

Thetha

Alumni & Friends Magazine
Edition 6

2022



Saving the Future
Sustainability under the spotlight

LIVING SPACES
Boosting student housing

One of a kind
New Science Centre

DIGITAL DONATIONS
Online giving goes live

Transformative, responsive and sustainable..... 3
 Digital donations 4
 Where does my donation go? 6
 Converging in service of society 8
 Sharing African excellence with the world 10
 Keen interest in new Medical School 12
 Life-changing innovations in Nanomedicine..... 14
 Walking with giants..... 21
 Keyboard warriors..... 23
 Online education – where is SA?..... 25
 Living spaces 27
 A valuable learning curve in sustainability..... 28
 Running a ‘small municipality’ 30
 Sustainable water resources and energy security 31
 Living, breathing, teaching, researching sustainability..... 32
 A bold new look for Ocean Sciences Campus..... 34
 One of a kind 36
 A master of crisis management..... 37
 Money Smarts 39
 Click to connect 41
 Shop online and collect or courier..... 43
 Alumni Achievers 44
 Rising stars making their mark..... 46
 Meet our new council members..... 48
 Putting science in service of society 52
 Making Madiba proud..... 53
 Drone licence gives Mandela Uni wings..... 54

Touching the future is our business

“I touch the future. I teach.”
 This quote is attributed to Christa McAuliffe, the American educator and astronaut killed in the Space Shuttle Challenger flight in 1986.

At Nelson Mandela University, we embrace McAuliffe’s sentiment. We do so, not just as academics and lecturers, but as every staff member who plays a role in ensuring that our students are able to graduate.

The challenges facing universities since the global pandemic in 2020 have thrust the skills, talents and importance of other employees to the fore. These are those individuals who kept us safe and enabled us to continue working and learning through technology.

They continue to do so in the face of load-shedding and water scarcity, turning such challenges into opportunities.

At Mandela, touching the future is everyone’s business.

Debbie Derry
 Editor



CONTENTS

Publisher: Paul Geswindt
Editor: Debbie Derry
Sub-editors: Beth Cooper Howell and Jill Wolvaardt
Writers: Debbie Derry, Heather Dugmore, Beth Cooper Howell, Gillian McAinsh and Nicky Willemse
Production: Lyndall Sa Joe-Derrockes
Design: Juliana Jangara
Photography: Many thanks to all who contributed images to this publication.
Cover image: The new one-of-a-kind Science Centre, designed by SVA International, will be a flagship facility for the University.
 Image: SVA International

PO Box 77000, Nelson Mandela University,
 Gqeberha (Port Elizabeth), 6031
 T +27 41 504 3935
 E alumni@mandela.ac.za

alumni.mandela.ac.za

Disclaimer: All information contained herein was correct at the time of going to print. The University cannot be held responsible for any changes or developments that may have taken place in the interim.

Transformative, responsive and sustainable

Nelson Mandela University continues in its endeavours to be a transformative, responsive and sustainable university, with institutional initiatives embedded in a broader societal context.

By Professor Sibongile Muthwa, Vice-Chancellor

With a vision to be a dynamic African university recognised for leadership in generating cutting-edge knowledge, this means not only confronting and undoing a history of separate and unequal development, but also actively working to create a just and sustainable future for all.

This year is the five-year anniversary of the renaming of the University as “Nelson Mandela University”. It provides further impetus to reflect on how we give practical expression to our institutional values of excellence, integrity, ubuntu, respect for diversity, social justice and equality and environmental stewardship.

As the only university in the world to be named after the late President Nelson Mandela, we are mindful of the responsibility to be the academic expression of the social figure of Nelson Mandela and advance his legacy.

Guided by our Vision 2030 strategy, Mandela University continues to promote social justice and sustainable futures through humanising learning and teaching, impactful research and innovation, and transformative engagement.

We now offer 261 study programmes across seven faculties and, over the past five years, have seen significant infrastructural growth. There are now 277 buildings in use with a footprint of approximately 315 000 m² across

our seven campuses. We have over 32 000 students in 2022.

We have made significant progress in increasing affordable student housing in support of our academic core missions and operations. A new 200-bed student residence on George campus was completed in time for the 2021 academic year, and work is progressing steadily on the Gqeberha North Campus for residences to provide a further 1800 beds, due for completion later in 2022.

As testament to the hard work of students

and staff, the Mandela success rate increased from 79% in 2019 to 83% in 2021, all the more notable when viewed against the context of the disruptions caused by the COVID-19 pandemic over 2020 and 2021.

The University seeks to cultivate graduates who contribute to changing the world through pioneering discoveries, scholarship and innovation.

Among the graduate attributes we strive to inculcate are: intellectual curiosity and critical thinking, being responsible agents of change, professionalism and integrity, resilience and adaptive expertise, and innovative, solutions-driven creativity.

This edition of *Thetha* provides all our alumni, friends and supporters



Vice-Chancellor, Professor Sibongile Muthwa

with updates on a number of strategic developments, including:

- Medical School
- Ocean Sciences
- Revitalising the Humanities
- Transformative Engagement
- Gender Studies
- Digitalisation
- Sustainability

Our Vision 2030 Strategy foregrounds endeavours to co-create a fair, liveable and viable world by focusing on the indivisibility of people, planet, prosperity, peace and partnerships.

In doing so, the University will contribute to strengthening social solidarity by focusing on the needs of the most vulnerable in society.

Online fundraising embraces Mandela ethos of giving

Digital Donations

Nelson Mandela University has introduced exciting new [integrated online fundraising platforms](#) for national and international resource mobilisation, writes Gillian McAinsh.

Launched on 2 September 2022, the new facilities will address sustainability and responsible stewardship and help the University to provide life-changing student experiences within and beyond the classroom.

Two new online systems have been introduced: one is a US-based resource mobilisation platform and the other processes donations and giving in South Africa as well as internationally.

The Nelson Mandela University Trust has joined forces with the King Baudouin Foundation United States (KBFUS) as a fundraising conduit in the US that can issue tax certificates in that country. The foundation spotlights some of its most creative partners from the African continent to connect them with investors and philanthropists in the US.

Progressive partnerships

The Nelson Mandela University online donation platform offers donors 24/7 convenience. The process is automated and is able to issue ‘thank-you’ letters and 18A tax certificates (for SA donors), which can save donors time and money. The online donations platform is especially convenient for those who wish to support without the hassle of filling in debit orders.

The new institutional [Giving to Mandela](#) donation page allows donors to choose within a category of projects from a drop-down menu of approved institutional fundraising projects. It also allows both once-off and recurring donations.

There are also links to faculty or department sites with access to the donation platform. This will offer donors multiple opportunities for project exposure.

“First-year students arrive with stars in their eyes and a suitcase full of dreams,” says Dr Ossie Franks. He offers Special Projects Support to the University’s Strategic Resource Mobilisation and Advancement (SRMA) office, a key driver of the new international platform.

Dr Franks has seen all too many student dreams of obtaining a qualification and improving their families’ lives replaced by worry and anxiety because they cannot afford registration fees, or cannot graduate due to unpaid student debt.

However, he says that donors do not need to be extremely rich to make a difference.

“International research has shown that small recurring donors can become major gift donors if properly stewarded. Thus, the long-term impact of this initiative can be massive,” he says.

Nelson Mandela University does, of course, offer financial assistance in the form of bursaries, merit awards, Vice-Chancellor’s scholarships, and study loans. However, with the national economy squeezed more than ever due to the pandemic, universities are struggling to meet the demand for financial assistance.

There is also a need to mobilise resources for university priorities like research and engagement. Engagement functions, in particular, need appropriate resourcing, as these generally do not enjoy government funding.

In service of society

SRMA Senior Director Dr Denver Webb points out that Nelson Mandela University’s strategic positioning as an embedded university in the service of society has meant that innovative ways of resourcing current priorities and future sustainability need to be found.

“It’s not just about cutting costs and raising money,” says Dr Webb. “It is also a chance to promote the flagship academic and engagement programmes and other priority initiatives which call for stakeholder support.

“To date, the implementation of an effective alumni giving campaign and international resource mobilisation have been hampered by the lack of appropriate institutional mechanisms to promote these, and to process the mobilised funds.”

That will now change, and helping a student to reach for the stars is only one avenue for donors to make a difference. The new fundraising platforms will also offer channels to support the ground-breaking new Medical School and Health Sciences hub

on the Missionvale Campus, as well as the pioneering Ocean Sciences drive towards a “blue economy”.

There is also the chance to contribute to social justice through the University’s Hubs of Convergence transformative engagement. Donors can make a difference to the Zwide Community Development Project, for example, take action against gender-based violence, or support a sewing project run in collaboration with Manyano Schools and the Association for People with Physical Disabilities.

As Dr Webb explains, the new systems “provide an opportunity to promote resource mobilisation initiatives across the institution, align with best practice in the higher education sector, promote efficiencies, integrate our resource mobilisation activities, and ensure we have systems and processes in place that support our sustainability imperative.”

It has been a team effort, with colleagues in ICT, Communications and Marketing, Finance and Legal Services working alongside key stakeholders such as the Alumni Association and Deanery.

You can make a difference

Major gifts or legacy donations are welcome, but the idea with these new platforms is to reach out to graduates who may just wish to plough back relatively modest amounts on a recurring basis.

The Nelson Mandela University “My Contribution” Alumni Fund is an important component of the package of possible projects to support, as it is a discretionary fund to support University and Alumni Association programmes.

Regular or once-off donations from alumni and friends of the University will go towards developing learning, teaching, research and engagement programmes to ensure excellence as a leading African university.

E To find out more regarding the institutional projects, contact Dr Denver Webb, denver.webb@mandela.ac.za

Contact Paul Geswindt for the Alumni My Contribution Fund, paul.geswindt@mandela.ac.za

W Give to Nelson Mandela University: mandela.ac.za/giving-to-mandela-university

Where does my donation go?

Who looks after the resources of Nelson Mandela University? Who makes sure your donation is used for the intended purpose? How do you know that it will be effectively used?

Among other things, this is the task of the Strategic Resource Mobilisation and Advancement (SRMA) office.

The office was established on 1 August 2017 as part of a broader reimagining of resource mobilisation at Nelson Mandela University. It started, however, in 2014 when the University Council mandated the Vice-Chancellor to explore establishing more coordinated, integrated and effective resource mobilisation functions within the University.

The outcome of this was restructuring the Nelson Mandela University Trust; establishing the Nelson Mandela University Investment Company to drive certain commercialisation projects and to explore opportunities to make the University more financial sustainable in the medium- and long-term; and establishing the SRMA at a strategic level within the Office of the Vice-Chancellor to provide overall coordination of resource mobilisation and to implement certain strategic projects.

Under the leadership of Senior Director: Strategic Resource Mobilisation and Advancement Dr Denver Webb, the SRMA team aims to enhance the financial sustainability of the University to meet present and future needs.

The SRMA has three main arms:

- Bursaries and Scholarships Directorate focusing on mobilising funding
- Directorate for Alumni Relations
- Directorate for Capital Resource Mobilisation and Special Projects.

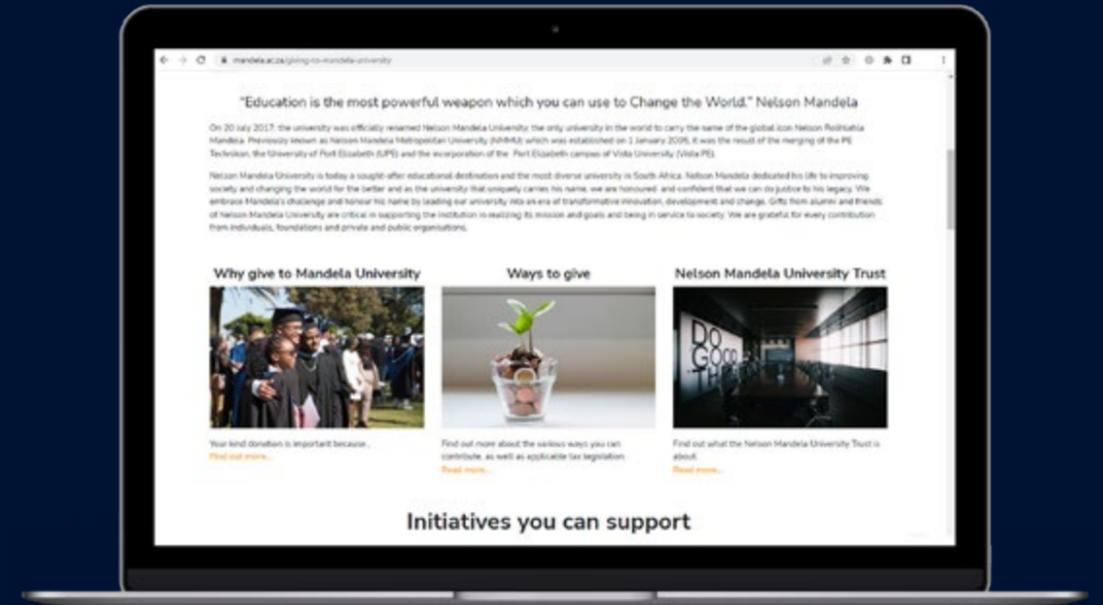
It also provides logistical and administrative support to the Nelson Mandela University Trust and the Nelson Mandela University Investment Company.

Nelson Mandela University is the sole beneficiary of the Nelson Mandela University Trust, which mobilises resources through donations in cash and kind, and which has PBO status with SARS and can issue Section 18A tax certificates for qualifying donations. Corporate governance of the Trust is in the hands of 10 Trustees. The Trust is independently audited and publishes a detailed annual report each year indicating how donations have been used.

Since 2015, the Trust has more than doubled the income it brings in to support Nelson Mandela University. These achievements were only possible due to the generosity of the many individuals, NPOs, private sector companies and public sector entities which have supported the University through the Trust.

More information online at [Nelson Mandela University Trust](http://NelsonMandelaUniversityTrust).

NELSON MANDELA UNIVERSITY



Giving to Mandela University



Change the World

mandela.ac.za/Giving-to-Mandela-University

Converging in service of society

One of the first fruits of the new Engagement and Transformation Portfolio (ETP) established in 2020 is the Hubs of Convergence, which are rooted in the University's desire to serve a larger social purpose. Falling under the Engagement Office of the ETP, there are six hubs that aim to bring to life key strategic objectives. The hope is that they will become a collaborative, multi-stakeholder space of exploration to position and reposition the engagement and transformation interface of Nelson Mandela University. **Gillian McAinsh** explores a few of the numerous hub projects.

Taking a stand against gender-based violence

Hub Three of the Hubs of Convergence focuses on gender-based violence (GBV), with Mandela University prioritising numerous initiatives that send out a strong message against GBV.

