



BHP and TESA delegation (right) discussing the country's application for EDCTP Council membership at the Ministry of Foreign Affairs Boardroom with the ministry officials.

## BHP Helps Government To Apply For EDCTP Council Membership

The Botswana Harvard AIDS Institute Partnership (BHP), the country's leading health research institute recently undertook to lobby and assist the Government of Botswana to apply for membership of the European and Developing Countries Clinical Trials Partnership (EDCTP) Council.

On August 04, 2022 during the Trials of Excellence in Southern Africa (TESA) Network leadership visit to BHP, BHP Management accompanied by the TESA Project Leader, Dr Francisco Saute and TESA Project Manager & Coordinator

Officer, Rodrigues Matcheve met with the Director of Europe and the Americas at the Ministry of Foreign Affairs, Tebelelo Boang to discuss progress and lobby Government to expedite the process for application for EDCTP Council membership for the benefit of the country. Boang told the meeting that the assignment has now been taken up and led by the Ministry of Communications, Knowledge and Technology (MCKT).

Dr Saute explained that TESA is a consortium established in 2009 under the first programme of the EDCTP with the objective of creating

a framework for collaboration, capacity building and training among nine African countries and three European countries to enable them to conduct clinical trials of excellence.

He said that one of the requirements for countries to be members of the EDCTP Council is that they have to commit to contribute a minimum amount of 200K Euros. This contribution can be either cash or in kind. He explained that in kind include direct funding of research facilities, operational costs and equipment as well as support to the secretariat.



Director of Science, Technology and Innovation-International Cooperation and Resources at the Ministry of Communications, Knowledge and Technology, Mr Ronnie Phutlhego.

The Director of Science, Technology and Innovation-International Cooperation and Resources at MCKT, Ronnie Phutlhego told the meeting that the Government has started the EDCTP Council application process. He revealed that the application had been escalated to cabinet due to the requirement to pay the 200K Euros. He appreciated the explanation that part of the money can be paid in kind.

BHP provided Government with the list of in-kind resources and assistance that the Botswana Government is already offering in support of BHP research as well as assisting with information on EDCTP grants which have been awarded to various institutions in Botswana. To also help fast track the application process, Dr Saute shared EDCTP regulations and template commitment letters and step-by-step guidance information on how to complete the submission process.

BHP Laboratory Director and Co-Principal Investigator for the BHP TESA III Project, Dr Sikhulile Moyo noted that BHP has held four EDCT grants from TESA I, TESA II and III, supporting at least 10 projects associated with HIV/AIDS research. This has culminated with the graduation

of four PhDs and 10 Masters as part of the capacity building component of the initiative. He highlighted that other institutions in Botswana like the University of Botswana also have EDCTP grants, remarking on the urgency to complete the application process to ensure BHP remains eligible to apply for funding.

“Rest assured that that the application shall be processed. We are committed to mobilizing resources in any form for the benefit of our country,” said Phuthego. He applauded BHP for taking the initiative and the enthusiasm to push for the application, encouraging them to always keep the authorities informed for greater assistance.

He advised that institutions should consider partnering with each other when applying for grants for similar projects in order to share resources and human capital for significant impact. He underlined that in all applications there should be a component of capacity building to build a critical mass of human resources capable to carry the work forward and build full capacity for certain critical areas.

The Director for Europe and the Americas Tebelelo Boang also assured BHP that they have a mandate to go out to seek new opportunities for Batswana, highlighting that there is political will to invest in science, research and the development of its value chain.

### BHP's Role In TESA III

BHP is recognized as the consortium's reference laboratory for HIV and offers training in HIV drug resistance and other related techniques. Under the TESA III project, BHP is tasked with establishing a joint platform with national and regional agencies to develop and strengthen collaboration on evidence sharing for the decision-making process, dialogue between researchers, communities, and policy-makers to maximize the impact of clinical research in Africa.

Key deliverables for BHP include the development of a Comprehensive Consortium Communication Strategic Plan, joint publications on various studies designed with a common interest, development of policy briefings to reinforce dialogue with policy makers and to support evidence-based policies. BHP is also expected to increase visibility of the Network and participate in relevant scientific conferences.

