



**THE AURUM
INSTITUTE**



ANNUAL REPORT

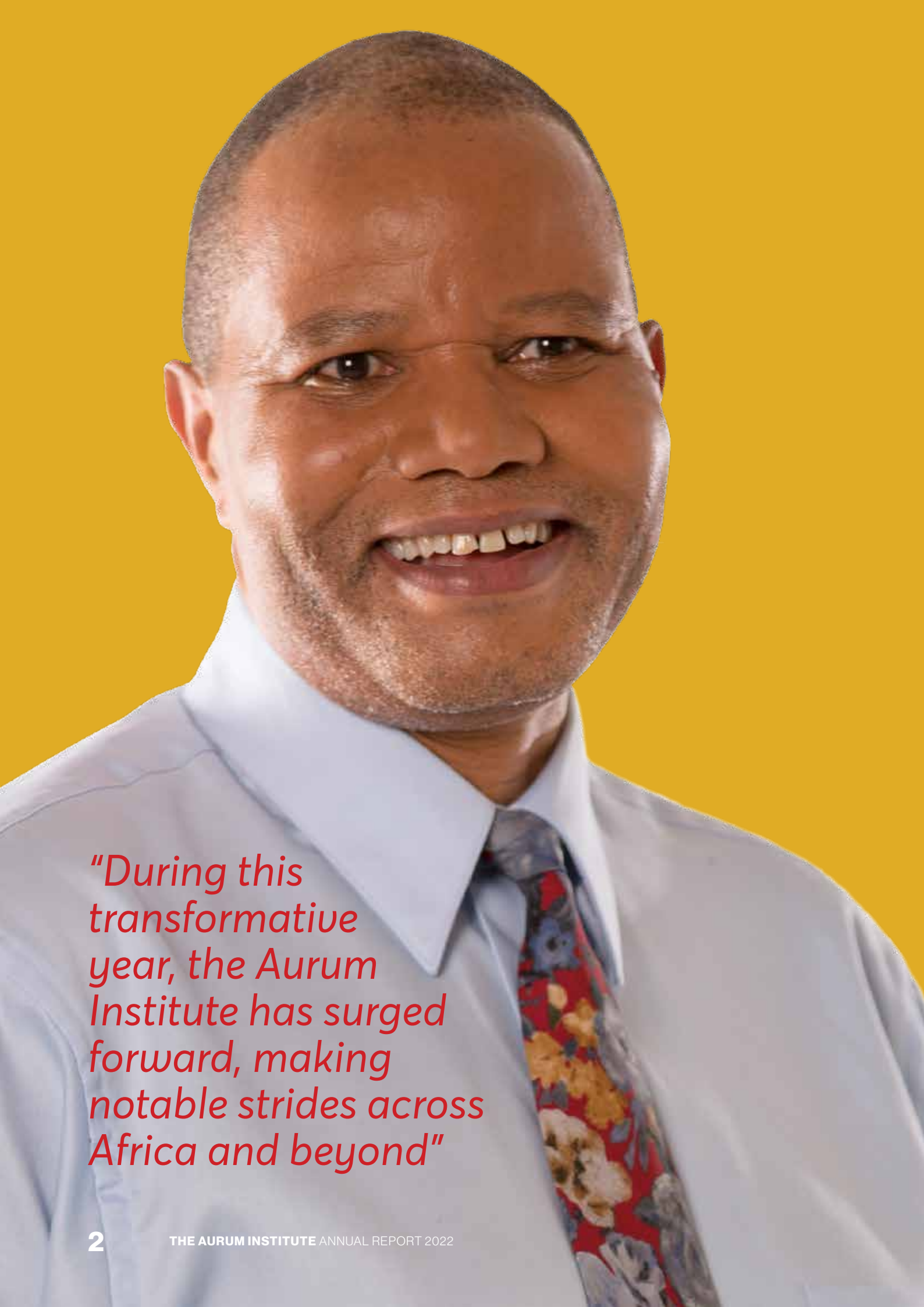
2022





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"During this transformative year, the Aurum Institute has surged forward, making notable strides across Africa and beyond"

Message from the Board Chairperson

Dr Jerry Gule

I write this letter as the Chairman of the Aurum Institute, filled with pride and gratitude, to present an overview of our remarkable achievements during the 2022/2023 period. However, before we embark on this journey, I want to acknowledge the profound sorrow we experienced with the untimely passing of our esteemed former Chairperson, Ms. Phangisile Mtshali, in January 2023. Ms. Mtshali's warmth, leadership, and dedication will forever resonate within our organisation, and we extend our heartfelt condolences to her family and loved ones.

In celebrating our 25th anniversary this year, the Aurum Institute embraces this momentous occasion with deep gratitude and renewed determination. Over the past quarter-century, we have steadfastly pursued our mission to enhance the health and well-being of individuals and communities grappling with HIV, tuberculosis, and, most recently, the formidable challenges of COVID-19. Our unwavering commitment has laid the foundation for a 100-year legacy in Global Health.

During this transformative year, the Aurum Institute has surged forward, making notable strides across Africa and beyond. I am delighted to share with you some of our key accomplishments:

Through Research and Innovation to Evidence for Policy

Breakthrough Treatment Strategies: Our exceptional researchers have made significant contributions to the development of innovative treatment strategies for HIV, TB and COVID-19. Their pioneering work includes conducting numerous clinical trials for new antiretroviral drugs, vaccines, and novel drug combinations.

The results have been promising, showing improved preventive and treatment outcomes, as well as reduced drug resistance.

Through our rigorous research and advocacy efforts, we have demonstrated the effectiveness of 3HP in preventing TB infection, leading to its widespread adoption as a recommended therapy worldwide.

Market Shaping: The Aurum Institute has played a pivotal role in shaping the global market for 3HP (isoniazid and rifapentine therapy) to prevent TB. Through our rigorous research and advocacy efforts, we have demonstrated the effectiveness of 3HP in preventing TB infection, leading to its widespread adoption as a recommended therapy worldwide. Our collaborative partnerships have expanded access to affordable 3HP regimens, benefiting individuals at high risk of TB. By championing its integration into national TB control programs and influencing policy guidelines, we have significantly reduced the burden of TB and improved the health outcomes of vulnerable populations across the globe.

From Policy to Practice – Our Implementation and Programmatic Impact

Expanding Reach: Through our Health System and Public Health Divisions, in conjunction with our country offices, we have expanded our programs to reach more communities across Africa. This expansion, supported by generous development funders such as the Centers for Disease Control, USAID, the National Institutes of Health, and the Bill and Melinda Gates Foundation, has enabled

us to provide effective healthcare services to a greater number of people. Operating in over 20 countries through our network of offices, clinics and partner organisations, we ensure that quality healthcare is accessible to those in need. Notably, our COVID-19 program, funded by the Centers for Disease Control, has vaccinated over 400,000 people and provided reliable vaccine information to millions across Southern Africa.

Strengthening Health Systems: Collaborating with governments and local stakeholders, we have prioritised strengthening health systems in the regions we serve. Through training, capacity-building initiatives, and technical support in HIV, TB, and health systems management, we enhance the capabilities of healthcare professionals and improve overall healthcare infrastructure.

Community Empowerment: Our community engagement initiatives have played a pivotal role in raising awareness, reducing stigma, and empowering individuals and communities affected by HIV, TB, and other Global Health challenges. Through various community-led programs, we promote health education and support peer-to-peer networks, particularly among Key Populations at high risk of HIV infection.

Capacity Development

Building Research Capacity: Our commitment to nurturing the next generation of leaders and researchers remains steadfast. Through our training programs, mentorship opportunities, and fellowships, we continue to develop research capacity among young scientists and healthcare professionals. By investing in their academic and programmatic growth, we ensure sustainable progress towards our mission and vision.

Knowledge Sharing: We actively contribute to the global scientific community, publishing nearly 80 high-quality research papers in leading journals and participating in numerous international conferences in the past year. Our experts share their knowledge and expertise, fostering collaboration and driving advancements in the field.

Governance and Systems

The global aid agenda now recognises the importance of designing and delivering Global Health programmes in close cooperation with local organisations.

Aurum Institute has always strived to maintain the highest standards of governance and compliance, ensuring accountability for funding awards. Our systems have withstood numerous audits and reviews, positioning us among the best.

While these achievements represent significant milestones for the Aurum Institute, we are acutely aware that diseases are relentless adversaries. Overcoming the challenges posed by HIV, TB, and other diseases demands unwavering dedication and collective efforts. Key in this pursuit will be the calculated validation and harnessing of emerging technologies to leapfrog conventionality towards better outcomes and impact. As we commemorate our 25th anniversary and reflect on our progress, let us recommit ourselves to our mission of improving health for generations to come.

Our systems have withstood numerous audits and reviews, positioning us among the best.

I express my deepest gratitude to my fellow Board members, our dedicated staff, partners, and all our funders and stakeholders for their unwavering support over the last 25 years. Your invaluable contributions have been instrumental in our mission's success and sustainability. As we embark on the next 25 years, I am confident that the Aurum Institute, as a true African thought leader, will continue to generate evidence, shape policy, and implement transformative practices, leaving an indelible impact on local communities and the global landscape of health.