The University considers gender justice a vital area to focus on, as the country has disturbingly high rates of GBV – one of the highest in the world. Given that women constitute 59% of all students at public higher education institutions in South Africa, urgent and dedicated efforts to address sexual and gender-based violence are needed.

Against this backdrop, it is significant to report that Professor Pumla Dineo Gqola from the Centre for Women and Gender Studies has won the 2022 Humanities and Social Sciences Book Award: Best Monograph in Non-fiction for her 2021 book, *Female Fear Factory*.

Female Fear Factory builds on the concept of how patriarchal fear is produced publicly in order to maintain compliance for GBV.

Prof Gqola is also the University's SARChI Chair on African Feminist Imaginations. Researching gender issues such as power and patriarchy, the Chair generates research of immense significance to the lived

experience of many women in South Africa today.

Another pillar to fight this scourge is the GBV Forum. This grouping of 10 stakeholders brings together the University's HIV Unit and Transformation Office, along with local non-governmental and community-based organisations focused on various aspects of GBV.

The forum aims to foster collaboration between members, build a network for understanding each other's work, and provide a supportive environment for organisational development.

The GBV forum also puts in place various advocacy and awareness interventions over the national 16 days of activism in November and December.

Anti-GBV and related areas which are supported through the University's new [online giving portal](#) include:

- GBV, HIV and mental health awareness campaigns
- Support for health professionals, caretakers and community leaders
- Empowerment programmes and initiatives driven towards children, women, men and queer communities.



Urban farming for sustainable food production



Sewing project empowering well-being

Another tangible expression of engagement over the COVID-19 pandemic has been the sewing project, which falls under Hub Four: Community-based Economic Initiatives.

At the onset of the pandemic in 2020, the University began a campaign called Mask-Up Mandela, driving awareness about protective measures against the disease, such as wearing a mask to prevent the spread of infection.

This campaign connected with another University project on sewing within marginalised communities. Specifically, the project created economic opportunities that supported small-scale production of reusable cloth masks.

The Faculty of Education's Centre for the Community School, the Association for the Physically Disabled and 12 community schools from the Manyano Network worked alongside each other to produce fabric masks while the threat of infection was at its highest.



A sewing project seamstress hard at work

Today, masks are no longer a legal requirement and the sewing project has channelled its resources to another venture that enhances health and well-being. It is now exploring methods of providing reusable cloth pads and/or menstrual cups to women in South Africa who cannot afford to buy them.

Seed-funding is now being sought to upskill community members with not only sewing, but also business skills, and the necessary resources to start a small enterprise.

Funding towards this project helps to provide logistical support such as transport, stationery, catering and printing. It also contributes to consultations for strategic sessions and workshops on the solidarity economy, cooperatives, and funding proposal development.

It is part of the Hubs' mechanisms for community engagement that build relationships across sectors and facilitate community access to information and resources.

The Zwide Development Forum and the Hubs of Convergence have joined hands to address economic challenges in the community through the Zwide Community Farming project.

This urban farming project falls under Hub Five – Community Driven Projects – and Hub Two: Food Security – as it focuses on supporting the community to produce food in a healthy and sustainable way.

It is one of the projects to be highlighted at the Mandela Day Launch in July 2022, in collaboration with the Nelson Mandela Foundation.

According to Statistics South Africa, almost one quarter (23.6%)

of South Africans in 2020 were already affected by moderate to severe food insecurity.

With food security and nutrition seriously threatened over COVID-19 pandemic, more people have been going hungry. Today, the picture is likely to be even bleaker.

In the face of this, the Hubs of Convergence recognises hunger and poverty as grand social challenges that cannot be ignored, and part of the response is a growing movement of partnerships in community-based food systems.

A key feature of this focuses on the work that communities are doing in establishing, improving and maintaining access to sustainable and affordable food.

Urban farming is one facet of the

work of the Zwide Development Forum, which encompasses a broader range of projects that aim to strengthen community assets and voices by placing social impact and responsibility in their own hands.

The Zwide Community Development Project envisions the establishment of developmental projects which are looking for support in the following areas:

- Skills development centre
- Community kitchens and home gardening
- Educational academy
- Arts and culture development centre
- Sports academy
- Environmental programmes.

On 25 May 2022, the King Baudouin Foundation United States (KBFUS), in close collaboration with the International Social Impact Institute®, and in partnership with Nelson Mandela University, Candid, GivingTuesday and Myriad Alliance for Borderless Giving, hosted an Africa Day celebration which featured our Vice-Chancellor, Professor Sibongile Muthwa.

The celebration took the form of a virtual “Fireside Chat” with the VC showcasing Nelson Mandela University, its purpose, its strategic intent as an embedded university committed to promoting social justice and its impact as the academic expression of Nelson Mandela.

This event coincided with the date and mission of Africa Day – celebrating accomplishments and advancements throughout the African continent.

In her conversation with the institute CEO and founder Elizabeth Ngonzi, who moderated the chat, Prof Muthwa covered stories and realities about the University’s leadership, its students, alumni and honorary doctorate recipients.

She also covered the University’s consistent initiatives to build a global ecosystem to develop education along with African-purposed solutions to develop a sustainable and socially just world.

KBFUS, which hosted the conversation, serves as the fiscal sponsor in the United States for Nelson Mandela University, helping to seamlessly facilitate philanthropic giving from US donors to support the University.

Prof Muthwa presented heart-warming stories of hope through the achievements of students, alumni and honorary doctorate recipients.

The Vice-Chancellor spoke about ongoing efforts in co-creating partnerships in the public and private sector to seek solutions around unemployment, poverty and inequality. This includes new online giving platforms being launched at Mandela University.

“Having the Mandela name and being part of Africa hold so much promise, and our impact can only be expanded if we work collaboratively across all these areas.”

“Having the Mandela name and being part of Africa hold so much promise, and our impact can only be expanded if we work collaboratively across all these areas,” said Prof Muthwa. “We would love to have a much bigger footprint on our continent.”

The Fireside Chat was an important step in taking Nelson Mandela University to a wider international audience.

The University is grateful to have terrific leading philanthropic partners such as KBFUS, GivingTuesday, Candid and Myriad, who joined forces to help

share the incredible story of the academic expression of Nelson Mandela.
[View the Fireside Chat.](#)

SHARING AFRICAN EXCELLENCE WITH THE WORLD



CONNECTING^{the} CONTINENT

Celebrating our identity as a dynamic African university bearing an iconic name, our alumni were well represented on a recent multi-leg Africa engagement tour that retraced Nelson Mandela’s historic journey across the continent.

In 1962, Madiba secretly left South Africa, travelling across Africa to meet African leaders and seek support for the anti-apartheid struggle.

Mandela University, in shouldering his legacy, followed in these footsteps 60 years later to forge connections and expand its continental footprint.

The first leg of the African Engagements and Partnership Programme ran from 25 June to 2 July, focusing on three East African countries: Ethiopia, Kenya and Uganda.

The University’s deepening connection with Africa seeks to shape and reanimate critical partnerships by identifying specific areas for collaborative engagement,



research, innovation and learning and teaching.

During their visit, the delegation met with six universities, held two successful alumni events and multiple recruitment activations, and engaged with other institutions, such as South African embassies in the respective countries and the African Union.

Forging friendships

A packed itinerary saw a number of engagements held across Ethiopia (Abrehot Library, Salale University, South African Embassy in Ethiopia, Addis Ababa University, African Union, Ethiopian Civil Service University (ECSU), Addis Ababa Science and Technology University (AASTU), and Kolfe Centre for Military Training); Uganda (Makerere University and Ugandan Alumni Event); and Kenya (University of Nairobi and Kenyan Alumni Event).

Addis Ababa, the first stop, was where Mandela received his military training.

The second leg of the tour was to Uganda, where constructive discussions were held with Makerere University.

An alumni event in Kampala drew

more than 60 alumni and friends, with several universities also sending representatives.

“Our doctoral graduates have ... been at the forefront in driving the Uganda chapter and engaging with Mandela University,” Professor Muthwa said in her address. “The Ugandan alumni chapter model is unique and commendable. Another unique characteristic of the Uganda Chapter is the special relationship it has with the South African High Commission in Uganda.”

From there, the Mandela Group travelled to Kenya, where Prof Keet led the delegation in talks with the University of Nairobi, a major partner in realising Mandela Uni’s African footprint.

More than 30 alumni attended the Nairobi Alumni event, with support evident to establish a formal chapter.

“Our presence in Kenya is recognition of the leading role of higher education institutions in the country and the role our alumni can play in helping us develop linkages and network,” said DVC: Engagement and Transformation, Professor André Keet.

The Team

Led by Vice-Chancellor, Professor Sibongile Muthwa and DVC: Engagement and Transformation, Professor André Keet, the delegation comprised a full bouquet of institution leaders: alumni relations (Mr Paul Geswindt), academic administration (Mr Edgar de Koker), Strategic Mobilisation and Advancement (Dr Denver Webb), academic faculties (Dr Jacqui Lück and Professor Mcebisi Ncwadi), Centre for Community Technologies (Professor Darelle van Greunen), International Office (Ms Natasha September, Ms Asande Tele and Ms Nobungwele Mbem), Communications and Marketing (Mr Andrew Kock), and the Chair for Critical Studies in Higher Education Transformation (Dr Jenny du Preez).

Keen interest in new Medical School

Nelson Mandela University's Medical School is, for the third year in a row, attracting a high number of applications, reflecting the popularity of the new programme. Gillian McAinsh reports.

The Medical School opened on the University's Missionvale Campus in 2021 with an initial cohort of 50, which increased to 80 for 2022, and it is hoped the number will be increased to 100 for 2023.

However, despite this steady increase in class size, the six-year Bachelor of Medicine and Bachelor of Surgery (MBChB) is already heavily oversubscribed.

"To date we have more than 7400 applicants who have attempted our online system, with approximately 6500 applicants successfully applying. Selections for the MBChB qualification will be done in October and applicants notified thereafter," says Faculty of Health Sciences' Megan Connelly, Senior Academic Administrator: Medical Programme.

As only the second medical school in the Eastern Cape, and the tenth in South Africa, it is clear that the Mandela qualification is a sought-after course. South Africa has long had a shortage of medical professionals – an issue this programme proactively aims to help address.

Regional, national and international stakeholders all praised the Medical School at its official launch in November 2021.

Minister of Higher Education, Science and Technology Dr Blade Nzimande spoke at the launch in Missionvale, while messages of support also came from Minister of Health Joe Phaahla, Eastern Cape premier Oscar Mabuyane and numerous others.

'We should be proud'

"As a country and a people we should be proud that we are launching this excellent teaching and learning facility," said Dr Nzimande. "It aims to position health education to be more responsive to our country's health needs ... The school will add to the [number of] health professionals that our country so needs to improve our health system."

The Chancellor and Chair of Council of Nelson Mandela University were likewise united in their hopes that the first graduates would bring healing to those in society who need it most.

Chancellor Geraldine Fraser-Moleketi, a former minister in President Nelson Mandela's cabinet, cited the affirmative nature of South Africa's Bill of Rights.

"Our University values all sections of the Bill of Rights ... and while our primary focus rests with Section 29, Education, the establishment of the Medical School opens the door for us to focus on Section 27, Health Care, and Section 11, Life," said Dr Fraser-Moleketi.

Similarly, Mandela Chair of Council Ambassador Nozipho January-Bardill said the school was a clear demonstration of what unity of purpose could achieve.

"The burdens of COVID-19 have disproportionately impacted the poor – those who live in areas like Missionvale – again highlighting the critical responsibilities we have as universities, businesses, government departments and health care institutions."



Celebrating the opening of South Africa's newest medical school

Holistic health care

The Faculty of Health Sciences uses an interprofessional education and collaborative practice (IPECP) model that builds bridges between primary health care disciplines. In this, future doctors train alongside nurses, radiographers, psychologists, environmental health practitioners, pharmacists, emergency medical care students and others.

Together, they can offer holistic and integrated health care with a multidisciplinary approach to health problems and solutions.

The aim is to develop and produce socially conscious medical doctors who can compete globally, but who also have a deep passion to change the lives of poor communities.

Bardill described the Medical School buildings as "so much more than bricks and mortar", and said its staff and students are "so much more than individuals with top qualifications and those seeking to attain their MBChB degrees".

Mandela's educational focus is on preventative medicine, which includes promoting healthier lifestyles and community engagement to achieve health and well-being.

The approach encouraged in students, lecturers and students alike is to "learn as we serve."

Major investment

On infrastructure alone, the University and partners have invested more than R114-million in upgrades to buildings. This covers a wide range of laboratories, lecture venues and offices as well as dedicated spaces for nursing students.

This excludes the cost of state-of-the-art equipment, such as an Anatomage Table for virtual dissection. The school also uses sophisticated digital technology to enhance traditional teaching methods in innovative ways.

However, Ambassador January-



Life-changing innovations in Nanomedicine

A passion for pioneering health technology is what drives Mandela University’s Dr Steven Mufamadi. By **Heather Dugmore**.

A new research chair in nanomedicine – the DSI-Mandela Nanomedicine Platform – was launched in the Faculty of Health Sciences last year as part of the Nelson Mandela University Medical School.

“My aim is to create a platform to significantly advance nanotechnology in South Africa,” says Dr Mufamadi, who was appointed head of the Chair in October 2021.

“I’m obsessed with nano and, over the years, have developed strong local and international networks from which to develop partnerships that can work on life-changing innovations.”

Dr Mufamadi has served as a consultant for universities, government departments, regulatory authorities and pharmaceutical companies, locally and internationally. He is the founder and managing director of his nanomedicine

consulting company, Nabio Consulting (Pty) Ltd.

His first major task at Nelson Mandela University was to build a nanomedicine laboratory from scratch on the Medical School’s Missionvale Campus. It was completed in August this year.

He has developed a transdisciplinary platform for master’s and PhD students from different disciplines, including pharmacy, physiology, environmental health and medical laboratory science and has also established an elective course in pharmaceutical nanotechnology for final year students in the Department of Pharmacy.

Initial research areas of the Chair offer exciting insights into unparalleled possibilities, thanks to science and technology.

These include innovative treatments for breast cancer, tackling pollution with robotics and synthetic blood.

Environmental Health Project Air Purifier (robotics)

“We want to create a robot that moves around and cleans the environment, by sucking in polluted air, including air

polluted with TB and other harmful bacteria and viruses, including COVID-19,” says Dr Mufamadi.

The robot works like a vacuum cleaner that contains a vacuum space with active antiviral nanomaterials in the membranes of the filter that immediately kill the virus.

