

THE PULSE



Medical School NEWSLETTER

Volume: 2 | October 2024



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“Being a medical doctor is more than a profession; it is a calling that requires us to be compassionate, committed, competent, caring, community-oriented and humble.”

1. FROM THE DIRECTOR’S DESK

As we look back on the launch of our first edition, we do so with gratitude. The inaugural issue was not just a milestone for us, but a testament to the collaborative effort and dedication of our team. Our goal was to provide insightful and relevant content that resonates with you, our readers. The positive and incredibly encouraging responses we’ve received have been heartening. Thank you for your support and for being an integral part of our journey.

In this edition, you will find stories that highlight our achievements and activities, featuring a blend of in-depth articles and personal success stories that inspire, motivate and remind us of why we are here, doing what we do.

The Eastern Cape’s rich medical heritage is celebrated in Joastin Naidoo’s excellent article about South Africa’s first black female medical doctor, [Dr Mary Susan Makobatjatji Malahlela](#), a profile on Dr Liz van der Merwe, who is the ICU Head at Livingstone Hospital and a Research Associate at the Nelson Mandela University Medical School, and a report on indigenous knowledge in medical education.

Looking to the future, some of our brightest and best young students share their tips on coping with the challenges of balancing academics and well-being, and we take a closer look at the role of mindfulness and psychoneuroimmunology within a modern medical context.

We have exciting developments in the field of language learning with the launch of our AfriXhosalingo app, and in our accreditation journey with news on the recent HPCSA visit.

As we move forward, let us remain committed to our core values of excellence, integrity, and service. Let us continue to work collaboratively towards our shared goals by supporting and inspiring each other. Our mission remains clear: to provide you with a newsletter that is not only informative but also reflective of our dynamic community.

Warm regards,

Dr Reno Morar

Director, Medical School
Nelson Mandela University

2. MEET OUR NEW STAFF:

ACADEMIC CLINICAL HEAD OF DEPARTMENT: OBSTETRICS AND GYNAECOLOGY

Professor Mfundiso Mabenge

As taken from "We welcome new staff members in July"

Head of Obstetrics and Gynaecology at the Nelson Mandela University Medical School, Associate Professor Mfundiso Mabenge, who is also the Clinical Head of Obstetrics and Gynaecology at the Dora Nginza Hospital clinical training platform. He is involved with the training and supervision of doctors specialising in Obstetrics and Gynaecology, as well as nurses doing advanced midwifery.

Prof Mabenge is President of the South African Medical Association (SAMA), a board member of the Medical and Dental Professionals Board, a member of Council for the College of Obstetrics and Gynaecology and serves as an advisor on the South African HPV board.

He recently received an academic fellowship award from Discovery to complete a PhD in Obstetrics at the University of Witwatersrand. Prof Mabenge trained as a super specialist in Gynae Oncology with the University of Pretoria. He holds a Fellowship in Obstetrics and Gynaecology, a Certificate in Gynae Oncology and a Diploma in Obstetrics from the College of Medicine of South Africa, and qualified as a Gynae Oncologist in 2016, becoming the first Gynae Oncologist in the Eastern Cape.



ACADEMIC CLINICAL HEAD OF DEPARTMENT: PAEDIATRICS AND CHILD HEALTH

Professor Siyazi Mda

Associate Professor Siyazi Mda has recently been appointed as Head of Paediatrics and Child Health at the Medical School. He is also the Head of the Clinical Department of Paediatrics at Dora Nginza Regional Hospital and Livingstone Tertiary Hospital, having been appointed in 2018. He is a Research Associate at Nelson Mandela University's Faculty of Health Sciences.

Prof Mda was previously Adjunct Professor in Paediatrics and Child Health at Sefako Makgatho Health Sciences University from 2012 to 2018.

He has been involved in paediatric postgraduate teaching and assessment for over 15 years and his research interests are malnutrition, diabetes and paediatric nutrition, particularly in HIV-infected children. Prof Mda has served on the Paediatric Expert Review Committee of the National Essential Medicine List and was a Council Member of the South African Health Products Regulatory Authority. He holds a PhD on micronutrients in HIV-infected children from Wageningen University in The Netherlands, an MMed (Paed) from then-Medunsa and his MBChB from the University of Natal.

The main activities of Paediatrics and Child Health include clinical services, undergraduate and postgraduate teaching and research. The Clinical Department of Paediatrics provides regional, tertiary and quaternary clinical services to neonates, infants, and children in the Western Region of the Eastern Cape province. The clinical services are mainly provided at Dora Nginza Hospital, but some services are based at the Port Elizabeth Provincial Hospital (PEPH).



Professor Siyazi Mda

Clinical services provided include Neonatology, General Paediatrics, Paediatric Critical Care, Paediatric Nephrology, Paediatric Neurology, Paediatric Pulmonology, Paediatric Cardiology and Paediatric Oncology. The latter two clinical services are based at PEPH. All specialists in the departmental are joint appointees between the Medical School and the Eastern Cape Department of Health.

Training of postgraduate students is focused on training specialist paediatricians for the Master of Medicine degree currently in collaboration with Walter Sisulu University. Since 2018, a total of 15 doctors have successfully completed the specialist examinations while training in the department. The processes of registering the Master of Medicine (MMed) qualification with Nelson Mandela University are ongoing.

