



**Two outstanding  
SMU Female Academics are  
the leading Professors  
in their areas of specialization**



# Sefako Makgatho Health Sciences University's Dr Dikeledi Mokone, becomes the first African female Professor of Surgery in South Africa!

**S**efako Makgatho Health Sciences University (SMU) is proud to announce Professor Dikeledi Mokone as the first female, African, to become a professor of Surgery in South Africa. Prof. Mokone is a well-respected academic in the field of breast oncology in South Africa and abroad amongst her peers. Her commitment to teaching both undergraduates and post graduates students is legendary. She is a dedicated clinician and academic. The University's Dean of the School of Medicine Professor Nathaniel Mofolo has described this as a historic moment, given that, worldwide, surgery is a male dominated area of specialization. "In the South African context, the problem has been, particularly, severe due to apartheid and its legacy", said Mofolo.

Prof Mokone completed her undergraduate studies and went to specialize as a general surgeon at SMU, where she further trained as a sub-specialist breast surgeon. She is currently Head of the

breast Unit at the Dr. George Mukhari Academic Hospital (DGMAH).

Her research interests are in the area of breast pathology, particularly, as it affects the indigent population of South Africa. She has published widely in the field of breast surgery. Her current responsibilities include teaching of both undergraduate and post graduate students and patient care. She is also supervising several Master's students.

The University has congratulated Professor Mokone for this momentous achievement.

Prof Mokone is a strong leader and SMU is proud of her achievements.

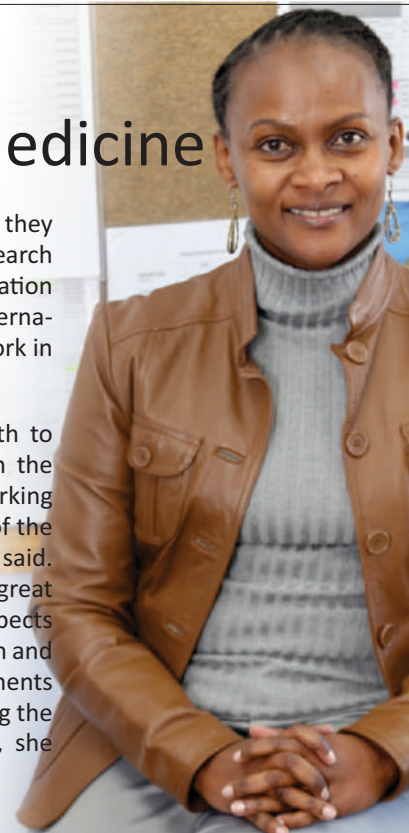
## Prof Nozipho Nyakale is now Associate Professor in Nuclear Medicine

**P**rof Nozipho Nyakale is one of the only two black female Associate Nuclear Medicine professors in the country, and the first black female to be promoted as Nuclear Medicine Head of Department in this academic standing. She has now been promoted to Associate Professor in the department of Nuclear Medicine and is the head of the department of Nuclear Medicine at the SMU/DGMAH complex.

"Our focus as a department has always been and continues to be ensuring that our department is on par with the best. We offer teaching and service that will create scholars that can survive and excel worldwide. We strive to offer a comprehensive service that gives our people access to what could otherwise be deemed exclusive diagnostic and therapeutic services; and teaching that allows our students to get exposure to almost everything that is needed for them to be with the best in the field",

said Prof Nyakale. She further stressed that they continue to progressively improve their research output and ensure that this is done in collaboration with the rest of the institution, national and international community and produce outstanding work in the area of nuclear medicine.

"This is the mandate I hope to continue with to ensure that we continue to grow together in the department. I believe I am naturally hardworking and always strive to do the best I can in spite of the resources available to me and the team", she said. Nyakale further expressed gratitude to the great mentors who patiently guide her in multiple aspects of her career. "I avail myself to serve where I can and always hope to make a difference. The achievements are simply validation of your efforts in providing the purpose and service that you are called to", she concluded.



### Editorial Team

**Dr Lusani Rabelani**  
Netshitomboni  
*Editor in Chief*

**Phaladi Seakgwe**  
*Editor*  
**Dineo Motshegare**  
*Graphic Designer*  
**Tumelo Moila**  
*Writer*

**Golokile Lebelo**  
*Intern*  
**Thelma Mohlala**  
*Intern*

**Relebogile Mabusela**  
*Intern*  
**Tsireledzo Mandane**  
*Intern*

### CONTACT US

E-mail: [phaladi.seakgwe@smu.ac.za](mailto:phaladi.seakgwe@smu.ac.za)

**Sefako Makgatho Health Sciences University**  
Molotlegi Road | Ga-Rankuwa | Pretoria 0204



# Dr Livhuwani Tshivhase wins the nGAP Award



**N**ursing Department Lecturer Dr Livhuwani Tshivhase is one of the top ten Lecturers who won the New Generation of Academics Programme (nGAP) Award. The Award ceremony was held on the 13th and 14th of April 2023 at the Emperor's Palace in Kempton Park. The nGAP is a prestigious programme under the Department of Higher Education and Training (DHET) that involves the

recruitment of highly capable scholars as new academics. Twenty-six South African universities advertise posts giving all those without experience an opportunity to apply and join nGAP before the previous lecturers and academics retire. Those who wanted to pursue their careers further were allowed to do so for instance, a person having a master's degree was able to complete a Doctor of Philosophy (Ph.D.).



Dr Tshivhase Began her lecturing career at Sefako Makgatho Health Sciences University (SMU) in February 2016 through the nGAP, where she was lecturing Community Nursing Science and General Nursing Science modules for the undergraduate bachelor's degree in nursing and Midwifery. During the beginning of her lecturing career, Dr Tshivhase was enrolled for a PhD in Nursing Science in March 2016, where she was allocated a supervisor so that she could complete it in record time. When she joined SMU, she was told that nGAP is meant to bridge the gap for the shortage of lecturers by recruiting new lecturers, due to the older generation of lecturers who were retiring.

“

“Joining the nGAP was like a dream come true because, I always wanted to become a lecturer, but it was tough. I applied to various universities after getting my master's degree but unfortunately, they could not take me because they needed experience which I did not have. nGAP opened doors for me because I became a permanent lecturer at SMU without having the experience after joining the programme and I was allocated a mentor to take me through the teaching process”  
explained Dr Tshivhase.

*continues to page 4...*

The awards were spearheaded by the Minister of DHET Dr Blade Nzimande. Ten lectures from various institutions completed their programmes within four years including Dr Tshivhase. "I was shocked when the Minister called my name as I did not think that I will be one of those to be called onto the stage. Dr Nzimande gave me the award and said well done for making progress in the nGAP. Some people quit the programme because the workload was too much for them, they could not cope due to the institution's high expectations," said Dr Tshivhase.

She completed her PhD in 2019 and graduated in 2020, the graduation ceremony was held virtually due to the Covid-19 pandemic. "I only ascended the stage in 2022 at SMU sports complex to have a feel of receiving a PhD. nGAP did not prescribe a mentor for people but allowed them to nominate a mentor for themselves from whichever institution they preferred. The mentor was a neutralizer especially when encountering problems with supervisors and the Departments. I got the best mentor ever because she assisted me so much and was an experienced researcher. My academic career has gone higher due to her input" stated Dr Tshivhase.

Dr Tshivhase said that most money came from nGAP funding. People cannot study further because they struggle financially but with nGAP, people's study fees are funded regardless of them having a salary and the university also contributed a small percentage towards the fees. The 26 universities in South Africa advertise positions for nGAP every year online and one can apply as long as they have an honours degree to do a masters up until PhD level. You must be determined to study because nGAP wants people to complete their studies on time.

"The challenge I faced during nGAP was the workload allocation because it made studying difficult. When you arrive at the institution, you are given work as if you are part of the workforce forgetting that you are still studying, and the main aim was to do 30% of teaching and 70% on research. When there is a shortage of lecturers, our managers would allocate us saying that we are lecturers. Colleagues did not understand the programme we were in because they thought we were being nursed when allocated time to go and do research. The university said it is going to implement this programme but did not have office space for me to study and do research as the new person in the department. I was frustrated because we were sharing an office and students were coming into that office. I think this is one of the reasons why some people quit the programme", she said.

Dr Tshivhase mentioned that sometimes you may not be given the chance to progress further because some people look down on nGAP and may not allow you opportunities even if you meet the criteria. The misunderstanding that other colleagues and management might have when it comes to what nGAP entails is a problem. "Many people were applauded for being promoted to senior positions and those from SMU were questioned as to why they did not have senior positions. nGAP allocated time for me to study and two supervisors but, there was a conflict in between because each one of them had their expectations.

"Some people took six years to complete their degrees and Dr Nzimande was appreciative of those who completed their course on time," said Dr Tshivhase.

