MISSION AND VISION

PATRONS
Archbishop Emeritus Desmond Tutu and Mrs Leah Tutu

VISION
To lessen the impact of the HIV epidemic on individuals, families and communities through our commitment to excellence innovation and passion for humanity.

MISSION
The Desmond Tutu HIV Foundation pursues excellence in research, treatment, training and prevention of HIV and related infections.
VALUES

Integrity
truthfulness, fairness, and commitment to the task

Passion
generosity, enthusiasm, concern for the needs of others

Respect
the dignity of all and the right to personal choice

Innovation
new ideas, views and opinions

Excellence
commit to do your best, set goals and meet them

Progress
bring about change, learn and grow
BOARD OF DIRECTORS

Zohra Ebrahim (Chair)  Professor Robin Wood
Peter Grant  Thandeka Tutu Gxashe
Professor Linda-Gail Bekker  Mpho Ndebele
Dr Marilet Sienaert  Charles Abrahams

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This is an exciting time to be involved in HIV research. In the last decade the death rates associated with the HIV epidemic have been reversed. New infection rates of HIV are still very high in South Africa with seven million people living with HIV. We can boast that we have more people on treatment than any other country and that mother to child transmission of HIV has almost been eliminated. The hard work and commitment of many has led to this encouraging result. HIV can now be managed like many other chronic illnesses. Medical science has made giant strides and we are proud that the DTHF has made a substantial contribution; however, with almost 2 million new infections last year the Epidemic is far from over. We have won some critical battles, but we have not won the war.

As Africa still bears the brunt of the Epidemic, it is fitting that an African should take a leading role in the HIV endeavour. We are proud that Deputy Director of the DTHC/Chief Operations Officer of the DTHF Professor Linda-Gail Bekker has been elected to the Presidency of the International AIDS Society (IAS). She assumed this office at the IAS Conference in Durban in 2016. The conference brought together some 18 000 delegates from across the world. The clear message from this international gathering was the need to focus on young people worldwide and to continue to find new solutions for global access. Around the world, HIV infection is flourishing in young people and deaths from HIV are most prevalent.

Over the past three years the DTHF has been privileged to participate in a number of studies that have led to the transformation of HIV treatment and the availability of new tools to protect individuals from HIV infection. An important change has been that the CD4 count of a person is no longer an issue when initiating patients on antiretroviral...
therapy (ART). It has been proven that those who test positive for HIV will do better if they begin taking ART before their immune system is challenged by the virus. Initiating ART early also improves life expectancy which is now virtually the same as for those who are not infected with HIV. We are supportive of the Prevention Access innovative awareness campaign U=U. If the virus is undetectable it is untransmittable. We have come a long way.

More options when taking ART! In place of a handful of pills, the patient is required to take only one pill a day and taking ART has the enormous benefit of preventing HIV transmission if the person’s viral load is fully suppressed. Gender imbalance in our society leaves women at risk, often unable to negotiate the use of condoms. Urgent work continues on finding tools whereby women can protect themselves from infection without their partner’s knowledge. DTHF’s participation in the Ring Study and Aspire to test the efficacy of a vaginal ring to prevent HIV is an important contribution to this challenge.

DTHF continues to participate in a number of important demonstration projects of Pre-Exposure Prophylaxis (PrEP) in both our key populations and adolescent work. PrEP has the potential to change the prevention landscape, but understanding how people can adopt PrEP into their lives is work that continues to unfold. Taking PrEP regularly if you are HIV-negative and at high risk of HIV infection has been shown to protect individuals from infection, much like contraception to prevent pregnancy. In South Africa PrEP has been approved by the MCC and the question is how widely should PrEP be made available to the public at large. DTHF is grappling with the social, clinical and economic implications that surround this decision.

Physical space for our work has always been a challenge. The Masiphumelele Research Site is bursting at the seams and the TB aerobiology lab is in need of larger premises. In Gugulethu the work is continuing most successfully in an innovative group of containers. The new development of Philippi Village behind the Philippi shopping hub has been a game-changer. Our mobile units are now in a secure space within the Philippi Village precinct and we have taken floor space on three levels to accommodate various projects. The largest and most exciting of these is Zimele, a partnership between the DTHF, the Western Province Department of Health and The Global Fund to Fight AIDS, Tuberculosis and Malaria. The two year project is a unique multi-dimensional health and social intervention programme. It was initiated in January 2017 and will reach out to 20 000 young people in the Klipfontein/Mitchell’s Plain sub-district.

The DTHF has always subscribed to the values of Passion, Innovation, and Progress. Becoming a larger family has caused us to review the values and include others - Integrity, Respect and Excellence. Much time and effort went into the translation and communication of these concepts across our sites so everyone has an understanding of our goals and how we can achieve them together.

Most critical to our success is the combined efforts of an industrious and passionate workforce. We continue to be most fortunate to lead this awesome “A” team! Secondly, we continue to value and nurture our deep and lasting relationships with communities and beneficiaries. The people we serve come first!

Recognition of our efforts has come at the close of the financial year. On 11th February 2017 the DTHF received the UBUNTU Award for Social Responsibility at the annual prize giving. We thank our donors and those who have supported our work over the years, and especially our staff and participants who have contributed so much to global knowledge and understanding of HIV and TB. This prestigious award is a tribute to you all. God bless you.
Established by Professor Robin Wood in 2004, the Desmond Tutu HIV Centre (DTHC) is an accredited research centre within the Faculty of Health Sciences, University of Cape Town. The Desmond Tutu HIV Foundation, a Section 21 not-for-profit company, is affiliated to the DTHC. It is focused on the community development and support aspects of these research endeavours.

Inspired by our patron, Archbishop Emeritus Desmond Tutu, we seek to find solutions to the twin epidemics of HIV and TB. Our facilities have expanded from our first site in Gugulethu to include research centres in New Crossroads, Masiphumelele, J52 Old Groote Schuur Hospital and, most recently, Philippi Village. Two mobile units, the Tutu Tester and the Tutu Teen Truck take wellness and testing services to under-resourced communities. We strive to be an Adolescent Centre of Excellence and are proud of our custom-built Youth Centre that provides youth-friendly sexual and reproductive health services alongside development and recreation programmes.

An international leader in clinical research some of our firsts include delivery of antiretroviral treatment to primary health care communities, mobile health screening and testing, cutting edge drugs, vaccine candidates, and new HIV prevention technologies.
IN APPRECIATION

OUR PATRONS
We thank Archbishop Emeritus Desmond Tutu and his wife, Mrs Leah Tutu, for their continued support for our work. It is a privilege and honour to bear the Archbishop’s name. It means a great deal to our staff who are proud to work for ‘Desmond Tutu’. The Tutu name has also enabled us to build trust more rapidly among the communities where our sites are located and to attract donors.

OUR BOARD
We appreciate the time and expertise given by the members of our board to the affairs of the DTHF. We welcome Charles Abrahams, a well known human rights lawyer, who joined the board in 2014, and Dr Marilet Sinnaert, Director of Research University of Cape Town, who represents UCT. It is a requirement that UCT be represented at our board meetings.

VOLUNTEERS, INTERNS AND POSTGRADUATE STUDENTS AND POSTDOCTORAL FELLOWS
The work of the DTHF has been enhanced immeasurably by the contributions of many unpaid hard working individuals. Usually volunteers come to us for a period of three months. Interns may be with us longer and receive hands-on experience that better prepares them for their chosen field of study. Postgrad students and Postdoc Fellows are often with us for more extended periods and undertake valuable research that increases our knowledge and expertise. Sincere thanks to you for walking the journey with us.

OUR PARTICIPANTS
Our studies and projects recruit large numbers of participants. We pay tribute to these individuals who have chosen to work with us to help find solutions to the HIV and TB epidemics. It is through their commitment that we are able to find new ways to improve the health not only of South Africans, but also of communities far beyond our borders.
AWARDS

ACADEMIC AWARDS & RECOGNITION

2014 Alan Pifer Award
Professors L-G Bekker & Robin Wood
University of Cape Town Vice-Chancellor’s annual prize in recognition of outstanding welfare-related research. The award highlights socially responsive research, and honours a UCT researcher whose outreach work has contributed to the advancement and welfare of South Africa’s disadvantaged people.

