

# SPIRIT

SEPTEMBER 2020 – ISSUE NO. 2



**shape and own the future**

# HOW TO APPLY TO MUT

All first year applications to study at MUT are submitted through the Central Applications Office (CAO). This is a simplified way of applying for more than one programme, using one application form, and paying a single application fee. Apply online at [www.cao.ac.za](http://www.cao.ac.za) or by downloading an application form.

## CHECKING THE PROGRESS OF YOUR APPLICATION

You can track the progress of your application by going to [www.cao.ac.za](http://www.cao.ac.za) and entering your CAO number, sending an email to [enqgeneralcao@cao.ac.za](mailto:enqgeneralcao@cao.ac.za) or call 031 268 4444.

## CLOSING DATES FOR APPLICATIONS

Faculty of Engineering	30 Sept
1st semester	31 May
2nd semester	
Faculty of Natural Sciences	30 Sept
Faculty of Management Sciences	30 Sept

*Applications submitted after 30 September accumulate a late application fee determined by the CAO.*

## APPLICATION DOCUMENTS

For South African applicants

- Grade 11 final results, grade 12 June exam results, National Senior Certificate or Statement of Results
- Identity document
- Students transferring from other universities should submit an academic record and a certificate of good conduct

Non-South African applicants

- Valid passport
- Valid proof of medical insurance cover
- Police clearance certificate
- SGCE, GCE, GCSE, IGCSE or Cambridge School Certificate

## MINIMUM ENTRANCE REQUIREMENTS

- National Senior Certificate with a diploma pass or N3 with 50% pass in Mathematics and English
- A minimum of 6 subjects with level 4 pass for diploma study and level 3 for Access Courses
- English Home Language or First Additional language, level 4 pass
- Specific subject combination and pass level relevant to the qualification; and
- Minimum points as per faculty requirement and as listed in the CAO handbook

## GENERAL ADMISSION REQUIREMENTS

Each faculty stipulates admission requirements based on points aggregate calculated from the best six subjects presented by the prospective student. Over and above the points system, some departments administer a compulsory entrance test.

## ADMISSION POINTS CALCULATION GUIDE

National Senior Certificate			Senior Certificate		
NSC Level Rating	NSC %	Points	Symbol	Points	
	90 – 100	8			Higher Grade
7	80 – 89	7	A	8	6
6	70 – 79	6	B	7	5
5	60 – 69	5	C	6	4
4	50 – 59	4	D	5	3
3	40 – 49	3	E	4	2

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# From the MarComms (Marketing and Communications) Editorial Team

## A snapshot of 2020

The year 2019 ended like any other. We welcomed 2020 with open arms and hearts full of hope, anticipation and all the other usual emotions the world has experienced for millennia. There was absolutely no need to worry; everything was under control, or so we thought. Except for over a billion people in China, the whole world thought so too.

As we eased into 2020, we were bombarded by news that the coronavirus that had originated in China's Wuhan province was spreading to other parts of the world, and that people were dying in increasing numbers. Soon the focus shifted to Italy as the second epicentre of the outbreak. Panic started to set in, and when COVID-19 was declared a pandemic, all eyes turned to the governments of the world – what were they to do?

At the same time the World Health Organisation (WHO) and other organisations continued to give the information they believed would save the world. Much of this information was about the way the virus was spreading – namely, that it was mainly transmitted by humans via droplets like saliva and mucus – and the need for people to keep a distance from each other. Like most governments of the world, our government also had to consider all this information and, working with scientists, to make decisions that were aimed at shielding everyone within the country from the scourge. Towards the end of March, the President of the country announced the unthinkable: the country would be under lockdown in less than 10 days. This was a difficult decision that would bring much of the economy to a halt.

At MUT we also closed down and hoped that the three weeks set by the government would be enough



to ready our defences. However the situation became worse, and we knew we were approaching the cold winter months when the virus appeared to thrive. Working from our homes, we quickly formed a team that would steer staff and students from this nightmare of biblical proportions. This issue is dedicated to the extraordinary efforts of our people to “save lives and save the academic year” throughout the pandemic. We hope that, despite the heaviness of the scourge we have faced – and continue to face, both from a human and economic point of view – that your spirits will be lightened by the stories of hope and encouragement in its pages.

Op-Ed:

# Getting the message across to “save lives and save the academic year”

Since March this year, the world has experienced a rude awakening as countries that were epicentres of commerce in the Marco Polo era became epicentres of the novel coronavirus, COVID-19. In an effort to stop its spread, nation after nation went on to isolate itself and its people from each other – making 2020 a year everyone will remember for its unpredictability, disruption and loss.



*Mbali Mkhize, Senior Director,  
Marketing and Communications*

In South Africa, death, job losses in many industries including tourism, and a severe impact on academic programmes, are just some of the many negative results of the virus and associated lockdown, and a constant reminder of how badly the world has been affected by this pandemic.

The global number of positive cases to date is close to 27 million, with nearly a million deaths arising from it. In South Africa, we are approaching 15 000 deaths from over 630 000 infections.

One day, we will talk about how global leadership could have done more to limit the spread of the coronavirus. We will talk about how we could have played our part in coming up with solutions to either prevent its spread or to fight it using our research, and how families could have taken leadership roles to keep the virus away from their homes.

For now, let us talk about the importance of communication during the pandemic. The University stuck to key messages that the WHO had outlined as effective in curbing the spread of COVID-19, namely:

- ◆ Wash or sanitise your hands frequently;
- ◆ Maintain a two-metre social distance; and
- ◆ Wear a mask.



Naturally, change in behaviour takes time – yet there is no time to waste! We are aware of this fact when we communicate, which is why we use multichannel communication strategies to get the message across effectively. One of the focus areas in our communication plans is the people who have contracted the virus off campus, whether at home, in shopping centres or while travelling.

We have not reached a level of perfect communication, but we are doing enough to help our University “to save lives and save the academic year”. This was a clarion call by our Minister for Higher Education and Training, Science and Innovation, the Honourable Blade Nzimande.

In line with our COVID-19 communication plan, we have used our multi-channel communications to repeat the message in different ways to different constituencies, while using story-telling in order to raise awareness and deliver a strong call-to-action with the aim of keeping people safe from COVID-19. As part of this, we used the story of ‘Khovy’ and ‘Mpilo’, a COVID-19 villain and hero.

# From the Acting Vice-Chancellor

**Professor Marcus Ramogale**

The year 2020 should not go down in history as subversive of MUT's academic enterprise. It should be remembered as the year we built a fortification to "save the academic year and save lives" during a pandemic which shut schools and universities across the entire world. All this in spite of the fact that as an historically disadvantaged institution, we are among the world's most marginalised when it comes to providing digital programme offerings.



*Professor Marcus Ramogale*

Since 17 June we have been clear that we would heed the clarion call of Dr Blade Nzimande, Minister of Higher Education and Training, Science and Innovation, "to save the academic year and to save lives" through a phased-in return to campus under Level 3 of the lockdown. However, we knew that achieving this would require out-of-the-box thinking.

A preliminary investigation of how our students consume online learning showed that the resources they had to access online learning were either outdated, limiting in terms of bandwidth, or not available at all. To ensure that "No student is left behind", we commenced a journey into the uncharted waters of multimodal teaching, learning and assessment. We developed a Multimodal Teaching, Learning and Assessment Plan (MTLAP) which would cater for the following categories of students:

- ◆ students who are unable to work effectively at home under lockdown conditions, for a range of reasons;
- ◆ students who do not have access to devices and cannot engage in any form of online or digital learning;

- ◆ students who may have devices but do not have data and/or connectivity to enable participation in online learning opportunities, but could engage in digital learning if electronic material were made available;
- ◆ students who have devices, data, connectivity and conducive study conditions and can participate in online learning opportunities; and
- ◆ students living with disabilities, who are part of all the groups described above.

In order to support the MTLAP we worked with the faculty deans to develop a project plan in which we revised the academic calendar and brought clinical students back to campus on 1 July, followed by final-year students and then postgraduate students to make up the first 33%. For more than 60 days, we have been getting to grips with the MTLAP. From 1 July we made appropriate teaching and learning materials available on our learning management system, Blackboard, to ensure that even those students who were not on campus would not be excluded in our efforts to save lives and save the academic year.

We refuse to let the events of 2020 disrupt the future of our students who aspire to become professionals and play a role in revitalising our struggling economy.

# An overview by Professor Marcus Ramogale, Acting Vice-Chancellor & Principal

The COVID-19 crisis has severely disrupted the global economy, with growth expectations of 3.3% in 2020 being revised to a global contraction of 5.2%. In South Africa, the pandemic has significantly worsened an already declining economy. Economists and our government have warned that the country will experience its biggest decline in Gross Domestic Product (GDP) in 90 years, with the GDP growth forecast being revised to -7.3%.

Disruptions to economic activities worldwide have led to a sharp decline in per capita income as tens of millions of workers have lost their jobs. In South Africa, the unemployment rate increased to 30.1% in the first three months of the year.

The Reserve Bank has cut interest rates again in order to stabilise the economy and contain inflation over the medium term, and the Minister of Finance presented an emergency budget to Parliament on 24 June 2020.

The direct impact of the recession, worsened by the arrival of the COVID-19 pandemic, has not left the public higher education sector unscathed. The DHET has cautioned public higher education institutions to tread carefully with regard to financial matters and has announced the following measures:

- ◆ Block Grant funding and Infrastructure and Efficiency (I&E) Grant funding for the 2020 academic year is being reduced due to reprioritising funds as a result of the COVID-19 crisis.
- ◆ The Block Grant for next year is not expected to increase significantly (if at all) and universities must apply a zero-based budget for the 2021 financial year.
- ◆ Efforts must be made to restrict the additional costs of the extended academic year, including spreading out the academic year costs over the extended period.
- ◆ 2021 fee increments have not been confirmed and will be advised later in the year, although any increases are not likely to be more than current inflation (2.2% in June 2020).
- ◆ Student accommodation guidelines are being prepared for approval and will be gazetted in August.

The Finance Executives' Forum of Universities South Africa (USAf) has also raised several matters impacting the finances and financial sustainability of universities. These matters include:

- ◆ Going concern risk – the ability of the institution

to continue to operate into the foreseeable future without any special funding being made available to it.

