,928,405	None	–	–	748,108	None
Tertiary Education and Research Network of South Africa	–	318,100	–	None	–	–	–	None
University of Cape Town	629,391	10,202,364	775,307	None	2,683,206	8,126,134	395,073	None
UCT Lung Institute	–	–	–	None	–	–	0	None
University of Limpopo	–	–	–	None	–			None
University of Pretoria	3,270,062	350,000	–	None	–	–		None
University of Stellenbosch	90,097	5,727,269	–	None	831,319	3,400,608	–	None
University of South Africa	–	–	–	None	–	1,721,470	–	None
WITS Health Consortium	–	2,097,043	–	None	–	4,232,204	–	None
Lubombo Spatial develop	–	–	–	None	172,082	–	–	None
GARDP	–	1,284,023	–	None	576,298	–	–	None
University of Fort Hare	–	–	–	None	159,407	30,000	–	None
University of Free State	–	4,852,964	–	None		–		None
University of Kwazulu-Natal	1,193,856	1,147,014	–	None	–	1,539,008	–	None
University of Witwatersrand	3,324,824	598,000	–	None	0	1,233,474	17,378	None
TOTAL	**8,508,230**	**26,800,177**	**174,469,586**		**11,575,886**	**25,004,273**	**196,799,531**	

Revenue

DESCRIPTION	2025	2024
Dept. of Science and Innovation (DSI)	144,443,257	154,207,488
Dept of Social development	386,839	442,250
Africa Health Research Institute	0	86,957
CAPRISA	0	7,350,635
GARDP	0	1,309,767
Lubombo Spatial develop	0	472,279
National Research Foundation	20,929,428	8,237,849
North West University	14,261	42,696
Public Health Association of South Africa	173,913	0
University of Cape Town	7,789,229	7,857,696
UCT Lung Institute	NIL	NIL
University of Fort Hare	0	405,408
University of Free State	11,609	0
University of Kwa-Zulu Natal	1,247,108	184,831
University of Limpopo	NIL	NIL
University of Pretoria	3,387,455	246,057
University of South Africa	0	NIL
University of Stellenbosch	3,631,952	10,895,768
University of Witwatersrand	203,227	1,646,425
WITS Health Consortium	4,781,311	1,724,197
TOTAL	**186,999,589**	**195,110,301**

Expenditure such as grants awarded, extra-mural unit grants and collaborative research grants incurred with notable parties

DESCRIPTION	2025	2024
African Health Research Institute	–	10,597,144
CAPRISA	–	4,915,979
DNDI GARDP	1,647,192.00	2,500,000
Hutchkinson Centre	4,269,193.92	7,942,210
National Research Foundation (NRF)	5,135,270.21	5,281,375
North West University	3,119,543.96	3,899,110
Public Health Association of South Africa	1,013,257.97	–
UCT	76,918,171.42	87,839,485
UCT Lung Institute	6,414,274.20	1,274,627
SA Heart Association	14,817.39	–
TENET	385,334.92	–
University of KwaZulu-Natal	23,478,731.58	23,534,945
University of Pretoria	11,955,497.09	11,310,480
University of Fort Hare	–	2,417,741
University of Free State	5,000,963.17	–
UNISA	3,075,390.05	4,817,978
University of Stellenbosch	39,349,182.29	45,129,399
Univ of Witwatersrand	20,555,299.28	25,961,408
Wits Health Consortium	63,849,161.14	60,688,124
TOTAL	**266,181,281**	**298,110,004**

PART F:
FINANCIAL INFORMATION

INDEX

The reports and statements set out below comprise the annual financial statements:

NATURE OF BUSINESS AND PRINCIPAL ACTIVITIES

The South African Medical Research Council (SAMRC) is a Schedule 3A public entity, it is accountable to Parliament for its performance and budget. The mandate of the SAMRC, in terms of the MRC Act 58, 1991 (as amended), is to improve the health and quality of life of South Africans. This needs to be realised through research, capacity development and technology transfer. SAMRC focuses on the top ten causes of death and disability associated risk factors. SAMRC acquires the most accurate healthcare information and provides policy makers with tools to enhance the quality of life for the people in South Africa. The address of the SAMRC's principal place of business is Francie Van Zijl Drive, Parowvalley, Cape Town.

REPORT OF THE CHIEF EXECUTIVE OFFICER & PRESIDENT

General financial review

(All figures R'000, prior year in parenthesis.)

Revenue for the year showed an increase of 4.6% to R1 408 845 (R1 347 255). This consists of an increase in government grants of 9.65% to R724 161 (R660 413) offset by a decrease in contract income of 0.3% to R684 684 (R686 842).

Other income has increased by 29.8% to R26 792 (R20 648) due to an increase in conference and seminar activities and recoupment of research grants.

Operating expenses reflected a decrease of 1% to R1 430 555 (R1 451 905).

The preceding has resulted in an operating surplus of R5 083 for the year compared to an operating deficit of R84 001 of the previous financial year 2023/24. The surplus is the result of the 9.65% increase in the government grant and a decrease of 14% in Collaborative research expenditure resulting in an overall decrease in total operating expenses by 1%.

The organisation remains financially strong with accumulated reserves of R473 614 (R412 948).

Total assets have increased by 17% to R1 182 631 (R1 009 310) due mainly to an increase in cash and cash equivalents of R157 724 and an increase in Property, Plant and Equipment of R27 260 due to increased capital expenditure on Buildings.

Deferred income has increased by R90 119 to R538 756 (R448 637) due to earning more contract funding in the reporting period.

The SAMRC generated a positive operating cashflow of R222 844 compared to a negative operating cashflow of R142 334 in the prior period due mainly to an increase in cash and a decrease in payments to suppliers.

Net cash flows from investing activities were negative representing cash outflow due mainly to capital expenditure of R60 193 (R43 423).

The net impact of the above is an increase of R157 774 in cash and cash equivalents compared to a decrease of R195 708 in cash and cash equivalents in the prior year.

Trends

Operating expenses reflected a decrease of 1% to R1 430 555 (R1 451 905). This is mainly the result of a decrease in collaborative research expenditure of R77 125, off-set by an increase in employee costs of R47 299.

Employee related costs have increased by 8.5% to R599 247 (R551 948) driven mainly by basic salary costs which have increased by 9% to R486 275 (R445 861). This increase is directly linked to the increase in permanent staff numbers, 830 (794). This translates to an average increase of 4.2% per staff member. Employee related costs include net bonus provision costs of R15 319 (R15 815).

The SAMRC generated a net surplus for the year of R60 666 compared to an approved budget deficit of R Zero. This surplus was generated from an underspent of R39m under baseline funded activities and income generated from contract funded activities of R21m.

Revenue was R343 756 under budget and expenditure was R404 422 under budget. The under-recovery on revenue was mainly due to lower than anticipated contract funded research revenue towards the end of the financial year, especially the start of quarter 4 when the SAMRC was issued with stop work orders from the USA Federal Government on Federal funded projects. The impact of this stop work order resulted in lower than the expected revenue and expenditure on contract funded research activities. Baseline funded projects activities spending was also lower than anticipated which contributed to the surplus of R39m.

Staff Expenditure, Laboratory expenses and Collaborative research costs were R15 569, R13 500 and R246 823 under budget respectively due mainly to reduced contract funded research projects activities which did not happen partly due to the stop work order issued by the USA Federal Government on Federal funded projects.

Requests for roll over of funds

The organisation remains financially strong with accumulated reserves of R473 614 (R412 948). The necessary approvals will be sought for the rollover of funds received from Government but not yet spent.

Supply chain management

There were no unsolicited bid proposals received during the year. The revised Materiality Framework was approved by the Minister.

Audit report matters

There were no matters to report.

Events after the reporting date

No significant events were identified after the reporting date that may have an impact on the financial statements.

Economic viability

Funding allocations of R765 298 for 2025/26 have been approved by Government. This together with accumulated reserves of R473 614 and the increase anticipated in the value of grants received will ensure that the SAMRC will continue to operate as a going concern.

REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

Report on the audit of the financial statements

Options

1. I have audited the financial statements of the South African Medical Research Council (SAMRC) set out on pages 263 to 336, which comprise the statement of financial position as at 31 March 2025, statement of financial performance, statement of changes in net assets, cash flow statement and statement of comparison of budget information with actual information for the year then ended, as well as notes to the financial statements, including a summary of significant accounting policies.
2. In my opinion, the financial statements present fairly, in all material respects, the financial position of the South African Medical Research Council as at 31 March 2025 and its financial performance and cash flows for the year then ended in accordance with the Standards of Generally Recognised Accounting Practice (GRAP) and the requirements of the Public Finance Management Act 1 of 1999 (PFMA).

Basis for opinion

3. I conducted my audit in accordance with the International Standards on Auditing (ISAs). My responsibilities under those standards are further described in the responsibilities of the auditor-general for the audit of the financial statements section of my report.
4. I am independent of the public entity in accordance with the International Ethics Standards Board for Accountants' *International Code of Ethics for Professional Accountants (including International Independence Standards)* (IESBA code) as well as other ethical requirements that are relevant to my audit in South Africa. I have fulfilled my other ethical responsibilities in accordance with these requirements and the IESBA code.
5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Other matter

6. I draw attention to the matter below. My opinion is not modified in respect of this matter.

Unaudited supplementary schedule

7. The supplementary information set out on page 337 does not form part of the financial statements and is presented as additional information. I have not audited this schedule and, accordingly, I do not express an opinion on it.

Responsibilities of the accounting authority for the financial statements

8. The accounting authority is responsible for the preparation and fair presentation of the financial statements in accordance with GRAP and the requirements of the PFMA; and for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.
9. In preparing the financial statements, the accounting authority is responsible for assessing the public entity's ability to continue as a going concern; disclosing, as applicable, matters relating to going concern; and using the going concern basis of accounting unless the appropriate governance structure either intends to liquidate the public entity or to cease operations, or has no realistic alternative but to do so.

Responsibilities of the auditor-general for the audit of the financial statements

10. My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error; and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of financial statements.
11. A further description of my responsibilities for the audit of the financial statements is included in the annexure to this auditor's report. This description, which is located at page 257, forms part of my auditor's report.

Report on the annual performance report

12. In accordance with the Public Audit Act 25 of 2004 (PAA) and the general notice issued in terms thereof; I must audit and report on the usefulness and reliability of the reported performance information against predetermined objectives for the selected material performance indicators presented in the annual performance report. The accounting authority is responsible for the preparation of the annual performance report.
13. I selected the following material performance indicators related to programme 2 presented in the annual performance report for the year ended 31 March 2025. I selected those indicators that measure the public entity's performance on its primary mandated functions and that are of significant national, community or public interest.

    - 2.1.1 Number of accepted and published journal articles, book chapters and books by SAMRC-affiliated and funded authors
    - 2.1.2 Number of accepted and published journal articles by SAMRC grant-holders with acknowledgement of the SAMRC
    - 2.2.1. Number of accepted and published journal articles where the first and/or last author is affiliated to the SAMRC
    - 2.3.1 Number of research grants awarded by the SAMRC

14. 1 evaluated the reported performance information for the selected material performance indicators against the criteria developed from the performance management and reporting framework, as defined in the general notice. When an annual performance report is prepared using these criteria, it provides useful and reliable information and insights to users on the public entity's planning and delivery on its mandate and objectives.
15. I performed procedures to test whether:

    - the indicators used for planning and reporting on performance can be linked directly to the public entity's mandate and the achievement of its planned objectives
    - all the indicators relevant for measuring the public entity's performance against its primary mandated and prioritised functions and planned objectives are included
    - the indicators are well defined to ensure that they are easy to understand and can be applied consistently, as well as verifiable so that I can confirm the methods and processes to be used for measuring achievements
    - the targets can be linked directly to the achievement of the indicators and are specific, time bound and measurable to ensure that it is easy to understand what should be delivered and by when, the required level of performance as well as how performance will be evaluated
    - the indicators and targets reported on in the annual performance report are the same as those committed to in the approved initial or revised planning documents
    - the reported performance information is presented in the annual performance report in the prescribed manner
    - there is adequate supporting evidence for the achievements reported and for the reasons provided for any overachievement of targets.

16. I performed the procedures to report material findings only; and not to express an assurance opinion or conclusion.
17. I did not identify any findings on the reported performance information for the selected indicators.

Report on compliance with legislation

18. In accordance with the PAA and the general notice issued in terms thereof, I must audit and report on compliance with applicable legislation relating to financial matters, financial management and other related matters. The accounting authority is responsible for the public entity's compliance with legislation.
19. I performed procedures to test compliance with selected requirements in key legislation in accordance with the findings engagement methodology of the Auditor-General of South Africa (AGSA). This engagement is not an assurance engagement. Accordingly, I do not express an assurance opinion or conclusion.
20. Through an established AGSA process, I selected requirements in key legislation for compliance testing that are relevant to the financial and performance management of the public entity, clear to allow consistent measurement and evaluation, while also sufficiently detailed and readily available to report in an understandable manner. The selected legislative requirements are included in the annexure to this auditor's report.

REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (CONTINUED)

21. I did not identify any material non-compliance with the selected legislative requirements.

Other information in the annual report

22. The accounting authority is responsible for the other information included in the annual report. The other information referred to does not include the financial statements, the auditor's report and those selected material indicators in the scoped-in programme presented in the annual performance report that have been specifically reported on in this auditor's report.
23. My opinion on the financial statements, my reports on the audit of the annual performance report and compliance with legislation do not cover the other information included in the annual report and I do not express an audit opinion or any form of assurance conclusion on it.
24. My responsibility is to read this other information and, in doing so, consider whether it is materially inconsistent with the financial statements and the selected material indicators in the scoped-in programme presented in the annual performance report or my knowledge obtained in the audit, or otherwise appears to be materially misstated.
25. If, based on the work I have performed, I conclude that there is a material misstatement in this other information, I am required to report on that fact.
26. I have nothing to report in this regard.

Internal control deficiencies

27. I considered internal control relevant to my audit of the financial statements, annual performance report and compliance with applicable legislation; however, my objective was not to express any form of assurance on it.
28. I did not identify any significant deficiencies in internal control.

Cape Town

31 July 2025

AUDITOR-GENERAL SOUTH AFRICA

ANNEXURE TO THE AUDITOR'S REPORT

The annexure includes the following:

- The auditor-general's responsibility for the audit
- The selected legislative requirements for compliance testing

Auditor-general's responsibility for the audit

Professional judgement and professional scepticism

As part of an audit in accordance with the ISAs, I exercise professional judgement and maintain professional scepticism throughout my audit of the financial statements and the procedures performed on reported performance information for selected material performance indicators and on the public entity's compliance with selected requirements in key legislation.

Financial statements

In addition to my responsibility for the audit of the financial statements as described in this auditor's report, I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the public entity's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made
- conclude on the appropriateness of the use of the going concern basis of accounting in the preparation of financial statements. I also conclude, based on the audit evidence obtained, whether a material uncertainty exists relating to events or conditions that may cast significant doubt on the ability of the public entity to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify my opinion on the financial statements. My conclusions are based on the information available to me at the date of this auditor's report However, future events or conditions may cause a public entity to cease operating as a going concern
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Communication with those charged with governance

I communicate with the accounting authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the accounting authority with a statement that I have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on my independence and, where applicable actions taken to eliminate threats or safeguards applied.

ANNEXURE TO THE AUDITOR'S REPORT (CONTINUED)

Compliance with legislation – selected legislative requirements

The selected legislative requirements are as follows:

LEGISLATION	SECTIONS OR REGULATIONS
South African Medical Research Council Act 58 of 1991	Regulations and instructions issued in terms of the act
Public Finance Management Act 1 of 1999	Section 51 (1)(b)(i); 51 (1)(b)(ii); 51 (1)(e)(iii); 53(4); 54(2)(c); 54(2)(d); 55(1)(a); 55(1)(b); 55(1)(c)(i); 56; 57 (b); 66(3)(c); 66(5)
Treasury Regulations, 2005	Regulation 16A3.2; 16A3.2(a); 16A6.1; 16A6.2(a); 16A6.2(b); 16A6.3(a); 16A6.3(a); 16A6.3(b); 16A6.3(c); 16A6.3(e); 16A6.4; 16A6.5; 16A6.6; 16A.7.1; 16A.7.3; 16A.7.6; 16A8.3; 16A8.4; 16A9.1(b)(ii): 16A 9.1(d); 16A9.1(e); 16A9.1(f); 16A9.2; 16A9.2(a)(ii); 30.1.1; 31.1.2(c); 30.1.3(a); 30.1.3(b); 30.1.3(d); 30.2.1; 31.2.1; 31.2.5; 31.2.7(a); 31.3.3; 32.1.1(a); 32.1.1(b); 32.1.1(c); 33.1.1; 33.1.3
Construction Industry Development Board Act 38 of 2000	Section 18(1)
Construction Industry Development Board Regulations, 2004	Regulation 17; 25(7A)
National Treasury Instruction No. 5 of 2020/21	Paragraph 4.8; 4.9; 5.3
Second Amendment National Treasury Instruction No. 5 of 202/21	Paragraph 1
Erratum National Treasury Instruction No. 5 of 202/21	Paragraph 2
National Treasury Instruction No. 1 of 2021/22	Paragraph 4.1
National Treasury Instruction No. 4 of 2015/16	Paragraph 3.4

LEGISLATION	SECTIONS OR REGULATIONS
National Treasury SCM Instruction No. 4A of 2016/17	Paragraph 6
National Treasury SCM Instruction No. 03 of 2021/22	Paragraph 4.1; 4.2(b); 4.3; 4.4; 4.4(a); 4.17; 7.2; 7.6
National Treasury SCM Instruction No. 11 of 2020/21	Paragraph 3.4(a); 3.4(b); 3.9
National Treasury SCM Instruction No. 2 of 2021/22	Paragraph 3.2.1; 3.2.4; 3.2.4(a); 3.3.1
National Treasury Practice Note 5 of 2009/10	Paragraph 3.6
National Treasury Practice Note 7 of 2009/10	Paragraph 4.1.2
Preferential Procurement Policy Framework Act 5 of 2000	Section 1; 2.1(a); 2.1 (f)
Preferential Procurement Regulations, 2022	Regulation 4.1; 4.2; 4.3; 4.4; 5.1; 5.2; 5.3; 5.4
Preferential Procurement Regulations, 2017	Regulation 4.1; 4.2; 5.1; 5.3; 5.6; 5.7; 6.1; 6.2; 6.3; 6.6; 6.8; 7.1; 7.2; 7.3; 7.6; 7.8; 8.2; 8.5; 9.1; 10.1; 10.2; 11.1; 11.2
Prevention and Combating of Corrupt Activities Act 12 of 2004	Section 34(1)

ACCOUNTING AUTHORITY'S RESPONSIBILITIES AND APPROVAL

The Accounting Authority is required by the Public Finance Management Act (Act 1 of 1999), to maintain adequate accounting records and is responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is the responsibility of the Accounting Authority to ensure that the annual financial statements fairly present the state of affairs of the entity as at the end of the financial year and the results of its operations and cash flows for the period then ended. The external auditors are engaged to express an independent opinion on the financial statements and were given unrestricted access to all financial records and related data.