# SMU participates in the Production of Globally Competitive Academics through the nGAP

**S**efako Makgatho Health Sciences University (SMU) is a proud participant in the New Generation of Academics Programme (nGAP) financed by the Department of Higher Education and Training (DHET), which aims to produce the next generation of academics for South African universities. Dr Thembi Simbeni and Dr Livhuwani Tshivhase were the first SMU lecturers to be appointed in the programme and thus received nGAP Awards from the Minister of DHET, Dr Blade Nzimande for completing their Doctorate of Philosophy (PhD) research on time and were part of Phase 2 of the nGAP at the National nGAP

Colloquium held on the 13th of April 2023 at Emperor's Palace in Johannesburg.

As a health sciences university, SMU not only produces quality globally recognised health practitioners but, also produces the next generation of academics in the health sector through the nGAP. Public Health Department Lecturer and Alumnus Dr Thembi Simbeni mentioned that she applied for the nGAP position advertised by SMU while she was still a Master's student. She was called in for an interview and later got appointed for the nGAP position.

*continues to page 5...*

Dr Thembi registered for a PhD in Public Health in 2016 and started her research late in 2017 due to challenges encountered in-between the years. "I had a good working relationship with my supervisor and submitted my thesis in June 2019 for examination. I received my results around September 2019 and graduated in 2021. I missed the graduation in 2020 because I did not have my publication from the thesis yet," said Dr Simbeni. Her highlight from the nGAP colloquium held recently is when she presented her PhD research findings to the nGAP funder (DHET) and when she was awarded for completing the programme.

Dr Simbeni comes from a clinical environment and was working as an occupational therapist before entering the academic field through nGAP. Amongst other duties, she is currently teaching and supervising postgraduate students in research at the Department of Public Health. "To anyone who wishes to develop themselves, nGAP offers a great opportunity to be mentored into teaching, research, and funding for PhD attainment", said Dr Simbeni.

Director of Development Grants Mr Theo Bhengu asserted that the nGAP is transformative in nature and is informed by DHET's Staffing South African Universities Framework (SSAUF) which encourages universities to focus on producing young predominantly black female academics. He further indicated that SMU started participating in Phase 2 of the nGAP because it was still trying to find its feet in 2015 following the demerger when the programme started nationally.

To maintain the prestige of this programme, candidates in and outside SMU are eligible to apply for approved nGAP positions provided they have an average percentage of not less than 70% at the Master's Level. SMU currently has 15 lecturers on the programme from Phases 2 to 8. "SMU postgraduate students who have Masters degrees may join the nGAP as it will allow them to be mentored as academics and to present their research at conferences both locally and in at least one international mobility which is also funded. They will be able to network with people from other institutions and learn about other disciplines," added Bhengu.

Mr Bhengu indicated that this forms part of SMU's retention strategies especially of highly productive academic and research staff. This falls within the ambit of the Human Resources portfolio, Schools, and academic departments. Other earmarked grants can support such staff to thrive in their research work.

Mr Bhengu mentioned that the nGAP also assists in research output, in terms of how the funding formula of the Department works. The productivity of postgraduate students registered at SMU who complete their Master's degrees and PhDs within the set time counts as part of the university's research output. "As any other PhD student, nGAP lecturers write articles in accredited journals, and

other kinds of research output (including book chapters) and can develop to be NRF-rated researchers," said Bhengu.

He further stated that SMU's Grants Management department manages other grants as well, including the University Capacity Development Grant (UCDG) which focuses on student support, staff, and curriculum development. There is also the Foundation Provision Grant (FPG) whose focus is on supporting students to succeed academically. The Sibusiso Bengu Development Grant (SB-DG) formerly called the Historically Disadvantaged Institutions Development Grant (HDI-DG), is only allocated to the eight historically black universities of which SMU is one.

The Clinical Training Grant (CTG) is also allocated to the University to augment the clinical training needs of the University by appointing mainly clinical staff as well as purchasing clinical training equipment and providing funds for the operations of clinical training programmes.



# A Chat with TAU Fellow Dr Nontobeko Mncwangi



**A**cting Head of Department: Pharmacy Practice, Dr Nontobeko Mncwangi was among the third cohort of the Teaching Advancement at Universities (TAU) fellowship. She completed the programme and has been awarded recognition as a TAU Fellow. The fellowship is funded through the Department of Higher Education and Training (DHET) and endorsed by the Higher Education Teaching and Learning Association of Southern Africa (Heltasa).

Dr Mncwangi was born in Ladysmith, she is one of four children, number two and only has one brother. Her whole family is in Ladysmith, a small town in KwaZulu-Natal. She went to Wasbank Primary School and Hoërskool Sarel Cilliers, she then pursued a Degree in Pharmacy at the then Medical University of Southern Africa (MEDUNSA), now Sefako Makgatho Health Sciences University (SMU). Currently, she is a registered pharmacist and a Senior Lecturer, acting Head of the Department of Pharmacy Practice, at the Sefako Makgatho Health Sciences University, School of Pharmacy. In this role, she is primarily responsible for developing and implementing a curriculum for pharmacy undergraduate students and also oversees research methodology for Honours students. She supervises Master's and Doctoral students working in different areas of Pharmacy Practice and Pharmaceutical Sciences.

In August 2019, she was appointed as an External Medicine Evaluator at the South African Health Products Regulatory Authority (SAHPRA) in the Pharmaceutical and Analytical Committee. As of February 2021, she was appointed as a member of the Working Group of Experts for African Traditional Medicines by SAHPRA. She has over 15 years of experience in both the private and public healthcare sectors of South Africa. She has been a visiting scientist at national and international institutions including the University of Mississippi (Oxford, US) and the University of Innsbruck (Innsbruck, Austria); this experience has enhanced my skills and practice in a quest to make a meaningful contribution to medicinal plant research. She has a passion for natural sciences, especially medicinal plants – Phytomedicines, after finishing her undergraduate studies, she then completed a Master's Degree in Pharmaceutical Sciences which she graduated cum laude and in 2017, completed her Doctorate which had a special focus on Phytomedicines, developing quality control parameters and evidence-based practice. As a young researcher, she has published and presented peer-reviewed articles on the research findings in various peer-reviewed local and international scientific meetings. For five years (2012 - 2017), she was a member of the South African Medical Research Council – Herbal Drugs Research Unit (SAMRC-HDRU), in the Department of Pharmaceutical Sciences at Tshwane University of Technology. In this role, she was primarily involved in research execution and supervision.

Focus on SMU Reporter tracked down Dr Mncwangi to hear more about her TAU fellowship.

## **What is the TAU fellowship all about?**

The TAU programme is included in the Ministerial Statement on the University Capacity Development Programme (UCDP) as a national

*continues to page 7...*

initiative in support of the implementation of the UCDP. The Statement asks for TAU participation to become a component of each institution's UCDP and Teaching and Learning plan. Institutions are asked to nominate their TAU participants and to link their nomination to one or more of their UCDP-funded or strategic Teaching and Learning projects. In this way, TAU participants and their projects will become part of the institutional strategic planning around Teaching and Learning and contribute to your institutional goals. This approach will allow the time allocated to TAU to be factored into the nominee's workload, TAU and participant workload. TAU requires serious commitment and engagement from participants. Participants are required to:

- Attend the three five-day Intensive Sessions across twelve months;
- Engage fully with the Enquiry Group in which they are placed, during and between the
- Intensive Sessions;
- Develop and implement a strategic institutional teaching and learning project;
- Report regularly on progress with the institutional teaching and learning project;
- Produce a four-page report on the teaching and learning project at the end of the year-long programme
- Collaborate with the Enquiry group in the development of a digital artefact;
- Submit a four-page self-reflective report on the TAU experience at the end of the year-long programme.

In addition to the Intensive Sessions, participants can expect to spend 3-5 hours weekly on their institutional project and engagement with Enquiry Group colleagues. Time spent on the AU project needs to be factored into the workload of participants.

### **Why are you interested in the TAU fellowship?**

I was nominated by the then-acting HOD Pharmacy Practice, I was hesitant to accept the nomination as I was not certain of what it entailed. Having gone through the information pack, I realised that it is a program that I wanted to engage in and be part of. I later learnt the importance of taking a chance even if you are not sure because the program has been a highlight of my career.

### **How will the TAU fellowship enhance your career growth?**

TAU does not only cause one to self-reflect continually but also, issues of agency and community engagement are highlighted in the program. The digital artefact that was created as part of the TAU now forms part of my official welcome to BPharm I students as it speaks directly to reasons why one would enrol in a professional degree and what is the acceptable overarching expectation and attributes at the end of the study period, which we referred to as 'graduateness'.

### **How do you plan to continue learning in your field?**

I plan to keep abreast of all new knowledge in my field and associated fields, also through attending seminars, congresses and workshops, this network-building effort will

result in collaborations with colleagues in South Africa and further abroad.

