



2021

ANNUAL REPORT

**Creating
a healthier
world for future
generations**



**THE AURUM
INSTITUTE**



**Aurum is
an African
organisation
advancing health
science and
innovation**

Vision

Creating a healthier world for future generations

Mission

Aurum generates evidence for policy and translates policy into practice to positively impact the health of communities globally

OUR FOOTPRINT



Aurum's headquarters are in Johannesburg South Africa, with a staff presence in the USA, as well as operations in Ghana and Mozambique.



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Message from the Board Chairperson **Ms Phangisile Mtshali**

I would characterise year 2021 as a year of adapting and building resilience at Aurum. We pivoted and seized opportunities brought by the COVID-19 crisis and its aftermath. We restructured and reorganised ourselves from our board to operational units, adapting to meet our planned growth. We paused, revaluated our organisation and adapted our structures so that we can better serve in our chosen health priorities and support our strategy for sustainability and survival. We deployed technology solutions with the launch of our ERP platform.

The board focused on managing the organisational risk agenda and ensuring we do not compromise organisational values, ethical behaviour, and good governance practices.

When the music changes so does the dance (African proverb)

The next step in our evolution is a critical look at where to invest our expertise and efforts in the next two decades to remain a high impact organisation by addressing prominent health issues.

We want to ensure that we prevail and remain vigilant to prevent and help address new health problems as they emerge and old ones as they become urgent threats. It is our response to adverse situations and not adversity itself, that will determine our survival to serve generations to come as envisaged in our 100-year vision.

I express my appreciation to our board of directors and executives for demonstrating resilience and steering our organisation to adapt in our unpredictable business and funding environment. To our staff for showing up and giving their all, even in difficult circumstances. To our stakeholders, partners, and beneficiaries we recommit to deliver high impact interventions to improve the health status of future generations.



We have a 100-year vision thus it is imperative for us to be constantly aware that if we do not adapt to changes in our environment, we will die.

A handwritten signature in black ink, appearing to read 'Phangisile Mtshali'.

**Board Chairperson
Ms Phangisile Mtshali**

> Board



Ms Phangisile Mtshali
Chairperson



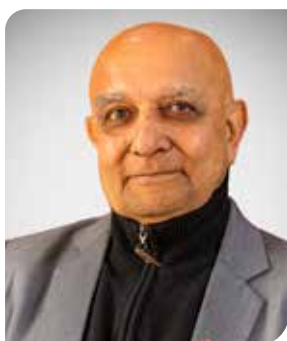
Prof Gavin Churchyard
Group Chief Executive Officer



Dr Dave Clark
Group Chief Operating Officer



Mr Yaw Peprah
Non-Executive Director



Prof Yosuf Veriava
Non-Executive Director



Mr Nigel Unwin
Non-Executive Director



Mr Arshad Hassim
Group Chief Financial Officer



Ms Christine McDonald
Non-Executive Director



Mr Gary Tamblyn
Non-Executive Director



Ms Paula Fray
Non-Executive Director



Dr Jerry Gule
Non-Executive Director



Prof Pontiano Kaleebu
Non-Executive Director



Message from the
Group Chief Executive Officer
Prof Gavin Churchyard

The Aurum Institute is a proudly African based organisation with a vision to create a healthier world for generations to come. 2021 was a foundational year that will underpin our vision of improving health, today and tomorrow.

If you want to go far, go together (African proverb)

2021 marked the end of the Aurum strategic plan: 2017-2021 (Figure 2). During this period, we pursued a strategy of global diversification. It became evident that our existing structure would not support sustainable growth, so we completed a process of restructuring Aurum. We established an Aurum Group leadership structure, setting out clear accountabilities for the key functions of a global organisation. The global leadership team is seen in Figure 1. An Aurum Covenant of Partnership, By-laws, and Code of Conduct was developed to align country operations and affiliate companies with Aurum's vision and mission. The Covenant defines who Aurum is, how we work together, and will ensure that we go far by going together.

Partnerships are essential to creating healthier communities. We learnt the importance of maintaining strong relationships with key stakeholders, including ministries of health, funders, collaborating institutions and implementing partners.

The chameleon changes colour to match the earth, the earth doesn't change colour to match the chameleon (Senegalese proverb)

Like the chameleon, we had to learn how to adapt to various challenges this year. COVID-19 continued to affect our operations and, tragically, 11 of our staff have died of COVID-19. Despite the personal and organisational challenges, our staff continued to provide quality services to the communities we serve.



