

## BHP Celebrates Professor Max Essex

Botswana Harvard AIDS Institute Partnership (BHP) on Thursday evening (January 24, 2019), hosted a dinner at Masa Square Hotel to celebrate its founding chairman, Professor Max Essex who has served the organization for 22 years. As the Mary Woodard Lasker Professor of Health Sciences at Harvard University prepares to retire as chairman of both BHP and the Harvard T.H. Chan School of Public Health AIDS Initiative, BHP hosted the dinner to honour him for his leadership, mentorship, achievements and contribution towards science especially in the fight against HIV/AIDS and his stewardship of the BHP since its establishment in 1996.

During welcoming remarks, BHP Chief Executive Officer (CEO), Dr Joseph Makhema noted that BHP is indebted to Professor Essex for the many lives that have been saved through the research, programmes and strengthening of the Public Health Systems in the fight against HIV/AIDS in Botswana and translational policy from the outcomes of the research and capacity initiatives that were led by Professor Max Essex. He said that through the guidance of Max, BHP has been fully capacitated to carry out research work necessary to inform policy on the fight of HIV/AIDS and other emerging health challenges. Makhema is confident that BHP is fully capacitated to carry on the baton and pursue research that is built upon the le-



*Prof. Max Essex acknowledging the love and appreciation from BHP.*

gacy of Max's work.

Narrating Max's journey with BHP, Principal Investigator and Associate Professor of Immunology and Infectious Diseases at Harvard Chan School, Roger Shapiro noted that Max's "heart has never left Botswana" since 1966 when he helped establish BHP as founding member and chairman.

He revealed that in 1986 Max was awarded the Lasker award for research that directly led to the discovery of HIV as the cause of AIDS. He explained that Max's research demonstrated transmission of HIV by blood and the first evidence of

its transmission through heterosexual sex. "Max and his colleagues identified the GP 120 envelope protein of HIV which is still used for HIV diagnosis today," he said.

Apart from Botswana, Max has also established some of the earliest HIV research and training partnerships in Thailand, Senegal, South Africa and Nigeria. Shapiro said that Max established the BHP partnership for all the right reasons that have since benefited Botswana and the region anchored on his experience in global HIV work which was considerably more than anyone else's at that time. [\(continued on page 3\)](#)

# Editor's Foreword



Welcome to your favourite in-house magazine, the BHP Quarterly after a long hiatus. The newsletter makes a comeback with a fresh new look and continues to be work in progress. The ultimate goal is to deliver to you a quality product in both content and design outlook.

With this edition, the first for 2019, we welcome feedback that will help us produce a quality journal that BHP staff and stakeholders shall be proud of and look forward to next editions.

Please send your feedback to the Communications Coordinator at [tmorapedi@bhp.org.bw](mailto:tmorapedi@bhp.org.bw).

We intend to make this production a 16-page newsletter which will not only cover BHP scientific and research stories but include BHP general news and feature articles from staff in an effort to be inclusive and cover BHP holistically. It will also include picture splashes and social diary where we will publish stories of BHP staff social events such as pictures of weddings and or birthdays of staff members.

A miscellaneous items section to which staff members are encouraged to contribute shall include quotes, poems, proverbs, etc, to give a balance between informative reading and entertainment. The Communications team is committed to give you rich and varied content with each edition.

Lastly, for content in this edition, we focus on retirement celebrations of Professor Max Essex as he retired from BHP and the Harvard T.H. Chan School of Public Health AIDS Initiative (HAI) after 22years and 46 years committed service respectively.

We should all draw inspiration from Prof Essex's dedication, contributions and selfless service in the local and global fight against the HIV/AIDS epidemic. The stories have also been published online on the BHP website.

We hope you will find the stories and reports in this edition and the rest to follow stimulating and thought-provoking and as well entertaining. Welcome and we wish you joyful reading.

*The Editor*  
*Tapela Morapedi*

A handwritten signature in black ink that reads 'Tapela Morapedi'.

*(continued from page 1)*

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Former President, Festus Mogae with Prof. Max Essex and his wife Dr. Elizabeth Essex at Max's Appreciation Dinner.

Immunology and Infectious Diseases at Harvard Chan School, Roger Shapiro noted that Max's "heart has never left Botswana" since 1966 when he helped establish BHP as founding member and chairman. He revealed that in 1986 Max was awarded the Lasker award for research that directly led to the discovery of HIV as the cause of AIDS. He explained that Max's research demonstrated transmission of HIV by blood and the first evidence of its transmission through heterosexual sex. "Max and his colleagues identified the GP 120 envelope protein of HIV which is still used for HIV diagnosis today," he said.

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perience in global HIV work which was considerably more than anyone else's at that time.