### **Can you describe some of your main discoveries that resulted from your PhD research?**

The project consisted of two core components namely quality control and in vitro anti-inflammatory assays. *Harpagophytum procumbens* together with the close taxonomic ally *H. zeyheri* are collectively known by the common name 'Devil's Claw' and are used interchangeably. However, *H. zeyheri* has been found to have lower concentrations of pharmacologically active constituents and both species exhibit chemotypic variation. Subsequently, it is not always suitable for medicinal use as a raw material to be used in phytomedicines in its current form. The less biologically effective *H. zeyheri* presents a problem where it is included as an adulterant in *H. procumbens* product formulations. Adulteration of raw materials and products emphasizes the need for strict but simpler and more rapid quality control measures. Several techniques were explored to develop elegant, rapid and cost-effective quality control protocols for *Harpagophytum* species.

The current ESCOP (2003) monograph recommends that *H. procumbens* preparations be used for symptomatic treatment of painful arthritis, back pain, lack of appetite and dyspepsia. *Harpagophytum procumbens* has also been widely used in European herbal tea formulations and usually ground *H. procumbens* roots are formulated into capsules, tablets, liquid extracts and topical creams. The quality of *H. procumbens* products has been called into question due to the interchangeable use of *H. zeyheri* and *H. procumbens*. As it is known that *H. zeyheri* contains lower concentrations of pharmacologically active constituents, adulteration of *H. procumbens* raw material and products may cause less than expected biological activity leading to treatment failure and loss of consumer trust in the product. This accentuates the need for strict, simpler and more rapid quality control measures. In the study, various chromatographic and spectroscopic methodologies were applied and they produced congruent findings. Metabolomics is the non-biased identification and quantification of all metabolites in a biological system.

However, no single analytical technique can provide a representative view of the entire metabolome therefore multiple techniques were used. Currently, three groups of methods can be used for metabolomic analysis namely chromatography (GC, HPLC), molecular weight-based methods (mass spectrometry) and physical characteristics-based methods (NMR spectrometry). The selection of the most suitable method or methods is regularly a compromise between speed, selectivity and sensitivity. NMR methods are rapid and selective but not very sensitive; while methods such as liquid chromatography coupled with mass spectrometry (LC-MS) are selective and sensitive but time-consuming. Vibrational spectroscopy methods, for example, Fourier transform infrared (FT-IR) spectroscopy, are rapid. Analysis of data is done with pattern recognition techniques

*continues to page 8...*

that determine similarities or differences between samples. More selective methods are needed to determine the specific identity of the meta-bolites responsible for the similarities and differences between samples.

Any method, singularly or in combination, results in complex multivariate datasets. These datasets require visualisation software and chemometric methods for interpretation. Chemometrics plays an indispensable role in elucidating patterns in complicated chemical matrices such as in herbal formulations. Multivariate and principal component analysis are excellent chemometric tools for comparing complex spectral data, identifying patterns of co-occurrence of compounds and assisting in elucidating chemical compositional differences between samples. Combining and correlating metabolomic data with pharmacological activities of the phytomedicine enabled the researcher to identify the active fraction(s) or compound(s). The potential of this approach has been demonstrated by various researchers in the investigation of phyto-medicines.

This holistic systems biology approach in the investigation of phytomedicine is a novel approach to optimizing the efficacy of a phytomedicine. Devil's Claw remains an important export product where it is used internationally in producing a range of herbal products. Additionally, by providing some basic scientific data, the project produced valuable information of commercial value. Recently, similar projects have shown the value of developing rapid and efficient quality control protocols which are welcomed by the pharma industry.

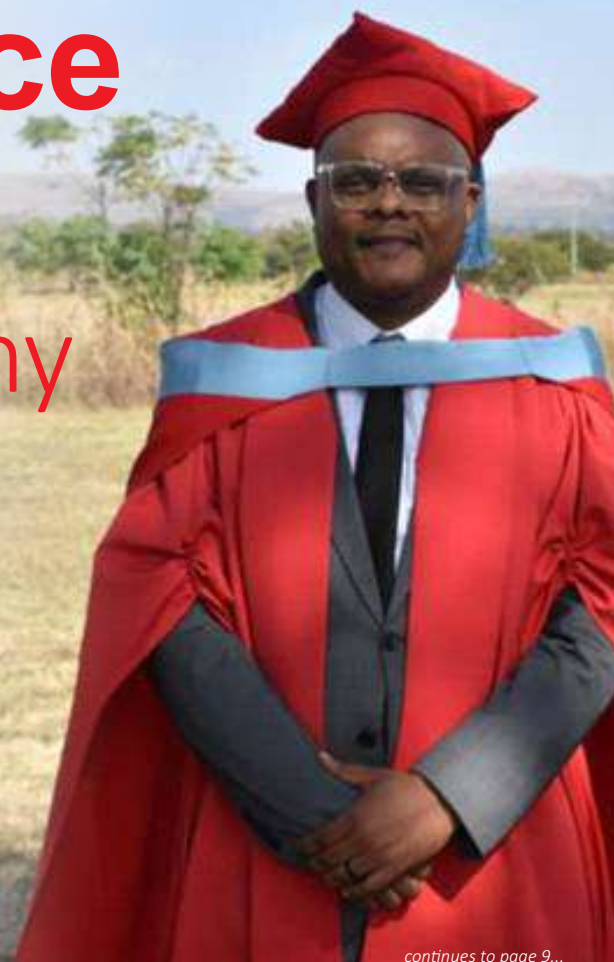
Through a metabolomics systems biology approach the results could direct the formulation of superior products with favourable pharmacological properties. This is basic research; its findings could influence chemotype selection for propagation; harvesting and post-harvesting processes; furthermore, quality can be assured in product manufacturing through the use of the simple and fast techniques which were developed such as HPTLC, MIR and NIR, also, this work is a springboard for further exploration of H. procumbens product quality, efficiency as a treatment modality in vivo studies and further investigation of biopharmaceutics, pharmacokinetic and pharmacodynamic studies.

#### What are your postdoctoral research goals?

I aim to engage myself in meaningful research that will make an impact both locally and internationally. South Africa is rich in biodiversity, both flora and fauna, more often than not, this is left unexplored. The scourge of the COVID-19 pandemic which left a lasting impact on our daily lives serves as a reminder that nature heals, as the general public focused more on herbal/traditional remedies to alleviate symptoms of COVID-19. One of the projects I am currently working on is medicinal cannabis, evaluating the anti-inflammatory effects of cannabidiol when applied to the skin. The results are encouraging, however, there is a great need for infrastructure to develop such assays and financial support to procure the required standards and solvents. Also being recognized by the National Research Foundation (NRF) is a goal I aim to achieve shortly.

# Bronwin Prince Van Wyk – Doctor of Philosophy in Medical Physics

**D**r Bronwin Van Wyk recently obtained his PhD in Medical Physics during the Sefako Makgatho Health Sciences University's autumn graduation ceremonies. He is currently serving as the Deputy Director of the Medical Physics Department at Dr George Mukhari Academic Hospital and Senior Lecturer at Sefako Makgatho Health Sciences University. His PhD research looked at the nature of neuroendocrine tumours at two South African hospitals. Focus on SMU Reporter interviewed him to get an insight into his recently acquired qualification.



*continues to page 9...*

**Congratulations on obtaining your PhD qualification. In brief, what is your PhD dissertation all about? What impact does your research add to the body of knowledge?**

Thank you so much, really appreciated! My research looked at the nature of neuroendocrine tumours at two South African hospitals. I developed dosimetry software to quantify or calculate the radiation dose to these tumours and the kidneys (which are considered critical organs). This software adds to the literature, as dosimetry is not currently prioritised in an African setting, unlike developed countries in Europe and America. All equipment worked on was validated in the study along with the software, which was validated against commercial software.

**What motivated you to become a Doctor of Philosophy?**

Have to say, my late father. He always said "Princie must become a doctor", still do not think he knew that he planted a seed and how it would manifest as it did. Also have to give thanks to my wife, sons, mom and sisters; because of them, I'm a motivated person.

**Who is Bronwin Prince Van Wyk (explain in detail from birth until now)?**

Bronwin is a so-called coloured that grew up on the outskirts of Soweto, in a small community called Noordgesig. Think that tells you more about me, than any sentence. From these dusty streets, I've always fought for what I wanted, from changing to a school (Westbury High) that offered Maths and Science as a combination when my school in Noordgesig dropped this combination. Somehow science was always what I pursued, hahaha. To attending university in the Free State, where it was a culture shock to my system. Also had to change supervisor during my research at SMU, but kept on fighting for what I believe in. So have to say Bronwin is a person that fights for his beliefs and sees things through. Am also very grounded, because I believe being grounded helps one to achieve a lot in life and also gives you a base to work from. As Kanye West's mom once said "A giant looks in a mirror and sees nothing".