The annual financial statements have been prepared in accordance with Standards of Generally Recognised Accounting Practice (GRAP) including any interpretations, guidelines and directives issued by the Accounting Standards Board.

The annual financial statements are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates. On a quarterly basis the Accounting Authority approved revised estimates in response to additional income received and progress with research projects.

The Accounting Authority acknowledges that it is ultimately responsible for the system of internal financial control established by the entity and places considerable importance on maintaining a strong control environment. To enable the Accounting Authority to meet these responsibilities, the Accounting Authority sets standards for internal control aimed at reducing the risk of error or in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the entity and all employees are required to maintain the highest ethical standards in ensuring the entity's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the entity is on identifying, assessing, managing and monitoring all known forms of risk across the entity. While operating risk cannot be fully eliminated, the entity endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Accounting Authority is of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement.

The Accounting Authority has reviewed the entity's cash flow forecast for the year ending to March 31, 2026 and, in the light of this review and the current financial position, is satisfied that the entity has access to adequate resources to continue in operational existence for the foreseeable future.

Although the Accounting Authority is primarily responsible for the financial affairs of the entity, they are supported by the entity's external auditors.

The external auditors are responsible for independently reviewing and reporting on the entity's annual financial statements. The financial statements have been examined by the entity's external auditors and their report is presented on pages 254 to 259.

The annual financial statements set out on page 263 to 336, which have been prepared on the going concern basis, were approved by the Accounting Authority on 30 July 2025 and were signed on its behalf by:

Professor J. Mahlangu
Chairperson of the Board

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

AUDIT COMMITTEE REPORT

We are pleased to present our report for the audited financial year ended 31 March 2025.

Audit committee members and attendance

The audit committee consists of the members listed hereunder and should meet 4 times per annum as per its approved terms of reference. During the current year 5 number of meetings were held. The unaudited annual financial statements were reviewed and discussed at a meeting held on 27 May 2025.

NAME OF MEMBER	NUMBER OF MEETINGS ATTENDED
Ms D Dondur (Chairperson from 1 November 2022)	5
Doctor M Madikizela (appointed 1 November 2019)	5
Professor T Mavundla (appointed 1 November 2019)	4
Professor E Mukwevho (appointed 1 November 2022)	5
Associate professor T Naledi (appointed 1 November 2022)	4
Ms J Williams (independent audit committee member from 1 November 2022)	5
Mr J Watson (independent audit committee member)	5

Audit committee responsibility

The audit committee reports that it has complied with its responsibilities arising from section 55(1)(a) of the PFMA and Treasury Regulation 27.1.

The audit committee also reports that it has adopted appropriate formal terms of reference as its audit committee charter, has regulated its affairs in compliance with this charter and has discharged all its responsibilities as contained therein.

The effectiveness of internal control

The system of internal controls applied by the entity over financial and risk management is effective, efficient and transparent. In line with the PFMA and the King IV Report on Corporate Governance requirements, Internal Audit provides the audit committee and management with assurance that the internal controls are appropriate and effective. This is achieved by means of the risk management process, as well as the identification of corrective actions and suggested enhancements to the controls and processes. From the various reports of the Internal Auditors, the Audit Report on the annual financial statements, and the management report of the Auditor-General South Africa, it was noted that no matters were reported that indicate any material deficiencies in the system of internal control or any deviations therefrom. Accordingly, we can report that the system of internal control over financial reporting for the period under review was efficient and effective.

The audit committee is satisfied with the content and quality of monthly and quarterly reports prepared and issued by the entity during the year under review.

Evaluation of audited annual financial statements

The audit committee has:

- reviewed and discussed the audited annual financial statements to be included in the annual report, with the Auditor-General and the Accounting authority;
- reviewed changes in accounting policies and practices;
- reviewed the entities compliance with legal and regulatory provisions

Internal audit

The audit committee is satisfied that the internal audit function is operating effectively and that it has addressed the risks pertinent to the entity and its audits.

AUDIT COMMITTEE REPORT (CONTINUED)

Auditor-General of South Africa

The audit committee has met with the Auditor-General of South Africa to ensure that there are no unresolved issues.

Risk Management

The risk management activity has received corporate endorsement and risk management processes have been formalised and adopted. Risk management activities are reported on a quarterly basis.

Information Systems

During the year under review hardware and infrastructural upgrades were implemented. Additional functionality was implemented on the research management platform. Ongoing security training was conducted during the year under review. The new HR system implementation commenced in the last quarter of the year under review.

Ms Doris Dondur
Chairperson of the Audit Committee
Date: 30 July 2025

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 2025

	NOTE(S)	2025 31 MARCH R	2024 31 MARCH R
Assets			
Current Assets			
Financial assets at fair value	3	11,237,073	9,551,014
Receivables from exchange transactions	4	74,485,043	88,216,813
Receivables from non-exchange transactions	5	21,723,586	9,055,438
VAT receivable	6	13,248,404	25,439,861
Prepayments	7	17,066,984	15,370,930
Cash and cash equivalents	8	679,806,132	522,082,612
		817,567,222	**669,716,668**
Non-Current Assets			
Biological assets that form part of an agricultural activity	9	20,000	25,000
Property, plant and equipment	10	337,692,725	310,432,000
Intangible assets	11	15,681,700	19,113,116
Living resources	12	1,233,985	1,063,039
Investments in controlled entities	13	2	2
Employee benefit asset	17	10,436,000	8,961,000
		365,064,412	**339,594,157**
Total Assets		**1,182,631,634**	**1,009,310,825**
Liabilities			
Current Liabilities			
Payables from exchange transactions	14	103,019,401	115,637,520
Provisions	15	56,765,448	21,019,052
Deferred income	16	538,756,205	448,637,352
		698,541,054	**585,293,924**
Non-Current Liabilities			
Employee benefit obligation	17	4,931,000	5,913,000
Earmarked funds	18	5,544,761	5,155,290
		10,475,761	**11,068,290**
Total Liabilities		**709,016,815**	**596,362,214**
Net Assets		**473,614,819**	**412,948,611**
Accumulated surplus	19	473,614,819	412,948,611

STATEMENT OF FINANCIAL PERFORMANCE

	NOTE(S)	2025 31 MARCH R	2024 31 MARCH R
Revenue	20	1,408,845,749	1,347,255,678
Other income	21	26,792,641	20,648,418
Operating expenses	23	(1,430,555,110)	(1,451,905,870)
Operating surplus (deficit)	33	**5,083,280**	**(84,001,774)**
Investment revenue	22	54,392,992	62,795,287
Fair value adjustments	31	1,477,299	211,431
Finance costs	25	(287,363)	(371,551)
Surplus (deficit) for the year		**60,666,208**	**(21,366,607)**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

STATEMENT OF CHANGES IN NET ASSETS

	TOTAL NET ASSETS R
Balance at 1 April, 2023	**434,315,218**
Changes in net assets	
Deficit for the year	(21,366,607)
Total changes	(21,366,607)
Balance at 1 April, 2024	**412,948,611**
Changes in net assets	
Surplus for the year	60,666,208
Total changes	60,666,208
Balance at 31 March, 2025	**473,614,819**

CASH FLOW STATEMENT

	NOTE(S)	2025 31 MARCH R	2024 31 MARCH R
Cash flows from operating activities			
Receipts			
Interest income		54,210,410	62,613,758
Dividends received		182,582	181,529
Cash received from customers and grants		1,535,687,961	1,257,805,419
		1,590,080,953	1,320,600,706
Payments			
Suppliers		(1,366,948,773)	(1,462,563,440)
Finance costs		(287,363)	(371,551)
		(1,367,236,136)	(1,462,934,991)
Net cash flows from operating activities	34	**222,844,817**	**(142,334,285)**
Cash flows from investing activities			
Purchase of property, plant and equipment	10	(60,193,366)	(43,423,123)
Proceeds from sale of property, plant and equipment	10	827,541	373,175
Proceeds from sale of financial assets		–	1,170
Purchase of other intangible assets	11	(6,093,820)	(10,682,667)
Net cash flows from investing activities		**(65,459,645)**	**(53,731,445)**
Cash flows from financing activities			
Movement in earmarked funds		389,471	357,524
Net cash flows from financing activities		**389,471**	**357,524**
Net increase/(decrease) in cash and cash equivalents		**157,774,643**	**(195,708,206)**
Cash and cash equivalents at the beginning of the year		522,082,612	719,684,368
Effect of exchange rate movement on cash balances		(51,123)	(1,893,550)
Cash and cash equivalents at the end of the year	8	**679,806,132**	**522,082,612**

An amount of R538,756,205 (31 March 2024: R448,637,352) included in cash and cash equivalents is due to cash received from funders for research projects in progress or not yet completed.

The accounting policies on pages 268 to 297 and the notes on pages 298 to 336 form an integral part of the annual financial statements.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

Budget on Accrual Basis

	APPROVED BUDGET R	ADJUSTMENTS R	FINAL BUDGET R	ACTUAL AMOUNTS ON COMPARABLE BASIS R	DIFFERENCE BETWEEN FINAL BUDGET AND ACTUAL R	REFERENCE
Statement of Financial Performance						
Revenue						
Non-tax revenue						
Sale of goods and services	909,773,000	139,428,584	**1,049,201,584**	684,684,518	**(364,517,066)**	42
Other non-tax revenue	65,659,000	–	**65,659,000**	82,662,932	**17,003,932**	42
Transfers received	859,833,000	(139,428,584)	**720,404,416**	724,161,231	**3,756,815**	
Total revenue	**1,835,265,000**	**–**	**1,835,265,000**	**1,491,508,681**	**(343,756,319)**	
Expenditure						
Compensation of employees	(636,557,000)	–	**(636,557,000)**	(599,247,707)	**37,309,293**	42
Goods and services	(1,050,327,000)	(112,381,000)	**(1,162,708,000)**	(794,369,031)	**368,338,969**	42
Depreciation	(36,000,000)	–	**(36,000,000)**	(37,225,735)	**(1,225,735)**	
Transfers and Subsidies	(112,381,000)	112,381,000	**–**	–	**–**	
Total expenditure	**(1,835,265,000)**	**–**	**(1,835,265,000)**	**(1,430,842,473)**	**404,422,527**	
Surplus/(deficit)	**–**	**–**	**–**	**60,666,208**	**60,666,208**	
Actual Amount on Comparable Basis as Presented in the Budget and Actual Comparative Statement	**–**	**–**	**–**	**60,666,208**	**60,666,208**	

SIGNIFICANT ACCOUNTING POLICIES

1. Presentation of Annual Financial Statements

The annual financial statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practice (GRAP), issued by the Accounting Standards Board in accordance with Section 91(1) of the Public Finance Management Act (Act 1 of 1999).

These annual financial statements have been prepared on an accrual basis of accounting and are in accordance with historical cost convention as the basis of measurement, unless specified otherwise. They are presented in South African Rand, which is also the functional currency. The amounts presented in the annual financial statements are rounded to the nearest Rand.

In the absence of an issued and effective Standard of GRAP, accounting policies for material transactions, events or conditions were developed in accordance with paragraphs 8, 10 and 11 of GRAP 3 as read with Directive 5.

Assets, liabilities, revenues and expenses were not offset, except where offsetting is either required or permitted by a Standard of GRAP.

A summary of the significant accounting policies, which have been consistently applied in the preparation of these annual financial statements, are disclosed below.

These accounting policies are consistent with the previous period.

1.1 Going concern assumption

These annual financial statements have been prepared based on the expectation that the entity will continue to operate as a going concern for at least the next 12 months.

1.2 Materiality

Material omissions or misstatements of items are material if they could, individually or collectively, influence the decisions or assessments of users made on the basis of the financial statements. Materiality depends on the nature or size of the omission or misstatement judged in the surrounding circumstances. The nature or size of the information item, or a combination of both, could be the determining factor.

Assessing whether an omission or misstatement could influence decisions of users, and so be material, requires consideration of the characteristics of those users. The Framework for the Preparation and Presentation of Financial Statements states that users are assumed to have a reasonable knowledge of government, its activities, accounting and a willingness to study the information with reasonable diligence. Therefore, the assessment takes into account how users with such attributes could reasonably be expected to be influenced in making and evaluating decisions.

1.3 Significant judgements and sources of estimation uncertainty

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. Significant judgements include:

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.3 Significant judgements and sources of estimation uncertainty (continued)

Trade receivables and loans and receivables

The entity assesses its trade receivables and loans and receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the entity makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

The impairment for trade receivables and loans and receivables is calculated on a portfolio basis, based on a review of the full trade debtors book, adjusted for national and industry-specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio.

Fair value estimation

The fair value of financial instruments traded in active markets (such as trading) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the entity is the current bid price.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. The entity uses a variety of methods and makes assumptions that are based on market conditions existing at the end of each reporting period. Quoted market prices or dealer quotes for similar instruments are used for financial assets. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments.

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the entity for similar financial instruments.

Impairment testing

The entity reviews and tests the carrying value of current and non-current assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. Assets are grouped at the lowest level for which identifiable cash flows are largely independent of cash flows of other assets and liabilities. If there are indications that impairment may have occurred, estimates are prepared of expected future cash flows for each group of assets. Expected future cash flows used to determine the value in use of tangible assets are inherently uncertain and could materially change over time. They are significantly affected by a number of factors including supply demand, together with economic factors such as research units closed as part of the revitalisation process.

Provisions

Provisions were raised and management determined an estimate based on the information available. Additional disclosure of these estimates of provisions are included in note 15 – Provisions.

Post retirement benefits

The present value of the post retirement obligation depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) include the discount rate. Any changes in these assumptions will impact on the carrying amount of post retirement obligations.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.3 Significant judgements and sources of estimation uncertainty (continued)

The entity determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the entity considers the interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability.

Other key assumptions for pension obligations are based on current market conditions. Additional information is disclosed in Note 17.

Useful lives of property, plant and equipment and Intangible assets

Management assesses the appropriateness of the useful lives of property, plant and equipment and Intangible assets at the end of each reporting period. The useful lives of motor vehicles; furniture and office equipment; computer equipment; laboratory equipment; certain components of buildings and intangible assets are determined based on the entity's replacement practices for the various assets and factors such as technological innovation.

When the estimated useful life of an asset differs from previous estimates, the change is accounted for as a change in estimate.

Recognition of an asset acquired through a non-exchange transaction

An item of property, plant and equipment acquired by means of a donation, the cost recognised is at its fair value as at the date of acquisition.

Biological assets

The fair value of biological assets is determined by the last selling price per biological animal type.

Budget judgements

Variance amounts above materiality is disclosed in note 42.

Disclosure of items

Where the deemed fair value of services in-kind was below materiality the note is not included in the annual financial statements.

1.4 Biological assets that form part of an agricultural activity

The entity recognises biological assets or agricultural produce when, and only when:

- the entity controls the asset as a result of past events;
- it is probable that future economic benefits or service potential associated with the asset will flow to the entity; and
- the fair value or cost of the asset can be measured reliably.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.4 Biological assets that form part of an agricultural activity (continued)

Biological assets are measured at their fair value less costs to sell.

Agricultural produce harvested from an entity's biological assets shall be measured at its fair value less estimated costs to sell at point of harvest.

A gain or loss arising on initial recognition of biological assets at fair value less costs to sell and from a change in fair value less estimated costs to sell biological assets is included in surplus or deficit for the period in which it arises.

Where biological assets are acquired at no cost, or for a nominal cost, the cost is determined to be its fair value less costs to sell as at the date of acquisition.

Where fair value cannot be measured reliably, biological assets are measured at cost less any accumulated impairment losses.

Horses are classified as biological assets.

1.5 Property, plant and equipment

Property, plant and equipment are tangible non-current assets (including infrastructure assets) that are held for use in the production or supply of goods or services, rental to others, or for administrative purposes, and are expected to be used during more than one period.

The cost of an item of property, plant and equipment is recognised as an asset when:

- it is probable that future economic benefits or service potential associated with the item will flow to the entity; and
- the cost or fair value of the item can be measured reliably.

Property, plant and equipment is initially measured at cost.

The cost of an item of property, plant and equipment is the purchase price and other costs attributable to bring the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Trade discounts and rebates are deducted in arriving at the cost. Subsequent costs of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the asset if it is probable that the future economic benefits embodied within the part will flow to the entity and its costs can be measured reliably. The cost of the replaced part is derecognised. The costs of day to day servicing of property, plant and equipment are recognised in the surplus or deficit.

Where an asset is acquired through a non-exchange transaction, its cost is its fair value as at the date of acquisition.

When significant components of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The entity identified the following major components of buildings as generators; buildings; prefabricated buildings; borehole tanks and pumps; water meters; water pipes and air conditioners.

The entity identified the following major components of laboratory equipment as laboratory equipment and irrigation equipment.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.5 Property, plant and equipment (continued)

The entity identified the following major components of furniture and office equipment as furniture and office equipment and signage.

Property, plant and equipment is carried at cost less accumulated depreciation and any impairment losses.

Property, plant and equipment are depreciated on the straight line basis over their expected useful lives to their estimated residual value.

The useful lives of items of property, plant and equipment have been assessed as follows:

ITEM	DEPRECIATION METHOD	AVERAGE USEFUL LIFE
Land (including boreholes)	Not depreciated	Indefinite
Buildings	Straight line	40 – 50 years
Vehicles and containers	Straight line	5 – 10 years
Furniture and office equipment	Straight line	3 – 15 years
Computer equipment	Straight line	5 – 10 years
Generators	Straight line	20 – 30 years
Borehole tanks and pumps	Straight line	10 – 15 years
Air conditioners	Straight line	10 – 15 years
Irrigation equipment	Straight line	10 – 15 years
Signage	Straight line	10 – 15 years
Prefabricated buildings	Straight line	20 – 30 years
Water pipes	Straight line	20 – 30 years
Water meters	Straight line	10 – 15 years
Laboratory equipment	Straight line	5 – 30 years

The items listed above are grouped in land; buildings; vehicles and containers; furniture and office equipment; computer equipment and laboratory equipment classes.

The residual value, the useful life and depreciation method of each asset is reviewed at the end of each reporting date. If the expectations differ from previous estimates, the change is accounted for as a change in accounting estimate. The useful lives of assets are based on management's estimation. The actual useful lives of assets and residual values are assessed annually and may vary depending on a number of factors. In re-assessing asset useful lives, factors such as technology, innovation, product life cycles and maintenance programmes are taken into account. The estimation of residual values of assets determines whether they will be sold or used to the end of their useful lives and what their condition would be like at that time. Residual value assessments consider issues such as, the remaining life of the asset and the estimated amount which the entity would currently obtain.

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

The depreciation charge for each period is recognised in surplus or deficit unless it is included in the carrying amount of another asset.

Items of property, plant and equipment are derecognised when the asset is disposed of or when there are no further economic benefits or service potential expected from the use of the asset.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.5 Property, plant and equipment (continued)

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in surplus or deficit when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

Assets which the entity sells via auction when it is obsolete or can no longer be used by the entity, are not accounted for as current assets held for sale. Proceeds from sales of these assets are recognised as profit or loss on disposal of assets. All cash flows on these assets are included in cash flows from investing activities in the cash flow statement.