- ◆ Deferral of state subsidy payments – in July, the Department of Higher Education and Training (DHET) did not pay institutions the block grants and fee gap grants, and the National Student Financial Aid Scheme (NSFAS) also paid a reduced amount to institutions.
- ◆ State subsidy reductions – these have already been announced by the DHET with respect to the Block Grant and the I&E grant.
- ◆ Reprioritisation of earmarked grants (no new money) – unspent grants, together with interest earned on such funds, have been reprioritised as no additional funds are available from Treasury to fund the COVID-19 crisis.
- ◆ Steep decline in student debt collection, resulting in an increase in student debt – a reality for universities nationwide, putting major strain on their cash flow as students struggle to settle their fees.
- ◆ Investment in health and safety – a critical aspect which requires more funds to be directed towards protecting staff and students.
- ◆ Investment in ICT, connectivity and related costs – a vital resource to enable online and multi-modal teaching and learning, which also requires significant financial resources.
- ◆ Revenue reduction from donors, state entities and third stream income – this is due to organisations and institutions not having excess cash available to donate or to put towards funding projects.
- ◆ Staff salary increments – the historical practices of greater-than-inflation salary increments have distorted pay scales and created unreasonable expectations among management and staff. These levels of increases are not sustainable and salary costs and increments will have to be curbed and be brought in line with inflation.

The financial impact of the above for MUT is obvious. MUT is not self-sustainable and depends largely on NSFAS and DHET for funding. The cohort of privately-funded students (approximately 33%) poses a high financial risk to the University, worsened by the COVID-19 pandemic.

Our country, our economy and the higher education sector are in crisis. We need to be very mindful of the implications this has for MUT and to consider all decisions very carefully. It is certainly not business as usual.

# I survived COVID-19 because...

In trying to capture the disruption that COVID-19 brought to staff members who became ill, we asked them to share their stories.

*I spent the entire two weeks recommended for self-isolation alone. During this time, I followed my doctor's guidance. I took my medication as a Holy Grail. I knew that my life depended on following the doctor's orders. On top of that I also used natural remedies like drinking water with lemon every day, and took 1 000 milligrams of vitamins C and D daily. I also spent a lot of hours in bed to keep warm. The virus does not do very well in warm weather. That is why experts also recommend that those infected with the virus spend 10-15 minutes in the sun so that their bodies get warm.*



*Friends, family and colleagues did more for me than I could ever have imagined. From the time people heard about my predicament, I started receiving warm messages. Vitamins in all shapes and forms were left outside my door. People came to my house to give me love. A friend of mine said to me, let the virus be in your body only and not on every space you touch in your house. She organised the fogging of my house. Neighbours were peeping through their curtains and I just did not care. My life was more important. The space PPE that I had first got a glimpse of in South Korea when the virus hit its shores, was something that hit my house. I could sleep in peace fighting the virus, knowing that it was no longer hiding on my sofa, wardrobe or anywhere. Everything was sanitised. I took all medication according to the book. I took the correct diet. I had never eaten citrus fruit because I always reacted but if it would help save my life, so be it. I am alive and this is a second chance that the Lord has given me. I am grateful to Him. He lives!*



*For me, I would have died were it not for one of my pastor colleagues. Out of respect to the service that he offered, I will not mention his name. He poured strength into my life when I was in despair. Every morning, I would wake up to a prayer voice note on my phone. The note seemed as if it was created specifically for me. Instead of crying myself to sleep, I looked forward to waking up and being thankful that I had a partner to pray for my salvation. Being diagnosed with COVID-19 felt like a death sentence had been handed to me. Having a praying colleague helped me navigate a terrible storm. I realised that the power of prayer made me have positive feelings and I am grateful to have had a fellowship of this nature.*





# Early crisis identification saved lives

MUT's crisis identification strategy which led to the University forming a COVID-19 Task Team (CTT), needs to be commended. The team was formed in March and Sister Nomusa Mkhwanazi was appointed as the COVID-19 Task Team Convenor in May. Under her tutelage, the CTT has enforced many protocols to prevent the spread of the coronavirus at MUT.

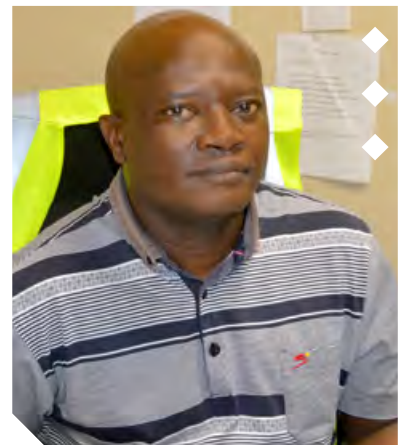
With nearly 15 000 deaths in the country, the University has done well in raising awareness about COVID-19 and preventing the spread of the virus. Its various COVID-19 campaigns are run across multiple channels, including email and WhatsApp messages, as well as regular updates on social media platforms and our website.



*Dr Johan van Koller, Convenor*



*Nomusa Mkhwanazi, HOD, Clinic*



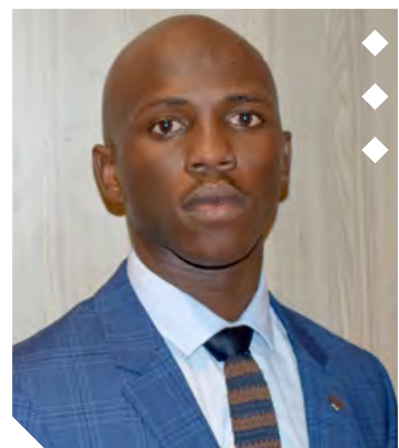
*Lizwi Masondo, S.H.E*



*Linda Nzama, Representative,  
NEHAWU*



*Keith Zwane, Representative,  
TENUSA*



*Mthobisi Dlamini, Residence Liaison  
Officer, SRC*

# Raising awareness about COVID-19



Naturally, a time of challenge brings with it confusion, anxiety and uncertainty. These emotions can prove to be deadly if nothing is done to get things under control. The emergence of the COVID-19 virus in China's Wuhan province, and its spread across the globe, has had many heads spinning, including in South Africa. The country's higher education centres, as some of the places that have large numbers of people at one time, had to act quickly to contain the spread of the virus.



The University's Department of Marketing and Communications (MarComms) regarded the shutdown of the University as a challenge to be faced head-on. While away from the University, staff and students still needed to be updated with news on the spread of the virus and how this impacts the University. Mbali Mkhize, Senior Director of the department, said that this kind of work is not always easy.

"Everyone leading a communications division knows that without the relevant information, the stakeholders are vulnerable. They can't take the right decisions. A simple statement such as telling staff and students via an SMS that there is protest action at a particular place and that they must avoid it, can go a long way in saving lives and property. The same is true of the dissemination of messages about the coronavirus," said Mkhize.

The coronavirus situation has been one of the biggest challenges for her division so far. "While others correctly see this situation as a challenge, we consider it as a chance to save lives, and the academic year. My team and I have continued to hold meetings via Microsoft Teams. In these meetings we brainstorm and find out the best ways to take the vital messages to staff, students and the general public. Since the advent of the coronavirus, and the introduction of the country-wide lockdown, my department has added several communication platforms. We are currently sitting at 25 platforms," she said.

Mkhize added that, just as governments have to readjust their budgets when faced with a massive crisis, the University has had to adjust its budget so as to deal with the pandemic. "On a number of occasions my department has met to look at how we could modify our budget so that we can finance the new campaigns. My department now resembles a war time cabinet where so much effort is directed at winning the war. This is war of a different kind," she said.

The campaigns she was referring to are all over the 25 platforms her department has created in the last five months. While its initial focus was on keeping staff and students informed, the department decided to expand its vision to include the general public, particularly that of Umlazi Township where the University is located.

Said Mkhize: "We have always considered ourselves as part of the township and its people. What affects us affects them, and vice versa. Lately we put up a

◆ *"Everyone leading a  
communications division  
knows that without the  
relevant information, the  
stakeholders are vulnerable."*  
– Mbali Mkhize, Senior  
Director, Marketing and  
Communications

giant billboard on the side of our Faculty of Natural Sciences building. The board's message is simple – we are asking people to continue taking precautionary measures against the pandemic. Wash your hands thoroughly with soap. Sanitise them when you cannot wash them. Keep the required distance between you and the next person. Wear your mask properly at all times. And only leave home when it is absolutely necessary."

She explained that the billboard was one of the University's ways of dealing with the challenges it was facing under Level 3 of the lockdown. "The University has to continue to remind staff and students of the threat of COVID-19 because it is very easy to revert to old habits. Given that our students had not seen each other since the lockdown, we thought this would pose a challenge to social distancing – but this has not been the case. Our students have responded positively to the health protocols to be followed to keep themselves safe," she said with pride.

As she spoke, the University was getting ready to welcome more students onto campus. "MUT will continue to be guided by the Department of Higher Education and Training (DHET) in terms of the phased approach to returning students. The University has taken all the necessary precautions and health protocols to ensure that students come back to a safe campus. MUT is ready to welcome more students should the DHET decide to allow more students back to campus," said Mkhize in closing.

# COVID-19 incorporated into MUT's Environmental Health curriculum

With COVID-19 having much to do with the environment and how people behave, MUT's Department of Environmental Health has decided to fully incorporate the topic into its academic programmes. The curriculum will be more dynamic, according to Anna Bigara, a lecturer in the department, and the department may also focus on strengthening and integrating the principles of epidemiology and of risk analysis and management throughout its various modules.



Left: Anna Bigara, Lecturer in the department, and Dr Thobile Poswa, HOD

This is one of the department's reactions to COVID-19, a pandemic that is wreaking havoc across the globe. "In early March 2020, we recognised that the soon-to-be pandemic would affect our country. In the Epidemiology (study of diseases) module, I integrated COVID-19 into the sections on communicable diseases, outbreak response and infection control," said Bigara, adding that they were now going to use case studies to enhance critical thinking.

She is already applying current interventions such as the International Water Sanitation and Hygiene (WASH) programme in water quality management. "But now the emphasis is on how it should be strictly applied and maintained because these provide an important additional barrier to COVID-19 transmission and to the transmission of infectious diseases in general," she said.

The department is guided by the World Health Organisation's (WHO) definition of environmental

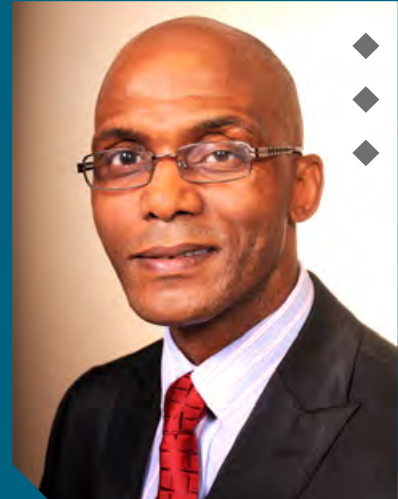
health, which is the science and practice of preventing human illnesses and injury, promoting well-being by identifying and evaluating environmental sources and hazardous agents such as COVID-19 as a biohazard, and limiting exposures to hazardous biological, chemical and physical agents in air, water, soil, food and other environmental media or settings that may adversely affect human health.