Speaking about impact on policy, the Minister of Health and Wellness (MoHW), Dr Alfred Madigele stated that Max and BHP have partnered with MoHW on HIV/AIDS research to address key HIV/AIDS related public health challenges whose outcomes have assisted in formulating policies and strategies to combat the HIV/AIDS epidemic in Botswana. Madigele noted that BHP has been the pioneering research institution on HIV/AIDS and has contributed immensely in advancing Botswana to become a world leader in HIV/AIDS disease management.

"The obligation of the BHP has been to undertake relevant country specific and regional HIV/AIDS, research training and capacity building important in providing evidence based policy and programming," said Madigele.

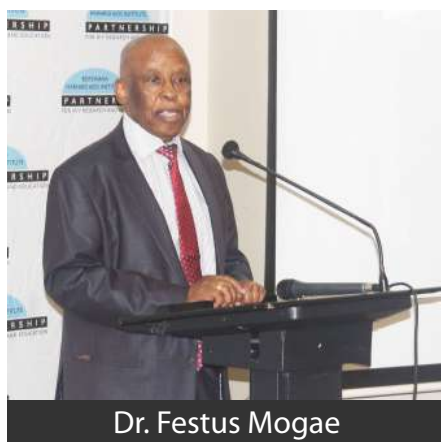
Madigele outlined some of the BHP's research work under the guidance of Professor Max which said has contributed to transitional policy and strengthening of the health care system. These research includes Prevention of Mother to child Transmission (PMTCT) which has seen a decline from 40% to 1% through studies such as Mashi and Mmabana. These studies have been referenced by the World Health Organisation (WHO) to inform global PMTCT guidelines.

Following BHP's Tshepo Study, the National Antiretroviral (ART) Programme dubbed MASA was established. Tshepo was the first ART treatment study in Botswana and has helped inform the national ART treatment guidelines, Madiegele explained. Other studies among many which involved Max and BHP include the HPTN 052 which has informed the Treat All Strategy adopted by Government, the Botswana Combination Prevention Project (BCPP) as well as the KITSO health manpower programme and Master Trainer of Trainer Corps which have been essential in training different health care cadres in the management of HIV/AIDS.

BHP Laboratory Director, Dr Simani Gaseitsiwe and Deputy Laboratory Director, Dr Sikhulile Moyo presented on Capacity Building and thanked Professor Max for his mentorship and for providing an opportunity for growth both of the organisation and the researchers. Gaseitsiwe described Max as an advocate of capacity building and training who has mentored many

Batswana Scientists. Both Gaseitsiwe and Moyo are some of the many BHP staff members who have benefitted from training at the Essex Laboratory under his direct supervision to attain their PhD's. The Lab Director emphasized the need for local support for research and graduate training to ensure that BHP research efforts in the fight against HIV/AIDS can be sustained.

Dr Moyo relayed the BHP story from humble beginnings through its transformation into a world class HIV research institution whose work informs health policy and guidelines not only in Botswana by globally. He spoke fondly of the construction of the Botswana Harvard HIV Reference Laboratory and its role in the fight against the HIV/AIDS epidemic and advancement of every aspect of the laboratory to become a regional center of excellence accredited to The Southern African Development Community Accreditation Services (SADCAS) ISO 15189 quality standard.



Max's friends, Former President, Dr Festus Mogae and Foreign Affairs and International Cooperation Minister, Dr Unity Dow also relayed their respective sto-

ries of their friendship and fond memories with Max. Mogae was president of Botswana during the worst era when Botswana's small population was severely threatened by the wrath of the HIV/AIDS epidemic. He applauded Max for his commitment to building local capacity by training health care workers and scientists from Botswana to ensure that Botswana has capacity to generate necessary knowledge to inform treatment policies and guidelines. "I am proud that we are celebrating Max on our soil in our own way. We have a duty to give testimony about Max to Botswana who do not know as well as we do about what he has done for Botswana," said Mogae.

Harvard University representative, Dean Michelle Williams stated that Max's life exemplifies a true academician who has had an extraordinary career as a virologist and contributed immensely to science. Through his contribution to Science, he has saved millions of untold lives," said Dean Williams. In his response, the emotional Max thanked BHP and staff as well as collaborators for celebrating his contribution not only to BHP and Botswana but to the body of science in general.

Overwhelmed by the love that surrounded him, Max became emotional but nonetheless, he managed to punctuate his emotional appreciation remarks with a bit of humour. He jokingly pointed out that Ria Madison, BHP's Chief Operations Officer is not BHP's first employee but him as the founding chair.

# Prof. Max Parties with BHP Staff

The outgoing and founding chairman of the Botswana Harvard AIDS Institute Partnership (BHP), Professor Max Essex partied the night away with staff on Friday as part of the institute's celebration of his legacy and contribution to the organization and in the fight against HIV/AIDS in Botswana. The staff party which was held at Tendani Gaolathe's Farm in Oodi was one of the events that were organized by BHP staff to celebrate Max's mentorship and guidance for the 22 years that he has been BHP chairman.