With hope and determination,

Dr Jerry Gule
Chairman, Aurum Institute



02

Message from the Group CEO

Celebrating Aurum's 25th anniversary

Prof Gavin Churchyard

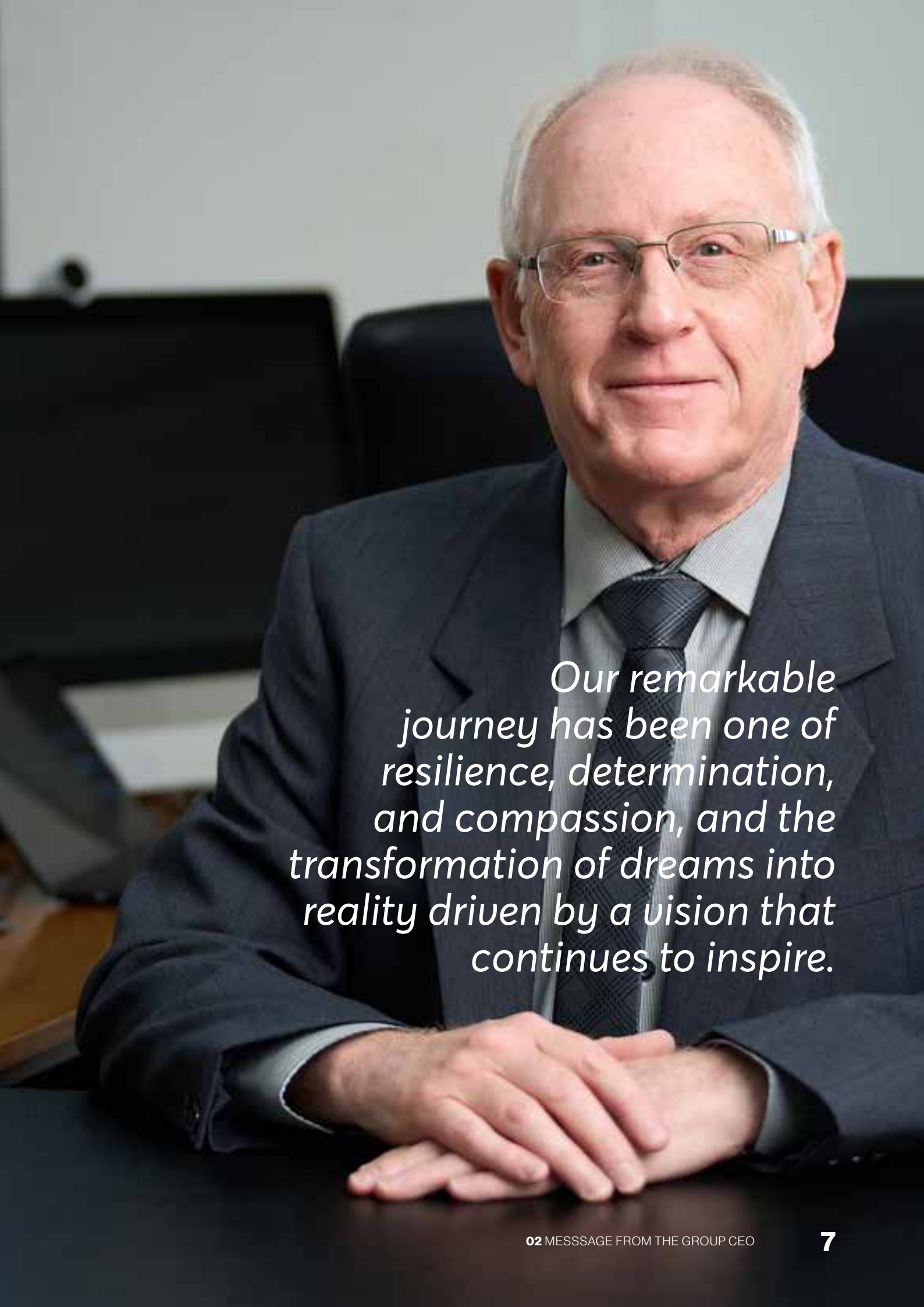
“Action without vision is only passing time, vision without action is merely day dreaming, but vision with action can change the world”

- Nelson Mandela

As I reflect on Aurum's 25-year anniversary, I am filled with a sense of joy and pride at our many achievements. Our remarkable journey has been one of resilience, determination, and compassion, and the transformation of dreams into reality driven by a vision that continues to inspire.

Gold

Our name, Aurum, carries profound symbolism. It hails from the Latin word for Gold, a precious treasure that has captivated the spirits of humanity throughout the ages. Like gold, we embody hope, resilience, and the indomitable human spirit that surmounts any obstacle in the pursuit of a brighter future. In this world of uncertainty, Aurum stands tall as a beacon of timeless value, weaving together the past, present, and future in a tapestry of purpose. Aurum is unique in that it has an aspirational vision of remaining a relevant, impactful Global Health Impact Organisation for more than 100 years. Our journey is therefore akin to an ultra-long 100 Km marathon, and we have just completed the first 25 Kms. We are driven by a vision to create a healthier world for future generations, striving to win gold at the finishing line of a 100-year race.



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Aurum's history

The history of Aurum hails from Welkom, a remote and dusty gold mining town, during the waning heyday of the gold mining industry. Our origins as Aurum Health Research, a wholly owned company of AngloGold Health Services, laid the foundation for a journey marked by growth and dedication to a noble cause. Our mission, dedicated to occupational and public health issues of gold miners, set us on a path of scientific exploration to gather knowledge, provide recommendations, and deliver essential healthcare services to those caring for the health of gold miners. With unwavering determination, we emerged as trendsetters, introducing pioneering HIV testing and TB preventive therapy programmes that left an indelible impact not only in South Africa but globally. It was Aurum that rolled out the first antiretroviral therapy programmes in South Africa, initially within the mining industry, and then, with PEPFAR support, to a growing number of companies and communities across the country. The integration of our implementation programmes with our groundbreaking research led to publications that informed policy and practice locally and worldwide.

Aurum has actively participated in expert panels, advisory committees, and working groups to develop local and global guidelines for diseases like tuberculosis and HIV/AIDS.

As we grew, so did our aspirations, leading to newfound independence from AngloGold in 2004 as Aurum Health. In 2007 we became The Aurum Institute for Health Research, later shortened in 2010 to just The Aurum Institute. We relocated our headquarters to Egoli, the City of Gold, and began expanding our reach throughout South Africa. But, the call for sustainable growth beckoned, and we broadened our horizons by operationalising Aurum Innova in 2009, paving the way for our two other affiliates in

Global Health Innovations and Youth Health Africa. In 2013 the board approved a strategy of international expansion that led to the establishment of associate Aurum companies in Ghana, Mozambique, eSwatini, Lesotho, USA, and Europe.

Generating evidence for policy, and transforming policy into practice

Throughout the past 25 years, Aurum has been a pioneer of transformative projects, leaving an indelible mark on global health. But we have done so whilst remaining true to our African roots. Aurum is locally led and globally influential.

Our participation in the US President's Emergency Plan for AIDS Relief (PEPFAR), launched by President George Bush in 2003, has over 19 years tested cumulatively more than 10 million people for HIV and started approximately 750,000 people on antiretroviral therapy.

Nelson Mandela, who is my all-time hero, launched our Thibela TB project in 2004, as part of the CREATE consortium funded by the Bill and Melinda Gates Foundation, at the International AIDS conference in Bangkok. Back then, gold miners still had the highest prevalence of HIV and TB in the world. The Thibela TB project evaluated a radical strategy of mass TB screening and treatment for either disease or infection among 80,000 gold miners in South Africa over 7 years. The results of this study catalysed the scale up of TB preventive treatment locally and globally. This exemplifies our commitment to our vision of making a difference in the lives of millions.

Whilst I could choose from many outstanding projects, three projects for me cement this commitment to developing evidence for policy through our research, and converting that policy into practice through our innovative implementation programmes:

In 2011, the XTEND project, launched by Minister Aaron Motsoaledi, evaluated the national rollout of GeneXpert MTB/RIF as a first line TB test, funded by the Bill and Melinda Gates Foundation. XTEND highlighted that a new tool introduced into a weak health system would have limited impact. Building on that experience, Aurum is today recognised as a key partner and consultant to agencies wishing to evaluate new tools for TB.

The WHIP3TB trial, a multisite, multi-country trial that evaluated the efficacy of a short-course TB preventive treatment given once or annually, demonstrated that Aurum could effectively run a global project to international standards of research and financial accountability. This credibility was the catalyst for the Unitaïd funded IMPAACT4TB project for short-course TB preventive treatment using two antibiotics, isoniazid and rifapentine, given weekly for 12 weeks, known as 3HP.

The IMPAACT4TB project, started in 2017, was conducted in 12 countries and resulted in the price of rifapentine being reduced by 80%, new formulations of 3HP being developed, evidence to inform policy and practice generated, and catalysed the procurement of 3HP to reach more than 3 million patients with life-saving TB preventive therapy in many more countries than the 12 we initially targeted.

The A team

Aurum is now the global company we envisaged 10 years ago. The work of the entire Aurum team has strengthened health systems, improved health outcomes, influenced health policies and practices, and, above all, SAVED LIVES. As I reflect on the incredible legacy we have built together, I am filled with immense pride for this amazing Aurum (A) team and the role each person has played. Dan Gable said that “gold medals are not really made of gold, they are made of the sweat, determination and a hard-to-find alloy called guts.” I see that “gold” in our Aurum team. I am also profoundly grateful to our various Boards and board subcommittees who over the years have ensured sound governance of Aurum and helped shape our strategy.

Partnerships

None of our achievements would have been possible without the power of partnerships - the bond we share with key stakeholders and funders. Many of these partnerships are those of convenience, built to respond to specific projects and then dissolved when the project ends. But some, long term partnerships, which I call partnerships of consequence, define mutual commitment to a global health vision. I extend my heartfelt gratitude to the London School of Hygiene and Tropical Medicine, which helped us establish Aurum all those years ago, the South African National Department of Health, WITS University, FHI360, HVTN, ACTG, IAVI, Vanderbilt, Yale, Johns Hopkins and so

many other influential universities locally and abroad, for helping us build academic rigor and delivery excellence into all our programs.

Similarly, there are funders of consequence. Aurum would be nowhere without our long-term supporters - CDC/PEPFAR, US National Institutes of Health, Bill and Melinda Gates Foundation, USAID, EDCTP, Unitaïd, and the Global Fund, to name but some - there are many others too that are listed in our annual reports over the years. Your belief in our vision over the past 25 years has been the bedrock of our accomplishments.

Moving forward

As we celebrate our 25-year anniversary in 2023 and look back at our remarkable achievement, we also need to look to the future and renew our commitment to advancing health science, innovation and impact. As we embark on the next quarter-century of our 100-year vision, we do so with unwavering hope and determination.

This determination is supported by a fresh 5-year strategic plan to ensure the sustainable growth of the organisation. Underpinned by a strategic roadmap, the plan sets our sights on shaping a brighter, healthier world for future generations.

To simply describe the strategic plan, we have figuratively used a house to represent the strategic plan with foundations, pillars and a roof:

The foundations of our house are:

- Systems and Governance to position Aurum as a locally governed and internationally accountable entity in Global Health;
- Sustainable Financial Reserves to maintain organisational stability through the ups and downs of our industry sector; and
- A Group legal and accountability structure that ensures effective and ethical governance and leadership;

The pillars of our house are:

- African Leadership, positioning Aurum as an African leader in global health
- Business Investment for Growth to grow and diversify our funding pipeline, geography and disease scope;
- Thought Leading People, who will grow and establish key Aurum staff as internationally recognised thought leaders in global health;
- Delivery Excellence in program performance and quality, the key output to meeting the expectations of our funders and stakeholders;
- Science/Programme Integration, a feature that makes Aurum unique amongst many global health competitors; and
- Marketing and Communications to position Aurum as an African, locally-led, globally supported Partner of Consequence in global health;

The foundations and pillars hold up the roof - what is visible for all the world to see - a Group driven by a vision whilst living up to its values of Excellence, Innovation, Integrity, Teamwork and Respect.

Conclusion

Our 25-year anniversary is not merely marking the passing of time; it is a celebration of lives touched, and an enduring legacy that we as Aurum have etched upon the world. What we have achieved over the past 25 years is testament to a vision with action. As we journey forward, we carry within us the spirit of resilience, innovation, and compassion that has brought us this far. In the immortal words of Nelson Mandela, "It is in your hands to create a better world for all who live in it." Let us embrace Madiba's call and continue to forge a path towards creating a healthier world for future generations.

Prof Gavin Churchyard
Group CEO





03

Highlights from 2022



Aurum Ghana turns 5

Aurum Institute Ghana, working to advance health science and innovation reached a milestone of five years of operation in Ghana in 2022.