Bigara applauded the government for taking a bold step to contain the pandemic, and had some advice. "The nation-wide lockdown was necessary to disrupt the chain of transmission and prevent the spread of the virus while the health care system prepared the hospitals and other related places for possible COVID-19 cases," she said. She added that in hindsight, authorities could have focused earlier on prevention measures related to cluster infections in high-risk areas within communities, and particularly among vulnerable people, as opposed to the initial approach of identifying cases and tracing the contacts.



# Spiritual support during the lockdown

Dr TT Poswa, who heads the Department of Environmental Health and is also one of the University's chaplains, has been a major part of our support system during the lockdown. Being technologically savvy has helped him provide valuable spiritual support through various digital channels.



*Dr Thobile Poswa, HOD,  
Environmental Health*

These include: WhatsApp where he uses status postings and dedicated broadcast groups to deliver uplifting messages to nearly 3 000 contacts; LinkedIn where he has over 1 550 followers; Facebook where he has 900 friends and a number of groups; and a blog posting on WordPress for followers with email subscriptions (accessible at <https://tonops.wordpress.com>).

"Initially, I was posting spiritual and philosophical messages monthly. Some of my followers requested more frequent postings. I then introduced weekly devotionals. Still there were requests for more. I then structured my postings to be three times a week and I arranged to cover a 52-week series on Mondays; leadership insights on Wednesdays; and general thought-provoking insights on life on Fridays. I also post general postings as and when a need arises, especially if there is a need to contribute to an important memorable event. During level 5 of the lockdown, I posted daily," said Dr Poswa.

Dr Poswa has built up his database over many years. "This has led many to consult me as a resource whenever they need to contact others," he said. His involvement in multi-sectoral settings exposes him to a diverse network ranging from academia to the church environment and community activities.

When asked what skills help him most to manage relations with his digital followers, he cites communication, book writing skills and an ability to reflect philosophically on ideas. It is his deep love for building others up that gives him joy in doing what he does.

"I therefore feel compelled to share something to touch other people's lives. Regular postings are a ministry for me. I have an inner drive that inspires me to carry on with the ministry of writing and sharing ideas. I get agitated if I fail to do it and will be compelled to do it even in the middle of the night. The messages get downloaded in me and I pass them as they come. It's a mystery that I find hard to tell to anyone or convince others about how it happens.

"I get fulfilled learning that many lives are positively touched. It feels good to receive some feedback from the young and the old; from people playing different important roles; the noble and the ordinary that say:

- ◆ 'Excellent advice'
- ◆ 'I needed to hear this message today'
- ◆ 'This is God speaking to me'
- ◆ 'This is wisdom personified'
- ◆ 'Glory be to God for these profound, challenging and transformational truths'
- ◆ 'Thank you for these powerful teachings that build us, please have courage to continue'
- ◆ 'Powerful words indeed, thank you so much for sharing. Somehow, God allows his people to speak the same language, have the same thoughts and empower each other without meeting to discuss events in one's life...interesting'
- ◆ "Thanks TT for these lessons, they are of good help, if they can be followed and put to practice. God bless you'.



# MUT Sport keeps active during the lockdown

The general feeling in the sports arena is that the profession has never faced a bigger challenge than the COVID-19 pandemic. Who would ever have imagined a time when sports teams would either not play at all, or play in empty stadiums and venues? Ironically, the importance of games has become clearer than ever during this period. Sport has occupied our chatter-filled minds and cut through the boredom of being in quarantine and lockdown. The once unthinkable has become our reality, our 'new normal'.

This is a big challenge for players who thrive on encouragement from the shouting fans. This sentiment was well captured by Marks Maponyane, a Kaiser Chiefs and Orlando Pirates soccer legend who, when asked why he left Dynamos to join Orlando Pirates, said he "missed the sound of thousands of fans".

Sporting personalities across the board have voiced their feelings about the impact of the restrictions that are meant to limit the spread of the coronavirus. This feeling is well articulated by MUT Sport's bodybuilding coach, Mbhekiseni "Msona" Mdletshe, who said he is finding it very difficult to live without going to the gym. "I have had to improvise with the material I have at home," said Msona, who converted his house into a gym.



*Xolani Mabhida, MUT Athletics Coach*



- ◆ *“Who would ever have*
- ◆ *imagined a time when sports*
- ◆ *teams would either not play at*
- all, or play in empty stadiums*
- and venues?”*

Like other MUT sporting code coaches, Msona continues to train his players during the lockdown using technology. Msona has taken it a step further, creating a number of challenges that gymnastic enthusiasts can enjoy being part of. One of these is the T-shirt challenge. “In the video I demonstrate how a person can put on their T-shirt while in an upside-down position, using only their hands, with their feet balanced on the wall. You can only use one hand at a time,” said Msona. You have to be extremely fit to achieve this almost impossible task. It is very tiring to be in a hand stand position for a long time.

Siyabonga Maphumulo, the dance coach, has enlisted the help of his niece to get his message across to his MUT dancers. Dance is an intimate sport, which makes it even harder to practise in a time when we are all preaching and observing social distancing. “That is why I dance with my niece who is a member of my family; I cannot dance with someone else,” said Maphumulo.

Dance moves may appear easy, but a professional will tell you otherwise. “There is a lot that goes into the process and keeping fit is integral,” said Maphumulo. He does physical training around the house every morning and three hours of dance training with his niece every afternoon. “I am helping her to become a better dancer and preparing her for when she joins MUT next year because she is in matric this year,” said Maphumulo. When she eventually joins MUT she will be an excellent dancer, he added.

As for his MUT dance team, Maphumulo uses WhatsApp to send them dance moves to rehearse at home twice a week. The dance moves are often in the form of a dance routine that Siyabonga choreographed with his niece. In return, team members have to send videos of their best attempts at the dance moves back to the group. Siyabonga then sends them individual



*Siyabonga Maphumulo, MUT Dance Coach*

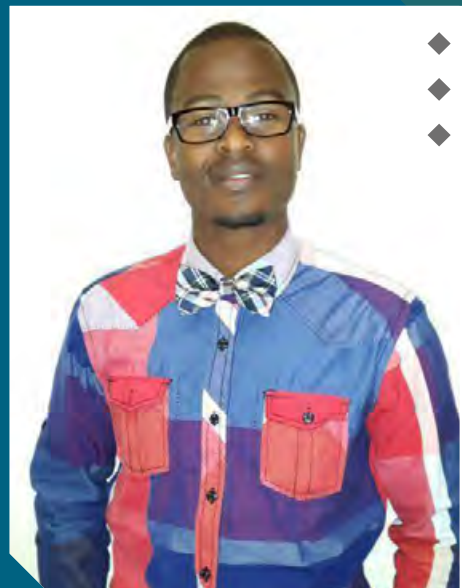
feedback on their technique. For those who do not have the luxury of a dance partner, Siyabonga sends them dance moves that do not require a partner.

MUT athletics coach Xolani Mabhida has also been hard at work throughout all the lockdown phases. This award-winning coach continues to give training to his athletes. He uses technology to take his team through a gruelling training regime, determined to help them follow in the footsteps of double marathon winner Bongumusa Mthembu, another one of his athletes.



*Siyabonga Maphumulo, with his niece*

# MUT coach appointed chairperson of USSA Aerobics National Committee



*Sandzile Dlamini, MUT E-Sport and Aerobics Hip-Hop Coach*

As social distancing measures were implemented across the globe, the sporting community had to watch on the side-lines as their sporting tournaments were suspended. Beyond the pandemic, many sporting codes will require strong leadership at the administrative level to bounce back.

In the midst of this turmoil, MUT's E-Sport and aerobics hip-hop coach, Sandzile Dlamini, stepped up to the podium at University Sports South Africa (USSA). He has been appointed to serve as Chairperson of the USSA Aerobics National Committee, after having served as Secretary of the same committee for the last three years.

Every three years at USSA competitions, an Annual General Meeting is held at which universities affiliated to each sporting code choose a committee that will be responsible for the administration and logistics of that particular code nationally. The difference is that this year's new committees will have to grapple with the coronavirus and its aftermath, which caused the USSA games to be cancelled for 2020.

Dlamini explained that these committees are responsible for organising and hosting the annual competition for their code, ensuring that the competitions run smoothly, ensuring that judges and instructors meet world standards, and facilitating selection of teams in preparation for world student games.

Although organising the next, post-COVID-19 USSA games will be a new challenge, Dlamini's years of experience in the committee and his experience as a coach for two sporting codes will place him in an excellent position to drive all the planning. His appointment, explained Dlamini, is an opportunity to provide input to grow the sport towards international competitive standards for athletes.

His appointment also means that MUT now has one of its own at the highest level of university sport, participating in influencing change and growth of the sport nationally and internationally. "MUT Sports will benefit by having representation on bridging the gap between developing institutions and developed institutions regarding competitive sports," said Dlamini.

It will also boost MUT's efforts to produce future leaders in sports and reinforce its role as an anchor institution within its immediate community through sports. His experience will contribute to developing better athletes for MUT and will also pave the way for students to reach for the stars to emulate their coach.





# LOCKDOWN GRADUATION

## MUT caps 2 539 students at its 'virtual' graduation ceremonies

Saturday, 27 June 2020, was just another day for many across South Africa. But for 2 539 MUT students graduating at the University's 2020 graduation, it was a day they were going to make history. They were the first graduates to be capped at MUT's first 'virtual' graduation in line with the country's social distancing and lockdown regulations.

The Faculty of Engineering graduated 809 students, while the Faculty of Management Sciences graduated 1 279 students. The Faculty of Natural Sciences graduated a smaller number of 451 students, but this included three Master's students – an extra cause for celebration.

The three ceremonies were available for viewing on the MUT virtual graduation microsite from 10h00 on the graduation Saturday. The ceremonies started with the constitution of the congregation and introductory remarks by MUT Chancellor and Minister of Human Settlements, Water & Sanitation, the Honourable Lindiwe Sisulu (MP), who was the first to send in her recorded message. Sisulu's introduction was followed by an address by the Acting Vice-Chancellor & Principal, Professor Marcus Ramogale. The conferral of qualifications followed immediately after Professor Ramogale's address. Sandile Dlamini, President of

MUT Convocation, then welcomed graduates to the Convocation of MUT before Sisulu dissolved the congregation.