“The filter will be ready in about six months and once we see that the membranes are working, we’ll work with engineers to design the robot.”

Blood Transfusion Project

The South African National Blood Service faces the major problem of never having enough blood – or a particular blood group – when needed. Blood needs to be stored in a fridge, which is impractical for many parts of South Africa.

A blood substitute called Hemopure®, that comes in powder form and into which sterile water is added to create blood, has already been approved for use in South Africa for the treatment of acute surgical anaemia.

“One of our senior researchers is putting together a proposal to try and take this a step further by incorporating nanomaterials for added benefits, including blood that doesn’t need a blood group, that can be stored at normal room temperature and that is easy to use in ambulances and remote areas.”

They aim to have a prototype ready within a year.

Breast Cancer

Breast cancer is the most frequent cause of cancer death in South Africa. According to the 2014 National Cancer Registry (NCR), 1 in 27 women in South Africa are at a risk of developing breast cancer. Triple negative breast cancer (TNBC) is the most aggressive form.

“My aim is to create a platform to significantly advance nanotechnology in South Africa”

“We are working on a drug delivery system where we use nanoliposomes, lipid nanoparticles containing chemotherapy and/or green nanoparticles to develop a personalised nanomedicine for TNBC patients.

“We are also working on disease detection and diagnosis to develop a nano-biosensor for fast and accurate diagnosis of TNBC. Mintek has already designed this, but we’re taking a different approach.

“We’re working with green nanoparticles that use plant extract such as *Cannabis sativa* and microalgae as a reducing agent, both of which have so many phytochemicals/biomolecules that fight disease.

“We’re partnering with InnoVenton (Institute for Chemical Technology) at Nelson Mandela University on this, as they specialise in microalgae. We engineer the green/microalgae nanoparticles to look like a microorganism (e.g. bacteria or a virus) that then seeks out where the virus is hiding in the body and targets it, either ripping it apart or blocking its growth.”





A credit to their alma mater and country

We celebrated over 7 000 students who walked the stage at Graduation 2022 and honour their determination to realise a dream in the midst of a global pandemic.

Having experienced two years of disrupted study, with very little on-campus learning and teaching, their achievements are outstanding.

Nelson Mandela University concluded its autumn graduation season on 5 May – only its second mask-to-mask, in-person graduation since COVID-19 reached our shores.

Awards included 51 doctoral degrees and three honorary doctorates, with many stories of courage in adversity and tenacity against all odds emerging from the proud ranks of newly capped students.

Maritime master's a rich reward for successful juggling act

Balancing work and academics paid off for Mandela University's first graduate in the newly introduced master's degree in Maritime Studies.



Nozipho Boo

"I am currently working within my dream ..."

New Business Development Manager at the Transnet National Ports Authority, Nozipho Boo, was not only the inaugural MPhil in Maritime Studies recipient, but managed to complete the two-year programme in just one year!

Programme coordinator Roshin Petersen says most of the students are permanently employed and the pandemic placed enormous psychological pressures on them. In addition, many people lost their loved ones and jobs during the pandemic.

But Nozipho, 34, was determined to explore the theory side of the maritime sector, and forged ahead with her studies. Her desire to expand a fundamental understanding of the different functions within the sector – and how these could be harmonised – bore fruit.

The hard-working academic holds a BCom (Management and

Economics), a BCom Economics Honours in Financial Markets (University of Fort Hare) and a MA in Development Studies from Mandela Uni.

"I am currently working within my dream area of focus, namely Business Development in the Ports Authority space. The most exciting part is that I am continuously learning new things and my leaders are some of the best sector specialists, who contribute to my knowledge and future growth opportunities," she says.

The programme is packed with relevant modules covering key maritime sub-sectors, and students, many of whom are already working in the sector, could engage meaningfully on topics and foster networking platforms for the future, says Nozipho.

The Maritime Studies programme was introduced in 2020 and currently has 18 registered students.

Male midwife pioneers vital birth process research

Trailblazing nursing professional Xolani Dlamini is not only carving a career in an industry traditionally dominated by women – he's passionate about helping new mothers to have the births that they deserve.

The critical importance of properly preparing pregnant patients for giving birth was the focus of Xolani's Master of Nursing in Advanced Clinical Midwifery and Neonatal Nursing Science.

Seven years after graduating with a Bachelor of Nursing Science at Nelson Mandela University, Bizana-born Xolani, 30, is also due to complete his first article for publication, reporting his master's findings and preparing for his PhD.

His research focused on the birthing process preparedness of first-time mothers in the public obstetric units of the Nelson Mandela Bay Health District. He found no previous similar study and/or literature with a South African context.

Xolani is an *accoucheur* (male midwife) who lectures at Lilitha

Nursing College. He started his master's programme on a part-time basis while working full-time in a busy maternity ward.

"I have not lifted my foot off the pedal since," he says.

Xolani's study found that first-time mothers were predominantly fearful of their birthing process experience. They also reported receiving poor information from midwives at antenatal care clinics – but applauded the help from women who have previously given birth, their families, WhatsApp groups, Facebook groups, the MomConnect app and YouTube videos.

His study concluded that there should be formal birthing preparation classes, counselling sessions and detailed information-sharing about birthing process strategies – and that poor birthing process preparation could lead to psychological problems.

Xolani's PhD focus will likely focus on developing strategies to enhance birth preparation to be comparable to developed countries.

"I have not lifted my foot off the pedal since"



Xolani Dlamini

ADHD expert promotes PhDs in Pharmacy

VITAL research on Attention-Deficit/Hyperactivity Disorder (ADHD) will expand knowledge on this challenging condition, thanks to the tireless efforts of veteran academic Anneke Meyer.

The 84-year-old Research Associate in Mandela Uni's Drug Utilisation Research Unit (DURU) is Africa's ADHD expert, and promoter and co-promoter of Corné Coetzee and Judith Regnart.

Prof Meyer specialises in neuropsychology and is a former University of Port Elizabeth staff member.

ADHD and substance abuse was the research topic of both PhDs in Pharmacy, with the University's Professor Ilse Truter, of the pharmacy

department, as co-promoter of Corné, a senior pharmacy lecturer at the University of Limpopo, and promoter of Judith's studies.

ADHD is prevalent among two to four percent of young adults. Corné's study on the prevalence and effect of past pharmacotherapy in young adults indicated that ADHD occurs in 30% of young adults treated for substance abuse. Nicotine and cannabis use are significantly more prevalent among adults with ADHD. Persons with ADHD experimented with and used a variety of substances.

Prof Meyer was an invited speaker and Corné presented a paper on her research results at ICASA (The International Collaboration on ADHD and Substance Abuse) in Sweden in 2017.



Prof Anneke Meyer

Prof Meyer holds a PhD in psychology, and a combination of her background in biological sciences and psychology resulted in neuropsychology becoming her field of specialisation.

Double delight for nature-loving couple



Emily and Samantha McCullough-Jones

"We both enjoy the prospects of our current trajectories and hope to continue to grow in these roles"

Eco-conscious Emily and Samantha McCullough-Jones cemented their commitment to nature with a PhD each in Nature Conservation this year.

Emily and her wife graduated together at Mandela Uni's George Campus in April.

Nicknamed "the fern lady" thanks to her research on invasion biology, thirty-year-old Emily is currently doing a post-doc with SANBI (the South African National Biodiversity Institute) at Stellenbosch University, developing a method to assess the environmental damage costs of alien trees on water systems in South Africa.

For her PhD, Samantha, 36, worked with governance, looking at landscape scale conservation initiatives on the west coast of South

Africa and the transfer of knowledge between conservation entities.

She works in the consultancy field and is currently compiling a state of knowledge report and data repository for the Garden Route Biosphere Reserve.

"We both enjoy the prospects of our current trajectories and hope to continue to grow in these roles," says Emily.

Being able to complete their studies side by side after walking the PhD journey together, with all its ups and downs, was an incredible and fulfilling experience, the couple says.

"We hope to make women in science proud and work together towards bridging the gap between science and practice to facilitate the shift towards an environmentally conscious future in South Africa."



Popina Khumanda

“Dreams do come true. I came to this country with nothing but dreams, hope and determination”

Long walk to freedom bears fruit for brave refugee

Popina Khumanda travelled 6000km on foot to South Africa after fleeing the Democratic Republic of Congo to escape captivity and abuse.

Her traumatic childhood ended in triumph with a Diploma in IT from Mandela University.

“Dreams do come true. I came to this country with nothing but dreams, hope and determination,” says Popina, who started school at the age of 10. “Witnessing [my dreams] come to life is overwhelming.”

She is currently working at Cape Town-based AgileHuts, where she is training to be a ScrumMaster. Scrum is a framework for project management that emphasises teamwork, accountability and repeating progress towards a well-defined goal.

The young entrepreneur has also created a website for her hair business, Urban Doll Factory, where she sells wigs and weaves online to pay for rent, food and transport to university.

Her journey began 26 years ago in the village of Zongo. She grew up climbing trees and running freely in the Congo rainforest.

When she was five, Popina’s village was attacked by rebels who killed many people, burned down huts and kidnapped little girls and boys. She and her older sister, Diane, were taken to be traded for guns, oil, money and cars, while boys were turned into soldiers.

During her five years in captivity, she was “raped, tortured, and lived in pain. Watching so many people die, and I just kept waiting and praying for

my day to come ... so that I could get away from that pain and suffering.”

Diane and Popina escaped, and the younger girl was taken in by a children’s home in Despatch. Barely able to read or write, Popina jumped straight to Grade 4 within six months and learnt to speak fluent Afrikaans. Her sister is now married with children, and employed.

“This Diploma is in honour of the refugees living in this country; to all the girls who are being killed every day, sold every day, and sexually, physically and emotionally abused every day.

“I want you to know that I have been there – and finding the strength to pull yourself out and say, ‘enough is enough’, is not easy. I pray that my story gives you strength, and gives you hope to fight for your dreams.”

WALKING WITH GIANTS

The awarding of Honorary Doctorates is a graduation highlight. Mandela University was proud to name three remarkable South Africans as our recipients this season.



Ambassador Mfenyana said it was evident from the vision, mission and values of the University that it aims to produce a high calibre of well-rounded graduates, who are sensitive to the needs of their communities”



Ambassador Sindiso Mfenyana
DOCTOR OF PHILOSOPHY (HONORIS CAUSA)

Recognised for his lifelong struggle for South Africa’s liberation, vocality on anti-corruption and patronage and a firm belief in constitutional democracy, Ambassador Mfenyana has left an indelible mark on society.

An ANC stalwart and veteran, he excelled academically and soon rose through the ranks of the ANC Youth League, before furthering his studies in the USSR, reading for an MSc in Economic Studies at Kiev Economics Institute, and meeting his wife, Rita, an Aeronautical Engineering graduate.

He held several high-profile roles in civil service, including Full Secretary to Parliament, South African Ambassador in Tanzania and membership of the ANC Integrity Commission.

Ambassador Mfenyana’s autobiography, *Walking with Giants*, was launched by Mandela University’s Centre

for the Advancement of Non-Racialism and Democracy (CANRAD) in April 2018.

“I am grateful for the high honour bestowed upon me. I owe this to my parents and family, for their encouragement and high expectations,” he said, addressing graduands and their families.

“I owe it to the leaders and comrades, who provided guidance and support during periods of strife and personal strain. In particular, the encouragement from my lifelong partner through thick and thin.”

Ambassador Mfenyana said it was evident from the vision, mission and values of the University that it aims to produce a high calibre of well-rounded graduates, who are sensitive to the needs of their communities, willing and able to transform the country, and who contribute to a better world.

Celebrated media personality Dr Noxolo Grootboom’s contribution to journalism and the upliftment of her linguistic heritage spanned a staggering 37-year career.

The retired isiXhosa television newsreader left the South African Broadcasting Association (SABC) in 2021. What remains is a rich and enduring legacy.

Born in Lady Frere, Eastern Cape, in 1960, Dr Grootboom’s media career began quietly enough, with a typist’s position at the public broadcaster. She would rise through the ranks as a current affairs producer and field journalist before her big break in 1990, when asked to read a late news bulletin, which led to becoming isiXhosa news anchor.

Her ability to authentically deliver fine isiXhosa prose without being theatrical or clichéd in news reporting, and her love for beautiful spoken language and excellent vocal delivery, cemented Dr Grootboom’s role as one of South Africa’s most popular and well-loved news personalities.

More than a seasoned broadcaster, Dr Grootboom also had a deep understanding of the culture, customs and traditions of amaXhosa, and prided herself as a storyteller whose foundation for learning about these was rooted in her rural, informal teaching in the Eastern Cape.

On 30 March 2021, Noxolo Grootboom delivered her



Dr Noxolo Grootboom
DOCTOR OF PHILOSOPHY (HONORIS CAUSA)

last news broadcast to an audience of almost four million people, marking her retirement. That news broadcast coincided with a “family meeting” by President Cyril Ramaphosa, who duly moved his time slot up by half an hour to allow her audience to witness her final bulletin.

As with all her bulletins, she ended her broadcast with her well-known mantra, “Ndinithanda nonke emakhaya” which, loosely translated, means “I love you all at home”.

In a bittersweet accolade for one of Mandela University’s game-changing academics, the institution conferred an honorary doctorate on acclaimed paediatric cardiologist and former executive dean of the Faculty of Health Sciences, the late Professor Lungile Pepeta, on 29 April.

The trailblazing medical pioneer was tragically felled by COVID-19 in August 2020, in the midst of a crucial time in the establishment of the new Medical School.

Prof Pepeta joined the University in January, 2017, and served the institution with excellence, demonstrating exceptional leadership through the establishment of South Africa’s tenth medical school and championing the accreditation of the undergraduate medical programme.

An active scholar, his contribution to paediatric cardiology research extends to over 20 research-related outputs, and professional memberships included President of the Paediatric Cardiac Society of South Africa, Vice-President of the South African Heart Association and Executive Member of the South African Paediatric Association.

Prof Pepeta embodied Mandela University values, particularly in being in service of society, through public health accountability and advocating for eradication of inequities in healthcare provision, especially in remote and under-resourced communities of the Eastern Cape, in particular, and South Africa, as a whole.

Accepting the doctorate on behalf of her husband, Dr



Professor Lungile Pepeta
DOCTOR OF HEALTH SCIENCES
(HONORIS CAUSA) POSTHUMOUS

Vuyo Pepeta said: “He bounced at many doors so that we would have access; he suffered so that many would thrive on his legacy. His life was cut shorter so that our people might live longer through his sacrifices.”

At the time of his untimely passing, Vice-Chancellor Prof Sibongile Muthwa spoke of the huge impact that he had on society at large.

“He changed lives through his academic expertise and his care for people’s well-being and personal situations.”



