

2021 ISSUE 27

ALUMNI MAGAZINE OF THE
UNIVERSITY OF PRETORIA

TUKKIE

TATJANA SCHOENMAKER
UP's golden girl



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Tuks Alumni

Letter from The Editor

Dear *Tukkie* reader,

Welcome to the 2021 edition of *Tukkie*, the University of Pretoria's alumni magazine. This has been quite an interesting year as we tried to get to grips with COVID-19, which has been a presence in our lives for more than 18 months. It seems we will have to get used to life with this virus lurking in the background. However, the vaccine, plus other measures we need to take to mitigate its effects, should hopefully mean the future will become brighter and full of possibilities once more.

In this edition of *Tukkie* we talk to Tatjana Schoenmaker who set a world record for the 200m breaststroke at the 2020 Tokyo Olympic Games in July this year. We find out how UP researchers are using the history and favourable genetics of southern Africa's Nguni, Afrikaner, Drakensberger and Bonsmara cattle to increase productivity and food security.

We hear from UP alumna Lalela Mswane who was crowned Miss South Africa 2021. We also celebrate with Professor Stephanie Burton who won the Management Award at the 2020/2021 National Science and Technology Forum (NSTF) NSTF-South32 Awards.

We then check in with the Faculty of Health Sciences and Steve Biko Academic Hospital after they welcomed Stevie, a mobile robot that will help improve the treatment of patients during the COVID-19 pandemic.

We watch how trail-blazing innovators and leaders get a platform thanks to LeadUP, a new podcast series that lets alumni and friends of the University share their stories and leadership lessons.

Speaking of trail-blazing, we check out the Onderstepoort Veterinary Academic Hospital's first magnetic resonance imaging scanner. Still with Vet Science, the Faculty and the Southern Africa Animal Cancer Association have teamed up to create an oncology centre for clinical cases and research in animals.

We then meet Dietrich von Staden (95), his wife, Sannie (93), and their daughter, Liebeth Turbati (63) – all graduates of the University of Pretoria (UP). Dietrich graduated with a BSc Agriculture in Horticultural Science in 1949, Sannie obtained a degree in social work in 1949, while Liebeth graduated with a BPolSci in 1979.

This is not all, there is much more to read and discover within the pages of this beautiful magazine.

We hope you enjoy this issue, and, as always, we look forward to your feedback, along with story ideas for future issues.

Drop us an email at alumni@up.ac.za.

Tebogo Menong



TUKKIE

Opinions expressed in *Tukkie* are those of the individual concerned and not necessarily the view of the University of Pretoria. *Tukkie* is published by the University of Pretoria's Department of Institutional Advancement.

Any editorial queries or information can be sent to:
Tebogo Menong
Email: tebogo.menong@up.ac.za
Tel: 012 420 3047

Change of address

Please send notification of address change or cancellations to:
Email: alumni@up.ac.za
Tel: 012 420 3533
Fax: 012 362 5088
Quote the code that appears on the address label in all correspondence.

Editor:

Tebogo Menong

Contributors:

Xolani Mathibela
Shakira Hoosain
Primarashni Gower
Dr Sian L. Tiley-Nel
Dr Sadna Balton
Mmane Boikanyo
Dr Liana le Roux
Ms Lesley du Toit
Mecayla Maseka
Samantha Castle

Design & Layout:

Words'worth

Cover:

Clive Rose, Getty Images

University of Pretoria's

Alumni Relations Office Personnel

Samantha Castle

Senior Manager: Alumni Relations
Tel: 012 412 3044
Email: samantha.castle@up.ac.za

Vuyo Ntloko

Alumni Events Coordinator
Tel: 012 420 3912
Email: vuyo.ntloko@up.ac.za

Henriette Minnaar

Alumni Events Coordinator
Tel: 012 412 3980
Email: henriette.minnaar@up.ac.za

Xolani Mathibela

Alumni Communications Coordinator
Tel: 012 420 5026
Email: xolani.mathibela@up.ac.za

TUKKIE

From the Alumni Desk

Dear *Tukk*ie reader,

What a year 2021 has been! We hope that you have kept yourselves and your families safe and we pray that the effects of COVID-19 have been very minimal on you. With all the challenges faced by the world in general, and our institution specifically, we have had to find new ways to keep our University running efficiently, while staying in touch with you, our alumni.

Here are highlights for the year, some of which are found in the magazine:

Quality outcomes

The Quacquarelli Symonds World University Rankings by Subject for 2021 has placed UP as the leading university in South Africa for four subjects: Theology, Divinity & Religious Studies; Engineering (Electrical and Electronics); Mathematics; as well as Accounting & Finance.

Furthermore, our School of Engineering in the Faculty of Engineering, Built Environment and IT, Veterinary Science Faculty as well as the Law Faculty are ranked number one in Africa.

The Department of Zoology and Entomology in the Faculty of Natural and Agricultural Sciences has been ranked 45th globally for its research and impact by the University Ranking by Academic Performance (URAP). The Department of Zoology continues to be number one in Africa in this ranking, which is for the 2020/2021 period.

Launch of the LeadUP podcast series

The Alumni Relations Office recently launched the LeadUP Podcast series, which is a spin-off from the LeadUP webinars. The podcast, in which alumni and friends of the University share their stories and leadership lessons, aims to inspire listeners to be a force for positive change, and to add our collective voice to global conversations to help find solutions to some of the challenges we face as a continent and broader global society. New episodes are available every second Monday at www.up.ac.za/leadup or on Spotify and Apple Podcasts.

MAIL & GUARDIAN 200 young South Africans list

Over the years, UP has had staff members, students and alumni featured on the list, furthering the University's aim to produce citizens who are not only suitably qualified, but also committed to using their skill sets in service of the communities they live and work in. This year, we have seen an increase in UP-associated individuals on the list, from 18 in 2020 to 22 in 2021.

The first Nobel Prize Dialogue in Africa

In May, UP hosted Africa's first Nobel Prize Dialogue, the theme of which was 'The Future of Work'. Broadcast online from the University's Future Africa institute and campus, the event featured five

Nobel Prize laureates. It aimed to bring science and society closer, and stimulate creative thinking by gathering a unique group of laureates, opinion leaders, policymakers, students, researchers and the general public.

UP hosts President Cyril Ramaphosa and French President Emmanuel Macron

Africa is capable of manufacturing safe and effective vaccines – it just needs the support to do so. This was the abiding sentiment at the 'High-level dialogue on manufacturing vaccines in Africa' that was led by South African President Cyril Ramaphosa and French President Emmanuel Macron, and hosted at the University of Pretoria's (UP) flagship Future Africa institute and campus. The event, which was broadcast online, was part of President Macron's first state visit to South Africa.

Growing international partnerships

In recent months, UP strengthened its academic and scientific research collaboration with Ghent University in Belgium and Michigan State University in the US, and became the first university in Africa to sign an institutional agreement with Cornell University, also in the US, to facilitate academic exchange and collaborative research on sustainability. We also formalised our partnership with Leeds University in the UK, to collaborate on, among others, food systems research.

A research-intensive institution

Several UP academics continue to cement the University's status as a research-intensive institution. Prof Hanlie Smuts of the Department of Informatics was selected to lead a group of BRICS alliance researchers to investigate how artificial intelligence and ICT technology can help address issues around pandemics. Prof Eugénie Kayitesi and Dr Farai Kapfudzaruwa received R5,6 million in grants from the Alliance for African Partnership to improve food security and nutrition; and Prof De Wet Swanepoel of the Department of Speech-Language Pathology and Audiology led a study that resulted in the development of a first-of-its-kind device to reduce the risk of hearing loss caused by personal audio systems.

A UP team led by Professor Gerhard Steenkamp, a veterinary specialist in dentistry and maxillofacial surgery at the Faculty of Veterinary Science, gave Max, a blue and gold macaw from a bird sanctuary in the Western Cape, a new lease of life with a 3D-printed beak.

A study led by a UP master's student using South Africa's MeerKAT telescope has led to the discovery of a group of 20 galaxies. This large galaxy group is likely the most neutral hydrogen gas-rich group ever discovered, and it is the first time this group has been identified, despite residing in a very well-studied area of the sky.

These and other notables, such as the University hosting the International Symposium on Robotics and Artificial Intelligence in Libraries and the Education Sector; Professor Stephanie Burton being announced as one of the winners at the 2020/2021 National Science and Technology Forum (NSTF) NSTF-South32 Awards, as well as Professor Tawana Kupe being awarded an honorary doctorate

(doctor honoris causa) by the University of Montpellier, are the fuel that will ensure that we remain future-focused, and continue to undertake research that is relevant to people's lives and is transdisciplinary in nature.

The Alumni Office will continue our efforts to keep in touch with you, and we urge our alumni to stay in contact with us. If you haven't done so, please join the UP Alumni Connect platform.

I would like to take this opportunity to wish you a restful and loving festive season. Please stay safe and I look forward to connecting with you again in 2022.

Ms Samantha Castle
Senior Manager:
Alumni Relations



UP's Golden Girl

When Tatjana Schoenmaker first stepped onto the Olympic podium to claim silver, South Africa rejoiced. When she stepped up a few days later to take gold, the world marvelled at her athletic performance and personal humility.

Tatjana Schoenmaker put South Africa on the map and at the medal table when she set a world record for the 200m breaststroke at the 2020 Tokyo Olympic Games in July this year, subsequently winning gold. She also finished the 100m breaststroke in second place, earning a silver medal

"I am grateful to everyone who walked this journey with me," she said. "Without God's grace, we would not be here. I would not be a gold medallist and have earned a degree if it was not for UP and TuksSport. I am grateful for the journey, and I am lucky to be able to do what I love."

Immediately after her spectacular win, she turned the spotlight on another Tuks-based swimmer: "I would have been happy just to swim an Olympic final. But, to have Kaylene Corbett, my teammate, swim the same final made everything more special." Kaylene came fifth in a time of 2:22.06, a personal best.

Addressing guests during the lunch that was held in her honour at her alma mater, Prof Tawana Kupe said that the minute Schoenmaker had crossed the winning line, he set in motion plans to meet her. "It was a moment of delight," he said. "Many strive for accomplishment and excellence, but Tatjana has reached that. You did well, Tatjana – not only for yourself, but for your family, friends and the country."

Schoenmaker's coach, Rocco Meiring, said he and the swimming champ are grateful to UP for prioritising sport at UP.

"Sport is a powerful force and Tatjana Schoenmaker is an example of that."