2014 Platinum Scientific Medal Award - SA Medical Research Council
Professor Robin Wood
In respect of a Lifetime of Outstanding Achievement in Science

2014 AU-TWAS (African Union - The World Academy of Sciences)
Keren Middelkoop, MD
Young Scientist National Award in the category of Earth and Life Sciences (Sciences category)

Professor Robin Wood
Awarded in recognition of the best work on aetiology, prevention, pathology or treatment of tuberculosis in the UK or abroad

2014 Fellows of the Royal Society of South Africa
Professor Robin Wood and Professor Linda-Gail Bekker

2014 Emeritus Professor of Medicine
Robin Wood
Department of Medicine Faculty of Health Sciences, University of Cape Town

2014 Ralph Kirsch Golden Pen Award for SAMU highest cited paper
Professor Robin Wood

2014 Honorary Professor, London School of Hygiene and Tropical Medicine University of London, UK
Professor Robin Wood

2014 fellows of the Royal Society of South Africa
Professor Robin Wood and Professor Linda-Gail Bekker

2014 Ralph Kirsch Golden Pen Award for SAMU highest cited paper
Professor Robin Wood

2015 Finalist - T W Kambule Awards: Emerging researchers
Keren Middelkoop, MD

2014/15 NSTF–BHP BILLITON Awards recognizing, celebrating and rewarding excellence in Science, Engineering, Technology & Innovation (SETI)

SERVICE AWARDS & RECOGNITION

2014 President-elect of the International AIDS Society
Professor Linda-Gail Bekker also Chair of the CIPHER initiative IAS; and appointed to the Scientific Task Group advising UNAIDS president Michele Sidibe on the 90-90-90 goals.
2014 Merit Certificates – City of Cape Town Health Services Annual Primary Health Care Awards TB/HIV/STI

**Sizophila Counsellors**
The annual awards recognise the achievements of exceptional staff at City and Provincial primary health-care facilities with regards to their work in the areas of HIV/AIDS, Sexually Transmitted Infections (STIs) and Tuberculosis (TB).

**Desmond Tutu HIV Foundation - Gold**
Assisting Klipfontein Sub-District achieve 81% of clients on ART remaining in care at 12 months

**Sizophila Facility Counsellors – Gold**
Assisting Klipfontein Sub-District to achieve a new smear positive TB cure rate of 89%

**Sizophila Facility Counsellors – Gold**
Assisting Gugulethu CHC to achieve 33% of the ART RIC patients receiving care in clubs

**Sizophila Community Care Workers - Gold**
Assisting Klipfontein Sub-District to achieve a new smear positive TB cure rate of 89%

**2014 Community Service Award - HIV Prevention Trial Network**
(Washington DC)
The Rev David Galetta – Community Advisory Board member Emavundleni Research Centre and Community Working Group representative for scientific committees

2015 Department of Social Development Ministerial Youth Excellence Award – Gold
DTHF Youth Centre

**2015 Dira Sengwe Leadership Award - SA AIDS Conference 2015**
Sr Lumka Mtwisha – runner up - in recognition of an individual or organization showing exceptional courage, commitment, and dedication in the HIV field.

2016 President – International AIDS Society
Professor Linda-Gail Bekker

**2016 Fellowship in Art and Science of Medicine - South African Medical Association**
Professor Linda-Gail Bekker

2016 Corporate Vision Magazine, UK
DTHF - Best Sexual Health Research NPO - South Africa

**2017 UBUNTU Award for Social Responsibility**
(Department of International Affairs)
"Through excellence in their chosen fields, these proud South Africans serve as global ambassadors of our nation. The award celebrates South African citizens, who, through their Integrity, Passion, Patriotism and Humility have raised the South African flag high on an international stage.

**OUTPUT**
A list of the research papers published in the period under review are listed on our website: [www.desmondtutuhivfoundation.org.za](http://www.desmondtutuhivfoundation.org.za)
The Development of an International Accredited Training Centre in South Africa

ICAP-SA and DTHC secured a 5-year funding grant (2012-2017) from the Centres for Disease Control to develop an online postgraduate diploma course. The curriculum covers TB-HIV management and supports the National Strategic Plan and National Agenda for TB and HIV. It is hoped this will help to reduce the TB/HIV burden by providing education, training and the creation of best practice guidelines. The curriculum provides for comprehensive training in TB and HIV, including courses related to TB and HIV management, infection control, and operational research. The initiative seeks to bridge training gaps by catering to primary care and community-level clinicians and other professional healthcare workers. Those who complete the course successfully will have the knowledge and capacity to manage TB/HIV co-infected patients and implement infection control measures in primary health care settings.

We have developed and piloted the first online post-graduate (PG) diploma offered by the Faculty of Health Sciences at UCT. To date, over 120 students have completed courses, and the first cohort of PG Diploma students was enrolled in 2016 – thus our first class graduation is anticipated in 2017.

There has been an overwhelmingly positive response from students. Our primary challenge has been to secure base funding for 2017. If we can sustain the project through the next year we predict it will become self-sustaining by 2019.

**Project Leader:** Dr Keren Middelkoop  
**Assisted by:** Prof Linda-Gail Bekker, Dr Shahra Sattar, Dr Funeka Bango & Melissa Slabbert
This is a phase 3 trial to determine whether Vitamin D supplementation in primary school children can prevent latent tuberculosis infection and enhance growth and development. The trial is funded by the UK Medical Research Council and will run from April 2016 to May 2021. Participants (5,400 children aged 6-11 years) will be sourced from the Klipfontein/Mitchell’s Plain sub district of Cape Town. The children will receive a weekly vitamin D supplement of 0.25 mg for 3 years.

Progress Report
This study commenced in April 2016. Staff have been recruited and have undergone GCP, HSP and protocol training, as well as training in the electronic data-capture software (REDCap). The study database REDCap, which was designed by collaborators in the UK, has been developed and gone live.

As of 2017, the commercial lab (BARC Laboratories) is prepared, and arrangements for sample collection, processing, and supply of results have been finalised. Our academic laboratory (IDM) is prepared to receive a subset of samples for analysis of secondary outcomes and our pharmacy at Emavundleni has received the first batch of IP. We have procured all major clinical equipment and supplies needed, in addition to study vehicles and screening incentive packs.

A major challenge has been the need to find alternative office space for the project due to the impracticalities of situating a new team in the already crowded Emavundleni research site. Space was identified and secured in Philippi Village. Other major challenges encountered included a much longer than anticipated time for staff recruitment as well as disruptions at UCT core facilities, imposed by the 2016 student protests.

Local Principal Investigator: Dr Keren Middelkoop
Collaborator and protocol PI: Prof Adrian Martineau (Queen Mary University of London)
Assisted by: Prof Linda-Gail Bekker; Dr Kim Hall, Dr David Joliffe; Venesia du Toit; Frances De Lange; Ncumisa Nzenze; Veronica Bam; Tebogo Rammala.
Collaborators: Dr James Nuttall (Red Cross Children’s Hospital); Prof Michael Levin (Red Cross Children’s Hospital); Prof Robert J Wilkinson (CIDRI – IDM); Dr Anna Coussens (CIDRI – IDM); Thomas Scriba (SATVI-IDM); Dr Lisa Micklesfield (UCT)

VIDI KIDS: A TRIAL OF VITAMIN D SUPPLEMENTATION IN CAPE TOWN PRIMARY SCHOOL CHILDREN
PHILIPPI VILLAGE

DESMOND TUTU HIV FOUNDATION / ANNUAL REVIEW
The DTHF has partnered with the Western Cape Government to implement a programme for young women and girls (10-24 years) funded by The Global Fund to Fight AIDS, Tuberculosis, and Malaria. The programme aims to strengthen and expand the Provincial HIV/AIDS prevention, treatment, and care programmes through the provision of a comprehensive package of health, education and support services. Measured outcomes will include reduction of new HIV infections, a decrease in teenage pregnancies, and the retention of girls in school until matric (final year). This project will reach more than 19,000 young women and girls in the Klipfontein/Mitchells Plain Health sub-district over two-years. A segment of the project will target boys and young men, recognising the positive role they will play in achieving these goals.