BHP currently has four trainees registered with the University of Botswana and the Botswana International University of Science and Technology (BIUST) supported by TESA and other capacity building grants. Bonolo Phinius and Nametso Kelentse are PhD candidates at UB while Ontlametse Bareng and Doreen Ditshwanelo undertaking MPhil and MSc studies at UB and BIUST respectively.

Also, under TESA III, BHP TESA Project Coordinator, Tuelo Mogashoa has been awarded a PhD scholarship under the "TESA Addressing Gender and Diversity Regional Gaps in Clinical Research Capacity (TAGENDI) PhD Fellowship Program". The fellowship offers specific training to female candidates in Southern African region in order to address the gender and diversity imbalance from participating TESA member African countries or institutions. Tuelo is reading towards her PhD with Stellenbosch University, South Africa.

**"Rest assured that that the application shall be processed. We are committed to mobilizing resources in any form for the benefit of our country"**  
**Ronnie Phuthego**



Group photo of BHP Management and TESA Leadership with BHP TESA III trainees



TESA Leadership being briefed on the progress of the BHP projects under TESA III



TAGENDI PhD Trainee, Tuelo Mogashoa.

# Access to clinical data critical in advancing healthcare



BHP Chief Executive Officer, Dr Joseph Makhema

**D**ata access and analysis is a key and fundamental window through which the researcher can address different health problems affecting the country. Discussing the challenges and opportunities in linking research and policy practice in Botswana at the second National Health Research Symposium held at Gaborone International Convention Centre (GICC) on 22nd November 2022, the Botswana Harvard AIDS Institute Partnership (BHP) Chief Executive Officer (CEO) Dr Joseph Makhema argued that clinical data is an indispensable resource for health research and therefore there is need for open access policy on data with certain protections.

The symposium was held under the theme:

[“Unearthing Health Research for Better Uptake: Linking Research and Policy Practice.”](#) Dr Makhema was part of a panel discussion that included Deputy Permanent Secretary in the Ministry of Health, Dr Moses Keetile, Prof Gregory Hillhouse from Botswana International University of Science and Technology (BIUST), Dr Nobert Musekiwa from University of Botswana (UB) and Dr Milton Montebatsi from Botswana-University of Maryland School of Medicine Health Initiative (BUMMHI). Dr Makhema argued that access to data is crucial for knowledge generation necessary for the transformation of the economy from being a resource based to one driven by knowledge as espoused in the Government’s reset agenda.

He pointed out that researchers cannot analyse data if they cannot access it. He proposed that there has to be a functional national health data repository where after primary and secondary analysis of research objectives for specific regulatory approved projects, research investigators should be mandated to deposit data sets for their research projects at the repository.

Such data sets should be consistent with international standards with open access advised by specific protocols and protections. This would provide opportunity for analysis by other scientists including students on various health issues if the data sets are relevant to the subject matter. He strongly opined that data belongs to the Ministry of Health and the country.

He said that data is generated at immense expense from funders, sponsors and research participants and it is an injustice if its use were not optimized. It would also be economical and beneficial for the same data to be used to seek solutions for different health problems as may be purposed and appropriate.

In response to a discussion on future research on stored samples, Dr Makhema strongly advocated for samples to be stored for future use. “We don’t have certain assays to do certain studies today which we may have available in the future and may need access to certain samples collected at specific time points to inform that new research.

A sample of acute infection of HIV in 2002 before we had antiretroviral therapy may be absolutely important today when we are working on a new immunological therapy or drug on acute infection based on a new technology which was not available in 2002, therefore, we have to store these samples for a certain period of time such that they can inform and advance human health in the future," he explained.

He further argued that there is need for Government to systematically set the research agenda, coordinate and prioritize research based on the needs for the country while the role of the researcher should be to develop the research hypothesis, protocols and processes for the conduct of the research based on that research agenda and priorities. He further emphasized that then outcomes of such research should be packaged in a manner appropriate and easy to be assimilated into policy framework to advise the country's health system.