Presentation of a walking stick (thobane in Setswana) as a gift by Ria Madison triggered spontaneous singing and dancing as the gathering merrily danced to the famous traditional song, "Tsaya Thobane" by Dr Vom. Max joined the revelers in dance, swinging his "thobane" in the air in spectacular fashion, just like the way Dr Vom does with his when performing the song.

The Premiere Harvard professor in HIV/AIDS research was also presented with a traditional chair



Prof. Max Essex and his wife Dr. Elizabeth Essex ( 2nd and 3rd from left) with BHP management and staff.

made of wood and cow leather while his wife who accompanied him, Dr Elizabeth Essex was given a traditional dress (leteise), a dress made of special fabric and print worn at traditional festivities like weddings and other cultural events in Botswana.

The gifts were selected reverently to give the Max's a taste of Setswana culture in tangible form to take home with them. Even the meal was a bush

braai with everyone braaiing for themselves. The smoke from the braai stands produced a delectable aroma that added to the thrill in an already cheerful atmosphere. Even the heavens poured a little to cool the night, leaving a cool breeze that made the party even more pleasant.

This evening session followed a morning tour of exhibition stalls and presentation of various ongoing studies and projects at the BHP. This involved a visiting Harvard T H Chan School of Public Health delegation led by "The Dean of Faculty" Michelle Williams and the Dean of Finance and Administration Michael Grusby who were in Botswana to attend the annual general meeting of the BHP and participate in Max Essex's retirement celebrations. The exhibition was meant for studies to showcase their work for Max and other researchers from Har-



Prof. Max Essex dancing to Dr Vom's "Tsaya Thobane" with BHP staff.



Prof. Max Essex touring exhibition stalls with BHP management and other officials from Harvard.

vard University to appreciate what BHP does as continuation of the work that Max has laid the foundation for and has continued to build since 1996. The delegation also had opportunity to tour BHP facilities including the Botswana Harvard HIV Reference Laboratory and other BHP research and administration sites in Gaborone.

These two events also provided an opportunity for team building as BHP staff including Executive Management gathered in one place and interacted with each other as they celebrated the “Godfather” of BHP. Speaking on behalf of the staff at the party, Tumulano Sekoto from Regulatory Office opined that BHP staff ought to be happy for having walked the path with Max. She pointed out that BHP employees have been Max’s “eyes and hands” as they executed their various tasks and assignments, all geared

towards the attainment of BHP’s brand mission to fight HIV/AIDS and emerging public challenges through innovative research, education and capacity building that impacts policy and practice.

Dr Gaerolwe Masheto of CTU shared similar sentiments, emphasizing that while BHP staff everyday carry out their duties at their respective departments, they are in fact working towards one common goal anchored in Max’s philosophy of combating HIV/AIDS.

Despite being a renowned leading researcher and academic, Max remains humble and sees himself through the lens of modesty. “Sometimes I feel I do not deserve all these accolades. It has absolutely been wonderful being part of you. I feel I should have many times to revel in such festivities (jokingly) but working with you has been such a

splendid experience,” said the professor who prefers to be called just Max without the much honoured title of professor.

Max shared wisdom and advice on how to stay the course as a researcher, emphasizing that apart from a conducive policy environment, one needs to be selfless and truly dedicated to what they do. He expressed gratitude to BHP Management and staff for all the activities that have been put together to celebrate his contribution to science, research and capacity building that ensures a legacy of research to generate imperative knowledge that is essential in informing national policy in the fight against HIV/AIDS and other emerging public health challenges.

# BHP, a Partner in Developing Global Health Strategies



The BHP Laboratory staff busy at work

Botswana Harvard AIDS Institute Partnership (BHP)'s research outcomes have been hailed as key in global health policy formulation by the Kuwait Foundation for Advancement of Sciences (KFAS).

The special recognition is an appreciation of BHP's successes in enhancing HIV prevention and treatment through cutting-edge research that have impacted positively on policy and practice in Botswana and internationally.

The recognition follows a nomination submission for BHP by the Chief Executive of Officer, Dr Joseph Makhema for the 2018 cycle of the Al-Sumait Prize for African Development in the field of health. The decision to award prizes and confer special recogni-

tions followed a thorough process involving screening, evaluation by independent international adjudicators and review by an international Selection Panel.

Sharing with BHP the KFAS Board of Trustees' final decision on the award of prizes, the Director General and Board Member who is also the Convener of the Al-Sumait Prize, Adnan A. Shihab-Eldin revealed that BHP has been given "special recognition" by the Selection and Evaluation panels for its research output, a decision that received the blessing of the Board of Trustees.

In a letter to BHP Chief Executive Officer, Shihab-Eldin noted that BHP has been acknowledged for its achievements in "building

research infrastructure that produced knowledge necessary for effective AIDS prevention and patient management in Botswana."

The Director General indicated further that BHP's research outcomes have had a seminal impact on the public health care system, especially for the underprivileged and have been of value internationally in developing global strategies.

