Health Sci 50 NEWS



Issue 1: Vol 1 • JUNE 2021

Welcome to the Faculty of Health Sciences' newsletter. We cover a range of highlights and achievements by the staff and students.

Some of the articles herein have been adopted from the UFS website's news articles.

Prof Mamello Sekhoacha new chairperson of **National Health Research Ethics Council**

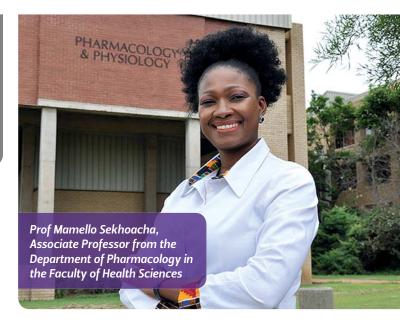
Prof Mamello Sekhoacha, Associate Professor from the Department of Pharmacology in the Faculty of Health Sciences, was appointed by Dr Zweli Mkhize, Minister of Health, as the new chairperson of the National Health Research Ethics Council of South Africa (NHREC).

A researcher in the field of drug discovery and development at the University of the Free State (UFS) has been appointed by Dr Zweli Mkhize, Minister of Health, as the new chairperson of the National Health Research Ethics Council of South Africa (NHREC).

Prof Mamello Sekhoacha, Associate Professor from the Department of Pharmacology in the Faculty of Health Sciences, was appointed as a member of the NHREC council in 2013, and later became the chairperson of the NHREC's Norms and Standards Committee responsible for developing and revising guidelines for health research. Prof Sekhoacha was appointed deputy chairperson of the council in 2018 and has played an integral part in setting ethical standards for conducting health research in the country.

Responsibilities of the NHREC

The NHREC is the national statutory body responsible for the governance and advancement of health research ethics in South Africa. Some of the responsibilities of the council are to set ethical norms and standards for health research by developing and revising the guidelines pertaining to health research; to promote



and monitor compliance with existing regulations by health research ethics committees; and to build capacity in research ethics committees through robust registration and audit processes.

"It is an honour for me to serve on the NHREC for the third term. The NHREC has achieved remarkable outputs over the past three years, and I believe, given the current composition of the council members, this momentum will not be lost. One of the goals of the NHREC is to further broaden the scope of the ethics in health research guidelines from 'biomedical research' to 'health-related research' to ensure that adequate guidance is provided for those in health-related disciplines, as a response to the changing

Continues on page 2

\rticles

Prof Mamello Sekhoacha new chairperson of National Health Research Ethics Council	1
New learning programme for clinical facilitators developed	2
International Nurses Day	3
#Challenge: Have a Heart and donate blood	4
The Best of the UFS: The National Control Laboratory for Biological Products	4

Dreams come true for Dean's Medal recipients	5
Indigenous Knowledge System receives annual grant of R17 million	6
UFS staff member first health-care worker to receive vaccine in the Free State	7
Student Voice	8

New learning programme for clinical facilitators developed

Dr Liezemari Hugo,a registered nurse and senior lecturer involved in the coordination of second year undergraduate module in the School of Nursing at the University of the Free state (UFS), has developed a learning programme for clinical facilitators.

2022. The development of a clinical facilitator programme which was first presented as a face-to-face training programme has now been transformed into an eLearning programme for the Academy for Continuous Development For Healthcare Professionals at the School of Nursing, Faculty of Health Sciences. This short eLearning programme consists of seven learning units with topics that include "Who am I?", the importance clinical facilitators, "diagnosing" students, learning and facilitation, assessment, evidence-based practices, and ethical behaviour of clinical facilitators. This programme includes a toolset that clinical facilitators need when they are supporting students' learning in the clinical practice. Furthermore, the programme follows a distance learning approach where clinical facilitators have

to demonstrate competence during

"The programme that is very important

for clinical facilitators will strat in in

and on completion of the programme. Frequent collaborative and discussion sessions are incorporated to reduce the feeling of isolation that many students in eLearning may experience. This programme is ideal for busy healthcare professionals as they can work through the content on their own time.

The impact of programme

Since the first face to face programme presentation, numerous clinical facilitators from twenty-five different educational and healthcare institutions have been trained across South Africa. Four articles have been published on the subject of clinical facilitation/facilitators.