Dr Norbert Musekiwa from UB reiterated the need for an open access policy on data, arguing that such a policy would benefit the research community especially graduate students working on their masters and PhD thesis.

For his part, Prof Hillhouse from BIUST stressed the need for collaborations between research institutions and universities who outputs must align with national priorities and mandate. He said researchers must focus on relevant studies that empowers Batswana as per national priorities. He highlighted that driving socio-economic development for the country needs working together other than working in silos.

On what is BHP's role in bridging the gap between research and policy implementation, Dr Makhema emphasized that BHP has the necessary capacity to mobilise resources for research funding and help translate the science in simple language for easy comprehension by policy makers and implementers.

For translation of research for policy implementation, Prof Hillhouse proposed that the Ministry of Health should have a Knowledge Transfer Office manned by a Chief Scientist who will absorb the research from research institutions and universities and break it down to policy level by drafting simple policy briefs in bullet points for easy understanding and uptake.

Dr Milton Montebatsi from BUMMHI highlighted that as an implementing partner, their role is to help Government in the epidemic control of HIV and implementation of innovations and evidence-based good practices generated from research. He also said that BUMMHI supports Government to build a sustainable environment for good conduct of research.



Deputy Permanent Secretary for Health Policy, Research and Development at MOH, Dr Moses Keetile

Deputy PS for Health Policy, Research and Development at MOH, Dr Moses Keetile acknowledged the existing gaps in translating science into policy and practice. He welcomed the ideas from the panelists on how to bridge the gaps for the country to fully benefit from evidence-based research outcomes and recommendations.

Commenting on the proposal for open access to data, Dr Keetile indicated that data is a sensitive security issue but stated that the Government will look into coming up with appropriate systems on how data can be shared and accessed.

He said that the panel discussion raised important issues to look at, explaining that the symposium was one way of enhancing science engagement as the impact of research also depends on the effective communication of research findings.

**“We have to store these samples for a certain period of time such that they can inform and advance human health in the future”**  
**Dr Joseph Makhema**

## TESA applauds BHP, UB collaboration



TESA Coordinator, Dr Francisco Saúte , also the leader of Centro de Investigação em Saúde de Manhiça (CISM) in Mozambique

The collaboration between the Botswana Harvard AIDS Institute Partnership (BHP) and the University of Botswana (UB) should be strengthened to enable both entities to sustain growth in different areas of research and training. This was said by the Project Leader for the Trials of Excellence in Southern Africa (TESA) Network, Dr Francisco Saute during an online meeting with the two institutions on August 04, 2022 during the TESA leadership visit to BHP. Dr Saute was accompanied by TESA Project Manager & Coordinator, Rodrigues Matcheve.

Dr Francisco Saute and Rodrigues Matcheve are both from Mozambique Centro de Investigação em Saúde de Manhiça (CISM), the research institution that is the host grant recipient for the consortium. TESA is a consortium constituted by nine African members (Angola, Botswana, eSwatini, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe) and three

European members (France, The Netherlands, Spain) and is funded through the European and Developing Countries Clinical Trials Partnership (EDCTP). The funding has facilitated research and capacity building of next generation scientists at BHP including fellows registered for MSc/MPhil and PhD at UB, core-mentored by BHP scientists and UB academics.

During this visit BHP arranged for the TESA leadership to meet its key collaborators and discuss available opportunities for enhancing such collaborations. Dr Saute applauded the collaboration, especially that both BHP and UB have projects that are funded through the EDCTP. He gave an overview of the network and explained changes to the grant application process which now requires countries to be members of the EDCTP council for its institutions to benefit from EDCTP funding. He presented EDCTP opportunities for joint grant applications between the two institutions.

To strengthen their collaboration, BHP and UB regularly engage to review how best the partnership can be enriched for the benefit of both institutions. For his part, BHP Chief Executive Officer, Dr Joseph Makhema hailed the collaboration a success, observing that producing scientists with post graduate qualifications from UB has also promoted the BHP brand, strengthening its capacity building credentials.