Although we were successful in renewing our PEPFAR care and treatment grant, sadly we learnt that we would no longer be the implementing partner in Ekurhuleni. This meant that we had to go through the painful process of right-sizing the organisation. I sincerely thank the staff who were affected by this process. They can all be immensely proud of their legacy, which will serve as a solid foundation for us to continue to build upon.

Prepare now for the solutions of tomorrow (Congolese Proverb)

We painstakingly developed a business investment strategy as a foundation for the overall organisational strategic plan for 2022-2027. The business investment plan provides guidance for investment decisions regarding priority donors, disease areas, new country expansion, and other supporting services required to propel Aurum into its next phase of growth and diversification. This process was ably supported by a dynamic team from Mann Global Consulting. We also initiated development of our Aurum Group Strategic Plan:

Message from the Group Chief Executive Officer **Prof Gavin Churchyard**

2022-2027 that will enable us to become a truly African based, but assuredly global, health impact organisation.

Robust financial systems are required to manage our large current portfolio of 93 grants and support sustained growth. In 2021 we implemented an enterprise resource planning (ERP) system (Microsoft Dynamics 365) with support from Altron Karabina. My sincere thanks go to the many people who worked tirelessly to ensure we have a functional and powerful ERP system to support our decision-making, strengthen our accountability to funders, and make us more efficient going forward.

As a South African-based organisation, Aurum understands the imperatives of diversity and broad-based black economic empowerment (BBBEE) as set out in the legislation of the South African government. The degree of transformation in an organisation is assessed and rated from low (a score of level 9) to high (a score of level 1). We are proud that Aurum achieved a level 1 rating for the second consecutive year, highlighting our commitment to transformation.

He who does not seize opportunity today, will be unable to seize tomorrow's opportunity (Somali proverb)

Aurum seized numerous opportunities during 2021 to improve the health of the communities we serve. COVID-19 brought with it various high-impact research and health programme opportunities that our teams will build on to propel our growth. Aurum prides itself on conducting investigator-initiated and -led research with the aim of advancing science, informing policy, changing practice, and contributing to impact on public health.

Aurum met its ambitious target of publishing 80 international peer-reviewed papers (our highest ever) and presenting at numerous international conferences. In 2021, the World Health Organisation (WHO) published its guidelines and handbook on TB screening, which

cited numerous Aurum publications. In recognition of Aurum's scientific contributions, six people received adjunct appointments at Vanderbilt University. They are an inspiration to us all.

Glory does not come by calling (Kenyan proverb)

Achieving "glory" does not come without commitment, perseverance, and hard work. The newly established Business Development Unit submitted 100 grants during 2021. We were thrilled to be awarded two grants that will contribute to public health impact. The IMPAACT4C19 grant, funded by UNITAID, aims to support the adoption and uptake of new diagnostic approaches and therapies for outpatient management of COVID-19 in low- and middle-income African countries. Aurum, through the TB LON project, is providing technical and clinical support to the South African National Department of Health (NDoH) to strengthen both the drug-susceptible and drug-resistant TB programmes and to effectively deliver on the NDoH TB diagnostics, surveillance and programmatic agenda. The Aurum team was also selected to support the Western Cape Province government initiative between US and South Africa.

Aurum Innova, an Aurum affiliate company, managed to turn its operations around and become profitable in 2021. Well done to the Innova team. The team at Youth Health Africa (YHA) continues to find innovative ways to create opportunities for young people to be employable and employed. They broadened its revenue and service bases beyond the Aurum Group and are even lining up to take their concept of youth empowerment into the continent of Africa. We wish them every success and hope that they will soon be headed to glory.

We should put out a fire while it is still small (Kenyan proverb)

With treatment or vaccines to prevent disease, we can put out fires while they are still small. The IMPAACT4TB

programme was spectacularly successful in catalysing the global scale up of short-course TB preventive treatment with two antibiotics taken weekly for 3 months (3HP). By catalysing scale up of 3HP we substantially contributed to averting TB cases and preventing deaths in the 12 high-burden countries in which we work, and globally. Concurrently, the prices of the drugs needed for this form of TB prevention were radically reduced.