Reviewing the impairment of assets is performed on an annual basis. Assets impaired as a result of restructuring are not accounted for as non-current assets held for sale as these assets will be transferred to institutions of higher learning.

The entity separately discloses expenditure to repair and maintain property, plant and equipment in the notes to the financial statements (see note 10).

1.6 Intangible assets

An asset is identifiable if it either:

- is separable, i.e. is capable of being separated or divided from an entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable assets or liability, regardless of whether the entity intends to do so; or
- arises from contractual rights or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

An intangible asset is recognised when:

- it is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the entity; and
- the cost or fair value of the asset can be measured reliably.

Intangible assets are initially recognised at cost.

Where an intangible asset is acquired through a non-exchange transaction, its initial cost at the date of acquisition is measured at its fair value as at that date.

Intangible assets are carried at cost less any accumulated amortisation and any impairment losses. For all intangible assets amortisation is provided on a straight line basis over their useful life.

The amortisation period and the amortisation method for intangible assets are reviewed at each reporting date and any change is accounted for as a change in estimate.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.6 Intangible assets (continued)

Amortisation is provided to write down the intangible assets, on a straight line basis, to their residual values. The estimated useful lives for current and comparative periods are as follows:

ITEM	DEPRECIATION METHOD	AVERAGE USEFUL LIFE
Computer software	Straight line	3 – 10 years

Intangible assets are derecognised:

- on disposal; or
- when no future economic benefits or service potential are expected from its use or disposal.

The gain or loss arising from the derecognition of intangible assets is included in surplus or deficit when the asset is derecognised (unless the Standard of GRAP on leases requires otherwise on a sale and leaseback).

1.7 Investments in controlled entities

Investments in controlled entities are carried at cost less any accumulated impairment. The financial statements of the entity is not consolidated with those of the controlled entities, as the entities have had no trading activities and they are not material.

1.8 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or a residual interest of another entity.

A concessionary loan is a loan granted to or received by an entity on terms that are not market related.

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

Derecognition is the removal of a previously recognised financial asset or financial liability from an entity's statement of financial position.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability (or group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, an entity shall estimate cash flows considering all contractual terms of the financial instrument (for example, prepayment, call and similar options) but shall not consider future credit losses. The calculation includes all fees and amounts paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts. There is a presumption that the cash flows and the expected life of a group of similar financial instruments can be estimated reliably. However, in those rare cases when it is not possible to reliably estimate the cash flows or the expected life of a financial instrument (or group of financial instruments), the entity shall use the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable willing parties in an arm's length transaction.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.8 Financial instruments (continued)

A financial asset is:

- cash;
- a contractual right to:
  - receive cash or another financial asset from another entity; or
  - exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity.

A financial liability is any liability that is a contractual obligation to:

- deliver cash or another financial asset to another entity; or
- exchange financial assets or financial liabilities under conditions that are potentially unfavourable to the entity.

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

Liquidity risk is the risk encountered by an entity in the event of difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.

Loan commitment is a firm commitment to provide credit under pre-specified terms and conditions.

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and other price risk.

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

A financial asset is past due when a counterparty has failed to make a payment when contractually due.

Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or financial liability. An incremental cost is one that would not have been incurred if the entity had not acquired, issued or disposed of the financial instrument.

Financial instruments at amortised cost are non-derivative financial assets or non-derivative financial liabilities that have fixed or determinable payments, excluding those instruments that:

- the entity designates at fair value at initial recognition; or
- are held for trading.

Financial instruments at cost are investments in residual interests that do not have a quoted market price in an active market, and whose fair value cannot be reliably measured.

Financial instruments at fair value comprise financial assets or financial liabilities that are:

- derivatives;
- combined instruments that are designated at fair value;
- instruments held for trading. A financial instrument is held for trading if:
  - it is acquired or incurred principally for the purpose of selling or repurchasing it in the near-term; or
  - on initial recognition it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short term profit-taking;
  - non-derivative financial assets or financial liabilities with fixed or determinable payments that are designated at fair value at initial recognition; and
  - financial instruments that do not meet the definition of financial instruments at amortised cost or financial instruments at cost.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.8 Financial instruments (continued)

Classification

The entity has the following types of financial assets (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

CLASS	CATEGORY
Trade debtors	Financial asset measured at amortised cost
Shares	Held for trading at fair value
Unit trusts	Held for trading at fair value
Cash and cash equivalents	Financial asset measured at amortised cost
Loans and receivables	Financial asset measured at amortised cost
Employee costs in advance	Financial asset measured at amortised cost
Deposits	Financial asset measured at amortised cost

The entity has the following types of financial liabilities (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

CLASS	CATEGORY
Trade payables	Financial liabilities measured at amortised cost

Initial recognition

The entity recognises a financial asset or a financial liability in its statement of financial position when the entity becomes a party to the contractual provisions of the instrument.

The entity recognises financial assets using trade date accounting.

Initial measurement of financial assets and financial liabilities

The entity measures a financial asset and financial liability initially at its fair value plus, in the case of a financial asset or a financial liability not subsequently measured at fair value, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

Subsequent measurement of financial assets and financial liabilities

The entity measures all financial assets and financial liabilities after initial recognition using the following categories:

- Financial instruments at fair value.
- Financial instruments at amortised cost.

All financial assets measured at amortised cost, or cost, are subject to an impairment review. The factors taken into account when considering impairment are solvency and whether the account holder is a slow payer.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.8 Financial instruments (continued)

Impairment and uncollectability of financial assets

The entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired.

Financial assets are measured at amortised cost:

If there is objective evidence that an impairment loss on financial assets measured at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account. The amount of the loss is recognised in surplus or deficit.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting an allowance account. The reversal does not result in a carrying amount of the financial asset that exceeds what the amortised cost would have been had the impairment not been recognised at the date the impairment is reversed. The amount of the reversal is recognised in surplus or deficit.

If there is objective evidence that an impairment loss has been incurred on an investment in a residual interest that is not measured at fair value because its fair value cannot be measured reliably, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses are not reversed.

Presentation

Interest relating to a financial instrument is recognised as revenue in surplus or deficit.

Dividends or similar distributions relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

Losses and gains relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

1.9 Statutory receivables

Identification

Statutory receivables are receivables that arise from legislation, supporting regulations, or similar means, and require settlement by another entity in cash or another financial asset.

Carrying amount is the amount at which an asset is recognised in the statement of financial position.

The cost method is the method used to account for statutory receivables that requires such receivables to be measured at their transaction amount, plus any accrued interest or other charges (where applicable) and, less any accumulated impairment losses and any amounts derecognised.

The transaction amount (for purposes of this Standard) for a statutory receivable means the amount specified in, or calculated, levied or charged in accordance with, legislation, supporting regulations, or similar means.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.9 Statutory receivables (continued)

Recognition

The entity recognises statutory receivables as follows:

- if the transaction is an exchange transaction, using the policy on Revenue from exchange transactions;
- if the transaction is a non-exchange transaction, using the policy on Revenue from non-exchange transactions (Taxes and transfers); or
- if the transaction is not within the scope of the policies listed in the above or another Standard of GRAP, the receivable is recognised when the definition of an asset is met and, when it is probable that the future economic benefits or service potential associated with the asset will flow to the entity and the transaction amount can be measured reliably.

Initial measurement

The entity initially measures statutory receivables at their transaction amount.

Subsequent measurement

The entity measures statutory receivables after initial recognition using the cost method. Under the cost method, the initial measurement of the receivable is changed subsequent to initial recognition to reflect any:

- interest or other charges that may have accrued on the receivable (where applicable);
- impairment losses; and
- amounts derecognised.

Derecognition

The entity derecognises a statutory receivable, or a part thereof, when:

- the rights to the cash flows from the receivable are settled, expire or are waived;
- the entity transfers to another party substantially all of the risks and rewards of ownership of the receivable; or
- the entity, despite having retained some significant risks and rewards of ownership of the receivable, has transferred control of the receivable to another party and the other party has the practical ability to sell the receivable in its entirety to an unrelated third party, and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer. In this case, the entity:
  - derecognise the receivable; and
  - recognise separately any rights and obligations created or retained in the transfer.

The carrying amounts of any statutory receivables transferred are allocated between the rights or obligations retained and those transferred on the basis of their relative fair values at the transfer date. The entity considers whether any newly created rights and obligations are within the scope of the Standard of GRAP on Financial Instruments or another Standard of GRAP. Any difference between the consideration received and the amounts derecognised and, those amounts recognised, are recognised in surplus or deficit in the period of the transfer.

1.10 Taxes

The SAMRC is exempt from income tax in terms of section 10 (1) (cA) (i) of the Income Tax Act (Act No. 58 of 1962).

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.11 Leases

Operating leases – lessor

Operating lease revenue is recognised as revenue on a straight-line basis over the lease term.

Initial direct costs incurred in negotiating and arranging operating leases are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease revenue.

Income for leases is disclosed under revenue in the statement of financial performance.

Operating leases – lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. The difference between the amounts recognised as an expense and the contractual payments are recognised as a prepayment or liability.

1.12 Cash and cash equivalents

Cash and cash equivalents comprise bank balances, cash on hand and deposits held at call with banks.

1.13 Impairment of cash-generating assets

Cash-generating assets are assets managed with the objective of generating a commercial return. An asset generates a commercial return when it is deployed in a manner consistent with that adopted by a profit-oriented entity.

Impairment is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation (amortisation).

Carrying amount is the amount at which an asset is recognised in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses thereon.

A cash-generating unit is the smallest identifiable group of assets managed with the objective of generating a commercial return that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets.

Costs of disposal are incremental costs directly attributable to the disposal of an asset, excluding finance costs and income tax expense.

Depreciation (Amortisation) is the systematic allocation of the depreciable amount of an asset over its useful life.

Fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal.

Recoverable amount of an asset or a cash-generating unit is the higher of its fair value less costs to sell and its value in use.

Useful life is either:

(a) the period of time over which an asset is expected to be used by the entity; or

(b) the number of production or similar units expected to be obtained from the asset by the entity.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.14 Impairment of non-cash-generating assets

Cash-generating assets are assets managed with the objective of generating a commercial return. When an asset is deployed in a manner consistent with that adopted by a profit-oriented entity, it generates a commercial return.

Non-cash-generating assets are assets other than cash-generating assets.

Impairment is a loss in the future economic benefits or service potential of an asset, over and above the systematic recognition of the loss of the asset's future economic benefits or service potential through depreciation (amortisation).

Carrying amount is the amount at which an asset is recognised in the statement of financial position after deducting any accumulated depreciation and accumulated impairment losses thereon.

Depreciation (Amortisation) is the systematic allocation of the depreciable amount of an asset over its useful life.

Fair value less costs to sell is the amount obtainable from the sale of an asset in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal.

Recoverable service amount is the higher of a non-cash-generating asset's fair value less costs to sell and its value in use.

Useful life is either:

(a) the period of time over which an asset is expected to be used by the entity; or

(b) the number of production or similar units expected to be obtained from the asset by the entity.

Criteria developed by the annual financial statements to distinguish non-cash-generating assets from cash-generating assets are as follows:

Assets used for administration and in daily operation of the entity is classified as non-cash-generating assets.

Where a substantial part of the asset is hired out, the asset is classified as cash generating assets.

Identification

When the carrying amount of a non-cash-generating asset exceeds its recoverable service amount, it is impaired.

The entity assesses at each reporting date whether there is any indication that a non-cash-generating asset may be impaired. If any such indication exists, the entity estimates the recoverable service amount of the asset.

This impairment test is performed at the same time every year. If an intangible asset was initially recognised during the current reporting period, that intangible asset was tested for impairment before the end of the current reporting period.

Value in use

Value in use of non-cash-generating assets is the present value of the non-cash-generating assets remaining service potential.

The present value of the remaining service potential of non-cash-generating assets is determined using the following approach:

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.14 Impairment of non-cash-generating assets (continued)

Restoration cost approach

Restoration cost is the cost of restoring the service potential of an asset to its pre-impaired level. The present value of the remaining service potential of the asset is determined by subtracting the estimated restoration cost of the asset from the current cost of replacing the remaining service potential of the asset before impairment. The latter cost is determined as the depreciated reproduction or replacement cost of the asset, whichever is lower.

Recognition and measurement

If the recoverable service amount of a non-cash-generating asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable service amount. This reduction is an impairment loss.

An impairment loss is recognised immediately in surplus or deficit.

When the amount estimated for an impairment loss is greater than the carrying amount of the non-cash-generating asset to which it relates, the entity recognises a liability only to the extent that is a requirement in the Standards of GRAP.

After the recognition of an impairment loss, the depreciation (amortisation) charge for the non-cash-generating asset is adjusted in future periods to allocate the non-cash-generating asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

Reversal of an impairment loss

The entity assesses at each reporting date whether there is any indication that an impairment loss recognised in prior periods for a non-cash-generating asset may no longer exist or may have decreased. If any such indication exists, the entity estimates the recoverable service amount of that asset.

An impairment loss recognised in prior periods for a non-cash-generating asset is reversed if there has been a change in the estimates used to determine the asset's recoverable service amount since the last impairment loss was recognised. The carrying amount of the asset is increased to its recoverable service amount. The increase is a reversal of an impairment loss. The increased carrying amount of an asset attributable to a reversal of an impairment loss does not exceed the carrying amount that would have been determined (net of depreciation or amortisation) had no impairment loss been recognised for the asset in prior periods.

A reversal of an impairment loss for a non-cash-generating asset is recognised immediately in surplus or deficit.

After a reversal of an impairment loss is recognised, the depreciation (amortisation) charge for the non-cash-generating asset is adjusted in future periods to allocate the non-cash-generating asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

1.15 Employee benefits

Employee benefits are all forms of consideration given by SAMRC in exchange for services rendered by employees. An annual valuation of the SAMRC Pension Fund and Post Retirement Medical Aid is performed.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

A qualifying insurance policy is an insurance policy issued by an insurer that is not a related party (as defined in the Standard of GRAP on Related Party Disclosures) of the reporting entity, if the proceeds of the policy can be used only to pay or fund employee benefits under a defined benefit plan and are not available to the reporting entity's own creditors (even in liquidation) and cannot be paid to the reporting entity, unless either:

- the proceeds represent surplus assets that are not needed for the policy to meet all the related employee benefit obligations; or
- the proceeds are returned to the reporting entity to reimburse it for employee benefits already paid.

Termination benefits are employee benefits payable as a result of either:

- an entity's decision to terminate an employee's employment before the normal retirement date; or
- an employee's decision to accept voluntary redundancy in exchange for those benefits.

Short-term employee benefits

Short-term employee benefits are employee benefits (other than termination benefits) that are due to be settled within twelve months after the end of the period in which the employees render the related service.

When an employee has rendered service to the entity during a reporting period, the entity recognises the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service:

- as a liability (accrued expense), after deducting any amount already paid. If the amount already paid exceeds the undiscounted amount of the benefits, the entity recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs. The entity measures the expected cost of accumulating compensated absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The entity recognises the expected cost of bonus, incentive and performance related payments when the entity has a present legal or constructive obligation to make such payments as a result of past events and a reliable estimate of the obligation can be made. A present obligation exists when the entity has no realistic alternative but to make the payments.

Post-employment benefits

Post-employment benefits are employee benefits (other than termination benefits) which are payable after the completion of employment.

SAMRC offers its employees post-employee benefits to the SAMRC Pension Fund.

Post-employment benefits: Defined contribution plans

Defined contribution plans are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

When an employee has rendered service to the entity during a reporting period, the entity recognises the contribution payable to a defined contribution plan in exchange for that service:

- as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the reporting date, an entity recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund; and
- as an expense, unless another Standard requires or permits the inclusion of the contribution in the cost of an asset.

Where contributions to a defined contribution plan do not fall due wholly within twelve months after the end of the reporting period in which the employees render the related service, they are discounted. The rate used to discount reflects the time value of money. The currency and term of the financial instrument selected to reflect the time value of money is consistent with the currency and estimated term of the obligation.

Post-employment benefits: Defined benefit plans

Defined benefit plans are post-employment benefit plans other than defined contribution plans.

Actuarial gains and losses comprise experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred) and the effects of changes in actuarial assumptions. In measuring its defined benefit liability, the entity recognises actuarial gains and losses in surplus or deficit in the reporting period in which they occur.

Assets held by a long-term employee benefit fund are assets (other than non-transferable financial instruments issued by the reporting entity) that are held by an entity (a fund) that is legally separate from the reporting entity and exists solely to pay or fund employee benefits and are available to be used only to pay or fund employee benefits, are not available to the reporting entity's own creditors (even in liquidation), and cannot be returned to the reporting entity, unless either:

- the remaining assets of the fund are sufficient to meet all the related employee benefit obligations of the plan or the reporting entity; or
- the assets are returned to the reporting entity to reimburse it for employee benefits already paid.

Current service cost is the increase in the present value of the defined benefit obligation resulting from employee service in the current period.

Interest cost is the increase during a period in the present value of a defined benefit obligation which arises because the benefits are one period closer to settlement.

Past service cost is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting in the current period from the introduction of, or changes to, post-employment benefits or other long-term employee benefits. Past service cost may be either positive (when benefits are introduced or changed so that the present value of the defined benefit obligation increases) or negative (when existing benefits are changed so that the present value of the defined benefit obligation decreases). In measuring its defined benefit liability, the entity recognises past service cost as an expense in the reporting period in which the plan is amended.

Plan assets comprise assets held by a long-term employee benefit fund and qualifying insurance policies.

The present value of a defined benefit obligation is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

The return on plan assets is interest, dividends or similar distributions and other revenue derived from the plan assets, The return on plan assets is interest, dividends or similar distributions and other revenue derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less any costs of administering the plan (other than those included in the actuarial assumptions used to measure the defined benefit obligation) and less any tax payable by the plan itself.

The entity accounts not only for its legal obligation under the formal terms of a defined benefit plan, but also for any constructive obligation that arises from the entity's informal practices. Informal practices give rise to a constructive obligation where the entity has no realistic alternative but to pay employee benefits. An example of a constructive obligation is where a change in the entity's informal practices would cause unacceptable damage to its relationship with employees.

The amount recognised as a defined benefit liability is the net total of the following amounts:

- the present value of the defined benefit obligation at the reporting date;
- minus the fair value at the reporting date of plan assets (if any) out of which the obligations are to be settled directly;
- plus any liability that may arise as a result of a minimum funding requirement.

The amount determined as a defined benefit liability may be negative (an asset). The entity measures the resulting asset at the lower of:

- the amount determined above; and
- the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. The present value of these economic benefits is determined using a discount rate which reflects the time value of money.

Any adjustments arising from the limit above is recognised in surplus or deficit.

The entity determines the present value of defined benefit obligations and the fair value of any plan assets with sufficient regularity such that the amounts recognised in the annual financial statements do not differ materially from the amounts that would be determined at the reporting date.