**What triggered your interest in Medical Physics?**

Interestingly enough I struggled in my first year at varsity, being away from home for the first time, and not enjoying the microbiology subjects I took. This led me to see a varsity social worker, she introduced me to the head of the department in medical physics at the time, Professor T Lotter, who was a total inspiration and help. Guess the chance meeting with the social worker and Prof triggered my interest in the field.

**What propelled you to choose a career in academia?**

I've always liked teaching, and giving back to the next genera-

tion, and what better way in doing so than being an academic?

**What is your research niche area?**

Have to say dosimetry and quality assurance. Always enjoyed determining the amount of radiation in a medium for radiotherapy, nuclear medicine and radiology. This is especially exciting in cases of cancer treatments. Also, enjoy assuring that the quality of the equipment and procedures are correct.

**What keeps you going and executing your responsibilities to the best of your abilities?**

My family! They are my inspiration to be a better man and to make a change in my immediate environment.

**Your CV indicates that you either have all or you are on a path to qualify to be a Professor, is that your ultimate career goal? If yes, elaborate in detail. If not, what are your long-term career goals?**

Yes, I think every academic dreams of being a Professor. I will apply for an academic promotion soon, hopefully, I get it, please hold your thumbs for me! So the goal is to first apply for associate Professor and later full Professor.

**What challenges did you experience during your PhD studies?**

As already mentioned, changing supervisor. This happened in my third year of study. That had to be the biggest challenge that I had. Luckily my brother from another mother Prof F Hasford, Prof N Nyakale and Prof MDTH Vangu became my supervisors which was a blessing in disguise, as they all are excellent supervisors and experts in the field. Goes to show, "everything happens for a reason".

**How did you manage to balance your studies, work and family activities?**

It was difficult, but luckily I have an understanding family and a high work ethic! I would be unable to exactly tell you how I did it, but I manage to always make time for my family, whilst working crazy hours. The important thing is to be present when you are with the family, only dedicating your time to them with no distractions. I do the same when I'm working, staying focused on the moment, think that helps a lot with the balance.

**In conclusion, what is your message to aspiring PhD holders?**

Would just like to encourage the young people out there, as Madiba once said, "It always seems impossible, until it's done". Always hold on to your dreams! Otherwise, nothing else to add. 🔍



# Cholera Update in light of the current South African outbreak

Written by E Hoedoafia, G Shikwambane-Ntlemo, SM Rashopole, S Mulaudzi, N-D Nogbou, AM Musyoki, M Nchabeleng  
Department of Microbiology

## Introduction:

Cholera is an intestinal infection that is caused by consuming water or food that is contaminated with the toxin producing bacteria *Vibrio Cholera*. Despite many advances this disease can arise from water contaminated with faecal matter and lead to devastating effects in the community. Cholera is associated with the lack of access to safe drinking water, food, good hygiene and adequate sanitation.

## Symptoms:

The presentation of the disease varies from being completely asymptomatic (without symptoms), mild, moderate or severe diarrhea. The asymptomatic patients can also play an important role in spreading the organism since they shed the organism in the stool.

The hall mark of cholera is profuse, painless rice watery diarrhea which can result in dehydration as early as within the first few hours from the onset of symptoms. It may also cause abdominal discomfort, vomiting and rarely fever.

## Incubation period:

Symptoms can occur from as little as few hours to 5 days, usually two to three days after exposure to the organism.

## Diagnosis:

If patients experience these symptoms, they are encouraged to visit their nearest healthcare provider for consultation and collection of a stool sample for laboratory testing and confirmation.

## Treatment:

Cholera is an easily treatable disease if diagnosed and treated timeously. The hall mark of treatment is rehydration. In moderate to severe cases, it will require intravenous rehydration. Salt and sugar oral solution should

be started immediately while transporting the patients to the nearest health care facility.

**HOMEMADE SUGAR AND SALT SOLUTION (SSS):** ½ spoon table salt PLUS 8 spoons sugar dissolved in 1 liter of boiled (if possible) then cooled water.

Antibiotics are usually recommended in selected cases, carefully identified by the treating doctors to shorten the duration of the diarrhea.

## Prevention:

Clean water supply and good sanitation are important in preventing cholera. Boiling water or adding household disinfectant kills the bacteria assisting in preventing the acquisition of the disease. Adding a quarter (1/4) of a teaspoon of disinfectant to a 25-litre container of water and allowing it to stand for at least 30 minutes can help to render the water safe for use. Vaccines are available in certain circumstances such as in outbreak situations, however they may give a false sense of security and do not provide 100% protection.

## References:

- WHO, cholera key facts, 2022, <https://www.who.int/news-room/factsheets/detail/cholera>, accessed on 26/05/23.
- NICD, Cholera treatment guidelines, specimen collection guidance and updates are available at [www.nicd.ac.za](http://www.nicd.ac.za) under the 'Diseases A-Z' tab, Accessed on 26/05/23.
- Sajeev Handa, Medscape, Feb 03, 2021, <https://emedicine.medscape.com/article/962643>, accessed on 26/05/23.



# Strengthening the Capacities for Radiopharmacy and Medical Physics and Radiology for the Expansion and Sustainability of Medical Imaging Services



The Sefako Makgatho Health Sciences University hosted the African Regional Cooperative Agreement (AFRA) Training Course for Research, Development and Training related to Nuclear Science and Technology from 15-19 May 2023. The focal point of the course was on Strengthening the Capacities of Radiopharmacy, Medical Physics and Radiology for the Expansion and Sustainability of Medical Imaging Services in Africa. The delegates from more than 30 African member states, local and international experts were welcomed by Prof Nathaniel Mofolo, the Dean of the School of Medicine. The training on image quality evaluation and radiation dose management in radiology as well as to define roles of various professionals such as radiologists and medical physicists within the clinical daily routine.

The course also enhances the AFRA strategic goal under the African regional framework of attaining sustainable contribution of nuclear science and technology to meet its members' developmental needs and interests. Nuclear Medicine, Medical Physics, Radiology and Radiopharmacy services face similar challenges in most African countries, namely lack of recognition, limited education and training capacity building, and lack of availability of educational and training programmes. "Medical physicists are facing a lack of adequate clinical training as well as a lack of experience in quality assurance and optimization in medical imaging. While these challenges have been identified we know that

these health professions are critical to enhance the safety, quality and effectiveness of medical imaging services," said Ms Lerato Makgae, the International Atomic Energy Agency (IAEA) national liaison officer at the Department of Mineral Resources and Energy (DMRE).

AFRA is a project under IAEA in partnership with number of African countries who are members to give training. This training was organized with South African Nuclear Energy



*continues to page 12...*

Corporation (Necsa) and DMRE National liaison officers by the elected project counterparts, Mr Thulani Mabhengu, a Nuclear Medicine Medical Physicist and Dr Mpho Maboho, a Radiologist, both based at the SMU/DGMAH complex, along.

The outcome of this training focused on enhancing the safety and quality of medical all radiation imaging services. Project activities entail building human capacity in radiopharmacy and medical physics; developing educational and training material for radiologists and radiographers to strengthen their radio-clinical interpretation and reporting of different medical imaging modalities. "This particular course was mainly focused on medical physics and radiology. The point of it was to enhance the quality of imaging the quality of imaging in all the radiation disciplines including nuclear medicine and radiology because we also work with similar equipment. We though if we can bring all of the African counterparts and just make sure that we ascend to similar international standards. We want to ensure that we always get our things right and that the quality of our work is where it should be for the people that we are serving," said Prof Nozipho Nyakale, Head of Department Nuclear Medicine at SMU.

One of the attendees, Simphiwe Isaac from NTP Radioisotopes SOC Ltd said the course was enlightening and

informative as she is hoping to attend more courses of this nature. "The course was very informative, well conducted and I enjoyed it. Basically most of the highlights was how properly good quality images from radiography can be obtained. Optimizing the results of your image quality was one of the aspects that I actually grasped as to what parameters you should look for and where improve so that you have a good quality image. I am into production so what I would impart is basically knowing that in production we are like the start of this. I saw radiography and all the images produced there, they are the end users of our products so if we produce better radio pharmaceuticals then they result in better images and better outcomes for the patients, diagnosis and therapy whatever they are intended for," as she reflected on the course.





## Building a resilient comprehensive reproductive health services hub for tertiary education students at SMU

The lack of reproductive health care on campus has always been a concern. Female students who comprise 60% of the student population had to seek this service outside campus. The lack of this service was evident in the increase in unplanned pregnancies with students having to interrupt their studies. The university context plays a role in sexual initiation among students and sexual activity in general, and this serves as a platform for health promotion interventions that will yield student community empowerment through STI, HIV, unintended pregnancy prevention and control.