The Aurum team contributed substantially to evaluating COVID-19 vaccines and supporting the national COVID-19 vaccine roll-out by administering >150,000 COVID-19 vaccines in 2021.

**“Part of being optimistic is keeping one’s head pointed towards the sun, one’s feet moving forward.”
Nelson Mandela**

Kofi Annan, a proud son of Africa and remarkable humanitarian once said, “I am a stubborn optimist, I was born an optimist and will remain an optimist.” I, too, am an optimist, and I am eager to start the next phase of our journey towards becoming a locally responsive organisation doing globally relevant work. I fervently believe that Aurum’s vision is “pointed” in the right direction. I am confident that we will achieve our vision through the efforts of Aurum’s industrious teams as they keep “moving forward” with the intent of creating a legacy of a healthier world today, and for generations to come.


Group Chief Executive Officer
Prof Gavin Churchyard

Group Executive Leadership

Figure 1.



Prof Gavin Churchyard
Group Chief Executive Officer



Prof Dave Clark
Group Chief Operating Officer



Mr Arshad Hassim
Group Chief Financial Officer



Prof Salome Charalambous
Group Chief Science Officer



Mr Michael McMillan
Group Chief HR Officer



Prof Regina Osih
Group Chief Global Health Officer



Ms Karin Kanewske Turner
Group Chief Growth Officer

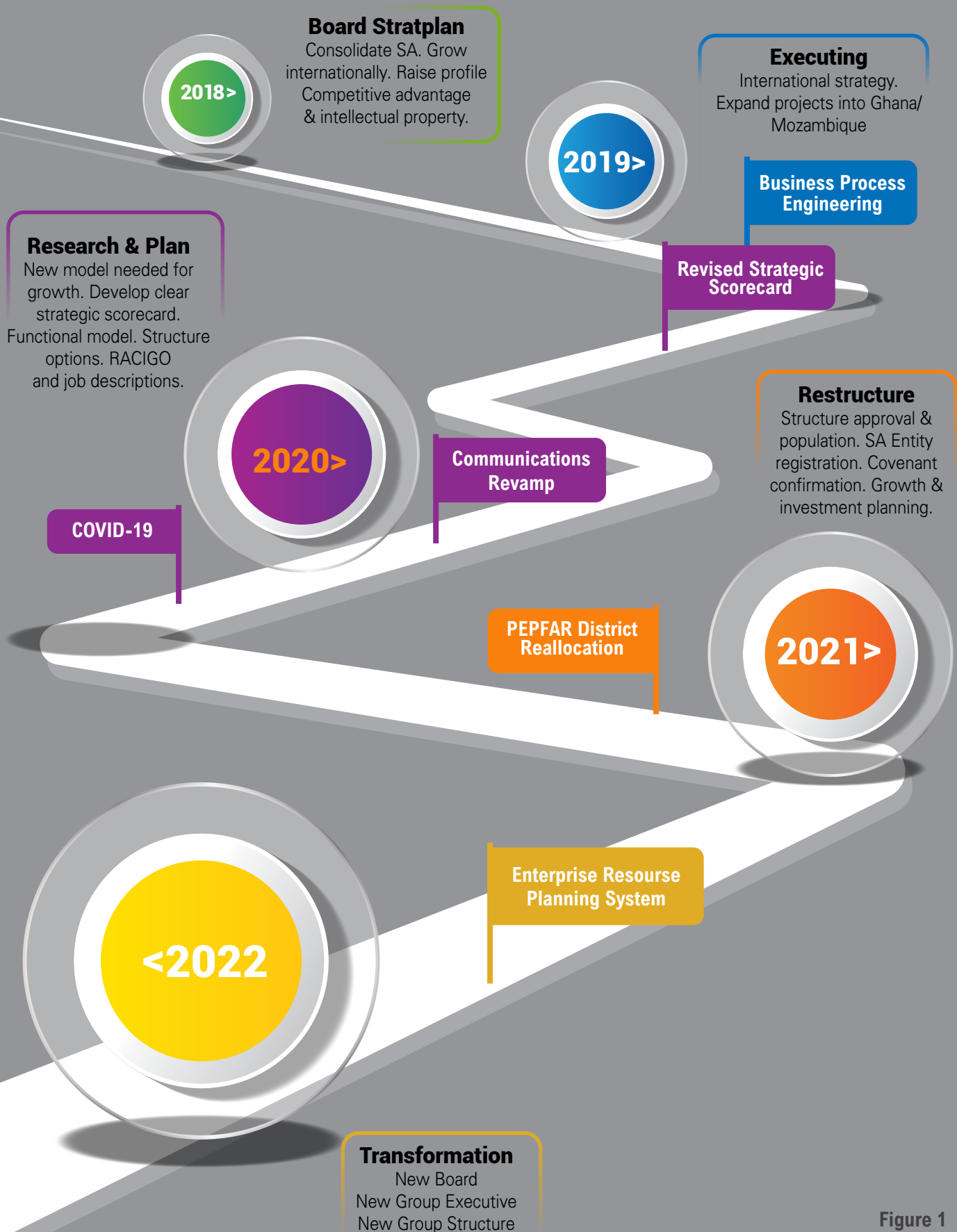


Figure 1



> Covid-19



172 348
COVID vaccinations
administered through
various sources of funding



Actively executing
12 Clinical Trials
to assist in finding a new
vaccine and or treatment
for COVID-19



1 011 000
educational material on
COVID-19 distributed
in Ghana



Assisted the national vaccine programme
with storage for **151 710** vials of Pfizer
vaccine at our research facilities in the
North West, South Africa, representing
888 670 doses of vaccine



The Aurum Institute contributed to improving knowledge
and delivering COVID-related services in various ways:



3 519 COVID-19 diagnostic
tests conducted at Aurum's labs in
support of the national response
in SA



Installed **256** Shesha Geza Washbasins
to provide an innovative solution for
improved hygiene and hand sanitation at
health centers in South Africa

> 2021 HIGHLIGHTS

Gita Ramjee Prize

The Aurum Institute, in collaboration with the International AIDS Society, created the inaugural Gita Ramjee Prize in honour of Aurum's late Chief Scientific Officer Prof Gita Ramjee.