Coding-without-computers project changing lives and futures

KEYBOARD WARRIORS

by Nicky Willemse

When Zwide youngster Culumanco Komanisi, as a Grade 6 boy, was first introduced to TANKS – a programming app that doesn’t need a computer – he didn’t even know how to switch on a PC.

“I thought a computer was the smartest thing on this planet, but I was wrong,” said Culumanco, now in Grade 11.

“With TANKS, I found out that computers are actually the dumbest things on this planet; they just follow human instructions. It is we humans who are smarter, not computers.”

Culumanco instantly became hooked on programming – a passion that would lead to his getting a

bursary to attend IT-strong high school Alexander Road, and also inspire a dream to complete his PhD in Computer Sciences one day.

“I developed computational thinking skills, actually understanding how the brain of a computer works.”

Culumanco is one of nearly 60 000 pupils across South Africa, mostly from under-resourced schools, who have been introduced to the world of coding through TANKS and two similar coding-without-computer apps called RANGERS and BOATS.

But it is the dream of Prof Jean Greyling – the Nelson Mandela University computing sciences professor responsible for

“I developed computational thinking skills, actually understanding how the brain of a computer works”

A group of learners play TANKS under the watchful eye of Madiba on Mandela University’s South Campus in Gqeberha.



Culumanco Komanisi celebrates TANKS' successes with Mandela University Computing Sciences Professor Jean Greyling.

“We believe this is a solution from Africa for Africa and therefore our dream is to take coding into the whole continent”

have been awarded high school scholarships by AWS vice-president and Mandela Uni alumnus David Brown, with hopes of more sponsors coming forward in future.

TANKS has notched up several awards, including being one of 10 winners in the international Falling Walls Science Breakthroughs of the Year 2021. In 2019, it was chosen as one of 60 global projects presented at UNESCO's Mobile Learning Week in Paris, France.

Changing the lives of unemployed youth

Greyling and his team, with the support of the Leva Foundation, are equipping young adults to run coding workshops at schools across the country – and to assist in the competitions.

By the end of July, they had trained 130 “coding evangelists”. “These are young unemployed people who showed an interest in the project. They don't need to have a coding background – that's the beauty of it,” Greyling said.

Greyling and his team have also trained around 1500 teachers in South African and Namibia to run coding clubs in schools without computer labs, and a further 600 teachers through teacher unions, who will in turn upskill an estimated 20 000 educators countrywide.

Coding without computers

TANKS was developed in 2017 by Nelson Mandela University honours student Byron Batteson: He wanted to find a solution to the country's shortage of software developers by reaching children in disadvantaged communities with no access to computers.

Computing sciences professor Jean Greyling, Batteson's supervisor, helped to make this vision a reality, by commercialising and rolling out TANKS. Since then, RANGERS and BOATS have also been developed.

commercialising and rolling out these apps – to reach many more learners.

“We have a much bigger dream than South Africa. We believe this is a solution from Africa for Africa and therefore our dream is to take coding into the whole continent, and in this way, reach millions of learners across Africa. That's why we recently rebranded the project as 'Tangible Africa'.”

Get with the programme

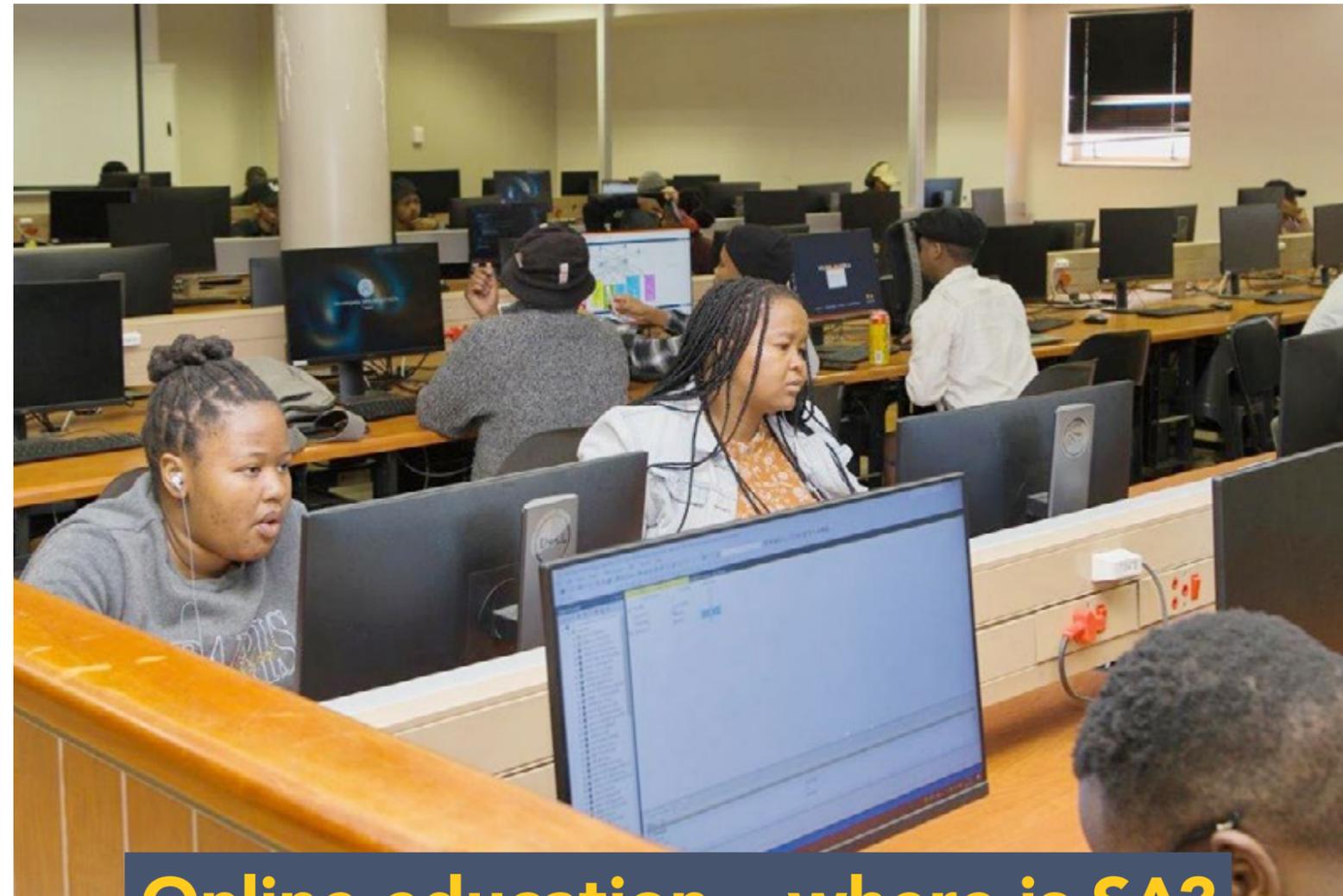
On Mandela Day, July 18, Greyling got a little bit closer to that dream with a continent-wide RANGERS competition – run under the banner “Coding 4 Mandela” – that reached over 6000 kids in 45 sites across

several countries. It was a project made possible thanks to global sponsor Amazon Web Services (AWS) InCommunities, national sponsors MiX Telematics and Transaction Junction, Gqeberha sponsors S4 Integration and VSC Solutions, and many others.

Even in the heavy lockdown days of COVID, with a few tweaks that saw the BOATS app moving from physical tokens to toggling commands on the phone, with scores emailed through, Greyling was able to run several virtual tournaments.

After lockdown eased, face-to-face contests have also been run successfully.

Some top-performing learners



Online education – where is SA?

Time is not on our side. Our learners urgently need access to online education and all the incredible e-resources that should be rolled out to every single school in the country. By **Professor Darelle van Greunen**, Director of the Centre for Community Technologies (CCT), Nelson Mandela University

When South African schools were closed during the pandemic, online learning was not an option for most, due to a deficit of infrastructure, devices and skills in educational technologies.

During a recent visit to East Africa, it became evident that South Africa is fast falling behind in the advancement of technology in education and a range of different spaces, as is happening in countries like Ethiopia, Uganda and Kenya, where the information and

communications technology (ICT) landscape is rapidly evolving.

A good example is the new Abrehot public library in Addis Ababa, Ethiopia, an initiative of the prime minister, spanning 19 000 square metres in the heart of the city. We went there on a Sunday and it was packed with young people sitting and reading and working on their laptops.

There is 5G internet throughout and the whole four-storey library is a user-friendly, people's space.

“The challenge is not that we don't have strategies; it's that we lack implementation, and this must change”

Abrehot means 'enlightenment' in Amharic and the uptake is phenomenal, with up to 2000 users at a time.

Another good example is Uganda, where public libraries, staffed by public librarians with e-training skills, are becoming the go-to places for people who want to learn digital skills. The libraries are achieving recognition, attracting trainees from all walks of life, and are receiving donations of computers, internet connections and data packages to create places of access for the community at large.

Waste of resources

The ongoing expansion and improvement of data infrastructure in Uganda is playing a major role in the country's economic development and boosting the contribution of the information and communications technology (ICT) sector to educational advances. Kenya is creating a similar environment.

South Africa is fortunate to have libraries in every city and town, but they are not being properly used or used at all. Our libraries should be vibrant Wi-Fi hubs for learners and students in every community. They should play a key role in enhancing education, literacy levels and language ability, and contribute to nurturing a culture of education through providing access to knowledge. Unsuitable material can be blocked.

There is certainly advancement in digital access in many of our urban schools, but the e-readiness movement is far too slow within the South African schooling context, and we must be urgent and innovative about expediting this.

Since 2013 government has pledged to deliver free broadband access to 90% of South Africa by 2020 and 100% by 2030 through its SA Connect campaign. The goal of South Africa's 2004 White Paper on e-Education was for every learner in the country to be ICT capable by 2013, and for teachers to use ICT to enhance teaching and learning. Neither have been achieved.



Professor Darelle van Greunen

"South Africa is fortunate to have libraries in every city and town, but they are not being properly used or used at all"

Less lip service

The challenge is not that we don't have strategies; it's that we lack implementation, and this must change.

To assess and evaluate the e-readiness of all government schools in South Africa, the Centre for Community Technologies (CCT) at Nelson Mandela University helped to develop an eReady ICT Maturity Assessment tool in the form of an easy-to-use app. In 2020, the app was rolled out to 8000 of South Africa's 26 000 government schools to understand the level of intervention required to enable ICT-based

education in government schools.

This helped us to refine the app so that it can be rolled out to all 26 000 schools towards the end of this year. At the same time, the Department of Basic Education needs to make sure it has the budget to expedite the process, not only to assist the schools to become ICT ready, but also to train the educators. There is no point in having high-tech schools without trained teachers to support this. For every year we do not achieve e-readiness in our schools, our learners, particularly in the rural and township areas, fall behind.



Living Spaces

Nelson Mandela University Dean of Students **Luthando Jack** outlines the value of 2 000 new student beds on campus.

Although student life has changed over the past two years, this still holds true: there is a desperate need for high-quality, yet affordable accommodation. There is, after all, far more to student life than what is learnt in a classroom.

On this front, we are bringing 2000 new beds to our Nelson Mandela Bay and George campuses, with two residences already complete and the remaining two on track for completion later this year.

Special provision has been made for differently abled students, and the University has looked at innovative ways to save water and reduce energy consumption.

Before the COVID-19 pandemic hit South Africa, the Department of Higher Education and Training (DHET) reported a national shortfall of 300 000 student beds, to serve the 2.5 million students enrolled across all tertiary institutions.

Increased undergraduate enrolments, particularly at Mandela University, which prides itself on enabling access to a wider band of applicants, make it likely that the current shortfall will continue.

Access for success

In post-pandemic higher education, student life can no longer be the same, especially with the rise of online learning and other technologies.

It requires a radical rethink. For example, student residences continue to play multiple roles, being spaces and places for online classrooms, examination venues, online libraries, living rooms and social interaction.

Studies have shown that students staying on campus perform far better, as accommodation plays a significant contribution to student success. The facilities, design and location of a residence all have an impact.

In the past, many of our students would have been excluded from tertiary studies through no fault of their own. Many also are the first in their family to study after school, and it is imperative that we welcome them, and show that we will take good care of them, while they are with us.

Healthy environment

We have about 17 500 National Student Financial Aid Scheme (NSFAS) beneficiaries out of a study body of 31 000 this year and, as with all our students, they need an environment conducive to healthy living and learning.

Our new residences have been made possible with an innovative funding model to ensure the best return on investment. Mandela University has combined its government grants with loan funding, which allowed for an expanded number of beds and is being considered as a blueprint for sharing with other institutions.

More student accommodation helps more South Africans access quality education, which is key to building human capital. The resultant larger pool of capable, skilled, trained citizens – with jobs – will help to reduce income inequality and promote social mobility.

Our 2 000 new beds are significant steps in the right direction, which is to give all those enrolled at Mandela University the very best quality of student life.

A valuable learning curve in sustainability

At Mandela University, sustainability is ingrained in our DNA. With both the South and North campuses located in a nature reserve, we are committed to the health and sustainability of our seas and terrestrial environment, as well as our communities – and the institution pursues this objective through numerous research avenues.

By Lebogang Hashatse, Deputy Vice-Chancellor: People & Operations



Sustainability management is predicated on the manner in which we utilise our natural resources, which includes water and energy security.

The current water and energy crises were more predictable than the coronavirus pandemic. Regardless, sustainability management is all about having the systems and teams in place to address or respond to any need, crisis, or emergency that arises.

This is driven by our university's

collective management approach, which is centred on our sustainability strategy, adopted several years ago and managed through the sustainability portfolio and forum.

Collective management requires collaborating closely with staff members, students, and relevant external partners to find effective solutions to sustainability and security of supply problems. This needs to be accompanied by active and targeted communication to explain how the challenges are being managed.



Lebogang Hashatse



Remote platforms and the hybrid approach

The University's digital platforms and tools grew significantly throughout the pandemic period. Today, we have a hybrid system of learning, teaching and working, with a mix of face-to-face and online eLearning spaces and meeting platforms. The system is maturing into an institutional digital transformation strategy.

Water security

In terms of rainfall, the Metro and parts of the Eastern Cape have had a seven-year drought, with catchment areas receiving below-average precipitation. It has underscored the crucial relevance of effective water resource management; how we use, store and save water sustainably.

To address the reality of running out of water, we accelerated our existing water strategy across all campuses.

A water metering and water pressure system was introduced to help detect and immediately fix water leaks and burst pipes, and we launched a submetering project to measure and regulate usage.

A national issue is that we use potable water for everything, including flushing toilets, washing cars and watering gardens, when non-potable sources should be used instead. At Mandela, we are installing non-potable water systems, and our new residences and sports fields use treated municipal return effluent (RE) water.