Since it started its operations in Ghana, Aurum has collaborated with the Ministry of Health and the Ghana Health Services to effectively deliver appropriate healthcare services to people living with TB and HIV.

HIGHLIGHTS FROM 2022



Partners announce **reduced price** for patient-friendly tuberculosis preventive treatments

Unitaid, The Aurum Institute, the Clinton Health Access Initiative (CHAI) and MedAccess announced agreements to lower the price of rifapentine (RPT)-based treatments to prevent tuberculosis in low- and middle-income countries.

The agreements, negotiated with manufacturers Macleods Pharmaceutical Ltd. and Lupin Limited, meant that:

3HP, a three-month, once-weekly oral treatment, was made available at a ceiling price of \$14.25 per patient course from both Macleods and Lupin.

Rifapentine 300mg single tablets, used in 3HP and 1HP (a one-month, once-daily oral treatment) was reduced to \$33.90 per 100 tablets.

The new prices were made available in 138 low- and middle-income countries, including those with the highest burden of tuberculosis (TB) globally.



Aurum showcase expertise at **SA TB Conference**

Aurum had a strong presence at the 7th SA TB Conference, with colleagues presenting the work which makes the organisation a scientific leader in the field of TB. The diversity of our expertise showcased our deep understanding of the science as well as the implementation approaches that lead to success in TB control. The showcase included 10 posters and 12 orals.

HIGHLIGHTS FROM 2022



Aurum at the **Union Conference**

Aurum technical experts presented findings from various projects on digital adherence technologies, clinical research on TB vaccines and new treatments, TB preventive treatment and TB and COVID-19.

Prof Gavin Churchyard, Group Chief Executive Officer co-chaired a featured TB Science session on 'Where are we in addressing post-TB lung disease?'.

In a symposia, Prof Salome Charalambous, Group Chief Scientific Officer presented on 'The use of digital adherence technologies to improve TB treatment outcomes: results from the TB MATE study in South Africa'.

The showcase included 5 posters and 11 orals.



Collaboration to research **COVID-19 vaccine strategies** for people living with or without HIV

The Aurum Institute, the Coalition for Epidemic Preparedness Innovations (CEPI) and the Human Vaccines Project launched a partnership to deliver an important African-initiated COVID-19 vaccine strategies study.

CEPI provided up to \$10.4 million in funding to support a clinical trial to assess the safety and immunogenicity of mixed vaccine strategies of three COVID-19 vaccines in people living with or without HIV in South Africa, where the HIV burden is high.

HIGHLIGHTS FROM 2022



Scientists graduate from **IAVI Leadership Programme**

Three Aurum scientists graduated from the inaugural cohort of the IAVI ADVANCE Leadership Development Programme (LDP).

Aurum's Dr William Brumskine: Rustenburg Clinical Research Site Leader, and Senior Scientists Drs Pholo Maenetje and Mandla Mlotshwa were part of the programme to develop a critical mass of promising scientific leaders uniquely equipped to advance the field for next-generation AIDS vaccine development in Africa and India.



New appointments strengthen Aurum/Vanderbilt partnership

The partnership between Aurum and Vanderbilt University was further strengthened with the appointment of four researchers.

Professors Salome Charalambous and Vinodh Edward, as well as Drs Mandla Mlotshwa and Pholo Maenetje were appointed as Adjunct Assistant Professors at the US University's Department of Medicine.

As part of their tenure, they will share their expertise with one of the leading universities in data science and public health and have access to Vanderbilt's vast academic resources and opportunities to engage, consult and discuss their work, particularly during the weekly virtual lectures with their Vanderbilt colleagues.

HIGHLIGHTS FROM 2022



Aurum scientist **appointed to new journal editorial board**

Aurum Scientist Lucy Chimoyi was appointed to the editorial board of the new PLOS Global Public Health Journal which is aimed at charting a new path towards equity, diversity, and inclusion in global health. The journal published its inaugural edition in 2021 and is led by Drs Catherine Kyobutungi and Madhukar Pai as Editors-in-Chief and Julia Robinson as Executive Editor.

Chimoyi said she was honoured to have been approached to join a strong, diverse board which sought to recruit researchers and experts, especially women, from the global South.



IAVI and Moderna launch **first-in-Africa** clinical trial of mRNA HIV vaccine development program

IAVI and Moderna, Inc. (Nasdaq: MRNA), a biotechnology company pioneering messenger RNA (mRNA) therapeutics and vaccines announced the first participant screenings for a Phase I clinical trial of an mRNA HIV vaccine antigen (mRNA-1644) at the Center for Family Health Research (CFHR) in Kigali, Rwanda, and The Aurum Institute in Tembisa, South Africa.

Phase I trial in Rwanda and South Africa aims to evaluate mRNA HIV vaccine antigen for safety and immunogenicity and strengthen regional scientific capacity.

Trial sites are expected to enroll a combined total of 18 healthy, HIV-negative adult volunteers.

HIGHLIGHTS FROM 2022



Aurum nominated for two **Standard Bank Top Women Awards**

With more than 60% of Aurum's senior and professional level leadership positions filled by women, Aurum was nominated for two Standard Bank Top Women Awards.

The organisation was a finalist in the Top Women Empowered Company in Health and Pharmaceuticals and the Top Women Empowered Company in Youth Development categories.



Aurum South Africa CEO Prof Vinodh Edward appointed **Honorary Associate Professor at the University of KwaZulu-Natal (UKZN)**

Edward said he was especially proud of this appointment at the College of Health Sciences as he had started his tertiary education there.

"It feels like I have come full circle but at the same time, it's the start of a new journey. I look forward to working with the team at UKZN to support and strengthen capacity development and contribute towards the development of the next cadre of scientists and entrepreneurs," he said.

HIGHLIGHTS FROM 2022



Prof Churchyard speaks at Humentum International webinar on Locally-led development

Prof Churchyard, Aurum Group Chief Executive Officer, participated in a webinar hosted by global development organisation Humentum on how to turn the US Agency for International Development (USAID) pledge of 25% of its funding for local partners into reality.

“As a proudly African-based, international NGO with our own projects and research programmes in 25 countries, we have learnt some important lessons. I am delighted this discussion is continuing, but we need to act, we need to see this being translated into action,” said Churchyard in his presentation.



Aurum at Rome 6

Prof Violet Chihota Acting Group Science Co-ordinator spoke at the Rome 6: High-Level Dialogue to Assess Progress on and Intensify Commitment to Scaling Up Prevention, Diagnosis and Treatment of Paediatric HIV and TB 2022 at the Vatican City.

In her speech, she said that in order to lower costs and increase accessibility to life-saving TB preventive therapy for all, more global demand generation is required for the paediatric formulation of rifapentine and the short-term TB prevention regimen 3HP.



"At the end of the implementation phase, the project had made a significant impact by enrolling nearly 9,000 PLHIVs and household contacts on TPT"

04



Aurum Ghana

This year was a significant year in the operations of Aurum Ghana as it marked the company's fifth year of existence in the country. Its flagship IMPAACT4TB project, which through its initiation gave birth to the setup of the country office, successfully ended after four years of great impact. The IMPAACT4C19 project, born out of the flagship IMPAACT4TB project in response to the COVID-19 pandemic, kicked off implementation activities after initial landscape analysis in the last quarter of 2021.

IMPAACT4TB

The IMPAACT4TB project, which focused on the scale-up of short-course TB Preventive Therapy (TPT) among PLHIV and household contacts of TB clients, was successfully closed out after a great deal of collaboration with the government throughout the implementation period. Through the project, Aurum Ghana supported the development of the country's TPT guidelines, pushed TPT into a routine programmatic intervention, and introduced TPT into all national M&E systems. At the end of the implementation phase, the project had made a significant impact by enrolling nearly 9,000 PLHIVs and household contacts on TPT.



The project was successfully transitioned to the government by supporting the scaleup of TPT in six low-performing regions and training 1756 HCWs in the process. A close-out event was organised to disseminate findings from the project and officially hand it over to the government. Aurum Ghana assured the government and other stakeholders of its commitment and continuous support in providing technical assistance despite the closeout of the IMPAACT4TB.

IMPAACT4C19

Aurum Institute Ghana made significant progress in achieving the goals of the various work areas. We successfully implemented a feasibility and acceptability study of COVID-19 self-testing in Ghana with nearly 1,100 patients and 30 healthcare workers as participants. The study identified facilitators and barriers for the rapid rollout of self-administered antigen rapid diagnostic tests (Ag-RDTs) and shared preliminary findings with the Food and Drugs Authority and Ghana Health Service (GHS) to advance conversations on revising diagnostic guidelines and adopting new digital tools to support self-reporting of test results.

To expand access to COVID-19, we procured 75,000 Ag-RDT kits and successfully activated COVID-19 antigen testing in two regions of Ghana by facilitating training for 108 healthcare workers from 80 facilities on the use and reporting of the test in partnership with the National Public Health Reference Laboratory and the Clinton Health Access Initiative. Aurum Institute Ghana also successfully advocated for the adoption of new outpatient treatments for COVID-19, including facilitating evidence reviews and policy updates that contributed to the inclusion of antiviral therapies in the revised treatment guidelines.