The meeting discussed opportunities for the renewal of the Memorandum of Understanding (MOU) between BHP, UB and the Harvard TH Chan School of Public Health (HSPH), reflecting on how it can be expanded. Dr Makhema suggested that the MOU could include UB staff becoming Research Associates with the BHP so that they can fully participate in the BHP research portfolio and thus expand their skills beyond didactic training. As part of the collaboration and reciprocity the university was requested to consider waving some of the requirements like tuition fees for post graduate students so that the money can be directed towards funding the research.

UB's Acting Deputy Vice Chancellor for Academic Affairs, Prof Richard Tabulawa commended the collaboration between his institution and the BHP. "This meeting has offered us an opportunity to interact as partners. Any collaboration that benefits both parties is a great partnership and we are here to support this collaboration", he said.



TESA Project Manager & Coordinator,  
Rodriques Matcheve

Prof Tabulawa reiterated that the MOU between BHP and UB offers opportunities for the appointment of BHP staff as adjunct lecturers at the university, something that he described as enhancing the university's research agenda.

UB's Prof Mabel Magowe affirmed that UB is already reviewing adjunct professorship applications from some BHP scientists stating that the applications are still undergoing the normal recruitment assessment. BHP's Laboratory Director, Dr Sikhulile Moyo has been an adjunct lecturer in the faculty of biological sciences at UB for the past six years.

Dr Margaret Mokomane, Head of Department of at the School of Allied Health Services at UB underscored that the university is working well with BHP in training of MPhil and PhDs as well as supervision of students' thesis as part of the partnership.

"We are continuously looking for opportunities for collaborative grant applications with BHP to leverage on each other's capabilities and capacities. Meanwhile We are also looking forward to become Research Associates with BHP and certainly encourage BHP staff to apply for adjunct lecturer positions so that you affiliate with UB. This will address the issues surrounding student supervision and publication authorship," said Dr Mokomane.



Deputy Dean of Faculty of Health Sciences at UB,  
Prof. Mabel Mogowe

# BHP researchers scoop awards at the Botswana International HIV Conference



Botswana Harvard AIDS Institute Partnership (BHP) participated at the 8th Botswana International HIV Conference hosted by the Botswana HIV Clinicians Society (BHIVCS) held at Gaborone International Conference Centre (GICC) 8-11th November 2022. The Conference was held under the theme “[New Generation, New Opportunities: Building resilience within our communities](#).” BHP researchers and BHP affiliated research associates presented a total of 12 oral and poster presentations. Three of BHP researchers received prestigious awards at the event, a testament to the quality of BHP research and training.

BHP Laboratory Director, Sikhulile Moyo received the Dr Festus Mogae Award presented to the most impactful researcher. Research Fellows at BHP, Natasha Moraka and Bonolo Phinius won Best Abstract and Best Young Researcher Award respectively. The two are currently studying for their PhD’s at the University of Botswana under the BHP training programme.

Dr Moyo who led the SARS-CoV-2 genomics surveillance at the BHP Laboratory presented on “The Role of Pathogen Genomics in Public Health”: Genomic surveillance of SARS-CoV-2 by the BHP led to the discovery of the Omicron variant of SARS-CoV-2 by Dr Moyo and team. The Omicron and sub variants BA.4 and BA.5 have since become the most vastly circulating variants around the world. Natasha Moraka’s presentation was titled “High predicted BNAB resistance but low-level HIV drug resistance among adults with HIV-1 seroconversion

in Botswana” while Bonolo Phinius’ presentation was titled “High Prevalence of Chronic and Occult Hepatitis B Virus infection among people living with HIV in rural peri-urban communities in Botswana.”

Two of BHP Principal Investigators and Research Associates, Dr Tendani Gaolathe and Prof. Mosepele Mosepele and academicians at University of Botswana also presented at the conference. Dr Gaolathe presented on “The Updated Botswana HIV Treatment Guidelines” while Prof Mosepele Mosepele’s topic was “New Research and Innovations on HIV”.

BHP Chief Executive Officer, Dr Joseph Makhema moderated a panel discussion on “[The future of HIV long-acting injectables in the Botswana setting](#)”, a session that provided an overview and implementation considerations of long-acting antiretroviral injectables in the Botswana setting. The session gave insights on how the rollout of the COVID-19 Vaccine Programme in Botswana may pave the way for introducing novel innovations into the Botswana healthcare system.