3. IN THE SPOTLIGHT

STAFF

Making the Mandela Doctor

A day in the life of Dr Liz van der Merwe, Livingstone Hospital ICU Head and Research Associate, School of Medicine. By Beth Cooper Howell

AA shift with Livingstone Hospital's Dr Liz van der Merwe is a snapshot of the purpose and passion with which she cares for the critically ill – and an eye-opening reality check for the would-be doctors who train with her at Nelson Mandela University's Medical School.

"The daily challenges of working at a busy, resource-stretched hospital such as Livingstone enriches the synergy between theory and practical teaching."

Head of the Gqeberha public hospital's Adult ICU unit for nearly 20 years, Dr van der Merwe is a lecturer for Walter Sisulu Medical School and, more recently, at Nelson Mandela University, helping to produce health care professionals trained in various medical fields and ready to serve their communities.

In between, the College of Medicine of SA examiner and councillor of the SA Critical Care Society conducted crucial research on early screening for post-intensive care syndrome, graduating from Mandela University in April this year with a PhD.

Wearing her many hats is a big ask, with a "day job" that involves serving the combined population of the Sarah Baartman and Nelson Mandela Metropolitan districts – over 1.7 million people – from the only tertiary level adult ICU in the area.

On the ground training

Dr van der Merwe has been teaching at the Nelson Mandela University's Medical School since its inception in 2021.

"Located in one of the poorest provinces, it clearly serves an urgent and widespread need," she says. "In the words of my long-time friend and colleague at the institution, Professor Elma de Vries, Mandela University will give South Africa the 'Mandela Doctor'.



Dr Liz van der Merwe

"They will have a holistic approach to patients, with a major part of their training focused on prevention of disease."

This multi-pronged approach to teaching and learning benefits both students and their patients. "When we were still discussing the curriculum, I commented that, as a medical student, I didn't always understand why I had to seemingly 'waste my time' studying certain things.

"So, I got a call very early on to teach the first years why they have to learn about research and statistics. During this lecture, I tell them of how, as a young specialist, I fled away from research... only to come here and realise that I need data and statistics in order to be an advocate for my patients."

Putting theory into practice

Dr van der Merwe's doctoral thesis, 'Early screening for the post-intensive care syndrome in a tertiary ICU follow-up clinic in the Eastern Cape' shows how The Post ICU Syndrome (PICS) negatively impacts patients, and alerts health professionals about its dangers. It was supervised by Mandela professors Louise Stroud and Gary Sharp, as well as Fathima Paruk from University of Pretoria.

PICS is a constellation of new or worsened impairments in physical, cognitive and/or psychological health which persists after critical care discharge, she explains.

"These deficits are more related to the patients' ICU stay than to their original ICU admission diagnosis, affecting between 25%-50% of ICU patients.

"It is often an unexpected outcome for the patients, their family and even some medical personnel. It has profound implications for ICU survivors' functionality and ability to fulfil life roles – and their quality of life."

Dr van der Merwe's patients inspired her work. "I had planned the research before COVID-19 existed and was about to start when the pandemic struck. I included COVID-19 patients in the study." The pandemic delay saw her completing her thesis about a year later.

There is massive scope for research and development of holistic rehabilitation services in the Eastern Cape state sector, she says, given the sobering statistics reflected in the research.

ICU survivors, at six months after hospital discharge, recorded being affected by their ICU experience in several ways, including significantly lower health-related quality of life (6/10), physical impairment (5/10), significant psychological symptoms (4/10) and a worrying 6/10 respondents affected by psychological symptoms at their six-week and/or six-month study visit.

BAAIENAAR" FROM THE BAY

Born in Johannesburg, but raised in Gqeberha (then Port Elizabeth), Dr van der Merwe matriculated from Framesby High School before studying medicine at the University of Stellenbosch, followed by further studies in internal medicine and critical care.

Dr van der Merwe is married to architectural heritage consultant Gerrie Horn, with whom she has two children: Mandela University student Jacobus and Grade 11 daughter Lize. Box ends

The daily challenges of working at a busy, resource-stretched hospital such as Livingstone enriches the synergy between theory and practical teaching, says Dr van der Merwe.

Challenges such as global economic contraction, corruption and South Africa's shrinking tax base all contribute to the challenge facing every sector, including medical care.

"Most of us do our best with what we are given, while being advocates for our patients. It is sometimes hard to remain positive – but worldwide and throughout history, people have had to battle far more challenging circumstances.

"Who am I, then, to give up hope? I realised, many years ago, that one can only make a difference if there is critical mass, i.e. a good team. I have wonderful colleagues who encouraged me through the years, amongst them Drs Rob Freercks (fellow Mandela lecturer and head of Nephrology) and Debbie Baker.

"My parents taught us critical thinking. They promoted that we use our imagination, so that we could imagine ourselves in the shoes of others."



Q & A with Dr Simo Zulu, Senior Lecturer, School of Medicine

Senior lecturer for Physiology Dr Simo Zulu holds a PhD in Medical Sciences (Physiology) from the University of Kwazulu-Natal. His research background is in cellular and behavioural neuroscience, particularly focused on the field of NeuroHIV. He chatted to Nelson Mandela University Medical School Student Success Coach Candice Chetty.

"Many studies have shown that HIV causes brain injuries, which lead to neurocognitive impairments termed HIV-associated neurocognitive disorders (HAND)."

What inspired you to focus your research?

I wanted to understand the human brain and how infectious diseases such as HIV affect the brain.

In South Africa, we have a very large number of people living with HIV and while most are now on antiretroviral therapy and have managed the disease by suppressing the virus, some individuals continue to experience HIV related comorbidities.