Over the years, we have also increased our use of boreholes,

with careful evaluation by our water specialists, since we are acutely aware of the negative impact these can have on groundwater reserves.

Dr Gaathier Mahed, a geoscientist from the Faculty of Science, has proposed Managed Aquifer Recharge (MAR) as a supplementary, sustainable water source. Water is extracted from a deep underground aquifer when required, such as during a water crisis, and then recharged as water availability increases so as not to deplete the aquifers.

Living with load-shedding

When load-shedding began several years ago, we assessed ways to reduce our electricity use and augment the supply to mitigate the negative impact on University activities.

- We installed generators in key areas.
- Photovoltaic installations are being implemented, providing 30% of campus daytime energy.
- We are adopting a University-wide energy efficiency strategy to eliminate electricity waste.

The pandemic period

At the onset of COVID-19, we formed a coronavirus task team, collaborating with the Metro's health joint operations centre, EC Department of Health, and others to better manage the health challenges facing the University and city.

We had to ensure that we could finish the 2020 and 2021 academic years and do everything in our power to limit the number of people who contracted the virus and fell ill.

We managed campus lockdown and reopening, and ramped up the laptop campaign to ensure students and staff had devices for remote learning and working. We also designed a system allowing students living in areas lacking connectivity and/or which were completely unsuitable for studying, to return to on-campus student residences or off-campus housing in the Metro, providing data and ensuring Wi-Fi availability.



Running a 'small municipality'



Melvin Syce

Running an institution the size of Mandela University, with seven campuses and over 32 000 registered students, is effectively running a small municipality, ensuring all infrastructure and operations are sustainably managed within budget through the portfolio of the Deputy Vice-Chancellor: People & Operations.

By Melvin Syce: Senior Director: Infrastructure Services and Space Optimisation

Of the University's 32 000 students, 17 500 are beneficiaries of the National Student Financial Aid Scheme (NSFAS), and on-campus accommodation is therefore a priority. The University increased its on-campus accommodation from 3870 beds at the start of 2020 to 5868 by the end of 2022.

All new residences are designed with sustainability as a priority – from design to the dual water system for potable water and non-potable water for toilet flushing. Toilet flushing accounts for one-third of the University's total water use.

Construction and maintenance budgets are meticulously managed, and it is a University requirement that local small, medium or micro enterprises (SMMEs) are hired, and local artisans trained on the job.

Increased water storage

Most campus buildings already have storage tanks, with an additional 95 x 5000L water tanks installed in 2021 and 8 x 5000L this year. The goal is to have sufficient water storage for all residences, and we are reviewing water requirements for the Ocean Sciences Campus and Sanlam Student Village.

Flush valves

The University is incrementally working on replacing the flushing mechanisms of all toilets with a cistern-less system using flush valves. At R2000 per unit, these are expensive, but hard-wearing and long-lasting, using up to half the water of a cistern system.

Sports fields and toilets

On the Summerstrand campuses, sports fields historically accounted for about 20% of total water use. The University now buys water for sports fields, gardens and an increasing number of toilets from the Cape Recife Waste Water Treatment Works, which generates return effluent (RE) water to a treatment standard that is irrigation-safe.

Boreholes

Two boreholes were drilled in 2019 to serve the two new residences on North Campus. They are achieving a good yield of 80 000 to 100 000 litres per day. We are exploring adding boreholes on the Summerstrand, Missionvale and Second Avenue Campuses.



Most campus buildings already have storage tanks, with an additional 95 x 5 000L water tanks installed in 2021 and 8 x 5 000L this year.



PROMOTING BEHAVIOURAL CHANGE

By Chantal Janneker, Senior Director: Department of Communication and Marketing

Our North, South and Ocean Sciences Campuses are situated in a nature reserve, and we need to get the message across that we are all environmental stewards.

This is not because environmental stewardship is a buzz phrase, but because life on earth and in the oceans depends on it. The planet is at a tipping point - and we have to understand this and get the message out there.

An example of this is our ongoing water conservation campaign in both the Metro and George.

It features messages, posters and posts across all forms of media and communication, including social and mainstream media platforms.

Sustainable water resources and energy security

The University is on a water emergency and sustainability drive to address the ongoing water crisis in the Metro, which includes the ever-present reality of Day Zero, when the Metro runs out of water.



Dr Andre Hefer

By Dr Andre Hefer, Sustainability Engineer: Infrastructure Services and Sustainability Department

At full capacity, the University's total water usage across all its campuses is 1.5 megalitres (Ml), or 1.5 million litres, per day during peak periods. Up to 70% of this usage is on South Campus, the largest of our seven campuses.

A three-pronged water management and sustainability strategy was implemented on the campuses from June 2021, and is ongoing. It includes:

- technology and the implementation of water saving systems
- reducing the use of potable municipal water by using other sources of water, such as boreholes and return effluent (RE) water
- promoting behavioural change to get people to use less water.

Energy security

Mandela University is committed to responsible and sustainable energy management in order to

meet its commitment to reducing CO₂ emissions, increasing energy efficiency, energy conservation, and renewable energy supply.

The University's Renewable Energy Strategy has approved the installation of solar-photovoltaic (PV) panels on all seven campuses over and above the existing 1 megawatt (MW) solar plant on South Campus.

The goal is for the entire daytime consumption of each campus's total energy/electricity use to be solar generated.

In addition to solar-PV, the University has introduced several energy saving initiatives, such as LED lighting, and replacing geysers with heat pumps in 90% of residences.

Prudent management of Eskom bills has been another contributing factor to financial sustainability.

Living, breathing, teaching, researching **sustainability**

George Campus is the University's living and learning Sustainability Futures Hub that connects terrestrial and marine environments, and boasts a fast-growing contingent of postgraduate students attracted to its emphasis on relationships between people, natural resources and the environment. By **Dr Kaluke Mawila**, George Campus Principal.

Covering 85 hectares surrounded by a mosaic of forestry plantations, indigenous fynbos and forests, and located at the foot of the Outeniqua Mountains, it is a natural meeting point for several contrasting biomes.

We live, breathe, teach and research sustainability here, and the reception area of my office displays the energy and sustainability drive on campus, including the harvesting of rainwater and recycling of organic plant waste for the gardens.

As part of the University's

Renewable Energy Strategy section, a solar-PV plant of ± 280 kW was approved in March 2022 and will be installed in 2023/4 at a cost of R3.8-million.

The campus has grown considerably over the past few years, which called for additional student accommodation. The new 198-bed residence was designed with sustainability principles in mind, including split water reticulation with a borehole providing water for the toilets, and energy-efficient lighting.

Former staff houses have also been converted into student ones,

with solar geysers and heat pumps replacing electric geysers.

A culture of service

It is essential that staff and students in all disciplines understand the importance of contributing to a sustainable environment.

George Campus engages with local schools, businesses, citizens, government and conservation organisations in a range of social sustainability initiatives, such as the food garden project at the prison in George, enabled by the Department of Correctional Services. All our

students are encouraged to participate in the food gardens. They take back the skills they learn to their communities, and the knowledge network grows.

Through the Nelson Mandela University Hubs of Convergence, the George Campus is also involved in an initiative to provide food,

clothing and blanket to victims of gender-based violence at Phambili Women's Shelter.

Nurturing eco-warriorship

This year, campus staff and students from a range of disciplines are participating in a new "hacking programme" coordinated by the Director of the School of Natural Resource Management, Professor Josua Louw, in collaboration with the Department of Horticulture.

They are tackling alien tree invasion and regrowth on campus grounds and surrounding communities as part of a landscape-wide programme to reduce alien tree infestation, which is a major environmental and fire hazard for the Garden Route. Alien trees also take up vast amounts of water, which a water-short country like South Africa cannot afford.

The 2018 Garden Route fire sharply highlighted our need to be proactive in disaster response training, emergency management protocols and water sustainability. A one megalitre water storage facility has been installed specifically for firefighting. Sustainability is a priority here, as the cost and devastation of a fire on campus must be prevented.

Rapid growth in postgrad numbers

Our burgeoning contingent of postgraduate students increasingly undertake inter- and transdisciplinary research at the interface between science and society.

Subjects include: the relationships between Cape gannets and fisheries; mammal diversity in production landscapes; indigenous knowledge and conservation narrative; inclusive conservation practices; soil health and pastoral management; landscape fragmentation and pollination; decision-framing for invasive alien clearing and deliberate fire and sustainable forestry plantation.

New BSc Honours programme from 2023

Prof Josua Louw, Director of the School of Natural Resource Management, was instrumental in the development of the new BSc Honours programme in Natural Resource Management in the Faculty of Science.

Over 60 applications had been received by the end of July 2022 for the first enrolment at the beginning of next year.

The academic programmes and research focus in the School of Natural Resource Management and the Sustainability Research Unit (SRU) on the George Campus, address the sustainable management of natural resources in the conservation, forestry and agricultural sectors.

The honours programme will include the following modules:

- Principles of Sustainability (the aim is to also offer this as a service module to honours students beyond the Faculty of Science)
- Statistical Techniques
- Research Project
- Electives:
 - Forest Management
 - Agricultural Management
 - Conservation Management
 - Social-Ecological Systems.



The project brief called for the creation of a new entrance building and visual identity for the Ocean Sciences Campus, while also providing different spaces within the specialised research environment. Images: SVA International

A bold new look for Ocean Sciences Campus

Mandela University's newest campus has blossomed from a squat set of monotonous old buildings into an architectural masterpiece firmly rooted in the 21st century. By Heather Dugmore.

Reimagined from the old CSIR campus, purchased by the University a few years ago, the Ocean Sciences Campus (OSC) now boasts a modern aesthetic, with some unique additions, such as the new Science Centre currently under construction.

The first phase of OSC renovations was completed in September 2017 and it has become an exciting campus in the process, says Mandela Uni's Graham Gouws, Deputy Director: Infrastructure Projects, who is managing the project.

"Once the renovations are completed, outdated structures will

be transformed into contemporary architecture, and serve their purpose on an appealing, multi-use transdisciplinary postgraduate campus," says Gouws.

All tenders are done according to a supply chain management process and contracts have a 30% value allocated to local SMMEs.

Work started in 2016 with the construction of the gateway entrance and the reconfiguration of A block. E and H blocks were then modified and modernised to house postgraduate labs, offices, a growth chamber, technical workshops and a large open-plan area for

the hyperbaric chamber, research equipment storage, and equipment maintenance.

A commons and conference area, comprising a 100-seater seminar room, three smaller boardrooms and a coffee shop area, were completed in B block at the beginning of this year.

The E and C block extensions and renovations are currently underway and are scheduled to be completed by the end of July this year. The work includes multipurpose spaces utilised by postgraduates and visiting academics, labs, research offices, hot offices, boardroom spaces, and an 8-metre-deep diver training tank.

It's all in the details

There are connecting bridges between E and C, flanked by a

three-storey vertical green wall. Elana Storm from the University's horticulture department is assisting with indigenous plants to populate the wall, which will have low water requirements.

A three-dimensional sun-screen layer further defining the main building façade was designed by the OSC architects, SVA International.

"The system reduces heat gain and gives visual identity to the campus," says SVA International's Tony Danev, who graduated cum laude from Nelson Mandela University with a Master's in Architecture in 2007.

The sun-screen layer also provides a unique aesthetic inside the buildings, with ever-changing shadow patterns throughout the day, creating an animated internal space.



One of a kind

The new Science Centre, with the opening planned for early 2023, was also designed by SVA International. Danev explains: "It comprises a digital planetarium installation with 150 seats, where six 4K (high resolution or sharp image) projectors display images on the dome screen, 15m in diameter, creating an immersive experience. Sky-Skan, a Germany-based company specialising in planetarium installations, has been contracted for this."

The area includes an exhibition space and teaching engagement laboratory accommodating up to 100 students and learners. It's intended as a multi-use building for the University, schools, the community and society at large.

The one-of-a-kind Science Centre will be a flagship facility for the University.



Denise van Huyssteen. Image: Leon Hugo

A master of crisis management

If the turbulence of the past five years has taught Nelson Mandela Bay Business Chamber CEO Denise van Huyssteen anything, it has been how to tackle a challenge. By **Gillian McAinsh**

Certainly, her experience in both the international motor industry and her personal life has proved invaluable in managing current work challenges, including power cuts, a water crisis, volatile municipal governance, the ongoing effects of a global pandemic and more.

It's part of what has earned her the 2022 title of Business Category winner for The Herald

Nelson Mandela University Citizen of the Year.

"I see myself as a crisis manager," Van Huyssteen says.

Since taking office – she started in June 2021 – Van Huyssteen has made her mark to position the chamber as a catalyst to attract and retain investment in Nelson Mandela Bay. It's no easy task, especially with unemployment in the region close to 40%.

Van Huyssteen's relationship

with the chamber stretches back to the early 1990s, when she interned there for her National Diploma in Public Relations. As a non-profit organisation (NPO), it represents a broad spectrum of businesses in Nelson Mandela Bay.

Van Huyssteen was the top public relations student of her year, acing nine distinctions from the then Port Elizabeth Technikon, now Nelson Mandela University.

"I always knew I wanted to be in business, and reputation management is key to success in business," she says of how qualification and current career dovetail.

Putting people first

As someone who is "cause-oriented", she has always supported the aims of the chamber and in the late 1990s also served as its communications manager.

However, she was head-hunted by former Delta Motor Corporation (later to become General Motors South Africa) head, Willie van Wyk, to manage corporate communications at the then locally owned automotive company.

"I found a way to make that position a cause – to save jobs," she says of the move, which led to spending close to 20 years in the automotive industry.

During her time at General Motors South Africa (GMSA), she was a member of the executive committee and led communications teams in South Africa, Kenya, Egypt and Dubai. She also served as a director on the business chamber board from 2013 to 2020.

Her crisis-management skills were called on when, in 2017, General Motors announced it would withdraw from South Africa in what could have been a body blow for the motor trade in Gqeberha, formerly often dubbed the Detroit of South Africa.

Isuzu Motors SA stepped in to buy out GMSA, but Van Huyssteen had to fight fires on several fronts, reassuring dealers, staff and customers of ongoing support and stability.

Her years of experience in corporate affairs, business strategy and legal issues gave her a solid grounding for difficult times.

Standing strong

The next crisis came in the form of a personal tragedy when her husband, celebrated Bay artist Tertius van Huyssteen, died in June 2017.

Van Huyssteen and her daughter, Kayleigh, then 21, slowly picked up the pieces, with Kayleigh going on to complete her CA at Nelson Mandela University, her mother's alma mater.