The entity recognises the net total of the following amounts in surplus or deficit, except to the extent that another Standard requires or permits their inclusion in the cost of an asset:

- current service cost;
- interest cost;
- the expected return on any plan assets and on any reimbursement rights;
- actuarial gains and losses;
- past service cost;
- the effect of any curtailments or settlements; and
- the effect of applying the limit on a defined benefit asset (negative defined benefit liability).

The entity uses the Projected Unit Credit Method to determine the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost. The Projected Unit Credit Method (sometimes known as the accrued benefit method pro-rated on service or as the benefit/years of service method) sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation.

Actuarial valuations for GRAP 25 purposes are conducted on an annual basis by independent actuaries separately for each plan. The results of the valuation are updated for any material transactions and other material changes in circumstances (including changes in market prices and interest rates) up to the reporting date.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

The entity recognises gains or losses on the curtailment or settlement of a defined benefit plan when the curtailment or settlement occurs. The gain or loss on a curtailment or settlement comprises:

- any resulting change in the present value of the defined benefit obligation; and
- any resulting change in the fair value of the plan assets.

Before determining the effect of a curtailment or settlement, the entity re-measures the obligation (and the related plan assets, if any) using current actuarial assumptions (including current market interest rates and other current market prices).

When it is virtually certain that another party will reimburse some or all of the expenditure required to settle a defined benefit obligation, the right to reimbursement is recognised as a separate asset. The asset is measured at fair value. In all other respects, the asset is treated in the same way as plan assets. In surplus or deficit, the expense relating to a defined benefit plan is not presented as the net of the amount recognised for a reimbursement.

The entity offsets an asset relating to one plan against a liability relating to another plan when the entity has a legally enforceable right to use a surplus in one plan to settle obligations under the other plan and intends either to settle the obligations on a net basis, or to realise the surplus in one plan and settle its obligation under the other plan simultaneously.

Actuarial assumptions

Actuarial assumptions are unbiased and mutually compatible.

Financial assumptions are based on market expectations, at the reporting date, for the period over which the obligations are to be settled.

The rate used to discount post-employment benefit obligations (both funded and unfunded) reflect the time value of money. The currency and term of the financial instrument selected to reflect the time value of money is consistent with the currency and estimated term of the post-employment benefit obligations.

Post-employment benefit obligations are measured on a basis that reflects:

- estimated future salary increases;
- the benefits set out in the terms of the plan (or resulting from any constructive obligation that goes beyond those terms) at the reporting date; and
- estimated future changes in the level of any state benefits that affect the benefits payable under a defined benefit plan, if, and only if, either:
- those changes were enacted before the reporting date; or
- past history, or other reliable evidence, indicates that those state benefits will change in some predictable manner, for example, in line with future changes in general price levels or general salary levels.

Assumptions about medical costs take account of estimated future changes in the cost of medical services, resulting from both inflation and specific changes in medical costs.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

Post retirement medical aid obligations

The SAMRC provides post-retirement health care benefits, to some of its employees and their legitimate spouses. The major portion of the liability is funded by an investment policy.

The entitlement to post-retirement health care benefits is based on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment. Independent qualified actuaries carry out valuations of these obligations.

The amount recognised as a liability for other long-term employee benefits is the net total of the following amounts:

- the present value of the defined benefit obligation at the reporting date;
- minus the fair value at the reporting date of plan assets (if any) out of which the obligations are to be settled directly.

The entity shall recognise the net total of the following amounts as expense or revenue, except to the extent that another Standard requires or permits their inclusion in the cost of an asset:

- current service cost;
- interest cost;
- the expected return on any plan assets and on any reimbursement right recognised as an asset;
- actuarial gains and losses, which shall all be recognised immediately;
- past service cost, which shall all be recognised immediately; and
- the effect of any curtailments or settlements.

Termination benefits

The entity recognises termination benefits as a liability and an expense when the entity is demonstrably committed to either:

- terminate the employment of an employee or group of employees before the normal retirement date; or
- provide termination benefits as a result of an offer made in order to encourage voluntary redundancy.

The entity is demonstrably committed to a termination when the entity has a detailed formal plan for the termination and is without realistic possibility of withdrawal. The detailed plan includes [as a minimum]:

- the location, function, and approximate number of employees whose services are to be terminated;
- the termination benefits for each job classification or function; and
- the time at which the plan will be implemented.

Termination benefits are payable whenever an employee's employment is terminated before normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits. The SAMRC recognises termination benefits as an expense when it is demonstrably committed to either terminate the employment of current employees according to a detailed formal plan without the possibility of withdrawal or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after reporting date are discounted to present value.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.15 Employee benefits (continued)

Pension Plan

Contributions to a pension plan in respect of service in a particular period are included in the total cost of employment and are charged to the statement of financial performance in the year in which they relate as part of the cost of employment. The amount recognised in the surplus or deficit for the period under defined benefit plans represents the movement in the present value of the defined benefit obligation and the fair value of the plan assets, after adjusting for contributions paid to the fund, as well as any unrecognised past service costs. Actuarial gains or losses are recognised in the surplus or deficit in the period in which it occurs.

1.16 Provisions and contingencies

Provisions are recognised when:

- the entity has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation; and
- a reliable estimate can be made of the obligation.

The amount of a provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date.

Provisions are measured at the present value of the expenditure expected to be made to settle the obligation using the pre-tax rate that reflects the current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as finance charges.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognised when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement is treated as a separate asset. The amount recognised for the reimbursement does not exceed the amount of the provision.

Provisions are reviewed at each reporting date and adjusted to reflect the current best estimate. Provisions are reversed if it is no longer probable that an outflow of resources embodying economic benefits or service potential will be required, to settle the obligation.

A provision is used only for expenditures for which the provision was originally recognised.

Provisions are not recognised for future operating deficits.

A constructive obligation to restructure arises only when an entity:

- has a detailed formal plan for the restructuring, identifying at least:
  - the activity/operating unit or part of an activity/operating unit concerned;
  - the principal locations affected;
  - the location, function, and approximate number of employees who will be compensated for services being terminated;
  - the expenditures that will be undertaken; and
  - when the plan will be implemented; and
- has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in note 43.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.17 Commitments

Items are classified as commitments when an entity has committed itself to future transactions that will normally result in the outflow of cash.

Commitments for which disclosure is necessary to achieve a fair presentation is disclosed in a note to the financial statements, if both the following criteria are met:

- Contracts should be non-cancelable or only cancelable at significant cost (for example, contracts for computer or building maintenance services); and
- Contracts should relate to something other than the routine, steady, state business of the entity – therefore salary commitments relating to employment contracts commitments are excluded.

1.18 Revenue from exchange transactions

Revenue is the gross inflow of economic benefits or service potential during the reporting period when those inflows result in an increase in net assets, other than increases relating to contributions from owners.

An exchange transaction is one in which the entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of goods, services or use of assets) to the other party in exchange.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Measurement

Revenue is measured at the fair value of the consideration received or receivable.

Sale of goods

Revenue from the sale of goods is recognised when all the following conditions have been satisfied:

- the entity has transferred to the purchaser the significant risks and rewards of ownership of the goods;
- the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits or service potential associated with the transaction will flow to the entity; and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Revenue derived from the sale of animal blood; dietary assessment kits and nutritional textbooks and sale of biological assets are classified as sale of goods.

Rendering of services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised by reference to the stage of completion of the transaction at the reporting date. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- the amount of revenue can be measured reliably;
- it is probable that the economic benefits or service potential associated with the transaction will flow to the entity;
- the stage of completion of the transaction at the reporting date can be measured reliably; and
- the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.18 Revenue from exchange transactions (continued)

When services are performed by an indeterminate number of acts over a specified time frame, revenue is recognised on a straight line basis over the specified time frame unless there is evidence that some other method better represents the stage of completion. When a specific act is much more significant than any other acts, the recognition of revenue is postponed until the significant act is executed.

When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognised only to the extent of the expenses recognised that are recoverable.

Consulting and research service revenue is recognised by reference to the stage of completion of the transaction at the reporting date. Stage of completion is determined by the proportion that costs incurred to date bear to the total estimated costs of the transaction.

Other income includes revenue earned from conference organising and recoupment of travel costs.

Interest, royalties and dividends

Revenue arising from the use by others of entity assets yielding interest, royalties and dividends or similar distributions is recognised when:

- It is probable that the economic benefits or service potential associated with the transaction will flow to the entity, and
- The amount of the revenue can be measured reliably.

Interest is recognised, in surplus or deficit, using the effective interest rate method.

Royalties are recognised as they are earned in accordance with the substance of the relevant agreements.

Dividends or their equivalent distributions are recognised, in surplus or deficit, when the entity's right to receive payment has been established.

Service fees included in the price of the product are recognised as revenue over the period during which the service is performed.

1.19 Revenue from non-exchange transactions

Revenue comprises gross inflows of economic benefits or service potential received and receivable by an entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Conditions on transferred assets are stipulations that specify that the future economic benefits or service potential embodied in the asset is required to be consumed by the recipient as specified or future economic benefits or service potential must be returned to the transferor.

Control of an asset arises when the entity can use or otherwise benefit from the asset in pursuit of its objectives and can exclude or otherwise regulate the access of others to that benefit.

Exchange transactions are transactions in which one entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of cash, goods, services, or use of assets) to another entity in exchange.

Non-exchange transactions are transactions that are not exchange transactions. In a non-exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange.

Stipulations on transferred assets are terms in laws or regulation, or a binding arrangement, imposed upon the use of a transferred asset by entities external to the reporting entity.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.19 Revenue from non-exchange transactions (continued)

Recognition

An inflow of resources from a non-exchange transaction recognised as an asset is recognised as revenue, except to the extent that a liability is also recognised in respect of the same inflow.

As the entity satisfies a present obligation recognised as a liability in respect of an inflow of resources from a non-exchange transaction recognised as an asset, it reduces the carrying amount of the liability recognised and recognises an amount of revenue equal to that reduction.

Measurement

Revenue from a non-exchange transaction is measured at the amount of the increase in net assets recognised by the entity.

When, as a result of a non-exchange transaction, the entity recognises an asset, it also recognises revenue equivalent to the amount of the asset measured at its fair value as at the date of acquisition, unless it is also required to recognise a liability. Where a liability is required to be recognised it will be measured as the best estimate of the amount required to settle the obligation at the reporting date, and the amount of the increase in net assets, if any, recognised as revenue. When a liability is subsequently reduced, because the taxable event occurs or a condition is satisfied, the amount of the reduction in the liability is recognised as revenue.

Gifts and donations, including goods in-kind

Gifts and donations, including goods in-kind, are recognised as assets and revenue when it is probable that the future economic benefits or service potential will flow to the entity and the fair value of the assets can be measured reliably.

Services in-kind

The entity recognise services in-kind that are significant to its operations and/or service delivery objectives as assets and recognise the related revenue when it is probable that the future economic benefits or service potential will flow to the entity and the fair value of the assets can be measured reliably.

Where services in-kind are not significant to the entity's operations and/or service delivery objectives and/or do not satisfy the criteria for recognition, the entity has not disclosed the nature and type of services in-kind received during the reporting period.

1.20 Revenue recognition for exchange and non-exchange transactions

Revenue represents the parliamentary grant from government as well as external income.

Parliamentary grant (Revenue from non-exchange transactions)

Government grants are recognised when it is probable that the future economic benefit will flow to the SAMRC and these benefits can be measured reliably. The grant is recognised to the extent that there are no further obligations arising from the receipt of the grant. Government grants are assistance by government in the form of transfer of resources in return for compliance with conditions related to operating activities. Grants that compensate the SAMRC for expenses incurred are recognised in surplus or deficit in the same periods in which the expense is recognised.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.20 Revenue recognition for exchange and non-exchange transactions (continued)

Revenue other than grants, donations, project revenue and council activities (Revenue from exchange transactions)

Revenue is recognised on the accrual basis. Revenue is recognised when significant risks and rewards of ownership have been transferred.

Research revenue

Revenue is recognised only to the extent of research costs incurred and is probable that it will be recoverable. Advance income received in respect of which no work has been done, is treated as deferred income until such time the expenditure is incurred or the conditions of the grant/contract are met.

Rental income

Rental income from tenants is recognised in the statement of financial performance on a straight line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income, over the term of the lease.

Deferred income

Deferred income is recognised as revenue to the extent that expenses are incurred and that conditions of the grant are met.

Social outcomes based contracts

Income received from the social investor is recognised in the statement of financial performance when all the contractual commitments are met.

A liability will be recognised once the social outcomes have been verified by the verification agent.

1.21 Borrowing costs

Borrowing costs are interest and other expenses incurred by an entity in connection with the borrowing of funds.

Borrowing costs are recognised as an expense in the period in which they are incurred.

1.22 Accounting by principals and agents

Identification

An agent is an entity that has been directed by another entity (a principal), through a binding arrangement, to undertake transactions with third parties on behalf of the principal and for the benefit of the principal.

A principal is an entity that directs another entity (an agent), through a binding arrangement, to undertake transactions with third parties on its behalf and for its own benefit.

A principal-agent arrangement results from a binding arrangement in which one entity (an agent), undertakes transactions with third parties on behalf, and for the benefit of, another entity (the principal).

Identifying whether an entity is a principal or an agent

When the entity is party to a principal-agent arrangement, it assesses whether it is the principal or the agent in accounting for revenue, expenses, assets and/or liabilities that result from transactions with third parties undertaken in terms of the arrangement.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The assessment of whether an entity is a principal or an agent requires the entity to assess whether the transactions it undertakes with third parties are for the benefit of another entity or for its own benefit.

Binding arrangement

The entity assesses whether it is an agent or a principal by assessing the rights and obligations of the various parties established in the binding arrangement.

Where the terms of a binding arrangement are modified, the parties to the arrangement re-assess whether they act as a principal or an agent.

Recognition

The entity, as an agent, recognises only that portion of the revenue and expenses it receives or incurs in executing the transactions on behalf of the principal in accordance with the requirements of the relevant Standards of GRAP.

The entity recognises assets and liabilities arising from principal-agent arrangements in accordance with the requirements of the relevant Standards of GRAP.

1.23 Translation of foreign currencies

Foreign currency transactions

A foreign currency transaction is recorded, on initial recognition in Rand's, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

At each reporting date:

- foreign currency monetary items are translated using the closing rate;
- non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction; and
- non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous annual financial statements are recognised in surplus or deficit in the period in which they arise.

When a gain or loss on a non-monetary item is recognised directly in net assets, any exchange component of that gain or loss is recognised directly in net assets. When a gain or loss on a non-monetary item is recognised in surplus or deficit, any exchange component of that gain or loss is recognised in surplus or deficit.

Cash flows arising from transactions in a foreign currency are recorded in Rands by applying to the foreign currency amount the exchange rate between the Rand and the foreign currency at the date of the cash flow.

1.24 VAT

The SAMRC accounts for VAT on the invoice basis.

The net amount of VAT recoverable, or payable to SARS is reflected on the Statement of Financial Position.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.25 Fruitless and wasteful expenditure

Fruitless and wasteful expenditure means expenditure which was made in vain and would have been avoided had reasonable care been exercised.

National Treasury instruction note no. 4 of 2022/2023 which was issued in terms of sections 76(2)(e) to 76(4)(a) and (c) of the PFMA (effective from 3 January 2023).

All expenditure relating to fruitless and wasteful expenditure is recognised as an expense in the statement of financial performance in the year that the expenditure was incurred. The expenditure is classified in accordance with the nature of the expense and where recovered, it is subsequently accounted for as revenue in the statement of financial performance. The entity records the details of all alleged fruitless and wasteful expenditure in the register; investigates the incidents and where appropriate raise a debt. Fruitless and wasteful expenditure is reported monthly to National Treasury and quarterly to the Accounting Authority.

1.26 Irregular expenditure

Irregular expenditure as defined in section 1 of the PFMA is expenditure other than unauthorised expenditure, incurred in contravention of or that is not in accordance with a requirement of any applicable legislation, including –

(a) this Act; or

(b) the State Tender Board Act, 1968 (Act No. 86 of 1968), or any regulations made in terms of the Act; or

(c) any provincial legislation providing for procurement procedures in that provincial government.

National Treasury practice note no. 4 of 2008/2009 and instruction note no. 4 of 2022/2023 which was issued in terms of sections 76(1)(b), (e) and (f), 76(2)(e) and 76(4)(a) and (c) of the PFMA requires the following:

Irregular expenditure that was incurred and identified during the current financial year and which was condoned before year end and/or before finalisation of the financial statements is recorded appropriately in the irregular expenditure register. In such an instance, no further action is required with the exception of updating the note to the annual report.

Irregular expenditure that was incurred and confirmed during the current financial year is recorded in the annual financial statements.

The Accounting Authority may condone irregular expenditure emanating from non-compliance with sections 44 and 56 of the PFMA and in a case where an employee of an entity listed in Schedule 3A to the PFMA, was responsible for exceeding the budget of the public entity.

Irregular expenditure that was identified and confirmed during the current financial year and which was not condoned must be recorded appropriately in the irregular expenditure register. If liability for the irregular expenditure can be attributed to a person, a debt account must be created if such a person is liable in law. Immediate steps will be taken to recover the amount from the person concerned. If recovery is not possible, the accounting authority may write off the amount as debt impairment and disclose such in the annual report. The irregular expenditure register will be updated accordingly.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.27 Budget information

General purpose financial reporting by the entity shall provide information on whether resources were obtained and used in accordance with the legally adopted budget.

The approved budget is prepared on an accrual basis and presented by functional classification linked to performance outcome objectives.

The approved budget covers the fiscal period from 01-Apr-24 to 31-Mar-25.

The annual financial statements and the budget are on the same basis of accounting therefore a comparison with the budgeted amounts for the reporting period have been included in the Statement of comparison of budget and actual amounts.

The Statement of comparative and actual information has been included in the annual financial statements as the recommended disclosure when the annual financial statements and the budget are on the same basis of accounting as determined by National Treasury. The Statement of comparison of budget and actual amounts is presented for the revenue and expenses as this is the information submitted to the Executive Authority. The Annual Performance Plan (APP) on the SAMRC intranet reflect the 2024/2025 approved budget.

Comparative information is not required.

1.28 Related parties

The entity operates in a sector currently dominated by entities directly or indirectly owned by the South African Government. As a consequence of the constitutional independence of the three spheres of government in South Africa, only entities within the national sphere of government and are in the same economic entity (having the same executive authority) are considered to be related parties.

Management are those persons responsible for planning, directing and controlling the activities of the entity, including those charged with the governance of the entity in accordance with legislation, in instances where they are required to perform such functions.

Close members of the family of a person is considered to be those family members who may be expected to influence, or be influenced by, that management in their dealings with the entity.

Transactions with related parties are disclosed.

Where those charged with governance are employed by an entity receiving funding or doing business with SAMRC which do not meet the definition of a related party in terms of GRAP 20 these relationships are separately disclosed in the Annual Report.

1.29 Living and non-living resources

Living resources are those resources that undergo biological transformation.