Zimele is the Zulu word for ‘standing strong together’. We aim to empower young women and girls to make healthy life choices and take responsibility for their lives. Over 100 new staff members have been enrolled to take on this challenging project.

**Project Leader/ Coordinators:** Linda-Gail Bekker, Riaan Beukes, Colleen Herman, Nthoesele Letoao,

**Assisted by:** The Zimele Team in conjunction with the Western Cape Government.
The social behavioural division within DTHF/C seeks to understand the complex drivers of human behaviour as an essential requirement of any successful biomedical, behavioural or structural HIV treatment and prevention intervention. Socio-behavioural research reveals critical insight and contextual understanding pertinent to biomedical implementation science. Sexual behaviour, relationship patterns and the variable uptake of health services are always situated within gendered, cultured and economic experience. Socio-behavioural input additionally provides support to patients within interventions and facilitates enhanced engagement in the communities with which we work.

The division is currently exploring issues relating to treatment adherence, decision making in prevention, the acceptability of emerging prevention technologies, community understanding of partially effective prevention, behavioural economics in HIV prevention, and community engagement. A number of clinical trials have social behavioural components as well. Select studies are described here.

2014-2016 Research Progress

One of the biggest achievements over the last three years has been the steady increase in the number of projects the division has secured. New studies have been launched and are currently underway, with still more in the pipeline. Additionally, the core socio-behavioural team is increasing its contribution to published work. This has been made possible by the recruitment of excellent new study coordinators, research assistants and field staff.

The division is involved in a wide range of projects, including an STI test-and-treat study that aims to investigate the feasibility of point-of-care testing for STI's at youth friendly clinics (pending ethical approval); a study exploring the social determinants of adolescent engagement in the HIV care continuum post-HIV testing and counselling; and an intervention programme to assist the transition to and retention of HIV-positive youth in adult health care (scheduled for 2017). The division conducted critical formative research in both the CHAMPS and 3Ps for Prevention studies. A ‘mental model’ of what influences young men and women’s decisions on HIV prevention has been developed that will inform the next phase of the Power Study in which up to 1,000 young women will receive PrEP via the Tutu Teen Truck in an open label demonstration project.

The division is also involved in implementation science with studies such as Girl Power, which investigates the feasibility and effectiveness of providing different combination HIV prevention and sexual reproductive health packages (with and without empowerment
workshops and cash transfers) for young women attending four public health clinics in the Klipfontein/Mitchells Plain sub-district. In 2017, this pilot study will be scaled-up to form part of The Zimele Project (described elsewhere in this report).

DTHF partnered with the International AIDS Society and the Children’s Radio Foundation in facilitating a series of focus groups and participatory media workshops with youth in South Africa, Zambia, and Tanzania to document youth perceptions of HIV prevention and treatment programmes.

The division is also involved in a number of HPTN and MTN studies, whereby qualitative assessment of adherence to biomedical HIV prevention tools, such as PrEP, are evaluated. Similarly, the iPrevent study is identifying factors to optimise adherence to injectable HIV prevention products, which are currently in the early stages of development and clinical testing.

The DTHF runs a mobile diagnostic unit, the Tutu Teen Truck that provides free comprehensive healthcare and counselling services to youth in the under-serviced health sub-district of Klipfontein/ Mitchells Plain. Studies are being conducted to assess the impact of economic incentives and/or text messages on linkage to HIV/TB care following mobile HIV and TB screening. Additionally, the feasibility and acceptability of HIV self-testing kits among adolescents and young adults is being assessed.

**Core Social-Behavioural Staff:** Millicent Atujuna, Thola Bennie, Laura Myers, Rebecca Marcus and Phillip Smith

**Assisted by:** Shiely Ndwayana, Amanda Norexe, Flora Thobela, Noluthando Ntlapo, Luyanda Ngcobo, Ndumiso Madubela, Jabulisile Zuma, Nomvuyo Thelma Mangxilana, Charity Asantewa Oduro, Siya Sindelo, Gloria Sikota Nomfezeko, Nosiphiwo Shwalake, and Primrose Dube.
Young people account for over a third of new HIV infections in South Africa, yet HIV counselling and testing (HCT) uptake remains low. Likewise, although nearly 20% of South African women fall pregnant by age 20 only half of this number obtain hormonal contraception. Drivers of HIV risk and unintended pregnancies among young South African women include early sexual debut, unprotected sex, sexually transmitted infections, older partners, multiple partners, low relationship power, intimate partner violence, sex work, and alcohol use. Additionally, young women are often unable to discuss HIV or negotiate partner HIV testing or condom use due to their desire to preserve the relationship with a partner and avoid potential gender-based violence. In South Africa, economic and social factors markedly increase young women’s susceptibility to HIV infection.

In response to these complex healthcare and social needs of adolescents, in 2011 the DTHF established a youth centre in the limited-resource, peri-urban setting of Masiphumelele with the aim that a non-traditional healthcare setting may promote health-seeking behaviour and facilitate prevention and screening opportunities among adolescents. The DTHF Youth Centre (YC) provides incentivised
adolescent-responsive health, educational and recreational activities, with the objective of widening access to HCT and sexual and reproductive health services to young people (aged 12-22 years) in the Fish Hoek valley. Additionally, the YC creates a safe space for young people to develop mentally and physically healthy lifestyles, and learn the value of making healthy life choices. Youth are rewarded for healthy behaviours—such as HIV testing, STI treatment, and family planning visits—with points, called “tutus,” that can be accrued and redeemed for various rewards. Visit data and “tutus” are collected via a biometric fingerprint data tracking system. The YC also runs sexual and reproductive health education and group counselling initiatives in the two local high schools.

By increasing adolescent access to sexual and reproductive health services and positive youth development, the YC aims to decrease the incidence of HIV, STIs, and unwanted pregnancies in the youth of Masiphumelele, while increasing access to education and economic opportunities.

2014-2016 Research Progress
Over the past two years, the adolescent friendly clinic has performed 2694 HIV tests, initiated 672 girls on contraception per year, treated 469 STI's and gained 1914 new registrations. An HIV adherence club has been established at the local HIV/TB clinic for those adolescents who are stable on ARVs. Adolescents are referred from the high-school or are self-referred for counselling sessions, and a weekly girls counselling group is run from Ocean View High School that focuses on life skills, relationship development, and positive behaviour changes. Daily groups of Masiphumelele High School students come to the YC for interactive sexual and reproductive health classes, while our computer lab provides homework support, tutoring, digital citizenship and internet access for homework and job application support.

The YC partners with local NGO’s, that run their own youth programmes out of the YC facilities. These partners include the Movement Trust (TV & Film production training), the IDM Department of Virology (a Wellcome Trust project that focuses on girls’ attitudes with respect to their sexual and reproductive health and interpersonal relationships), the Mountain Club of South Africa, the Zeekoe Vlei Yacht Club, the Equinox Equestrian Centre, the Waves of Change Surfing Club, and the Lalela Art Programme. Additionally, six young adults gain job experience at the YC each year through our internship programme.

Future programmes in development include the placement of a sexual and reproductive outreach nurse and HIV counsellor at Ocean View High School, the establishment of vocational membership for interns, and the expansion of both our Adolescent ARV club and the Life Orientation Classes in Masiphumelele. We aim to develop a curriculum that contains a specific focus on the reduction of teen pregnancy that can be used in South African schools. We have also identified the need to improve linkage to care of adolescents diagnosed with HIV through the use of a community navigator, as well as the need to develop parent and school partnerships further in order to manage teen pregnancy within the community.

Project Leaders and Coordinator: Katherine Gill, Andrea Mendelsohn & Dante Robbertze
Assisted by: Shabaana Osman; Khanyiselo Silo; Noluvuyo Mandlana
Youth Interns: Anele Nqgokwe; Sibabale Silo; Akho Mpame; Aviwe Mankayi
This is a field site of the University of Cape Town Clinical Trials Unit, where a variety of research studies are conducted. Current research projects focus predominantly on the development and implementation of biomedical strategies for HIV prevention; however, the unit also conducts research on HIV treatment and HIV and TB epidemiology in adult, adolescent and paediatric populations.