"I feel good knowing that I can assist healthcare professionals to be good clinical facilitators equipped with the necessary skill set to support their students in clinical practice".



Prof Mamello Sekhoacha ... continued from page 1

environment of research involving humans and the broader meaning of health research."

"We need more comprehensive guidelines with nuanced commentaries to indicate how the ethical principles that emanated from biomedical research involving humans, could be effectively implemented in other disciplines of health-related research," says Prof Sekhoacha.

Global paradigm shift in role and integration of ethics in health research

Having been a council member since 2013, Prof Sekhoacha, whose training spans from pre-clinical laboratory experimentation, the use of animals in research, clinical trials, and working with indigenous communities, says there is a global paradigm shift in the role and integration of ethics in health research in almost all aspects of research, with an increased emphasis on the scientific and social value of research: the prospect of generating the knowledge in a manner that protects and promotes people's health. Considerations of the NHREC go beyond developing ethical guidelines or ensuring the efficient

functioning of the ethics committees, to raising awareness among research institutions and researchers to continually promote ethically sound research conduct.

The subject of ethics in health research is pivotal and reflective of the values of both the institution and the country at large.

UFS uses Prof Sekhoacha's expertise on ethics

Prof Sekhoacha is also a co-opted advisory member in the Senate Research Ethics Committee of the UFS and facilitates workshops and seminars on research ethics offered by the Postgraduate School.

Prof Corli Witthuhn, Vice-Rector: Research and Internationalisation, says it is a great honour for the UFS that Prof Sekhoacha has been elected chair of the NHREC. "The NHREC governs the research ethics processes in South Africa, and it is strategically important for the UFS to now have one of our own academics play such a nationally important role. We have been using Prof Sekhoacha's expertise on issues of ethics and we are looking forward to working with her to continue to better our own ethics processes."

International Nurses Day: The future of nursing is bright

International Nurses Day, which is celebrated around the world on 12 May, celebrates the contribution of nurses to the healthcare of individuals, societies, and communities. The contribution of nurses during the pandemic cannot be overstated, and it is essential that such contributions are brought to light and that all nurses and nursing-related staff be appreciated.



Dr Champion Nyoni, Senior Researcher and Lecturer in the School of Nursing at the University of the Free State (UFS).

This is according to Dr Champion Nyoni, Senior Researcher and Lecturer in the School of Nursing at the University of the Free State (UFS). The theme for the Day is Nurses: A Voice to Lead. The sub-theme is A Vision for Future Healthcare. Dr Nyoni says it is an important date on the calendar of the nursing profession.

The future of nursing

Says Dr Nyoni: "A lot has happened in 2020 and more will happen in the future. The COVID-19 pandemic brought various challenges to the healthcare system and nurses have been at the coalface of these challenges. The mental health of nurses has been challenged, their resilience tested, and their teamwork strengthened.

"In the future, a collective approach related to the function and role of nurses needs to be enhanced; the growth of the nursing profession is essential, and nurses will continue this work through enhancing their professional identity, their professional role, their own research, and also through teamwork with other professionals."

The future of nursing is bright. The past 60 years have shown rapid advancements in the professionalisation of nursing – from being an altruistic occupation to a profession with legal status in many

countries, says Dr Nyoni. The science of nursing has been growing exponentially, with several nursing-specific research and research led by nursing scientists. The impact of nursing research continues to be aligned with improved healthcare and health outcomes in many settings across the globe.

"Nurses continue to be celebrated for their tireless efforts in influencing healthcare and health outcomes, in addition to being the single largest health professional body in the world. The world requires more professional nurses, not only by qualification but by necessary and appropriate context-specific competencies aimed at universal healthcare."

"Nurses have to look towards negotiating new healthcare spaces where their professional roles, though indispensable, are aligned with future population healthcare needs. In the same vein, the nurse of the future needs to embrace the Fourth Industrial Revolution and its potential influence on the profession," says Dr Nyoni.