"The special recognition attests to the quality of the work of BHP and its unwavering commitment to continue making tangible contribution to help improve the life of less fortunate people globally and in Africa in particular," said Shihab-Eldin.

# BHP taking the lead in PBMC's isolation in Botswana



Natefo Keakantse Presenting on PBMC's Isolation

Clinical Trials Laboratory Assistant at Botswana Harvard AIDS Institute Partnership (BHP), Natefo Keakantse has revealed that her investigations have shown that BHP's peripheral blood mononuclear cells (PBMCs) Laboratory is at the moment the only facility that conducts PBMCs isolation in the country.

PBMCs play an important role in immune system functions such as recognition of foreign pathogens such as fungi, viruses or bacteria, fighting infections, as well as protecting the body against invading pathogens, thereby providing insight into immune responses, she has explained.

"PBMCs are an essential blood component necessary for study-

ing autoimmune diseases, vaccine development studies, drug discovery processes and advancing cancer research studies," she said.

Ms Keakantse made this revelation when presenting on PBMCs isolation processes at a recent BHP Journal Club session held at the BHP Conference Room.

She went on to explore the different types of PBMCs Isolation and the various techniques involved, with her preference being Leukapheresis procedure as opposed to the commonly used Density Gradient Centrifugation (DGC).

She explained that although this method is expensive and time consuming, Leukapheresis is nevertheless the easiest and most ef-

ficient method to use for isolating PBMCs as it only targets a particular constituent. By targeting a specific constituent, only the needed component is collected from the patient while the unneeded constituents are returned back into the patient's blood circulation.

Keakantse further explained that blood wastage and the risk of contaminating the donor's blood are significantly reduced under this method as opposed to the DGC which however is the fastest method when it comes to blood collection.

*Keakantse has been working on PBMCs for over three years and she has special interests in Paediatric HIV/TB Co-Infection Research.*



# BHP donates mobile laboratory trucks & network equipment to Ministry of Health and ACHAP

The Botswana Harvard AIDS Institute Partnership (BHP) on December 20th 2018 ended the year 2018 on a high note as it donated four Mobile Laboratory trucks, three to the Ministry of Health and Wellness while one was donated to the African Comprehensive HIV/AIDS Partnerships (ACHAP). Network equipment was also donated to the Ministry of Health and Wellness (MoHW).

When conducting the Botswana Combination Prevention Project (BCPP) also called Ya Tsie Study, BHP together with its collaborative partners, CDC and HSPH had purchased and used mobile trucks as Laboratory and Data Centers installed network equipment in all the 30 communities where the study was undertaken. The mobile trucks facilitated the laboratory specimen and data processing while the internet connectivity enhanced data transfer and communication between the various sites.

The transfer of the network equipment and three trucks to MoHW is expected to assist in facilitating internet connectivity and enhance communications in those health facilities where the BCPP study was conducted while the trucks will be used in the BAIS V survey. The one truck transferred to ACHAP is expected to be used in the Safe Male Circumcision campaign as it also contributes to strengthening the ministry's health care systems.



Handshake to mark the official handover of the trucks and network equipment, also symbolizing collaboration.

Presenting the equipment at the combined handover to MoHW and ACHAP at MoHW Headquarters, BHP Deputy Chief executive Officer, Dr Mompoti Mmalane noted that “the trucks have traversed all terrains across Botswana in the 30 villages where the study was conducted.” He stressed that the study has revealed that men still lag behind in testing for HIV and hopes the trucks will help the ministry and ACHAP in the safe male circumcision drive.

Receiving the equipment, Acting Deputy Permanent Secretary at MoHW, Dr Morrison Sinvula highlighted that the donation has come at the right time when the ministry is transitioning its hospital services from being city centered to reach out to people in remote areas. He pointed out that the network equipment will provide an opportunity for the provision of real time data man-

agement enhancing efficiency in their delivery of health services.

Representing ACHAP, Lesedi Tsalaeile also appreciated the gesture, noting that the truck will help them reach out to people in far flung settlements which are usually hard to reach due difficult terrain. The Country Director of CDC, Dr Michelle Williams was thankful for the handover and called for continued collaboration and support among the various health sectors.

National Coordinator at NACA, Richard Matlhare when delivering closing remarks highlighted the importance of partnership in unlocking the value of medical research.

“We can coordinate and provide policy environment but we need researchers, we cannot do without research,” he said,



urging all to introspect on the value of partnerships which he said is critical for collaborative research.

The BCPP study survey for which the infrastructure was purchased was conducted from October 2013 and concluded in June 2018. The equipment was purchased through a Center for Disease Control (CDC) grant awarded as sub contract to the BHP from the Harvard T. H. School of Public Health.

Consistent with stakeholder engagement at the beginning of the study, any infrastructure built by the study was to be transitioned over to the MoHW as part of the study's contribution towards health systems strengthening, hence the transfer of the equipment to the ministry and ACHAP.