2014-2016 Research Progress
The major advance in HIV prevention intervention over the past few years has been the development of PrEP (Pre-Exposure Prophylaxis – a daily pill). PrEP is the use of anti-retroviral medication by HIV-uninfected individuals at high risk as a means of reducing the risk of HIV transmission. Oral PrEP’s efficacy has been proven in numerous trials carried out worldwide in which the DTHF has also participated. PrEP has recently been granted regulatory approval in South Africa.

The challenge now lies in how PrEP can best be made accessible to the general population in South Africa and how well adherence to a daily pill will be supported. Alternatives to a pill that are hoped to make this prevention method more accessible are also in development. Other prevention strategies are also under assessment.

3Ps Study: Prevention, Partners & Pills
The 3Ps project coordinates three different smaller studies. The basis was drawn from fieldwork conducted by the London School of Hygiene and Tropical Medicine in 2015 where they sought to gain contextual understanding about the lives of young women in Masiphumelele to better inform PrEP uptake and adherence. The second phase of this study (3P BCD) began early in 2016 to validate the initial findings and
Projects focusing on HIV Prevention in Adolescents:
The CHAMPS (Choices for Adolescent Prevention Methods in South Africa) project is a set of three pilot studies that investigate different HIV prevention strategies in adolescents. The PlusPills study, which is scheduled to wrap up early 2017, examines the feasibility of providing oral PrEP (Truvada®) to HIV-negative adolescents in peri-urban settings of Johannesburg and Cape Town. The UChoose study looks at contraceptive preference in HIV-uninfected female adolescents as a proxy for HIV prevention method preference. The MACHO study, which concluded in 2015, evaluated attitudes and uptake of voluntary medical male circumcision as a means of HIV prevention in male adolescents (14-17 years).

Projects focusing on PrEP Alternatives:
The efficacy and acceptability of an anti-retroviral (dapivirine) containing vaginal ring by women are being investigated. "The Ring Study" (IPM 027), which ran from 2014 to 2016, found that use of a vaginal ring by women was effective at reducing HIV transmission. The DOMA study, completed in 2016, investigated the level of adherence to use of a vaginal ring and aimed to develop a set of adherence scales beyond mere self-reporting that could support the implementation of ring use. A follow-up study (IPM 032) began in 2016 to provide continued access to the ring to all "Ring Study" trial participants.

3P Formative focused on the "partner" aspect and was conducted as a risk perception analysis among young South African women (16-29 years) that included HIV testing, the effect of partner involvement on relationships, and factors influencing the decision to take up and adhere to HIV prevention strategies such as oral PrEP. The 3P Cohort study is due to start early 2017 and consists of two phases. Phase I will focus on demand creation for PrEP among young women through the use of the marketing campaign developed in the creative workshop described. Phase II will assess PrEP acceptability and adherence among young women openly offered PrEP, and assess whether offering a short-term conditional incentive will improve outcomes. Some of these participants will also be interviewed or engaged in discussions to determine their experience and pattern of use of PrEP.

Projects focusing on PrEP Alternatives:
The efficacy and acceptability of an anti-retroviral (dapivirine) containing vaginal ring by women are being investigated. "The Ring Study" (IPM 027), which ran from 2014 to 2016, found that use of a vaginal ring by women was effective at reducing HIV transmission. The DOMA study, completed in 2016, investigated the level of adherence to use of a vaginal ring and aimed to develop a set of adherence scales beyond mere self-reporting that could support the implementation of ring use. A follow-up study (IPM 032) began in 2016 to provide continued access to the ring to all "Ring Study" trial participants.

Project Coordinator/ study Leader: Katherine Gill
MASIPHUMELELE TUBERCULOSIS RESEARCH

Tuberculosis (TB) is currently the leading cause of death among people living with HIV/AIDS. South Africa carries one of the highest TB burdens worldwide. TB is transmitted through the air, particularly through coughing, consequently transmission is suspected to be particularly high in crowded areas.

The Masiphumelele TB research site adopts a basic science approach to combating the TB epidemic through seeking to further characterise the physiology of the TB molecule as well as to enhance our understanding of how TB is transmitted. There are currently two primary ongoing studies. The TB aerobiology study (funded by the South African Medical Research Council’s Flagship program, with supplementary funding from the Bill and Melinda Gates Foundation) seeks to understand the biology of the airborne transmission of Mycobacterium tuberculosis (MtB). This is a complex but exciting area of research, as innovative creative effort is required to sample, investigate and understand an airborne biological component. It is hoped that procurement of a better understanding of MtB transmission biology will enable the development of novel interventions that reduce transmission.

The Whole Genome Sequencing (WGS) project has two studies, funded by two different grants. The TB Aerobiology project is linked to the British Medical Grant Fund, in collaboration with Digby Warner (MMRU-IDM). It aims to investigate the potential link(s) between mycobacterial genotype and the production of infectious aerosols, such as the extent of genotypic differences in MtB populations and whether genotype correlates with baccili released by normal exhalation and/or cough. The second study is funded by a grant from Barun Mathema (Columbia University) and aims to better define transmission
clusters from a 10 year Masiphumelele TB retrospective database, to
analyse the transmission dynamics within this community.

2014-2016 Research Progress
The TB aerobiology project has several aims.

**AIM 1:** to develop and refine a device capable of rapidly capturing
airborne mycobacterial TB particles from the expired air of patients.
Two devices have been built (the Respiratory Aerosol Sampling
Chamber (RASC) and the Pulmonary Aerosol Sampling System (PASS))
to achieve this, which allow samples from patients to be extracted
within an hour. This is remarkable as previously patients needed to
be retained, off-treatment, for a month to retrieve this type of data.
Additionally, a model has been developed to validate the flow and
sampling characteristics for the PASS device, which has been used to
increase the sampling efficiency. Samples have been taken from TB
patients before initiation of TB therapy and TB negative volunteers,
and particle analysis capability has been enhanced to the point where
we can count the number, size, shape and biological components of
the air within our collection chambers.

**AIM 2:** to use our device to gather airborne Mtb particles for use in
the characterisation of the genetic and phenetic properties of those
particles capable of transmission, before and during Mtb therapy. From
this data, we hope to determine the total number of bacilli produced
by patients with active Mtb and assess whether genetic variability is a
contributing factor to why some people could produce more airborne
bacilli than others. We are pursuing the development of a methodology
for imaging (optical and electron microscopy) of clinical Mtb strains,
and continue to find methods that will enable culture-free detection
and isolation of single bacilli.

The completion of this aim is dependent on the availability of a reliable,
reproducible, and sensitive technique for detection and quantification
of bacilli from the different types of samples. We have observed a wide
discrepancy between numbers of airborne genomic and culturable
TB organisms, for which we are exploring reasons and solutions. A
molecular method has so far proved most useful and is based on the
application of a droplet digital PCR (ddPCR)-based technique, which
can quantitate TB genomes in clinical samples of different forms.
Another challenge has been optimisation of liquid capture during
sampling for which we are looking into new sampling systems. The
solution currently remains elusive.

**AIM 3:** to identify how a host’s (source of infection) immunological
state could affect the production of infectious particles in their breath
and determine whether there are any identifiable blood signatures or
biomarkers that will allow us to screen individuals for the potential to
transmit the disease. Blood samples from all participants have been
stored to allow for investigation of these immunological determinants
once the collection has reached an advanced stage.

**AIM 4:** to identify social and environmental conditions that are
conducive for Mtb transmission, in the hope that we can uncover
some of the mechanisms that drive Mtb transmission within our
communities. Data regarding participants’ social habits and level
of exposure to crowded settings is being collected. This data has
already been used alongside recorded carbon dioxide measurements
to identify and characterise potential “hotspots” of TB transmission
within the community. We also aim to detect and quantify airborne
TB in crowded settings in Masiphumelele. Over 70 environmental air
samples have been collected at clinical sites, control sites and, more
recently, in churches. This study has highlighted the challenges faced
at the data interpretation stage, and adjustments have been made to
address these issues.