Then, just as life started to reshape into a semblance of normality, COVID-19 hit and with that, the world of business was disrupted once more.

In addition, water mismanagement has pushed Nelson Mandela Bay ever closer to the dry taps of #DayZero, along with increasingly erratic load-shedding and a city council in turmoil.

Disinvestment is an ongoing threat as companies look elsewhere for a stability and growth.

She does not believe these challenges are new, however: "COVID just exposed everything".

"I've got a lot of support from the business sector," says Van Huyssteen gratefully – essential in the face of major economic threats.

"We need to protect and retain existing businesses before we can begin to grow the economy."

Action plan

To address this, the chamber has task teams homing in on areas such as water and electricity, transport and logistics, and safety and security.

It has also initiated geographical clusters, which are geared at uniting efforts and resources to address areas of common interest. Additionally sectoral clusters have been set in motion and these include renewable energy, mining, high energy users and liquid bulk operators.

Projects such as "adopt a sub-station" see innovative business and government partnerships, while "adopt a school" and "adopt a leak" also unite disparate groups for a common goal.

The chamber has signed a memorandum of understanding with the University for possible collaboration in research, development, training and dissemination of knowledge in support of its strategic plan. The goal is to build a strong relationship in establishing and adding value to its BayGrow Hub through business intelligence-orientated research.

Transformation is another imperative: small businesses make up 70% of chamber membership and there is an active entrepreneurship desk. Mentorship is also key, along with empowerment.

As Van Huyssteen says: "We need a set-up that supports small businesses, giving access to finance, tender documents, legal advice, and connections through events."

On a side note, since graduating at Mandela University, Kayleigh has since become an entrepreneur and runs her own fashion design label "Jam and Cheese". She is showing a Van Huyssteen combination of business acumen and a creative spark.

Former GMSA colleagues of Van Huyssteen senior praise her for her work ethic and dedication. Along with her qualifications and experience, this should equip her not only to be a "crisis manager" of today, but also to lead the business chamber into the future.

"We need to protect and retain existing businesses before we can begin to grow the economy"



MONEYSMARTS

Gillian McAinsh asked a few Mandela graduates working at international, African and regional levels for their forecasts in the areas of investment, banking and finance. Wherever they are in the world, and in their careers, there is a common thread to their responses. Despite the current global uncertainty, they all are clear that this turbulent time may in fact be an economic turning point – a chance to seize the new opportunities offered by a changed world.



Johann Jooste

What does the financial future hold? After all, just as the world was starting to recover from a global pandemic, a war broke out between a world superpower and its neighbour.

Meanwhile in South Africa, power cuts, water shortages and political uncertainty have complicated the forecast even more.

The former Global CIO Office managing director, now CIO at Panagaea Wealth, Johan Jooste graduated with an honours degree in Economics in 1993, after completing his BCom Law and Economics the year before.

Now based in London, this Alumni Award recipient says the current economic upheaval could prove to be "an opportunity for the nimble".

"To answer the question 'what does the financial future hold?' is harder," says Jooste.

'The right strategy is patience'

"The pandemic has upended the world economic order in many profound ways, and a war has broken out in Europe, which will have political ramifications for the rest of our

generation and likely the next too. "Financial market losses have always been recovered – the right strategy is patience," says Jooste.

"New and cheaper technologies, new ways to work remotely and more localised supply chains all offer chances for those struggling to compete on size under globalisation to thrive in a new era of increased localisation."

Krynauw Krüger

Another Mandela alumnus now working in the UK, Krynauw Krüger, is founder director at Cresco Capital Ltd. Krüger completed his BCom Hon, Finance, in 1999 after his BCom Finance and Financial Management.

"Undoubtedly inflation is wreaking havoc globally, with pent-up post-COVID-19 demand, near full employment in the UK and the war in Ukraine being the main drivers," he says.

"Central banks have started raising interest rates in response but have very limited room to manoeuvre both due to increase of government cost of debt servicing and pressure on domestic households via

mortgage repayments."

'This is an exciting period'

However, where there is turmoil, change and flux, there is opportunity and as an entrepreneur in the financial sector, this is an exciting period, he says.

Specifically, says Krüger, in the UK unemployment is near all-time lows due to Brexit's impact on the European workforce.

"Entrepreneurs are using technology to create efficiency gains through automation, and the government is deploying incentives and grants in many sectors to stimulate research and development and growth."



Mary Bomela

Back on African soil, there are alumni such as Mary Bomela who offer a rational yet upbeat perspective.

Bomela is CEO of the Mineworkers Investment Company (MIC) and is armed with several degrees, starting with her BCom from the then University of Port Elizabeth in 1995.

'With adversity comes opportunity'

"The world, including South Africa, is recovering from one of the harshest

periods in history. However, with adversity comes opportunity," says Bomela.

"Many new businesses have emerged from people working remotely, there has been an increase in online shopping and entertainment as people have changed their lifestyles and maintained the changes post lockdown.

"Recognising the need to promote small businesses, there is a lot of money being made available.



"We as MIC are now funding young black innovative businesses to help them scale up and there are many more similar initiatives in the market."

Chartered accountant Sandile Phillip is regional head for FNB Business, and graduated from Mandela University in 2005. He also sees the world opening up again post-COVID-19, despite unique challenges faced by South Africa, and the Eastern Cape in particular.

Collaboration is key

"The water crisis that we are faced with in Nelson Mandela Bay and the surrounding areas provides new economic opportunities for innovative businesses to provide alternative solutions," he says.

"For example, sustainable water harvesting, borehole drilling, infrastructure maintenance projects



and perhaps water desalination plants with alternative renewable energy mix to power these projects, and consequently job opportunities for the citizens."

Overall, Phillip believes more collaboration from private and

Sandile Phillip

public sector is needed to reignite the economy.

"This requires effort from business, society and government – local, provincial and national – and I'm encouraged to see more collaboration as shown by recent work done via Gift of the Givers, Nelson Mandela Metro and the Nelson Mandela Bay Business Chamber.

"The financial services sector, and FNB in particular, has developed innovative funding solutions to fuel this important reigniting of the economy."



trustless system, transparency, automated contracts, and greater security.

"With two billion people in the world making up the unbanked population, and South Africa on the top 20 list, achieving access to digital identity and financial service inclusion is key to a country's future growth."

Nadia Mannell

More turbulence ahead

Nadia Mannell, co-founder and general partner of Seed South Capital, is also chief strategy officer and board member for Women in Tech®, an international non-profit organisation on a mission to close the gender gap and to help women embrace technology.

"Technology innovation is born from necessity, and it's clear that the financial sector needs an overhaul. With the change, comes disruption before the new beginnings, and it's

going to be turbulent for a while," warns Mannell.

The Mandela BA Media, Communication and Culture graduate sees "What does the financial future hold post-pandemic?" as a loaded question.

"My spliced answer would be that the future of financial innovation is in blockchain technology, diversity and inclusion.

"The ultimate goal for blockchain is free transfer of values, faster and cheaper transactions, a decentralised



New platforms help alumni stay in touch

CLICK TO CONNECT

Director: Alumni Relations (AR), Paul Geswindt, with Liska Hendrick (AR Administrative and Communication Officer), Santhoshini Petersen (AR Coordinator) and Uyanda Makanda (AR Assistant).

Over the past few years, alumni relations have been changing – not just at Nelson Mandela University, but all over the world. Mandela Alumni Connect is a leading-edge platform that looks set to transform how we communicate with each other. *By Paul Geswindt, Director: Alumni Relations*

We've shifted from in-person events where we briefly connect with alumni, to widening and deepening relationships with alumni, enabling them to play a much bigger role in the life of the University.

We are doing this through broader participation in institutional online events, student mentorship and coaching, providing bursaries and sponsorships, helping to ensure our graduates are employable, or simply sharing their expertise. Greater alumni involvement at faculty and programme level is also being encouraged.

Within this space, there has, of course, been a huge push towards digital transformation, which has been accelerated by the COVID-19 pandemic.

In addition to using well-known social media platforms such as LinkedIn and Facebook to connect with alumni, and continuing to engage via emails and newsletters, more specialised alumni platforms have emerged – and we have embraced them.

“ ... more specialised alumni platforms have emerged – and we have embraced them”

Did you know?




Nelson Mandela University alumni live in more than **80 COUNTRIES**



Our most qualified alumnus holds **7 QUALIFICATIONS** from the University



OUR GRADUATES TOTAL 127 718

and the number of qualifications they hold is 171 178. This includes 135 604 qualifications at undergraduate level, and 35 574 qualifications at postgraduate level.

Going digital

Last year, we launched the Mandela Alumni Connect platform, available at: alumni.connect.mandela.ac.za

This is an online networking platform, using Graduway software, which caters specifically for alumni relations.

- Alumni sign up via Facebook, Google or LinkedIn accounts and create their own profile.
- Within the platform, they may set up and belong to different interest groups, connecting with like-minded alumni.
- The platform facilitates alumni playing a more prominent role in advancing the University.
- It also supports efforts to mobilise resources to assist our students, including advertising, employment and internship opportunities, coaching, mentorship and bursaries.

Departments and faculties across the University are working to deepen relationships with current students – who will one day be graduates and alumni – to encourage connections that last a lifetime.

We value our connections with alumni: you are key stakeholders in our University. And, ultimately, you are helping our institution to be at the top of our game, while also increasing the value of our qualifications.

What else is new at Alumni Relations and Governance?

- Apart from our new online networking platform, Mandela Alumni Connect, we have also launched an online fundraising platform, <https://www.mandela.ac.za/Giving-to-Mandela-University> where alumni and friends can contribute to specific projects within the University, including the Alumni My Contribution Fund (see page 5 for story). Our University Shop is also available online: onlineshop.mandela.ac.za (see page 43 for story).
- In 2021, the Alumni Association constitution was amended to make provision for governance in a new era where digital communication and tools play such an important role. We have also amended the Alumni Awards policy, increasing the number of Rising Star awards from four to seven. Both these documents are available at: alumni.mandela.ac.za
- Our Alumni Association Executive Committee, which includes your elected alumni representatives, volunteered many additional hours reviewing our policies to support this new era of alumni relations.



SHOP ONLINE and collect or courier

TOP SELLERS

- 
- T-shirts
 - Journals and notebooks
 - Hoodies
 - Caps
 - Tracksuits

Shop online: onlineshop.mandela.ac.za
 Email: shop@mandela.ac.za
 Phone: +27 41 504 4371
 Facebook: @UniversityShopMandelaUni

Shop: Sanlam Student Village, Summerstrand, Gqeberha

The COVID-19 pandemic shifted many things online, including the University Shop.

Although there is still a physical shop, students, staff, alumni and friends of the University have been able to buy all in-store products online since September 2021.

There have been 547 online registrations to date and 141 purchases made, with sales promotions proving popular.

“Even if you live in Gqeberha, you can buy online and ensure you get the sale item you want – rather than rushing down to the shop, and (then) maybe it’s already sold out,” said Alumni Relations Director Paul Geswindt.

“The ‘quick pick up’ collection service available online is the most popular,” said University Shop manager Shene du Toit. “To date, we’ve had 97 collections versus 44 courier deliveries ... Our best-selling items online have been branded hoodies and micro-active shorts.”

Products bought at the shop are delivered across South Africa. While buyers in other countries currently place their orders via email at shop@mandela.ac.za, an international courier service is being launched later this year.

The University Shop is a self-sustaining alumni project, which was established by the University Alumni Association in 2005 to promote the university brand.

•• Alumni Achievers

Annual Alumni Awards a showcase of service and skills

On 7 December last year, Mandela University honoured nine outstanding alumni who use their talents, expertise and passion to build exceptional careers, while serving the communities in which they live. From Olympic swimming pools to India's cricket stadiums, from TV adverts that make us laugh and think to the banking tools that protect us from risk, Nelson Mandela University alumni are making a difference in diverse fields and across the world.

Mike Abel

Mike Abel is recognised as one of Africa's leading marketing, advertising and communications specialists. Born and raised in Gqeberha and now based in Cape Town, Mike graduated with a National Diploma in Marketing and Sales Management at Nelson Mandela University in 1989. During his 30 years in the advertising industry, he co-led Ogilvy South Africa, the largest communications group in Africa, and ran the prestigious M&C Saatchi Group in Australia, the country's largest agency. In 2010, he co-founded M&C Saatchi Abel, which was recognised by Finweek as the Breakthrough Agency in South Africa and named Agency of the Year by Financial Mail just five years after opening. Mike is also CEO of M&C Saatchi Group South Africa, a group of seven companies listed among the top five creative agencies in South Africa, with an impressive list of clients including Standard Bank, Takealot, Nando's and Lexus. Under Mike's leadership, M&C Saatchi Abel is involved in various social impact initiatives, including the Street Store, the world's first free "pop-up clothing store" for the homeless. With a keen personal interest in driving entrepreneurship, he has supported and consulted to many NGOs and political parties in South Africa, helping to build the economy and tackle corruption. In his 2020 book, *Willing and Abel*, he shares lessons he has learned over the past 30 years.



Hilda Kabushenga Kragha

Uganda-born executive Hilda Kabushenga Kragha is tackling Africa's unemployment challenges by bringing transparency to labour markets and improving productivity in the workplace. Based in Lagos, Nigeria, she is Managing Director for ROAM Africa Jobs, where she leads recruitment teams across several countries, including Jobberman in Nigeria and Ghana, and Brighter Monday in Kenya, Uganda and Tanzania. Prior to this, she was CEO at Jobberman, Nigeria's leading online recruitment platform, where she partnered with the Mastercard Foundation to train five million job seekers and place three million in employment within five years. This initiative aimed to address the challenges many young Nigerian graduates face, of getting qualifications that don't necessarily equip them with the skills demanded by the labour market. Hilda obtained her LLB law degree at Nelson Mandela University in 2011. Before blazing a trail in the recruitment industry, she worked as an Engagement Manager in McKinsey & Company's Nigeria office, serving private and public sector clients in the areas of strategy, human capital, talent management, change management and organisational behaviour. Before that, she worked as a transfer pricing expert with KPMG East Africa. Hilda blogs on Instagram about motherhood and finding balance as a working African mother.