One of the BCPP Laboratory trucks handed over to MoH&W



Officials from MoHW, BHP, ACHAP, CDC and NACA posing for a group photo in front of the laboratory truck.

# BHP collaborate with UB to undertake innovative HIV testing study



Dr. Mosepele Mosepele giving the background of the study.

The Botswana Harvard AIDS Institute Partnership (BHP) has collaborated with the University of Botswana (UB) to undertake an innovative HIV testing study for men in an attempt to find out why men do not test for HIV and or access healthcare services. Funded by the National Institutes of Health (NIH), the study titled “Innovative HIV Testing Strategy for Middle-to-Upper Income Men in a Resource Limited Setting” was recently launched (February 15, 2019) at Sir Ketumile Masire Teaching Hospital. UB, which is leading the study has partnered with Barclays Bank where it will recruit participants for the study to find out from men at Barclays Bank, what prevent them from participating in HIV testing

and how they would like to be tested and access HIV services.

Giving the welcome remarks and background of the study at the launch, the Principal Investigator for the study, Dr Mosepele Mosepele revealed that almost half the men in resource limited settings do not undergo HIV testing as it has been shown by various studies. He said because men do not test, they do not know whether they are infected and they spread the virus to their wives, partners and to their younger female partners when they are involved in inter-generational relationships. He noted hat Botswana still experiences high numbers of new HIV infections every year despite free access to prevention ser

vices and Antiretroviral Therapy.

Because of these realities, Dr Mosepele and his Co-Investigator, Professor Nthabiseng Phaladze (Department of Nursing, UB) and Dr Laura Bogart (RAND Institute, USA) proposed the study to the National Institute of Health (NIH) to explore barriers to HIV testing among men, and use results from the study to pilot an innovative HIV testing strategy among heterosexual men aged 35 years and above in major employers in Botswana. The study seeks to find out from men, what prevents them from participating in HIV testing and how they would like to be tested and access HIV services.

Dr Mosepele said they have proposed to conduct the research as a three-phased study with the first phase being face-to-face interviews with men who have tested for HIV and some who have not tested and find out from them what it would take for them to test for HIV and what would prevent them from testing for HIV.

The second phase involves setting up anonymous online interviews where men can anonymously say how they would like to access HIV testing and what barriers they perceive to be preventing them from getting tested for HIV. The final phase involves a pilot study of an innovative HIV testing strategy based on what men want as would have been revealed by the interviews.

(continued from page 11)



Mr. Tumelo Mokowe, Director Of Human Resource, Barclays Bank.

We will come up some innovative ways of getting men to access HIV testing. We have support to even provide self-testing using either needles or swabs to test HIV in the saliva," said Dr Mosepele.

The data from the study will possibly inform strategies to promote preventive health in the work place among men who often are slow at engaging with the healthcare system to access preventative services, or even when they are offered through employer initiated programmes. Dr Nkomo from the Health Service Management at MoHW said that the study will help support the Treat All Strategy by driving the first 90 of the 90-90-90 global health strategy. "Our projection shows that if you test men, you are more likely to find them infected men and be able to drive the 90's," he said.

Barclays Bank Director of Human Resources, Tumelo Mokowe said that as a responsible employer, they take great pride to have partnered with UB to conduct the

study. "Despite the availability of support programmes from the employer, many of our employees particularly men are not taking active part, not only for HIV but other ailments like hypertension. We have decided to partner with UB to find out what can be done to facilitate such kind of engagement and find out how we can make men participate in issues that are a challenge to society that include child abuse and upbringing of children," said Mokowe.

He stated that research has shown that social issues have an impact on productivity and by participating in the study, they want to address those issues so that they can uplift their performance. The bank stand to benefit as the study seeks to evaluate ways to improve HIV testing among men, hence the outcomes of the study will enhance preventative health behavior in the work place.

The Acting Vice Chancellor for Academic Affairs, Dr Oathokwa Nkomazana said the study will

mostly likely address the issue of stigma which she said is context specific. "What I may shy about that keeps me from seeking help may be different for someone next door in Zimbabwe. Finding reasons that are specific to our context and why people are not seeking care will be helpful," she said. She noted that many factors such as societal beliefs, infrastructure or the way the health facilities are organized determines whether people will seek help, including changing demographics, transitions in the economy and the way people define themselves. She said many elements determine what choices people make which calls for the healthcare system to transition with all these various dynamics

The Director, Office of Research and Development, Professor Graham Hall said the study is going to be worthy for Batswana, noting that men are often described as tough but the fact that they do not go for HIV testing indicate that men too are vulnerable. The study is expected to uncover men's vulnerability and find innovative solutions to the problem.

The Acting Dean in the Faculty of Medicine, Dr Doreen Ramogola-Masire expressed sentiments on growing local capacity for research and funding. She said she is pleased to know that NIH accepted the proposal and acceded to the request to fund the study, something that came as a surprise as in most cases, funders dictate terms, telling investigators what needs to be done and how. She said the predetermined questions that come

from the funders do not always provide solutions to our context.