About six weeks before the Games, Meiring contracted the COVID-19 virus. There was a stage when he could hardly breathe and he spent five days in a hospital's intensive care unit. Yet, throughout this ordeal, he never lost focus. Two days after being discharged, he was back at the Tuks swimming pool to coach Tatjana and Kaylene.

The one, the place

Television commentators lauded Schoenmaker's performance as a special moment in Olympic history. There was even praise for the University as one of the world's best coaching facilities.

"Tatjana has been committed since day one," said Steven Ball, Director of TuksSport. "And Rocco Meiring spotted her from day one, and specifically asked to work with her because he knew she was the one – and here we are today, celebrating their achievements."

Professor Rendani Mulaudzi, Deputy Director of Sports Management at TuksSport, also offered his congratulations to Schoenmaker and Meiring and for the University's continuous support in the form of funds and personnel facilities. "Without this kind of support, TuksSport would not be the best in Africa and in the world."

Leo Dlamini, Chief Executive Officer of TuksSport sponsor Bestmed Medical Scheme, told Tatjana and Coach Meiring,

"it is your partnership that made this happen; Bestmed Medical Scheme as a partner of UP congratulates you both on a job well done".

Authors: Wilhelm De Swardt and Xolani Mathibela

"I can't think of a nicer person to break my record... **It's really hard to win a gold medal but I think even more impressive is her humility.**

South African Olympic champion and swimming legend, Penny Heyns.

Tatjana broke Heyns's record at the Commonwealth Games, a record that had stood for 19 years.



2020 Tokyo Olympic times for the 200m breaststroke

2.18.95	Tatjana Schoenmaker, SA (previous world record: 2:19:11)
2:19.92	Lily King (USA)
2:20.84	Annie Lazor (USA)

“

”

I would not be a gold medallist if it were not for UP and TuksSport.

Olympic champion, Tatjana Schoenmaker





A thriving southern Africa has four legs

The history and genetics of our famous Nguni cattle can help conserve them, not just for their production but for their ability to uniquely withstand our region's hot and dry conditions.

Southern Africa's Nguni, Afrikaner, Drakensberger and Bonsmara cattle are unique and well suited to our climate. UP researchers are using the history and favourable genetics of these breeds to increase productivity and food security. Professor Este van Marle-Koster, an animal breeding expert at UP's Department of Animal Science, is putting together a detailed picture of the genetics of southern African cattle breeds.

By identifying which genes code for their most favourable traits, like growth and resilience, researchers can help farmers selectively breed more productive animals while conserving the features that make these breeds special.

"As average temperatures rise, we need animals that are adapted to heat, such as the Nguni and the Afrikaner, which have the potential to grow economies and reduce hunger," she says.

"We need to quantify that potential by using genetic sequencing data to find the genes associated with adaptive traits like resilience to heat stress."

Danger: Indiscriminate crossbreeding

Southern Africa has about 150 recognised indigenous breeds well suited to the region's hot and dry conditions. The Nguni breed has a few ecotypes adapted to specific areas in southern Africa, including

the Shangaan, Pedi, and Nkone. However, Prof Van Marle-Koster says that some of these ecotypes are in danger of extinction from indiscriminate crossbreeding, having less than 1 000 breeding individuals according to the Food and Agriculture Organisation (FAO).

"The Bonsmara breed has the most genotyped animals to date at 5 000 individuals, which is very limited. Elsewhere in the world breeds such as Hereford and Angus have millions of animals genotyped," she says.

To get a better picture of the genetic potential of these indigenous breeds, Prof Van Marle-Koster sought to trace their

origins by going through over 2 000 years of southern African history.

She worked with Dr Judith Sealy, a historian from the University of Cape Town, who could weave the dimension of time into the complex tapestry of indigenous breeds in southern Africa. "I think that this context of history is important as we often forget to tell actual stories in our science," Prof Van Marle-Koster says.

According to the archaeological record, it took a long time for cattle to be raised in southern Africa's punishing climate. The first traces of cattle in the region date back to around 2 000 years ago, whereas cattle in other parts of Africa were present more than 4 500 years ago.

Prof Van Marle-Koster hopes that the long history of cattle in the region can also be reflected in their genetic data. For instance, they found that in the 17th century, Dutch settlers used Sanga cattle from the Khoekhoe, and selectively bred them as draught animals, which then brought about the Afrikaner breed.

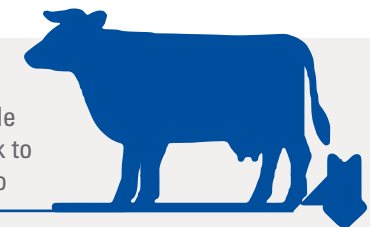
Solution: Conserve ecotypes

So far, Prof Van Marle-Koster and her team have published their review in the *Sustainability Journal* detailing the known breeds and ecotypes of southern Africa, as they put plans in place to do genomic sampling in South Africa, Namibia and Botswana. With this work, the researchers will use the resulting genomic data to help farmers breed more resilient and productive cattle.

With a more detailed genomic picture identifying the unique breeds like the Nguni, Prof Van Marle-Koster's research will be able to conserve these ecotypes from being crossbred out of existence, taking their adaptive traits with them.



Southern Africa has about 150 recognised indigenous breeds well suited to the region's hot and dry conditions. Research at UP is using genomic data to conserve them from being crossbred out of existence, taking their unique traits with them.



The first traces of cattle in the region date back to around 2 000 years ago

Whereas cattle in other parts of Africa were present more than 4 500 years ago



“
The Bonsmara breed has the **most genotyped animals to date at 5 000 individuals**, which is very limited. Elsewhere in the world breeds such as Hereford and Angus have millions of animals genotyped.
”

Nurturing the roots from which we grow

Healthy families are the cornerstone of healthy societies, but the COVID-19 pandemic has placed a heavy burden on South African families who now require greater empathy from professionals.



Less instruction,
more empathy

The COVID-19 pandemic has produced significant stress and anxiety for many families around the world, more so for families of children with special needs where boundaries between home and the outside world have become blurred.

These families were left to manage unrealistic expectations while lockdown restrictions decreased access to essential support systems such as schools and access to therapeutic services.

Parents who attended group therapy at Chris Hani Baragwanath Academic Hospital explained that they were cut off from family support and had to take

care of their children with no respite or support. Their other responsibilities did not stop, and they were exhausted at the end of each day.

Mrs Mpho Masoga, who receives therapy for her son who was diagnosed with Autism at Chris Hani Baragwanath Academic Hospital, described her challenges:

“Our journey with my son was filled with ups and downs, we were coming right with him at some point, had things under control and he was getting used to a set routine. Then COVID happened. We started well the first few days, then he started having more meltdowns. His sleeping pattern also changed for the worse.”

Those of us involved in early child development and education need to ask ourselves if we are adding to the burden experienced by families by adding more to the already long to-do list. A mother of a child with severe cerebral palsy asked me a very sobering question after I explained everything that she needed to do at home to help her child eat better. She said: “I feed my child three times a day which takes over an hour at each mealtime. I have two other children and many household chores. When do you expect me to do more?”

Learning and development can come from everyday experiences. We need to empower families with the competence and confidence to stimulate development through their routines and activities. We need to reflect for a moment and realise that families have a finite pool of time, space and finances. As professionals, we often place unrealistic demands on families and potentially hinder their overall wellbeing.

Now more than ever, we need to support families with compassion and understanding.

Families function as a system and our role as a society is to help keep that system whole and functional. Every family has a story to tell about how COVID-19 has changed them, redefined them and in many cases scarred them. Let us be understanding and compassionate in what we expect of them and from them.

Author: Dr Sadna Balton

“
Families function as a system and our role as a society is to help keep that system whole and functional.
”

Dr Sadna Balton, Head of Speech Therapy & Audiology Unit at Chris Hani Baragwanath Hospital

Stressful times need strong families



Families and communities face ongoing changes brought about by the COVID-19 pandemic, such as having to work from home, the closing of childcare centres, home schooling, and possible job losses. Social distancing has caused further distress, especially for children and adolescents, given their naturally strong need for social connection.

Studies in the United States found that the pandemic has had a severe effect on parents’ mental health and children’s behavioural and emotional well-being. In South Africa, these effects can be seen in the higher prevalence of family violence and violence against girls and women, which has been a prominent theme in the local media and has been linked to the economic, social and emotional stressors caused by the pandemic.

The abovementioned studies found that families who care for children generally experienced higher levels of distress than those without children. In addition to managing their own stressors, parents must do their best to meet their children’s physical, emotional, social and educational needs. When parents or caregivers struggle with this role, children are likely to show higher levels of distress at home, at school and in the community. Parents who try to cope with their own stress may overlook signs of distress in their children. Sustained high stress levels can result in toxic stress—a form of severe stress that, if not managed, can negatively influence children’s development, learning and health.

The most important buffer against toxic stress and challenging behaviour during childhood is the availability of one significant adult on whom the young

person can depend—a person who cares unconditionally, who will protect them and respond to their needs. This person can be a parent, grandparent, teacher, social worker or a child and youth care worker. By promoting this idea, the principle of ‘the power of one’ could be implemented throughout South Africa to help every child to cope during difficult times.

Parents and caregivers who are responsive to children’s emotions and behaviour are better able to protect their children against the negative effects of stressors. The Department of Social Work and Criminology at the UP is committed to achieving this goal through a series of courses on responsive practice. These will be offered to persons from various professions who work with families and children.

Authors: Dr Liana le Roux, Senior Lecturer and Ms Lesley du Toit

Halala, Lalela!

UP alumna Lalela Mswane has been crowned Miss South Africa 2021, making UP the home of two consecutive Miss SA titleholders and proving that at UP you walk away with more than a degree. You walk away with the confidence and skills to face the world.

University of Pretoria (UP) alumna Lalela Mswane was recently crowned Miss South Africa 2021. The 24-year-old hails from KwaSokhulu in Richards Bay, KwaZulu-Natal and graduated from UP with a Bachelor of Law degree in 2020.

The Miss South Africa pageant was held on Saturday 16 October 2021 in Cape Town and Mswane won R1m in cash and other prizes worth R3m.

"I'm not a 'pageant' girl," she told the *Sowetan* after her victory. "But that's why I think it's important for people to stop seeing Miss SA as a mere beauty pageant, which is why I often shied away from pageantry. Miss SA is an empowerment platform for women, and could be a launchpad for so many other opportunities."

Through her Miss SA campaign #BeReady, Mswane plans to put the spotlight on youth employment.



Fast Fact

Miss South Africa 2020 Shudufhadzo Musida is also a UP graduate, and is set to represent South Africa at the Miss World competition in December 2021.