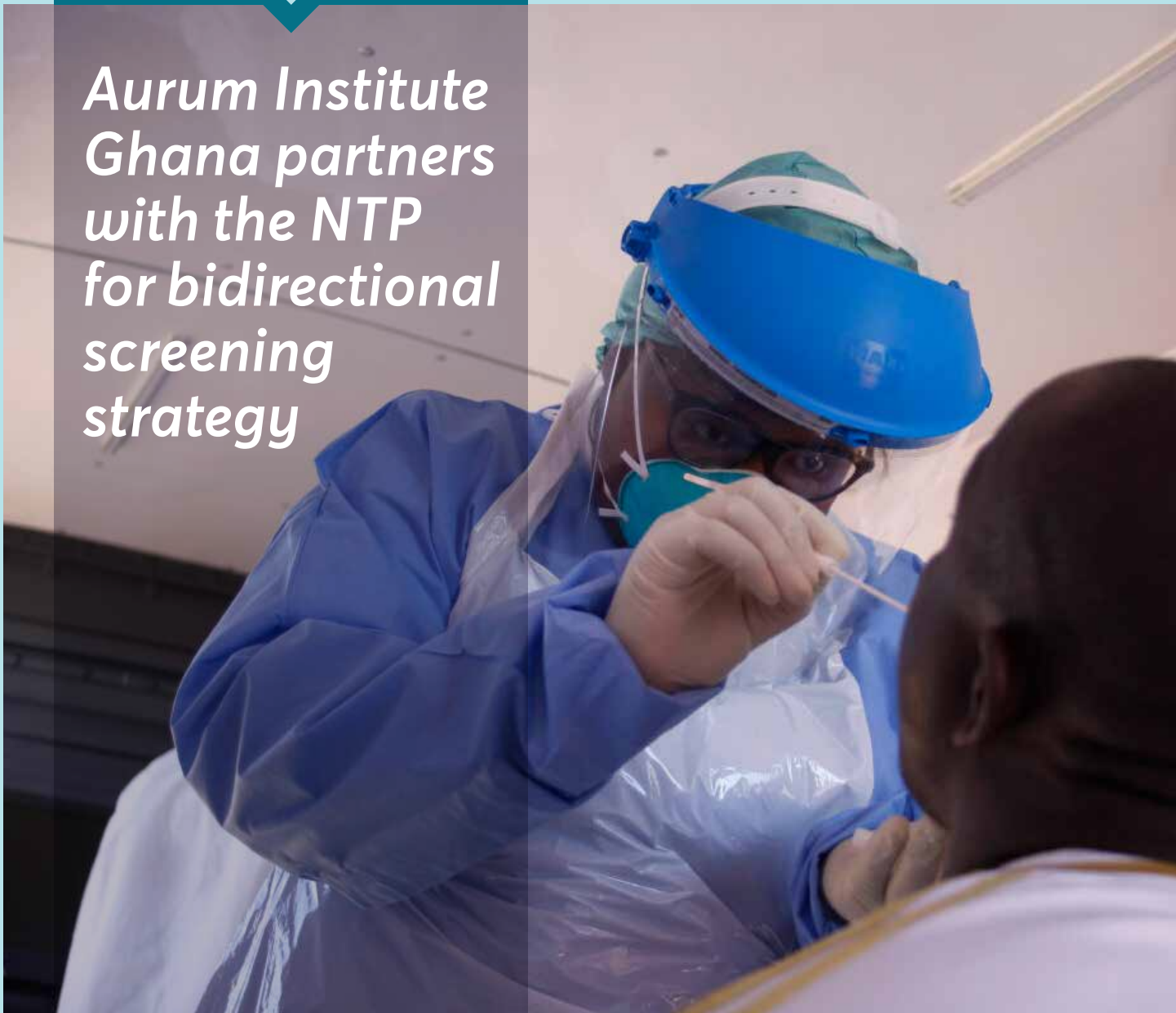
Similarly, Aurum provided technical assistance to the National Tuberculosis Programme on the integration of Ag-RDTs into existing bidirectional screening for TB and COVID-19 by reviewing the testing algorithm and standard operating procedures. Importantly, Aurum Institute Ghana also served on the core writing team for the 2022 Global Fund C19RM Additional Fast Track Funding Request, supporting the government to secure USD 14,692,453 in additional funding for the national COVID-19 response.

Aurum Ghana @ 5

Aurum Institute Ghana celebrated five years of unprecedented impact and contribution to the health sector in Ghana. As part of the 5th anniversary celebrations, we organised a capacity-building session for 20 journalists on public health reporting and fact-checking. We also donated a wide variety of PPEs to the Greater Accra Regional Hospital, the Ga East Municipal Hospital, the Ghana Infectious Disease Centre, and the Shai Osudoku District Hospital to support the COVID-19 response in their facilities. More significantly, we produced a documentary to highlight the impact we have achieved with our projects and interventions in the past 5 years. The documentary was aired on national TV networks and our social media platforms. The 5-year anniversary celebration climaxed with a dinner event to celebrate our success in Ghana and to dialogue with key partners and stakeholders on future opportunities. In attendance at the dinner event were the National TB Ambassador, Aurum Group Global Growth Officer, Aurum Ghana Board, staff of MoH/GHS, staff of Mott MacDonald, staff of CHAI, and staff of Ghana TB Voice Network.

OUR IMPACT

Aurum Institute Ghana partners with the NTP for bidirectional screening strategy



Through the IMPAACT4C19 project, Aurum Institute Ghana provided technical assistance to NTP on the integration of COVID-19 Antigen Rapid Diagnostic Tests (AgRDT) into existing bidirectional screening strategy for TB and COVID-19. The existing strategy employed cartridge-based nucleic acid amplification testing (CB-NAAT) on the GeneXpert platform to detect TB (Xpert MTB/RIF Ultra cartridge) and COVID-19 (Xpress SARS-CoV-2 cartridge). However, the relatively high commodity cost of \$24 per patient screened was hindering sustainability of the strategy, with COVID-19 cartridges accounting for 42% of the cost build-up. In response to this challenge, Aurum Institute Ghana

partnered with the NTP to introduce SARS-CoV-2 AgRDTs into the existing bidirectional screening strategy for TB and COVID-19. This lowered the input cost of the COVID-19 test used in the strategy by an estimated 80% by replacing Xpress SARS-CoV-2 cartridges with the Sure Status COVID-19 AgRDT. This approach also lowered operating time of the GeneXpert platforms and speeds up patient notification of COVID-19 status by abridging the testing process. Aurum in collaboration with the NTP conducted bidirectional screening in 35 mining communities reaching nearly 3,000 persons.



"The program was directly implemented in 7 districts, but in 2022 Fundação Aurum supported the expansion to 36 additional districts"

05

Fundação Aurum



In 2022, the Fundação Aurum completed its Board by incorporating a third non-executive director, Dr. Angélica Salomão. The Fundação Board has now six members, five of them Mozambican, with a balanced gender composition.

The program that brought Aurum to Mozambique, IMPAACT4TB, closed operations in December. A total of 26,820 patients received 3HP for the prevention of tuberculosis, and 86% of them completed the treatment. The program was directly implemented in 7 districts, but in 2022 Fundação Aurum supported the expansion to 36 additional districts. Currently the three southern provinces of Mozambique plus the city of Maputo are offering 3HP to people eligible to receive TPT. The project team also managed to catalyse the incorporation of 3HP within the procurement plans of two main donors: Global Fund and PEPFAR quantified needs, ensuring 3HP supply until 2026. Data analysis is currently ongoing, and the team plan to disseminate results during 2023, including the presentation of some results at the 2023 INTEREST and Union conferences.

Within IMPAACT4TB, the team also completed an implementation science study, the CAT study, seeking to evaluate the impact of a potential solution to the deficit in TPT prescription noted in reports worldwide. Specifically, CAT used a "choice architecture" approach to make TPT prescription the default choice for the health provider. This strategy was implemented in 10 health facilities chosen randomly among those implementing 3HP, comparing them to a similar set of clinics used as a control. Results are being analysed and will be submitted for presentation to the 2023 Union conference.

Linked to IMPAACT4TB, the team implemented during 2022 IMPAACT4C19, an intervention aiming to provide access to effective COVID-19 test, triage, and treat solutions within health care systems. Fundação staff provided support to the Ministry of Health in different areas, as the continuous update of COVID-19 guidelines and the regulatory approval of oral antiviral medications as molnupiravir and paxlovid. The Fundação donated 82,900 rapid antigen tests for COVID-19 to the Mozambican health authorities.

The Fundação led the development of the National Strategy for Test to Treat COVID-19. As part of our collaboration in testing activities, the team set up bidirectional screening for COVID-19 and tuberculosis in a number of community settings in the city of Maputo and the provinces of Maputo and Gaza. A study protocol to assess feasibility and acceptability of self-testing strategies for COVID-19 has been prepared in collaboration with the National Institute of Health and submitted to the national IRB. We are awaiting protocol approval to start with preparatory activities. IMPAACT4C19 presented some results at the 2022 Union conference and the International Conference on Public Health in Africa.

Another project that came to a close-out in 2022 is the TB Reach Wave 8 “Establishing simple and functional pathways for TB patient referral and notification in the Mozambican private health sector”. This intervention sought to facilitate the interaction between private health providers –both formal and informal– and the public national health system. The team choose some health catchment areas in the Greater Maputo to engage private clinics and traditional healers in the project, training them on tuberculosis screening.

A software app was designed and set up in mobile devices of private providers to enable them to share patient information with the referral public health facilities. At the same time, staff from the national health system was supported to receive patients referred from the private sector and confirm presumptive diagnosis. This project suffered delays since its beginning due to the onset of the COVID-19 pandemic, and although it had not the expected results in terms of TB cases identified –132 TB cases in total, it has set the basis for the private-public partnership strategy being currently developed by the Ministry of Health.

A natural prolongation of the TB Reach project is the USAID-funded “Expanding TB case finding in Mozambique: contact tracing in patients treated in the private sector”. This project was awarded in the last quarter of 2022 and will start implementation in January 2023, intending to expand the TB Reach intervention to define contact tracing procedures for those patients choosing to be treated for tuberculosis in private clinics.

Our collaboration with the Vanderbilt University Medical Center continued with the implementation of trainings on implementation science to a group of Carmelo Hospital staff, where the team is trying to constitute a research team that can bring forward our partnership with Carmelo to establish the hospital as a clinical trial unit with the capacity to participate in the trials implemented by the Aurum Group.

Fundação Aurum portfolio has grown significantly, and we achieved break-even status in 2022, having registered a nett surplus of \$58 403. The whole team is looking with optimism towards Fundação definite as a relevant actor in the fields of health research and programme implementation in Mozambique.



Junte-se à
contra a Tu
HIV. Par
precisamos
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FUNDAÇÃO
AURUM
MOÇAMBIQUE



"The Aurum Institute was selected to serve as the Central African Biorepository for the IAVI ADVANCE program."



06



Aurum South Africa

CLINICAL RESEARCH DIVISION

The Clinical Research Division (CRD) has achieved remarkable results in 2022. Our five Clinical Research Sites located in Klerksdorp, Rustenburg, Tembisa and Pretoria, conducted 54 trials with more than 4,700 participants enrolled or in follow-up for the year and we surpassed accrual targets for 8 clinical trials. We have 6 current and 6 planned Investigator-led Trials - an unprecedented achievement for the division. Our portfolio of Network, Non-Network & Investigator Led Trials has diversified, and the number of funders has increased from 22 in 2021 to 26 in 2022.

The Aurum Institute was selected to serve as the Central African Biorepository for the IAVI ADVANCE program. We also renovated and moved into our new Clinical Research Site in Rustenburg, expanded our Basic Science and Laboratory Capacity to include COVID neutralization and the ELISA S-binding Assays, DNA and RNA isolation, PCR and DNA cloning, Flow cytometry, ELISPOT Assays, Cell culture, HIV Pseudo-neutralisation Assays, B-Cell sorting, and Multiplex Immunoassays.

We expanded our clinical trial experience to include First in Human and Early Bactericidal Trials. Furthermore, we continue to support youth development through Youth Health Africa's (YHA) internship programme. Year 2 in our new role as SAHTAC secretariat was also completed successfully.

The division has added to the overall impressive academic qualifications: 10 completed Masters, 6 ongoing Masters, 3 completed PhDs, and 3 ongoing PhDs.

We have had 34 publications, with seven first or senior author and nine high-impact publications [IF > 6].

In summary, 2022 was a busy and fulfilling year for the Clinical Research Division. The impact of the work we do is apparent in the significant achievements across all areas, and we take great pride in what our teams have accomplished. CRD continues to grow and make valuable contributions to the advancement of clinical research in South Africa and beyond.