Non-living resources are those resources, other than living resources, that occur naturally and have not been extracted. Agricultural activity is the management by an entity of the biological transformation and harvest of biological assets for:

(a) sale;

(b) distribution at no charge or for a nominal charge; or

(c) conversion into agriculture produce or into additional biological assets for sale or distribution at no charge or for a nominal charge.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.29 Living and non-living resources (continued)

Biological transformation (for purposes of this Standard) comprises the processes of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a living resource.

Carrying amount is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses.

Cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or development and, where applicable, the amount attributed to the asset when initially recognised in accordance with the specific requirements of other Standards of GRAP.

Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Group of resources means a grouping of living or non-living resources of a similar nature or function in an entity's operations that is shown as a single item for the purpose of disclosure in the annual financial statements.

The residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset was already of the age and in the condition expected at the end of its useful life.

Useful life is the period over which an asset is expected to be available for use by an entity, or the number of production or similar units expected to be obtained from the asset by an entity.

Recognition

A living resource is recognised as an asset if it is probable that future economic benefits or service potential associated with the asset will flow to the entity, and the cost or fair value of the asset can be measured reliably.

Where the entity holds a living resource that meets the definition of an asset, but which does not meet the recognition criteria, relevant information is disclosed in the notes to the annual financial statements. When the information about the cost or fair value of the living resource becomes available, the entity recognises, from that date, the living resource and apply the measurement principles.

Measurement at recognition

A living resource that qualifies for recognition as an asset is measured at its cost.

Where a living resource is acquired through a non-exchange transaction, its cost is measured at its fair value as at the date of acquisition.

The cost of a living resource comprises its purchase price, including import duties and non-refundable purchase taxes, and any costs directly attributable to bringing the living resource to the location and condition necessary for it to be capable of operating in the manner intended by management.

Measurement after recognition

Cost model

After recognition as an asset, a group of living resources are carried at its cost less any accumulated depreciation and any accumulated impairment losses.

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.29 Living and non-living resources (continued)

Depreciation

Living resources are depreciated and the depreciation charge for each period is recognised in surplus or deficit unless it is included in the carrying amount of another asset, where appropriate.

The depreciable amount of a living resource is allocated on a systematic basis over its useful life.

The entity assesses at each reporting date whether there is any indication that the entity's expectations about the residual value and the useful life of a living resource have changed since the preceding reporting date. If any such indication exists, the entity revises the expected useful life and/or residual value accordingly. The change(s) is accounted for as a change in an accounting estimate.

In assessing whether there is any indication that the expected useful life of the living resource has changed, the entity considers the following indications:

(a) The use of the living resource has changed, because of the following:
- The entity has changed the manner in which the living resource is used.
- The entity has made a decision to dispose of the living resource in a future reporting period(s) such that this decision changes the expected period over which the living resource will be used.
- Legislation, government policy or similar means have been amended or implemented during the reporting period that have, or will, change the use of the living resource.
- The living resource was idle or retired from use during the reporting period.

(b) The living resource is approaching the end of its previously expected useful life.

(c) There is evidence that the condition of the living resource improved or declined based on assessments undertaken during the reporting period.

(d) The living resource is assessed as being impaired.

In assessing whether there is any indication that the expected residual value of the living resource has changed, the entity considers whether there has been any change in the expected timing of disposal of the living resource, as well as any relevant indicators as noted above.

The depreciation method used reflects the pattern in which the future economic benefits or service potential of the living resource is expected to be consumed by the entity.

The depreciation method applied to a living resource is reviewed at least at each reporting date and, if there has been a significant change in the expected pattern of consumption of the future economic benefits or service potential embodied in the living resource, the method is changed to reflect the changed pattern. Such a change is accounted for as a change in an accounting estimate.

The useful lives of items of property, plant and equipment have been assessed as follows:

ITEM	DEPRECIATION METHOD	AVERAGE USEFUL LIFE
Rhesus monkeys	Straight-line	25 years
Vervet monkeys	Straight-line	30 years

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

1.29 Living and non-living resources (continued)

Impairment

The entity assesses at each reporting date whether there is an indication that the living resource may be impaired. If any such indication exists, the entity estimates the recoverable amount or the recoverable service amount of the living resource.

Transfers

Transfers from living resources are made when the particular asset no longer meets the definition of a living resource and/or is no longer within the scope of this accounting policy.

Transfers to living resources are made when the asset meets the definition of a living resource.

Derecognition

The carrying amount of a living resource is derecognised on disposal, or when no future economic benefits or service potential are expected from its use or disposal.

The gain or loss arising from the derecognition of a living resource is included in surplus or deficit when the item is derecognised.

1.30 Earmarked funds

The Earmarked funds are donations; bequests from deceased estates or cash received for a limited period to be used for visiting eminent scientists; cancer research or tuberculosis research. The monies received have been allocated to a separate account. The monies are ring-fenced from the cash balance of the SAMRC.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

2. New standards and interpretations

2.1 Standards and interpretations effective and adopted in the current year

In the current year no new standards were adopted.

2.2 Standards and interpretations not yet effective or relevant

The following standards and interpretations have been published and are mandatory for the entity's accounting periods beginning on or after 1 April, 2025 or later periods but are relevant to its operations:

STANDARD/INTERPRETATION:	EFFECTIVE DATE: YEARS BEGINNING ON OR AFTER	EXPECTED IMPACT:
GRAP 106 Transfer of Functions Between Entities Not Under Common Control	Undetermined	Unlikely there will be a material impact
GRAP 105 Transfer of Functions Between Entities Under Common Control	Undetermined	Unlikely there will be a material impact
GRAP 2023 Improvements to the Standards of GRAP 2023	Undetermined	Unlikely there will be a material impact
GRAP 1 (amended): Presentation of Financial Statements (Going Concern)	Undetermined	Unable to reliably estimate the impact
GRAP 103 (as revised): Heritage Assets	Undetermined	Unlikely there will be a material impact
iGRAP 22 Foreign Currency Transactions and Advance Consideration	1 April, 2025	Unable to reliably estimate the impact
GRAP 104 (as revised): Financial Instruments	1 April, 2025	Impact is currently being assessed
Guideline on The Application of Materiality to Financial Statements	Undetermined	Unable to reliably estimate the impact

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
3. Financial assets at fair value		
Designated at fair value		
Class 1 Listed shares	1,165,577	982,286
Sanlam demutualisation shares No. of shares 12715 (2024: 12715); Old Mutual demutualisation shares No. of shares 3682 (2024: 3682); Quilter shares No. of shares 924 (2024: 924) and Nedbank Ltd shares No. of shares 145 (2024: 145)		
Class 2 Unit trusts	10,071,496	8,568,728
SIM General Equity Fund R – 18839.23 units (2024: 18492,97 units) and SIM Balanced Fund R – 33361,59 (2024: 32398,67)		
	11,237,073	**9,551,014**
Current assets		
Designated at fair value	11,237,073	9,551,014

Financial assets at fair value

Fair value hierarchy of financial assets at fair value

For financial assets recognised at fair value, disclosure is required of a fair value hierarchy which reflects the significance of the inputs used to make the measurements. The fair value hierarchy has the following levels:

Level 1 represents those assets which are measured using unadjusted quoted prices in active markets for identical assets. Quoted selling price per share at 31 March 2025 (31 March 2024) is used.

Level 2 applies inputs other than quoted prices that are observable for the assets either directly (i.e. as prices) or indirectly (i.e. derived from prices). The valuation certificate received from Sanlam indicating the unit balance and price per unit and market value.

Level 3 applies inputs which are not based on observable market data.

Level 1		
Class 1 Listed shares	1,165,577	982,286
Class 2 Unit trusts	10,071,496	8,568,728
	11,237,073	**9,551,014**

The entity has not reclassified any financial assets from cost or amortised cost to fair value, or from fair value to cost or amortised cost during the current or prior period.

The number of Nedbank shares was reduced by 5 shares due to the odd lot buy back of Nedbank shares for shareholding of less than 100 shares in July 2023.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

3. Financial assets at fair value (continued)

Reconciliation of financial assets at fair value through surplus or deficit measured in level 1

Reconciliation of financial assets at fair value through surplus or deficit measured in level 1 – 31 March 2025

	OPENING BALANCE R	GAINS OR LOSSES IN SURPLUS OR DEFICIT R	PURCHASES R	CLOSING BALANCE R
Class 1 Listed shares	982,286	183,291	–	1,165,577
Class 2 Unit trusts	8,568,728	1,294,008	208,760	10,071,496
	9,551,014	**1,477,299**	**208,760**	**11,237,073**

Reconciliation of financial assets at fair value through surplus or deficit measured in level 1 – 31 March 2024

	OPENING BALANCE R	GAINS OR LOSSES IN SURPLUS OR DEFICIT R	PURCHASES R	SALES R	CLOSING BALANCE R
Class 1 Listed shares	809,814	173,642	–	(1,170)	982,286
Class 2 Unit trusts	8,339,199	37,789	191,740	–	8,568,728
	9,149,013	**211,431**	**191,740**	**(1,170)**	**9,551,014**

4. Receivables from exchange transactions

	2025 31 MARCH R	2024 31 MARCH R
Trade debtors	74,162,784	**80,582,877**
Employee costs in advance	1,686	**179,141**
Deposits	320,573	**7,454,795**
	74,485,043	**88,216,813**

The decrease in receivables from exchange transactions is attributed to funder/grantor accrued income. There is a decrease in deposits.

Credit quality of trade debtors

The credit quality of research grant debtors that are neither past nor due nor impaired can be assessed by reference to historical information about the specific debtor.

Trade and other receivables past due but not impaired

Trade and research grant receivables which are less than one month past due are considered to be impaired when the invoices were raised in previous periods and were re-issued during March 2025. (31 March 2024 no trade and research grant receivables which are less than one month past due were considered to be impaired). At 31 March 2025: R4,425,665, (31 March 2024: R19,487,539) were past due but not impaired as the debtors paid subsequent to the reporting date or there is a firm commitment to settle the debt.

The ageing of amounts past due but not impaired is as follows:

1 month past due	2,976,839	2,706,521
2 months past due	122,123	9,139,800
3 months past due	1,326,703	7,641,218

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
4. Receivables from exchange transactions (continued)		
Trade and other receivables impaired		
The amount of the provision was R3,340,265 as of 31 March 2025 (31 March 2024: R489,484). All debtor balances are reviewed for impairment. Impairment considerations include solvency of debtor and recoverability of amount owed. Employee costs in advance are not considered for impairment as these amounts are recovered/processed within 30 days.		
Aged as follows:		
Less than one month (re-issue of invoice)	457,804	–
1 month but less than 2 months past due	1,638,229	–
2 months but less than 3 months past due	250,738	–
More than 3 months past due	993,494	489,484
The carrying amount of trade debtors are denominated in the following currencies:		
Rand	63,184,709	68,698,434
US Dollar	8,965,382	11,414,113
Euro	1,129,219	–
Pound sterling	883,474	470,330
	74,162,784	**80,582,877**
Reconciliation of provision for impairment of trade and other receivables		
Opening balance	489,484	626,312
Provision for impairment	3,340,265	489,484
Unused amounts reversed	(489,484)	(626,312)
	3,340,265	**489,484**

5. Receivables from non-exchange transactions

Research grant debtors	21,723,586	9,055,438

At 31 March 2025 there were funder/grantor non-exchange debtors and accrued income (31 March 2024 there were funder/grantor non-exchange debtors and accrued income).

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
5. Receivables from non-exchange transactions (continued)		
Receivables from non-exchange transactions past due but not impaired		
Research grant receivables from non-exchange transactions which are less than one month past due are not considered to be impaired. At 31 March 2025: Nil (31 March 2024: Nil) were past due but not impaired.		
Receivables from non-exchange transactions impaired		
The amount of the provision was Nil as at 31 March 2025 (31 March 2024: Nil), the amounts owing are considered fully recoverable.		
The carrying amount of other receivables from non-exchange transactions are denominated in the following currencies:		
Rand	21,402,026	9,055,438
Pound sterling	321,560	–
	21,723,586	**9,055,438**
6. VAT receivable		
VAT	13,248,404	25,439,861

7. Prepayments

Prepayments – other relate to expenditure paid in advance for subscriptions; membership fees; annual computer licenses; computer software updates and maintenance; computer warranties; insurance; conference registrations and equipment maintenance.

Subsistence and travel advances	302,111	274,614
Prepayments – other	16,764,873	15,096,316
	17,066,984	**15,370,930**

The increase in prepayments – other is mainly as a result of an increase in computer software updates and maintenance; computer warranties and equipment maintenance contracts paid during the period under review.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
8. Cash and cash equivalents		
Cash and cash equivalents consist of:		
Cash on hand	25,040	36,485
Bank balances	679,781,092	522,046,127
	679,806,132	**522,082,612**
Analysis of bank balances		
ABSA and Standard Bank	2,573,242	5,147,192
ABSA funder accounts	33,838,124	12,573,776
First National Bank	692,010	543,393
Cash at the Reserve Bank	642,677,716	503,781,766
	679,781,092	**522,046,127**

The cash at the Reserve Bank includes funds for the Botha Trust; Bruhns Trust; Melville Douglas Trust; Q&S Abdool Karim Trust; FJ Kleynhans Trust and Motor vehicle reserve fund (refer note 18).

The Motor vehicle reserve fund was established to provide self-insurance of motor vehicles with a low market value.

Motor vehicle reserve fund		
Balance at beginning of year	5,095,082	4,854,812
Allocation for the year	253,720	240,270
	5,348,802	**5,095,082**

9. Biological assets that form part of an agricultural activity

	31 MARCH 2025			31 MARCH 2024		
	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R
Bearer mature biological assets	20,000	–	20,000	25,000	–	25,000

Reconciliation of biological assets that form part of an agricultural activity – 31 March 2025

	OPENING BALANCE	DISPOSALS	TOTAL
Bearer mature biological assets	25,000	(5,000)	25,000

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

9. Biological assets that form part of an agricultural activity (continued)

Reconciliation of biological assets that form part of an agricultural activity – 31 March 2024

	OPENING BALANCE R	TOTAL R
Bearer mature biological assets	25,000	25,000

Methods and assumptions used in determining fair value

SAMRC holds horses as biological assets, horse blood is sold to laboratories when required.

All activities are monitored and controlled to ensure humane treatment of animals.

The last selling price per biological animal type is used to determine fair value.

	2025 31 MARCH R	2024 31 MARCH R
Fair value less cost to sell of biological assets during the period	20,000	25,000

10. Property, plant and equipment

	31 MARCH 2025			31 MARCH 2024		
	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R
Land	1,769,181	–	1,769,181	1,769,181	–	1,769,181
Buildings	227,940,578	(65,172,884)	162,767,694	196,829,639	(56,600,069)	140,229,570
Vehicles and containers	24,262,175	(15,313,477)	8,948,698	23,821,659	(14,925,034)	8,896,625
Furniture and office equipment	54,547,621	(22,666,029)	31,881,592	58,526,409	(27,165,370)	31,361,039
Computer equipment	109,226,279	(56,302,980)	52,923,299	106,345,287	(53,300,988)	53,044,299
Laboratory equipment	134,542,208	(55,139,947)	79,402,261	122,428,426	(47,297,140)	75,131,286
Total	**552,288,042**	**(214,595,317)**	**337,692,725**	**509,720,601**	**(199,288,601)**	**310,432,000**

Reconciliation of property, plant and equipment – 31 March 2025

	OPENING BALANCE R	ADDITIONS R	DISPOSALS R	TRANSFERS R	DEPRE-CIATION R	IMPAIRMENT LOSS R	IMPAIRMENT REVERSAL R	TOTAL R
Land	1,769,181	–	–	–	–	–	–	1,769,181
Buildings	140,229,570	25,273,835	(185,077)	1,054,198	(3,136,304)	(500,369)	31,841	162,767,694
Vehicles and containers	8,896,625	2,542,498	(367,103)	–	(973,635)	(1,414,319)	264,632	8,948,698
Furniture and office equipment	31,361,039	5,430,561	(980,399)	(1,054,197)	(3,049,927)	(333,084)	507,599	31,881,592
Computer equipment	53,044,299	11,589,367	(697,022)	–	(11,017,250)	(241,210)	245,115	52,923,299
Laboratory equipment	75,131,286	16,633,749	(1,166,991)	(1)	(11,282,248)	(471,331)	557,797	79,402,261
	310,432,000	**61,470,010**	**(3,396,592)**	**–**	**(29,459,364)**	**(2,960,313)**	**1,606,984**	**337,692,725**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

10. Property, plant and equipment (continued)

Reconciliation of property, plant and equipment – 31 March 2024

	OPENING BALANCE R	ADDITIONS R	DISPOSALS R	OTHER CHANGES, MOVEMENTS R	DEPRECIATION R	IMPAIRMENT LOSS R	IMPAIRMENT REVERSAL R	TOTAL R
Land	1,769,181	–	–	-	–	–	–	1,769,181
Buildings	140,482,139	8,273,374	(1,818,739)	(1,624,273)	(5,243,497)	(18,070)	178,636	140,229,570
Vehicles and containers	7,355,127	2,873,296	(44,859)	–	(848,335)	(483,463)	44,859	8,896,625
Furniture and office equipment	29,893,118	5,311,141	(797,859)	–	(3,045,511)	(334,886)	335,036	31,361,039
Computer equipment	39,474,341	24,345,766	(565,296)	–	(10,232,416)	(197,538)	219,442	53,044,299
Laboratory equipment	56,702,690	28,403,167	(2,593,133)	–	(6,402,199)	(1,293,575)	314,336	75,131,286
	275,676,596	**69,206,744**	**(5,819,886)**	**(1,624,273)**	**(25,771,958)**	**(2,327,532)**	**1,092,309**	**310,432,000**

Carrying value of impaired assets:

IMPAIRED ASSETS 31 MARCH 2025	R
Property, plant and equipment – Laboratory equipment	5,033,147
Property, plant and equipment – Computer equipment	484,334
Property, plant and equipment – Furniture and office equipment	616,857
Property, plant and equipment – Buildings	564,543
Property, plant and equipment – Vehicles	1,777,469
	8,476,350

IMPAIRED ASSETS 31 MARCH 2024	R
Property, plant and equipment – Laboratory equipment	5,119,613
Property, plant and equipment – Computer equipment	488,239
Property, plant and equipment – Furniture and office equipment	791,372
Property, plant and equipment – Buildings	96,015
Property, plant and equipment – Vehicles	627,782
	7,123,021

During the period under review various intra-mural units and platforms identified items of property, plant and equipment that would be used for future research projects, these items were impaired. The items are stored at a research site or at the unit/platform.

All items of property, plant and equipment are owned by the entity.

In the 2023/2024 financial year the SAMRC received a donation of laboratory equipment of R20,622,547, the assets were included in the laboratory class.