We additionally aim to archive TB isolates from all sputum-positive
patients in this community over the study period. The ongoing
collection and archiving of Mtb isolates from all sputum-positive patients in Masiphumelele, together with the collection of epidemiological and clinical data on all TB patients, will enable us to track TB disease trends as well as perform ongoing TB transmission analysis in the community. Over the past three years, over 90% of eligible patients have been enrolled in the epidemiological study. We are currently performing the 2016 census but, based on TB trends up to 2014; we predict that TB notification rates will continue to decline in the community.

Whole Genome Sequencing:

**PROJECT 1** – To determine the degree of genetic variability among aerosolised bacilli, using whole-genome sequencing (WGS) of bacilli isolated from both sputum and RASC samples. Sequencing of 18 samples from 12 patients has been completed to date, including eight which were captured as aerosolised bacilli. Preliminary data have been very revealing, granting key insights into the genetic diversity within patient samples (aerosol, sputum) and between different patients. Specifically, we have established degrees of heterogeneity within and between patients that are far higher than initially expected. Further data is necessary before any grand claims can be made.

**PROJECT 2 (Mathema)** - Of the 789 samples in the Masiphumelele database, we anticipate we will be able to sequence 250 isolates. To date, 129 isolates have been sequenced and a further 80 shipped for sequencing. The W-Beijing strains have been prioritised for initial sequencing. Preliminary data shows a very structured phylogenetic tree, with evidence of micro-clusters within RFLP-defined strains. Initial challenges for this work included the timing of sequences performed in South Africa. We are now using a laboratory in New York, and this has expedited our results substantially.

**TB Aerobiology Study Leader:** Prof Robin Wood  
**Assisted by:** Dr Keren Middelkoop, Dr Carl Morrow, Melitta Gqada, Vuyiseka Mpongoshe, Kedebone Oliver, Juane Leukes

**Whole Genome Sequencing Study Leader:** Dr Keren Middelkoop  
**Assisted by:** Melitta Gqada, Vuyiseka Mpongoshe  
**Collaborators:** Prof Valerie Mizrahi (MMRU-IDM), Prof Jonathan Blackburn (Structural Biology Research Unit, FHS, UCT), Prof Nicola Mulder, Prof Digby Warner (MMRU-IDM), Prof Thomas Scriba (SATVI-IDM) Prof Jeremy Woodward (Structural Biology Research Unit, FHS, UCT), Prof Arnaud Malan (InCFD group, Mechanical Engineering, UCT), Dr Wayne Bryden (ZeteoTech LLC), Dr Charles Call (ZeteoTech LLC), Dr David Silcott (S3I LLC), Dr Barun Mathema (Columbia University), Samuel Ginsberg (Electrical Engineering, UCT)
The Gugulethu Research Office (GRO) opened in April 2016 and was designed to host Professor Orrell’s antiretroviral adherence community-based research. The GRO currently manages three adherence studies (META, ADD-ART and the Treatment Ambassador Team (TAT) programme) with an anticipated total of more than 750 participants.

**2014-2016 Research Progress**

The highlight of 2016 was moving into the new container offices on the Scout Hall land adjacent to the Hannan Crusaid Treatment Centre. This provided much-needed relief to the Measuring Early Treatment Adherence (META) team who had been working out of a single room at the JL Zwane Church. The buildings are shared with Professor Landon Myer’s research team and are a dynamic and vibrant place to work.

The META study has enrolled 421 participants, and the interim analysis shows that antiretroviral treatment (ART) adherence measured by the Wisepill device in Cape Town is markedly lower than that of the sister site in Mbarara, Uganda, particularly in pregnant women and in those who start ART with a CD4 count <200 cells. The Wisepill device is a pillbox that contains a communication chip able to monitor in real time whether medication, such as antiretrovirals, is taken as prescribed. The pillbox sends a message to study researchers whenever it is opened, and this is used as a means of measuring adherence. Follow-up with current patients will continue for another year, but plans for an intervention study are already underway.

The Use of ARV Drug Levels in DBS to Assess and Manage ART Adherence (ADD-ART) study team was created slowly between January and July 2016. The team received DAIDS site approval in August 2016 – a substantial achievement for such a community site. This DAIDS funded study explores whether tenofovir diphosphate drug concentrations measured in red blood cells might better predict virological outcomes and adherence than the before mentioned the Wisepill device. Recruitment commenced in November 2016 with the aim of enrolling 250 participants.

The Treatment Ambassador Team (TAT) recruited 300 newly diagnosed HIV-positive people in 2015, to determine the proportion of those diagnosed who do not access ART and the reasons for treatment refusal. The team has since moved on to explore qualitative reasons for treatment refusal and are beginning to recruit 80 participants for a randomised intervention that either links people not willing to start ART with a skilled Treatment Ambassador or allows the participant to follow the standard of care. Treatment Ambassadors will use a mix of education and motivational interviewing over eight sessions with the aim to improve linkage into care.

Everyone employed at the GRO has a passion for caring for those living with HIV. We hope to improve both access to and adherence to ART for those living with HIV in South Africa.

**Project Coordinator / Study Leader:** Catherine Orrell (PI), Anna Cross (site investigator); Colleen Herman (Clinical Operations Manager) Nicola Kelly, Alicia James and Ingrid Courtney (study coordinators)

**Assisted by:** Includes research nurses, research assistants, data managers, a data clerk, and community health workers. Please see attached organogram.
Emavundleni Research Centre is part of the University of Cape Town Clinical Trials Unit (UCTCTU), under the Desmond Tutu HIV Centre. Two core beliefs drive all activities at Emavundleni, namely that excellent research leads to effective evidence-based clinical guidelines, which lead to better patient outcomes and more effective health policy. Secondly, HIV prevention is crucial to eventually beating HIV. Emavundleni is working across multiple projects many of which are Division of AIDS Network studies (HVTN, MTN and HPTN), or are involved in pharmaceutical studies (AERAS, IDRI and Merck). Since its inception in 2006, the research centre based in Old Crossroads has conducted research into developing strategies for HIV, HPV and TB prevention.

Research Progress:
HIV Prevention: MTN Studies
Two studies, MTN020 (ASPIRE - A Study to Prevent Infection with a Ring for Extended Use) and MTN025 (HOPE - HIV Open Label Prevention Extension), have looked into the use of an ARV drug dapivirine vaginal ring for HIV prevention in women. ASPIRE was a Phase III study to determine whether such a ring would be safe and effective when inserted monthly. ASPIRE enrolled 2,629 sexually active HIV-negative women ages 18-45 and was conducted between August 2012 and June 2015 at 15 clinical research sites in Malawi, Uganda, South Africa and Zimbabwe. Results, reported in February 2016, found HIV risk was reduced by 27 percent overall – there were 27 percent fewer women who acquired HIV in the group assigned to use the dapivirine ring than in the placebo ring group. There was a 37 percent reduction in HIV infections in a second analysis planned early into the study that excluded data from two sites with less than ideal retention and adherence. HIV risk was cut by more than half (56 percent) in women older than 21, who also appeared to use the ring most consistently. Additional analyses suggest even higher levels of protection can be achieved with regular and consistent use.

HOPE is a Phase 3B open-label trial and is a follow-on to ASPIRE, to assess the continued safety of and adherence to a Dapivirine-containing ring. The study began in January 2017 and aims to provide additional safety data for licensure of the Dapivirine vaginal ring, to assess the acceptability of a partially effective HIV prevention strategy, to assess the feasibility of a three-month follow-up schedule and to understand reasons for declining to participate in the study. Thus far, the majority of the enrolled women have opted to use the vaginal ring. The target is to enrol 114 women who were deemed eligible at the end of the ASPIRE study.

MTN015 is an observational cohort study that follows women who have seroconverted during microbicide trials, to ensure there is a strong linkage to treatment and long-term support following diagnosis. MTN016 (EMBRACE - Evaluation of Maternal and Baby Outcome Registry After Chemoprophylactic Exposure) follows pregnant women who took an investigational HIV prevention drug, up until delivery and monitor the infants until they are one year old. No infants have been found to be affected so far.