Implementation Research Division

The Implementation Research Division (IRD) contributed immensely to Aurum's reputation as a research organisation by meeting or exceeding its research output targets for 2022. The division produced 34/35 (97%) of

its target for peer-reviewed publications. This was 34/80 (43%) of all publications produced by the Aurum Institute in 2022. The division had 18/20 (90%) of the targeted journal presentations and exceeded its target for oral and poster presentations at local and international conferences by 18/15 (120%).

With regard to improving research capacity, six staff members were funded and six completed their studies – 3 obtained Master's degrees in health sciences, 2 obtained Post-graduate Diplomas in Public Health and 1 obtained a BSocSc (Nursing). Six staff members were promoted in 2022.

The IRD team submitted 24 research grant applications and 8 of them were funded to yield a research projects budget of R70.55 million in 2022. The target of ensuring that 90% of staff salaries be funded from research projects and 10% from the core budget was achieved.

At IRD, we use Implementation Research to promote the systematic uptake of evidence-based findings into routine practice, to improve the quality and effectiveness of health services. Three research projects testing innovative digital adherence technologies, TB MATE, ASCENT and 2wT were implemented in 2022 and are providing the evidence to stakeholders.

Health Systems Division

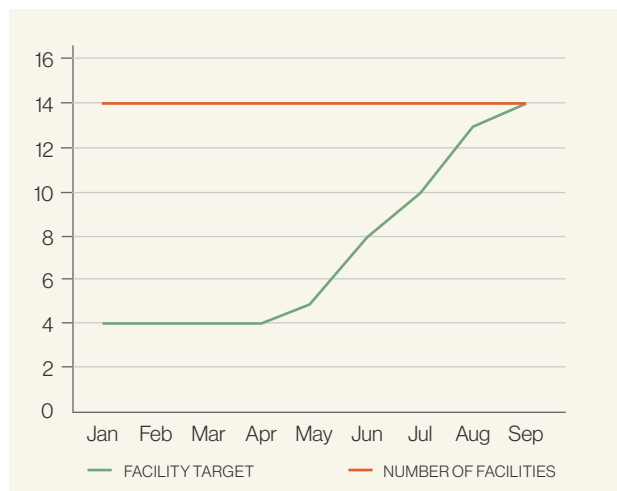
Care and Treatment

- Training and tester certification for 852 Lay Counsellors was conducted across NW facilities.
- Supplied 62,477 Oraquick and 46,200 INSTI HIVSS kits to improve testing and Case finding.
- Client Engagement Officer role was introduced to improve retention of clients on ART.
- Development of the Men's 'Health Strategy and sign off of MINA concept document was done, with successful launch in 8 selected facilities in Bojanala.
- Facilitated formation of Provincial Patient Safety Group Meetings, with establishment of ACC, 4 Provincial CoEs, and Pharmacovigilance committees reporting adverse events following immunization.
- Over 120 youths placed in NWDOH through our partnership with YHA.
- Assisted and coordinated the rollout of Operation Phuthuma handbook across the 3 supported districts, with 210 DOH staff trained.



TB LAM implementation -DKK

Number of Facilities from January to September 2022



4 /14 PHC facilities were implementing LAM test in April 2022. TB LAM training was conducted, and a standardized supportive package was implemented in the remaining 10 facilities. By December 2022 100% facilities were implementing LAM testing with a total 294 tests conducted.

Key Populations Programme

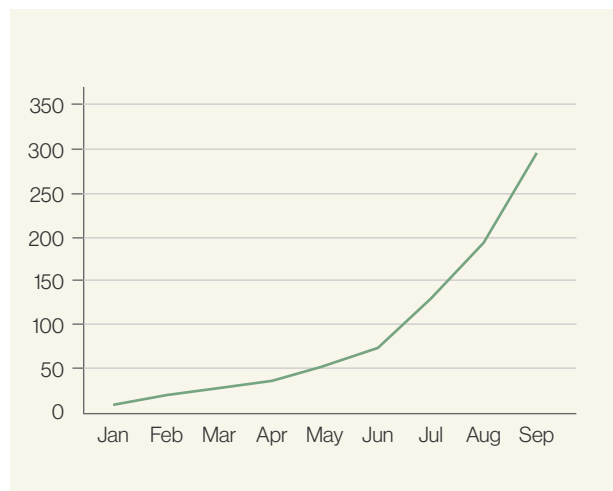
Over 200 transgender women were offered Gender-Affirming healthcare services and 145 received hormonal therapy being offered at POP INN centres. We led National establishment of KP CoEs and training conducted in 25 DoH facilities to provide sensitized and tailored KP health services to MSM, TGW, FSW and PWUDs. ePharmacy services are utilised by over 203 clients across the five POP INN clinics and 1276 clients were initiated onto event-driven PrEP regimen. Collaboration with PSI on Coach Mpilo reached 226 MSM who were lost to follow-up and returned to care.

Vaccination Programme

Aurum was awarded the following grants in 2022:

- 2 follow-on grants from the CDC and RTC through the ADAPT funding mechanism.
- Technical assistance as part of the RTC ADAPT grant funding, in eThekweni North and uMkhanyakude to drive COVID-19 vaccination services integration.
- Quality audits for the Anglo-American (AA) group across 11 mines in South Africa.

Number of LAM tests done Cumulative



In 2022, a primary focus was enhancing the 3rd 95 (viral suppression among ART clients). This involved:

1. Improving viral load test completion rates.
2. Enhancing viral suppression (<50 copies/ml), reducing virological failure (>1000 copies/ml).
3. Decreasing patients with low-level viremia (50-999 copies/ml).

Implementation of the Viral Load QIP approach:

The Viral Load Quality Improvement Programme (QIP) addressed challenges in viral load completion and suppression across age groups and districts. This ongoing project involves multidisciplinary collaboration (clinical, SI, QI, Technical, district/operational). The data-driven approach analyses Viral Load (VLD) and Viral Load Suppression (VLS) by age, cohorts, and facilities for site selection.

Efforts to increase VLD included district team support for implementing Viral Load SOP activities in all facilities. This ensured clinicians had eLABS access, N4 registers for shortages, monitored data capturers, and enforced daily VL pending list tracking. Teams supported pre-retrieval of files and active tracing for missing appointments.

Activities to improve VLS included a register for monitoring Enhanced Adherence Counselling (EAC) to track activities longitudinally.

A Tick Sheet guided comprehensive counselling, with weekly reporting for recent implementations. Interventions focused on patient education about U=U, adherence, and reporting medications.

Key success factors in the project include:

- **File audits:** At each facility, the clinical team collaborates with the facility data team and senior data monitor to generate patient lists of unsuppressed clients, facilitating root cause analysis. The file audit examines the duration on ART, chronological VL results, records of EAC, previous and current ART regimens, paediatric dose optimisation, co-morbidities, and the use of other chronic medications, assessing evidence of appropriate VL intervention.
- **Patient Literacy:** The project developed and distributed posters on VL, adherence, and U=U, alongside videos for healthcare workers and patients to promote U=U as a goal for ART patients.
- **Training:** The initiative trained 947 clinicians on viral loads, 1899 non-clinicians on adherence, 1004 clinicians on U=U, along with 22 Health Promoters and 810 counsellors.
- **Job aids and scripts:** Developed for healthcare workers, including Adult EAC Counsellors, DTG TLD counsellors, Teletracing script, Retention script, and Viral load management for Health Care workers. Materials for patients included Paeds EAC, Adult EAC, and TLD.
- **Lab interventions:** Root cause analysis revealed challenges in lab processes affecting VLD and LLV rates. The CLI team investigated processes from ordering a blood test to capturing in patient files, identifying areas for improvement in specimen collection and storage, adherence to phlebotomy procedures and SOPs, backlogs from a new shift system, and delays with specimens from referral laboratories. Implemented improvements included procuring additional centrifuge machines to assist with high sample volumes.

Results at the end of the financial year indicated encouraging progress in VL data for the previous 12 months. Although the rate of viral loads done remained constant (requiring improvement), there was an increase in viral load suppression rates, a decrease in virological failure, and a notable decrease in the proportion of patients with low-level viremia.

In the following graphs:



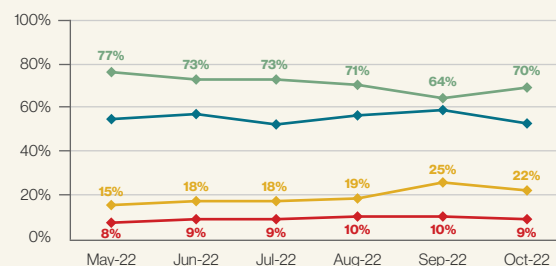
So, at a glance ideally we would want to see:



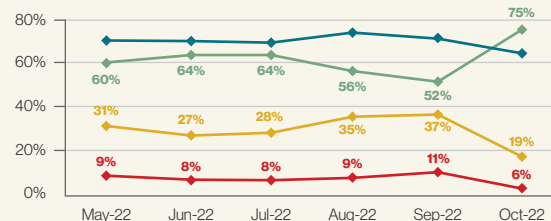
As a *general* trend, this is what we see in October:



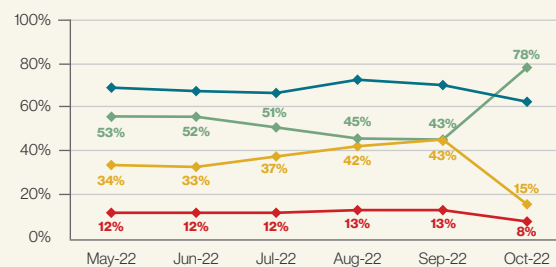
All Cohorts, Oct 2021 - Oct 2022, DKK



All Cohorts, Oct 2021 - Oct 2022, BOJ



All Cohorts, Oct 2021 - Oct 2022, NMM



Statistics

HIV

In 2022, the HIV programme grew in scale...



954 020 People were tested for HIV in the North West

19 157 New people were put on treatment in the North West

295 673 People we currently have on treatment in the North West



6 194

parcels collected through Peleboxes



8 612

VMMCs performed in 2022



98 367

INSTI HIV Test Kits distributed in the year



45 564

key populations were given preventative measures

TB

HSD:



7 879

new TB cases found in the North West (Bojanala, Ngaka Modiri Molema and Dr Kenneth Kaunda districts).



32 969

people were put on TB prevention treatment in the North West (Bojanala, Ngaka Modiri Molema and Dr Kenneth Kaunda)

Public Health Division

NACOSA Covid-19 Vaccination Programme

Aurum is the current sub-recipient for NACOSA, implementing a Covid-19 Vaccination Programme in the Cape Winelands District supporting the Drakenstein Sub-District.