There are no restrictions on the title of Property, plant and equipment.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	31 MARCH 2025 R	31 MARCH 2024 R

10. Property, plant and equipment (continued)

Property, plant and equipment in the process of being constructed or developed

Cumulative expenditure recognised in the carrying value of property, plant and equipment

Buildings	3,591,971	4,648,683

Reconciliation of Work-in-Progress 31 March 2025

	INCLUDED WITHIN INFRASTRUCTURE R	TOTAL R
Opening balance	4,648,683	4,648,683
Additions/capital expenditure	14,169,511	14,169,511
Transferred to expense	(16,150)	(16,150)
Capitalised to buildings	(15,210,073)	(15,210,073)
	3,591,971	**3,591,971**

Reconciliation of Work-in-Progress 31 March 2024

Opening balance	6,069,528	6,069,528
Additions/capital expenditure	203,428	203,428
Transferred to expense	(1,624,273)	(1,624,273)
	4,648,683	**4,648,683**

Expenditure incurred to repair and maintain property, plant and equipment

Expenditure incurred to repair and maintain property, plant and equipment included in Statement of Financial Performance

Contracted services	20,103,901	17,598,774

11. Intangible assets

	31 MARCH 2025			31 MARCH 2024		
	COST/ VALUATION R	ACCUMULATED AMORTISATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R	COST/ VALUATION R	ACCUMULATED AMORTISATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R
Computer software	37,783,286	(22,101,586)	15,681,700	35,589,950	(16,476,834)	19,113,116

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

11. Intangible assets (continued)

Reconciliation of intangible assets – 31 March 2025

	OPENING BALANCE R	ADDITIONS R	DISPOSALS R	AMORTISATION R	TOTAL R
Computer software	19,113,116	4,272,410	(4)	(7,703,822)	15,681,700

Reconciliation of intangible assets – 31 March 2024

	OPENING BALANCE R	ADDITIONS R	DISPOSALS R	AMORTISATION R	TOTAL R
Computer software	14,223,042	11,707,723	(1)	(6,817,648)	19,113,116

There are no restrictions on the title of intangible assets.

12. Living Resources

	31 MARCH 2025			31 MARCH 2024		
	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R	COST/ VALUATION R	ACCUMULATED DEPRECIATION AND ACCUMULATED IMPAIRMENT R	CARRYING VALUE R
Rhesus monkey	892,806	(273,395)	619,411	825,571	(300,211)	525,360
Vervet monkeys	943,332	(328,758)	614,574	848,479	(310,800)	537,679
Total	**1,836,138**	**(602,153)**	**1,233,985**	**1,674,050**	**(611,011)**	**1,063,039**

Reconciliation of living resources – 31 March 2025

	OPENING BALANCES R	ADDITIONS R	DISPOSALS R	DEPRE-CIATION R	TOTAL R
Rhesus monkeys	525,360	152,535	(26,157)	(32,327)	619,411
Vervet monkeys	537,679	128,424	(21,307)	(30,222)	614,574
	1,063,039	**280,959**	**(47,464)**	**(62,549)**	**1,233,985**

Reconciliation of living resources – 31 March 2024

	OPENING R	ADDITIONS R	DISPOSALS BALANCE R	DEPRE-CIATION R	TOTAL R
Rhesus monkeys	636,374	76,268	(155,743)	(31,539)	525,360
Vervet monkeys	525,773	70,263	(29,988)	(28,369)	537,679
	1,162,147	**146,531**	**(185,731)**	**(59,908)**	**1,063,039**

The last selling price per animal type was used to determine the fair value as there is not an active market for these animals.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

13. Investments in controlled entities

NAME OF COMPANY	HELD BY	% HOLDING 31 MARCH 2025	% HOLDING 31 MARCH 2024	CARRYING AMOUNT 31 MARCH 2025	CARRYING AMOUNT 31 MARCH 2024
Medres (Pty) Ltd	SAMRC	100.00%	100.00%	1	1
Jiresha Medical (Pty) Ltd	Medres (Pty) Ltd	42.00%	42.00%	1	1
				2	**2**

The carrying amounts of controlled entities are shown net of impairment losses.

The financial statements of Medres (Pty) Ltd and Jirehsa Medical (Pty) Ltd have not been consolidated with those of the SAMRC, as they are not considered material in the context of SAMRC.

Controlled entities with less than 50% voting powers held

Although the entity holds less than 50% of the voting powers in Jirehsa Medical (Pty) Ltd the investment is considered a controlled entity because SAMRC has the power to govern the financial and operating policies of Jirehsa Medical (Pty) Ltd.

During the 2023/2024 financial year Jirehsa issued additional shares. The percentage shareholding did not change by the share issue.

14. Payables from exchange transactions

	2025 31 MARCH R	2024 31 MARCH R
Trade payables	55,873,246	42,509,397
Leave accrual	24,006,362	21,656,816
Accruals	23,074,215	51,301,948
Interest due to funders	65,578	169,359
	103,019,401	**115,637,520**

The decrease in payables from exchange transactions is attributed to amounts due in respect of grants awarded.

The carrying amount of trade payables are denominated in the following currencies:

Rand	55,590,814	39,692,523
US Dollar	268,484	1,982,892
Pound sterling	9,796	821,337
Euro	2,715	8,152
Naira	–	4,493
Other	1,437	–
	55,873,246	**42,509,397**

Leave accrual

Balance at the beginning of the year	21,656,816	20,902,587
Leave payouts	(11,325,029)	(10,281,142)
Movement recognised in surplus or deficit	13,674,575	11,035,371
	24,006,362	**21,656,816**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

15. Provisions

Reconciliation of provisions – 31 March 2025

	OPENING BALANCE R	ADDITIONS R	UTILISED DURING THE YEAR R	TOTAL R
Provision for legal fees	929,019	–	–	929,019
Provision for collaborative research	188,000	–	(188,000)	–
Provision for performance bonus	15,842,307	15,319,163	(6,769,158)	24,392,312
Social impact bond liability	–	27,397,800	–	27,397,800
Other provisions	4,059,726	4,046,317	(4,059,726)	4,046,317
	21,019,052	**46,763,280**	**(11,016,884)**	**56,765,448**

Reconciliation of provisions – 31 March 2024

	OPENING BALANCE R	ADDITIONS R	UTILISED DURING THE YEAR R	REVERSED DURING THE YEAR R	TOTAL R
Provision for legal fees	929,019	–	–	–	929,019
Provision for collaborative research	–	188,000	–	–	188,000
Provision for performance bonus	6,432,869	15,842,307	(6,405,789)	(27,080)	15,842,307
Other provisions	3,711,833	4,059,726	(3,711,833)	–	4,059,726
	11,073,721	**20,090,033**	**(10,117,622)**	**(27,080)**	**21,019,052**

Collaborative research costs

At 31 March 2025 there were no collaborative research provisions and the previous year's amounts were settled during the year under review. The collaborative research provision at 31 March 2024 related to self initiated grants where the institution did not respond to the request to submit an invoice.

Provision for legal fees

The legal fees provision relates to the estimated legal costs that is due to NEHAWU regarding a previous bonus dispute.

Other provisions

The other provisions at year-end relate to the Department of Labour assessment for the claim for occupational injury on duty assessment for 2025 (COIDA); a repayment of unspent grant funds and building retentions. (March 2024: The other provisions relate to the Department of Labour assessment for the claim for occupational injury on duty assessment for 2024 (COIDA) and an admission of no liability settlement amount for two ex-employees).

Social impact bond liability

The provision is recognised at the reporting date as the social outcomes verified by the independent verification agent indicated that the outcomes have been achieved. The amount reflected is an estimate at the reporting date of the amount to be repaid. The payment to the social investor will be made after the final verification of the last quarter results of the project, the estimated payment date is 30 September 2025.

Provision for performance bonus

The performance bonus cycle was changed after discussions and agreement with the union. The Accounting Authority approved the change in bonus cycle which will result in payments being made after the financial year end. The amount reflected is the 2024/2025 bonus provision and the unpaid amount of the 2023/2024 provision for performance bonuses. SAMRC is engaging with National Treasury regarding the basis used for the 2023/2024 bonus provision. The 2023/2024 bonuses were paid in July 2024.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
16. Deferred income		
The increase in deferred income can be attributed to contract funds received in advance: Department of Science and Technology; Department of Health; The Elma Philanthrope; Michelle & Susan Dell Foundation; Global Fund; MRC UK; EDCTP; The Chan – Soon Shiong Family Foundation; Bill & Melinda Gates Foundation and USAID Brilliant.		
Deferred income	538,756,205	448,637,352
Summary of deferred income		
Research grants received in advance	538,571,439	448,539,002
Other funds received in advance	184,766	98,350
	538,756,205	**448,637,352**

17. Employee benefit obligations

Defined benefit plans

Post retirement medical aid plan

SAMRC took a compulsory insurance policy in order to fund post retirement medical obligations of its ex-employees. Given the nature of the policy, it is appropriate to treat this as a plan asset. Certain assets have been allocated specifically for the purpose of covering the post retirement medical aid defined benefit liability. The defined benefit medical liability has been recognised and accounted for under the requirements of GRAP 25 – Employee Benefits. The assets have been accounted for in terms of the requirements of the accounting standards to which they relate and not in terms of GRAP 25 because the plan is not registered. The Post retirement medical aid plan is valued annually in compliance with GRAP 25. The relevant assets are included in the statement of financial position. The valuation is based on an employer subsidy of a percentage of members' post-employment medical aid contributions, subject to the benchmark maximum. SAMRC considers paying the annual contribution in order to eliminate the liability. There are no in service members.

The risks to which the plan exposes the entity are the market performance of the plan in order to meet the liability.

The entity will investigate options available to eliminate the net liability as far as possible.

The basis on which the discount rate has been determined is: by reference to market yields at the balance sheet date of South African long-term bonds.

Pension funds

SAMRC personnel are members of the following pension funds

- State Pension Fund (Associated institutions – AIPF) (Act No. 51 of 1963)
- State Pension fund for temporary employees (Act No. 75 of 1979)
- SAMRC Pension fund (since January 1994)
  - (a) The first two funds were established by Law and are regulated by the respective Acts.
  - (b) The last-named fund is regulated by the Pension Fund Act and is managed by an independent Board of Trustees. The SAMRC Pension fund was actuarially valued at 1 April 2023. Next statutory valuation for the fund is 1 April 2026.
  - (c) The first two funds offer defined benefits to staff. With regard to the SAMRC Pension fund, some members are on a defined benefit scheme, while the remainder are on a defined contribution scheme. The Fund operated a closed defined benefit section for members who joined prior to 1 July 1998.

The SAMRC Pension Fund is valued annually in compliance with GRAP 25.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
17. Employee benefit obligations (continued)		
The amounts recognised in the statement of financial position are as follows:		
Carrying value		
Post retirement medical aid – Present value of the defined benefit obligation – wholly unfunded	(1,311,000)	(1,230,000)
Post retirement medical aid – Present value of the defined benefit obligation – partly or wholly funded	(19,379,000)	(18,560,000)
Post retirement medical aid – Fair value of plan assets	15,759,000	13,877,000
Pension Fund – Present value of the defined benefit obligation	(45,570,000)	(52,268,000)
Pension Fund – Fair value of the plan assets	56,006,000	61,229,000
	5,505,000	**3,048,000**
Non-current assets	10,436,000	8,961,000
Non-current liabilities	(4,931,000)	(5,913,000)
	5,505,000	**3,048,000**
Post Retirement Medical Aid		
The fair value of plan assets includes:		
Changes in the net defined liability (asset) are as follows:		
Opening balance	5,913,000	5,527,000
Net interest expense or revenue	766,000	616,000
Remeasurements	6,000	979,000
Contributions by employer	(1,754,000)	(1,209,000)
	4,931,000	**5,913,000**
Changes in the present value of the defined benefit obligation are as follows:		
Opening balance	19,790,000	19,662,000
Interest cost	2,177,000	1,861,000
Remeasurements	1,248,000	592,000
Benefits paid	(2,525,000)	(2,325,000)
	20,690,000	**19,790,000**
Net expense recognised in the statement of financial performance are as follows:		
Net interest on the net defined benefit liability (asset)	2,177,000	1,861,000
Remeasurements of the net defined benefit liability (asset)	(1,405,000)	(266,000)
– Actuarial gains and losses arising from:	6,000	979,000
– Changes in demographic assumptions	1,032,000	750,000
– Changes in financial assumptions	(1,026,000)	229,000
– Return on plan assets, excluding amounts included in net interest	(1,411,000)	(1,245,000)
Contributions from employer	(1,754,000)	(1,209,000)
	(982,000)	**386,000**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
17. Employee benefit obligations (continued)		
Calculation of actuarial gains and losses		
Actuarial (gains) losses – Obligation	1,248,000	592,000
Actuarial (gains) losses – Plan assets	(1,242,000)	387,000
	6,000	**979,000**
Changes in the fair value of plan assets are as follows:		
Opening balance	13,877,000	14,135,000
Return on plan assets	2,653,000	858,000
– Interest revenue	1,411,000	1,245,000
– Remeasurements	1,242,000	(387,000)
Contributions by employer	1,754,000	1,209,000
Benefits paid	(2,525,000)	(2,325,000)
	15,759,000	**13,877,000**
Key assumptions used		
Assumptions used at the reporting date:		
Discount rates used	10.50%	11.80%
Expected rate of return on assets	10.50%	11.80%
General increases in medical aid subsidy	6.60%	8.10%
Proportion of continuing membership at retirement	100.00%	100.00%
Proportion of retiring members who are married	80.00%	80.00%
Retirement age for staff who joined prior and after 1 May 1998	65	65

The plan accrued liability is taken as the aggregate of the present value of the employer's obligation required to settle the subsidies towards each member's medical scheme contributions, using the discounted cashflow approach.

The subsidies are assumed to be paid or payable, in terms of the employer subsidy policy. The subsidies are expected to grow with annual medical aid inflation increases allowing for expected future lifetimes of members and any adult dependent/spouse, in retirement, allowing for joint-life survival probabilities where applicable.

General increases to the employer's medical aid subsidy ("medical inflation") take into account the estimated future changes in the costs of medical services, resulting from both inflation and specific changes in medical costs. The inflation rate has been determined by reference to market yields at the balance sheet date of long-term bonds. The medical inflation premium has been set based on past experience for the industry.

Sensitivity analysis

Healthcare cost trends

Assumed healthcare cost trends rates have a significant effect on the amounts recognised in surplus or deficit. A one percentage point change in assumed healthcare cost trends rates would have the following effects:

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

17. Employee benefit obligations (continued)

	ONE PERCENTAGE POINT INCREASE R	ONE PERCENTAGE POINT DECREASE R
31 March 2025		
Discount Rate	19,529,000	21,996,000
Medical inflation	21,937,000	19,566,000
31 March 2024		
Discount rate	18,656,000	21,068,000
Medical inflation	21,008,000	18,692,000

Discount rate

The assumed discount rate has a significant effect on the liability. A one percentage point change in the assumed discount rate would have the following effects:

The methods and assumptions used in preparing the sensitivity analyses and the limitations of those methods are: The valuation is based on the Projected Unit Credit valuation method. The expected rate of return on plan assets is based on market expectation, at the beginning of the period, for returns over the entire life of the related obligation.

The discount rate has been determined by reference to market yields at the balance sheet date of the South African long-term bonds.

Amounts for the current period and previous four years are as follows:

	2025 R	2024 R	2023 R	2022 R	2021 R
Defined benefit obligation – partially or wholly funded	19,379,000	18,560,000	18,436,000	19,219,000	20,320,000
Defined benefit obligation wholly unfunded	1,311,000	1,230,000	1,226,000	1,163,000	1,168,000
Plan assets	15,759,000	13,877,000	14,135,000	14,039,000	14,774,000
(Deficit) in the plan	(4,931,000)	(5,913,000)	(5,527,000)	(6,343,000)	(6,714,000)

Funding arrangements and funding policy

Expected contributions

The expected contributions to the plan for the next reporting period is RNIL.

Pension fund

SAMRC Pension Fund is subject to the provisions of the Pensions Fund Act 24 of 1956. Subject to the provisions of the Act and the Rules of the Fund, the sole responsibility for the management of the Fund is vested in the Trustees.

The nature of the benefits provided by the plan are the final salary for the defined benefit members as per the pension fund rules. The risks to which the plan exposes the entity are inflation: The risk that the future CPI inflation, which is the main driver of future salary increases, is higher than expected and uncontrolled. Open-ended, long-term liability: The risk that the liability may be volatile in the future and uncertain.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
17. Employee benefit obligations (continued)		
Changes in the net defined liability (asset) are as follows:		
Opening balance	8,961,000	6,494,000
Service cost	(1,432,000)	(2,351,000)
Net interest expense or revenue	1,060,000	604,000
Remeasurements	91,000	1,631,000
Contributions	1,756,000	2,583,000
	10,436,000	**8,961,000**
Changes in the present value of the defined benefit obligation are as follows:		
Opening balance	52,268,000	83,039,000
Service cost	1,432,000	2,351,000
Interest cost	5,943,000	7,938,000
Contributions by plan participants	614,000	901,000
Benefit payments	(16,027,000)	(36,197,000)
Actuarial (gain)	1,571,000	(5,422,000)
Reinsurance premiums	(149,000)	(221,000)
Expenses	(82,000)	(121,000)
	45,570,000	**52,268,000**
Net expense recognised in the statement of financial performance are as follows:		
Service cost	**1,432,000**	2,351,000
– Current service cost	1,432,000	2,351,000
Net interest on the net defined benefit liability (asset)	(1,060,000)	(604,000)
Remeasurements of the net defined benefit liability (asset)	(91,000)	(1,631,000)
– Actuarial gains and losses arising from:	(91,000)	(1,631,000)
– Changes in financial assumptions	(91,000)	(1,631,000)
Contributions	(1,756,000)	(2,583,000)
	(1,475,000)	**(2,467,000)**
Calculation of actuarial gains and losses		
Actuarial (gains) losses – Obligation	1,571,000	(5,422,000)
Actuarial (gains) losses – Plan assets	(1,662,000)	3,791,000
	(91,000)	**(1,631,000)**
Changes in the fair value of plan assets are as follows:		
Opening balance	61,229,000	89,533,000
Return on plan assets	7,003,000	8,542,000
– Interest revenue	7,003,000	8,542,000
Contributions by employer	1,756,000	2,583,000
Contributions by members	614,000	901,000
Benefits paid	(16,027,000)	(36,197,000)
Expenses	(82,000)	(121,000)
Actuarial gain/(loss)	1,662,000	(3,791,000)
Reinsurance premiums	(149,000)	(221,000)
	56,006,000	**61,229,000**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
17. Employee benefit obligations (continued)		
Key assumptions used		
Assumptions used at the reporting date:		
General inflation rate	5.00%	6.90%
Discount rate	10.80%	12.90%
Interest income on assets	10.80%	12.90%
Salary increase rate (excluding merit increases)	6.00%	7.90%
Pension increase rate	3.33%	4.60%
Retirement age for staff who joined prior and after 1 May 1998	65	65

The net actuarial loss on the defined benefit obligation is largely as a result of the release of the member's individual reserve. Update of economic assumptions on defined benefit obligation. Update of post-retirement mortality assumptions and age difference between spouses. The change in valuation methodology from using annual salary adjusted with an averaging factor to using final average salary as at the calculation date. Actual salary increases granted over the valuation period, for members who were present at both valuation dates, averaged 5.76% per annum and were lower than the 7.92% per annum anticipated by the previous valuation assumptions. Demographic experience being different than expected.