“My campaign focuses on youth employment from the perspective of no longer waiting for opportunities from the state, but instead empowering the youth by providing them with entrepreneurial skills to take charge economically.”

UP Vice-Chancellor and Principal Professor Tawana Kupe said Mswane's victory is testament that at UP you do not just walk away with a degree, but with confidence and skills, ready to face the world. "Congratulations, Lalela, we are all proud of you, and we are confident that you will make an impact during your reign," he said. "As a UP graduate you are an ambassador of this institution. Represent us well out there, and continue to FLY@UP! Your message on the importance of entrepreneurship as a pathway to a fulfilling life resonates strongly with UP, which runs a free online entrepreneurship course for all students, a Centre for Entrepreneurship, and our business incubator TuksNovation."

Lalela sums it up

Being rejected by clients in the modelling industry was really hard. Patience and a mentality shift helped me bounce back. Rejection helped mould the resolute lady I am today, and my indomitable will to succeed is fortified each time I'm told "no".

What is the biggest problem facing young people today?

Young people suffer self-esteem and body-image issues today more than ever. They constantly subject themselves to comparison and always feel like they fall short of societal standards of beauty. This, I believe, is among the leading causes of bullying and depression in a lot of young people.

Who are your role models?

My mother is my greatest role model. She is the greatest giver of love, patience, kindness, affection and support. She never fails to extend grace even when she experiences injustice. If I could be only half the woman she is, I would truly be one great woman. I also find inspiration in the late actress, Audrey Hepburn. She was a classic beauty and style icon, and always radiated effortless elegance yet what made her the most beautiful was her philanthropy.

Courtesy: Channel 24

And the Oscar goes to ...

Professor Stephanie Burton of the University of Pretoria (UP) has won the Management Award at the 2020/2021 National Science and Technology Forum (NSTF) NSTF–South32 Awards. The NSTF Awards are informally known as South Africa’s “Science Oscars”.

“It is an honour to receive this award from the NSTF, a prestigious organisation that recognises excellence as its primary criterion for these awards,” says Prof Stephanie Burton, a Professor of Biochemistry who previously held the position of Vice-Principal: Research and Postgraduate Education at UP. Prof Burton is not only an accomplished academic, but also a leading player in higher education organisations. She is an internationally acclaimed researcher and a National Research Foundation B-rated scientist.

The NSTF Awards are the largest, most comprehensive and sought-after national awards of their kind in the country. They were established in 1998 to recognise outstanding contributions to science, engineering and technology (SET) and innovation by SET-related professionals, teams and organisations in South Africa.

Adds Prof Burton: “This award represents recognition of a career that was built from an academic research base to a position in university leadership, where leading development and implementing strategies have meant that many people – my colleagues – have been enabled to achieve their goals and build their careers. I have always seen my role in university leadership as one of enabling others.”

Dr Blade Nzimande, Minister of Higher Education, Science and Technology, said that in the years since this prestigious event was inaugurated, competition has continued to become tougher, to the point where selection as a finalist itself is a greater honour and privilege. Prof Burton was one of eight UP finalists.

In congratulating Prof Burton, UP Vice-Chancellor and Principal Professor Tawana Kupe says: “We are proud of your work and for constantly striving for excellence. As we continue to build partnerships with key stakeholders and seek greater levels of external funding, we also seek to increase the commercialisation of our research and establish UP as a leader in science communication, which you as researchers all contribute to in the work that you do.”

“The award also represents recognition of the achievements of a leading university,” Prof Burton states. “And it represents recognition of the contribution that one can make to national goals and to the development of a whole national sector.”



Open wide and say ‘click’

It’s short, has no hair and wears no shoes. But it helps save lives. Stevie the robot joins the intensive-care team at UP’s Faculty of Health Sciences and Steve Biko Academic Hospital.

The Faculty of Health Sciences at the University of Pretoria (UP) and Steve Biko Academic Hospital have welcomed Stevie, a mobile robot that will help improve the treatment of patients during the COVID-19 pandemic. This will be done through instant live discussion and communication daily between German and South African intensive-care unit (ICU) teams.

Stevie works at Steve Biko Academic Hospital’s ICU and will be vital in enabling a bedside ward round attended by ICU teams across the globe. According to Professor Tiaan de Jager, Dean of UP’s Faculty of Health Sciences: “Telemedicine plays a crucial role in encouraging long-distance patient and clinician care. COVID-19 has been a massive disruptor in society, especially in the healthcare sector.”

This initiative is an interdisciplinary global telemedical collaboration between the Faculty of Health Sciences, the Department of Critical Care at Steve Biko Academic Hospital, the Enhanced Recovery after Intensive Care (ERIC)-Tele ICU at Charité Medical University in Berlin, and the Robert Koch Institute (RKI).

“The Faculty takes pride in responding to the demands of the fourth industrial revolution (4IR), which can aid patient care, enhance the teaching and learning experience for students and support the University in conducting research that matters, thus leaving a positive impact on society,” Prof de Jager states. The gender-neutral Stevie is the second robot to be employed by UP, following Libby, the robotic library assistant who arrived in 2019. “Stevie is now officially the much-adored baby of our ICU team and is stimulating much excitement throughout the hospital,” says Professor Fathima Paruk, Academic and Clinical Head of the Department of Critical Care at UP and Steve Biko Academic Hospital.

Stevie has a privacy handset to aid confidential communication during ward rounds; a stethoscope port where it can remotely relay information while a patient is being examined, and it enables visualisation of detail for close-up diagnosis and patient care oversight with high-definition pan-tilt-zoom cameras.

“ICU specialists and their teams based in Germany at the CU and RKI will join the South African ICU team in person through

Stevie is named after Steve Biko, one of the most prominent leaders during South Africa’s anti-apartheid struggle. The robot is facilitating long-distance patient and clinician care.



the robot’s digital screen,” Prof Paruk informs. “Both the SA and German teams, led by ICU specialists, will interact virtually. This will enable the team from Germany to see the patient, look at the ICU monitors, and engage in discussions with patients. The ward round will involve discussing the medical condition and include a management plan over a secure line.”

Prof Paruk adds that Stevie will be used for the benefit of all ICU patients as well as for the exchange of ideas, specialist training, global collaborations, webinars and educational workshops, and especially for highly selective or niche specialties in critical care. Specialists will also be able to remotely advise upon and guide a bedside procedure.

Science gets a good rap!

Move over Jay Z, Drake and Eminem – and make way for University of Pretoria (UP) student Rostum Ogbuehi (Ross the Boss), the star of a music video that promotes vaccination against the COVID-19 virus.

This fifth-year Faculty of Health Sciences medical student features in a catchy rap video that dispels myths about getting vaccinated. The video has had at least 25 000 views on YouTube and Instagram, and the idea for it was initiated by the Dean of the Faculty, Professor Tiaan de Jager. Ogbuehi says that through the faculty’s social media crew, Louis Cloete Productions, “the Dean reached out to me to compose a song and a video to help promote vaccination”. Within less than a week, the video had more than 15 000 hits on social media.

“We have seen a low uptake in people getting vaccinated,” Prof De Jager says. “This is concerning, as we know that vaccines reduce the risk of people getting the virus and can reduce the risk of spreading it. We were also one of the first Faculty of Health Sciences to open a vaccination site on campus. I believe it is our duty to serve the UP community and make sure that everybody has easy access to the COVID-19 vaccine.

“I understand the power of rap songs and that it can reach different age groups. I am very proud of our talented students who agreed to compose this unique rap song, and to contribute to the national and international drive to get people vaccinated.”

Other students who feature in the video are Vincent Mathenjwa (medicine), Reatlegile Mangope (oral hygiene) and Tsholofelo Mphahlele (medicine).

This is not Ogbuehi’s first collaboration with Prof De Jager. “In second year, I approached the Dean with a song that I had written and recorded titled ‘2nd Year’s Guide’. I felt like second year was one of the most difficult years, so I asked the Dean to help me promote the song and video. He was eager and pleased to assist.”

Prof De Jager explains that in its efforts to be innovative and creative, the faculty hosts scientific webinars and has its own HSUP TV on YouTube. A webinar that addressed the use of Ivermectin to treat COVID-19 had more than 17 000 views. As Director of the UP Institute for Sustainable Malaria Control, Prof De Jager’s team won a prestigious science communications award in the National Science and Technology Forum Awards a few years ago.

Ogbuehi used information from UP’s Acting Head of the Department of Infectious Diseases, Prof Veronica Ueckermann, to craft the lyrics:

Vaccinate x2
It’s not too late
Don’t procrastinate ...
Hey, everybody, look they call me The Boss
The name’s Ross
Giving out information free of cost
Let’s talk about the contemplation we’re facing of the vaccination
Help, this dying generation
Vaccinate, let us try and heal the nation
Wait, but there’s a debate
People are wondering why we should vaccinate
First of all, prevention is better than cure
Second of all, getting the vaccination is not mandatory but it’s mandatory for you to know it’s your responsibility to keep you, your family and your community safe
So do the right thing and vaccinate.

Alumni success

PhD was a life-changing journey

The Machimanas husband-and-wife team agree on one thing: their UP qualifications set them apart from other graduates. Dr Nondumiso Machimana received her PhD in Curriculum and Instructional Design and Development (CIDD) from the Department of Humanities in 2021. The title of her thesis was: *Language-learning strategies of English second-language learners participating in peer tutoring*.

Dr Eugene Machimana has been with UP for over a decade and in 2018 he joined the Department for Education Innovation, Unit for Community Engagement, as a Senior Education Consultant: Community Engagement, where he currently works. In 2017, he obtained his PhD: Learning

Support, Guidance and Counselling from the Department of Educational Psychology at University of Pretoria (UP). The title of his thesis was *Retrospective experiences of a rural school partnership: informing global citizenship as a higher education agenda*.

At the time of registering at UP they were both working as professionals in their respective fields, but UP served to enhance their vision and broadened their scope in terms of making an impact in the global village. "Our study supervisors were excellent, exposing us to the wealth of knowledge and great networks that enrich our workplaces. Our workplaces are benefitting from our studies, which were not academic exercises, but life-changing

Dr Eugene Machimana and his wife, Dr Nondumiso Machimana, both chose UP for their studies because the institution is making major contributions by producing new knowledge and also driving transformation for changing social conditions.

journeys," they said. The Machimanas are both active alumni contributing towards the development of their alma mater. "It is our hearts' desire to see many of our youth being influenced to choose UP as a university of choice and eventually graduate there," they said.