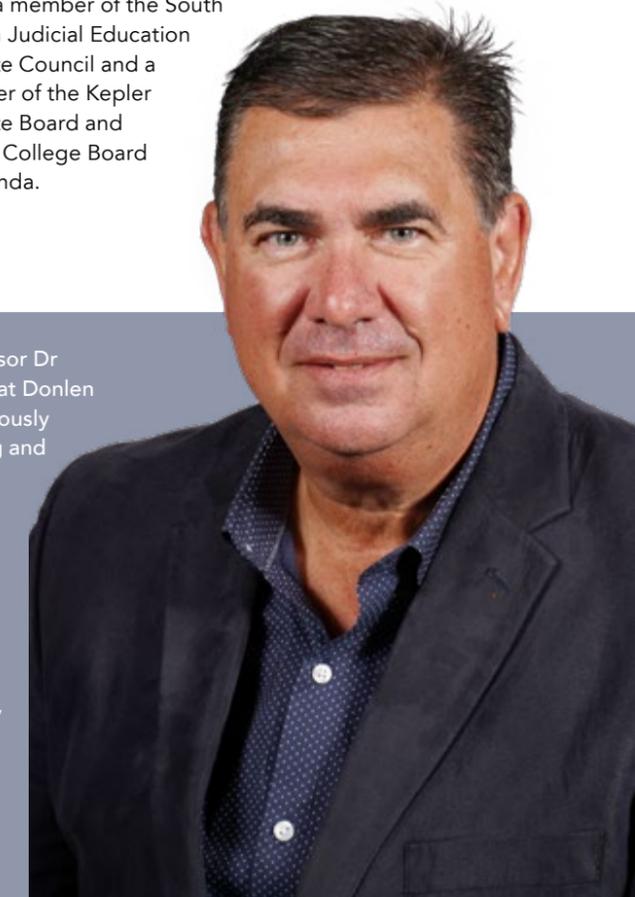
Prof Vivienne Lawack

Professor Vivienne Lawack is the Deputy Vice-Chancellor: Academic at the University of the Western Cape, where she is also a Professor of Law. She holds a BJuris *cum laude*, an LLB *cum laude* and an LLM from Nelson Mandela University. She also holds an LLD and is an admitted, non-practising advocate of the High Court of South Africa. Vivienne began her legal career as an academic at Vista University and the former University of Port Elizabeth, before working at the South African Reserve Bank in various capacities, including senior legal counsel for South Africa's central securities depository. In 2008, she served as Executive Dean of the Faculty of Law at Nelson Mandela University. She joined UWC in 2015. Vivienne is an expert in law, economics and the intersection of the two fields, and has published extensively, including two books and numerous articles. She is highly engaged in her community, participating in various committees in the legal, financial and education sectors. Her latest book, *Stemme van Clarkson*, tells the story of the community from which she hails, namely, the Moravian mission station at Clarkson. She is a former chair of the Moravian Church Trust, a member of the South African Judicial Education Institute Council and a member of the Kepler Institute Board and Kepler College Board in Rwanda.



Dr Michael Ferreira

Based in the United States, automotive executive and financial services advisor Dr Michael Ferreira is the Senior Vice-President of Global Sales and Marketing at Donlen Corporation, an international leasing and fleet management company, previously owned by Hertz. Michael completed his undergraduate studies in Marketing and Business Management at Nelson Mandela University in 1987 and obtained his MBA and doctorate in Business Management in the UK. Able to speak Dutch, Portuguese and German, he has worked all over the world, notching up 30 years of marketing and financial services experience in the fleet and mobility industries across five continents. From 1990 to 2001, he was National Sales and Marketing Manager, and Managing Director of the Avis Fleet Services subsidiaries in Southern Africa, before moving on to become Commercial Sales Leader at GE Capital Australia and New Zealand. From 2004 to 2017, he worked for the Porsche Automotive Group, first as Country Manager for the Sales Finance Division of Porsche Cars Australia and New Zealand, and then as Vice-President of Marketing and Sales Finance for Porsche, Bentley, Lamborghini and Bugatti in North America. During this time, he took on additional roles in Germany and was also appointed Head of Special Projects for Volkswagen Financial Services in Brazil.



●● Rising Stars Making Their Mark

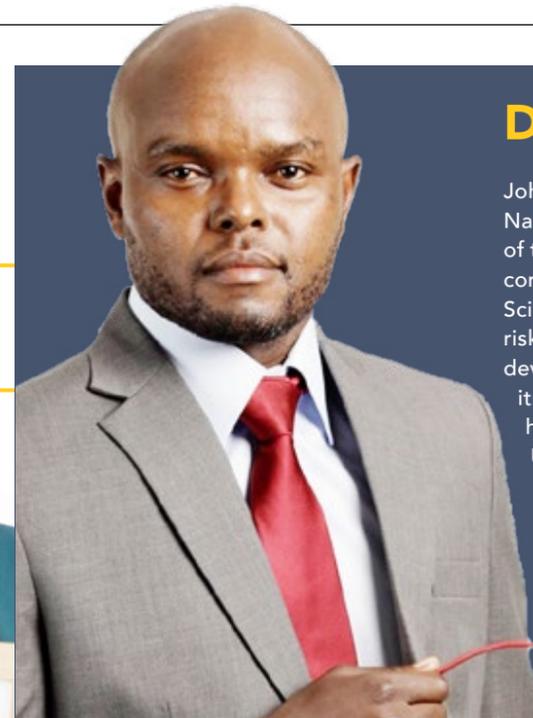
Thembinkosi Josopu

Thembinkosi Josopu has been working to uplift society for the past 17 years, serving mainly in the youth development, legislative and policy development space. He holds a BA Honours degree in Development Studies from Nelson Mandela University, and is currently working in Corporate Governance, serving in some of the country's most notable governance structures. His roles include chairing the Capacity Building and Governance sub-committee of the National Skills Authority, heading up the Economic Governance and Management stream within the African Peer Review Mechanism (APRM), and chairing the Labour Activation Programme of the Unemployment Insurance Fund (UIF). He is also a member of various committees in the National Economic Development Labour Council, including the Presidential Working Committee on Jobs. Thembinkosi is a former board member of the Quality Council on Trade and Occupations. He previously worked as the Service Delivery Manager for Early Warning Systems at Siyakha Isizwe Trading – a role which saw him tackling municipal water-related issues. He also worked in the Department of Trade and Industry, as head of office for the Deputy Minister. In his home community of Zwide, Gqeberha, he drives community development through his personal foundation and local soccer team.



Delaine Mentoor

During the Tokyo 2020 Olympics, held in 2021, Delaine Mentoor made history as the first ever female coach of an Olympic water polo team. She was head coach of the South African women's water polo team, who were also the first women's water polo team to represent the African continent at the Olympics. Not surprisingly, she was named Coach of the Year at the Momentum GSport Awards 2021 – and she managed all this while being a mother to a busy one-year-old. Delaine also coaches the South African women's under-20 water polo team, Nelson Mandela University's women's water polo first team as well as the girls' water polo first team at Gqeberha's Pearson High, where she is also the head of aquatics and sports administrator. Prior to this, she coached South Africa's under-18, under-17 and under-16 girls' water polo teams – and played for the South African women's water polo team herself, participating in world championship events. Delaine obtained her degree in Human Movement Science from Nelson Mandela University in 2019 and uses her knowledge from her studies not just to provide water polo coaching, but overall health and fitness advice, to develop strong and healthy athletes.

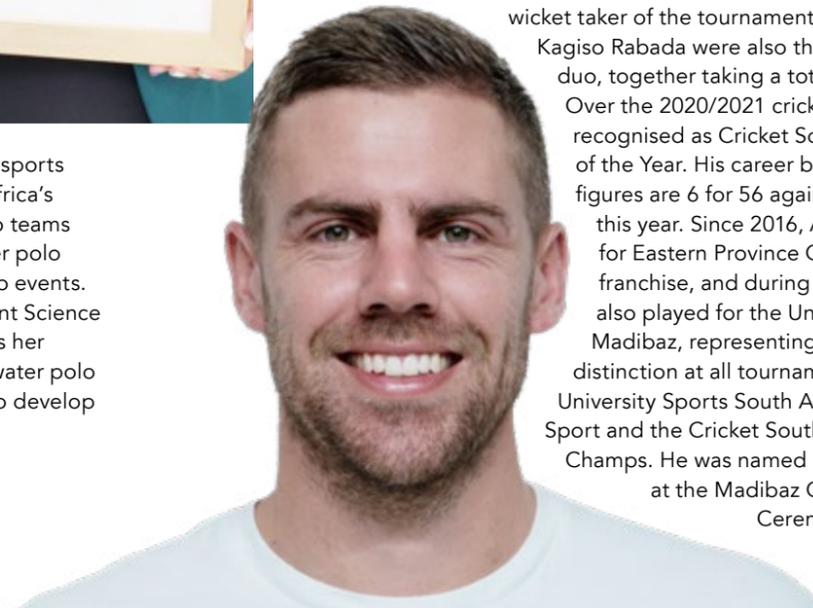


Dr Mark Nasila

Johannesburg-based data, analytics and Artificial Intelligence (AI) expert Dr Mark Nasila is the Chief Data and Analytics Officer of FirstRand's Risk Office, and a member of the South African Faculty of the global Singularity University. He is also a steering committee member of the National Institute for Theoretical Physics and Computational Sciences. At FirstRand, he ensures that digital technologies introduced to manage risks are at the leading edge of banking, both locally and internationally, and is the developer and brain behind Manila, an AI system FNB has harnessed to reimagine its risk management and forensic due diligence processes. Mark, who obtained his honours, master's and PhD degrees in Mathematical Statistics from Nelson Mandela University, manages a team of analytics experts, quantitative analysts, data scientists and business heads. Their core function is to champion the use of data to drive innovation and client impact across FNB's businesses. Mark has presented at local and international conferences, including South Africa's Business-Tech Digital Banking Conference, Chief Data and Analytics Officer forums in South Africa and the UK and the European Simulation and Modelling Conference. He is widely published in Business Day, Mail & Guardian, TechCentral, Daily Maverick, CIO.com and other media.

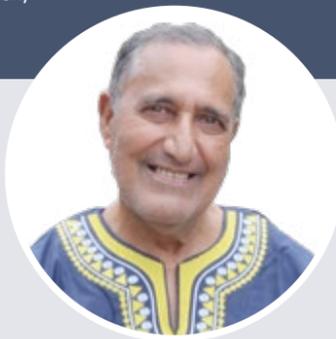
Anrich Nortje

South African cricketer Anrich Nortje obtained his BCom degree and postgraduate diploma in Financial Planning at Nelson Mandela University while pursuing his cricket dream – proving that it's possible to combine sporting and academic excellence. Anrich, who has been playing cricket for the Proteas since 2019, is currently the fastest bowler in world cricket. He also plays for Cape Town Blitz in the Mzansi Super League, and the Delhi Capitals in the Indian Premier League (IPL). In the 2020 edition of the IPL, he took 22 wickets, which made him the fourth-leading wicket taker of the tournament. He and teammate Kagiso Rabada were also the best fast-bowling duo, together taking a total of 52 wickets. Over the 2020/2021 cricket season, he was recognised as Cricket South Africa's Player of the Year. His career best test innings figures are 6 for 56 against Sri Lanka earlier this year. Since 2016, Anrich has played for Eastern Province Cricket's Warriors franchise, and during his studies, he also played for the University team Madibaz, representing the University with distinction at all tournaments, including University Sports South Africa (USSA), Varsity Sport and the Cricket South Africa (CSA) Club Champs. He was named Cricketer of the Year at the Madibaz Cricket Prizegiving Ceremony in 2016.



Special Award for Ken Ramjee

Ken Ramjee has been a proud ambassador for Nelson Mandela University since 1980, when he embarked on his studies in electrical engineering, while at the same time managing a career and caring for a family. With a passion for engineering, he became a mentor to students, a moderator, a stand-in lecturer and a member of the University's advisory committee. Employed by the South African Broadcasting Corporation (SABC) for 27 years, he contributed significantly to his field, gaining the respect of leaders in the industry. Although he is now in his 80s, Ken continues to serve on engineering organisations and structures, nationally and internationally, including the Institute of Professional Engineering Technologists (IPET), the Engineering Council of SA (ECSA), the Engineering Technology Association (ETA) in the USA and the Institute of Engineering Technology (IET) in the UK, where he is currently a registered professional incorporated engineer fellow. Ken obtained his National Diploma in Electrical Engineering from Nelson Mandela University in 1985 and, in 2019, obtained his BTech in both Electrical Engineering and Business Administration. He served on the University's alumni executive committee for several years, and, throughout his retirement, has been a familiar face on campus, with regular visits to the Alumni Relations Office, the University Shop and various departments.





Mzinwabantu Dayimani

Judge Nambitha Dambuza

Professor Liz Lange

Meet our new Council members

The University has welcomed three new members of Council, the governing body that exercises oversight of our institution.

The new members are Judge Nambitha Dambuza, Mr Mzinwabantu Dayimani and Professor Liz Lange.

The appointees, like all members of Council, were selected for their expertise and good standing to serve the best interests of the University as a whole.

We are also bidding farewell to several valued members: Deputy Chair of Council Mr Siyabulela Mhlaluka, who has served four terms and Professor Mala Singh, who has served two terms.

Others leaving Council with one term under their belts are: Senate representative Dr Kwezi Mzilikazi, Academic Employee representative Mr Deroul Chauke and co-opted member Professor Darelle van Greunen. We thank and acknowledge each for their service.

Chancellor and Vice-Chancellor re-appointed

Nelson Mandela University Council has re-elected Dr Geraldine Fraser-Moleketi as its Chancellor for a second term of office.

At the same time, the University also reappointed Professor Sibongile Muthwa as Vice-Chancellor for a second term, with effect from 1 January 2023.

Dr Fraser-Moleketi has served as Chancellor since 2018, joining Prof Muthwa and Chair of Council Ambassador Nozipho January-Bardill

at the helm of the institution.

January-Bardill outlined a few of the qualities that make Dr Fraser-Moleketi such a valued, ongoing figurehead.

“She has worked in inter-governmental structures, interacted with political leaders, business leaders and in civil society, and has been involved in complex negotiations across different issues and sectors,” said January-Bardill.

“Her illustrious career is characterised by a commitment and approach to social justice and economic participation that is purposefully inclusive and sustainable.”

The Chair said that both Council and the broader university community had also noted Prof Muthwa’s achievements with deep appreciation.

“[Her] visionary, transformative and empowering leadership, approach to strategic management,

and total commitment to entrenching ethics and integrity into the DNA of Mandela University has been impactful,” January-Bardill said.

“She is determined to create a leading institution in service of society, through our key strategic areas of learning and teaching, research, innovation and internationalisation, engagement and transformation as well as a variety of groundbreaking academic projects.”



Dr Geraldine Fraser-Moleketi



Professor Sibongile Muthwa



Shawn Godfrey. Image: M-Net

MY
KITCHEN
RULES

Industrial engineering alumnus **Shawn Godfrey** cooked his way to *MasterChef South Africa* victory in March this year.

Beating the competition on the hotly contested reality show took perfect precision and preparation – all traits of a good engineer! His sister, journalism alumna **Liesel Searle**, gets the inside scoop.