UFS preparing nursing students for future

The UFS School of Nursing is at the forefront of nursing education in South

Africa in terms of preparing competent professional nurses who meet the healthcare needs of our population and the future. "Our undergraduate programme is aligned with the primary healthcare approach, which is a complex healthcare model that underpins the health delivery system in South Africa and many low- and middle-income countries. Through state-of-the art facilities, our students engage with top nursing experts who facilitate and guide their learning."

Dr Nyoni, who became the first UFS staff member and only the third African to win the prestigious Sigma Emerging Nurse Researcher/Scholar award, says the postgraduate nursing programmes at the UFS are driven towards producing independent thinkers who are able to significantly contribute to the development of nursing and healthcare, not only in South Africa but also in the rest of Africa. The students, drawn from all over the continent – says Dr Nyoni – are challenged to engage in research that makes a contribution to their own nursing practice and context.

A new research centre in the School of Nursing is about to be launched, focusing on reproductive, maternal, neonatal, and child health (RMHC).

#Challenge: Have a Heart and donate blood

Two final-year MBChB students show how it is done when they donated blood earlier this year.

Bachelor of Medicine and Bachelor of Surgery (MBChB) staff and students in the Faculty of Health Sciences have challenged other departments in the faculty as well as other faculties and departments at the University of the Free State (UFS) to see whose staff and students will donate the most blood!

Mrs Angela Vorster, UFS Clinical Psychologist, says the South African National Blood Services (SANBS) has been appealing for increased blood donations since the onset of the COVID-19 pandemic last year. In order to provide support, the School of Clinical Medicine at the UFS held a virtual blood donation challenge in 2020, to encourage students to participate in altruistic behaviour and to enable the preclinical platform year groups to also feel like they are providing essential medical assistance.

"This was hugely successful and consequently we decided to include a blood donation challenge in our annual Mental Health Awareness programme. The benefits of donating blood are not only of a physiological nature (e.g. it assists in

reducing iron levels and helps to control high blood pressure etc.) but means you are giving something of yourself. It will definitely save at least one life, perhaps more, and is incredibly beneficial in enhancing feelings of self-worth and personal meaning," says Vorster.

The Faculty of Health Sciences invited the SANBS to UFS this week to provide all students and staff with the opportunity to donate blood at their place of work and study. So Have a Heart and take a few minutes to relax with a cookie and cool drink while your heart does the work of blood donation for you.

The Best of the UFS: The National Control Laboratory for Biological Products

There can be no compromise when it comes to the quality of medicines made available to the public.

The UFS-based National Control Laboratory for Biological Products (NCL) is a full member of the international WHO-National Control Laboratory Network for Biologicals and one of 12 laboratories worldwide contracted to perform vaccine testing for the World Health Organisation (WHO). The NCL is also the only vaccinetesting laboratory in the country that performs the final quality-control testing of all human vaccine batches marketed in South Africa on behalf of the South African Health Products Regulatory Authority (SAHPRA).

In its role as a vaccine-testing laboratory for the WHO, the NCL helps to ensure that the vaccines purchased through the WHO prequalification programme for international distribution to resource-limited countries, meet the high standards of quality, safety, and efficiency.

International testing standards

The laboratory received the status of a pharmaceutical testing laboratory

after the South African Accreditation System (SANAS) endorsed its qualitymanagement systems as of a high standard according to the International Standards Organisation's requirements.

With its international testing standards, the NCL must ensure that all its operations – from the way documents are compiled and stored, to the maintenance of equipment and infrastructure, as well as staff competency – are performed according to international guidelines.

The laboratory has all the quality systems in place to ensure high-quality test results. The certificate of Good Manufacturing Compliance received 2019 indicates that laboratory testing is on the expected level for any pharmaceutical testing laboratory and manufacturer. This certification is very strict and means that the NCL complies with exceptionally strict standards for pharmaceutical labs anywhere in the world. The certification offers the South African Health Products Regulatory Authority, the WHO, and other national control laboratories around the world the confidence that the test results from the NCL can be trusted.



Licensed as pharmaceutical manufacturer

The laboratory is also licensed as a pharmaceutical manufacturer. Although the lab does not manufacture, it needs to comply with manufacturing standards. It is rare for a pharmaceutical testing laboratory (such as the NCL) outside of a manufacturing context to qualify for both certifications.