Opening the ceremonies as she would during face-to-face graduation, Honourable Minister Sisulu expressed her disappointment at not being able to join the University's graduates in person. "As you know, the MUT graduation is very close to my heart," said Sisulu. "There is a sense of uniqueness to the MUT graduation which makes me appreciate how far we have come as a country to bring access to education to people from all walks of life."

Sisulu further reminded graduates that they needed to find ways to soldier on with their lives as the coronavirus would be part of them until a vaccine was discovered and distributed.

Professor Ramogale reminded graduates that they were graduating a few days after the country's Youth Day holiday on June 16, which commemorates the uprising of the youth of 1976 against apartheid education. Professor Ramogale explained that just like the youth of 1976, the Class of 2020 needed its own legacy.

"I would like to challenge you as the Class of 2020, receiving your qualifications under the lockdown. What legacy are you going to carry beyond the lockdown? However, my challenge to you is to think of yourself as an employer. In that way, you will never go wanting," said Professor Ramogale.

Professor Ramogale, who has been the biggest proponent of getting MUT students to consider entrepreneurship, encouraged graduates to see some of the problems caused by the coronavirus as opportunities.

"The coronavirus has created many problems, but has also opened new opportunities. Leverage these opportunities, find solutions to the problems we are faced with. In that way, you will find success. There may be no jobs, but there is plenty of work if you see

work as the creation of solutions to existing problems," he said. He also highlighted the eight qualities that graduates would need to become successful entrepreneurs. These are: courage, perseverance, tenacity, positive thinking, sound human relations, willingness to take risks, curiosity and a problem-solving attitude.

The MUT virtual graduation would have been incomplete without the President of MUT Convocation, Sandile Dlamini, formally welcoming the new graduates to the MUT Convocation after the virtual conferral of their qualifications.

Dlamini said: "I am very proud to share the excitement of your graduation day. Although we are not able to congregate at the Dr Pixley ka Seme Hall and celebrate your achievement in person, it is with great joy that I welcome you to the Mangosuthu University of Technology Convocation family."

The ceremonies ended on a celebratory note with footage of the MUT Choir leading the last dance, which has become synonymous with the joy that graduation brings at MUT.

## Graduation in numbers

Faculty	Diploma	Advanced Diploma	Bachelor of Technology	Postgraduate Diploma	Masters	Total
Engineering	785	-	24	-	-	809
Management Sciences	1 053	170	31	25	-	1 279
Natural Sciences	323	61	49	15	3	451
<b>Total</b>	<b>2 161</b>	<b>231</b>	<b>104</b>	<b>40</b>	<b>3</b>	<b>2 539</b>

## Vice-Chancellor's Awards recognise top achievers virtually

The term 'virtual' has become a reality that everyone has not only to adjust to, but to live with. 'Virtual' meetings! 'Virtual' public lectures! 'Virtual' trainings! 'Virtual' graduation! The latter has been in the minds of many for the last three months or so, with institutions being forced to conduct graduations online so their students could receive their qualifications.

MUT was no exception to this new 'rule'. One of the highlights of the virtual graduation was the students

that performed exceptionally well in their last examinations. Out of the 2 539 students that went through this important rite of passage on 27 June 2020, three students received the Vice-Chancellor's Award for being the top students in each faculty. Congratulations to this year's awardees who have done themselves, their families and MUT proud.

## Natural Sciences Vice-Chancellor's Award winner set to conquer the world

If it were not for the unprecedented COVID-19 restrictions in the country, Mxolisi Zondi, who hails from Mzumbe near Port Shepstone on the KwaZulu-Natal south coast, would have been one of three students to receive the loudest applause from a full house at his graduation ceremony on 27 June. Mxolisi would have ascended the stage and received his trophy, a cheque for this sterling performance as the top achiever in the Faculty of Natural Sciences. His family would have led the ululation as they would have been watching the first individual among them to attend a university. This was not to be – but his family was very happy when he told them he had received a Vice-Chancellor's Award as the top student in his faculty. They are going to celebrate his achievement, he said.

In 2018 Mxolisi put everyone at the University on notice. He was one of the students that won the Academic Excellence Award from the Teaching and Learning Development Centre (TLDC). He was only 21 years of age at the time, but some members of the Department of Information and Communication Technology (ICT) had noticed the youngster.

Mxolisi, who is now a teaching assistant at MUT, said the reason for his success was the support he received from his family. "Their support inspired me to work hard. Also working with people that I share similar goals with helped me to achieve this good result." He added that the 2018 Academic Excellence



*Mxolisi Zondi*

Award from the TLDC also motivated him to continue doing better in his studies.

Mxolisi's stay at MUT was not easy. He described it as "a hard journey with lots of ups and downs" but said that "our ICT lecturers supported us through this journey. Being a part of the MUT family has been an honour and privilege that I will always remember and cherish. Coming from a rural area in KwaZulu-Natal, I always find a very welcoming and vibrant atmosphere at MUT," said Mxolisi.

Mxolisi advises school learners who would like to enrol with MUT to "attend all lectures, and don't forget why you came to MUT. Work hard as much as you can on your studies; it's not going to be easy but believe in yourself". He still wants to continue his studies up to PhD level, and will get a job and help his family while studying.

## Engineering award recipient makes her mark in a male-dominated industry

The Vice-Chancellor's Award recipient in the Faculty of Engineering, Zamamvubu Samukelisiwe Ndlovu, quietly worked her way to the top of her faculty with the aim of making a mark on the so-called 'men's world'. When she enrolled for the Diploma in Construction Management and Quantity Surveying, Samukelisiwe knew that she would have to double her effort once she had obtained her qualification. She is doing just that now: she is employed, and also has her own business.

Samukelisiwe lives in Nelspruit, Mpumalanga Province, with her family. At just 23 years of age, Samukelisiwe



*Zamamvubu Samukelisiwe Ndlovu*



is already on her way to shaking up the world. She makes it clear that women are now ready to take up their rightful place in sectors previously dominated by men. "I chose Building because now there are a lot of women-empowering initiatives in this sector. There is change in the balance of job opportunities," she said. As a student, Samukelisiwe resolved to do the best she could, not just be one of the numbers. "I felt I had to do well. I felt no one would do it for me," she said. She felt that her good performance would push the door open so that other women coming after her would find it easy to break into the 'men's world'. "I studied with my friend, Ayanda Mkhize, who also did very well in her exams," she added.

Key to Samukelisiwe's success is her drive. "You have to have self-discipline. I had to put a lot of effort into my studies. I was inspired by the fact that women had been looked down upon. I wanted to show everyone that there is no difference between men and women. There are no limitations imposed by gender."

Samukelisiwe is pursuing her dream to be a businesswoman in the construction industry. She already has a company that she owns with Cebile,



One of the building projects Samukelisiwe is involved in

her 20-year-old sister, called S&C Developers. "We do delivery for suppliers. At the moment there are just the two of us. We are also both interested in livestock farming, and farming in general. We want to do animal farming, particularly pig farming. And goat farming. We will use our father's land," she said. Samukelisiwe's chances of succeeding in this area are big; her mother is also a farmer.

Samukelisiwe is also employed by Figgup General Trading, a company where she did her work-integrated learning (WIL), which does water pipelines and earthworks. On top of that, she does paperwork for her father's company, Sinethando Construction.

## Management Sciences awardee attributes success to family

Slungile Mkhize has received the Vice-Chancellor's Award for the top student in the Faculty of Management Sciences.

"My family inspired me to excel. I come from a very strict family. By strict I mean 'old school' as they still believe that when a girl goes to university, she will eventually meet friends who will mislead her and she may even end up falling pregnant. So I had to invest hours and spend sleepless nights in order to prove to them that I honestly went to university to be a better person tomorrow, not only for me but for them too," said Slungile, who graduated with a Diploma in Human Resources Management.

The secret to her success is simple: time management. She learnt early on that if she was to succeed, she would have to manage the amount of time she spent with her friends, or at least surround herself with good friends.

"I had to surround myself with the right people – not only my friends, but also being able to socialise with



Slungile Mkhize

other classmates and form group discussions with them," said Slungile.

Her path to MUT was not a straight line. Unlike her peers, she joined MUT after two gap-years. "It was not easy at first to get my mind used to the idea of 'learning' again," she admitted. "It was not easy to share a class with students who had recently matriculated, students who studied from privileged schools, and multiracial schools."

Besides having to re-orientate herself to being back in the classroom with fellow students, Slungile also had to contend with financial difficulties and the temptations that come with being a student. "I had to remind myself of who I was, where I came from and what my values were. Of course, that came with surrounding myself with people who challenged how I thought, and those are the people that contributed significantly towards my academic excellence," she said.



# Staff congratulations

## Students give new Acting Dean of Engineering the thumbs up

There is a new sheriff in the Faculty of Engineering. Professor Babatunde Bakare is the new Acting Dean of the faculty and students have thrown their weight behind his interim appointment.

Upon news of his interim appointment being shared on the official MUT Facebook page, students took to social media to commend the University. “It is the right move” and “long overdue” were some of the comments students posted. Professor Bakare brings with him a wealth of experience in research, supervising postgraduate candidates and postdoctoral fellows, and mentoring junior colleagues. Apart from serving the faculty as chairperson of its research committee, Professor Bakare also leads the Environmental Pollution and Remediation Research Group (EPRRG). This research group has produced over 20 journal articles and numerous conference proceedings. Over the years, the EPRRG has hosted and supervised postdoctoral fellows, PhD students, Master’s students and B.Tech students.

Last year, Professor Bakare received a Y2 research rating by the National Research Foundation in recognition of his research output. He holds a Bachelor of Engineering, Master of Science Engineering (Environmental Engineering) and a doctorate in Chemical Engineering.



Professor Babatunde Bakare

- ◆ “Professor Bakare brings with
- ◆ him a wealth of experience
- ◆ in research, supervising postgraduate candidates and postdoctoral fellows, and mentoring junior colleagues.”

## Cooperative Education Director receives her PhD

As MUT strives to continue to offer quality education to its students, staff have embraced this mission by registering for postgraduate and terminal degrees. For academic staff, studying towards postgraduate degrees means that they can now supervise postgraduate students when their departments start offering qualifications at this level.

Support services staff refuse to be left behind by their academic counterparts. One such staff member is Dr Fundiswa Nofemela, Director of the Cooperative Education Directorate, who received her Doctor of Education degree during the lockdown. Her area of specialisation is Work-integrated Learning (WIL), an area that the Cooperative Education Directorate at MUT focuses on.