The investment strategy in respect of the defined benefit section of the fund was revised in March 2023 with 90% of the MRC defined benefit portfolio being invested in a matched portfolio (Liability driven investment strategy) and 10% in an unmatched global portfolio (growth portfolio).

Sensitivity analysis

Inflation rate

Assumed inflation rates will have an impact on the value of the liability. A one percentage point change in inflation rates would have the following effects:

	ONE PERCENTAGE POINT INCREASE R	ONE PERCENTAGE POINT DECREASE R
31 March 2025		
Defined benefit obligation (DBO)	(49,312,000)	(42,239,000)
Total DBO	(49,312,000)	(42,239,000)
31 March 2024		
Defined benefit obligation (DBO)	(53,473,000)	(47,130,000)
Effect of withdrawal benefits on DBO	(3,264,000)	(1,237,000)
Total DBO	(56,737,000)	(48,367,000)

In 2025 there are no effects of withdrawal benefits of the DBO.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

17 Employee benefit obligations (continued)

Discount rate

Assumed discount rate have a significant effect on the amounts recognised in surplus or deficit. A one percentage point change in assumed discount rate would have the following effects:

	ONE PERCENTAGE POINT INCREASE R	ONE PERCENTAGE POINT DECREASE R
31 March 2025		
Defined benefit obligation (DBO)	(41,344,000)	(50,560,000)
Total DBO	(41,344,000)	(50,560,000)
31 March 2024		
Defined benefit obligation (DBO)	(45,816,000)	(55,171,000)
Effect of withdrawal benefit on DBO	(1,539,000)	(2,929,000)
Total DBO	(47,355,000)	(58,100,000)

The methods and assumptions used in preparing the sensitivity analyses and the limitations of those methods are: The valuation is based on the Projected Unit Credit valuation method. The expected rate of return on plan assets is based on market expectation, at the beginning of the period, for returns over the entire life of the related obligation.

The discount rate has been determined by determined by reference to market yields at the balance sheet date of the South African long-term bonds.

In 2025 there are no effects of withdrawal benefits of the Defined benefit obligation (DBO).

Amounts for the current period and previous four years

	2025 R	2024 R	2023 R	2022 R	2021 R
Defined benefit obligation	45,570,000	52,268,000	83,039,000	82,304,000	85,789,000
Plan assets	56,006,000	61,229,000	89,533,000	87,186,000	93,817,000
Surplus in the plan	10,436,000	8,961,000	6,494,000	4,882,000	8,028,000

Expected contributions

The expected contributions to the plan for the next reporting period is R2,181,600 for both member and entity contributions.

Defined contribution plans

It is the policy of the entity to provide retirement benefits to all its employees.

The entity is under no obligation to cover any unfunded benefits.

	2025 31 MARCH R	2024 31 MARCH R
The amount recognised as an expense for defined contribution plans is	35,619,889	32,454,010

Defined contribution plan: SAMRC Pension Fund

The SAMRC Pension Fund has a Defined Contribution section for members who joined after 1 May 1998.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
18. Earmarked funds		
Botha trust	151,636	151,636
Bruhns trust	1,656,823	1,544,764
Melville Douglas trust	13,325	13,325
Q&S Abdool Karim trust	3,611,535	3,334,123
FJ Kleynhans trust	111,442	111,442
	5,544,761	**5,155,290**

The Earmarked funds are donations; bequests from deceased estates or cash received for a limited period to be used for visiting eminent scientists; cancer research or tuberculosis research.

The Earmarked funds are held at the Reserve Bank.

The monies are ring fenced separately from the cash balances of the SAMRC refer to note 8.

The Bruhns and Q & S Abdool Karim trust funds earned interest.

19. Accumulated surplus

Accumulated surplus	473,614,819	412,948,611

The policy of the SAMRC is to maintain a reserve of R50 million to provide for any unforeseen health emergencies. The accumulated surplus at the end of the reporting period is required to fund capital projects and other commitments as well as the maintenance of current funding levels of research projects over the MTEF period. The surplus will also be used to attract equivalent leverage funding from international funders.

20. Revenue

Income from contracts, grants and services rendered (exchange)	546,086,648	552,429,032
Rental income	6,023,856	6,208,292
Fair value adjustments	1,477,299	211,431
Gain on exchange differences	122,888	1,162,965
Other income	20,645,897	13,277,161
Interest received – investment	54,210,410	62,613,758
Dividends received	182,582	181,529
Government grants & subsidies	724,161,231	660,413,043
Income from contracts and grants (non-exchange)	138,597,870	134,413,603
	1,491,508,681	**1,430,910,814**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
20. Revenue (continued)		
The amount included in revenue arising from exchanges of goods or services are as follows:		
Income from contracts, grants and services rendered (exchange)	546,086,648	552,429,032
Rental income	6,023,856	6,208,292
Fair value adjustments	1,477,299	211,431
Gain or loss on exchange differences	122,888	1,162,965
Other income	20,645,897	13,277,161
Interest received – investment	54,210,410	62,613,758
Dividends received	182,582	181,529
	628,749,580	**636,084,168**
The amount included in revenue arising from non-exchange transactions is as follows:		
Baseline grant	724,161,231	660,413,043
Income from contracts and grants (non-exchange)	138,597,870	134,413,603
	862,759,101	**794,826,646**
In the 2023/2024 financial year included in Income from contracts, grants and services rendered (non-exchange) is the in kind donations received R20,622,547.		
Revenue		
Income from contracts, grants and services rendered – exchange	546,086,648	552,429,032
Income from contracts, grants and services rendered – non-exchange	138,597,870	134,413,603
Government grants	724,161,231	660,413,043
	1,408,845,749	**1,347,255,678**
21. Other revenue		
Rental income – third party	6,023,856	6,208,292
Gain on foreign exchange	122,888	1,162,965
Other income	20,645,897	13,277,161
	26,792,641	**20,648,418**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
22. Investment income		
Dividend revenue		
Listed financial assets – Local	182,582	181,529
Interest revenue		
Unit trusts	66,866	46,831
Bank	1,214,059	649,409
Interest charged (reversed) on trade and other receivables	595	1,900
Corporation for public deposits	52,928,890	61,915,618
	54,210,410	**62,613,758**
	54,392,992	**62,795,287**
23. Operating expenses		
Depreciation and amortisation	37,225,735	32,649,514
Collaborative research costs	473,670,196	550,795,556
Debt impairment (reversal)	3,166,724	(136,828)
Employee costs	599,247,707	551,948,716
Loss on disposals	2,616,517	3,621,990
Impairment (reversal) loss of impairments on property, plant and equipment	1,353,329	1,235,223
General expenses	272,129,587	268,191,189
Lease rentals on operating lease	4,306,707	3,895,033
Repairs and maintenance	22,029,682	19,705,477
Surrender of surplus	–	20,000,000
Repayment of conference registration fees	14,808,926	–
	1,430,555,110	**1,451,905,870**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
24 Employee related costs		
Basic	486,275,612	445,861,114
Bonus	15,319,163	15,815,227
UIF	1,836,672	1,764,776
Leave payments	12,410,126	11,567,427
Movements in retirement benefit assets and liabilities	(2,457,000)	(2,081,000)
Other salary related costs	17,795,555	13,316,355
Defined pension benefit plan expense – current service cost	1,810,356	2,726,031
Overtime payments	1,583,404	1,495,604
Temporary staff	27,299,547	27,820,387
Defined pension contribution plan expense	35,619,889	32,454,010
Post retirement medical aid contribution	1,754,383	1,208,785
	599,247,707	**551,948,716**

The bonus amount is the 2024/2025 provision for performance bonus. In 2023/2024 the bonus amount includes the performance bonus provision of R15,842,307 and the unutilised amount of R27,080 relating to the 2022/2023 provision that was reversed.

Basic salary includes other non pensionable allowances for the period under review.

Staff exercised the option to encash a maximum of ten days leave, the encashment of leave is included in the leave payments amount.

25. Finance costs

Other interest paid	287,363	371,551

SAMRC reversed interest previously reflected as interest due to its funders for monies received in advance R103,781; (March 2024: R225, refund interest due to its funders for monies received in advance), to the earmarked funds (March 2025: R389,470; March 2024: R370,774). Interest paid to suppliers for late payments of account is not classified as fruitless and wasteful expenditure if the invoice is received late from the supplier (March 2025: R1,674; March 2024: R552).

26. Debt impairment

Debt impairment	379,074	–
(Reversal of) Provision for debt impairment	2,787,650	(136,828)
	3,166,724	**(136,828)**

The provision for debt impairment reflected above include the current periods provision for bad debt of R3,340,265 (including VAT of R63,131) and reversal of the previous year's provision (March 2024 provision for bad debts of R489,484 (including VAT of RNil)).

The debt written off relates to an amount owed by GFC Diagnostics Ltd, an overseas supplier who was paid in advance for test kits. The supplier was requested to repay SAMRC for the test kits not received. Attempts to recover the monies were unsuccessful.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
27. General expenses		
Advertising	2,009,679	2,614,308
Auditors remuneration	3,308,142	3,312,042
Bank charges	1,324,278	739,624
Cleaning consumables	4,680,576	7,461,135
Computer expenses	47,472,649	40,500,283
Consulting and professional fees	17,092,044	15,750,741
Donations	–	470,159
Insurance	4,381,777	5,032,051
Personal Protective Equipment	(80)	2,028
Magazines, books and periodicals	6,834,643	9,638,775
Postage and courier	2,351,234	1,380,104
Printing, stationery and publication costs	9,503,133	10,638,387
Security	11,839,683	11,708,053
Subscriptions and membership fees	1,732,544	1,602,396
Telephone and fax	756,947	1,525,160
Training	7,086,426	4,088,615
Travel, subsistence and conference attendance	56,804,097	57,445,381
Utilities	23,348,166	18,607,182
Laboratory operating cost	49,982,057	50,937,608
Skills Development levies	4,266,648	3,847,309
Other expenses	17,354,944	20,889,848
	272,129,587	**268,191,189**
Travel, subsistence and conference attendance		
Local travel	6,881,108	6,365,930
Overseas travel	12,542,654	11,814,836
Accommodation – local and overseas	9,099,296	9,171,021
Subsistence and travel expenditure	7,585,046	8,854,458
Conference expenditure	9,019,701	9,450,946
Participant incentives	11,676,292	11,788,190
	56,804,097	**57,445,381**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
27. General expenses (continued)		
Other expenses		
Canteen costs	672,617	739,283
Administration costs	1,467,120	808,475
Personnel teas	1,994,771	1,716,130
Hire of premises and equipment	11,549,034	15,768,157
Licenses	100,782	103,680
Staff recruitment costs	176,357	226,465
Employee wellness costs	838,071	992,294
Pot and plant rental	110,098	105,717
Uniforms	446,094	420,079
Royalty distribution	–	9,568
	17,354,944	**20,889,848**

28. Collaborative research costs

Extramural units and self initiated research grants	273,055,985	278,377,447
Collaborating research partners and research grant awards	200,377,254	272,118,109
Sponsorships	236,957	300,000
	473,670,196	**550,795,556**

Collaborative research costs include amounts that were paid to research institutions which relates to tranche payments of contractual agreements signed with institutions who will conduct research on behalf of the SAMRC as part of the entity's mandate. No goods or services are received for these payments as they relate to start-up costs for research, the 2024/2025 amount is R173,629,542 (2023/2024 amount is R117,714,713).

29. Impairment of assets

Impairments		
Property, plant and equipment	**1,353,329**	**1,235,223**

Impairment of (Reversal of previously impaired) property, plant, and equipment were processed during the period under review. Impairment of property, plant and equipment was identified at the year-end by management. Internal indicators such as the research sites/laboratories not being active were key factors in deciding to impair the property, plant and equipment.

30. Surrender of surplus

SAMRC was requested to repay unspent baseline funds received in 2021 for the Sisonke project during the 2023/2024 financial year.

Repayment of unspent funds received for the Sisonke project	–	20,000,000

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
31. Fair value adjustments		
Other financial assets		
Other financial assets at fair value	1,477,299	211,431
32. Auditors' remuneration		
Fees	3,308,142	3,312,042
33. Operating surplus (deficit)		
Operating surplus (deficit) for the year is stated after accounting for the following:		
Operating lease charges		
Premises		
Contractual amounts	4,306,707	3,895,033
Loss on disposal of assets	2,616,517	3,621,990
Impairment on property, plant and equipment	1,353,329	1,235,223
(Gain) on exchange differences	(122,888)	(1,162,965)
Amortisation on intangible assets	7,703,822	6,817,648
Depreciation on property, plant and equipment	29,459,364	25,771,958
Depreciation on living resources	62,549	59,908
Employee costs	599,247,707	551,948,716
General expenses	272,129,587	268,191,189

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
34. Cash generated from (used in) operations		
Surplus (deficit)	60,666,208	(21,366,607)
Adjustments for:		
Depreciation and amortisation	37,225,735	32,649,514
Loss on sale of assets and liabilities	2,616,517	3,621,990
Gain on foreign exchange	(122,888)	(1,162,965)
Fair value adjustments	(1,477,299)	(211,431)
Impairment deficit	1,353,329	1,235,223
Debt impairment	3,166,724	(136,828)
Movements in retirement benefit assets and liabilities	(2,457,000)	(2,081,000)
Movements in provisions	35,746,396	9,945,331
Capitalisation of financial assets	(208,760)	(191,740)
Non-cash adjustment on biological assets	5,000	–
Non-cash adjustment on living resources	(280,959)	(146,531)
Other non-cash items: Donation in kind	–	(20,622,547)
Other non-cash items: asset replacement	–	(2,010,452)
Other non-cash items: property, plant and equipment	16,150	3,634,725
Changes in working capital:		
Receivables from exchange transactions	10,739,057	27,653,989
Receivables from non-exchange transactions	(12,668,148)	(3,538,369)
Prepayments	(1,696,054)	(4,351,391)
Payables from exchange transactions	(12,089,501)	(55,028,604)
VAT	12,191,457	(9,231,214)
Deferred income	90,118,853	(100,995,378)
	222,844,817	**(142,334,285)**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

35. Financial instruments disclosure

Categories of financial instruments

31 March 2025

Financial assets

	AT FAIR VALUE R	AT AMORTISED COST R	AT COST R	TOTAL R
Trade and other receivables from exchange transactions	–	74,485,043	–	74,485,043
Receivables from non-exchange transactions	–	21,723,586	–	21,723,586
Cash and cash equivalents	–	679,806,132	–	679,806,132
Investments in controlled entities	–	–	2	2
Financial assets	11,237,073	–	–	11,237,073
	11,237,073	**776,014,761**	**2**	**787,251,836**

Financial liabilities

	AT AMORTISED COST R	TOTAL R
Trade and other payables from exchange transactions	103,019,401	103,019,401

31 March 2024

Financial assets

	AT FAIR VALUE R	AT AMORTISED COST R	AT COST R	TOTAL R
Trade and other receivables from exchange transactions	–	88,216,813	–	88,216,813
Receivables from non-exchange transactions	–	9,055,438	–	9,055,438
Cash and cash equivalents	–	522,082,612	–	522,082,612
Investments in controlled entities	–	–	2	2
Financial assets	9,551,014	–	–	9,551,014
	9,551,014	**619,354,863**	**2**	**628,905,879**

Financial liabilities

	AT AMORTISED COST R	TOTAL R
Trade and other payables from exchange transactions	115,637,520	115,637,520

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
36. Commitments		
Authorised commitments		
Already contracted for but not provided for		
– Property, plant and equipment – buildings	958,893	3,598,589
– Property, plant and equipment – vehicles and containers	–	999,124
– Property, plant and equipment – furniture and office equipment	941,631	220,641
– Property, plant and equipment – computer equipment	9,975,937	144,139
– Property, plant and equipment – laboratory equipment	147,759	6,261,616
– Intangible assets	30,470	374,850
– Goods and services	18,346,387	10,661,713
– Operating leases	11,086,127	2,506,835
	41,487,204	**24,767,507**
Already contracted for but not provided for	41,487,204	24,767,507

This committed expenditure relates to property, plant and equipment; intangible assets; goods and services and will be financed by retained surpluses, existing cash resources and funds internally generated.

Operating leases – as lessee (expense)		
Minimum lease payments due		
– within one year	3,875,886	2,506,835
– in second to fifth year inclusive	7,210,241	–
	11,086,127	**2,506,835**

Operating lease payments represent rentals payable by the entity for certain of its office properties. Leases are negotiated for an average term of three years. No contingent rent is payable.