The panel was made up of Dr Tendani Gaolathe, BUMMHI Chief Executive Officer, Dr Ndwapi Ndwapi and another BHP Research Associate, Dr Ava Avalos. Dr Gaolathe presented on “Lessons learnt from COVID-19 Vaccines” while Dr Avalos presented on “Long Acting Injectables in HIV prevention.” Dr Nwapi’s presentation was on “how Botswana should successfully implement long-acting injectables into the current healthcare system”.



# Potlako+ Study educates communities on cancer prevention



Study Physician, Dr Taolo Ntloedibe



The Botswana Harvard AIDS Institute Partnership (BHP) through Potlako + Study recently held community outreach and engagement activities in seven villages where the study is taking place to impart knowledge on the prevention, early diagnosis and treatment of cancer. These community education activities were held at four Southern and three Northern villages in Botswana: These being Lentsweletau, Metsimotlhabe, Oodi and Molapowabojang in the South and Maunatlala, Lerala and Shoshong in the North.

Potlako +: A multilevel intervention to improve timely cancer detection and treatment initiation in Botswana is a pair-matched, community-randomized study involving 20 rural and peri-urban communities that participated in one of BHP's largest HIV prevention trials, the Botswana Combination Prevention Project (BCPP) which took place on 30 Botswana villages and communities between 2013 and 2018.

The study seeks to assess the following:

1. Effectiveness of cancer symptom awareness intervention delivered in communities and clinics aimed at reducing time to presentation with cancer.
2. The impact of a comprehensive, real-time, patient navigation and advocacy platform in reducing time to initiation of cancer treatment.
3. Whether the combined multilevel intervention decreases cancer stage at diagnosis and increases

number of patients treated with intent to cure versus palliation.

Potlako + Study Coordinator, Kutlo Manyake emphasizes the importance of community education in improving public awareness of different cancer symptoms and encourages people to seek care well in time and be able to access effective treatment.

"We have partnered with local clinics, dikgosi and village Development Committees (VDC) in participating villages to facilitate community education on the study and impart knowledge on cancer and its management in general. We also work with and train health professionals in these clinics so that they can conduct accurate and timely diagnosis," said Manyake.

Manyake facilitated the activities in the North where in addition to community education, the study also facilitated screening of cervical cancer for women as well as penile and prostate cancer for men.

In the South, the activities were facilitated by the Study Physician, Dr Taolo Ntloedibe. The activities included a walk for cancer in Lentsweletau Village spearheaded by the Village Development Committee (VDC).

Kgosi Butler Badisang of Lentsweletau commended BHP for the outreach and implored residents of his village to always seek medical advice and assistance whenever they notice unusual changes in their bodies or their health.

# Spotlight on Bonolo Phinius: Winner of the Charles Boucher's Award For Excellence in Science



Bonolo Bonita Phinius

**A**part from producing cutting edge scientific discoveries, Botswana Harvard AIDS Institute Partnership (BHP) is also bullish in unearthing and nurturing talent through its capacity building and training programmes. The BHP Capacity Building and Training initiative seeks to build a pool of young career researchers who are innovative and determined to develop game-changing scientific solutions to public health challenges.

Bonolo Bonita Phinius from Bobonong, a Research Fellow at BHP and a PhD candidate with University of Botswana is a shining example that BHP produces highly adept researchers and scientists that are globally competitive.

Phinius is the winner of the inaugural 2022 Charles Boucher Award for Excellence in Science, an award that was competed for globally. The Prof. Boucher (1958 – 2021) Award was established to recognize early-career scientists by facilitating mentorship by experts in their field of interest, to obtain a particular new skillset for their research or afford them opportunity for interaction and presentation of their work at an international stage.

“Prof. Charles Boucher was a leader of high repute in virology research who was passionate about capacitating early career scientists. To be the first recipient of this award in his tribute is an honour. This award recognizes individuals who are active researchers and who have contributed knowledge in the field of HIV, hepatitis and COVID-19,” says Phinius.