The prize will be presented at every HIV Research for Prevention Conference (HIVR4P). It recognises leading female scientists in the field of HIV prevention research who demonstrate the principles and practices that Prof Ramjee embodied in her life and career. She was committed to uplifting disadvantaged communities, promoting gender transformation, and generating solid evidence in her field.



In January 2021, Dr Nelly Mugo became the first recipient of this prize. Mugo is the Senior Principal Clinical Research Scientist at the Kenya Medical Research Institute (KEMRI) and a Research Associate Professor at the Department of Global Health in the University of Washington, USA.

Aurum at the 11th IAS Conference on HIV Science

Aurum experts presented at the 11th International AIDS Society (IAS) Conference in July 2021. Prof Gavin Churchyard presented on the current state of the TB/ HIV epidemic in a symposium on advances in TB and HIV diagnostics and treatment.

Dr Tonderai Mabuto, Aurum Director: HIV Research, presented an abstract on the uptake of a rapid HIV point-of-care diagnostic test to increase the reach of HIV testing services in public sector clinics in South Africa.

Dr Pearl Selepe, Klerksdorp Clinical Research Site Leader, and Marthinette Taljaard, Quality Assurance Head of Department, co-authored an abstract with Dr Nelly Mugo, titled "HPV increases HIV risk in African women: advancing the argument for HPV immunization".



Aurum Clinical Research conducted
COVID-19 studies with more than
40 000 participants

> Aurum 2021 highlights

Aurum receives part of US\$ 50 million FIND and Unitaid COVID-19 grant

The Aurum Institute, with partner KNCV, was awarded a portion of a US\$50 million grant to quickly deliver new end-to-end strategies that will accelerate and enhance improved access to COVID-19 diagnostics and treatment, while continuing to build capacity for test-trace-isolate and treatment efforts to contain the ongoing spread of the virus.

FIND and UNITAID made the funding available to address inequities in access to COVID-19 testing and treatment, supporting early adoption of comprehensive care packages in low- and middle-income countries across Africa, Southeast Asia, Latin America, and the Western Pacific.



Aurum hosts Deputy Minister in the Presidency

About a year after the March 2020 confirmation of the first case of COVID-19 in South Africa, the country started vaccinating health workers in the first phase of the national vaccine roll-out. Aurum supported the North-West province roll-out, with staff seconded to vaccinating hospitals. As custodians of vaccine doses, Aurum was responsible for managing the cold chain, injection preparation, and accounting for every dose.