Dr Ramogola-Masire said that it is very important to have more of home-grown researchers, well trained and seasoned enough to be able to come up with research proposals worthy of NIH taking note. "If we truly are intent on becoming a knowledge-based economy, we do not have a choice but to undertake research. It is part and parcel to economic development," said Dr Ramogola-Masire.

BHP Chief Executive Officer (CEO) Dr Joseph Makhema who is also the Chairman of UB Council commended the investigators for the study, advising the university to take the lead in innovative research as the top institution of higher learning in the country.

He highlighted that doing so is consistent with the university's strategy and the university's drive to fund research, further advising UB to invest in funding research so that they can support knowledge-based economy.



Dr. Joseph Makhema, BHP CEO

The Dean in the Faculty of Health Sciences, Prof. Ishmael Kasvosve commended the two Co-Investigators of the study, Dr Mosepele who is Head of Internal Medicine in the School of Medicine, Faculty of Medicine and Professor Phaladze, an Associate Professor in the School of Nursing in the Faculty of Health Sciences to have

seen the need to collaborate and pursue the study together.

He appealed for a wider collaboration across the University faculties. need to have locally produced Batswana Principal Investigators who are able to apply for grants externally and bring the money home for research.



Prof. Ishmael Kasvosve, Dean Faculty of Health Sciences

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## BHP commemorates World AIDS Day



Community Engagement Coordinator Ernest Moseki engaging with members of the public at BHP stall in Mochudi

As part of the commitment to fight against HIV/AIDS and emerging public health challenges through innovative research, education and capacity building that impacts on policy and practice, BHP participated at the National Commemoration of World AIDS Day (WAD) held in Mochudi on December 01.

It commemorated the day by putting up a stall to interact with, engage and educate the public on its role in combating HIV as a research institute.

Giving the keynote address at the commemoration, President Mokgweetsi Masisi said that WAD is a day for the nation to introspect and reenergize efforts in dealing with an enemy whose existence, at one time was not understood but Batswana are now knowledgeable about and empowered to tackle it head on.

BHP's participation at the commemoration was anchored on expanding HIV knowledge as way of empowering Batswana to stem the tide of HIV/AIDS.

A large number of people visited the stall to learn how BHP inspires HIV discoveries through innovative Science Research and how its breakthroughs have informed national policy on HIV/AIDS treatment.

BHP team discussed with the public the role that scientific research plays in developing efficient treatment and prevention methodologies in the ongoing fight against HIV.

The discussions helped to enhance public knowledge of not only the role of BHP but also knowledge on the dynamics and approaches to HIV/AIDS prevention and treatment.

To demonstrate that indeed BHP offers perspectives on effective HIV prevention and treatment, the team discussed with the public some of its ongoing studies. The studies included HPTN 084 which is the first study to test whether an injection of cabotegravir given once every two months works better than Truvada pill taken daily for HIV prevention in women.

Other studies included Potlako which aims to save lives through faster cancer diagnosis. Potlako is an initiative to reduce delays in cancer diagnosis and treatment linkages of cancer patients, Tshidilo Dikotla, AMBITION, CTU and the laboratory. President Masisi revealed that the national HIV incidence rate of 1.35 percent and new HIV infections is estimated to be fluctuating between 10 000 and 14 000 per year.

He pointed out that "the only indicator that would show that we are heading the right direction would be the time when we start recording zero new infections."

To achieve zero infections, BHP and all other stakeholders have to actively continue playing their part in fight against the HIV/AIDS endemic.



# IMPAACT 2008 and IKITSE study enroll first participants



IMPAACT 2008 Principal Investigator, Dr. Gaerolwe Masheto



IMPAACT Study Physician, Dr. Ponego Ponatshego

IMPAACT 2008 a study of Monoclonal Antibody VRC01 with Combination Antiretroviral Therapy to Promote Clearance of HIV-1 Infected Cell in Infants has enrolled its first participant at the Gaborone site.

IMPAACT 2008 Study Physician, Dr Ponatshego has congratulated the study clinic and Laboratory teams for their tireless efforts to ensure that the study attains the milestone of enrolling its first participant. IMPAACT2008 is a study on infants who are three months of age or less.

The study investigates the safety of VRC01 administered with antiretroviral drugs (ART) and the effect of VRC01 on HIV-1 DNA concentrations in peripheral blood among HIV-1-infected infants. VRC01 is an investigational monoclonal antibody which is currently being studied as a possible strategy to treat people living with HIV. Some infants enrolled into the

study will be given the VRC01 in addition to standard of care ARVs and they will be compared to those enrolled not receiving the VRC01, but receiving the standard of care ARVs only.

"This is a relevant and important study because perinatal HIV-1 infection presents a unique population to determine if early combination antiretroviral therapy (cART) plus broadly neutralizing monoclonal antibodies (bNAbs) such as VRC01 will limit HIV-1 reservoirs" said the IMPAACT Study Investigator in Botswana, Dr. Gaerolwe Masheto.