She adds, “to me it solidifies that indeed the work I have been doing is of good quality and is indeed impactful, and it speaks to the efforts of BHP in capacitating young scientists to do such impactful work.”

Growing up as an aspiring scientist, she wanted to contribute to the health of the people, only she did not know how, but through research, she has found the key. She now investigates the burden of diseases such as hepatitis and their progression and she hopes that the scientific data that she generates shall influence health policies in can be applied to understanding future pandemics.

“I will apply the skills in my PhD work and impart the knowledge to colleagues here at BHP and other institutions. I will also impart these skills to the students I am mentoring,” she adds.

Phinius obtained her BSc Biological Sciences degree from the University of Botswana in 2015 and volunteered briefly at the Botswana Vaccine Institute. She joined BHP as an intern in 2016 where she continues to train. To show her competitive streak, she applied for the highly competitive Chevening Scholarship which she was awarded in 2018 to pursue an MSc in Medical Biosciences at the University of Bradford (UK).



Bonolo Phinius receiving the the Charles Boucher Award

"Upon completion I returned to BHP to continue research on viral hepatitis and set-up capacity for SARS-CoV-2 testing at the start of the pandemic. Through support from my supervisors here at BHP, I registered for a PhD in Medical Sciences with the University of Botswana in 2021 and I am currently working on my studies among other responsibilities," said Phinius.

Phinius works closely with undergraduate students and interns training them in various laboratory skills and other soft skills. She is also part of the BHP Viral Hepatitis Research Group that raises awareness on hepatitis viruses through research and engagements.

"BHP is a research, training and capacity building institution and through it I have been mentored throughout my time here. I therefore, as part of this culture also contribute to this mandate through training and mentoring undergraduate students from various universities, both locally and internationally," she said.

Her mentorship involves helping them develop their final year research projects, reviewing their research project proposals, and giving feedback, encouraging assertiveness and confidence in their work, sharing opportunities for advancing their education such as scholarships and guiding them through those processes.

Bonolo's PhD project is on the prevalence of Chronic and occult hepatitis B virus (HBV) infection

among people living with HIV in rural and peri-urban communities in Botswana. This project includes investigating the burden of the virus in 30 communities and tracking HBV variants that are circulating in these communities to better understand how patients can be managed.

Bonolo presented an abstract on her project at the 8th Botswana International HIV Conference held in Gaborone from 8-11 November 2022 where she received the Best Emerging Researcher Award. The award further buttresses her winning element and strengthens her confidence to continue working hard to save lives through research.

"This is the largest HBV study to be conducted in Botswana and will bring awareness to the public in different parts of Botswana about HBV. Results from this study will also inform the Ministry of Health on areas that are highly affected to encourage targeted interventions and formulation of evidence-based policies from data specific to Botswana," she said.

Phinius encourages other young researchers and enthusiasts to be persistent in their pursuit to achieve their goals. She urges them to identify mentors and embrace mentorship, citing that mentorship has greatly impacted on her career. She advises all young people not be afraid to approach people who will guide them throughout their studies and careers in any field.

# Selected BHP Associated Research and Associated Investigators Publications

1. Population pharmacokinetics of liposomal amphotericin B in adults with HIV-associated cryptococcal meningoencephalitis. Stott KE, Moyo M, Ahmadu A, Kajanga C, Gondwe E, Chimang'anga W, Chasweka M, Leeme TB, Molefi M, Chofle A, Bidwell G, Changalucha J, Unsworth J, Jimenez-Valverde A, Lawrence DS, Mwandumba HC, Laloo DG, Harrison TS, Jarvis JN, Hope W, Mårtson AG. *J Antimicrob Chemother.* 2022 Nov 22;dkac389. doi: 10.1093/jac/dkac389. Online ahead of print. PMID: 36411251
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## VISION

To Be a World-Renowned Public Health Institute.

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To Fight HIV/AIDS and Emerging Public Health Challenges Through Innovative Research, Education, and Capacity Building That Impacts Policy and Practice.

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