West Coast HCT Grant

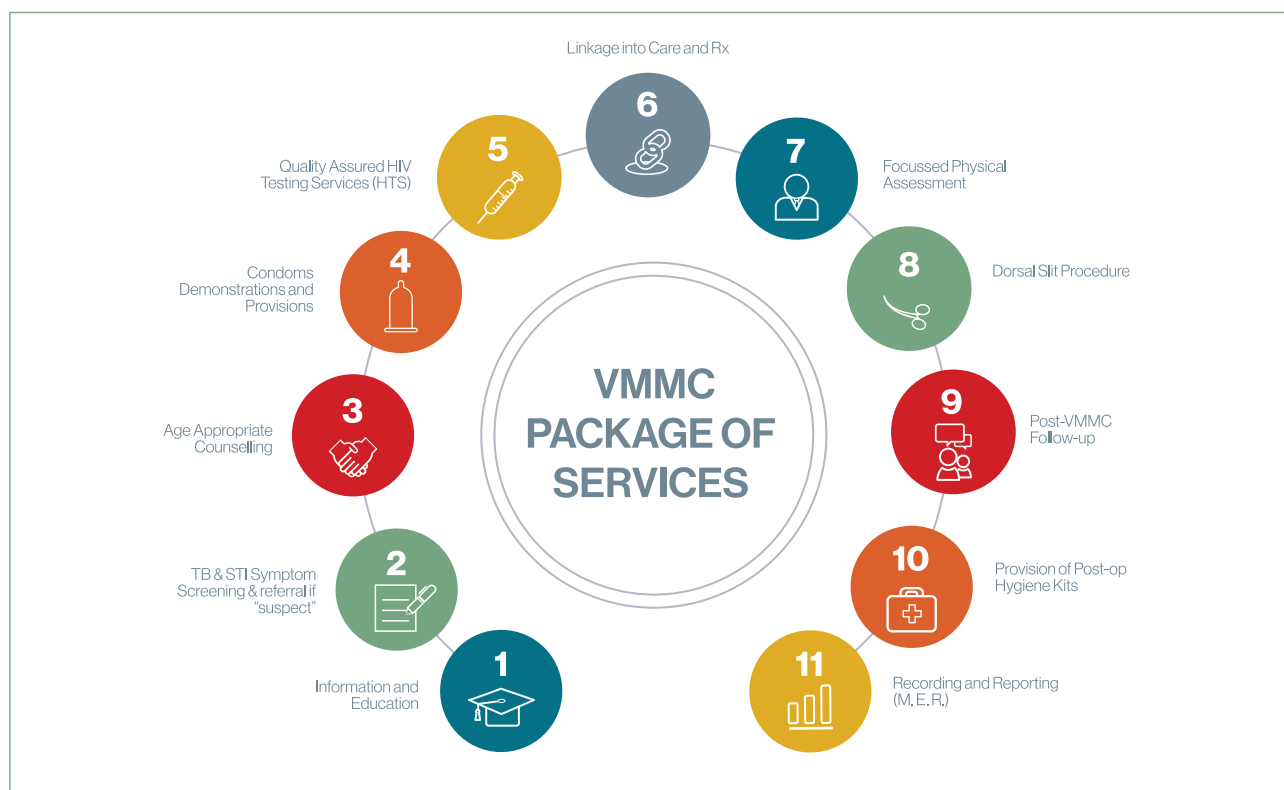
Aurum implemented the HCT Grant in the West Coast district with 65 Counsellors supporting 27 facilities within 5 sub-districts, providing HIV Testing and Counselling services, Health Talks, supporting ULAM and TUTT at facility and hospital level.

RT35 VMMC

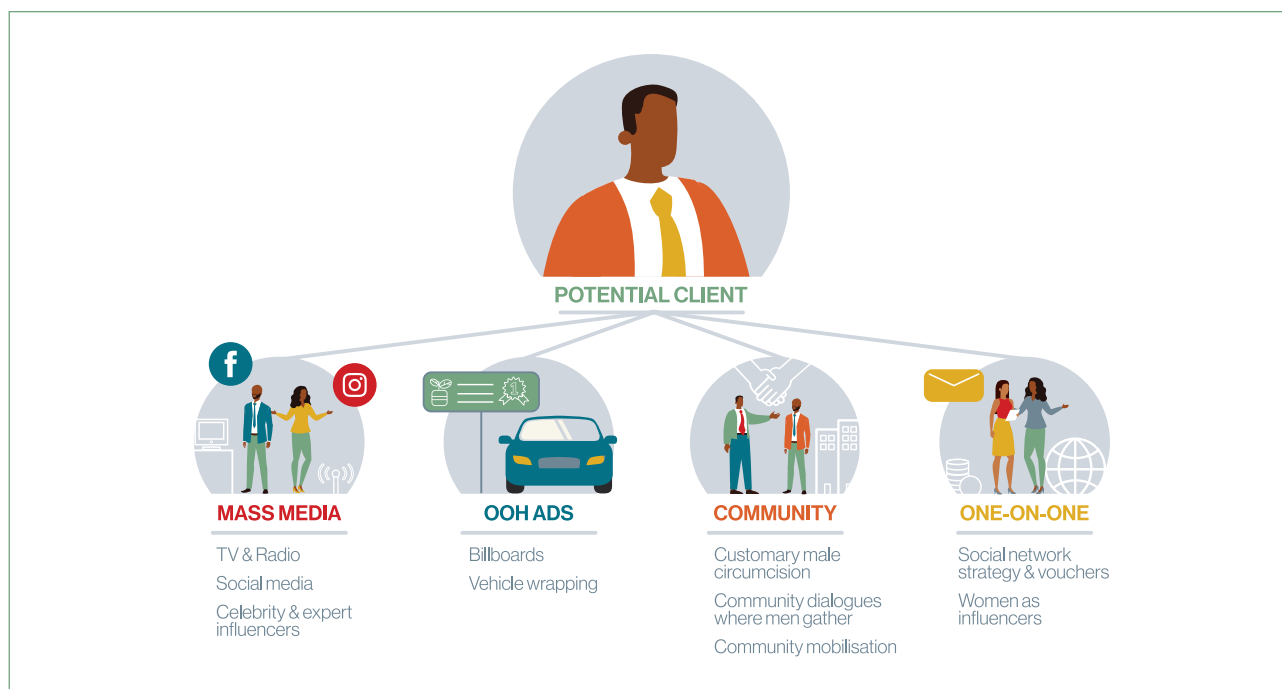
Aurum is the current implementing partner for the RT35 VMMC grant under National Treasury in the Mangaung District in the Free State Province, and Ruth Segomotsi Mompati District in the North West Province. We are working with a Hybrid Model that includes a Roving

Team to cover all areas throughout the Districts and a GP network system to add on and fill regular bookings. Our VMMC package of services includes tailored MMC counselling with age-appropriate messaging. Aurum contributed to the National VMMC Project 350K and managed to perform 4,330 VMMCs out of a target of 2,699 VMMCs that was set during the period of May 2022 until September 2022, achieving the target by 160% towards our pledge.

With VMMC Seasonal Peaks and Pits linked to school holidays and TMI Camps, we have seen this reflected in the data pattern of our monthly reporting. Our demand creation strategy includes mass social media and advertising, using local radio station platforms to promote VMMC services, we also supported the local soccer tournaments for promotion, pamphlets and posters with direct numbers to link potential clients to our clinical teams, door to door campaigns, working through community leaders and using women as influencers.



Multi-Faceted approach to VMMC Demand Generation



Management Development Programme (MDP)

Aurum continued with the MDP in the Western Cape Province and trained a total of 181 learners on the MDP. The Aurum MDP is fully accredited and meets the standards set by the South African Qualifications Authority (SAQA) for a qualification in General Management.

Quality Improvement Unit

The Aurum Institute Quality Improvement Unit, was awarded a \$10 million grant to support Operation Phuthuma, National Department of Health, HIV/AIDS and STI Cluster, by leading the QI work on behalf of Operation Phuthuma. This support includes designing and leading the implementation of a national nerve centre approach across all provinces in the country. The approach establishes nerve centres at all levels of government to enable them to be problem focused and improvement driven.

TB Local Organizational Network (LON)

Aurum was the sub-recipient to IRD under USAID supporting the Western Cape Provincial Department of Health, and the West Coast District, to optimise targeted TB active case finding and linkage to care, supporting all 5 sub-districts through Technical Assistance at provincial, district, sub-district, facility and community level. Data Quality Monitors conducted Data Quality Assessments

and capacitated M&E staff at all level, whilst Professional Nurses capacitated facility staff on DS-TB and DR-TB. Our roving teams supported outreach activities in farming and urban communities, as well as workplaces.

Global Fund

Aurum is the current sub recipient of the Global Fund NMF3 grant in 3 districts in South Africa; City Of Cape Town (WC), Frances Baard (NC) and eThekweni (KZN). The aim of the project is to find 154,348 missing people with TB by implementing Targeted Universal TB Testing (TUTT), Urine LAM, Expanded use of DCXR, and integrated screening through the following objectives:

1. Optimised TB Screening and Testing by improving the efficiency and reliability of screening among people attending health facilities and providing TB screening targeting TB hot spots.
2. Efficient Contact tracing of Index patients by using contact slips (Patient delivered screening model) to conduct contact management, using ward-based outreach teams.
3. Enhanced case detection among key populations by campaigns targeting people living with HIV, household contacts, children < 5years, pregnant women, diabetics, HCW and migrant workers including farm workers. Also, TB services target inmates, people living in informal settlements and peri-mining communities.

4. Improving diagnostic yield using new diagnostics and revised algorithms by implementing Gene-Xpert Ultra in all labs and Urine-Lipoarabinomannan (ULAM) to improve TB case detection among HIV positive patients.

Corporate Operations

The Corporate Operations Department of the Aurum Institute's Core Services Division manages a portfolio of projects and programs to support the company's growth and strategic intent. Its objective is to make a significant impact on operations by implementing policies, processes, and systems to reduce costs and improve operational efficiency.

The Corporate Operations Project team managed the Rustenburg CRS Renovations, Pretoria CRS HVAC project and numerous site closeouts and setups including the Durban Key Populations and Parktown Central Storage

Centre for ICT Assets. The Facilities Management team have managed renovation projects and preventative maintenance. The Security and Risk Management team has completed security site assessments and with the increase in crime statistics has set up an Aurum Trackbox Disaster Management team.

The Fleet Management team continues to show impact by reducing the risk in the insurance portfolio and the redirection of all traffic fines from Aurum's BRN. A saving of R1.16 million from January 2020 to December 2022 has been achieved through managed maintenance services. Site Operational support includes asset audits at all Aurum sites using handheld scanners and a proof of concept for RFID has been conducted at Rustenburg CRS. The Records Management team has effectively sorted, collated, indexed, scanned, shredded, and archived paper records with 3,796,930 paper records scanned and shredded. The Supply Chain Management team has set up a warehouse in Midrand to effectively reduce stock losses, wastage, and implement stronger supply chain management processes.