SMU students are not an exception. Most students coming from various places have not lived away from home before, thus experiencing freedom for the first time and explore university lifestyle and engage in sexual activities. The fact that there is a noticeable increase in unintended pregnancies amongst SMU students' points to the unavailability of contraceptives and lack of information on family planning to both male and female students, lack of information on and access to abortion services. The high pregnancy levels and the stigma associated with termination of pregnancy further lead to more women turning to unsafe and illegal termination of pregnancies, neglecting the risks associated with such activities.

The aim of this project is not exclusively intended to take care of female reproductive health but also will include males who also participates in sexual activities.

The quench to improve reproductive health prompted Prof Lekalakala-Mokgele to approach Dr Tamrat Endale, Director of Research and Metrics at Center for International Reproductive Health Training (CIRHT) to support SMU. Dr Tamrat advised her to submit an expression of interest on the program SMU wanted to implement. According to Prof Lekalakala-Mokgele, she wanted to establish a reproductive health clinic to meet the needs of students. It became apparent that CIRHT supports

beyond service provision but collaborate with academic institutions which intend to strengthen or integrate training on contraception and comprehensive abortion care in their pre-service education and strongly support research.

Under the leadership of Prof Lekalakala-Mokgele as the Principal investigator, campus health represented by Dr Mathebula (co-Principal investigator) and colleagues from the department of nursing and Public Health collaborated in conceptualizing the expression of interest. After the initial concept, Prof Lekalakala-Mokgele accompanied by Mr Tukisi were invited to attend a fully funded reproductive conference in Rwanda in 2022, to experience the work of CIRHT and network with those already funded and implementing reproductive health programmes. Funders gave feedback on the expression of interest document to strengthen it.

Other departments within the university including Pharmacy, family Medicine Gynaecology and Obstetrics were later asked to join in an attempt to increase collaboration. Prof Lekalakala-Mokgele and Dr Mathebula were invited by funders to visit Addis Ababa, Ethiopia for the Center for International Reproductive Health Training (CIRHT) experience sharing 5-10 March 2023. "We had the opportunity to discuss past collaborations with St Paul's Institute for Reproductive Health and Rights and St Paul's Millennium Medical College and were joined by a team from Zambia. The aim of this program is to develop a comprehensive reproductive health hub that will promote and provide training and quality service to the University student populace; and conduct research driven by social justice and we are happy to collaborate with the Schools of Medicine and Pharmacy", said Prof Lekalakala-Mokgele.

The initiative managed to raise a total of 400 000 US Dollars which totals the income of over R 7 200 000 over a period of two years. This is the highest amount ever granted for the School of Health Care Sciences.

# SMU Harambee Annual Fund Challenge



Join our Vice Chancellor, Prof. Peter Mbatia and SMU in raising funds for a bursary program designed to assist academically qualified but financially disadvantaged students. Additionally, the initiative intends to donate to the university's Hands of Compassion food security project, which delivers meals to underprivileged students on campus.


## WAYS TO GIVE

1. Payroll donations
2. Online donations:  
<https://smu.devman.co.za/devman/online/giving/>
3. Pay Scan – Zapper
4. SMU Banking Details  
Ref: Standard bank | Acc: 070754128  
Branch Code: 020909  
Q013 - Name Surname

## CONTACT DETAILS

Dr Lusani Netshitomboni  
Email: [lusani.netshitomboni@smu.ac.za](mailto:lusani.netshitomboni@smu.ac.za)  
Tel: 012 521 4563/5506





# Gauteng Department of Health and Wellness DDG Basani Baloyi visited SMU to address challenges at the Dental Hospital

**T**he School of Oral Health Sciences at Sefako Makgatho Health Sciences University held a meeting with the Deputy Director General (DDG) Corporate Services at the Gauteng Department of Health and Wellness Ms Basani Baloyi. This meeting took place shortly after the previous visit undertaken by MEC Nomantu Nkomo-Ralehoko to address among other issues, the major human resource crisis caused by the exit of 60 clinicians (dentists and other support staff) from Dental hospital following the end of their contracts.

The meeting was spearheaded by the Acting Dean of the School of Oral Health Sciences (SOH) Prof Dini Mawela and the Acting Chief Executive Officer of the dental hospital Dr Kotsane and was attended by a team of 9 Heads of Department in the School and student representatives.

The follow-up visits by the DDG and her delegation sought to understand the issues which were raised on the first meeting about the Dental hospital and to discuss ways of addressing the challenges.



*continues to page 16...*

The DDG raised concerns about the appointment of the clinicians for a period of three months highlighting that there may be another crisis after the period has lapsed. She further suggested that the contracts should be six months.

DSC chairperson Kwanele Makhubalo on behalf of SOHS students indicated that, there is a shortage of supervisors and this affects the students in completing their clinical training requirements.

Important decisions were made during the meeting and the agreement between SMU OHC, SOHS and GDOHW was reached. The agreement was that in the short term – relief funding will be provided for 6 months to create posts for re-appointment of some of the clinicians who lost their jobs in March 2023. GDOHW has also committed to review the entire organizational structure of the Dental hospital as a way to address the historical loss of the staff members over the last decade. In addition, the proposal for the updated structure has been submitted to GDOHW.

During the meeting the DDG was able to understand the real issues, and challenges facing the Dental hospital and she also heard from Head of Departments (HODs) about how the staffing crisis was impacting the service delivery mandates as well as Teaching and Learning.

SMU, through the VC's office has facilitated the formalization of a task team that will include members of SMU, Dental hospital and DGMAH. This task team will meet quarterly to discuss all matters that will improve the relationship between SMU and GDOH – including HR, Infrastructure and maintenance.



# The 2023 SMU Graduations Ceremonies



Over 1100 graduates were awarded their qualifications including 12 Doctoral Degrees recently by SMU Vice-Chancellor Prof Peter Mbatlali during the May graduation ceremonies held over a period of three days from 24 to 26 May 2023 at the sports complex. Graduates from all the five Schools of the university accompanied by their families, friends and relatives walked the stage to receive the qualifications and celebrated in different ways following years of hard work.

The SMU Chairperson of Council Ms Maria Rambauli and other members of Council and Convocation joined the celebrations and congratulated all those who received their qualifications.

Amongst SMU's many graduates was Dr Nteboheng Malefu Xaba who was awarded a Bachelor of Medicine and Bachelor of Surgery (MBChB). Dr Xaba recently toured the United Kingdom as a recipient of the Abbey Bailey Scholarship and thanked SMU for providing her with such a lifetime opportunity. Her parents expressed their joy and appreciation to the university for educating and taking care of their child. "We are very happy that our

little girl is being called a Doctor today. She had a tough 6 years while studying for her degree and as her parents, we comforted her with prayers throughout her academic journey," explained Mr and Mrs Xaba.

It was a double celebration for Dr Phumzile Prudence Skhosana who was awarded a Doctoral Degree in Pharmacy and also celebrated her 10th year marriage anniversary. "I did my Undergraduate Bachelor of Pharmacy (BPharm) at SMU, followed by a Master's Degree in Pharmacy (MPharm), and now I have also obtained a PhD from SMU. My Journey at this university has been awesome because I had support and now have grown in a number of areas due to my studies," explained Dr Skhosana. She indicated that her next move will be to become a Professor.

SMU is on a trajectory of growth and success and plays a pivotal role in producing globally competitive and quality graduates. Graduations are a culmination of years of hard work by students and the academics as well as everyone involved in teaching, learning, community engagement and research.





The Gender-Based Violence Unit, in partnership with the National Department of Social Development (DSD), hosted a workshop on Gender-Based Violence (GBV), Social Crime Prevention, and Anti-Substance Abuse. The workshop was attended by Residence Managers, Peer Counselors and Campus Health staff. In her remarks, the Manager for GBV, Velencia Maupye, indicated that the workshop will provide the Residence Managers and Peer Counsellors with information and knowledge on how to respond to and assist victims of GBV, as in most cases, they are the first responders to GBV cases. Also, she reiterated that it would assist them in preventing re-traumatization when victims of GBV approach them for assistance. Among the facilitators of the workshop were Mr Sbusiso Malope, the Director of Victim Empowerment (DSD), Ms Ditebogo Manana, the Manager for Social Crime Prevention, and Ms Faith Namatha, the Manager for Anti-Substance Abuse. During his presentation on GBV, Mr. Sbusiso Malope noted that "South Africa has the shameful distinction of being one of the most unsafe places in the world for women." Additionally, he discussed the GBV awareness programmes that National DSD is currently implementing. Ms Ditebogo Manana presented about social crime prevention, which Ms Faith Namatha presented about anti-substance abuse. The session was well received and appreciated by SMU, as well as the National DSD, who expressed gratitude for the invitation, and further stated that they would partner with the GBV Unit to raise GBV awareness among students.

# Gender-Based Violence Workshop





# The role of Internal Audit in a transforming Health Sciences Institution

**T**he internal audit within SMU joined the profession world-wide in celebrating the internal audit month during May 2023. The Director responsible for internal audit at SMU Mr Tshepo Mofokeng provides some clarity on the function and its role at SMU.