Dreams come truefor Dean's Medal recipients

While two recipients of the Dean's Medal in the Faculty of Health Sciences at the University of the Free State's (UFS) April graduation ceremonies reached their respective dreams, another one is one step closer to her achieving her own childhood dream.

Sebotsana Paula Rasebotsa, graduated cum laude with a Master of Medical Science specialising in Virology in February this year, while Cecelia Marais was awarded the Dean's Medal for achieving the best results in respect of a master's degree in the Faculty of Health Sciences during April's graduation ceremonies. Marais graduates on Thursday cum laude with a Master of Nursing degree.

Another Dean's Medal winner, Mandi van der Merwe, graduated on Monday with a Bachelor of Medical Science Honours in Anatomy and Cell Morphology and was awarded the medal for achieving the best results in respect of a Bachelor Honours degree in the Faculty of Health Sciences.

One step closer

Rasebotsa, who has suffered anxiety and depression several times, says it had always been her childhood dream of having the title of doctor.

"I always told myself from a young age that i wanted to be referred to as doctor by the time I was through with my studies. I am glad that I am one step closer to achieving my childhood dream. What motivated me through this journey was the drive to be part of the scientists who are bringing about

solutions to African problems through our research," says Rasebotsa.

"I never anticipated that; the very same girl who attended high school in the township of Seshego in Polokwane, and who didn't have a laboratory nor secured a bursary for her undergraduate studies, would manage to navigate her way through varsity and be considered as a young upcoming scientist with a master's degree.

"Special thanks to the CSIR, NRF, PRF, and UFS bursaries for believing in me and funding my postgraduate studies. I am very proud and overwhelmed with joy every time I think of what I have achieved as a young, black, female scientist," says Rasebotsa.

Obtaining a postgraduate qualification a dream come true

Marais, who completed her studies in December 2020, says she is truly thankful to the Lord for giving her the strength and knowledge to accomplish all the things she has.

"It has always been my dream that after I first graduated in 1994 I would obtain postgraduate qualifications. I am hoping

to be able to study further and obtain my PhD." In 2018, she completed an Advanced University Diploma in Nursing Education (with distinction).

According to her, 2020 was challenging due to not being able to have face-to-face contact with her study supervisors. Skype and Zoom meetings, however, made it possible to continue her studies. Says Marais: "It was truly a huge challenge to balance work, studying, and my family at the same time without neglecting any of them. Being faced with a community that did not understand why someone of my age wanted to study was another challenge."

Dream to do medicine

Van der Merwe says her biggest motivation came from her dream of wanting to study medicine. "Throughout my studies I continuously applied to do medicine and although I only got accepted now, the rejection motivated me to always do my best and get good marks. Another motivator was my older sister, who is currently a master's student, also at the UFS, who was a great example and mentor to me," she says.

She is currently doing her first year of medicine (MBChB) at the University of Pretoria.

"I am proud of myself, and I know my family is too and that makes me really happy. My message to others would be to always work for what you want and to follow your dreams, no matter the cost, as the end result of all the hard work is so rewarding," says Van der Merwe.



Sebotsana Paula Rasebotsa was awarded the Dean's Medal for achieving the best results in respect of a master's degree in the Faculty of Health Sciences.



Cecelia Marais, a private nurse practitioner focusing on caregiver training, homecare, and first-aid training, who is graduating cum laude with a Master of Nursing degree, was also awarded the Dean's Medal.



Mandi van der Merwe, graduated on Monday with a Bachelor of Medical Science Honours in Anatomy and Cell Morphology and was awarded the Dean's Medal for achieving the best results in respect of a Bachelor Honours degree in the Faculty of Health Sciences

Indigenous Knowledge System receives annual grant of R17 million



Prof Motlalepula Matsabisa is Professor and Director of Pharmacology at the University of the Free State (UFS) and the chairperson of the World Health Organization's (WHO) Regional Expert Advisory Committee on Traditional Medicines for COVID-19.

Prof Motlalepula Matsabisa is Professor and Director of Pharmacology at the University of the Free State (UFS) and the chairperson of the World Health Organization's (WHO) Regional Expert Advisory Committee on Traditional Medicines for COVID-19.