What's a family favourite dish?

Roast lamb.

And your favourite dish to prepare?

Sunday roast.

Favourite cooking style?

Outdoors, preferably on the fire.

Favourite ingredient – or impossible to choose?

Avocado – it's so diverse.

Coffee or tea?

Coffee.

Chicken or beef?

That's hard. I'd say both – they're so different and versatile.

Sweet or savoury?

Savoury.

What makes you tick?

Challenges and new experiences.

What ticks you off?

Sloppy work or lack of attention to detail.

Shawn Godfrey's signature dish?

Pork belly.

Last meal on death row?

Pork belly, of course!

Does anyone ever eat the garnish?

Yes ... and you should! Everything on the plate should be edible.

Cat or dog person?

Dog. I have a French Bulldog named Oscar. He regularly features on my Instagram and is a real character!

Marie Biscuit Squares

Shawn shares the Godfrey family's childhood favourite, courtesy of his mom, Kay Godfrey.

- 250g margarine/butter
- 500g icing sugar
- 1 and a half packets Marie biscuits broken into small pieces – crush some as well
- 2 T cocoa
- 2 eggs, well beaten
- 2 t vanilla essence

Method

- Melt margarine or butter in a pot (don't allow it to bubble or boil)
- Sift icing sugar and cocoa
- Stir into pot
- Mix thoroughly (do not boil)
- Remove from stove and add beaten eggs and vanilla
- Stir in broken pieces of Marie biscuits
- Press into a greased pan
- Put into fridge for at least 1.5 hours
- Cut into squares or any other shape

W Website: theroasteddad.com
S Shawn: @theroasteddad
I Lianne Instagram: [theroastedmom](https://www.instagram.com/theroastedmom)

Secret junk food addiction?

McDonald's. Every now and then, I love a Big Mac.

What makes SA food superior?

Incredible produce and a high diversity of ingredients, flavours and recipes from different cultures.

What makes a good chef great?

A chef who understands the clientele and what they want to eat.

Are all the best chefs boys?

No, definitely not. Clare Smyth, the first female chef to win three Michelin stars in London, comes to mind. In



South Africa, we have great female chefs, such as Mokgadi Itsweng and Mmabatho Molefe. I'd love to work with Chef Mmabatho – her restaurant, Emazulwini, focuses on authentic Zulu favourites, giving them a modern twist to tempt even the most European-influenced of diners. She really opened my eyes about African cuisine.

Worst cooking day ever?

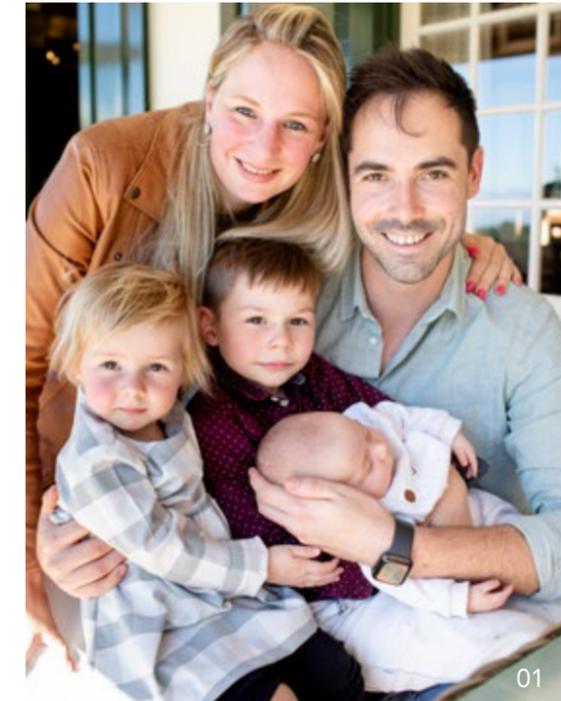
None, because even when everything goes wrong, it's an opportunity to learn.

How do you not chop your fingers off?

I did nearly chop a finger off the other day, trying to cut gem squashes with a cleaver. It had to be glued back together and the medic on duty said that I was lucky not to have lost a nail!

What does home smell like?

Stews, especially on a cold winter's day! But even just the smell of onion and garlic frying in a pan does it for me.



01 Shawn Godfrey with wife Lianne and children Aiden, Olivia and Harvey. Image: Niki M Photography



02 Cooking with Aiden. Image: Niki M Photography



03 Shawn with his sister, journalist Liesel Searle

Favourite childhood cooking memory?

Making shortbread biscuits in the December holidays.

When did the cooking bug bite?

It started as a necessity, when our mom was diagnosed with chronic fatigue syndrome. As children, we needed to help with chores, and I gravitated towards the kitchen. She allowed me to make a mess and learn through experience.

Why did you enter MasterChef South Africa?

We've always been avid watchers of any cooking show – you name it, we've binge-watched it! My wife, Lianne (also a Mandela University graduate) and I were watching *Masterchef Australia* one Sunday last year and while I was making popcorn, she discovered that *MasterChef South Africa* was back, with applications closing that Friday!

Hardest challenge on the show?

Chef Michael's dessert replication - I think it was nine recipes with

incredibly complicated techniques. Each technique was a follow-on from the previous one and its success hinged on each of the previous recipes being executed correctly.

What is family "foodie" life like in the Godfrey household?

With three children under the age of five, I cook for my family every night and like to involve them as much as possible. Aiden (4), Olivia (2) and Harvey (born in February) were my reason for pushing so hard in the competition.

What next in the foodie space?

Venturing out in the world of food has been a fun challenge! I am an entrepreneur at heart and co-own several companies. I've launched my own brand, *Roasted*, and have a range of merchandise in my online store at theroasteddad.com/store. Also check out my Instagram page, *The Roasted Dad*.

Putting **science in service of society**

Nelson Mandela University has planned two exciting science conferences this year under the banner of Science for Society, the Faculty of Science's engagement strategy.

2022 is the 100th anniversary of the Union of Pure and Applied Physics – of which South Africa was a co-founder in 1922 – and it is also the International Year of Basic Sciences for Development, which focuses on the links between basic sciences and the UN's Sustainable Development Goals (SDGs).

The first event was the annual conference of the South African Institute of Physics (SAIP 2022) from 4-8 July with the theme "100 years of Physics in Africa – Past, Present and Future".

"These conferences are an honour not only for our institution and the Nelson Mandela Bay Metro, but also for South Africa as a whole," said Dean of Science Prof Azwinndini Muronga.

"They are furthermore a tangible expression of engaged scholarship, reflecting our commitment to 'Science for Society'."

This in turn, said Prof Muronga, is aligned with the University's Vision 2030's strategic focus areas. Among others, these include the pursuit of impactful, pioneering research, innovation and internationalisation to address grand societal challenges and promote sustainable futures.

"SAIP 2022 is an excellent opportunity to participate in these international celebrations as we focus on the growth of physics in Africa over the last 100 years and at the same time look to the present and future, exploring how

this subject can address development challenges facing Africa," Prof Muronga said.

Mandela University will also host the seventh Biennial African School of Fundamental Physics and Applications (ASP 2022) and the third Biennial African Conference on Fundamental Physics and Applications (ACP 2022), from 28 November to 9 December.

The faculty is further involved in science engagement strategies and policies at national, continental and international levels.

The Faculty of Science's Engagement and Partnership Portfolio, as well as the Faculty Engagement Committee, were born of the faculty's strategy of Science for Society, signalling the intent and commitment to public education and engagement with science.

The engagement

strategy calls for the integration of research and training, learning and teaching, and engagement and partnerships in a meshed and sustainable manner.

The conference will include a Physics in Industry day that calls on physics graduates to take part. This will provide a platform for stimulating knowledge transfer and collaboration between industry and academic partners.

The Department of Physics hosted the SAIP2022 conference as an online event, while ASP 2022 and ACP 2022 will be conferences.

"The engagement strategy calls for the integration of research and training, learning and teaching, and engagement and partnerships in a meshed and sustainable manner."



Executive Dean of the Faculty of Science, Prof Azwinndini Muronga



Making Madiba Proud

Naming and renaming a project worth gold



Famous names and faces are an integral part of the country's historical landscape

By Gillian McAinsh

July 2022 marked the fifth anniversary of the renaming of the institution from Nelson Mandela Metropolitan University to Nelson Mandela University.

Vice-Chancellor Professor Sibongile Muthwa launched the celebratory moment with a call to action for introspection and reflection on what this name means.

It has been a remarkable five years, including not only the launch of an Ocean Sciences Campus in Summerstrand, and a new Medical School on the Missionvale Campus, but also a massive organisational redesign and the launch of the University's strategic Vision 2030.

This time has seen the structure of the University move towards an increased focus on engagement and transformation, setting up a new Engagement and Transformation Portfolio with a status equal to other core academic missions of Learning and Teaching, and Research and Innovation.

At the same time, an ongoing Naming and Renaming programme is symbolically signalling the University's commitment to transformation in naming places, spaces and buildings that enhance the Mandela name and entrench its growing intellectual identity.

Part of the celebration therefore saw Phase 2 of the programme that started in 2017 by renaming Gqeberha campus residences, with an additional 41 names of buildings across all seven University campuses unveiled.

Instead of being known by number, buildings will be

given a name that resonates with their purpose. Hence Building 35 in the Faculty of Humanities will be renamed after Gqeberha actress Nomhle Nkonyeni and Building 13 in the Faculty of Sciences will become the Katherine Johnson Building in honour of the NASA mathematician.

Likewise, many buildings known by their function will gain meaningful new names, such as the Law Service Building which will be renamed Dulcie September. On the George Campus, residences and other spaces are named after similarly well-known figures such as the late Johnny Clegg, Reeve Steenkamp, Fatima Meer and George Bizos.

The kick-off event in September launched a year-long series of engagements across faculties, schools, entities, units, and the in-between spaces.

These commemorations aim to not only reflect on bearing the Mandela name, but to catalyse deeper discussions. After all, the significance of the name goes deeper than switching from referencing a geographical area in the Eastern Cape to commemorating an influential public figure.

As the only university in the world to be named after the late President Nelson Mandela, the University is mindful of the responsibility to promote social justice and equality while also contributing to long-term sustainability.

It gives further impetus to institutional values such as ubuntu, social justice and equality, and environmental stewardship.

Nelson Mandela University is the first South African university to be awarded a drone licence. By **Lize Hayward**.



Drone Licence Gives Mandela University Wings

The hard-won achievement will bring it closer to offering diverse and life-changing educational experiences for a better world, says the institution's Advanced Mechatronic Technology Centre (AMTC) director, Karl du Preez.

"This breakthrough is of strategic importance to the University. We now have the ability to collect data in the form of aerial imagery at a much higher rate than ever before.

"This enables us to understand and more quickly manage large-scale projects linked to the community, such as fisheries, illegal poaching, whale populations, forestry and fire control."

Rocky road to success

In 2015, drone flights conducted by universities, industry and individuals became illegal for anything other

than sport flying.

"Overnight, all drone activity at Nelson Mandela University had to stop until we could secure a Remotely Piloted Aircraft System (RPAS) Operating Certificate (ROC)," explains Du Preez.

"My team and I started a rigorous three-year application process, with rigid guidelines, to obtain a ROC from the South African Civil Aviation Authority (SACAA), which governs commercial and corporate RPAS operations in much the same way as a large airline operation."

Following intensive paperwork, training, equipment procurement and legal assistance, the licence was granted in August.

The AMTC is fortunate to have two commercially licensed pilots, Professor Russel Phillips and Damian Moodley, on board, says Du Preez.

Bird's eye view benefits

The Drone Unit allows the School of Engineering to equip students with specialised skills in a technical environment supporting both communities and the niche market of drone operations.

- Researchers and staff have access to professional drones and crew for myriad projects, such as Ocean Science research into mucus sample collection from whale spray.
- The AMTC has developed two short courses to train drone technicians in preparation for a possible shortage of qualified staff in the growing field.
- Employment and economic growth will dovetail from ongoing research and collaboration with industry.
- Drone production and maintenance at the University is aimed at the commercial sector.

Drones are an integral aid to communities, offering search and rescue capability, package delivery (The South African Blood Bank recently obtained their own ROC) and disaster management assistance.

"The University will be able to help communities solve problems via drone technology," says Du Preez.

Newly elected Alumni Association Committee

On 15 September 2022, the Alumni Association held its online AGM, at which the election of office bearers and members of the Executive Committee of the Association took place. More than 250 members of the Association attended the online meeting - a record number of attendees for an Alumni AGM. The Association supports and enhances the realisation of the University's vision and mission through maintaining and expanding positive relationships with its members through utilising and maximising their expertise, goodwill, and influence in support of the University.

Congratulations to the newly elected office bearers and Executive Committee members who will serve a three-year term of office.



Siphile Hlwatika
PRESIDENT

Siphile Hlwatika obtained a LLB '17, PGDip (Labour Law Practice) cum laude '18 and LLM (Labour Law) cum laude '22. He is currently a practising attorney at ENSafrica, Africa's largest law firm, specialising in employment litigation and general employment law.



Ayanda Mlatsha
VICE PRESIDENT

Ayanda Mlatsha, BCurv'12, Dip (Nurs Educ) '17 and Master of Nursing '21, is a registered nurse and currently working as a Senior Professional – Living and Learning Office at Nelson Mandela University.



Athenkosi Sityata
TREASURER

Athenkosi Sityata, BCom (Gen Acc) '16, PG Dip (Fin Plan) '17 and AdvDip (Bus Studies: Monitoring & Eval) '20, is the Finance Officer at Isivivana Centre.



Linda Mafa
ELECTED MEMBER

Linda Mafa, BCom '11, PGDip (Business Administration) '17 and MBA '19, is the Operations Manager at the United Nations Development Programme.



Asiphe Mxalisa
ELECTED MEMBER

Asiphe Mxalisa, BAdmin '17, BA Hons (Political Science) '18 and MA (Political Studies) '21, is a Lecturer at the Centre for Postgraduate Studies at Rhodes University. She is currently registered for her PhD in Higher Education.



Lebo Nare
ELECTED MEMBER

Lebo Nare, BA '15 alumnus, is currently the Logistics Director at Mafoko Security Patrols based in Pretoria. His duties include fleet management, procurement, asset management and supply chain management.



Kaya Ngubentombi
ELECTED MEMBER

Kaya Ngubentombi, LLB '16 alumnus, is currently an Associate Attorney at McWilliams & Elliot Inc and a former Candidate Attorney for the same private law firm.

NELSON MANDELA
UNIVERSITY

Apply Now

For more information visit mandela.ac.za

Enquiries: postgrad@mandela.ac.za

Change the World