The title of her doctoral research, which she conducted through the Cape Peninsula University of Technology, was “The effect of Kaizen-based training on the work-readiness of graduates from South African universities of technology”. Dr Nofemela explained that the research “studied the impact of the Employability Improvement Programme (EIP), which is currently being offered as part of the Work Readiness Module at MUT, on students’ and graduates’ level of readiness as they transitioned from university into the world of work”.

The study found that the intervention through the Kaizen-based EIP supported students’ acquisition of interpersonal skills and personal dispositions towards work-readiness.

“However, the EIP was found wanting with respect to developing students’ professional identification with the field of practice, their capability to navigate the South African labour relations context, as well as a greater societal contribution that can be made



Dr Fundiswa Nofemela, Director of the Cooperative Education Directorate

- ◆ “Dr Nofemela’s area of
- ◆ specialisation is Work-
- ◆ integrated Learning (WIL), an area that the Cooperative Education Directorate at MUT focuses on.”

through the exercise of professional and ethical work practices,” said Dr Nofemela. “The study recommended that longer-term, more integrated and better contextualised forms of training are necessary in attaining work-readiness in the complex South African work context.”

## Student Development Officer graduates with a PhD

He has come full circle! Dr Mthokozisi Emmanuel Ntuli, Student Development Officer in the Department of Student Affairs, recently graduated with a PhD in Higher Education. This is the fulfilment of a dream whose implementation began at MUT in 1992 when Dr Ntuli enrolled for National Diploma in Personnel Management at the tender age of 18. Now he boasts of a PhD in a very specialised area: student activism, university governance and leadership development. His title was “Implications of student activism on university governance: a multi-case study in South Africa”. Dr Ntuli did his studies at the University of KwaZulu-Natal.

“I chose this title as it was most appropriate for my area of work. For me student governance and leadership development is not just a job that one needs to do from 8am to 4pm. It is a profession that needs to be taken seriously. We all need to have a deeper understating of what it is like to be a student nowadays, and the kind of challenges that students face, given the historical account of higher education in South Africa. The dynamics of higher education have changed such that it has become essential to think more deeply about student governance and leadership development, and the place of a student at a University,” said Dr Ntuli.

Dr Ntuli is also an alumnus of the Durban University of Technology and the University of Durham, UK, where he did his Master’s degree. In 2018 he was awarded an Erasmus Mundus scholarship to study at the University of Tampere, Finland, on a doctoral students’ exchange programme. While at the University of Tampere, Dr Ntuli attended a doctoral course which was taught by professors from the US, UK, Europe, South America, Africa, Australia and China. This provided Dr Ntuli with new insight on University governance and leadership development, and on student activism, governance and leadership development. Dr Ntuli would like to empower others with the skills and knowledge that he has acquired and would like to utilise his newly-acquired insights and perspectives to help develop the institution.

“This is a very specialised area. I would like to see the number of people that enrol to study this area growing. This will have a direct positive influence upon the management of the higher education sector as the role of the students and student leadership is fast becoming more and more prominent,” said Dr Ntuli.



Dr Mthokozisi Emmanuel Ntuli

◆ *“The dynamics of higher education have changed such that it has become essential to think more deeply about student governance and leadership development, and the place of a student at a University.”*

He added that his immediate goal was to entrench a love for and understanding of student issues in the higher education sector. “I will do this by engaging with colleagues in the sector through writing papers, and sharing information in various ways,” he said. Dr Ntuli has already published papers on student leadership and governance.

Dr Ntuli has been working at the University for 24 years. He worked for seven years in Information Technology & Networks (IT&N) as a technician focusing on access control system management; three years as Bursaries, Loans and Awards Officer; three years as Senior Officer: Bursaries, Loans, Awards and Scholarships; and 11 years as Student Development Officer. His love for interacting with all student-related matters drew him towards the Department of Student Affairs, which he joined in 2009.



# MUT celebrates its women



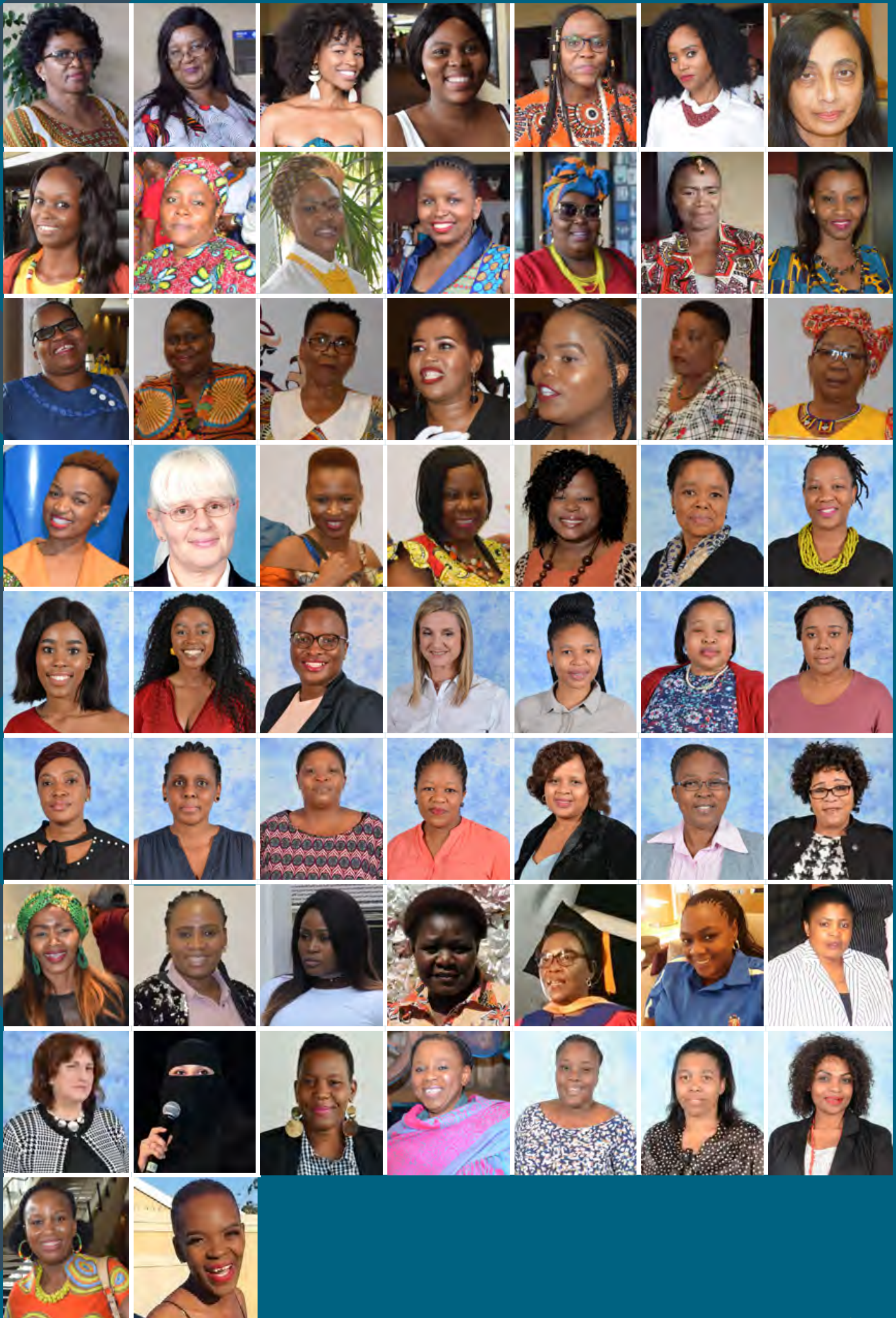














# Celebrating our nursing heroes

## 2020 – International Year of the Nurse and the Midwife

The World Health Organisation (WHO) has designated 2020 as the “International Year of the Nurse and the Midwife,” in honour of the 200th anniversary of Florence Nightingale’s birth. Florence Nightingale, famously known as the “Lady with the Lamp”, was a nurse and social reformer who was in charge of nursing wounded British and allied soldiers in Turkey during the Crimean War. Given the role that nurses have had to play in fighting the coronavirus, 2020 couldn’t be a more fitting year to commemorate their work.

As the biggest segment of the global health workforce, nurses have not only been providing direct patient care during the COVID-19 pandemic, but have been involved in various other areas such as advising governments, leading research, coordinating public health teams and helping formulate humanitarian responses to COVID-19.

Nurses’ wide-ranging expertise, including infection prevention and control, critical care, palliative care and public health, is essential to the maintenance of national and global health systems and the preservation of lives. As the healthcare professionals that are closest to patients, they are often exposed to danger and moral dilemmas, and we salute them for the critical role they have played and continue to play during the pandemic.

More especially, we wish to pay tribute to our own MUT Clinic headed by Sister Nomusa Mkhwanazi, who took it upon herself to lead a discourse on the coronavirus at MUT, breaking all barriers to ensure that staff and students became aware of COVID-19. The Clinic Team has been at the forefront in training staff and students on COVID-19.



Sister Nomusa Mkhwanazi

- ◆ “...we salute them for the
- ◆ critical role they have played
- ◆ and continue to play during the pandemic.”



## Honouring nurses as frontline workers in the fight against COVID-19

While legend has it that the “once and future” King Arthur will come back from his resting place, Avalon, to save Britain from whatever threatens it, the world’s “once and present” – our beloved nurses – are saving lives now, as you read these lines. These frontline workers have risen to the challenge and are tackling COVID-19 head-on. If it were not for them, the story being told about the pandemic would be even gloomier. The efforts of these essential workers have been recognised not only by the WHO but by our own Mangosuthu University of Technology.

According to the Senior Director of the Department of Marketing and Communications, Mbali Mkhize, the University will recognise nurses in two ways: “We will host a public lecture dedicated to the nursing profession. The department has also decided to profile a couple of the nurses. We know that many nurses have contributed to the profession, but we couldn’t write about all of them,” said Mbali. “We also acknowledge that there are also male nurses, and that their role in this field is just as important,” she added. The three nurses that we feature in this edition are



*Dr Phumelele Jabulisiwe Kunene*

our own former colleagues, Martha Buthelezi and Nontando Duma, as well as Dr Phumelele Jabulisiwe Kunene. Combined, these retired nurses have given over 100 years of dedicated service to the nursing profession, and their stories are deeply inspiring.