HIV Vaccines: HVTN Studies
A number of clinical trials are underway to evaluate the safety and efficacy of potential HIV vaccine regimes. HVTN097 is a phase 1b randomised double-blind placebo-controlled clinical trial that will
evaluate the safety and immunogenicity of the vaccine regimen ALVAC-HIV (vCP1521) followed by AIDSVAX® B/E in healthy, HIV-1 uninfected adult participants in South Africa.

**HVTN100** is a phase 1 placebo-controlled clinical trial to evaluate the safety and immunogenicity of SAAVI DNA-C2, SAAVI MVA-C and Novartis subtype C gp140 with MF59 adjuvant in various vaccination schedules in healthy, HIV-uninfected vaccine-naïve adult participants in South Africa. Early results in 2016 showed the vaccine was safe and can induce good immune responses. Part B is about to start with the participants getting a booster dose to further evaluate safety and efficacy.

**HVTN702** uses the same vaccine as used in HVTN100. This phase 3 HIV Vaccine study activation coincided with the World AIDS Day commemoration day. The first participant was enrolled live on television, and the events were broadcast on SA radio stations. On the day the site hosted Dr Carl Dieffenbach, who is the Director of the Division of AIDS. Study participants and CAB Members also took part in the interviews. The communities and the stakeholders have shown tremendous support for this study and men and women are being screened and enrolled into the study with great success. The Emavundleni site will enrol over 300 participants in the next 12 months (27 enrolled to date). Total enrolments will be 5 400 participants across 15 sites.

**HVTN107** is a Phase 1/2a double-blind, randomised clinical trial to characterise the safety and immunogenicity of clade C ALVAC-HIV (vCP2438) and Bivalent Subtype C gp120 alone, with MF59® adjuvant, and with alum adjuvant in healthy, HIV-uninfected adult participants. Emavundleni will soon be enrolling.

**HVTN108** is a phase 1/2a clinical trial to evaluate the safety and immunogenicity of HIV clade C DNA, and of MF59®-or AS01B-adjuvanted clade C Env protein in various combinations, in healthy, HIV-uninfected adult participants. The study will be up and running soon and aims to enrol 334 participants across 10 sites.

**HVTN120** is a phase 1/2a clinical trial to evaluate the safety and immunogenicity of ALVAC-HIV (vCP2438) and MF59®- or AS01B-adjuvanted clade C Env protein, in healthy, HIV-uninfected adult participants. 320 healthy participants will be recruited and followed up for 12 months across 10 sites. The study will start soon.

**HVTN910** follows participants who received a study vaccine in NIH-sponsored preventive HIV vaccine studies and looks at how long vaccine-induced HIV antibodies, which are detectable on commercial test kits, last in these participants. Emavundleni has five such participants.

**HVTN404** and **HVTN802** are long-term studies on participants who seroconverted after they had participated in experimental HIV vaccine trials. The studies were closed out following a network decision, as the data collated couldn’t answer the research question. A lot was learned however during these studies.

**HIV Vaccines: Other Studies**

**IDRI-TBVPX-203** is a phase 2a, randomised, double-blind, placebo-controlled, clinical trial to evaluate the safety and immunogenicity of the id93 + gla-se vaccine in HIV uninfected adult TB patients after treatment completion. There were recruitment challenges as most patients did not meet the inclusion criteria and the study was closed out in January 2017.

**AERAS-042 (HVTN602)** was a clinical trial that evaluated the safety and immunogenicity of BCG revaccination in healthy, HIV-1-uninfected adolescent participants. The study successfully enrolled 84 participants between 2015 - 2016. The participants were vaccinated and followed up for a duration of 12 months. The community was once again very supportive of the study and the parents and legal guardians enrolled their children and always accompanied them to site for their study visits for the duration of the study.
**MERKV002 (V503-002)** is a Phase III Clinical Trial to Study the Immunogenicity, Tolerability, and Manufacturing Consistency of V503 (A Multivalent Human Papillomavirus (HPV) L1 Virus-Like Particle (VLP) Vaccine) in Preadolescents and Adolescents (9 to 15 year olds) with a Comparison to Young Women (16 to 26 year olds).

**Other Studies:**

**ECHO** is a multicenter, open-label, randomised, clinical trial comparing HIV incidence and contraceptive benefits in women using depot medroxyprogesterone acetate (DMPA), levonorgestrel (lng) implant, and copper intrauterine devices (IUDs). The goal is to answer the public health question of the relative risks (HIV acquisition) and benefits (pregnancy prevention) of three commonly-used, effective contraceptive methods among women who desire contraception. The study was activated in April 2016 for implementation with the accrual target of 650 women who are willing to be randomised to one of the study contraception methods over 16 months. The site is working with the community advisory boards and different stakeholders through various community engagement activities to ensure we reach as many participants as possible. The site has managed to successfully enrol 330 participants, over 300 more participants will be enrolled in the next six months. Follow-up for each participant is 18 months and final study visit is expected to occur in the last quarter of 2018. The site will also implement an ancillary study, the aim of which is to investigate the possible biological mechanisms if any for increased risk of HIV acquisition related to each method of contraception.

**HIV Prevention: HPTN Studies**

**HPTN076** is a Phase II safety and acceptability of an investigational injectable product, TMC278 LA, for Pre-Exposure Prophylaxis (PrEP). The study enrolled 48 women at Emavundleni. The uptake of the study was successful and accrual targets were met. The retention of participants was found to be challenging as at least 8 participants were terminated early from the study. Participants will come for their last visits in Feb 2017.

**HPTN082** is a phase 4 study that is rolling out oral PrEP to young women at risk of HIV infection has been enrolling since November 2016. The study will enrol up to 200 women including those who decline PrEP at enrolment over the period of 6 months. The follow-up period will be 12 months for each woman enrolled. The uptake of the study has been overwhelming as more and more young women are presenting to the site requesting PrEP. The site was successfully granted an informed consent waiver for participants under the age of 18 (16-17 year olds) following robust discussions with the CAB, which understands the importance of this intervention in curbing HIV infections.

**STUDIES PLANNED FOR IMPLEMENTATION IN MID-LATE 2017:**

**MTN034** (Reach - Reversing the Epidemic in Africa with Choices in HIV prevention) study will be a Phase 2a crossover trial evaluating the safety of and adherence to a vaginal matrix ring containing Dapivirine and oral Emtricitabine/Tenofovir Disoproxil Fumarate in an Adolescent and Young Adult Female Population. The site will enrol 75 young adult women and adolescents into the study, which is anticipated to start in the 3rd quarter of 2017.

**HPTN084** will be a Phase 3 open-label safety and efficacy study of long-acting injectable Cabotegravir compared to daily oral TDF/FTC for Pre-Exposure Prophylaxis in HIV-uninfected women. The protocol is still in development.

**Principle Investigator:** Linda-Gail Bekker  
**Assisted by:** Baningi Mkhize (Senior Research Officer), Lulu Nair (Senior Research Officer) & Danielle Crida (Senior Medical Officer), and the incredible Emavundleni Team.
The mobile units provide a community based, active case-finding wellness service, which includes rapid point of care testing and screening for HIV, TB, sexually transmitted diseases (STIs), pregnancy, diabetes and hypertension. There are two mobile units in the fleet: the Tutu Tester, that provides testing and screening services to the general public; and the Tutu Teen Truck, that aims specifically to provide an adolescent-friendly mobile service and only caters to adolescents (aged 12-24 years). The units operate in under-served, limited-resource communities and are predominantly based in the Mitchell’s Plain/Klipfontein Health Substructure, but do travel to other areas such as Delft and Dunoon. The Tutu Teen Truck was formerly the Tutu Treater that was used to dispense antiretroviral therapy in the Overberg region. It was subsequently withdrawn and converted to address the needs of adolescents in local areas as described.

Since 2008, over 50,000 individuals have accessed the testing services provided by the mobile units. Linkage to care is strongly encouraged following each positive diagnosis, and clients are referred to local clinics where appropriate. Those who test positive for HIV or TB are also followed up. Active case-finding and earlier linkage-to-care is highly cost-effective and helps decongest primary healthcare facilities, further preventing complex co-morbidities for patients who would otherwise wait long periods before accessing HIV counselling and testing. Mobile services are easily accessible and the thorough wellness check can be completed in a relatively short space of time. The innovative addition of a family planning service to the trucks has been extraordinarily well received by women.