The Aurum Clinical Research sites in Klerksdorp, Tembisa, Rustenburg and Pretoria conducted seven COVID-19 studies with more than 40 000 participants. These sites were also part of the Sisonke vaccine roll-out.

IMPAACT4C19

In 2021 Aurum was asked to propose interventions to address the lack of access to key commodities to manage the COVID-19 pandemic in lower and middle income settings. Aurum partnered with KNCV to propose a 12 month project that would gain key insights through research on the use of novel diagnostics such as self-tests as well as drive the uptake of essential new drugs needed in the fight against COVID-19.

The IMPAACT4C19 (Improving Public Health Outcomes through Enhancing Accelerated Access to Care and Treatment Innovation for COVID-19) project was approved for US\$8.3 million and started in September 2021. Aurum is implementing this project in Ghana, Mozambique and South Africa, and KNCV is implementing in Ethiopia and the Philippines. Through this additional stream of funding from UNITAID, Aurum will play a key role in clarifying the evidence, pathways and processes to ensure access to essential diagnostics and therapeutics.

➤ Aurum 2021 highlights

Aurum MD appointed at UNISA

Professor Geoffrey Setswe, Managing Director: Implementation Research Division (IRD), was appointed as a Professorial Research Fellow at the University of South Africa (UNISA). Prof Setswe's role in the university's Department of Health Studies includes improving research capacity by supervising PhD candidates and contributing to research publications. He has previously supervised or co-supervised 45 completed Masters' and Doctoral degrees in public health and health sciences and has more than 70 publications.



Aurum at 52nd Union World Conference on Lung Health

In October, eight Aurum experts presented the latest research on various projects at the virtual 52nd Union World Conference on Lung Health, which was themed. "Lung Health for All: Solutions for a New Era".

Aurum's technical presence included symposium presentations by Prof Gavin Churchyard on the role of TB preventive therapy on eliminating TB and an introduction of the CUT TB trial by Prof Salome Charalambous. There was also a symposium by the Aurum-led IMPAACT for TB project titled "The ABC's on Scaling up 3HP in Children".

Oral presentations were made by Prof Violet Chihota, Chief Specialist Scientist, Prof Robert Wallis, Chief Scientific Officer: Host Directed Therapy, and Farzana Sathar, Junior Research Manager.

Prof Charalambous, Health Economist Rachel Mukora, and Fundação Aurum (Mozambique) Country Director Prof Emilio Valverde also presented e-posters with Dr Matsie Mphahlele, Senior Technical Advisor, co-moderating an oral abstract session on TB: transmission to treatment.

Aurum at 6th International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA)

The Aurum Institute, in partnership with WHO, hosted a high-level round table discussion on the Status of TB Prevention in Southern Africa at the 6th International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA). The conference was held virtually in December 2021 under the theme "Africa's AIDS response: The race to 2030 – Evidence. Scale Up. Accelerate."

As Secretariat of the South African Health Technologies Advocacy Coalition (SAHTAC), Aurum in collaboration with Amref Health Africa, Coalition for Health Research and Development (CHReAD), and Advocates for the Prevention of HIV in Africa (APHA) hosted a breakfast meeting on the sidelines of ICASA. Discussions were held on assessing the state of domestic funding in health research and development in Africa. Panelists interrogated the importance of investing in health to improve quality of health by ensuring that innovative health technologies reach the most vulnerable.

The logo for ICASA 2021. The letters "ICASA" are in a bold, green, sans-serif font. A multi-colored ribbon (red, white, blue, green) is tied in a bow around the letter "A". The year "2021" is in the same green font to the right of "ICASA".

In 2021, Aurum's HIV support programme through PEPFAR in South Africa continued to provide life-saving services to persons living with HIV:

The HSD supported the Department of Health with implementing HIV and TB programmes in **4** of the **27** priority districts during 2021: Ekurhuleni (GP), Bojanala, Dr KK and NMM (NW) - collectively a population of **7 500 000**



2 466 716 people were tested for HIV in the North West (Dr KK, Bojanala and NMM) and Gauteng provinces, allowing them to take appropriate action for treatment or prevention



43 311 persons received medical male circumcision services, allowing them to reduce their risk for HIV by 65%