## Celebrating Martha Buthelezi's contribution to the MUT Clinic

It was in 1994 when Martha Buthelezi joined MUT as a Student Health Officer to focus specifically on delivering health services to students. Martha was already a seasoned healthcare professional with over 20 years' experience. She had worked as a nurse for 10 years at Madadeni Hospital, three years at the Don McKenzie Hospital, over three years at the Tongaat Community Clinic, three years in industry, and a year in Nkandla Hospital as an educator.

"I was recruited strictly for student health services but I knew in my mind that you cannot deny other people these health services," she said. The MUT clinic in those days, explained Martha, was located in Block C and operated more like a first aid room.

"I thought it was a big elephant; one bite at a time. When I came, I had my own vision of what I wanted to do. I started running the clinic before it was registered because I had a background in running clinics. My experience in Tongaat gave me that," she said.

Martha started the process of getting the MUT Clinic registered as a comprehensive health service provider. She recruited a general assistant and enlisted the services of Dr Zodwa Ngobese, as the clinic was required to have a visiting doctor as part of its staff.

Martha explained that the Clinic was important in dealing with health issues as a result of where it was located. The Clinic attended to many student medical emergencies, so much so that it acquired an ambulance for transporting students to the nearby Prince Mshiyeni Hospital. It also served the family planning needs of students, along with attending to Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD).



*Sister Martha Buthelezi*

In these early days of the MUT Clinic, HIV and AIDS was also becoming a significant problem in higher education. MUT rolled out the Higher Education AIDS Programme to help fight the AIDS epidemic and help students graduate alive. "In 1994 the death of students was related to politics," said Martha. "In 1997 the trend had changed; deaths were caused by 'natural causes' because they would not reveal what caused the deaths."

Everything changed in 2000 when the West Wing administration building, where the MUT Clinic is currently located, was constructed. As part of the University's efforts to deliver quality healthcare to students, the MUT Clinic was designed to look like other clinics.

Martha worked at the MUT Clinic for 20 years before she retired. She continues to consult on occupational health.



## Sister Nontando Duma reflects on a nearly 50-year journey as a nurse and educator



*Sister Nontando Duma*

Nontando Duma, who was born in Inanda near Durban, spent almost half a century of her adult life as a nurse, working in six hospitals and teaching at MUT in its technikon days. She worked as a nurse from 1969 to 2016, doing her formative training at Durban's McCord Hospital where she studied General Nursing. She then went to King Edward VIII Hospital in Durban where she studied Midwifery, and proceeded to do a nursing degree at UNISA.

From a very early stage in her life, Nontando was attracted to the professional look of nursing. "I chose nursing because I had passion for it. I was also motivated by the attitude and behaviour of nurses during the 1960s when nurses were highly professional, and their behaviour and mannerisms spoke volumes about the profession," said Nontando.

During the apartheid years, the scope of work was very limited for black people. Only teaching, the police force, the army, nursing and a few other professions were available to them. For women, the scope was even narrower. Fortunately for Nontando, she preferred nursing and never regretted it. "Once a nurse always a nurse. I loved dealing with the needy, vulnerable, children and elderly people, especially in the community."

Nontando said the highlight of her career was when she was a senior nurse. "That was the time when I had to focus on the end results rather than on procedures. Emphasis was on creativity and flexibility, rather than on uniformity," she said. As a manager, Nontando had to promote ethical responsibilities and moral issues in health care with emphasis on disease prevention through health education. She also had to explain legal aspects and regulations in the health service, and how to use the resources at their disposal. "As part of resource management we had to have a good grasp of the methods of financial services in health care, as well as the theories of micro and macro-economics," said Nontando.

This was a time when everything in the country had the potential to become a political mine field. Nontando understood this, and applied the necessary diplomacy. She said nurses, like everybody else, had to be aware of who was wielding power, and how they had to deal with the situation. "We had to be sensitive to the use of power, understand who had it and who did not, and how power or influence was acquired and lost, and when to use it and not to use it."

Highlighting the varied responsibilities of nurses in a society, Nontando said they are educators of health personnel and health consumers, and are also counsellors – helping clients to choose viable solutions to health problems by assisting them to take informed decisions. She also said that nurses have to play a leadership role, explaining that: "Nurses are role models where they consciously or unconsciously demonstrate behaviour to others who will perform a similar role. Nurses practise an advocacy role based on the principle of humanity. This is based on the principle that clients are unique, and will therefore have a unique relationship with the nurse."

From 1993 to 1998 Nontando taught nursing at MUT while it was still a technikon. She was a senior lecturer, and acted as head of the department. She said some of her students went on to hold senior positions in the nursing profession. She also worked in the UK where she got "satisfaction from working with different



Nontando Duma, left, with a colleague

elderly people, allaying their anxieties, promoting self-sufficiency, and keeping them company until their end of life”.

Nontando remembers the apartheid era as being both good and bad for a nurse. “We had no time for white racists. We grew up during the Black Consciousness Movement (BCM) when we knew that ‘black is beautiful’, and didn’t have time to pretend to be something we were not. We gave all our care and love to our own people unconditionally and excelled in what we were doing as nurses,” she said.

Nontando said one of the drawbacks of the time was that the best jobs were reserved for white people. “Whites could have senior positions, irrespective of their qualifications or competence.”

Nontando has been married to Richard Duma since 1968 and they have four children – two sons and two daughters. She moved to Lamontville when she got married and the family now lives in Hillcrest, west of Durban.

## From humble beginnings to an academic in the nursing profession – the story of Dr Phumelele Jabulisiwe Kunene

For some black people growing up during apartheid, having a Junior Certificate (JC) was one of the major achievements. Times were tough; the powers that be were not comfortable with blacks obtaining better education. They were seen as a threat to the order. Because education was a light with which black people could illuminate their future, it was in the interests of the apartheid government to limit their educational progress as much as possible.

For a black girl born in 1939 in a remote rural area called EsakwaBiyela, near Melmoth in what used to be called Zululand, life was surely going to be tough. The colour bar system, and then apartheid from 1948, ensured that black people started life on the back foot. Like most of her peers, Phumelele Jabulisiwe Kunene did obtain her JC. However, for the go-getter that she was, this was not enough. She only left school because of a lack of funds. Phumelele enrolled for nursing at KwaCeza, a mission hospital, while she continued to work towards her matric through private studies.

Nursing was one of the few professions that black women could turn to in those days. But for Phumelele, it was more than that: she ‘loved’ it.

“I grew up in a home very close to a mission hospital. Nurses were my good role models. I longed to be part of the caring profession of nursing. Nurses were smartly dressed in their uniform, and disciplined. Good Christian values impressed me as I was born and brought up in a Christian family where caring was emphasised,” she said.

For a young black woman, nursing was a God-sent profession. “It also helped for us people with financial constraints in that as a student, one got a stipend instead of paying for the tuition fees,” she remembered.

Back then marriage for nurses was seen as a next step; nursing and being married was a nice package indeed! Phumelele moved to Durban when she got married, and it was here that she got employment.



*Dr Phumelele Jabulisiwe Kunene*

She also continued to study. She obtained her major nursing profession – B. Cur E et A (majoring in Community Health Nursing, Nursing Administration (with distinction) and Nursing Education) when she was 46 years of age. After that, it took Phumelele less than 20 years to achieve a doctorate in nursing from the University of Zululand. This octogenarian spent 42 years in the profession, ‘retiring’ in 1999, but continued to work full-time for another seven years. After that, alongside being a priest in her retirement, she continued to be sporadically involved in health care and related work.

In her almost half-a-century in the profession, Phumelele singles out a number of highlights. For instance, she became an assistant teaching nurse before she got her qualification. “As a senior student nurse in a small rural training hospital with few nurse educators, in my last year I assisted the nurse educators with first year students’ orientation, teaching in class and practical work,” she said, adding that her interest and expertise in this area of nursing education grew and was recognised.

“It is for this reason that I ended up as a nurse educator in nursing colleges and university nursing departments, teaching diplomas and degrees,” she said.

She also promoted private university study for nurses employed full-time in hospitals. As a Senior Sister, now called Operations Manager, she also supervised nursing students that were doing Clinical Care Administration and Instruction. Phumelele was happy

with the outcome of what she was doing. “It was good to see young nurses develop to become nurse leaders in the nursing profession, and moving up the ladder to high management positions in the health care system,” said this professional who was once awarded a prize as ‘Best Nursing Care Unit Manager’.

Another highlight in her career was being among the first nurses at King Edward VIII Hospital to be given the opportunity to study Intensive Care Nursing at Wentworth Hospital. “On return from that course, we were allocated to be part of the group given the responsibility of preparing for installation of a new Intensive Care Unit to be opened at our hospital,” she said.

While working at Clairwood Hospital, another Durban hospital, Phumelele was in charge of the In-service Department. She was also appointed facilitator of a course called A Nursing Process Approach to Nursing, a newly introduced package. “Part of my responsibilities in this department was to enforce continuous practical nurse learning to keep nurses updated since this was not a training hospital,” she said.

As part of the University of Zululand Nursing Science Department, Phumelele was assigned to go and open a new Nursing Department at its Umlazi Campus. “This was a big success and offered nursing degrees and diplomas like those offered at Main Campus,” she said. Many professional nurses were able to attend and study University courses part-time while fully employed. This department grew and has produced many nurse leaders in the health care system.

These are just a few of Phumelele’s milestones in her career as a nurse. After retirement, Phumelele got involved in community health projects, especially HIV and AIDS and TB. She was particularly involved in training and supervision of Home Based Care.

Reflecting on the unjust and inhumane apartheid system, Phumelele said nursing was not exempted. For instance, white nurses were paid higher salaries. Conditions of service, placement and allocation of duties were also much better for white nurses. Training schools were segregated, with no mixing of races. “Black nurses were barred from observing or assisting in certain special procedures if performed on a white client, even if that condition or procedure was so rare that they might never see it during their training,” she concluded.



# MUT researchers take on COVID-19

## MUT research contributes to search for COVID-19 vaccine

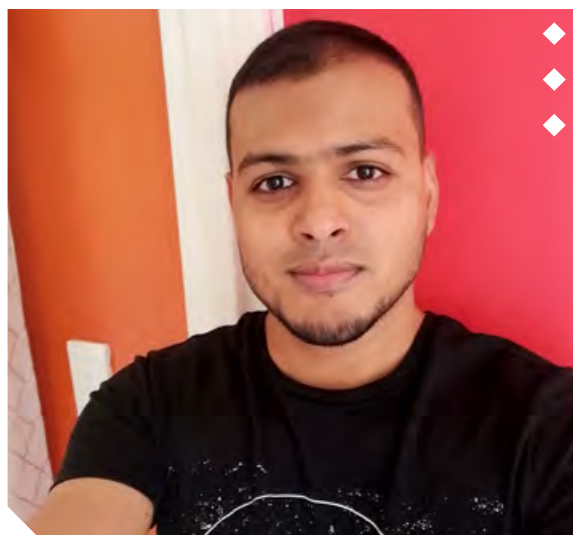
Mangosuthu University of Technology researchers have published a peer-reviewed research paper on the feasibility of potential drugs against the coronavirus. Dr Devashan Naidoo, Dr Taurai Mutanda and Professor Akash Anandraj, all from the Department of Nature Conservation's Centre for Algal Biotechnology (CAB), collaborated with their counterpart at the University of North Bengal in India to conduct a three-month computational study on COVID-19.