He pointed out that "administering VRC01 with cART during early infection has the potential to reduce the potential for ongoing low-level replication, and also potentially eliminate HIV-1 expressing cells through antibody dependent cellular cytotoxicity (ADCC) which promotes killing of HIV-1 infected cells".

The study which is funded by the National Institute of Allergy and Infectious Diseases and the Institute of Child Health and Human Development (NIAID/NICHD), targets to enroll 68 participants worldwide and so far, 10 infants have been enrolled with one infant enrolled in Botswana.

Botswana site aims to enroll 8 participants. The study is being conducted in Botswana, South Africa, Malawi, Brazil, Haiti, US and Zimbabwe.

Another new BHP study which has enrolled its first participant in February 2019 is the "IKITSE Study" which seeks to determine the acceptability and uptake of HIV self-testing among female sex workers in Botswana.

Ikitse is a Setswana name which translated in English means "knowing oneself". The name was selected to signify the important aspect of knowing one's HIV status.

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IKITSE Study Assistant Project Coordinator, Kutlo Manyake



IKITSE Study Principal Investigator, Dr Emily Makunike-Shava

Assistant Project Coordinator for IKITSE Study, Kutlo Manyake explained that the study will involve both qualitative and quantitative data collection.

The study seeks to conduct face-to-face interviews with 30 female sex workers and five healthcare workers to get their personal views on oral HIV self-testing so as to gauge acceptability.

Thereafter, 200 participants will be enrolled and be provided with the oral HIV self-testing kits (Oraquick) to test themselves and to share the testing kits with significant others.

The one-year study started in January this year and is expected to end in January 2020 having established how peo-

ple responded to the introduction of oral HIV self-testing.

The data from this study will provide the basis for whether HIV self-testing is a feasible option that can be introduced in order to improve HIV testing especially amongst high risk and hard to reach populations.

Manyake has given special recognition to the IKITSE team from Nkaikela Youth Group for their great contribution and dedication to the study. Nkaikela Youth Group is a Non-Governmental organization where sex workers access care.

The organization has partnered with BHP on this study so that they become the link to key population (female sex work-

ers) and facilitate recruitment and retention for the study.

The IKITSE Study is funded through Harvard University Center for AIDS Research through a developmental award for the study Principal Investigator, Dr. Emily Shava.

"HIV Self-testing among women at high risk for both HIV infection and marginalization could be an important element of early diagnosis and engagement in care strengthening HIV prevention efforts, thus the feasibility and acceptability of self-testing should be well defined and its potential role and impact understood," said Dr Shava, further highlighting the importance of strengthening in-country HIV prevention strategies.



# BHP remembers Emmanuel Kedisitse

Saturday night of January 26th, 2019 marked the beginning of a very somber and tearful week ahead as Botswana Harvard AIDS Institute Partnership (BHP)'s Laboratory Scientist and Quality Officer, Emmanuel Kedisitse succumbed to cancer and breathed his last. The announcement of his passing to colleagues at the Laboratory on Monday morning brought anguish to the many BHP colleagues who have worked with him for the last nine years.

On Wednesday afternoon (January 30, 2019), BHP held a memorial service at the BHP Conference Room to remember Kedisitse and to give staff an opportunity to honour the memory of the deceased. Kedisitse's colleagues from the Laboratory shared their fond memories of him, all sharing details of their encounters with him over the past nine years he has spent at BHP. All the speakers described Kedisitse as a wonderful spirit, a cheerful person whose humility and dedication to work has always been exemplary.

The service started with a poignant sermon by Pastor Gabriel Diteko who has an impressive gift of the gab. He read from 1 Thessalonians 5:23 from the King James Version (KJV) to comfort the bereaved colleagues and family members.

"And the very God of peace sanctify you wholly; and I pray God your whole spirit and soul and body be preserved blameless unto the coming of our Lord Je-



The late Emmanuel Kedisitse

sus Christ," read the scripture. He also quoted 1 Corinthians 15:20-23 KJV to emphasise on restoration and rebirth in Christ, observing that because Kedisitse was a resolute disciple of the word of God, he will be among the first to be risen from the dead as the bible records in 1 Thessalonians 4:13-18 KJV that "... the dead in Christ shall rise first." Kedisitse's colleague, Julita Magwenzi pointed out that despite deteriorating health, Kedisitse cared about his job. She said that just like the way he loved his job, Kedisitse loved his family. "He cared so much about his work and his family. When he was getting mar-

ried, he told me and I attended his wedding," said Magwenzi who said her and Kedisitse were like brother and sister. She recalled being surprised by Kedisitse's

love for Shona music of which he had great compilation, some of the songs Magwenzi who is shona did not have or even know about.