Author: Xolani Mathibela



'I submitted a master's and it ended up being more than that'

When University of Pretoria (UP) master's student Dr Michael Barnes submitted his thesis for external examination, he got the surprise of his life when it was subsequently converted into a PhD.

"When most people have a thesis converted, it is done way before submission of a master's," he

informed. "Whereas I submitted a master's and it ended up being more than that. It came out of the blue and I was caught completely off-guard."

The Cape Town-born meteorologist, who recently graduated with a PhD, works as a research scientist at the South African Weather Service's Marine Research Unit, where he is involved in the development of numerical models and associated forecast products and services.

His master's-turned-PhD dissertation focused on atmospheric dynamics. "I studied the dynamics of upper-tropospheric weather systems called cut-off lows," Dr Barnes explained. "The study analysed the properties of these weather systems that extend all the way to the surface compared to those that do not."

He was supervised by Dr Thando Ndarana, BSc Meteorology Programme Coordinator and Senior Lecturer, and co-supervised by Professor Willem

Landman, Programme Coordinator in the Department of Geography, Geoinformatics and Meteorology in the Faculty of Natural and Agricultural Sciences.

"By the time Michael submitted his MSc dissertation for examination, he had already published his first paper based on his research in *Atmospheric Research*, which is a very reputable, high-impact journal," Dr Ndarana said. "He had also submitted a second article to *Climate Dynamics*, an equally reputable journal of the atmospheric sciences. Both these papers closed a knowledge gap in the literature. Based on the depth and breadth of the work that was submitted, an international examiner from Oxford University suggested that an upgrade be considered.

To quote him, 'This thesis is, by any measure, a truly outstanding and exceptional piece of work.'"

Author: Mecayla Maseka



Dr Thando Ndarana (left), supervisor of Dr Michael Barnes, says two papers written by Dr Barnes have closed a knowledge gap in the field.



Faculty of Engineering,
Built Environment and
Information Technology

Fakulteit Ingenieurswese, Bou-omgewing en
Inligtingtegnologie / Lefapha la Boetšenera,
Tikologo ya Kago le Theknološi ya Tshedimošo

FROM 4IR TO 5IR AND SOCIETY 5.0

TOP
356

OF UNIVERSITIES RANKED
GLOBALLY FOR ENGINEERING
AND TECHNOLOGY IN
2021 QS RANKINGS

#1

ENGINEERING SCHOOL IN
AFRICA BY THE
US NEWS AND WORLD REPORT
RANKINGS 2020

TOP
1%

OF ENGINEERING SCHOOLS IN
THE WORLD IN 2019 CLARIVATE
ANALYTICS ESSENTIAL SCIENCE
INDICATORS

#1

IN SA FOR ELECTRICAL AND
ELECTRONIC ENGINEERING IN
2021 QS RANKINGS

#1

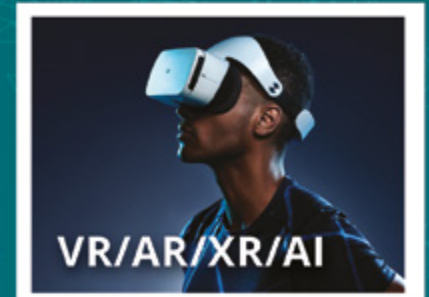
IN SA FOR MATERIALS SCIENCE
AND METALLURGICAL
ENGINEERING (METF)



4IR is paving the way for the future. EBIT's Engineering 4.0 Complex is positioning UP as a centre of excellence in smart transportation and transdisciplinary research.



TuksNovation supports a culture of job creation and entrepreneurship. It is as a technology incubator and accelerator to support students in starting their own business.



Virtual, augmented and extended reality, as well as fields like artificial intelligence and bio-engineering, maps the future of industry and life in Society 5.0.



Trail-blazing innovators and leaders get a platform

LeadUP, a new podcast series (thank you, Covid), lets alumni and friends of the University share their stories and leadership lessons.

"The COVID-19 pandemic has forced UP to find new ways of communicating and staying in contact with its alumni," says Samantha Castle, Senior Alumni Relations Manager. "Podcasts are increasingly becoming a way of communicating with existing and new audiences in a way that brings the world of growth that UP and its alumni can offer right onto any device, and during any time the listener has available to continue their own personal-growth journey."

UP was the first university in Africa to host and deliver events on LinkedIn Live, in the wake of lockdown restrictions necessitated by the COVID-19 pandemic, which made hosting face-to-face events impossible. "We launched the LeadUP alumni webinars, a series of virtual topical debates hosted on UP's LinkedIn and YouTube page, to create a space for UP's highly skilled and well-placed alumni to stir debate and engagement on various critical issues affecting South African, African and global society."

"Our new LeadUP Podcast series, launched in August 2021, aims to be a platform of engagement for our alumni, staff and students, while also inspiring other interested listeners everywhere. It's our way of motivating and educating, bringing interesting alumni and topics to the audience, reaching our alumni all over the world, and encouraging a sense of pride in this wonderful institution."

Professor Tawana Kupe, Vice-Chancellor and Principal of UP, said: "Our LeadUP Podcast series aims to inspire our listeners to be a force for positive change. We aim to add our collective voice to global conversations and help find solutions to some of the challenges we face as a continent and broader global society." He said institutions of higher learning are important spaces for the preparation of each new generation of trail-blazing innovators and leaders. "At UP, we empower our students and staff through high-quality education and cutting-edge research that makes a positive transformative impact."

Be inspired

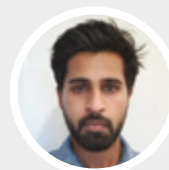
Our podcasts have featured awe-inspiring alumni, many of them trailblazers in their field. Here's what you can listen to:



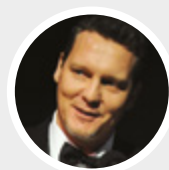
Taelo Mojapelo, CEO of BP Southern Africa, on how to lead yourself towards success.



Hon Yvonne Dausab, Namibia's Minister of Justice, on leading for social justice, particularly during the COVID-19 pandemic.



Dr Kresen Pillay, a wildlife veterinarian, on pioneering a new department as the Manager of Veterinary Services at the Sydney Zoo.



Nicol Verheem, an Oscar winner at the Academy of Motion Picture Arts and Sciences Scientific and Technical Awards, on failing as part of growth.



Shudufhadzo Musida, Miss South Africa 2020, on self-awareness and mental health support.



Rev Charlotte Sibanyoni, the first black female NG Kerk minister, on impacting a community from within.



Catch them all at

<https://www.up.ac.za/alumni/article/2989086/leadup-podcast>

LeadUP: Online Alumni Events



The LeadUP webinars and podcast series brings leading University of Pretoria (UP) alumni, academics and experts into national, African and global conversations.

Prominent UP alumni speak about different topics, ranging from politics, finance and health to agriculture and education. In doing so, they provide an opportunity for the University to showcase its talented alumni and academic experts.

LeadUP: In Conversation with the VC: In 2021, there were two LeadUP: In Conversation with the VC webinars.

International Relations: Strategies for strengthening SA's reputation on the global stage featured the Honourable Minister of International Relations and Cooperation, Dr Naledi Pandor. Professor Tawana Kupe invited this alumna of UP (PhD in Education, 2019), and Dr Sithembile Mbete, Senior Lecturer in UP's Political Sciences Department, to be his guests for the first 2021 instalment in this special series.

The role of leadership in the context of the 4IR in mining and related industries formed part of the 60th anniversary of UP's Department of Mining Engineering. Prof Kupe invited several experts to discuss the topic.

LeadUP: Alumni Thought Leadership

The Alumni Relations Office hosted several LeadUP: Alumni Thought Leadership virtual events, featuring diverse experts and alumni from across the globe. Discussions included:

- The Fourth Industrial Revolution (4IR) and disruptions in the engineering field.
- Rethinking privatisation towards economic recovery.
- Youth employment: How young people, businesses, and government can help turn the tide.
- Celebrating women in sport – this online chat focused on the Tokyo Olympics, the role of sport during a time of crisis, and celebrating UP women athletes.



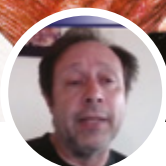
United, we care



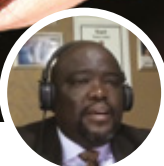
**Dr Geneviève
James**



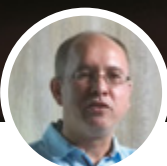
**Prof Jannie
Hugo**



**Prof Stephan
de Beer**



**Rev Thabiso
Mashiloane**



**Lance
Thomas**

In times of health crises, churches can play a valuable role in the spiritual healing needed to allay mounting anxieties and fears.

The role of the church in community support during public health crises was the subject of discussion during the latest instalment of the LeadUP: Alumni Thought Leadership webinar, presented by the University of Pretoria's (UP) Alumni Relations Office.

The online panel discussion was moderated by Lance Thomas, Project Manager at the Centre for Faith and Community in UP's Faculty of Theology and Religion, and featured alumni guests, faculty members and community workers.

"The first hard lockdown in March 2020 saw UP and Unisa (the University of South Africa) collaborate on how were going to provide shelter, social work support, health screening and medical healthcare to assist the homeless across the region," said Dr Geneviève James, Deputy Director of Community Engagement and Outreach at Unisa.

"A time of crisis is not time to seek self-promotion for our isolated brands, but a time to mount a monumental campaign

of solidarity for those who the city may not have prepared for. We came together in shared interests with shared resources, insights and networks to share the development gains and benefits with participating communities."

Reverend Thabiso Mashiloane, Chief Executive Officer at HospiVision, an NGO that provides spiritual care to patients, staff and family members in hospitals, also featured on the panel. "When hard lockdown came, HospiVision came in to represent the families of patients who were not allowed visitors in hospital wards. We also realised that healthcare givers needed attention and motivation, because they had never seen people die at such a high rate before. Spiritual healing was needed, as they had anxieties and fears. We had not ministered to such a huge number before the pandemic. Another issue was that this pandemic exposed what is essential – and the work of pastors is essential."

Professor Stephan de Beer, Director for the Centre for Faith and Community, pointed out that some people found themselves homeless as a result of the pandemic.

He found himself asking: how does theology contribute to a good, inclusive city? "During the first hard lockdown, President Cyril Ramaphosa challenged municipalities to create shelters for homeless people for the duration of lockdown. But the city was not ready for this crisis."