Many studies have shown that HIV causes brain injuries, which lead to neurocognitive impairments termed HIV-associated neurocognitive disorders (HAND). It is estimated that about 20-30% experience HAND despite antiretroviral therapy (ART). The pathophysiological mechanisms that underlie HAND remain unclear, but many medical scientists believe that the low-grade chronic inflammation due to HIV might be a key contributing factor.

The current scientific understanding is that HIV doesn't directly damage nerve cells, but this damage occurs through what is called a "bystander effect", where HIV infected immune cells release proteins that are toxic to nerve cells in the brain. Some experts believe that the poor ability of antiretroviral drugs to cross the blood-brain barrier contributes to inadequate viral suppression in the brain, which then causes brain cell injuries.

The unresolved questions regarding HAND neuropathogenesis are what led me to the field of NeuroHIV research and my current research study focuses on understanding the neuroinflammatory mechanisms that underlie HAND pathogenesis.



What methods or technologies are used in your pioneering research?

This study is a laboratory-based cellular neuroscience research in which we use cultured brain tissue cells to investigate the neuroinflammation process and markers that are induced by HIV infection. A variety of biochemical techniques and assays, such as immunofluorescence, will be used for analysing neuroinflammatory responses of brain cells.

What potential applications do you see for your findings in clinical practice?

The diagnosis of HAND is mainly based on a neuropsychologic testing tool and there are growing concerns that the current tool lacks diagnostic precision and could potentially overestimate cognitive impairment in people with HIV.

Therefore, there is need to identify reliable biomarkers that can support the neuropsychologic test findings. I believe that our study will improve the current HAND diagnoses and enable clinicians to assess the risk and severity of HAND.

Currently, there is no approved drug for the treatment of HAND; therefore, I think our study will also stimulate further research into the development of therapeutic drugs targeting the neuroinflammatory markers.

Who are your research partners?

This research project is funded by the National Research Foundation (NRF), and I am working in collaboration with Professor Mpošana from the North-West University and Professor Hajierah Davids from the Physiology Department, who are both experts in neurotoxicology research.

Students

Meet Our 2024 Peer Mentors: Guiding The Next Generation Of Students

Ms Candice Chetty and Ms Zintle Yokwe, Student Success Coaches

Peer mentoring is a transformative role that offers invaluable support and guidance to first-year students as they embark on their academic journey at the University. For many students, this may be their first experience away from home or their first encounter with the campus environment in Gqeberha. Peer mentors play a crucial role in helping first-years navigate their new surroundings, both academically and socially.

Within the Nelson Mandela University Medical School, senior students voluntarily take on the role of peer mentors, guided by student success coaches who coordinate the peer-mentoring programme. These senior students receive mentoring training from the Learning and Teaching Collab and are assigned a group of peer mentees at the beginning of the year. Through this programme, senior students provide valuable support and guidance to first-year students, fostering a collaborative and supportive learning environment.

Peer mentors play an integral role on multiple levels:

- Facilitating peers' successful academic adjustment
- Aiding overall adjustment to tertiary life
- Providing support that contributes to overall well-being during the first-year
- Helping first-year students feel more connected.

Peer mentors are empowered with essential skills, including leadership, communication and facilitation – traits crucial for any future medical graduate in a service-focused profession.

This year's mentorship programme for first-year medical students was a success, drawing positive feedback from grateful students who appreciated the open and supportive environment created by their mentors.

Highlights for the students included being able to freely share their experiences and challenges, a sense of mental relief, and greater motivation to rise to challenges as the senior students have done.

Key takeaways

- Well-structured and concise mentor meetings
- Personalised approach: friendly demeanours and sharing personal experiences significantly eased stress and helped first-years navigate the transition to medical school
- Real-life lessons: time management, communication, setting realistic goals, study techniques, interpersonal skills and avoiding procrastination were among several highlights identified by students in the programme.

Peer mentors play a crucial role in helping first-years navigate their new surroundings, both academically and socially.





“ IN LOVING MEMORY OF UNATHI MALAIKA JANUARY ”

(to dates of birth - 25 June 2024)

On behalf of Nelson Mandela University Medical School, we are greatly saddened by the passing of Ms January, a MBChB II student and dedicated peer mentor.

Her compassion for others, and contributions to all spheres of the Medical School, endeared Ms January to both staff and fellow students.

A quiet, determined presence, she was known and loved for her gentle nature, kindness and pursuit of greatness in her studies – traits ideally suited to a future Mandela Doctor.

Unathi means “is with us” and Malaika means “angel”. We know that Ms January’s spirit lives on in the hearts of all at our school, and beyond.

Our sincere condolences to her beloved family, and to her friends, classmates, teachers and mentees. She will be sorely missed.

- Dr Zithulele Tshabalala, Senior Lecturer in Human Anatomy, HOD of the Department of Human Biology and Integrated Pathology



Sound Advice: fostering first-year success

You've successfully completed your first year! Now, others need your advice. Students share their top tips.

In ONE SENTENCE, what's your best first-year advice?

"Learn and study hard from day one."

"Be on top of your work from week one so that you don't fall behind!"

Your BIGGEST challenge and how you beat it?

"It took me a long time to adjust to the workload. But, once I did, I managed to cope by staying organised and asking for help when needed."

"Managing my week well and allocating specific times for study helped me to stay on track."

Secret STUDY recipe?

"Find a study style that suits you and stick to it!"

"Lecture slides alone aren't always enough; supplement them with additional learning resources."