The Tutu Tester Project was revamped in 2014 and is currently running a three phase research project called the “Tutu Tester Mobile Clinic Project – Health on Wheels”. Phase I and II have both been completed, while phase III is ongoing (due to reach completion in December 2017). Since the start of the study, the Tutu Tester has seen 6288 clients, of which 93% were tested for HIV. The HIV prevalence in this cohort was found to be 5.6%. The Tutu Tester also led an investigation into the use of the AtomoRapid HIV test (iTest), which is an HIV self-testing kit, which was found to be especially popular among young people. HIV self-testing kits have been approved by the Health Department for sale in local pharmacies, which will greatly increase accessibility of HIV testing.

The Tutu Teen Truck was initiated in 2015 and is currently conducting a three-year research project, called the “Tutu Teen Truck Mobile Clinic Project”, due to reach completion by August 2018. The Tutu Teen Truck saw 3817 young people between the ages of 12-25 years, of which 36% were male. This level of health service access by young men is unprecedented when compared to traditional clinics, and indicates the success of mobile clinics in reaching difficult to reach populations. Overall, 65% of clients reported having been sexually active in the past six months and yet 43% completed an HIV test for the first time. 98% of clients were tested for HIV, and a prevalence of 3.4% was found (4.6% female and 1.3% male). HIV was highest in females aged 20-24 years, supporting young women in South Africa as a key population for HIV-risk. Some of this data has already been presented at the AIDS 2016 Conference in Durban and will be used to publish a paper on the acceptability of the mobile service in adolescents and young adults in South Africa.

**Project Coordinator / Study Leader:** Philip Smith  
**Staff:** Elzette Rousseau, Daphne Moralie, Junita Ali, Asavela Sodinga, Dorothy Zakariya, Pakama Mapukata, Beryl Sibanda, Andiswa Gqiba, Ayanda Qinga, Vuyisa Dumile, Xolisa Mondliwa, Thulani Zokoza, Pam Fuzile, Thando Xeketwana, Busiswa Mxinwa, Nkosiyabo Futshane.
All research conducted by the Desmond Tutu HIV Foundation requires relations with, and the support of, the community and its stakeholders. Ensuring effective community engagement is critical to the success of the work. A primary method used to achieve this is community consultation on all research and development work through the community advisory board (CAB) before and during the implementation of a study or project. By determining and taking into account the views of a community, we can ensure firstly that our work is reflective of the communities’ interests and secondly, that they have a stake and a voice in our projects. This has allowed our projects to be more efficient, reach more people within the community (easing recruitment), and establish a sense of community trust with the organisation.

The CAB is made up of representatives from different community structures, government departments, and organisations that work in or have an interest in public health. The DTHF manages both a youth and an adult CAB, which have been in existence since 2004.

Research Progress
The CAB meets monthly, alternating each month between adult and youth boards. During these meetings, the CABs receive updates on various research project developments and any new projects. All CAB members have received research literacy training and have been involved in community-focused outreach events. These events take place throughout the year and typically fall on occasions that commemorate various health issues. For instance, condom and STI prevention month in February, World AIDS Vaccine day in May, Youth Day on the 16th June, Women’s month in August, and World AIDS day on the 1st December.

In addition to these events, community outreach teams partner with health facilities to promote health awareness through various public events. These events have focussed on raising awareness about HIV and STI prevention, family planning and other related health concepts.

Project Coordinator / Study Leader: Ntando Yola (Community Engagement Manager)
Assisted by: Siyabonga Ngqame and Lulama Bunu (Community Liaison Officers)
The DTHF is in the forefront of clinical research and has forged strong links with multiple local, national and international partners. We are grateful for their foresight in providing funding for research that is crucial to the increase of knowledge and ultimately, to saving lives. We deeply appreciate their support and encouragement.

We are committed to achieving the UNAIDS 90+90+90 target for HIV treatment: 90% of people living with HIV diagnosed by 2020; 90% of people diagnosed on antiretroviral treatment; and 90% of people in treatment with fully suppressed viral loads by 2020. This is a huge challenge but with the help of the following individuals and organisations we are moving closer to achieving these goals.

COLLABORATORS

- Institute for Infectious Disease and Molecular Medicine, University of Cape Town
- Harvard Center for AIDS Research, through Professor Ken Freedburg
- Public Health Research Institute, New York, USA
- School of Public Health, Johns Hopkins University, USA
- School of Public Health, University of California Berkeley, USA
- The South African Centre for Excellence in Epidemiological Modelling and Analysis (SACEMA) University of Stellenbosch
- The HIV Resistance Response Database Initiative
- Family Health International, North Carolina, USA
- International Epidemiological Databases to Evaluate AIDS
- Professor David Bangsberg and Dr Ingrid Katz, Harvard Medical School and Center for Global Health Massachusetts General Hospital, USA
- The London School of Hygiene & Tropical Medicine, London, UK
- Clinical Infectious Diseases Research Initiative, Wellcome/UCT
- South African Tuberculosis Vaccine Initiative, University of Cape Town
- Perinatal Health Research Unit, University of the Witwatersrand
- HIV AIDS Vaccines Ethics Group, University of KwaZulu-Natal
- ANOVA Health, RSA
- Research and Training Centre, RSA
- International Center for AIDS Care and Treatment Program, Columbia University, USA
- The European & Developing Countries Clinical Trials Partnership SASHA
- Stanford University, San Francisco, USA
- Human Science Research Council, RSA
- Rochester University, New York, USA
- University of Amsterdam, The Netherlands
- University of California, San Francisco, USA
- National Agency for AIDS Research, France
- US Centers for Disease Control and Prevention
- USAID
- Emory University, Atlanta, USA
- John Hopkins University, USA
- St George’s College University of London, UK
- Washington University, USA
- University of New South Wales, Australia
- International AIDS Society
- National Institutes for Health, USA
- HIV Centre for clinical & Behavioural Studies, New York State Psychiatric Institute
- University of Minnesota & INSIGHT Network
- City of Cape Town Department of Health
- Western Province Department of Health
- Western Province Department of Education
- National Department of Health
- National Department of Science and Technology
LARGE RESEARCH NETWORKS

PHARMACEUTICAL COMPANIES

- Gilead Sciences, Inc
- Icon Clinical Research
- Janssen Pharmaceuticals
- MSD Pharmaceuticals
- Parexel International
- Pfizer Laboratories
- ViIV Pharmaceuticals
- Bristol-Myers Squibb
- Merck Sharp & Dohme Corporation
MAJOR DONORS & RESEARCH GRANTORS
AND OUR SPECIAL THANKS AND APPRECIATION TO INDIVIDUAL DONORS

- American School of London
- Annelise Brans
- Archbishop Emeritus Desmond Tutu and Mrs Leah Tutu
- Carl and Emily Fuchs Foundation
- Cronulla Soccer Club, Australia
- Douglas Murray Trust
- EvoTec Plastics
- Fiero Milano – Table of Peace and Unity
- Fordham University – Dr S Freedman
- Frans van Schalkwyk
- Fred Meintjes
- Freshlyground
- G. Ewing
- Irene Cooper
- Klaus Tulp
- Lewis Stores
- Lisa Aquino
- Maryse Barak – Time to Think
- Megan Barnes, Australia
- Pippa Dowding – Inward Bound Training & Coaching
- Professor Gilla Kaplan
- Professor Michael and Mrs Sandy Hayden and family
- QSP Construction
- Robbertze family
- Sarah Townsend, UK
- Sheil Family Kilimanjaro climb
- Solms Delta Wine Estate
- St Margaret’s Church, Fish Hoek
- Tounsel family
- UCT Class of ’79
- Vicky Coates – Corporate and Community Trainer
- Nikhil Swaminathan
- Donald Webb
- Zeekoevlei Yacht Club
- Graham Leigh
- John Lane
- Paul Kuklinski
- Tony Kirby
- Elaine Keats
- Sandeep Katwala
- Maria Hoffman
- Corina Hendricks
- Stephen Griffin
- Mark Gibbard-Jones
- Alan Fix
- Jasper Evans
- Brenna Curti
- Ravi Coutinho
- Ellie Betar
- Thean Beckerling
- Megan Barnes
- Nикоeta Alatsas
- Theodore Alatsas
- Dino Alatsas
- Hyung Ahn
- Gary Adler
- Isobel & Nicolette Sheil
- Dan Schuster-Woldan
- Richard Levy
- Walter Long
- Andrew Malcolm
- Rasebolelo Maleka
- Allison Markovitz
- Senya Merchant
- Maggie North
- Wilailuk Okanurak
- Margaret Pardue
- Lawrence Picard
- Shailesh Popat
- Cecil Qullan
- Jim Rice
- Theresa Runde
- Wachizungu Sawa Sawa
- William Sheil
- Pamela Shores
- P Sheil
- Austen Simoes-Gomes
- Kimberley Spurgat
- Sudha Srinivasan
- Scott Summerville
- Kathleen Vierling
- Jeremy Webb
- Marissa Wiener
- Imogen Wright
- Adina Zapfel
## FINANCIAL STATEMENTS