Aurum Global Projects

IMPAACT4TB

The original grant IMPAACT4TB 2017-2021, with no cost extension (NCE) 2021-2022: The goal of the IMPAACT4TB project is to reduce TB incidence and deaths among people living with HIV (PLHIV) (15-49) and child contacts through the sustainable implementation of affordable, quality-assured 3HP (weekly high dose rifapentine & isoniazid for 3 months). The outcome of the project is to increase the number of PLHIV and child contacts <5 years starting treatment with affordable, quality-assured 3HP and contribute to revising WHO preventive therapy management guidelines based on evidence generated.

The NCE was to recover the 12-month delay in both project implementation and research studies mainly caused by the COVID-19 pandemic and the nitrosamine impurity issue detected in June 2020. The project required a no-cost extension to achieve the direct and catalytic targets already determined for this award. During this period, the grant shifted to not explicitly focus on 3HP, but moved to look at all RPT-based formulations for Treatment of TB infection and disease.

By the end of the IMPAACT4TB project in August 2022, work on the market shaping aspects of the project had led to the emergence of two generic manufacturers of rifapentine, three formulations of rifapentine namely: 150mg singles, RPT/INH 300/300mg FDC and 300mg singles, and a major reduction in the cost of 3HP FDC from \$75 per patient course to \$14.25 per patient course.

This remarkable achievement paves the way for millions more people at risk of TB gaining access to TB preventive therapy in the years ahead.

We ordered and delivered 491,760 patient courses of 3HP and catalysed a further ~4 million patient courses in 59 additional countries, which is well beyond the minimum target of 400,000 patient courses stipulated in the project plan. Total 3HP uptake in IMPAACT4TB project sites by December 2022 was 37,792 ARV Treatment Naïve PLHIV; 123,000 Total PLHIV and 12,139 household contacts (HHC). Of the 12 countries that committed to rolling out 3HP from 2017, only Tanzania had not started implementation of 3HP because it only introduced 3HP into the TPT guidance update in 2021. Tanzania is now ready to implement 3HP for PLHIV and it will start implementation for household contacts in January 2024.

We have been awarded a costed extension from September 2022 to December 2024 to build on the momentum created by the IMPAACT4TB Consortium over the past five years, focusing specifically on evidence required to ensure that children and pregnant women, including those living with HIV, and household contacts have access to the latest TB prevention regimens. The additional funding will help identify the correct dosing and drug-to-drug interactions when children and pregnant women living with HIV take three months of weekly isoniazid and rifapentine—or 3HP—combined with dolutegravir (DTG) based Anti-Retroviral Therapy. The costed extension will fund three studies to help fill these evidence gaps: one in HIV positive pregnant women in South Africa who are on DTG based regimens (DOLPHIN MOMS); one in children living with HIV in South Africa who are taking DTG based regimens (DOLPHIN KIDS); and one comparing the use of 1HP to 3HP in South Africa, Mozambique, India and Indonesia (One to Three). The extension will fund global demand creation and market shaping for new formulations of rifapentine-based paediatric formulations.

Country programs ended operations in August 2022, after a successful closeout meeting in Nairobi in June 2022 where we discussed country successes and closeout plans for program sustainability.

IMPAACT4C19

Led by Aurum in a consortium with KNCV and TAG, the UNITAID-funded I4C19 Project is a sub-section of the IMPAACT4TB project. The project goal is to reduce COVID-19 deaths and the negative socio-economic impact of the pandemic by accelerating access to new COVID-19 diagnostic and treatment tools and test-to-treat services in five countries: Ethiopia, Ghana, Mozambique, the Philippines, and South Africa.

The strategy to achieve the grant objectives includes policy and regulatory support to health ministries, supply chain support with test-to-treat services, digital tools optimization, and community demand creation activities. The project has successfully supported countries in updating their policies and guidelines to include new therapies and diagnostic tools by providing the evidence base for review and uptake of tools through global and ongoing studies on the project.

As a result, all five countries have adopted Antigen Rapid Diagnostic (AgRDTs) for diagnosis, with three adopting self-tests into their testing policies. In addition, 4 of 5 countries have adopted recommended antivirals (nirmatrelvir/ ritonavir (Paxlovid) or molnupiravir) for treatment of non-severe COVID-19 in persons at risk into their policies and guidelines and developed outpatient algorithms to operationalize these policies.

The project has facilitated the delivery of 198,600 COVID-19 AgRDTs and partnered with other donors to deliver up to 14,000 treatment courses of antivirals for non-severe cases at risk; and 2,000 treatment courses treatment for severe COVID (1,000 Tocilizumab and 1,000 Baricitinib) to Mozambique and the Philippines respectively. Demand creation and advocacy led to improved testing and vaccination across countries and supply chain support to quantification and forecast volumes which have contributed to global negotiations to reduce the price of antivirals from \$85 – \$105 (variable pricing across LMICs) to \$25 (ex-factory) for generic alternatives.

However, the project experienced a shift in country commitments with the evolving COVID-19 epidemiology. With reduced severity, countries deprioritized their commitments to COVID-19 support. Additionally, delayed regulatory approval of antivirals by WHO and subsequently in countries, unanticipated global supply chain delays delayed implementation of the project's test and treat intervention. Research studies were also postponed due to lengthy regulatory approval processes. In June 2022, Aurum applied for and received a no-cost extension to implement outstanding activities and support the delivery of antivirals. However, the landscape continued to change, reducing the demand for antivirals across project countries.

The project-maintained relevance by adapting swiftly to the changing COVID-19 landscape. With the decline in changes, we supported countries to transition from emergency pandemic response to long-term COVID-19 management. In 2022, the project supported countries

in optimizing existing reporting systems that feed into country surveillance to detect surges or emerging variants. Supported countries in developing policies and guidelines that support decentralized care models and COVID-19 integration into routine care and existing infectious diseases programs such as TB and HIV programs by supporting bi-directional testing.

In Mozambique, we set up health posts linked to COVID-19 and TB referral sites for further care. In Ghana, leveraging TB mobile trucks to screen and refer suspected COVID-19 and HIV-positive cases to where they can receive care. In Ethiopia, the project supported extending services to the primary health care level. By supporting countries to implement decentralized care models and increasing access points to remote settings, we trained and provided job aids to healthcare workers in 160 healthcare facilities to provide COVID-19 screening, referral, and case management services. Demand creation activities supported to activate communities for testing and vaccinations to complement services, manage misinformation and disinformation and improve government buy-in. Demand creation activities were completed in January 2023.





08

Our people

Group Senior Leadership 5 Year Overview

2018



2019



2020



2021



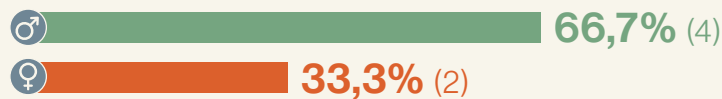
2022



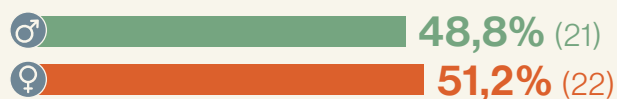
■ African
 ■ Coloured
 ■ Indian
 ■ White