"Make studying a regular habit – not just something that you do before exams."

TIME management tips?

"Plan your days so that you know what to expect and can manage your time effectively."

"I can't stress it enough: the importance of planning and staying ahead of deadlines."

"Space out your study sessions through the week to maintain consistency."

What would you do DIFFERENTLY second time around?

"I would study more often AND have more fun!"

"Choose friends wisely."

"Start studying as early as possible."

G.O.A.T moments in #first-year?

"Despite challenges, I cherished friendships formed."

"I loved the excitement of pursuing my dream."

"Meeting lifelong friends and engaging in course material that I'm passionate about made the experience worthwhile."

Any final thoughts?

"As you embark on your first year, remember that consistency, time management and a proactive approach to learning are key."

"Lean on your peers, seek help when needed, and most importantly: enjoy the journey!"

"Be on top of your work from week one so that you don't fall behind!"



| From First-Year to Fourth: reflections on my medical journey

A current fourth-year student reflects on trials, tears, tribulations and triumphs during her dream-come-true medical school adventure.

"I've fallen in love with medicine, and now everything starts to make sense."

It's still hard for me to believe how far I've come. The journey hasn't been easy—third-year often felt like a never-ending storm, full of challenges that tested me in ways I never imagined. I remember standing in the dissection hall, trying to distinguish between a vein, an artery, and a nerve, and feeling utterly lost. But despite the difficulties, I've found a strength within myself that I never knew existed.

There were days when the weight of it all felt unbearable, and I thought about calling home to say I was quitting. But the idea of giving up was somehow more daunting than pressing on. In high school, we were told that getting into tertiary education would be tough, but no one really prepared us for the challenge of staying in, especially in medical school.

Enjoy the ride

Fourth-year has brought clarity and purpose to my journey. When I first wrote my portfolio reflection on why I wanted to become a doctor, I didn't truly understand what that meant. But now, I see that it's not about the scrubs or the stethoscope. It's something deeper. I've fallen in love with medicine, and now everything starts to make sense.

The most beautiful part of medicine, for me, is clerking patients and being present with them in the consultation room. It's an honour beyond words to ask someone the most confidential questions and have them trust you enough to answer, no matter how sensitive the subject.

Patients often share things they've never told anyone else—not their spouses, not their children—but they open up to us within minutes. That trust is one of the most sacred honours I've ever experienced.

In the wards, I've had the privilege of assisting people in their most vulnerable moments—whether it's offering a glass of water or adjusting their bed. Even when we can't take away their pain, being able to provide emotional support is invaluable. I've witnessed families come together, some after years of estrangement, drawn by the love and hope for a miracle as their loved one lies in a hospital bed. These experiences have taught me the true meaning of love, hope, and compassion.

Advice for third-year students

It gets better. I know how overwhelming third-year can be because I've been there. I was so close to giving up, more than once. But I found ways to cope, and so can you.

One of my lifelines was calling home. I called when I couldn't breathe, when I couldn't eat, when I couldn't sleep. Sharing my struggles with a close friend also helped. Sometimes just talking about your academic challenges can make them feel lighter. Knowing you're not alone could make all the difference.

Find your special place, whether it's a physical location or a mental space, where you can retreat when you feel overwhelmed. Lean on the support of those who care about you—family, friends, mentors. It's okay to ask for help, and it's okay to admit when you're struggling.

Embracing the privilege

I'm reminded of the words of Nelson Mandela: "What counts in life is not the mere fact that we have lived. It is what difference we have made to the lives of others that will determine the significance of the life we lead." Being a medical student has shown me that the smallest acts of care can make the biggest difference. I am privileged to be in a position where I can listen, offer comfort, and make a real impact in someone's life.

Every day in this profession reaffirms my decision to become a doctor. It's not an easy path, but it's one that I'm grateful to walk. The challenges have shaped me, and the joys have solidified my passion. I've found my identity in the simple, profound moments of patient care, and I wouldn't trade this journey for anything.

4. SCHOOL NEWS: EVENTS AND INITIATIVES

Building a Stronger Medical School: HPCSA Accreditation Visit

The Health Professions Council of South Africa (HPCSA) conducted an accreditation visit to our Medical School from 15 to 19 July, underscoring the Council's commitment to ensuring that medical institutions across the country adhere to the highest standards.

The panels' assessment was comprehensive, involving thorough site inspections, interactive discussions with students and staff, and a review of our curriculum.

This accreditation process offers valuable insights as we continue to develop and enhance our medical school. The HPCSA's feedback will be instrumental as we implement necessary improvements and strive for excellence in medical education.

The HPCSA's visit not only validates our dedication to delivering high quality education but also identifies areas for growth. These efforts are crucial, particularly because we are a new medical school building our foundation year by year, and must not only meet, but exceed national standards, ensuring that our students are well-prepared for their future roles in healthcare.



Glimpses of history: Dr Mary Susan Makobatjatji Malahlela, South Africa's first black female medical doctor

By Mr Joastin Naidoo, Lecturer in Anatomy

- As part of South Africa's national Women's Month, celebrated in August, our hearts fill with
- pride in recognising the impact and contributions of women in medicine. These days,
- medical school classrooms across the country have growing numbers of diverse female
- students; therefore, it is important that we appreciate and acknowledge the steps that it took
- to get us here, and the stories of the stalwarts who paved the way.

"She became the first black doctor to practice at the community clinic and continued to serve its people for the rest of her career, often working for no payment due to high levels of poverty."