Dr Naidoo, the principal investigator, said: "We wanted to determine the feasibility of cyanobacterial metabolites as potential drugs against the virus. For a drug to be effective, it is required that it binds to the virus at functional sites."

"We found that several compounds were able to bind to the proteins with relative potency. However, for a drug to be effective it needs to also be safe and non-toxic," said Dr Naidoo. The research team evaluated the toxicity of each of the compounds and found that one in particular, deoxycylindrospermopsin, was the safest. The safety and stability that the compound displayed are the hallmarks of a potential drug.

In terms of how South Africans will benefit from the research, Dr Naidoo said the compounds evaluated in the study are proposed as candidate lead drugs that require further evaluation *in vitro* and *in vivo*. "Since we predicted that these compounds have the ability to bind to functional components of the viral genome, they could potentially inhibit the processes that lead to viral replication," said Dr Naidoo. He added that it would give the host the ability to effectively control the spread of the virus within the body. He said this research could pave the way for the development of effective therapeutics in the fight against COVID-19 in South Africa as well as globally.

However, Dr Naidoo admitted that researchers were still far from developing an effective treatment or vaccine for the virus, although great strides have been made in this regard. There are some 145 vaccines



Dr Devashan Naidoo

that are currently undergoing clinical trials globally and several drugs that are currently being evaluated. "However, the processes are complex and require a lot of time and effort. For instance, the compounds that we propose require further evaluation under laboratory conditions as well as clinical trials prior to approval by the Food and Drug Administration (FDA). This process could take months," he said.

Dr Naidoo said the research was done over a period of three months during South Africa's lockdown. The title of the paper is "Cyanobacterial metabolites as promising drug leads against the M<sup>pro</sup> and PL<sup>pro</sup> of SARS-CoV-2: an *in silico* analysis".

## MUT scientist flies the MUT flag in BBC discussion on COVID-19

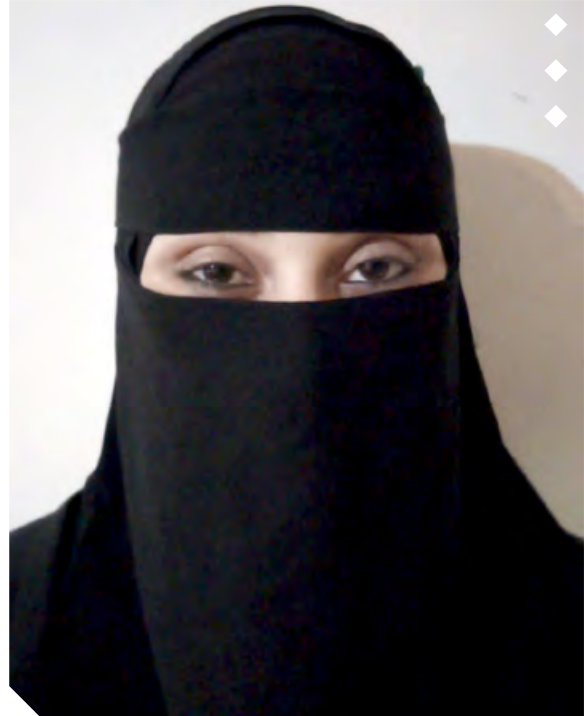
June 23, 2020 was the day that one of the University staff members made history! Dr Maryam Jordaan, NRF Administrator at the MUT's Research Directorate, joined scientists from around the world in a BBC discussion to explore and inspire worldwide innovation to combat the COVID-19 pandemic.

"During the meeting we had the opportunity to make comments and ask questions directly with an expert panel of four world-class engineers involved in the COVID-19 response. BBC presenter Kevin Fong hosted this exciting global conversation to explore and inspire innovation worldwide," said Dr Jordaan. Dr Jordaan was part of an audience representing six continents.

Dr Jordaan believes a world effort is required to deal with COVID-19. "In order to combat the coronavirus, a combined global effort is needed; the BBC World Service and the Royal Commission for the Exhibition of 1851 created a special online forum which took place on 23 June 2020," said Dr Jordaan.

Dr Jordaan and her colleagues at the University, Dr Oluwakemi Ebenezer, Dr Nkululeko Damoyi and Dr Michael Shapi, have already written a paper on COVID-19. The paper, titled "Virtual screening, physicochemical properties and molecular docking study of FDA approved compounds similar to ARV efavirenz, targeting COVID-19" was accepted by Heliyon, an open access journal. The team has also submitted another paper for review. The preprint for this paper is available at <https://www.researchsquare.com/home>.

Dr Jordaan is one of the University's annual Research Award winners. She has also been acknowledged by the Technology Innovation Agency (TIA) for her innovative ideas. She won the TIA's Global Cleantech Innovation Programme Award (GCIP-TIA) for the best



*Dr Maryam Amra Jordaan*

women-led team, and was the TIA female investees winner for the best social impact innovation in 2019. "TIA has further invested in my business development skills through the Leaders in Innovation Fellowships (LIF) programme facilitated by the Royal Academy of Engineering, from which I won first place at the pitching event in London in January 2020," said Dr Jordaan.

The participation of Dr Jordaan in the BBC discussion was highly applauded by the Research Directorate, under which Dr Jordaan works. "Everybody in the Research Office is filled with excitement. We cannot be more proud of Dr Jordaan," said Dr Anette Mienie, Director, Research.

# ALUMNI CORNER

## MUT graduates heed management advice and start their own businesses

Two former students, Bright Hlongwane and Njabulo Mabaso, have taken a page from Professor Marcus Ramogale's book. The Acting Vice-Chancellor is on record emphasising the need for students to be job creators, and not job seekers, and has proposed that business studies be part of the mainstream academic programmes. This would offer graduates a chance either to be employed or to create jobs.

Both Bright and Njabulo have taken the decision to become businessmen, and their willpower is likely to take them further.

Bright's story clearly indicates that this young man is way ahead of his time. Bright, who recently graduated with a Diploma in Public Administration, has been nominated to serve on the Presidential Youth Working Group, chaired by President Cyril Ramaphosa. He has also recently been nominated for the Prestige Awards by his colleagues at the Isimangaliso Group, a media, marketing and communication firm based in the Durban CBD. Bright's colleagues were responding to an invitation from Corporate LiveWire, the London-based organisation that is organising the awards in South Africa and overseas.

Bright, who also runs a non-profit organisation called Youth in Business, was nominated for his sterling efforts in youth business participation. "Corporate LiveWire sent us an invitation upon seeing my profile

online. They invited us to take part in the nomination," said a very excited Bright.

According to him, the reason for the Prestige Awards is to recognise the effort young entrepreneurs put into the economic development of their countries. "I feel very excited and proud to know that our efforts as young South African entrepreneurs are known and recognised abroad," he said. The event is planned to take place towards the end of the year, or early in 2021 in London, UK, but it will all depend on the coronavirus situation.

Bright, who attended the Advanced Entrepreneurship Programme at Stanford University in the United States in 2017, has become known as a staunch advocate of entrepreneurship. During Youth Day on June 16 this year, he was on Ukhozi FM and eTV News, talking about how important it is for the country's youth to get involved in business as job creators, not job seekers.

Njabulo's story is equally inspiring. This intrepid young marketing graduate from the Class of 2019 set a deadline for employers when he sent out his job applications (usually it would be the other way around), and his impatience to get started resulted in the creation of his own business. Some months ago, 26-year-old Njabulo started a business venture that is poised to make a mark on his immediate community, and his family. Having previously tried a number of other business ventures, he spotted a gap to start a

*Hard at work! Njabulo Mabaso*



*Njabulo's colleagues loading coal into a truck*



*Wood ready to be delivered to customers*





wood and coal-selling business in the Mpumalanga province where he lives.

“We had wattle wood at our homestead and I told my siblings I was going to sell that wood for us to get money to buy bread. Like everybody, we also use the wood for cooking and to keep ourselves warm,” said Njabulo. The family has been hard hit by the coronavirus pandemic, with no source of income. Njabulo himself lost his internship because of the virus. The new venture was the step that gave Njabulo a chance to show his mettle.

“I sold almost six wheelbarrows in a week. That was my first success,” said Njabulo. Soon the family needed to make some important adjustments. “We decided as a family to sell the family bakkie to buy a truck so we could sell more wattle wood. Soon I added coal to my stock that I sell in the township.” Njabulo gets wood from three local farms, and coal from the coal mines around Ermelo.

Njabulo has learnt from his failed business ventures. He has a plan that will ensure that Compte, his current company, does not suffer the same fate. “I want to take advantage of the digital space to grow my business. I will use Google and social media to promote it. I will also lease stands around Ermelo where my target market will reach my products. This will also ease my delivery costs,” said Njabulo.

A very confident Njabulo said he was planning to sell the wood to some of the big chain stores in the area, but was still working on branding his plastic packaging. He said he would use skills he learnt in class to build his business. These skills, particularly door-to-door selling and social media, have given his customers confidence to purchase his products. “I have decided to post at least three messages a day on Facebook using humorous status updates about my products. This helps to engage my customers, and bring awareness about what I sell,” said Njabulo.

## Cultivating a future through entrepreneurship

None of us has control over the economy, the job market, or anything else in the global sense; however we are 100 percent in charge of how we respond to the challenges that come our way. Given the shrinking job market in South Africa, it is time for our youth to create their own opportunities and to look where others are not looking.

Entrepreneurship has been advanced as a solution for youth unemployment and wealth creation. The role of entrepreneurship in economic development is being recognised by MUT marketing graduate Yandisa Mdolo, 27, who after taking up a few unrelated jobs for a couple of years, relinquished the security of employment and created his own opportunity using the skills he acquired at the University to penetrate the business market. Mdolo acknowledged that starting a business is “a bold step that will need sacrifices, taking risks and having the willpower to overcome obstacles”.