Adding to the conversation was Prof Jannie Hugo, former Head of UP's Department of Family Medicine and current Lead Academic for Community Oriented Primary Care, who said that the pandemic made it clear that the state is unable to do all the work in society. There are many layers to society, and the church is one of them, he said, adding that the church can be seen as a definite player in making society a better place to live. "During the pandemic, we were under the impression that the state would take the lead and the rest of society, including universities, would support that. In the end, we needed to collaborate with each other. In future, we need to look more at churches for collaborations and to facilitate collaborations."

CREATING PERSPECTIVES AND INSIGHTS FOR FUTURE-FIT ORGANISATIONS

Partner with Enterprises UP to gain access to all-inclusive solutions that will assist your organisation to navigate the changing world of work.



Discover how emerging technologies will impact your organisation



Gain perspectives on the existing skills in your organisation as well as the significant gaps that may exist in the future



Determine your organisation's "future-fitness" status and create the roadmap required to navigate change

On a daily basis, executive managers are bombarded with new terminology and conceptual constructs, and they are constantly changing due to disruptions and technological advancements.

Within this context, Enterprises University of Pretoria (Pty) Ltd (Enterprises UP) developed an integrated Future-Fit Solution called "Future-Fit Organisations", which addresses the issue of PEOPLE, TECHNOLOGY, ORGANISATIONAL DESIGN, and NAVIGATING CHANGE, in order to assist leaders in navigating this new landscape.



Establish information required to develop your organisation's Workplace Skills Plan



Increase returns on investment from a training and productivity point of view



Review, design and restructure your organisation to meet your strategic objective

Please contact our Executive Management if you would like more information on our Future-Fit Solution:



Dr Elmar de Wet
Executive Manager: Research Solutions
Tel: +27 (0)12 434 2353
Email: elmar.dewet@enterprises.up.ac.za



Irvin Bogopa
Executive Manager: Stakeholder Relations
Tel: +27 (0)12 434 2554
Email: irvin.bogopa@enterprises.up.ac.za

Shifting Knowledge to Insight



Young people making a difference from a University making a difference

Twenty-two of the 2021 Mail & Guardian 200 Young South Africans share the same foundation: UP.

From over 5 300 names submitted for this year's *Mail & Guardian* 200 Young South Africans list, only 200 were chosen, with more than 10% coming from just one institution: the University of Pretoria (UP). For the past 15 years the M&G list has celebrated 200 young people who create a positive, tangible impact on society. Since those first awards, 105 UP alumni have been honoured among SA's top young people, with 22 of those coming from this year's awardees.

Vice-Chancellor and Principal Professor Tawana Kupe hosted a lunch at UP's Future Africa Institute to celebrate their success. "Being selected as part of the M&G 200 Young South Africans is an honour that must not be taken for granted, and this reflects your achievement and where you are going," Prof Kupe said. "On behalf of myself and UP we congratulate you all for this wonderful recognition. The sky is the

limit for you. As Vice-Chancellor I am proud to boast about you everywhere I go!"

M&G Editor-in-Chief Ron Derby said: "We hope to continue this partnership with UP, and we hope to look for other ways to broaden this relationship. Congratulations to all this year's awardees, and we hope to see more of UP awardees in future."

Brandon Ferlito, an awardee under the category Health, was "shocked" when he found out that he had made the list. "A few people nominated me, and I also nominated myself. Being in the presence of the VC today makes me feel like I am doing something right. Where I saw myself five years ago, I am finally realising it."

Jolandi Jacobs, awardee under the Sport category, was surprised to learn she had won. "I thought to myself, 'But who nominated me?' I felt honoured that the *Mail & Guardian* is recognising us.

Being here today is a humbling experience."

Mutshidzi Abigail Mulondo, another UP awardee under the Health category, said: "I was excited and surprised and honoured to be part of the list, and I am ready for everything that is coming from here onwards."

Samantha Castle, Senior Manager, Alumni Relations reiterated the general sentiment of the day: "UP is proud of you, and we are confident that you will do even greater things going forward." Castle also encouraged awardees to come back to their alma mater and give back to the UP community by mentoring, tutoring, and being a guest lecturer.

Author: Xolani Mathibela

To find out more about ways in which alumni can stay connected with UP and apply for jobs, please go to www.upalumniconnect.com

Next Generation Employment

Graduates face an increasingly competitive and constantly changing world.

The GIBS full-time PDBA is an honours equivalent degree that exposes recent graduates to leading business trends and builds the skills needed for future career success.

- > This programme is ideal for those students completing their undergraduate studies in 2021.
- > A business degree is not required for admission.
- > Increase your employability by gaining a deep understanding of the evolving business landscape.
- > The programme includes a workplace internship.

SEE THE FUTURE:

Point your phone at the QR code

Click "Open XR plus"

Point your phone at the business card

Gordon Institute of Business Science
University of Pretoria

Postgraduate Diploma in Business Administration
Full-time
gibs.co.za/fulltimepdba

Developing Africa's young business leaders

With local unemployment levels sitting at a record high of 34.4%¹, we need an environment that encourages investment, industrial development, and job creation. This requires leaders who understand the practical nature of business, as well as cutting-edge developments coming to the fore. GIBS can help.

Strong economies need business leaders with a vision. Leaders who can imagine a future that is built on innovation, sound business practices, and ethics and sustainability. To help build South Africa's business leaders, the University of Pretoria's Gordon Institute of Business Science (GIBS) offers young graduates the full-time Postgraduate Diploma in Business Administration (PDBA).

As a world-class business school, GIBS believes that business is a force for positive change and a key factor in the economic development of any country. The university understands that it is imperative for business leaders to work cooperatively with government and civil society to create a better, more equal society.

Holistic view of business

The GIBS PDBA is an Honours-equivalent degree, and is designed to give graduates an in-depth, holistic view of business, complemented by a practical skill set, that will provide a competitive edge at the start of their careers. The programme is an online offering, using a variety of technologies including online lectures, videos, case studies and exercises, giving students a broad range of learning tools to maximise their experience.

The course is split into distinct modules that give students a holistic view of the business environment. There are five academic modules that include Human Resources, Accounting, Marketing, Operations Management, Entrepreneurship, Economics, Ethics and Sustainability, Information and Knowledge Management, Innovation, Organisational Behaviour, Systems and Processes. A sixth module is a practical one where students are given an internship with an organisation, other than their own, to put what they have learned into practice.

Adding to the practical nature of the course, students will also have access to workshops, short courses, and career support services which are all designed to help the student enter and thrive in the world of work. A final aspect of the course is ongoing personal development, where students will be encouraged to look at where their strengths lie and how they can maximise these competencies to ensure their personal career growth.

The PDBA is aimed at young graduates who are in their first or second year of employment, working part-time or who are currently unemployed. The one-year degree will enhance a job applicant's attractiveness to employers by adding valuable theoretical business knowledge and practical experience to their CVs.

It will also benefit young entrepreneurs who wish to get a better understanding of business process and departments, as they seek to grow sustainable and profitable businesses.

Organisations who sponsor students will be eligible for skills development points on the B-BBEE scorecard in addition to giving their young workforce critical skills for the future. Successful applicants are also able to self-fund their studies.

Support network

As the adage goes, "It is not what you know, but who you know." Although GIBS believes in a sound theoretical foundation, an underlying philosophy of the University is teamwork and network building. The school believes it is imperative for any business leader to have a network of like-minded people who can support them through their career journeys. As such, all GIBS students and alumni have access and exposure to over 6 000 executives, managers and scholars who pass through the campus each year.

This thriving and dynamic community not only offers a support network for students, but also instils a vibrancy and energy to the learning that GIBS offers as a leading African business school.

 6 000

Number of executives, managers and scholars who pass through the GIBS campus each year.



Who can apply?

Although no work experience is required to do this degree, there are a number of required criteria to apply.

- As the course is a postgraduate degree, applicants must have completed the equivalent of an undergraduate qualification.
- Matriculant equivalent of mathematics is essential.
- Applicants will have to complete the GIBS entrance test to ensure they have the capacity to complete a postgraduate qualification.
- Leadership potential in applicants is essential. The motivational essay and references need to reflect the applicant's capacity to lead.
- All applicants need to supply a 1 000-word letter of motivation on why they are applying for the course, what they are expecting from the course and how they believe the course will enhance their careers as future business leaders.
- All applicants must be able to communicate (speak, read and write) fluently in English.
- A laptop or computer, a 10MBPS-equivalent internet connection and a sound grasp of MS Word, Excel, PowerPoint, and Web browsing is essential as the degree is an online course.



Gain a world of business knowledge

GIBS is renowned for its focus on practical application of the theoretical work learned. Graduates will leave the course having gained a wealth of benefits and prepared to excel in the world of business. The course will ensure they:

- Develop fundamental business knowledge and skills that can be applied to a number of business environments.
- Are able to solve a range of day-to-day managerial challenges.
- Develop skills to work on projects from inception to completion with a big-picture overview as well as having a keen attention to detail.
- Can better apply theoretical concepts in a practical environment.
- Gain valuable experience by working on a real-time consulting project which will require them to find real solutions to a current project.
- Develop both personally and professionally.
- Build a life-long network of like-minded colleagues and friends.

NOTE: Because of the digital nature of the course, students need to be self-starters and able to learn to work under pressure to deliver on deadlines.

Source:

¹ Unemployment rate according to Stats SA in its Quarterly Labour Force Survey for the second quarter of 2021



Creating a future-fit generation

Can a university that is 113 years old and that appealed to their grandparents and parents still attract the new generation of Tik-Tokkers and Insta-addicts? We believe that today, more than ever, UP is producing students who are resilient and can contribute meaningfully to a post-pandemic world.

The University of Pretoria (UP) prides itself on producing well-rounded graduates who are productive, socially engaged citizens and future leaders, generation after generation. It is evident that many alumni have taken those values to heart as they continue to put their qualifications and skills to use to effect real-world impact.

Your children might be on the cusp of forging their own path in the world, and thinking about their role in building an equitable, forward-thinking and more sustainable society, which is exactly why they should #ChooseUP. We are guided by our social and academic ethos, The UP WAY. It is about excellence, perseverance, respect, creativity,

innovation, diversity, growth, kindness and making a difference every day.

They can rest assured that UP is a future-focused university – focused on the results we can achieve in the future enabled by the actions we take today – and you can rest assured that UP is still the same top-quality institution it was when you were a student. In fact, we're one of the world's top universities, so your child will be one of the world's top graduates!

Flexibility and resilience are at the heart of the University's academic practice. Our transdisciplinary approach to research allows us to take the lead in creating new knowledge and ways of doing things, while our hybrid approach – which combines face-to-face and online

teaching and learning – creates a rich interactive environment that is educative rather than merely instructional.