One such story is that of South Africa's first black female medical doctor, Mary Susan Makobatjatji Malahlela, who graduated in 1947 – just shy of 80 years before the first class is set to graduate from the Nelson Mandela University Medical School (2026).

Dr Malahlela was born in 1916 in Polokwane, Limpopo. When the South African Native College (now known as the University of Fort Hare), based in the town of Alice, Eastern Cape, offered health-care courses to black students in 1937, she was among the first to enrol.

Four years later, in 1941, South African medical schools agreed to admit a small group of African or Indian students to study medicine. Dr Malahlela was one of the few students who received funding from the Native Trust Fund, enabling her to register as a medical student at the University of the Witwatersrand.

A rocky road

Dr Malahlela and other black students faced discriminatory hurdles to their learning. A prohibition of use of several university facilities, segregation from white students in residences and dining halls, separate buses to only "non-white" hospitals, and not being permitted to observe clinical demonstrations on white patients, or study anatomy on white cadavers, were some of the impediments that black medical students had to endure.

Persevering through this, Dr Malahlela completed her studies in 1947 and officially became the first black woman to qualify as a medical doctor in South Africa. Dr Malahlela then began her internship at McCord Hospital in Durban, KwaZulu-Natal,



since the hospital was one of the first, in the late 1940s, to offer internship positions to black doctors. Although many reported on the communal and supportive spirit that the hospital had tried to nurture, black doctors still faced segregation regarding their residential, dining and toilet areas.

Furthermore, a distinct difference in remuneration was present, since pay was racially determined. Whilst expected to perform the same roles and responsibilities, white male doctors had the highest salaries (R360 per month) in comparison to black female doctors, who received the lowest salaries (R180 per month). Due to these conditions, many black doctors decided to set up private practices.

A new dawn

Dr Malahlela, who had settled down after marriage in Kliptown, Soweto, started two private practices to serve the local community.

However, due to the Group Areas Act of 1950, under the Apartheid regime, Dr Malahlela was forced to shut down her practice and forcibly relocated to Dobsonville, Soweto. Here, she became the first black doctor to practice at the community clinic and continued to serve its people for the rest of her career, often working for no payment due to high levels of poverty.

In 1981, Dr Malahlela suffered a heart attack during one of her many periods of voluntary work and died aged 65. In 2015, almost a hundred years after her birth, Dr Malahlela was posthumously awarded the Order of the Baobab by the South African government, for her work in administering medical care to the oppressed during the Apartheid regime and in recognition of her status as the first African woman qualifying as a medical practitioner in the country.

Mindfulness and Psychoneuroimmunology: what is their place in health and healthcare?

Dr Margo de Kooker holds degrees in Medicine and Physiology from the University of the Witwatersrand and presents mindfulness-based approaches as part of academic support at Nelson Mandela University Medical School. She is a Research Associate in the Health Sciences faculty and has served as a developer in several of the University's Business School Management programmes.

In August, Dr de Kooker led a series of mindfulness workshops for students, shedding light on the profound connection between mindfulness and the immune system. Her insights into how mindfulness can benefit medical students offer a valuable perspective on the intersection of mental and physical health – a fitting nod to October as Mental Health Awareness month.

"One of the most important strategies we can leverage for mind-body balance is the art of paying attention"

Stress and fatigue rate as two common symptoms in modern life. The complexities of navigating social and personal responsibilities, work and academic pressures, and the perceived increased pace of life, leaves many reaching for stimulants, sleep aids and mood enhancing medications.

Psycho-social stresses interact with the mind and body in complex ways. From direct nerve to immune cell communication, to the complex common chemical language of peptides, nothing happens in the mind without the body responding to it. Stress has been found to have an influence at the subcellular level, influencing cellular bioenergetics, ageing and disease resistance. The field of Psychoneuroimmunology (PNI) explores these connections and what we need to do to build "stress resistance".

Just as different attitudes to the same stressor can lead to different physiological outcomes, certain factors "buffer" us against stress related dysfunction and potential illness.



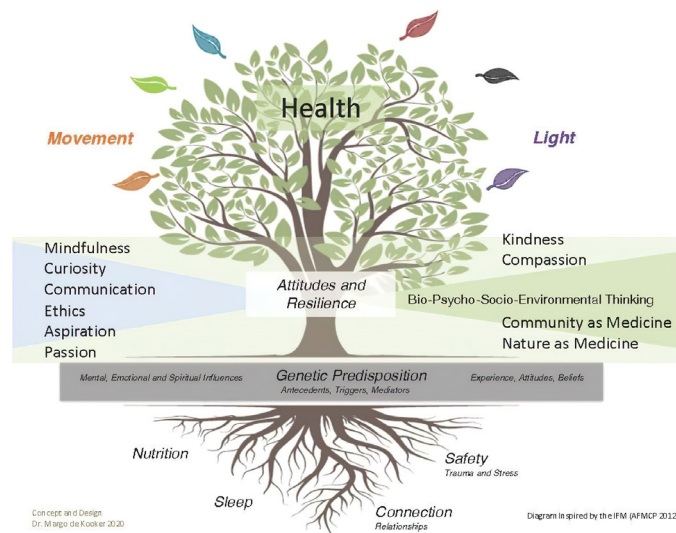
Robert Ader, the father of PNI research, reminds us: "When we speak of the mind-body connection, as demonstrated in PNI research, we are not focusing on the causation of disease, but the interaction between psycho-social factors, coping style and pre-existing conditions."