The Indigenous Knowledge System (IKS) for Health in the Department of Pharmacology in the Faculty of Health Sciences at the University of the Free State (UFS) has been awarded an annual Technology and Innovation Agency Platform (TIA) grant of R17 million for the next five years.

This research and teaching programme in the School of Clinical Medicine will now be rebranded and be known as the African Medicines Innovations and Technology Development Platform (AMITD), which will strive to respond to community health needs and address industry research challenges.

Prof Motlalepula Matsabisa, Professor and Director of Pharmacology, says the AMITD will aim to stimulate economic growth directly and indirectly by providing science-based solutions and developing technologies that utilise indigenous knowledge (IK) and South African iconic biodiversity to produce high-quality proprietary and commercial IKS/ African Traditional Medicine (ATM) products, focusing on priority diseases.

Prof Matsabisa is also leading Africa's fight against the COVID-19 pandemic after being appointed chairperson of the World Health Organization's (WHO) Regional Expert Advisory Committee on Traditional Medicines for COVID-19 last year.

According to Prof Matsabisa, AMITD will work with private pharmaceutical companies to address technological challenges regarding herbal or ATM products that need improvement, and even develop new products for the

market. The main scope of the platform will be to conduct applied and need-driven IKS health research.

"In the longer term, the plan is to establish an AMIDT Institute, and to become the international IKS research hub. To continue maintaining this position as the preferred research institute for training, research, and technology development for industry, government, local communities, and forming partnerships with leading national and international institutions."

"The overall benefits will be skills development, job and wealth creation at community level, high-level training at higher-education level, and industrial and business developments around IKS/ATM production activities. The AMIDT will move the country from the current resource-based thinking to a more intensive knowledge-based thinking and development. Abundance of natural resources means nothing to the country if those resources cannot add value and develop commodities for industry development and job creation, including social impacts," says Prof Matsabisa.

Why IKS TIA platform for UFS

The UFS is recognised as a national leader in pharmacology as well as research and development of IKS and traditional medicines. The UFS has developed and built infrastructure in this field of scientific research, and has the best modern equipment for the training, teaching, and development of prototypes and products for commercialisation based on IKS. Interdisciplinary and interfaculty research is undertaken in this study area, and we have an excellent track record of sound community engagement with relevant stakeholders.

The appointment of Pharmacology IKS as platform will further strengthen our current local, regional, and internationally active research collaborations. These collaborations exemplify the strength and potential that the AMIDT platform could have in Asia, Africa, the UK, the US, Latin America, and Europe. We will strive to establish a mutually beneficial partnership with relevant players in Australia to make this a truly global IKS platform/research institute.

UFS staff member first Free State health-care worker to receive vaccine

Dr Samantha Potgieter, infectious disease expert at the Universitas Academic Hospital and affiliated lecturer in the Department of Internal Medicine at the University of the Free State (UFS), was Wednesday (17 February 2021) the first health-care worker in the Free State to receive the Johnson & Johnson vaccine.



Dr Samantha Potgieter, infectious disease expert at the Universitas Academic Hospital and affiliated lecturer in the Department of Internal Medicine at the University of the Free State (UFS), was the first health-care worker to receive the Johnson & Johnson vaccine in the Free State.

Dr Nicholas Pearce, Head of Surgery at the UFS and also heading the Free State Province COVID-19-Task Team, said they were rolling out the Johnson & Johnson vaccine as part of a 3B clinical trial. The vaccination of health-care workers is part of an extension of the study and the vaccine has not yet been registered with the South African Health Products Regulatory Authority (SAHPRA).

Excited for the province to receive this vaccine

"It is vital to vaccinate health-care workers to prevent staff members from getting ill and dying. So, it is a critical process, as all health-care workers are key people we have to protect in terms of the fight against COVID-19," said Dr Pearce.

Dr Potgieter, who is working tirelessly in the COVID-19 ward at the Universitas Hospital in Bloemfontein, said she is extremely excited and also excited for the Free State province to receive this vaccine. "I am grateful to Dr Pearce and his team for setting up this vaccine station for us at the Universitas Hospital," she said.