### DESMOND TUTU HIV FOUNDATION NPC

**ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 28 FEBRUARY 2014**

### STATEMENT OF FINANCIAL POSITION

<table>
<thead>
<tr>
<th>Notes</th>
<th>2014</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
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</tbody>
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### ASSETS

**Non-Current Assets**

- Property and equipment
  - 2
  - 11 876 842
  - 12 273 821

**Current Assets**

- Trade and other receivables
  - 3
  - 16 364 716
  - 12 342 963

- Cash and cash equivalents
  - 4
  - 31 505 883
  - 20 739 396

**Total Assets**

- 47 870 599
- 33 132 359

### ACCUMULATED FUNDS AND LIABILITIES

#### ACCUMULATED FUNDS

- General reserve
  - 1 122 890
  - 1 122 890

- Accumulated surplus
  - 43 603 774
  - 30 390 001

**Total**

- 44 726 664
- 31 512 891

### LIABILITIES

**Current Liabilities**

- Trade and other payables
  - 5
  - 8 946 682
  - 4 619 714

- Deferred income
  - 6
  - 6 074 095
  - 9 273 575

**Total Accumulated Funds and Liabilities**

- 15 020 777
- 13 893 289

- 59 747 441
- 45 406 180
### Statement of Comprehensive Income

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<tr>
<th>Description</th>
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<tr>
<td>Revenue</td>
<td>7</td>
<td>75 963 349</td>
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<td>Direct project costs</td>
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<td>(61 963 886)</td>
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<td>Gross surplus</td>
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<td>Other income</td>
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<td>411 807</td>
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<tr>
<td>Administrative expenses</td>
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<td>(1 605 881)</td>
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<tr>
<td>Operating surplus</td>
<td>9</td>
<td>12 805 389</td>
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<tr>
<td>Investment revenue</td>
<td>10</td>
<td>434 338</td>
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<tr>
<td>Finance costs</td>
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<td>(25 954)</td>
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<tr>
<td>Surplus for the year</td>
<td></td>
<td>13 213 773</td>
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### Statement of Financial Position

**ASSETS**

<table>
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<tr>
<th>Non-Current Assets</th>
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<tbody>
<tr>
<td>Property and equipment</td>
<td>13 528 227</td>
<td>11 876 842</td>
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**Current Assets**

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<th>Current Assets</th>
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<th>2014</th>
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<tr>
<td>Trade and other receivables</td>
<td>11 183 010</td>
<td>16 364 716</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>41 458 412</td>
<td>31 505 883</td>
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</table>

**Total Assets**

| Total Assets                | 16 616 649   | 59 747 441|

**ACCUMULATED FUNDS AND LIABILITIES**

**ACCUMULATED FUNDS**

| General reserve             | 1 122 890    | 1 122 890 |
| Accumulated surplus         | 54 314 679   | 43 603 774|

**LIABILITIES**

<table>
<thead>
<tr>
<th>Current Liabilities</th>
<th>2015</th>
<th>2014</th>
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<tbody>
<tr>
<td>Trade and other payables</td>
<td>5 733 548</td>
<td>8 946 682</td>
</tr>
<tr>
<td>Deferred income</td>
<td>4 998 532</td>
<td>6 074 095</td>
</tr>
</tbody>
</table>

**Total Accumulated Funds and Liabilities**

| Total                       | 66 169 649   | 59 747 441|
## Statement of Comprehensive Income

<table>
<thead>
<tr>
<th>Description</th>
<th>Notes</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>7</td>
<td>68 493 469</td>
<td>75 963 349</td>
</tr>
<tr>
<td>Direct project costs</td>
<td>8</td>
<td>(56 989 836)</td>
<td>(61 963 886)</td>
</tr>
<tr>
<td>Gross surplus</td>
<td></td>
<td>11 503 633</td>
<td>13 999 463</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td>-</td>
<td>411 807</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td></td>
<td>(2 074 857)</td>
<td>(1 631 835)</td>
</tr>
<tr>
<td>Operating surplus</td>
<td>9</td>
<td>9 428 776</td>
<td>12 779 435</td>
</tr>
<tr>
<td>Investment revenue</td>
<td>10</td>
<td>1 282 129</td>
<td>434 338</td>
</tr>
<tr>
<td>Surplus for the year</td>
<td></td>
<td>10 710 905</td>
<td>13 213 773</td>
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DESMOND TUTU HIV FOUNDATION NPC
ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 28 FEBRUARY 2015
# Statement of Financial Position

**Desmond Tutu HIV Foundation NPC**  
**Annual Financial Statements for the Year Ended 29 February 2016**

<table>
<thead>
<tr>
<th></th>
<th>Notes</th>
<th>2016</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Non-Current Assets</td>
<td></td>
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</tr>
<tr>
<td>Property and equipment</td>
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<td>Current Assets</td>
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<tr>
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<tr>
<td>Cash and cash equivalents</td>
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<td>55 850 882</td>
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<tr>
<td><strong>Total Assets</strong></td>
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<td>52 641 422</td>
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<tr>
<td><strong>Accumulated Funds and Liabilities</strong></td>
<td></td>
<td>95 820 311</td>
<td>66 169 649</td>
</tr>
<tr>
<td><strong>Accumulated Funds</strong></td>
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<tr>
<td>General reserve</td>
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<td>1 122 890</td>
<td>1 122 890</td>
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<tr>
<td>Accumulated surplus</td>
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<td>72 194 538</td>
<td>54 314 679</td>
</tr>
<tr>
<td><strong>Total Accumulated Funds and Liabilities</strong></td>
<td></td>
<td>73 317 428</td>
<td>55 437 569</td>
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<tr>
<td><strong>Liabilities</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other payables</td>
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<td>5 733 548</td>
</tr>
<tr>
<td>Deferred income</td>
<td></td>
<td>12 585 411</td>
<td>4 998 532</td>
</tr>
<tr>
<td><strong>Total Accumulated Funds and Liabilities</strong></td>
<td></td>
<td>22 502 883</td>
<td>10 732 080</td>
</tr>
</tbody>
</table>

**Total** | 95 820 311 | 66 169 649 |
<table>
<thead>
<tr>
<th>Notes</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Revenue</td>
<td>7</td>
<td>79 844 077</td>
</tr>
<tr>
<td>Direct project costs</td>
<td>8</td>
<td>(62 782 656)</td>
</tr>
<tr>
<td>Gross surplus</td>
<td></td>
<td>17 061 421</td>
</tr>
<tr>
<td>Other income</td>
<td></td>
<td>180 796</td>
</tr>
<tr>
<td>Administrative expenses</td>
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<td>(1 968 623)</td>
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<tr>
<td>Operating surplus</td>
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<td>15 273 594</td>
</tr>
<tr>
<td>Investment revenue</td>
<td>10</td>
<td>2 606 265</td>
</tr>
<tr>
<td>Surplus for the year</td>
<td></td>
<td>17 879 859</td>
</tr>
</tbody>
</table>
Desmond Tutu HIV Foundation

Faculty of Health Sciences UCT
Level 1, Wernher Beit North Building, Anzio Road
Observatory, Cape Town 7925

www.desmondtutuhivfoundation.org.za