200 000 INSTE HIV Test Kits distributed by Innova

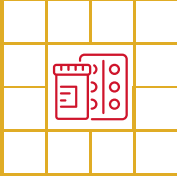


Aurum facilitated **62 586** new persons on life-saving antiretrovirals



Aurum's programme supports **577 000** people on antiretroviral treatment in four districts of South Africa

Aurum facilitated patient-centered care through the continued development of innovative methods for medication delivery:



116 167
parcels were
collected
through Peleboxes
in 2021



80 329 medication
parcels delivered to clients'
homes, allowing patient-
centered care in the face of
the COVID-19 pandemic to be
scaled up



354 000 people received
their medications outside of
regular patient queues (health
facility fast queues, adherence
clubs, F-PUPs) in Ekurhuleni
and the North West (Dr KK,
Bojanala and NMM)

Through our HIV interventions we were able to reach Key Populations

Jan 21 - Dec 21

15 777
people
received
PrEP



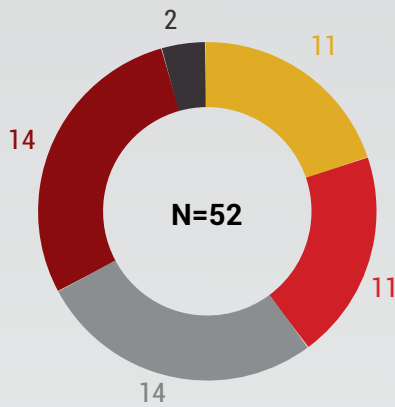
55 601
people were
reached for
HIV prevention
interventions



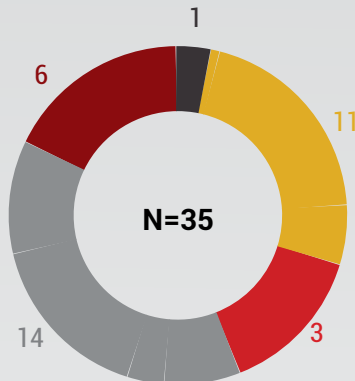
1 991 people
are still on PrEP



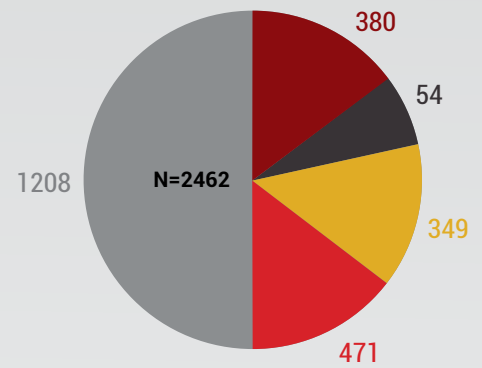
Number of current trials



Number of planned trials



Participants in active trials in 2021 by Clinical Research Site



 Rustenburg  Tembisa  Klerksdorp  Pretoria  Durban



RUSTENBURG

N=11 Current Trials/Studies (349ppts)
HIV Vaccines = 1 trial
PrEP = 2 trials
TB Treatment = 1 trial
TB Prevention = 1 trial
COVID-19 Vaccines = 3 trials
COVID-19 Natural history = 1 study
COVID-19 Treatment = 2 trials



PRETORIA

N=7 Current Trials/Studies (380ppts)
PrEP = 1 trial
TB Treatment = 2 trials
RSV = 1 study
COVID-19 vaccines = 3 trials
(7 trials transferred from Vx Pharma)



TEMBISA

CLINIC 1&2

N=7 Current Trials/Studies (213ppts)
PrEP = 1 trial
TB Vaccines = 1 trial
TB Treatment = 2 trials
TB Prevention = 1 trial
TB Natural history = 1 study
COVID-19 Treatment = 1 trial



CLINIC 3&4

N=7 Current Trials/Studies (995ppts)
HIV Vaccines = 1 trial
RSV = 1 trial
COVID-19 Prevention = 1 trial
COVID-19 Vaccines = 3 trials
COVID-19 Natural history = 1 study



KLERKSDORP

N=11 Current Trials/Studies (471ppts)
HIV Vaccines = 2 trials
PrEP = 2 trials
TB Vaccines = 2 trials
COVID-19 Vaccines = 3 trials
COVID-19 Natural history = 1 study
COVID-19 Treatment = 1 trial



DURBAN

Non-Aurum Site using Aurum Staff
N=2 Current Trials/Studies (54ppts)
STI = 1 trial
HIV Treatment = 1 trial