Important to vaccinate healthcare workers

"The idea was to vaccinate a few people to make sure everything is in place. To check our systems, to make sure we can safely vaccinate others. It is extremely important to vaccinate health-care workers; I think, not only are we trying to protect our health-care workers from occupational exposure to COVID-19 – and they are

obviously at high risk of occupational exposure – but you also want to preserve a workforce," said Dr Potgieter.

She said it would be important to not only vaccinate health-care workers working directly in COVID-19 wards, but to vaccinate all health-care workers so that we can provide an ongoing service to our community.

The Free State MEC for Health, Montseng Tsiu, also received the vaccine on Wednesday.



The National Control Laboratory for Biological Products

The UFS-based National Control Laboratory for Biological Products (NCL), a full member of the international WHO-National Control Laboratory Network for Biologicals and one of 12 laboratories worldwide contracted to perform vaccine testing for the World Health Organisation (WHO), also received the first batch of the AstraZeneca vaccines earlier this month. Because the Johnson & Johnson vaccine is still in the trial phase and has not yet been registered, it did not follow the same process as the AstraZeneca vaccine.

The NCL is also the only vaccine-testing laboratory in the country that performs the final quality-control testing of all human vaccine batches marketed in South Africa on behalf of SAHPRA. In its role as a vaccine-testing laboratory for the WHO, the NCL helps to ensure that the vaccines purchased through the WHO prequalification programme for international distribution to resource-limited countries, meet the high standards of quality, safety, and efficiency.

Student Voice

Mojalefa Jnr Nkosi

I am currently pursuing an Honours degree in Anatomy to further my knowledge in this field. Covid-19 has changed my study environment quite a lot in terms of the way I learn and manage my time. The shift to digital platforms has demanded more time management from me and has allowed me to create my own schedules based on what time of the day I work and study best

Daniëlle van der Merwe

I graduated BSc Forensic Sciences, cum laude, in 2020, and am currently pursuing an honours degree in Anatomy and Cell Morphology at the Faculty of Health Sciences, UFS, with the goal of pursuing a career in forensic anthropology. During lockdown, despite the luxuries of being home, I was anxious to return to my assigned skeleton, "Charlie". It was then that I realised that I could pursue a career in this. After doing some research, and speaking to my now study leaders, I committed to it, and applied for the honours program

Masunyane Kelebogile

Pursuing an Honours Degree in Anatomy and Cell Morphology under the Department of Basic Medical Science has always been my dream. With the onset of COVID-19 and the emergent transition from face-to-face interactions to online learning, a great threat was particularly imposed to my entire undergraduate degree. As I was getting used to the situation, a similar challenge was introduced when the essential students were called back to campus to complete their academic activities and write sitdown examinations. This took another toll on me! However, I am proud to say that despite all the hardships encountered, I kept the faith and maintained my academic integrity until I ultimately obtained my Forensic Science degree.

Wairimu Maringa

I am a Kenyan International student pursuing a Master's degree in Medical Virology under the Faculty of Health Sciences. Studying here has allowed me to meet people from all over the world and create incredible memories in the process, all while having the privilege to pursue my interests in science. The quality of education at UFS is exceptional at the Division of Virology within the Faculty of Health Sciences. As a student, I know that I can do whatever I want (within legal limits) because I have access to many resources. UFS offers a fantastic academic environment to pursue your goals and broaden your



Honours students, Kelebogile, Nkosi and Van der merwe

intellectual horizons. I am very glad for the opportunity to study here.

Dr. Peter Nthiga Mwangi

The completion of any degree tends to be accompanied by the relative stress of "what to do next?". After completing my Master's degree in Biotechnology at Kenyatta University in Kenya in 2017, I was focused on the idea of pursuing a Ph.D. dream. Thank heavens, after doing several applications, I was fortunate to successfully pass an interview to join the University of the Free State-Next Generation Sequencing (UFS-NGS) Unit, headed by Prof. Martin Nyaga, to pursue a Ph.D. opportunity in Medical Virology in the Division of Virology under the Faculty of Health Sciences.





Faculty Research Forum 2021

Save the date

24 August 2021

Student Research Forum

08h00-13h00

25 August 2021

50th Celebration, Panel Discussion and Ethics Session

08:30-13:00 & 18:00-21:30

26 and 27 August 2021

Faculty Research Forum

(Full Day) CPD Accredited