Group Leadership: 2022

Executive Group



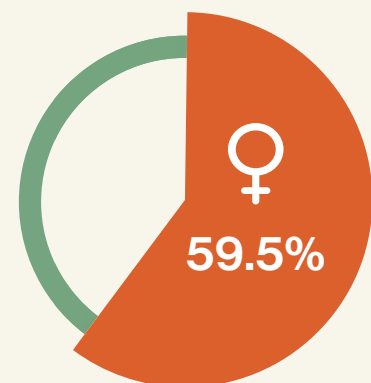
Senior Management



Middle Management



Females in Management



Our People



10

Professors in the Organisation



50

Medical Doctors



59,6%

Women in Senior and Professional Level Leadership Positions



13

PHD Qualifications



60%

Professional Nurses



2 452

Number Active Staff



7

PHD Students



14

Pharmacists



78%

Staff between the age of 18 and 40 years



47

Master's Degrees



2

Health Economists



832

YHA Successfully hosted during the course of 2022



16

Master's Degrees Students



4

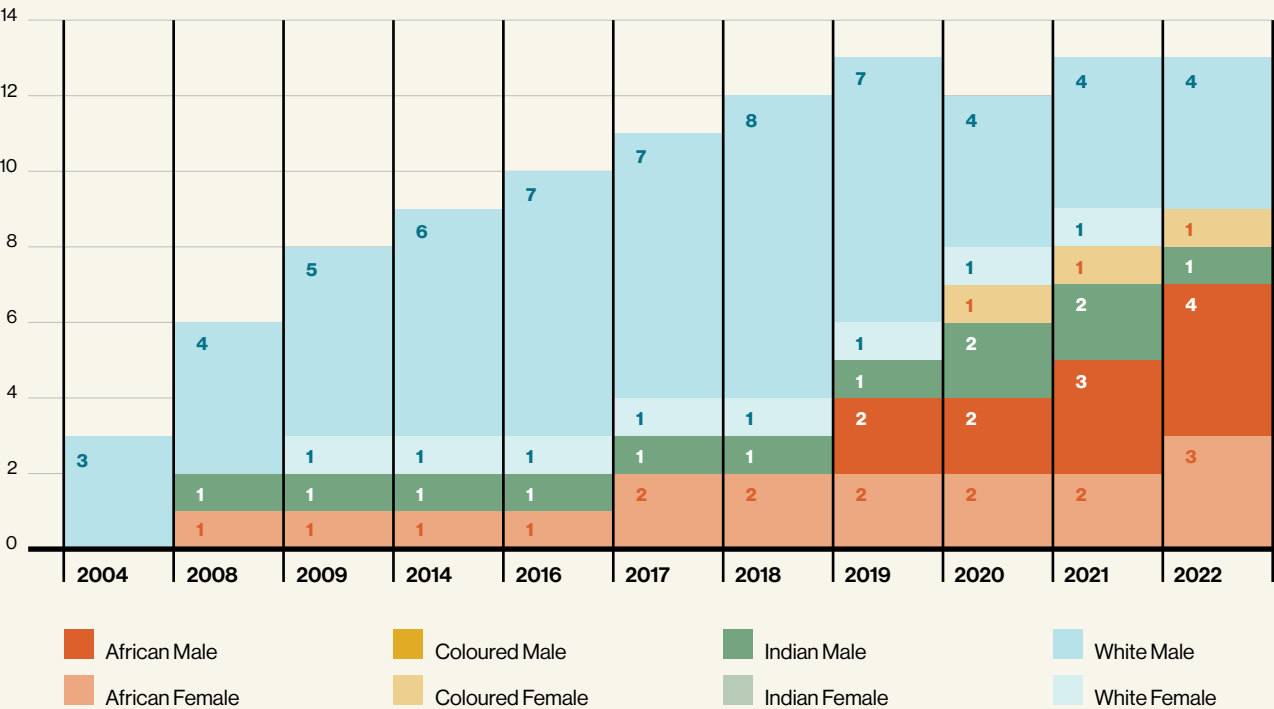
Doctorate Qualifications



Level 1

Achieved B-BBEE Accreditation

Aurum NPC Board: 2004 – 2022

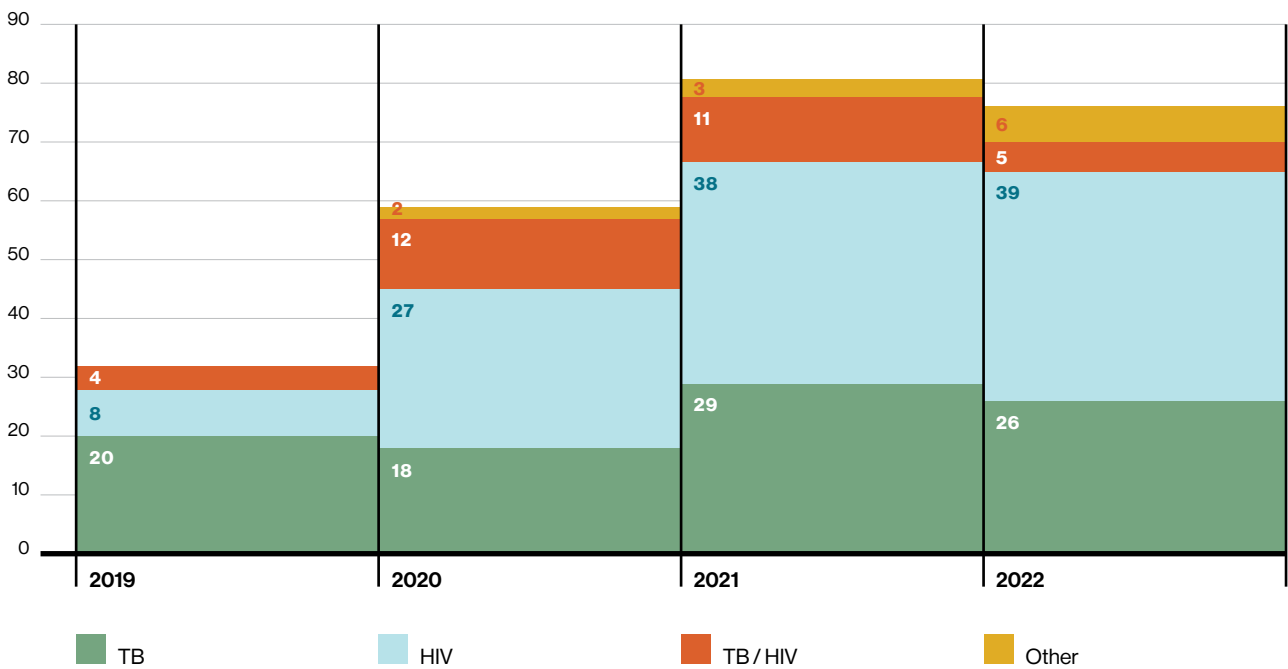


Composite Overview of Group Boards: 2022

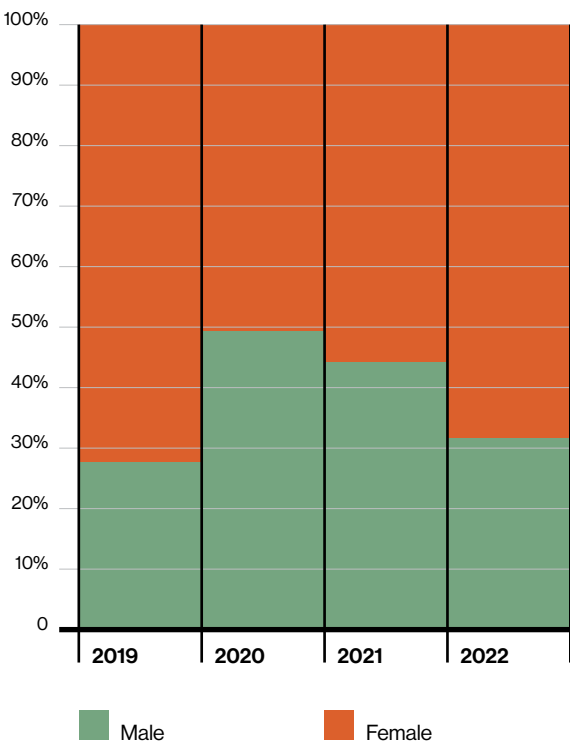
AFRICAN		INDIAN		COLOURED		WHITE		TOTAL		OVERALL TOTAL
Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
8	7	2	4	1	0	1	7	12	18	
								40%	60%	



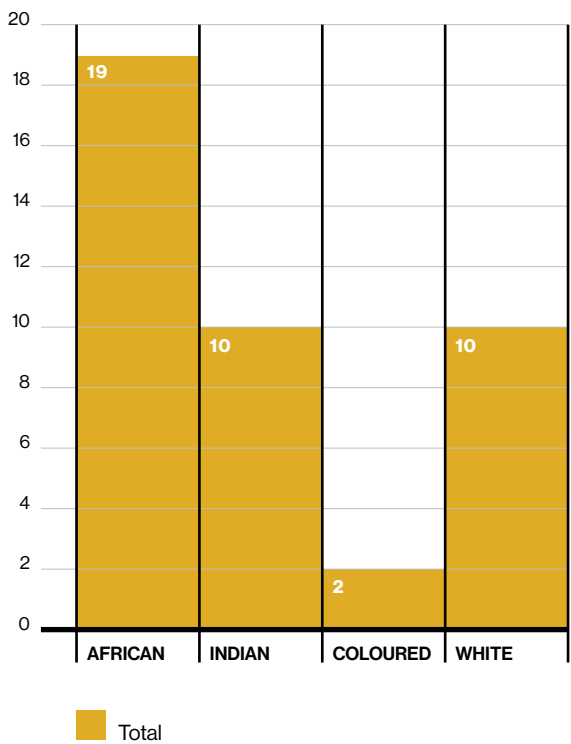
2022 Total Scientific Publications: 76



Author Gender %

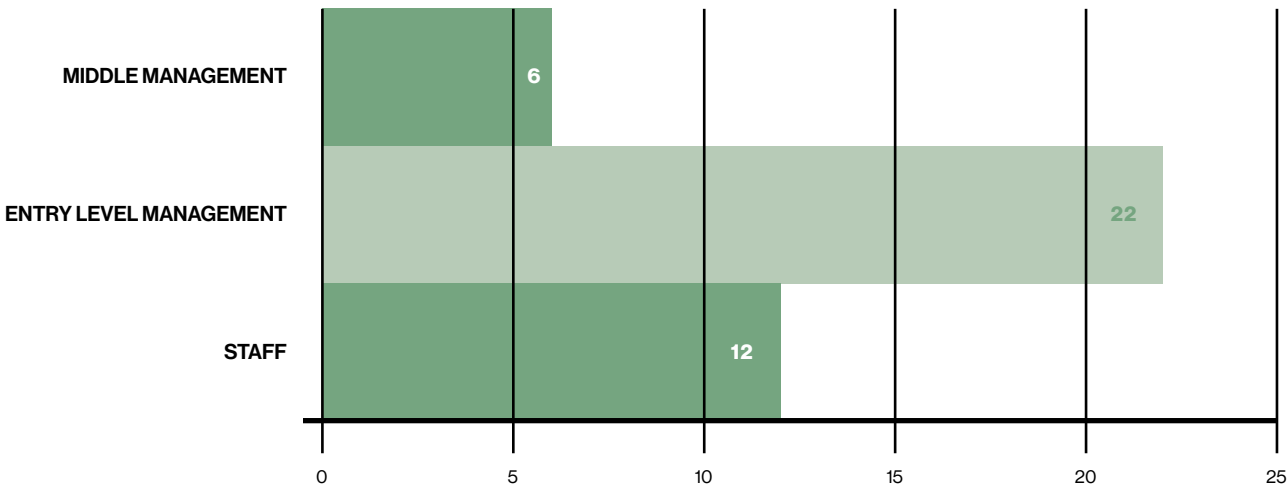


Authors by Race 2022 (n=41)



2022 Total In-Service Bursary Allocation: 40

Approved by Level





09

Partners and funders

Funders



International Collaborators



The Aurum Institute Ghana Collaborators



Fundação Aurum Collaborators



The Aurum Institute South Africa Collaborators





10

Abbreviations

2wT	Two-Way Texting
3HP	A short-course tuberculosis (TB) preventive treatment (TPT) combining two drugs, rifapen tine and isoniazid
Ag-RDTs	Self-Administered Antigen Rapid Diagnostic Tests
AGYW	Adolescent Girls And Young Women
AIG	Aurum Institute Ghana
AMR	Antimicrobial Resistance
ART	Antiretroviral Therapy
ARV	Antiretroviral
ASCENT	Adherence Support Coalition to End TB
BBBEE	Broad-based Black Economic Empowerment
BMGF	Bill and Melinda Gates Foundation
BOJ	Bojanala District
BRN	Bank Routing Number
CAT study	Choice Architecture-Based TB Preventive Therapy Prescribing (CAT)
CB-NAAT	Cartridge-based Nucleic Acid Amplification Testing
CEPI	Coalition for Epidemic Preparedness Innovations
CTU	Clinical Trials Unit
CXR	Chest X-Ray
DCXR	Dicarbonyl and L-xylulose Reductase
DKK	Dr Kenneth Kaunda District
DNA	Deoxyribonucleic Acid
DOH	Department of Health
DR TB	Drug-resistant TB
DS-TB	Drug-susceptible TB
FDC	Fixed-Dose Combination
FSW	Female Sex Workers
GHS	Ghana Health Service
HCT	HIV Counselling and Testing
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
ICT	Index Case Testing
IMPAACT4C19	Improving public health outcomes through enhancing accelerated access to care and treatment innovation for covid-19

IMPAACT4TB	Increasing Market and Public health outcomes through scaling up Affordable Access models of short Course preventive therapy for TB
LAM	Lipoarabinomannan
MDP	Management Development Programme
MoH	Minister of Health
MSM	Men Who Have Sex With Men
NACOSA	Networking HIV and AIDS Community of Southern Africa
NHLS	National Health Laboratory Service
NCD	Non-communicable Diseases
NIH	National Institutes of Health
NPC	Non-Profit Company
NTP	National Tuberculosis Programme
NWDOH	North West Department of Health
OST	Opioid Substitution Therapy
PCR	Polymerase Chain Reaction
PEPFAR	US President's Emergency Plan for Aids Relief
PHC	Primary Healthcare
PLHIV	People Living with HIV
PPE	Personal Protective Equipment
PrEP	Pre-Exposure Prophylaxis
PWUD	People Who Use Drugs
QI	Quality Improvement
RFID	Radio Frequency Identification
RNA	Ribonucleic Acid
SAHTAC	South African Health Technologies Advocacy Coalition
STI	Sexually Transmitted Infection
TB	Tuberculosis
TB MATE	A study is to implement and evaluate the use of an adherence monitoring system (using the Wisepill evriMED device) with a differentiated response to patient care, among drug-sensitive TB patients (DSTB) in South Africa.
TGW	Transgendered Women
TPT	TB Preventative Therapy
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization



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