After two years of intensive research and crafting his ideas, Mdolo was finally funded by the National Youth Development Agency (NYDA). He recently won the SmartXChange Best Newcomer of the Year at the small business incubator’s annual awards ceremony.

Mdolo is now the CEO of Black Cotton Marketing, a marketing business solution tailored to help small



Yandisa Mdolo

enterprises to reach new heights. The company provides digital advertising space via electronic TV screens installed in minibus taxis on the KwaZulu-Natal South Coast. Mdolo envisions his company as a full-service marketing agency in the next five years. He has a gifted and highly motivated team behind him that is working on creating innovative marketing solutions to suit brand personalities.

“My own path to marketing was not planned. I was led by talk shows and activities that used to be organised by my residence at MUT. There is more than one way that leads to success in marketing,” he concluded. In order for South Africans to compete globally, he said we need to become trend setters, inventors and global suppliers. “Yes we can,” he concluded.

## Alumnus scores a career break in Saudi Arabia

Building a career abroad means learning new norms, cultures and most importantly, being willing to accept cultural differences as an answer for why certain things can't be done.

Thabani Khanyile is a mechanical engineering graduate from the Class of 1990 who found better career prospects in Saudi Arabia and seized the opportunity with both hands. Thabani, who used to picture himself designing cars for Toyota, now works for one of the world's biggest oil companies, Saudi Aramco, which has more than 79 000 employees and 7 refineries.

Khanyile believes that the less graduates tie themselves to their homestead, the better their mental growth and openness to new adventures and international experience will be. Mechanical engineering was a



Thabani Khanyile

great window that opened all these opportunities for him in the 1990s.

Back then, being at a university was the greatest opportunity for a black child from a rural area. "Our lecturers were open-minded and understood that English was not our first language. Fortunately, they understood the challenges of the community of Umlazi. They inspired and displayed patience which helped in building our confidence to study hard," he said.

Khanyile also owns a logistics company currently operating in South Africa, called Sesikhanyile Logistics. It is responsible for transporting goods. His vision is to return to South Africa in a couple of years to expand his business and use the skills he has acquired to enhance the experiences of graduates of his alma mater, Mangosuthu University of Technology.

## The spirit of giving back is the essence of a successful life

Doing a National Diploma in Accounting and B.Tech in Cost and Management Accounting at MUT was a well thought-through decision. Smanga Mathonsi made after completing his matric at Tshana High School in his hometown of Mandeni on the north coast of KwaZulu-Natal.

Mathonsi received his two qualifications in 2014 and 2015 respectively, and is currently CEO of Dunga Creations, an accounting and taxation firm that he founded in 2017 and which currently has five diverse operations. Mathonsi says that no industry is immune to change and that inspiration rarely arrives when you are doing the same thing every day. He is currently pursuing a Master's degree in Cost and Management Accounting at Cape Peninsula University of Technology.

Determination and hard work have landed Mathonsi accolades from the beginning of his career, which started in 2015 with a six-month stint at Virtual Back Office. In May 2018, he aced his board exams and



Smanga Mathonsi

became qualified as a professional accountant and tax practitioner.

Mathonsi credits some of his success to the ENACTUS organisation at MUT. Being part of it made him realise that the future of the country is in the hands of the youth who take leadership roles and are eager to find solutions through entrepreneurship.

As an active student, he was elected to be part of the ENACTUS national competition representing MUT in Johannesburg. They competed with more than 21 universities and managed to achieve fourth position for the first time since ENACTUS' inception at MUT. This is one of his best memories and he holds it close to his heart.

"My passion is helping students. The experience I have gained over the years is that in life, most times we have to give without expecting anything in return. This creates a culture of givers and God rewards selfless givers with what they never imagined," he said.

Mathonsi wants to remove the notion that students who graduate from universities of technology (UoTs) are less valuable than those from traditional universities. One of the bigger plans he has for opening an accounting firm is to be able to employ mostly students from UoTs, particularly MUT graduates.

Mathonsi has been an unrecognised tutor for MUT students for the past nine years in Financial Accounting, Taxation and Cost and Management Accounting. Seeing students who used to get 30 to 40% in their tests and exams getting 70 to 90% after attending his tutorial classes is extremely satisfying for him.

In 2018, he launched an accounting competition known as Power of Accountancy, sponsored by the profession's second largest accounting association, the South African Institute of Professional Accountants (SAIPA).

Even the COVID-19 pandemic couldn't stop Mathonsi's passion for helping students. He opened a WhatsApp group where accounting students ask difficult questions and he lets other students exercise their understanding first, then gives them the correct answer. He believes this way he is able to let them evaluate their own understanding of the principles of the subject.

Mathonsi values mentorship which has assisted him in every phase of building his trade. He has mentored many students and will continue to contribute to knowledge generation through his ventures. He believes in the saying that "it takes a village to raise a child" because he was once that child.

## Electrical engineering graduate to help manage Pietermaritzburg's Msunduzi municipality

He was only 19 years old and had no registration cash when he enrolled at MUT for a National Diploma in Electrical Engineering. But with Grade 12 distinctions in Maths and Physical Sciences and a passion for learning, Cyncol Akani Sibiya succeeded in acquiring financial help from the National Student Financial Aid Scheme (NSFAS) and focused on building a brighter future for himself. Less than four years since he graduated, Sibiya will be starting his new job in Pietermaritzburg as a manager for metering and tariffs at the Msunduzi municipality. This is the result of Sibiya's outstanding dedication towards his work.



Akani Sibiya

He is also about to finish his Master's degree in Electrical Engineering at the Central University of Technology. He is being supervised by MUT's Dr Papy Numbi who, upon receiving news of Sibiya's appointment as manager, said, "You have made MUT proud; only four years from your graduation, you are now a manager in a municipality...WOOW!"

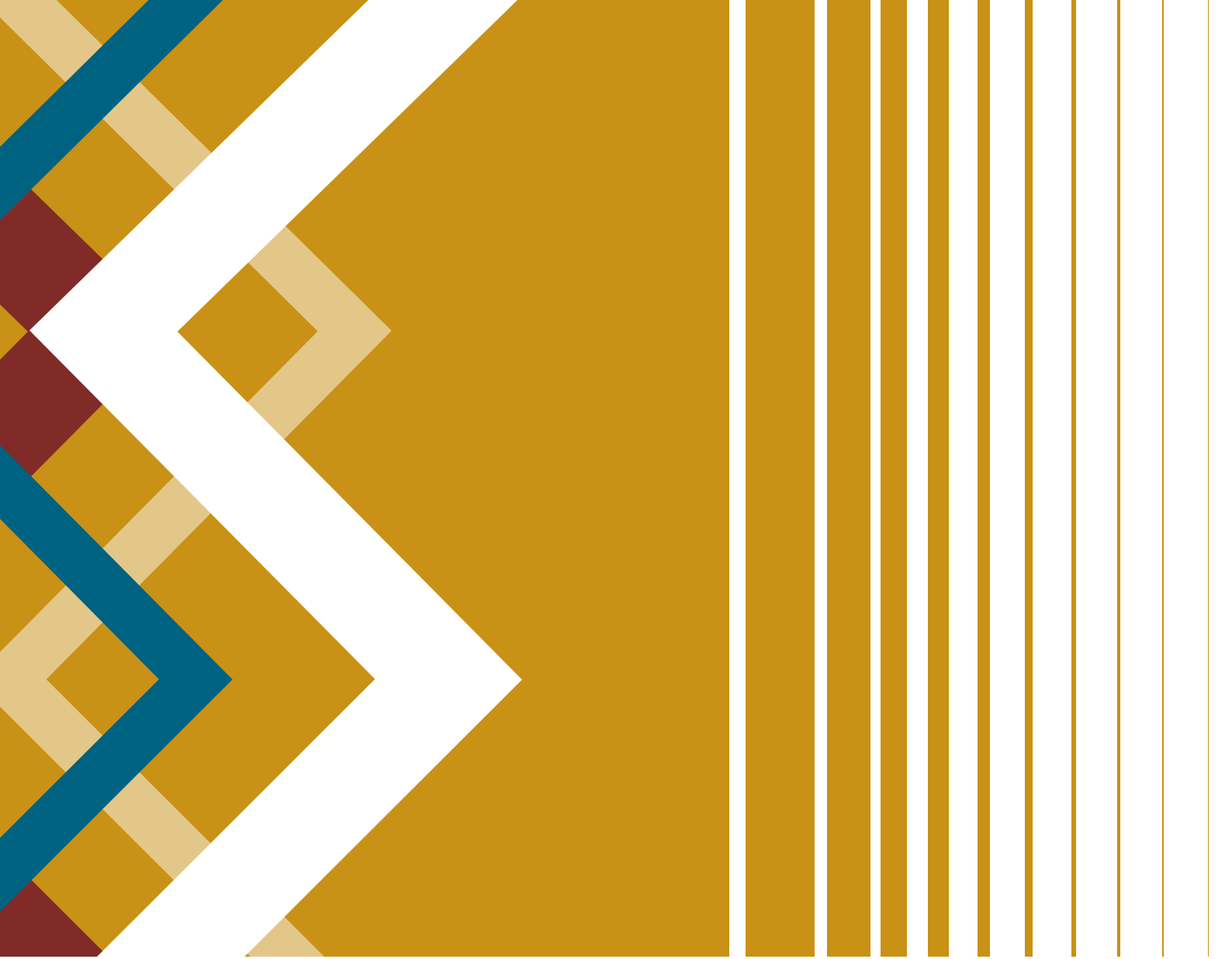
Sibiya's very senior appointment comes amid a very gloomy atmosphere in which people are losing jobs as a result of COVID-19. Dr Numbi believes his success

can be used to motivate other students. "Akani can also help as a point of contact who can assist for student placement for the in-service training of our students," said Dr Numbi.

Much has been said about the character of an individual and the people he or she associates with. Sibiya says that he considers himself lucky to have got close to people who have influenced his life. Some of these are MUT academics. "I got very close to people like Dr Numbi, Dr Owolawi, Dr Mulangu, Prof Kusakana, Mr Magenuka and my uncle Jerry Nwamba, a TUT lecturer, to name a few. They all said they saw a lot of potential in me, being a hard worker and a good student. They always believed in me and made it clear that I can get to their level and beyond," said Sibiya, who would like to pursue his studies up to PhD level.

Born in Johannesburg, 27-year-old Sibiya went to Mawila Primary School in Meadowlands, Soweto. After passing Grade 3 he went to Giyani, Limpopo, and continued at Samson Shiviti Primary School. He did his high school education at Mavalani High School. His brother told him about MUT, and the rest, as they say, is history.





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