Being aware

One of the most important strategies we can leverage for mind-body balance is the art of paying attention. The awareness of thinking, feeling, and acting allows us to reflect, creating space for appraisal and potential change, and in the process, we decompress (not because the situation changed, but because we changed). In a simple word, this could be called "mindfulness".

Mindfulness has been a focus in the field of PNI for decades. Research has shown that the impact of this simple practice of paying attention in an impartial way, strengthens brain pathways that facilitate nervous system balance, positive emotion, and robust immunity.

This research is supported by other areas of focus in PNI, with evidence for positive health outcomes in those who are mentally flexible and agile, who seek to influence situations in a helpful way, and who approach life with a sense of compassion and passion. Being mindful of when we are sidelined into conflict, negativity, frustration, and over-striving allows us to reboot and respond in a healthier way.



Applying your mind

As doctors and medical students, creating self-management strategies to work with stress and challenges in novel ways makes us both more efficient in our work, and better able to appreciate the impact of stress in our patients.

We can also bring mindfulness into our interactions with others, particularly our patients. A first step would be to gather ourselves into a calmer space, then to remind ourselves to be curious. In the rush to “fix” we may miss something if we don’t enquire more deeply. Sometimes the act of enquiry allows a new story to emerge (from our patient) or from our own minds.

The field of Psychoneuroimmunology has clearly demonstrated that psychosocial factors, and our emotional responses to, and perceptions of these factors, cause changes in our bodies, varying from brain chemistry to nervous system arousal or suppression, to neuro-endocrine pathways and cellular energetics. The result may be the secretion of various hormones and peptides that

may directly or indirectly affect immune system functioning. One of the key issues in mind body medicine research is self-awareness and the ability to respond to life’s challenges in a flexible, balanced way, rather than simply out of habit.

Mindfulness is an invitation to stop, pay attention, take a breath and adjust our responses, to break unhelpful habits by noticing them and choosing a different perspective. This is a skill that is supported by a sense of optimism, motivation, connection, and focus.

We would do well to include a mind-body practice in our day to day lives. Just as the mind supports the body, so the body supports the mind – time connecting with nature, movement, nourishing the body with nutrients and sleep, and our own personal spiritual practices all support health and make us better facilitators of health in others.

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Heritage healing: exploring indigenous knowledge in medical education

SENIOR LECTURER AND KAVIR DULLABH, THIRD-YEAR MEDICAL STUDENT

Dr Savania Nagiah

Dr Nagiah is passionate about both the science of nutrition and the use of traditional plants in treating diseases endemic to South Africa. A YouTube video capturing this conversation is available on the University's Learning and Teaching website. The interview can be viewed by following this link: [Watch Interview. https://youtu.be/Fa9JOLJv2SQ?si=AewVFGGLalB8DM0s](https://youtu.be/Fa9JOLJv2SQ?si=AewVFGGLalB8DM0s)

The conversation began with Dullabh asking Dr Nagiah about how awareness of indigenous knowledge and traditional medicine influences her research and teaching. Dr Nagiah recalled a significant project from 2011 that explored the potential of *Moringa oleifera* to mitigate the toxicity of contaminants in maize meal, which can contribute to liver cancer. This project was particularly meaningful for her because *Moringa*, known in her community as the "drumstick herb," was something she had grown up with.

"It was very familiar but also interesting in that I was now applying it in a scientific context for the first time," she shared. This early encounter with integrating indigenous knowledge into scientific research sparked a deeper awareness in Dr Nagiah. While traditional remedies are often scientifically validated, she said, the commercialisation of these products often raises questions about ownership and accountability. "At what point do we become responsible for who owns this knowledge?" she asked.

Incorporating indigenous knowledge into the curriculum

Dr Nagiah emphasised the importance of incorporating traditional knowledge into the curriculum, both in terms of the value of traditional medicine and the broader brushstrokes of colonialism's impact on health. She explained how she uses familiar examples, such as traditional remedies used by students' parents, and grandparents, to make complex medical concepts more accessible. Integrating indigenous knowledge into teaching was another crucial tool, she explained. "When teaching about diabetes, for instance, I would bring up how certain traditional remedies can stimulate similar pathways to drugs we use in treatment."

It was vital that students grasped not only the genetic factors associated with disease, but also the epigenetic influences resulting from historical stressors, such as famine, she said. Understanding these factors, including the impact of colonialism

on health and the genetic and epigenetic legacies passed down through generations, was key to preparing and fully educating future healthcare providers.

Cultural competence in healthcare

Dullabh stated that it was important to be a "culturally competent doctor in a country as diverse as ours", echoing Dr Nagiah's sentiments about understanding the cultural backgrounds and traditional practices of the communities in which medical graduates serve. These skills were as critical as technical prowess and built both trust and understanding between patient and doctor, he said.

Dr Nagiah agreed, adding that this awareness extends beyond just the Health Sciences. She highlighted the unique location of the Nelson Mandela University Medical School, which is closely linked with the local community. This connection enriches the students' educational experience and fosters the practical applications of indigenous knowledge in healthcare. Dr Nagiah suggested supporting interdisciplinary collaboration and incorporating seminars and group sessions on indigenous knowledge into the curriculum, allowing students to openly discuss applications of valuable traditional knowledge in medical science.

"Knowledge is limitless," said Dullabh, "and the pursuit of understanding through diverse perspectives is essential for the growth and development of future healthcare practitioners."