The programmes we offer are equally diverse and adaptive. UP has launched the first of several fully online accredited programmes through its UPOnline initiative. In addition to our leading undergraduate and postgraduate programmes, students and graduates alike can engage in lifelong learning by accessing the many short courses we have developed through EnterprisesUP.

As a leading higher education institution that is ranked in the top 2% of universities worldwide, your child will be well supported by a university that is steeped in history while embracing the future. Make today matter – #ChooseUP.



LIVE LIFE
UNRESTRICTED

Phone: 012 434 1749 | Email: info@semli.co.za
SEMLI, University of Pretoria, Hillcrest Campus,
Burnett street, Hatfield, Pretoria

WE OFFER *the following clinical and scientific services to promote healthy lifestyles, ensure exercise is safe and enhance sporting excellence.*

- Biokinetics
- Physiotherapy
- Sport Science
- Psychology
- Sport and Exercise Medicine
- Nutrition



SEMLI
Sport, Exercise Medicine & Lifestyle Institute

www.up.ac.za/Sport-Exercise-Medicine-and-Lifestyle-Institute

A master at lifelong learning



Dr John Boje is flanked by his wife Elizabeth (left) and his supervisor, Dr Idette Noomé.

As a teacher, Dr John Boje feels that the greatest gift to give a student is not discipline-related content, but rather the desire and skills for lifelong learning. He should know: he practises what he preaches.

When most people reach the end of their working careers, they gloomily face years of intellectual emptiness. Not so Dr John Boje, who at the age of 83, received his second doctorate from the University of Pretoria, both within the last decade.

Prof Tawana Kupe was a guest speaker at the inaugural John Boje expert lecture series with St Alban's College, who named the school auditorium in honour of Dr Boje for being an inspiration to young and old.

Prof Kupe also shared examples of how the University of Pretoria has been preparing for the kind of thinking and learning that is necessary as we stand on the cusp of the fourth industrial revolution and equip ourselves for the future of work, which looks very different to the working worlds our parents and grandparents inhabited.

Learn to understand

"Students with deep approaches to learning have an intention to understand. They generally engage in vigorous interaction with content, relate new ideas to old ones, relate concepts to everyday

experience, relate evidence to conclusions, and examine the logic of arguments. While doing this, they 'construct' their own knowledge," he told the learners and their parents.

Not fully understanding these processes gives rise to all sorts of misconceptions about learning in the school environment, where good memory and rote learning are equated with good marks.

Efficient learners know how to access different modes of thinking and apply them to different kinds of tasks. "This process involves metacognition, which is essentially, 'thinking about thinking', with metacognitive strategies helping students analyse the task or problem, recognise what kind of thinking is required, and activate the right cognitive processes for the task at hand," he continued.

Importance of environment

A highly effectively learning environment, he mentioned, is one where the student asks more questions than the teachers; questions are valued over answers; ideas come from divergent sources; a variety of learning models are used; classroom

learning 'empties' into a connected community; learning is personalised by a variety of criteria; assessment is persistent, authentic, transparent, and co-created with students and families; learning habits are constantly modelled; and there are constant and creative opportunities for practice and growth.

"These are certainly the characteristics we strive to incorporate into our teaching and learning at UP, where our approach is based on inquiry-based learning, hybrid learning and community-based learning."

Never stop learning

Prof Kupe pointed out that there is no such concept as finished education. "A lifelong-learning individual has a continuous aspiration for learning and for taking responsibility for the ongoing, voluntary, and self-motivated pursuit of knowledge, for either personal or professional reasons. Lifelong learning brings with it a great sense of satisfaction, in having set a goal and reached it, as well as through the joy of being able to share knowledge with others." Studies also show that it strengthens the health of your brain and fights off the onset of diseases like Alzheimer's and dementia.

The amazing life of Dr John Boje

- Born in 1937, one of eight children
- Raised as an English speaker as his father struggled to find work due to his limited command of English
- In his matric year he set about translating Chaucer's *Canterbury Tales* into Afrikaans
- Worked as a teacher in South Africa, Swaziland and England
- Received his first doctorate (History) in 2010, at the age of 73
- Completed his second doctorate (English) in 20 months and graduated in 2020, at the age of 83
- **His advice when choosing research topics:** "Select something that is of compelling interest and, if possible, personal significance, in order to stay the course."

"In a discussion around the fourth industrial revolution with some UP alumni who have become global experts in their fields, the most important skill for the future which came up again and again was the ability to learn, unlearn, and relearn," he informed. "Professionally, the skills that you need for your first job will become obsolete, requiring constant re-skilling in order to maintain employability."

Vital interest

When Dr Boje was asked what's next on his to-do list, he displayed his characteristic good humour and said: "I read a story in the paper about an old guy who celebrated his 100th birthday with a first-ever bungee jump. Afterwards, when asked how he felt, he said, 'A little tired. I think I'll go and lie down for a bit.'"

It seems, though, that Dr Boje isn't ready to sit still just yet and is, in fact, having fun translating *Joseph and the Amazing Technicolor Dreamcoat* into Afrikaans!

Prof Kupe ended the lecture by thanking Dr Boje for providing the perfect model of someone who lives life with vital interest and embraces lifelong learning in so many ways. "May we all seek to follow your example in some way as we carve out our unique learning journeys."

Fast Fact

Chess masters spend between 50 000 and 100 000 hours studying chess to reach "expert" level.

An average of 75 000 hours means spending eight hours a day, 365 days a year, for more than 25 years to become an accomplished chess player!

How many hours are you spending on learning?



Gr8t!

Eight simple actions for lifelong learning

1. **Read widely and often** – Be curious; if you want to find research on a topic, use Google Scholar to find academic research. Delve into a topic and don't stop until you have exhausted it.
2. **Keep smart company** – Reach out to the contacts you admire; and get talking to influencers on Twitter to explore ideas and learning topics.
3. **Teach others** – Teaching others is a really good way to help ensure you really understand something.
4. **Keep a list of things you want to explore** – This is a good way to help you get started. Research some topics, make a list, and then decide what the best option to follow is.
5. **Use a personal learning environment** – Use personal learning environments such as GoConqr.com to help you adopt proven learning techniques to use throughout your journey to discovering new knowledge.
6. **Experiment with new ways to learn** – Drawing diagrams, watching documentaries, creating mind maps, and using music to study are just some of the ways to approach learning.
7. **Join a study group** – Find an online study group where you can collaborate and learn from people with varying experiences.
8. **Make it a priority** – Don't just keep saying 'one day'. Make today that day. If you wait for learning to find you, you will limit the amount of information you know, plus your ability to attain this knowledge over the long-term. It may even help to explore habits like curiosity, scepticism, creativity, initiative, and perseverance, which are linked to lifelong learning.

Research matters, indeed

UP's research matters because we have an impact on lives, and transform society with our research. A new platform and its accompanying digital magazine will help show that when scientists communicate more effectively about their research, science thrives.



"Universities are right at the centre of research projects that will shape our future – but their valuable work is often locked up in 'academic bubbles' and 'ivory towers' that remain mostly inaccessible to the average person," says Professor Tawana Kupe, UP Vice-Chancellor and Principal.

To help change this picture, UP has thrown open a new window that will help society get a much clearer view of what happens inside our laboratories, and research spaces.

Research Matters is UP's specially created platform to increase the spread of scientific knowledge and fight misinformation. The site showcases examples of the rich variety of research underway at UP. There is an accompanying digital research magazine, *Re.Search*, which features articles that are easy-to-read and which demystify the science behind issues.

UP aims to cut through complexity by providing information to a broad audience in plain language, supplemented by graphics, video animations and other engaging visual explainers.

A world of answers

"Research Matters will literally open up a new world of answers at the click of your mouse on anything from archaeology to zoology," Prof Kupe says.

Some examples of recent research at UP include the development of synthetic avocados made with 3D printers and equipped with tiny electronic sensors to ensure that fresh produce arrives undamaged on supermarket shelves.

An alumna from UP discovered around 20 gas-rich galaxies hiding in plain sight in a well-studied section of the sky using South Africa's MeerKAT telescope. Images of the galaxies are housed within a gallery for people to view.

This research forms part of UP's drive to generate research that is future-focused, cross-cutting and transdisciplinary. This means that UP researchers will collaborate with each other across disciplines to draw together apparently disparate research topics in a holistic manner.

<https://indd.adobe.com/view/546b52a9-9c8c-401f-bec7-837445f4614a>



Research Matters and *Re.Search* magazine will be of use to anyone who yearns for reliable information about our increasingly complex universe.

"The decisions we make today matter as we continuously deliver a world of answers to society through our teaching and learning, our UP ethos, our people and our research," Prof Kupe says.

"Through inclusion, relevance, innovation and impact, UP will positively contribute to communities, societies, ecosystems and the world at large – our commitment is to make a difference to today's challenging questions."

University of Pretoria Museums

On prescription for your social well-being

The University of Pretoria Museums manage, curate and conserve the diverse institutional collections and archives displayed in the iconic architectural wonders of the Old Arts Building and Old Merensky Building. With eight top-quality permanent exhibition galleries for the UP community and accessible to civic society.

Engage with the offerings of ceramics, sculpture, paintings and an array of other art forms, including the world-renowned Mapungubwe Collection are highlights and must-see museum collections in contemporary contexts with bespoke experiences. Beyond walls, there is also a creative sculpture art route meandering through the campus landscape.

Opening hours Monday to Friday 08:00-13:00 | Currently by appointment
Connect with us, follow us, like, browse and scroll our social media or continue to the website for updates.
Explore the University of Pretoria Museum Collections on Google Arts & Culture

<https://artsandculture.google.com/partner/university-of-pretoria-museums>

012 420 2178 | museums@up.ac.za | www.up.ac.za/museums-collections

All universities have great museums

Minding the gap

The step from matric to university may seem too big a leap for many learners. Thanks to the guiding hand of UP's Pre-University Academy, it isn't.

“ I had an amazing experience with the PUA last year and learnt a lot, from computer skills and mathematics to how to prepare for exams. I also had a wonderful opportunity to meet international learners from Hong Kong Poly-Technical University via a Zoom project who taught us how to use 360-degree cameras.

Tebogo Simlindile (15), Ribane-Laka Secondary School



C lose on 30 000 young people have seen opportunities opening up for them as a result of UP's Pre-University Academy (PUA). Learners from the 20 schools in Mamelodi and the surrounding areas are given the extra help they need with their schoolwork and to prepare them for tertiary studies.