Key outputs 2021

Our Implementation Research Division produced **12** TB research projects, **6** HIV research projects and **2** COVID-19 research projects



Raised
R66 500 000
in research funds



Changed organogram
to emphasise scientific/
research roles for all
research staff



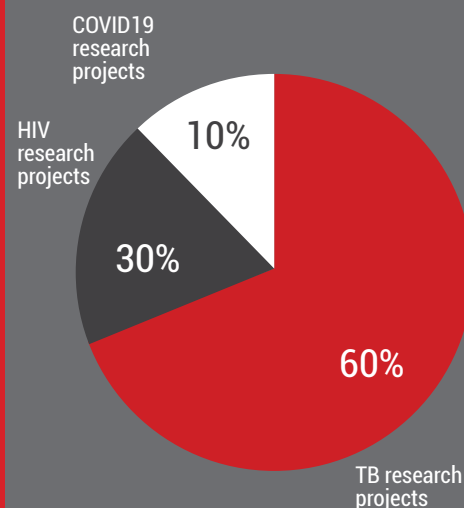
Ensured that **90%**
of staff are funded
by projects



Produced **40** peer
reviewed publications



Increased **staff capacity** for
research, data management,
analysis and publications



390
People trained
on OP new
Nerve Centre
Approach





ACHIEVEMENTS AND REMAINING GAPS TO DATE:

Impact:

The price of 3HP was substantially reduced

Gap:

Currently \$15 per patient-course but could it go lower?

Two generic manufacturers entering the RPT market with a RPT/INH 300/300mg Fixed-Dose Combination formulation and a RPT 300mg Single Film-Coated Tablet

Catalysing a strong global demand for 3HP, which is creating a favourable environment for adding manufacturing capacity.



TB

Aurum continued to lead in the TB space through various initiatives:



5 060

Household contacts initiating 3HP



9 000

medical examinations conducted for miners for TB/ Silicosis in South Africa



46 334

PLHIV initiated on 3HP



12 000

chest X-Rays completed in South Africa

We continued to explore innovative case finding strategies through collaboration with the private sector in Mozambique:



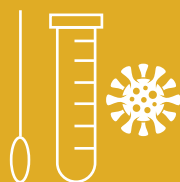
47 health professionals and **96** traditional healers trained on procedures to refer TB presumptive patients to the public sector



1 000 000 brochures and more than 6 000 posters were distributed to all provincial health authorities



More than **11 000** patients started 3HP in Maputo and Chókwè and Mandlakazi in the Gaza province



Aurum implemented rapid **COVID-19** testing in the communities, collaborating with the National Institute of Health and the Maputo City Council

PROJECT PROGRESS AND IMPACT

Total 3HP
Patient Courses
Received in
country @Dec 21
> 4 741

3HP Medications Arrival



Q1

Patient Enrolment



Q2

Total Patients
Enrolled onto
3HP as @Dec 21
> 5 060
(PLHV-4 934 &
HHC - 126)

Evaluation Patient
Level Data
Captured
into REDCap
> All qualified
enrolled clients
(Apr-Aug, 21)

Q3



Evaluation Phase 2

Q4



Evaluation Phase 1

Evaluation Sites
Enrolment
@Dec 21
> 1 967
(SMDH-870
& ENRH-1 097)

RESULTS

AURUM IN THE MEDIA

Between January 2020 and December 2021, Aurum had **609 news** features in print, broadcast and online media in **13 countries**. This coverage translated into a circulation of well over **750 million**.



7 240 309

Reach on the website and social media pages



42 730 @AurumInstitute
followers on Facebook, Twitter,
LinkedIn, Instagram and YouTube



PEOPLE FACTS



9
PhD Qualifications

81%

Staff between the age
of **18** and **40** Years

40

32 Medical Doctors
8 Locums



207 Professional nurses
66 Locums



8
Doctors in other fields



68 Master's Degrees



12 Professors in
the Organisation



2
Health Economists



22
Pharmacists



Level 1 B-BBEE
Accreditation



Youth Health Africa
Successfully hosted
1 785 Unemployed Youths
Aurum sponsored **191** Youths



3 181
Aurum's Active
Employees



70%
Women in Senior &
Professional Positions



THE AURUM
INSTITUTE

2021

ANNUAL REPORT

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