## **What is internal audit Awareness Month?**

May is Internal Audit Awareness Month. During this month of observance and throughout the year, audit professionals work to raise awareness of the internal audit profession and its value to businesses and organizations. Our institution is no different as it boasts a functional internal audit function.

## **What is internal audit?**

The IIA standards defines internal auditing as an “independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, controls, and governance processes.”

## **When was the unit formed within SMU?**

The unit was formed at the formation of the institution in 2015. It has evolved over time to be a trusted advisor and value enhancer for the institution.

## **A number of people associate internal audit with finance or compliance, is this really the case?**

The internal audit department is separate from those two

*continues to page 20...*





# SMU Workshop on trans- perineal biopsies

The Department of Human Anatomy and Histology (DHAH) successfully hosted a surgical skills workshop on trans-perineal biopsies on the 29th of March 2023. The workshop was in conjunction with a private company, Becton Dickinson (BD) that sponsored the whole programme. Prostate hypertrophy and cancer are common among elderly men. The objective of this workshop was to provide Urologists with hands-on training on ultrasound-guided transperineal prostate biopsies, because of their high sensitivity and a lower rate of sepsis.

The workshop on Trans perineal biopsies is intended to be run annually as it has accreditation by the Royal College of Surgeons for 10 Continuing Professional Development (CPD) points. DHAH's efforts to support the University's mission and strategic objectives to increase third-stream income and improve SMU visibility globally led to this training. The department continues to receive interest as a host for 2023 clinical workshops from the private sector. The workshop forms part of the foundational efforts in the development of short courses that SMU may offer in the future.

The workshop was facilitated by Dr Mark Richard Purdy, a Urologist based at Midvaal Private Hospital in Vereeniging, South Africa. Delegates who attended the workshop were medical professionals from various countries such as Sweden, France, the United States of America, Switzerland and the United Kingdom.

The DHAH Technical Staff prepared all the required cadaveric material for the workshop and Mr Lucky Japhta was instrumental in setting up the facility and also served as the liaison person in controlling the visuals for the success of the workshop. The use of multimedia platforms in an Anatomical setting was a major highlight. High-resolution cameras, ultra-high-definition screens and ultrasound equipment were set up such that the facilitator was able to demonstrate to the participants as they practiced on their respective cadaver stations.

The workshop had a cadaveric and hospital practice session, in which the cadaver hands-on training session and practice were held at SMU within the DHAH. It was followed by an in-person practical patient session which took place in Midvaal Private Hospital.

"We need to embrace a symbiotic relationship with the private sector to enhance continuous professional development among our medical practitioners who have qualified already," said Prof Robert Ndou who heads the DHAH.



# Lerato Kgosana wins at the International Rotavirus Symposium 2023

Lerato Kgosana is a Ph.D. candidate in Diarrheal Pathogens Research Unit (DPRU), Department of Virology at the Sefako Makgatho Health Sciences University. She grew up in a village called Mapela, Hans, outside Mokopane, where she attended Hans Masibe School for her primary education and Sekoba Secondary School for her high school.

She joined the Diarrheal Pathogens Research Unit at The Sefako Makgatho Health Sciences University In April 2019 for a Ph.D. program under the supervision of Dr Cliff Magwira.

Lerato and her supervisor Dr Cliff Magwira recently attended the 14th International Rotavirus Symposium in Bali, Indonesia. Ms Kgosana was accepted for a poster presentation at the symposium and subsequently won in her category. “I presented work showing a positive association between high counts of bacterial lipopolysaccharides and their signalling molecule, toll-like receptor 4, with oral rotavirus vaccine take among South African infants. Winning the poster presentation award is a recognition of the quality of our research, which will increase our visibility within the academic community and enhance chances of obtaining funding and collaboration opportunities. We already have Associate Prof Vanessa Harris from University of Amsterdam, who will be collaborating with us in microbiome related projects”, said Lerato.

She credits her supervisor for the award and considers herself fortunate to have a supervisor who has played a pivotal role in her academic journey. “Dr Magwira has been a constant source of support and guidance since the start of my studies. I always prioritize getting their feedback before submitting any work and he’s always eager to review my work and provide constructive feedback”, she further explained.

The Symposium presented her with an opportunity to learn and meet new people within the space of her study. “At the conference, I had the opportunity to network with other researchers in my field and learn about the latest research in virology. I also gained valuable feedback on my research from other experts in the field and found several researchers who would like to collaborate with us”.



# Using Smart Technology (AI) in the Security Department (UAV)

While ago the Security Services department acquired an Unmanned Aerial Vehicle or UAV to assist in reacting to threats and to proactively prevent a threat turning into an incident. It possesses the means to learn and execute programmed parameters within its framework.

When one talks about smart technology in UAV's or AI drones, a lot of AI features will come alight. The security services department' UAV possess the ability to fly and land on its own while the security Control Room Operator in the control room can control the camera independently. The battery's strength is constantly monitored and is compared with the power it needs to return home safely. Thus, when the battery runs low with regards to the distance from its landing spot, it will fly back and land safely without interference needed from the UAV pilot. The camera, as mentioned, can be controlled by moving it left, right, up, or down, including zoom in and out as it is equipped with a 25x optical zoom dark fighter lens. Dark fighter technology is relatively new on the market, and it entails technology for the camera to see a clear color picture in pitch darkness without using even infra-red light.

Currently the security Control Room Operators are in the process of being trained to become UAV pilots as the UAV can fly like a normal drone when human intervention is required, for instance, during specific events. Due to the large range the UAV has, up to 3000m horizontal and 500m vertical, the pilot can be at one place to control the flight of the UAV as well as the camera. Recent events, such as the graduation ceremonies and the building of the 2000 bed residence was captured as can be seen below.

The university has used this device even during major events such as graduations and to capture footage around Campus. Although the pilot was in control of the UAV during these events, the unit still makes use of AI, thus it uses between 10 and 25 GPS satellites to pinpoint its position. Thus, if the pilot does not move it, the device will not move and will remain in the same position via the GPS satellites. The UAV can correct its position even in winds up to 25m/s and light rain.

On the control unit, the pilot can choose which view to have, either the camera view or a map view of the area. At the screen on the control unit is a touch screen, on the map view, the pilot can send the UAV to a specific point by just tapping on that point on the map, set the height of flight and the UAV will immediately move to that position and wait for further instructions. The camera can also be replaced with e.g., a Loudspeaker or a Drop-off mechanism.

Drones or UAV's have become much more relevant these days and can be used in various fields such as agriculture to spray crops, the medical industry, and in certain instances to drop packages. Special regulations are being implemented to regulate the units as well as the pilots, and it is important that the security control room operators at SMU are also properly trained.

It is thus imperative for the security person to adapt and embrace AI technology and use it to work smarter, not harder.





# SMU Water Awareness and Saving Campaign

**S**efako Makgatho Health Sciences University (SMU) joined the international community to celebrate World Water Day on the 22nd of March 2023, with the theme: Accelerating Change.

On the 3rd of April 2023, as part of the continuing World Water Day celebrations and SMU commitment to conservation of scarce resources, the Built Environment Division held an event in partnership with Rand Water and the School of Biology to launch a month-long water awareness and saving campaign within the university through the theme "accelerating change in mind".

Taking into consideration that South Africa is a water scarce country and the 30th driest country in the world, the campaign aims to raise awareness about the importance of saving water to cope with its scarcity and ensure sustainability. By putting extra effort in water conservation, the water supply will decrease, and this can assist to reduce operating cost by decreasing the monthly water bill.

The Director of Built Environment, Yandisa Lengoasa during her welcoming remarks indicated that water is a scarce resource, therefore it is the SMU's Community's responsibility to ensure that water is conserved and used efficiently. She further urged students who are currently doing research and those who have innovative ideas around water conservation to partner with the Built Environment to ensure the University can have continuity of water supply.

"Our goal for the next 5 years is to reduce water usage and the associated cost that comes with the inefficient utilisation of water. We also want to reduce our carbon emissions," said Lengoasa.

Delegates from Rand Water were present during water awareness and saving water campaign to provide water and environmental conservation education to the students, staff, and visitors on how to conserve water with different shower heads, taps in their bathrooms and kitchens. There was a machine in display which was used to depict how different shower heads utilises different volumes of water in the bathrooms, taps and Kitchen.

Mr. Lethu Mhlongo, Water Quality Advisor at Rand Water urged people to recycle water by indicating that used water can be repurposed for other use such as to wash a car or to watering plants after bathing. As part of skills transfer and staff capacity development, the university has collaborated with Rand Water whereby it will assist the Built Environment staff with water conservation training at no cost to SMU.

In closing, Mr. Mpho Mmako, SMU Horticulturist and champion indicated that water restrictions are becoming a reality in our lives. He called on the SMU Community to act and use water wisely.