One of the programmes offered in the PUA is a Saturday school programme which presents seven courses on Saturday mornings for Grade 8 to 12 learners, aimed at complementing their schoolwork. These are: Mathematics, Physical Science, Natural Science, Creative Writing, Language and Literacy Skills, Computer Literacy, and Examination Preparation. Learners can also join the Science Club and the Art Club.

PUA manager Moloko Malahlela says that besides improving learners' academic performance, one of the programme's objectives is to help them access higher education by developing their

critical thinking skills and conceptual understanding of the subjects. "Learners need help with Mathematics more than with any other subject, and often switch to Mathematics Literacy. We want to prevent this by helping learners from Grade 8 to 12 improve their potential for success when they are at school, and after they enter higher education."

He added that the basic education system is much like a pyramid: "Many enter the system, but we lose too many on the way to the top. We also aim to foster independence in learners, and familiarise them with the campus environment, so that when they do get here, they don't feel out of place."

Create careers early

The Mamelodi Campus has embarked on career interest awareness for 1 000 Grade 9 learners through online testing, to help parents guide their children towards secure futures. Test results are shared



with parents and they are made aware of the career opportunities their child could pursue, and which subjects best position them for these careers. Follow-up meetings are included.

Malahlela has worked in the education delivery and management field for 18 years, six of them as a mathematics and physical science teacher, before being appointed as manager of the PUA. "A lot of top learners can do well or better with just a little extra help. We also want to reach out to the child whose performance is not so good as well; seeing them flourish is very fulfilling. Being part of the programme for three or five years can really help a learner develop resilience and improve their thinking substantially," he says.

Beyond bridging the gap

There are opportunities for all learners when engendering a college-going culture.

According to Dr Martina Jordaan, Head: Community Engagement and Postgraduate Studies: "The Mamelodi Campus has adopted an anchor mission strategy to improve the economy and infrastructure of the communities in which it is located. The aim is to eliminate the barriers between academia and the community."

The Itsoseng Psychology Clinic, run by the Department of Psychology of the University of Pretoria, for example, assists parents with children at risk of failing or dropping out, by offering counselling services for both.

The Mae Jemison Science Reading Library, a USA embassy initiative, exposes learners in the community to career fields and individuals working in the sciences. Committed Artists for Cultural Advancement allows them to explore their musical talent and personal creativity in a safe and supportive environment.

Mekidela Belay, the PUA programme coordinator, says that one of the broader goals of the PUA Saturday programme is to bridge the gap between secondary schools and tertiary institutions through fostering conceptual understanding of learners in science and mathematics subjects, besides enhancing their personal skills to be independent learners who can use scientific skills in their day-to-day life.

"It is very fulfilling to do this work. We are building the next generation and as they build their self-esteem they know 'I can do this. I have hope and goals. I have the opportunity to develop myself.' It is truly awesome to witness this," Belay says.

Fast Fact

UP's Mamelodi Campus is a hub for community engagement, with a focus on enhancing access and successful student learning, as well as strengthening social responsiveness and the impact on society. The campus is geared towards broadening educational pathways by providing access programmes in science, engineering, technology, and mathematics (STEM).

“ The Pre-University Academy helps learners to develop skills and knowledge to assist them in high school. The programme helped me solve school problems that I encountered during lockdown.

Nthabiseng Sithole (16), Hoërskool FH Odendaal

Happiness is a wagging tail (and an MRI scanner)

UP's Onderstepoort Veterinary Academic Hospital gets its first MRI scanner and now there's no need to let the dogs out.



How does an MRI work?

Magnetic resonance imaging is the newest form of imaging in general use today. Through this method, the molecules in the body resonate when a magnetic field (of up to 60 000 times as strong as the magnetic field of the Earth) is applied to them. A short pulse of radio waves is applied, and a weak signal is echoed back from the body tissues; the echo varies depending on the type of tissue involved.



The new MRI scanner at the OVAH is a 1,5T unit, which is believed to be the strongest unit in veterinary use anywhere in Africa.

“
OVAH has begun another exciting chapter in the faculty's more than 100-year history – the beginning of a new era in service delivery and patient care. It reinforces the hospital's invaluable role and position as the country's leading veterinary hospital.

Professor Tawana Kupe,
Vice-Chancellor and Principal of UP

”

The Onderstepoort Veterinary Academic Hospital (OVAH) of the University of Pretoria's (UP) Faculty of Veterinary Science has acquired its first magnetic resonance imaging (MRI) scanner. This means the hospital now no longer has to make special arrangements with human hospitals to perform MRI scans.

“In South Africa, the use of MRIs for diagnostic purposes is limited to small animals, and most MRI scans are done in human facilities by special arrangement,” said Dr Paul van Dam, Director of the OVAH. “An MRI scan takes 45 minutes or longer, which limits the number of cases that we can refer. With our own MRI scanner, we can now do scans at any time of the day, on site, without the additional time to travel to another facility. An added advantage is that our MRI scanner will be the only high-field MRI in South Africa, and probably Africa, with image acquisition optimised for veterinary patients.”

In the past, the OVAH has facilitated MRI scans on a variety of species, including several highly trained working dogs and a lion. MRI scanners differ in strength in terms of the magnetic field being used, which is rated in tesla (T) units.

Stronger magnetic fields make for faster examinations, with greater detail and clearer pictures compared to lower-strength units. “The new MRI scanner at the OVAH is a 1,5T unit, which is believed to be the strongest unit in veterinary use anywhere in Africa,” Dr Van Dam said. “The unit also has the biggest diameter bore (the scanner's diameter) available, which allows us to scan the bodies of even the largest dogs and many other animals – including wildlife such as big cats and great apes – on the built-in table. We can also scan the limbs and necks of larger animals like horses on a purpose-built (and locally designed) table.”

Benefits of MRI

MRI scanners have been used in human medicine since 1977 and have been used in veterinary medicine since the mid-1990s. MRI imaging is the diagnostic method of choice when there is low contrast between neighbouring tissue types. This includes the brain – where the MRI distinguishes between grey matter, white matter, nerves and cerebrospinal fluid – as well as the locomotor system, where it can distinguish between muscle, tendons and ligaments surrounding joints, joint fluid and joint cartilage.

Lesions of the spinal cord are also best visualised with MRI imaging.

“By providing excellent images of soft tissue, MRI scans enable the clinician to make an accurate and often early diagnosis, allowing properly targeted treatment plans,” said Dr Van Dam.

The OVAH has the largest variety of veterinary specialists practising under one roof out of all veterinary hospitals in South Africa. These veterinarians examine, diagnose and treat patients and are supported by veterinary sisters who provide specialised nursing care. Enthusiastic students assist the clinical team as part of their practical training.

The hospital boasts an array of facilities and equipment, including an extended and improved state-of-the-art dog and cat ICU and high-care facility, 10 theatres for small and large animals where total hip replacements, implant-driven orthopaedic procedures for cats and dogs and life-saving emergency surgery on all animal species are performed. Internal medicine, including oncology, neurology and dermatology is practised in species-specific clinics and the equine clinic is equipped to diagnose and treat

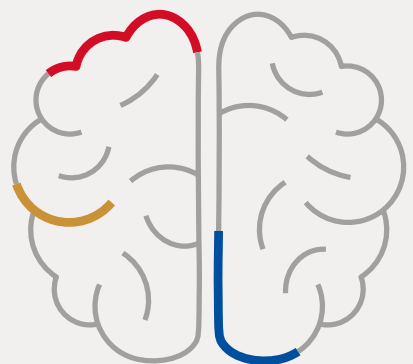
complicated lameness cases. Facilities also include accommodation for all animal species, from the smallest pet to horses, farm animals and wildlife, including the big cats and even immature rhinos. Added to this, the OVAH has access to a number of specialised on-campus diagnostic laboratories and specialist pathology services, enabling it to give each patient the best individual care, attention and treatment.

“All this ensures that the OVAH is never lacking in patients to heal or opportunities to train students to the highest standards,” said Dr Van Dam.

“The acquisition of the MRI scanner provides the hospital with a comprehensive set of imaging modalities including conventional radiographs (X-rays), ultrasound, scintigraphy, computed tomography (CT) and now magnetic resonance imaging (MRI),” said Professor Vinny Naidoo, Dean of the Faculty of Veterinary Science at UP. He explained that the MRI scanner was made possible in part by a generous bequest from Betty Noakes, who left a large part of her estate to the OVAH to be used for the benefit of animals. “We trust that the MRI will indeed play a large role in improving the lives of our patients.”

Clever!

An MRI can distinguish between grey matter, white matter, nerves and cerebrospinal fluid in the brain.



Advance YOUR CAREER

For more information, visit www.up.ac.za/ems



Faculty of Economic and
Management Sciences

Fakulteit Ekonomiese en Bestuurswetenskappe
Lefapha la Disaense tsa Ekonomi le Taolo



The University of Pretoria (UP) is a globally competitive institution offering postgraduate qualifications to set you apart with the latest knowledge and skills in your field of specialisation.

Whether you are considering pursuing a postgraduate diploma, honours, master's or doctoral degree, there are a range of world-class programmes accredited by leading professional bodies to meet your needs.

QS World University Rankings by Subject 2021

Accounting and Finance (#1 in South Africa)	101-150
Economics and Econometrics	251-300



Programmes offered in a wide variety of fields, including:

Economic Sciences

Econometrics
Economics



Financial Sciences

Accounting and Auditing
Financial Management
Investment Management
Taxation



Management Sciences

Industrial Psychology
Insolvency and Business Rescue
Labour Relations
Marketing Management
Strategic Management
Supply Chain Management

AACSB

Business
Education
Alliance
Member

For more information, visit www.up.ac.za/ems

Can't mute this mic

As the UP Law lecture reflected on technological innovations during and post-COVID-19, it was clear that there's no stopping integration technology in teaching and learning.



Even before COVID-19 forced education online, technology played an important role in the sector. Now it needs to become an integral part of teaching and assessment practices. So said Lizelle le Roux, Lecturer in the Faculty of Law's Department of Jurisprudence at the University of Pretoria (UP), during the faculty's virtual inaugural Teaching and Learning Lecture Series. The monthly lecture series reflects on teaching and learning during COVID-19 using technological innovations and mapping the way forward.

"We have witnessed the ease with which students navigate online materials on online platforms. Many of us started incorporating technology into teaching, called technology integration, but we need to focus mainly on how technology can be used to enhance teaching," said Le Roux. "Integration technology needs to do two things: it must enhance the actual learning outcomes to facilitate deeper understanding of the content, and it must spark creativity in the educator to improve a transformed teaching practice."