Otwell Elias who supervised him at the PBMCs Laboratory revealed that Kedisitse was dedicated to his work and was always ardent to work full hours a day despite being in pain. He explained that Kedisitse did not like self-pity as he had accepted the situation with his health and he had the confidence and courage to cope with it and go all out against all odds. as a person of high integrity, honesty and sincerity who always carried out his assignment with tact and delivered on his set goals.

"We are strengthened by the fact that we know that he fought a brave and good fight," said Dr Sikhulile Moyo, the Deputy Lab-



BHP staff at Emmanuel Kedisitse's memorial service.

oratory Director who described Kedisitse as a valiant Scientist. He said that Emma as Kedisitse was affectionately known among his colleagues have had an exceptional contribution to BHP having worked in various sections within the HIV Reference Lab, handling with ingenuity the many different science processes from different sections. He noted that Kedisitse was part of the HPTN 052, a study that informed the Treat All antiretroviral treatment strategy adopted by the Botswana Government.

Representing the Kedisitse family, Mosalagae Gaborone relayed the story of their upbringing and of Kedisitse's influence at home. He lamented Kedisitse's death, describing him as an intelligent person who they looked up to for inspiration. Lebalang Ramatokwane who played football with Kedisitse in the BHP Football team handed over the kit that was worn by Emmanuel Kedisitse to Gaborone. The team has suspended Kedis-

tse's Jersey number seven as a way of honouring him. His friend, Vincent Pagiwa was very thankful for the gesture, acknowledging BHP management for the support that they have given his friend when he was going through difficult times. He applauded BHP management for having extended Kedisitse's employment contract even when he was fighting for his life in a sickbed away from work, pointing out that this is indicative of BHP's support and demonstration of how much valuable Kedisitse was at BHP.

Giving a word of Comfort, BHP's Chief Operations Officer, Ria Madison recited a poem that teaches about loving each other while we are still alive just as BHP and its staff sincerely loved and treasured Emmanuel Kedisitse when he was still alive. "When I am dead..., your tears will flow..., but I won't know...Cry with me now instead...You will send flowers..., But I won't see..., Send them now instead," read part of the poem. Madison noted that Ke-

disitse's courage and persistence have inspired colleagues to have a positive mindset even when faced by difficulty just as he was determined to soldier on despite odds stacked against his health. Kedisitse life story was depicted as that of triumph over adversity.

BHP hired a bus to transport staff to Topisi, Kedisitse's home village, to go and bid their colleague final goodbyes as he was being laid to rest. On Friday morning (February 01, 2019) before the bus left for Topisi for the funeral, BHP held a group counselling session by renowned pastor and counsellor, Reverend Eddy Aupa Rantshilo at BHP Conference Room to uplift the spirit of all staff members so that they may find closure and accept that their dear colleague's soul is resting in eternal peace.



ON THE BALL: BHP Football Team has handed over this kit to Kedisitse's family and have suspended jersey No. 7 in Kedisitse's honour.

# 10 A USER'S GUIDE: WAYS TO PROTECT YOUR PERSONAL DATA

## 1 Don't click that link!

**What to do:** Don't click links in emails. Instead, type the URL you want directly into the browser.

**Why:** According to Microsoft, phishing is still the number one favorite method of cyber-attacks.



## 2 Use two-factor authentication

**What to do:** Use a second factor for logging into accounts.

**Why:** If you have a robust two or multi-factor in place, you are much less likely to lose personal data due to phishing.



## 3 Delete recorded conversations

**What to do:** Regularly delete any recorded conversations used by your personal assistant.

**Why:** There have been cases where Alexa revealed personal data to unknown persons without consent.



## 4 Keep it clean — delete old files

**What to do:** Make sure you keep data replication to a minimum. Delete old files you don't use.

**Why:** There can never be 100% security, but reducing the places that can be compromised helps lessen your risk.



## 5 Be less social

**What to do:** Minimize the amount of personal data you have on social media platforms.

**Why:** Information like your pet's name or mother's maiden name is sometimes used to recover account logins. Don't give hackers an easy way into your online accounts!



## 6 Don't sync for sync's sake

**What to do:** Disable automatic file and media sharing whenever possible.

**Why:** A lot of devices set up cloud syncing when you first configure the device. Check if you really want to store these data in the cloud.



## 7 Keep off the beaten track

**What to do:** Disable location tracking on each app.

**Why:** A recent study of almost 1 million Android phones demonstrated that apps regularly harvested tracking data.



## 8 Let sleeping Bluetooth lie

**What to do:** If you are not using Bluetooth, switch it off.

**Why:** Bluetooth vulnerabilities can allow data to be siphoned off your device.

## 9 Encrypt stored data

**What to do:** Encrypt any data you store on hard drives and use an email encryption tool if you share personal data.

**Why:** Encryption is a layer of protection that can prevent lost or stolen data from being exposed.



## 10 Patch your devices

**What to do:** Keep your computers and mobile devices patched and up to date.

**Why:** Software vulnerabilities allow malware to infect your device, which can steal data and login credentials.



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