As part of a faculty-wide discussion series on decolonisation of the curriculum, a recent discussion centred on the role of indigenous knowledge in shaping medical education was held. This series involves students interacting with academic staff to explore how research influences departmental curricula.

Third-year medical student, Kavir Dullabh, interviewed Dr Savania Nagiah, a Senior Lecturer in Basic Medical Sciences, and specifically, Biochemistry, who shared insights into her research interests.



Facilitating Language Learning: our AfriXhosaLingo app is live!

MBCHB PROGRAMME COORDINATOR

Prof Elma de Vries

The medical school has developed a phone app to facilitate learning how to conduct a medical interview in isiXhosa and Afrikaans.

The app contains a glossary of terms, as well as phrases for history taking, physical examination and explanations for specific clinical skills. Users have the option of playing a sound file of the chosen phrase in either isiXhosa or Afrikaans. If a student is in the hospital and does not remember how to ask, for example, "Do you have blurred vision?" in isiXhosa or Afrikaans, they can access the app on their phone and play the audio recording for the phrase.

The initial version that was developed in 2023 included basic phrases for history taking, such as "Where is the pain?" and "When did it start?", which will be expanded in 2024 to include phrases for taking a history for patients in Paediatric, Obstetric and Psychiatric settings as well.

The app is available on both Google Play store and the Apple store to anyone with a Nelson Mandela University

email account. Development was supported by funding from the Department of Higher Education and Training (DHET) through the University Capacity Development Grant (UCDG). University colleagues in Information and Communication Technology developed the app in-house and are assisting to further refine user experience.

While the long-term goal is that our medical students will be comfortable taking a history from a non-English-speaking patient without requiring a language app, AfriXhosaLingo is a useful tool on the learning journey.

The Language app is available on both Google Play store and the Apple store. Once downloaded, anyone with a university log-in can use it. Search for AfriXhosaLingo in either app store.

Android: <https://play.google.com/store/apps/details?id=com.nmu.nmumedicalschoolapp>

Apple: <https://apps.apple.com/za/app/afrixhosalingo/id6477778475>



App Interface

Fig 1

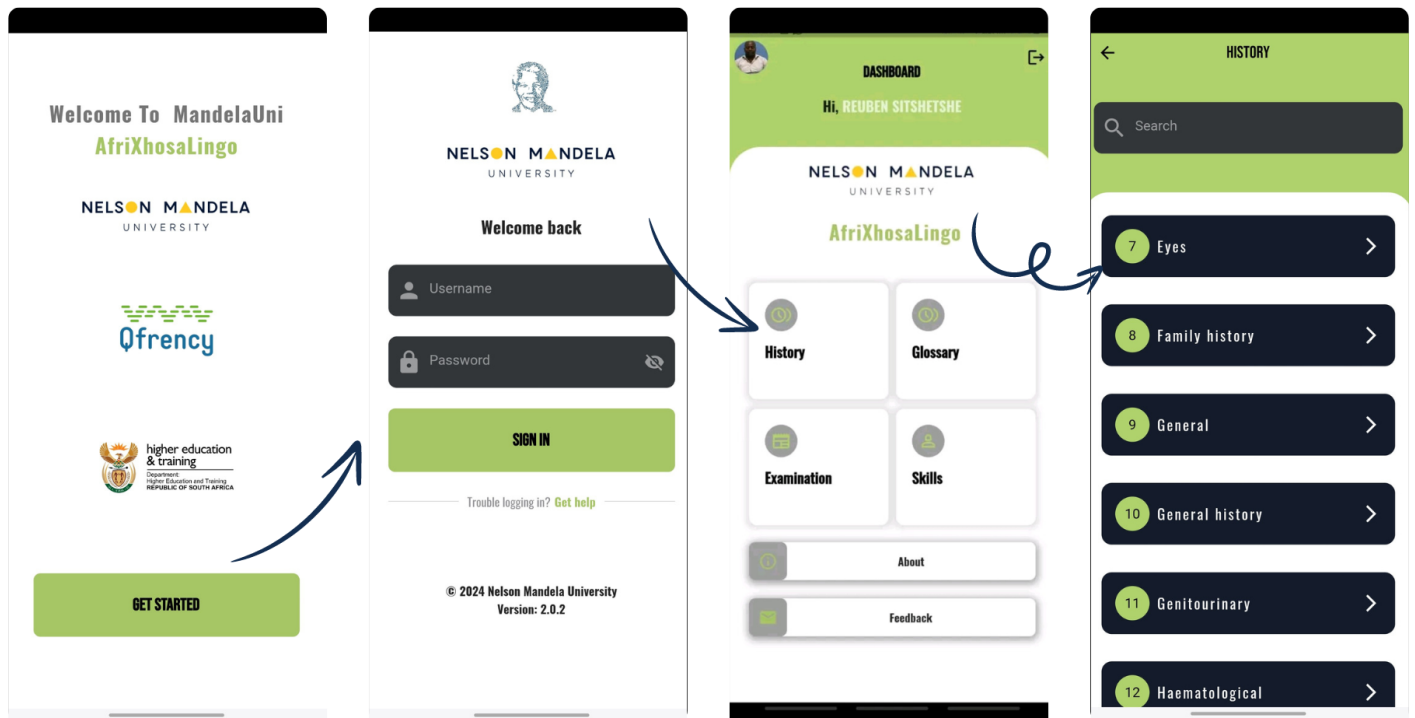
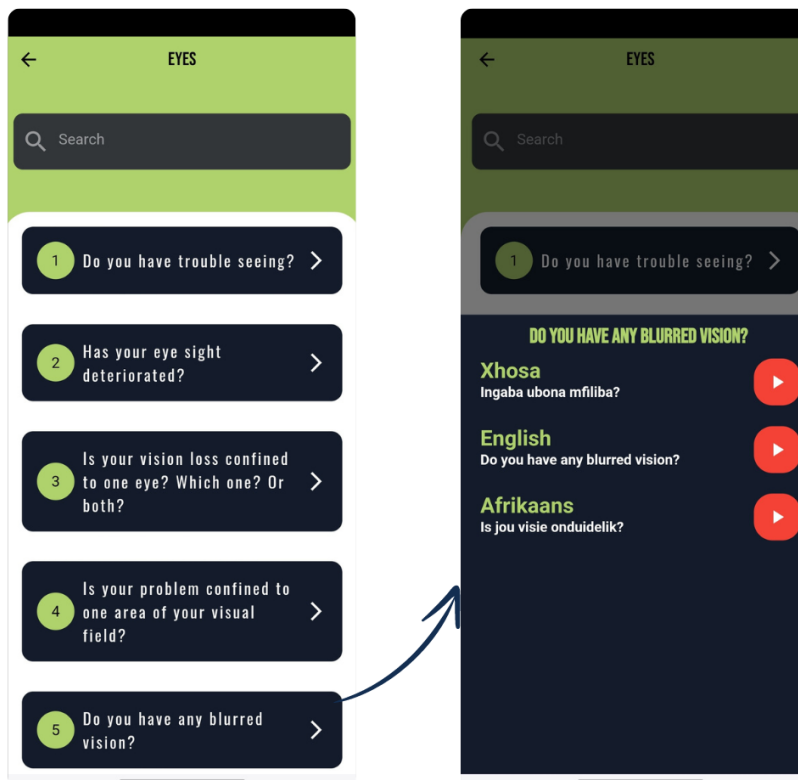