#### **Below are tips for the SMU Community on water conservation:**

- Turn off the tap whilst, brushing teeth or shaving.
- Take short showers (2-3 minutes)
- Turn the tap off when lathering with soap (when taking a shower).
- Avoid filling your bath to a depth greater than 20cm.
- When washing your hands please do not let the water run. Turn the tap off when soaping your hands.
- Water the gardens during the cool parts of the day (preferably in the morning/ afternoon).
- Group plants according to their water requirements (Hydro-zoning).
- Report water leaks to relevant departments. 🔍





# SMU International Midwife Day Celebration

**S**efako Makgatho Health Sciences University (SMU) Nursing Department commemorated International Day of the Midwife on 05 May 2023 under the theme together again: from evidence to reality. This day is celebrated annually to provide an opportunity to honour and appreciate the work of midwives. It also provides a platform to promote awareness of the crucial care that midwives provide to mothers and their newborns.

Midwifery studies are very complex and requires a lot from the students in terms of theory that they need to grasp and the clinical requirements they need to acquire in clinical facilities that include number of deliveries, high risk pregnant women they need to care for, and the midwifery procedures they need to do and provide evidence.

The event was graced by the guest speakers from various departments. The speakers include Ms. Tsakani Thobela, Midwifery specialist from Gauteng Department of Health, Ms. Boitumelo Seemela from the Department of Physiotherapy, Bongani Mazibuko (DENOSA), Provincial Secretary, Collen Mkansi from Metropolitan and Tukisi Kagiso (Midwifery Lecturer, SMU). The importance of midwifery discipline in the global health context, and how instrumental midwives are in reducing maternal and neonatal mortalities were stressed during the event.

“The midwives are the first line of defence for patients during antenatal, intrapartum ad postnatal period. About 60% of deliveries are handled by the midwives. Equipping midwives with knowledge and skills will ensure appropriate response to patients

needs which will include midwifery interventions and involvement of other health care professionals depending on the complexity of the condition”, emphasized Mr Tukisi Kagiso, Midwifery & Neonatal nursing science lecturer at SMU.

Ms. Boitumelo Seemela from the Department of Physiotherapy took it further and spoke about advocacy and the role of the midwife in reproductive health. She spoke about the type of interventions required and stressed that midwives must put the needs of the patients first to avoid exposing patients to unsafe illegal practitioners, thus avoiding risks of maternal deaths. Mr. Bongani Mazibuko (DENOSA), Provincial Secretary emphasized the importance of clinical competence in the midwifery sphere to avoid litigations.

The Nursing Department stressed the importance of applying the scientifically proven evidence through midwifery research into the day-to-day practice.

Close to 200 students from the nursing and other departments attended the event and participated in the activities such as water bottle game which was played to hype the students up in preparation for the midwifery themed games.

“It was a proud moment for me as a midwifery specialist and a lecturer, when I saw the third years who are the beginners in the Midwifery studies being in the forefront and demonstrating the love, passion, and commitment to midwifery studies. For me it confirmed that we are preparing the leaders in midwifery field here at SMU”, said Mr Tukisi.



# SMU Celebrated African Diversity and Success on Africa Day



On Friday, 02 June 2023, Sefako Makgatho Health Sciences University (SMU) held its Africa Day commemoration event in celebration of Africa Day as well as the various African cultures found on the University campus. Africa Day is aimed at celebrating African diversity, heritage and success, and to highlight the cultural and economic potential that exists on the African continent.

Students, staff and management of SMU gathered on the grounds near the student cafeteria dressed in their traditional regalia to showcase their different cultures and traditions through dance, music, storytelling and different cuisines from the African continent.

The event was officially opened by the University Vice Chancellor, Professor Peter Mbatlana, who indicated that the time has come to move away from rhetoric and to decisively implement programmes that would advance Africa's economies, enhance its educational and health systems and compete with the best in the world. "We at SMU are at an exciting time of growth as the only dedicated health sciences university in Southern Africa and therefore, a celebration of Africa Day and at the same time re-dedicating ourselves to the core mandate of training highly qualified healthcare professionals becomes a mandate that we must uphold and cherish", said Prof. Mbatlana.

The Vice Chancellor further added that it was a shame and embarrassment that after several years of independence, countries on the African continent either have stagnated or even reversed the economic gains made at the time of independence. Prof. Mbatlana called for the restoration of the dignity and pride of the African people.

The celebration featured an exciting cultural parade, captivating live performances, inspiring art and craft art exhibitions and diverse African cuisine stalls. SMU's Internationalisation Directorate and Student Affairs' Diversity and Advocacy Unit was critical in raising awareness of the event throughout the University.

SRC president Thato Masekoa remarked that, "on the 25TH of May 1963 Africa made history with the foundation of the Organisation of African Unity, which was the precursor to the African Union, and that became the opportunity to celebrate African diversity, success, and to highlight the cultural and economic potential that exist on the African continent." He further added that Africa Day celebrations acknowledge the progress that Africa and its people have made while reflecting upon the common challenges that have been faced in a global, regional, and local context.

Ten SMU student residences performed representing various African cultures and traditions, the African countries which were represented were Botswana, Lesotho, Ghana, Nigeria, Kenya, Zimbabwe, Namibia, Swaziland (Eswatini), Zambia and Cameroon. The overall winner of the Africa Day performance was Cameroon.

"We are gathered under a common purpose to celebrate our beloved continent, Africa. I wish to celebrate the people of South Africa, the rainbow nation, indeed, you have been an example to the world that freedom must be a fundamental right of human existence," said Abe Ayomide, SMU's President of the International Student Organisation (ISO). SMU was also privileged to have ambassadors and representatives of various foreign missions on campus during the Africa Day celebrations.





# SMU TTO successfully held the SMU TIA seed fund committee Induction



It has been 8 months since the official launch of the Technology Transfer Office at Sefako Makgatho Health Sciences University. The TTO was launched to ensure that the intellectual property and licensing rights of researchers are properly handled and eventually commercialized. TTO which falls under the Research and Innovation office led by Prof Mapaseka Seheri and Mr Mohlatlego Sebola on Friday the 21st of April welcomed guests from the Technology Innovation Agency for the SMU TIA seed fund committee induction. Amongst the delegates who attended the induction was Dr Maggie Aphane HOD: of the Department of Mathematics and Applied Mathematics, Dr Mtheza Mtyopo who is the Head of the content technical team at SA BRICS, Winnie Motsatsi Coordinator: of Grants and strategic partnership, Prof Douglas Maleka HOD: Physiotherapy, Eugene Munyai Medunsa Alumni, Dr Taurai Hungwe Lecturer: Computer Sciences and Tshembani Khupane who is the TIA Seed fund programme manager.

The induction was led by TTO's liaison officer Mr Pontsho Mampuru who gave a brief presentation about the overview of the Technology Transfer office. "The purpose of

this presentation is just to give you the overview of our office because we are still trying to get our feet since we are still new so that people can be aware of our work within the institution specifically the researchers as well as the post-graduate students" said Mampuru. TTO is that part of the institution that is responsible for identifying, protecting and commercializing intellectual property that emanates from researchers' RME activities as well as students. Tshembani Khupane spoke about the TIA Seed fund programme, its functions and how it will work together with SMU TTO going forward. "We are here today because Sefako Makgatho Health Sciences University was onboarded to be part of the Seed fund partner in executing of the seed fund programme," said khupane. "The contract that was signed last year september by our CEO and the Vice chancellor actually allows the University if they have researchers that have research outputs, technologies or innovations that need further technology development to actually access a bit of seed funding to assist them in the development of their technologies and to allow them to commercialize whatever reaserch outputs that may come out of the university" added khupane. The induction continued and delegates were given the opportunity for a question and answer session which allowed them to get clarity on certain aspects that needed deeper explanation the induction was then adjourned. 🔍



## The Department of Human Nutrition and Dietetics Workshop on Indigenous and Heritage Foods

Sefako Makgatho Health Sciences University Senior Lecturer Dr Annette Van Onselen and part-time Lecturer Ms Mari Pronk from the Department of Human Nutrition and Dietetics attended an indigenous and heritage food workshop at the Prue Leith Culinary Institute in Centurion recently. This was the first time the workshop occurred and its aim was to create awareness about indigenous and heritage foods within the hospitality industry.

The workshop was hosted by Harvesting Heritage, the South African Chefs Association and Sociotech. They collaborated with Prue Leith Culinary Institute to showcase a cook and taste programme while educating the audience about various indigenous and heritage foods put on display. The workshop had international visitors from Lesotho's Rural Self-Help Development Association (RSBA) which helps eradicate extreme hunger and improve Basotho people's lives by supporting sustainable agriculture, facilitating self-help, and enabling farming communities to become sustainable.