Operating leases – as lessor (income)		
Minimum lease payments due		
– within one year	5,859,476	5,263,103
– in second to fifth year inclusive	10,330,466	12,011,076
– later than five years	1,445,370	561,010
	17,635,312	**17,835,189**

Certain of the entity's buildings generate rental income. Lease agreements have terms from 12 months to 9 years and eight months.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

37. Related parties

Relationships

Executive authority	Dept. of Health (DOH)
Public entities in the same economic entity	National Health Laboratory Services (NHLS) South African Health Products Regulatory Authority (SAHPRA)
Controlled entities	Medres (Pty) Ltd refer to note 13 Jirehsa Medical (Pty) Ltd refer to note 13
Members of key management	Prof G Gray (President appointed 1 April 2014 until 30 June 2024) Prof N Ntusi (President appointed 1 July 2024) Mr. N Buick (Chief Financial Officer appointed 16 July 2012 till 8 December 2023). The official is a director of the controlled entity Medres (Pty) Ltd and a board member of National Health Laboratory Services (NHLS) from October 2021. Mr. S Nqgongwa (Chief Financial Officer appointed 4 September 2023) Prof. L Zuhlke (Vice President appointed 1 February 2022) Dr. M Mdhluli (Chief research operations officer appointed 1 September 2017). Mr. M Popo (Legal Counsel appointed 1 February 2019) Dr. M Mulder (Executive director appointed on 1 June 2021). The official is a director of the controlled entities Medres (Pty) Ltd and Jirehsa Medical (Pty) Ltd. Ms. VN Bam (Executive director appointed on 1 September 2021) Prof. A Mathee (Executive director appointed 1 March 2022)
Board members	Prof. J Mahlangu (Chairperson from 1 November 2019. Board member from 1 November 2016) Prof. R Carolissen, term started 1 November 2019 Dr. T Tucker, term started 1 November 2019 Prof. E Seekoe, term started 1 November 2019 Prof. T Mavundla, term started 1 November 2019 Dr. M Madikizela, term started 1 November 2019 Prof. E Mukwevho, term started 1 November 2019 Adv. D Khoza, term started 1 November 2019 Prof. B Biccard, term started 1 November 2022 Prof. B Chiliza, term started 1 November 2022 Ms. D Dondur, term started 1 November 2022 Prof. Z Makatini, term started 1 November 2022 Prof. LR Mathivha, term started 1 November 2022 Prof. M Moshabela, term 1 November 2022 to 31 August 2023 Prof. T Naledi, term started 1 November 2022 Prof. T Pillay, term started 1 November 2022

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
37. Related parties (continued)		
Related party balances		
Loan accounts – Owing (to) by related parties		
Medres (Pty) Ltd (The loan is not considered to be recoverable and has been written off.)	234,630	234,630
Amounts included in Trade receivable (Trade Payable) regarding related parties		
National Health Laboratory Services (NHLS	(3,336)	(469)
National Health Laboratory Services (NHLS	4,900	–
Dept. of Health (DOH)	13,141,640	–
South African Health Products Regulatory Authority (SAHPRA)	–	39,890
Deferred Income (grants received in advance)		
Dept. of Health (DOH)	593,523	1,382,812
Revenue – grants received and services rendered to related parties		
Dept. of Health (DOH, revenue from non-exchange)	724,161,231	660,413,043
Dept. of Health (DOH) Contracts, revenue from exchange	41,103,671	584,348
National Health Laboratory Services	4,261	6,087
South African Health Products Regulatory Authority (SAHPRA) refund of unspent funds	–	39,890
	765,269,163	**661,043,368**
Expenditure such as grants awarded, extra-mural unit grants and collaborative research grants incurred with related party suppliers.		
Repayment of unspent grant funds.		
Dept. of Health (DOH) repayment of unspent grant	–	275,008
National Health Laboratory Services (NHLS)	17,146	160,469
South African Health Products Regulatory Authority (SAHPRA)	117,400	151,000
	134,546	**586,477**
Executive authority information		
Minister: Dr. MJ Phaahla until 31 May 2024. Minister Dr A Motsoaledi from 30 June 2024		
No subsistence, travel and other related re-imbursement costs have been paid.		
Director General: Dr. S Buthelezi		
No subsistence, travel and other related re-imbursement costs have been paid.		
Executive Directors leave balances		
Ms. V Bam	180,938	152,768
Prof. N Ntusi	233,483	–
Prof. G Gray	–	237,720
Mr. M Popo	70,992	83,671
Prof. A Mathee	180,452	183,917
Dr. M Mdhluli	375,890	346,852
Dr. M Mulder	126,656	105,472
Mr. S Ngqongwa	176,932	68,409
Prof. L Zuhlke	154,661	133,747
	1,500,004	**1,312,556**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

38. Member's emoluments

Executive

31 March 2025

	EMOLUMENTS R	VEHICLE & PARKING & CELLPHONE ALLOWANCE R	ACCOMMO-DATION AND ENTERTAIN-MENT R	LOCAL AIR TRAVEL AND PARKING R	TOTAL R
Professor J Mahlangu	111,150	12,084	4,548	16,548	144,330
Professor B Biccard	35,074	3,684	–	–	38,758
Professor R Carolissen	45,866	3,684	1,331	8,735	59,616
Professor B Chiliza	59,356	3,684	6,026	22,661	91,727
Ms D Dondur	119,700	3,684	7,505	20,002	150,891
Advocate D Khosa	75,544	3,684	2,957	8,920	91,105
Doctor Z Makatini	78,242	3,684	6,026	27,293	115,245
Professor M Madikizela	70,148	4,105	4,548	14,765	93,566
Professor T Mavundla	75,544	4,014	6,139	23,526	109,223
Professor L Mathivha	56,658	3,684	4,435	14,410	79,187
Professor E Mukwevho	72,846	12,964	7,843	16,419	110,072
Associate Professor T Naledi	64,752	3,684	–	–	68,436
Professor T Pillay	56,658	3,684	4,435	19,064	83,841
Professor E Seekoe	83,334	3,684	6,409	29,962	123,389
Doctor T Tucker	125,096	3,684	2,661	–	131,441
	1,129,968	**73,691**	**64,863**	**222,305**	**1,490,827**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

38. Member's emoluments (continued)

31 March 2024

	EMOLUMENTS R	VEHICLE & PARKING & CELLPHONE ALLOWANCE R	ACCOMMO-DATION AND ENTERTAIN-MENT R	LOCAL AIR TRAVEL AND PARKING R	TOTAL R
Professor J Mahlangu	146,718	12,084	5,713	16,670	181,185
Professor B Biccard	37,772	3,684	–	4,459	45,915
Professor R Carolissen	78,242	3,684	1,330	4,890	88,146
Professor B Chiliza	113,316	3,684	2,756	11,397	131,153
Ms D Dondur	162,868	3,684	10,113	23,508	200,173
Advocate D Khosa	107,920	3,952	2,757	12,537	127,166
Doctor Z Makatini	99,826	3,684	4,248	14,064	121,822
Professor M Moshabela	24,282	3,684	2,809	9,841	40,616
Professor M Madikizela	78,242	3,684	8,642	14,360	104,928
Professor T Mavundla	62,054	3,684	7,148	20,958	93,844
Professor L Mathivha	62,054	3,684	2,730	7,984	76,452
Professor E Mukwevho	102,524	9,427	15,675	17,857	145,483
Associate Professor T Naledi	70,148	3,684	–	–	73,832
Professor T Pillay	51,262	3,684	6,765	15,673	77,384
Professor E Seekoe	112,860	3,684	10,104	32,469	159,117
Doctor T Tucker	152,722	3,684	–	–	156,406
	1,462,810	**73,355**	**80,790**	**206,667**	**1,823,622**

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

38. Member's emoluments (continued)

EXECUTIVE DIRECTORS EMOLUMENTS

31 March 2025

	PACKAGE TOTAL INCL. LEAVE PAYOUT; ALLOWANCES AND LUMP SUM R	BONUS R	SUBSISTENCE AND TRAVEL R	COMPANY CONTRI-BUTIONS R	TOTAL R
** N Ntusi (President)	2,713,559	–	19,972	218,852	2,952,383
* G Gray (President)	1,008,350	–	10,596	71,267	1,090,213
S Ngqongwa (CFO)	2,745,103	22,536	15,042	318,864	3,101,545
V Bam (Executive Director)	2,147,695	40,932	14,264	301,633	2,504,524
A Mathee (Executive Director)	1,856,384	40,932	5,263	242,274	2,144,853
M Mdhluli (CROO)	2,782,907	40,933	20,652	313,559	3,158,051
M Mulder (Executive Director)	2,203,633	40,933	7,808	285,891	2,538,265
M Popo (Executive Director)	2,243,754	40,933	1,292	180,991	2,466,970
L Zuhlke (Vice President)	2,834,259	40,933	57,929	301,879	3,235,000
	20,535,644	**268,132**	**152,818**	**2,235,210**	**23,191,804**

* *G Gray term ended 30 June 2024.*
** *N Ntusi appointed 1 July 2024.*

31 March 2024

	PACKAGE TOTAL INCL. LEAVE PAYOUT; ALLOWANCES AND LUMP SUM R	BONUS R	SUBSISTENCE AND TRAVEL R	COMPANY CONTRI-BUTIONS R	TOTAL R
G Gray (President)	3,397,761	57,158	60,496	264,949	3,780,364
* N Buick (CFO)	2,231,350	57,158	720	195,249	2,484,477
** S Ngqongwa (CFO)	1,436,788	–	646	174,664	1,612,098
V Bam (Executive Director)	2,022,220	57,158	12,732	273,709	2,365,819
A Mathee (Executive Director)	1,764,113	57,158	10,099	227,602	2,058,972
M Mulder (Executive Director)	2,046,284	57,158	10,491	267,582	2,381,515
M Mdhluli (CROO)	2,608,280	57,158	31,212	293,848	2,990,498
M Popo (Executive Director)	2,098,497	57,158	720	169,808	2,326,183
L Zuhlke (Vice President)	2,656,389	57,158	89,440	282,925	3,085,912
	20,261,682	**457,264**	**216,556**	**2,150,336**	**23,085,838**

* *N Buick contract ended 8 December 2023. CFO handover period 4 September to 8 December 2023.*
** *S Ngqongwa started on 4 September 2023.*

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
39. Irregular expenditure and Fruitless and wasteful expenditure for the year		
Fruitless and wasteful expenditure	217,800	–
Fruitless and wasteful expenditure	47,420	1,552
	265,220	**1,552**

During the period under review irregular expenditure was incurred amounting to R217,800 for the appointment of legal services, management is considering the appropriate consequence management actions (2024: RNil).

Following the discovery of the irregular expenditure, a decision was taken to review all transactions that were incurred during the 2024/2025 financial year via a Request for Quotes procurement basis to assess and determine if they were procured irregularly or not.

Expenditure relates to staff incurring costs for private travel (R43,372); interest on the late renewal of motor vehicle licenses (R1,671); a traffic fine (R2,075) and interest on Cashsend bank accounts (R2) and theft of a participant re-imbursement of R300. (March 2024 expenditure relates to interest on the late renewal of motor vehicle licences; traffic fines and interest on a municipal account).

The Accounting Authority approved fruitless and wasteful expenditure for the amount of R1,871 being the interest on the late renewal of motor vehicle licences and the traffic fine for a temporary employee (March 2024:The Accounting Authority approved interest on municipal bills totaling R3,250 being an amount of R108 incurred in the current year and an amount of R3,142 incurred in 2023. The interest charges were investigated and it was determined that it was not incurred due to negligence on the part of the staff member).

During the period under review R45,447 was recovered from staff. In the 2023/2024 financial year Interest charged due to negligence on the part of the staff members and traffic fines paid is recovered from the employees. An amount of R1,244 was recovered from staff.

40. Deviation from supply chain management regulations

Paragraph 12(1)(d)(i) of Government gazette No. 27636 issued on 30 May 2005 states that a supply chain management policy must provide for the procurement of goods and services by way of a competitive bidding process.

Paragraph 36 of the same gazette states that the accounting officer may dispense with the official procurement process in certain circumstances, provided that he records the reasons for any deviations and reports them to the next meeting of ARIC and the Accounting Authority and includes a note to the annual financial statements.

All deviations were documented and will be submitted to the Accounting Authority or its delegate in terms of the Delegation of Authority Framework. Deviations were motivated in advance and subsequently approved.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

41. Public Finance Management Act (PFMA)

Section 55 (2)

No material losses through criminal conduct were incurred during the period ended 31 March 2025. Irregular and fruitless and wasteful expenditure incurred has been disclosed in note 39.

Section 54 (2)

In terms of the PFMA and Treasury Regulation 28.3 the entity has developed and agreed to a framework of acceptable levels of materiality and significance.

42. Budget differences

Material differences between budget and actual amounts

Other non-tax revenue were higher than anticipated. Lower than anticipated external funding from contracts and grants were received during the period under review. The decrease in external contracts and grant funding had a material effect on the salaries and expenditure on goods and services which were much lower than anticipated.

The adjustment reflects the VAT which is allocated as a transfer and subsidies expense.The SACENDU grant and funding for the Social Impact Bond (SIB) was included in the budgeted transfers received, but was allocated to the sale of goods and services as this is managed as separate contracts.

43. Contingencies

Contingent liabilities

There are two high court claims by research trial participants. The matters will be defended. At this stage, the outcome of the cases is unknown and it is not practical to estimate the financial effect of the claim.

The SAMRC will be applying to National Treasury to retain the accumulated surplus funds of R473,614,819 if approved, the accumulated surplus funds will not have to be paid to National Treasury.

Contingent assets

In October 2017 and November 2017 the South African Revenue Service (SARS) re-assessed the September 2016 vat period. Output vat amounting to R2,824,561 was disallowed and interest and penalties were levied amounting to R370,726 and R294,150 respectively. The amount of R3,492,222 was deducted from a refund due to SAMRC. SAMRC has lodged a dispute with SARS for the disallowed output vat and the interest and penalties. The output vat is valid and has been claimed in the 2021/2022 period. SAMRC anticipates to recover the interest and penalties amounting R664,876 from SARS.

44. Going concern

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

	2025 31 MARCH R	2024 31 MARCH R
45. Statutory receivables		
The entity had the following statutory receivables where the Framework for the Preparation and Presentation of Financial Statements have been applied:		
Vat receivable	13,248,404	25,439,861

Transaction(s) arising from statute

Value Added Tax Act 89 of 1991.

Determination of transaction amount

The net amount of VAT recoverable from SARS is reflected in the Statement of Financial Position as Vat Receivable.

Interest or other charges levied/charged

The Value Added Tax Act determines the rates and interest is charged.

Basis used to assess and test whether a statutory receivable is impaired

No impairment, the balance is expected to be fully recoverable.

46. B-BBEE Performance

Information on compliance with the B-BBEE Act is included in the annual report under the section titled B-BBEE Compliance Performance Information.

47. In-kind donations and assistance

During the 2023/2024 financial year SAMRC received a donation of laboratory equipment from MGI International Sales Co Limited valued at R20,622,547, the assets have been recognised in terms of GRAP17 in property, plant and equipment.

48. Accounting by principals and agents

Details of the arrangements are as follows:

The SAMRC was appointed as the project executing agency for funding received from the Government of the Federal Republic of Germany. The Department of Science and Innovation (DSI) as the recipient of the funds will pay SAMRC a management fee for the implementation of the project. It is anticipated that funds approved by DSI and KfW Development Bank for project expenditure will be paid directly to SAMRC.

During the 2023/2024 financial year a contract was identified that established a principal/agent arrangement. During the year under review the arrangements changed, such that the SAMRC will be the contracting party with the third parties (recipients of equipment and suppliers) and not the Department of Science and Innovation. No further income was received from the Department of Science and Innovation and no funding was received from KfW Development bank for the year under review.

ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 MARCH 2025

NOTES TO THE ANNUAL FINANCIAL STATEMENTS (CONTINUED)

49. Risk management

Liquidity risk

The entity's risk to liquidity is a result of the funds available to cover future commitments. The entity manages liquidity risk through an ongoing review of future commitments and credit facilities. Trade and other payables are due within 12 months and equal their carrying balances as the impact of discounting is not significant.

SAMRC's primary source of income is government grants and contractual income, funds receivable is estimated when preparing the MTEF. Budgets are prepared for each contract and spend is monitored on an ongoing basis to ensure the liquidity of the entity.

Credit risk

This is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. Management has a debtors policy in place, and this makes provision for credit evaluation for customers requiring credit above R1 million. Investments are allowed only in liquid securities and only with the South African Reserve Bank.

Contract work constitutes a significant portion of the SAMRC's income, and the major exposure is delays in finalising contracts, and disputes in terms of whether or not the outputs have been produced. A certain number of contracts are started and paid on a reimbursive basis, and this poses a risk if the funder is not satisfied with the outputs.

The SAMRC operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar; GBP and the Euro. SAMRC receives substantial funding from the UK; USA and Europe, as a result its statement of financial position can be affected by movements in the US dollar; GBP and Euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities and net investments.

Due to uncertainties in respect of when cash will be received from overseas, SAMRC does not hedge foreign exchange fluctuations.

Approximately 12% of SAMRC's Trade and funder/grant debtors (R11,299,635) are exposed to currency risk compared to 13% last year (R11,884,443).

SAMRC's project office does a scenario calculation looking at how much would be lost if there was an unfavourable currency change. On the basis of this outcome, it will be decided whether or not to proceed with a particular project.

Market risk

Interest rate risk

In respect of income-earning financial assets interest-bearing financial liabilities, the table below indicates their average effective interest rates at the reporting date and the periods in which they mature.

49. Risk management (continued)

Cash flow interest rate risk

FINANCIAL INSTRUMENT	CURRENT INTEREST RATE	DUE IN LESS THAN A YEAR R	DUE IN ONE TO TWO YEARS R	DUE IN TWO TO THREE YEARS R	DUE IN THREE TO FOUR YEARS R	DUE AFTER FIVE YEARS R
Trade and other receivables – normal credit terms	11.00%	95,886,370	–	–	–	–
Cash in current banking institutions	–%	679,806,132	–	–	–	–
Trade and other payables – extended credit terms	11.00%	103,019,401	–	–	–	–

Foreign exchange risk

The entity does not hedge foreign exchange fluctuations.

Exchange rates on 31 March 2025 (31 March 2024) used for conversion of foreign items were:

	2025 31 MARCH R	2024 31 MARCH R
USD – ABSA buying	18.3032	18.9214
USD – ABSA selling	18.3203	18.9364
GBP – ABSA buying	23.6441	23.8123
GBP – ABSA selling	23.6680	23.8388
EURO – ABSA buying	17.7986	–
EURO – ABSA selling	19.8189	20.3798
CHF – ABSA buying	.0483	–
NAIRA – ABSA selling	–	70.8833
KES – ABSA selling	7.0523	–
ZMW – ABSA selling	1.5309	–

The entity reviews its foreign currency exposure, including commitments on an ongoing basis. The entity has CFC accounts for specific foreign income grants whose payments are mainly made in foreign currency. The risk for currency fluctuations is eliminated by maintaining the CFC accounts for these grants.

The SAMRC has been affected by the recent research funding cuts from United States of America. SAMRC is actively engaging with government to address the crisis and is currently reviewing alternative funding options.

DETAILED INCOME STATEMENT

	NOTE(S)	2025 31 MARCH R	2024 31 MARCH R
Revenue			
Revenue from exchange transactions			
Rendering of services		546,086,648	552,429,032
Rental income		6,023,856	6,208,292
Other income		20,645,897	13,277,161
Interest received – investment	22	54,210,410	62,613,758
Gain on foreign exchange		122,888	1,162,965
Fair value adjustments		1,477,299	211,431
Dividends or similar distributions received	22	182,582	181,529
Total revenue from exchange transactions		**628,749,580**	**636,084,168**
Revenue from non-exchange transactions			
Transfer revenue			
Government grants & subsidies		724,161,231	660,413,043
Income from contracts and grants (non-exchange)		138,597,870	134,413,603
Total revenue from non-exchange transactions		**862,759,101**	**794,826,646**
Total revenue	20	**1,491,508,681**	**1,430,910,814**
Expenditure			
Employee related costs	24	(599,247,707)	(551,948,716)
Depreciation and amortisation		(37,225,735)	(32,649,514)
Reversal of impairments	29	(1,353,329)	(1,235,223)
Finance costs	25	(287,363)	(371,551)
Lease rentals on operating lease		(4,306,707)	(3,895,033)
Debt Impairment (reversal)	26	(3,166,724)	136,828
Repayment of conference registration fees		(14,808,926)	–
General expenses	27	(272,129,587)	(268,191,189)
Repairs and maintenance		(22,029,682)	(19,705,477)
Collaborative research costs	28	(473,670,196)	(550,795,556)
Surrender of surplus	30	–	(20,000,000)
Loss on disposal of assets and liabilities		(2,616,517)	(3,621,990)
Total expenditure		**(1,430,842,473)**	**(1,452,277,421)**
Surplus (deficit) for the year		**60,666,208**	**(21,366,607)**

The supplementary information presented does not form part of the financial statements and is unaudited.

SAMRC

CONTACT DETAILS

PO Box 19070
7505 Tygerberg, South Africa
Enquiries: Tel: +27 21 938 0911
Email: info@mrc.ac.za
www.samrc.ac.za