Fig 2



Dr Imtiaz Sooliman Inspires Medical School Staff

Dr Imtiaz Sooliman, founder of the Gift of the Givers Foundation, gave an inspirational talk to Medical School staff at Missionvale Campus on 5 September 2024, followed by a Q&A session.

"I'm very happy the staff asked for a lecture because some are not just teaching medicine, they are teaching life principles," Dr Sooliman noted.

Medical School Director, Dr Reno Morar, described the discussion as "beautifully inspirational", frank, and very honest.

"It was emotional and comforting, inspiring us to be better health professionals and, most importantly, better human beings. He reminded us of the value of people, which is fundamental in healthcare.

"When you serve people, be passionate, love what you do, care about people and do the right thing all the time"

Dr Sooliman emphasised that medicine is not just about technical skills, but also about compassion, discipline, and humanity. "The medical field is about saving lives, showing compassion, and providing care.

"You need to be disciplined and take instructions; that will produce a good doctor who can serve patients better," he said.

He also highlighted the importance of maintaining a positive attitude through faith and spirituality.

Dr Sooliman had a clear message that a country belongs to its people, and it is the responsibility of citizens to actively contribute to improving the country.

"South Africa is our country. No one will care for it better than us," he said. He urged citizens to work together, support each other, and promote humanity, while encouraged businesses, schools, and religious institutions to guide communities and create opportunities.



Dr Sooliman was expected to return to the campus to speak with Medical School students later in September 2024.

Original article published in the NMMU staff bulletin.

<https://staff.mandela.ac.za/Bulletin/Dr-Imtiaz-Sooliman-pays-inspirational-visit-to-Mis>

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DONATIONS: STEP-BY-STEP GUIDE



1) ENGAGEMENT

Medical School engages with potential donors



2) EMAIL CONFIRMATION

Donor sends email to Medical School **sherwin.king@mandela.ac.za** confirming amount and general conditions (e.g. first-year)



3) GENERATION OF INVOICE

Email confirmation sent to Ms Jennilee Bezuidenhout **jennilee.bezuidenhout@mandela.ac.za** who issues Trust invoice to donor



4) ISSUING OF INVOICE

The invoice: bank details + short information form for Section 18A tax certificate



5) PAYMENT RECEIPT

Donor pays invoice – funds transferred to Financial Aid under donor conditions



6) FUNDING ALLOCATION

Medical School + Financial Aid allocate funding to student/s in need



7) ISSUING OF S18A CERTIFICATE

The Trust issues thank you letter + Section 18A tax certificate



8) ISSUING OF B-BBEE CERTIFICATE

B-BBEE certification (if required) arranged with Faculty of Health Sciences after funds have been disbursed.

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The Trust may issue Section 18A tax certificates for certain categories of donations that qualify for tax rebates. Amendments to the B-BBEE framework also mean that donors who support Black South Africans, as defined in the BB-BEE codes, may receive certification to assist them with their B-BBEE scorecard.

Sound corporate governance is at the heart of the responsibilities of 11 Trustees. The Trust is independently audited each year and has achieved unqualified audit opinions for many years. More information on the Trust, as well as copies of its annual reports and audited financial statements, can be found at <https://srma.mandela.ac.za/Nelson-Mandela-University-Trust>.

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Your voice counts. Please send us suggestions, stories and ideas for future issues – this is your newsletter, and we'd love to grow it with you.

Contact us. Drop us an email @ candice.chetty@mandela.ac.za

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<https://forms.office.com/r/0Y3vx0t1YH>