Different indigenous food producers from these organizations, exhibited their food coming from different provinces such as Limpopo, Eastern Cape, Gauteng and Western Cape. Food that was showcased included, the Amarula ice cream made from Amarula pit, Chevon made from goat meat, wild red root tea, white and red speckled beans, tepary beans, large white kidney beans, sprouts and wild watermelons amongst others, all locally harvested. Indigenous foods are rich sources of essential nutrients especially vitamins and minerals that

contributes to good health. The Lecturers got the opportunity to meet people from Setsong Tea Crafters, Matawi mead, African Marmalade, Malie's Frozen Dessert and the Strydkraal community.

Ms Mari Pronk pointed out that Nederburg Wines was a sponsor for the workshop. She stated how they were able to pair indigenous foods with wine. "Incorporating indigenous foods into our meals can add new flavour and diversity. We learned about sustainable farming and building broad-based livelihoods" explained Mari. People at the workshop were advised to support local farmers and businesses, as this can assist in uplifting communities and alleviating poverty in South Africa.

Dr Van Onselen indicated that they took photographs of the food for their students and said that they gained a lot of new knowledge that can be incorporated into the curriculum for the Food Service Administration and Food Service Management modules.

Dr Van Onselen added that Indigenous and heritage food is part of our history and should be part of our future as well. She mentioned how Tepane black bush tea tasted lovely and how nutritious and caffeine free it was. "One of the speakers indicated that you could have enough food by just looking into your environment. It is time to look closely at the food we have naturally and use that to help the community with food insecurity," concluded Dr Van Onselen. 🔍

# SMU netball coach and player puts the university on the sporting map

**S**efako Makgatho Health Sciences University's (SMU) Sport and Recreation Department provides students, staff, and nearby community members with the opportunity to participate in sports and recreational activities. Tsietsi Lesenyego and Ronewa Munyai speak about their athletic journey and how they put SMU on the Map.

SMU male netball player Tsietsi Lesenyego explained that he transitioned from being a coach to being a player to create room for other coaches to apply their skills to the team. "I have been with the team for 8 years and the sports department needed someone to come grow their coaching skills and take over where I have left off with the team", says Tsietsi.

Tsietsi indicated that the sports department plans to get the netball team back to the top-performing team in Tshwane and Gauteng. He also pointed out that they need training equipment to implement their planned programmes. "We have produced a national player from the grounds of SMU, Pamela Chukwu who played for the South African Under-21(SS U21). We also had players representing Baobabs in the National League which shows that we are more than capable to achieve these strides" said Tsietsi.

Tsietsi's numerous achievements as a coach include winning their first medal at the National University tournament and the bronze medal at University Sports South Africa (USSA) in 2015. In 2016 under the second position, they acquired a Silver medal, in 2017 a Gold medal, and another Gold medal in 2018. "Not only did we progress to high performance in section A, but also won the most consistent team in the USSA tournament for four years' consecutively. We are

going to play in the tournament at Stellenbosch University in Cape Town on 3-7 July 2023", he said.

Meanwhile, SMU male coach Ronewa Munyai mentioned that it was a dream come true and a stepping stone to coaching nationally. Munyai is honoured to have been part of the Capricorn District in 2015. He worked with Botswana national netball Head Coach Jany van Dykand, Baby Proteas Head Coach Dr Elsje Jordaan, and Limpopo Baobabs Head Coach Emily Mathosa. "Apart from being a coach, I am a soccer referee of more than 18 years and currently coaching the SMU students' netball team, SMU Staff netball team, and Church of holy ghost netball team. I am a proud founder of the Tshaulu Netball Club", Munyai explained.

Munyai hopes to produce national netball players of both males and females and to continue with the recruitment of new male players for SMU's netball team. "National male championships is a tournament that is played by males every year and it is under Netball South Africa (NSA). This is where the NSA gets a chance to select male players that are going to compete with other countries. I produced national male netball players, won a Silver medal for the school under 16 national team, and also won the Church of holy ghost fire netball twice" stated Munyai. SMU is indeed proud to have both of them as part of the sporting codes in the university.



# Healthy

# Lifestyle Fact Sheet

## What is a Healthy Lifestyle?

A healthy lifestyle helps to keep and improve people's health and well-being. Healthy living is a lifelong effect. A healthy lifestyle includes a balanced diet. 'Healthy living' means maintaining a healthy lifestyle and introducing habits that improve your health.

## Steps to a positive Healthier Lifestyle

The journey towards a healthy lifestyle starts with small changes that you feel confident you can achieve. One start by setting just one goal and that one initial "win" will propel you to set new, bigger goals.

## STEPS TO FOLLOW:

### Eating more fruits and vegetables

Fruits and vegetables contain vitamins and minerals which are essential to your health. Consuming more veggies and fruit is associated with a lower risk of heart disease, stroke and cancer.

### Pick brightly coloured foods (*Eating the rainbow*)

These are high in antioxidants (antioxidants remove toxins in our bodies). Here are a few examples to look out for:

- Yellow (Pineapples, Mangoes)
- Orange (Oranges, Papayas)
- Red (Apples, Strawberries, Tomatoes, Watermelons)
- Green (Guavas, Avocados, Cucumbers, Lettuce, Celery)
- Purple/Blue (Blackberries, Eggplants, Prunes)

### Replacing refined grains with whole grains

Replacing refined grains with whole grains will benefit your health and consuming more whole grains will reduce your risk of diabetes, coronary heart disease, cardiovascular disease, and cancer:

#### Whole grains include:

- Plain oats
- Whole grain bread and pasta
- Brown rice
- Corn, etc.

#### Refined grains include:

- White bread and pasta
- White rice
- Most breakfast cereals
- Chips

### Cutting down on processed foods

Most nutritional value is lost in the making of processed foods and they also contain added preservatives. Processed foods contain a high amount of salt and sugar. Examples of processed foods are:

- Breakfast cereals.
- Tinned vegetables
- Breakfast cereals.
- meat products, such as bacon, sausage, ham, salami and



*continues to page 33...*

- paté
- microwave meals or ready meals
- cakes and biscuits

### Avoiding trigger foods

These are foods you cannot put down after one bite. These are different for each individual. The main culprits are sweets, chocolate, chips, cookies, or anything with high levels of refined sugar, salt, fat or flour.

### Choose low-calorie (energy) and low-fat alternatives

There are many low-fat or non-fat alternatives readily available in all grocery stores. Try switching your full-fat staples for low-fat versions over some time e.g. replacing butter or margarine with jelly, jam or honey on bread. Legumes are low-calorie food items that can be included in the diet to ensure a healthier diet.

### Stop smoking

If you're a smoker, consider quitting for better health—not just for you-self but, for your family and friends. If you don't smoke, it is advisable to stay that way.

### Have healthy snacks on hand

Eating small meals throughout the day is good for your metabolism and eating the right things is what matters most. The healthy snacks to incorporate into your day are:

- fruit,
- salad,
- Or freshly squeezed juices. These are nutritional and won't give you a sugar crash.

### Drink lots of water

Make it a habit of drinking water with and in between meals. Avoid sugar-containing beverages.

### Sleeping well and managing stress

It is important to get enough sleep. When you don't sleep you eat more leading to weight gain. Chronic stress puts your body into fight-or-flight mode all the time, which in turn taxes your immune system and makes you more susceptible to health problems, including:

- heart disease
- diabetes
- digestive problems
- depression
- high blood pressure
- anxiety
- Difficulty sleeping etc.

### Cutting down on screen time

Too much time on electronic devices could pose health risks. Too much screen time has been linked to obesity and depression. Taking regular breaks, stretching, and moving around are helpful.

### Being physically active

Being physically active a few times a week (aim for 10 minutes a day, 5 days a week):

- Will lower your risk of diseases,
- Create higher bone density! (Keeping your bones strong).
- And potentially increase your life span.

Choosing an activity, you have an interest in will increase the chances that you'll stick with it.

**Remember:** *You don't have to run a marathon to be healthy*

### How to develop positive healthy habits

The key to developing positive habits that you are more likely to keep is to:

- **Start slowly.**
- **Change just one thing at a time** - see the benefits that can come from eating more balanced meals, exercising more or quitting smoking
- **Make small changes** – an achievable change is more likely to become a habit you keep.
- **Go slowly** – making a change gradually can be easier than all at once.
- **Build on what you already do** – for example, if you enjoy walking, try extending your usual route by a manageable amount.
- Remember, increasing or adding even one new health behaviour can make a big difference to your health and a healthy lifestyle.

### What are the benefits of a healthy lifestyle?

The benefits of a healthy lifestyle may be just what you need to commit to changing your daily habits into healthier ones.

### You will...

- Improve your physical health
- Improve your mental health
- Get more energy naturally
- Boost your mood
- Prevent diseases and health issues
- Save money

### Compiled by

*Dr Mashudu Manafe*

*Acting Head of Department: Human Nutrition & Dietetics*