The lecture was moderated by UP's Professor Charles Maimela, Deputy Dean of the Faculty of Law. Also on the panel were the University of Johannesburg's (UJ) Professor Mzukisi Njotini, Vice-Dean for Teaching and Learning, Faculty of Law; and Dr Melanie Murcott, Senior Lecturer, Department of Public Law, UP Law.

Creative teaching

According to Murcott, teaching during COVID-19 was an opportunity for her to get creative. "The real challenge was not to expect too much from myself and students; it was to figure out how to get students to engage, prepare

and consolidate without formal in-person lectures; it was to reduce formal assessments and replace them with incentive-based informal assessments and acknowledging students' living realities. I had fun making the layout and design of my module more appealing and found YouTube videos for students to watch where the current social context related to the module context."

Focusing on the theme *Teaching under COVID-19, and if technology enhances or compromises teaching LLB curriculum going forward*, Prof Njotini said the International Astronomical Union (IAU) noted that more than 60% of global universities have had to digitise amid the disruptions and uncertainty caused by COVID-19.

Murcott said in her department staff used Instagram as a form of communication for some announcements because the photo and video sharing social networking site was popular with students.

"We made fun, informal video content to keep them engaged, and we used a Gmail account for student queries so that tutors and student assistants could reply to certain queries instead of lecturers being flooded with emails. In addition, this allowed students to engage even more among themselves.

"As most learning material was already loaded on clickUP (UP's learning management system), it was easy for students to access and we did not have to prepare a lot soon after COVID-19 hit South Africa. With some subjects, students submitted assignments online via the Turnitin programme to avoid plagiarism," said Murcott.

Access and curriculum transformation

Njotini further noted that COVID-19 made the inequality between students in terms of access to technology, very apparent.

"We need to look at the prevailing realities in South Africa – poor internet access and electricity power outages. As technology will only be available to a few we, as lecturers, need to create a way in which we are going to authenticate our online teaching and learning."

Maimela noted that it is important for lecturers to take a proactive approach to finding ways to make the best use of technological innovations. Lecturers also need to listen to their students and be aware of how receptive they are to the level of technological integration, he said.

He also noted that technological advances, outside of the current crisis, have an effect on teaching and learning. "One would agree that the fourth industrial revolution contributes partly to curriculum transformation because it challenges the status quo of how we are teaching and proposes different ways of teaching practices and pedagogies."

“

Integration technology needs to **enhance** the actual learning outcomes to facilitate deeper understanding and **spark creativity** in the educator to improve a **transformed** teaching practice.

”

Tips to spark creativity

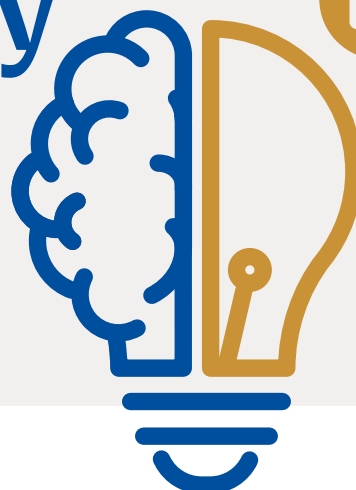
Work on making the layout and design of modules more appealing



Use Instagram as a form of communication for some announcements



Find YouTube videos that relate to the module context



Smooth. Well-balanced. Not too bold, yet rich in taste and aroma. Onderstepoort Gold coffee.

The special centenary edition Onderstepoort Gold was specially roasted for the Faculty by Beans About Coffee and is available in beans and ground coffee (500g).

Now being sold
by the
OP Crisp Health Café

HEALTH
CRISP
CAFÉ

Buy yours now or order at
op@crisphealthcafe.co.za at
R173.91 excl VAT. Cash, EFT and
card payment options available.



Key staff appointments



Prof Margaret Chitiga-Mabugu

Dean: Faculty of Economic and Management Sciences

I enjoy learning new things, and I have a passion for interacting with society and communities to share lessons I've learnt. I also enjoy making a difference in the lives of my colleagues. Essentially, I come to work to live my dream life.

After being a member of the Faculty for over 15 years, Professor Chitiga-Mabugu is keen to promote and ensure research productivity with high-impact relevance. "I also plan to enhance and uphold the significance and excellence of the Faculty's academic offerings; actively pursue alternative funding sources, maintain financial sustainability and optimise resources; as well as advance an ethical, diverse and inclusive faculty community that strives for equity and cultivates a sense of belonging for all."

She holds a BSc (Hons) and MSc Economics from the University of Zimbabwe and a PhD in Economics from Gothenburg University in Sweden.



Lekgetho Makola

CEO: Javett-UP

One of the founding principles is that the art practice of the continent must be represented within Javett-UP.

Makola, previously head of the Market Photo Workshop in Johannesburg, became the first African to chair the World Press Photo Awards General Jury in 2021.

His vision for Javett-UP is to position the art centre as a leading space for transdisciplinary engagement, where different types of practices interface to generate new ways of understanding arts cultural practice.

"We are beginning to diversify as a product where people can come to access knowledge and research, but also for leisure and pleasure. That element is critical: how the art can be pleasing and healing. With COVID limitations, we're investing in technology and how it can assist us to be accessible to as wide a public as possible."

Pertinent issues are urgent now, like the construction of masculinities, and abstraction.

Former Wits lecturer Ngcobo – who had curated one of Javett-UP's opening exhibitions – was included in ARTnews's May 2021 list of 25 Curators Shaping the Art World Today.

Like Makola, she is equally intent to open up access to the centre. "We're always thinking about how we can reach as many people as possible to come to the centre – and also how Javett-UP can have a presence in different areas."

Part of their research process is "to open up new entry points to the themes and to the collections".

One way to do this is to create fresh artistic responses.



Gabi Ngcobo

Curatorial director: Javett-UP



Dr Rakeshnie Ramoutar-Prieschl

Acting Director: Department of Research and Innovation

Dr Ramoutar-Prieschl joined the University of Pretoria in 2018 and has more than 15 years' senior management experience in the public and private sectors.

She has over ten years' experience working in the research funding environment, both at the Cape Biotech Trust (ex-TIA offices based in Cape Town) and the National Research Foundation.

Her career path to date has led her to be an innovative and driven leader in the research management space, which has impacted her publication and supervision record. She obtained a master's degree in biotechnology at Stellenbosch University and completed her PhD at North-West University Business School.



Dr Nokuthula Mazibuko Msimang

Artist in Residence

Dr Msimang is the first fellow to be appointed in the Artist in Residency Fellowship Programme at Future Africa.

The Programme advances the Humanities to specialist and non-specialist audiences through the arts and creative outputs. Her role will be to conduct research into, document and publish a manuscript on the life of Dolly Rathebe, the legendary South African musician and artist who was Africa's first black female film star.

Dr Msimang is a writer, academic, producer, and broadcaster. She has been creating values-based content for young people on multiple platforms for the past 25 years. She is part of the Puku Children's Literature network, where she works on special projects. Dr Msimang has published six books for young readers in which she celebrates positive cultural and social values, and encourages self-love, confidence, courage and resilience. In 2003 she was awarded the Bessie Head writing fellowship, which enabled her to complete and publish the collective biography Spring Offensive.



Professor Flavia Senkubuge

Deputy Dean: Health Stakeholder Relations in the Faculty of Health Sciences

Professor Senkubuge is a specialist in Public Health Medicine and has been attached to the School of Public Health in the Faculty of Health Sciences since January 2011. She is the Head of the Behaviour and Health Management Sciences (BHMS) division.

Professor Senkubuge holds the following qualifications from the University of Pretoria: a PhD (Public Health), an MMed (Public Health Medicine), and an MBChB.

Additionally, she holds an MBA from the Edinburgh Business School, Heriot-Watt University, UK, and a Fellowship of the College of Public Health Medicine (FCPHM) of the Colleges of Medicine South Africa (CMSA).

Professor Senkubuge has held various academic and professional leadership positions and is a member of a number of research advisory groups on health research and development in South Africa. She is the President of the CMSA and is involved in several projects and health conferences nationally, regionally and internationally.

Believing in UP since 1949

*‘It was a privilege to study at an outstanding, world-class university’.
Two generations of UP graduates recall their days at UP.*

Meet Dietrich von Staden (95), his wife, Sannie (93), and their daughter, Liebeth Turbati (63) – all graduates of the University of Pretoria (UP). Dietrich graduated with a BSc Agriculture in Horticultural Science in 1949, Sannie obtained a degree in social work in 1949, while Liebeth graduated with a BPolSci in 1979.

After graduation, Dietrich was swiftly offered a post as Research Officer in the Department of Horticultural Science at UP and worked on a project to develop superior citrus cultivars for the South African citrus industry.

“Apart from my involvement in citrus research, I was also responsible for a long-term research project on the fertiliser requirement for bananas under South African conditions.” This project formed the basis of his dissertation and he received his MSc in 1965.

In the late 1960s, Dietrich initiated a course in Ornamental Horticulture at UP and with the establishment of the BL degree in Landscape Architecture in 1973, he adapted some of the courses to meet the requirements for the Landscape Architecture degree.

Sannie says it was a privilege to be trained at a world-class university. “That is why we sent our children and grandchildren to UP,” she said. She believes that the role of alumni is one of public relations, funding and support of programmes related to one’s specialised field of training. “It is also an opportunity to socialise at meetings where stimulating talks and programmes are presented.”

Liebeth currently works as a senior associate at international strategic advisory firm McLarty Associates in Washington, DC. “As a pioneer in the field of private sector diplomacy, we help our clients – mainly large US corporations – to navigate strategic and operational challenges in every part of the world.”

After graduating from UP, Liebeth joined the Department of Foreign Affairs and served in Denmark, Peru and Canada. “I also lived in Italy and, in the late 1990s, relocated to the US. As an immigrant it was not always easy to establish oneself in a new career, especially in a highly competitive city such as Washington, DC.”

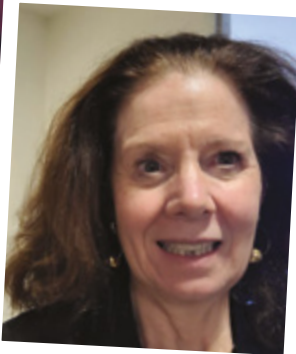
She related some of her memories of UP. “The 1976 student uprising in Soweto profoundly influenced the way many of us thought about apartheid policies and the increasing international isolationism South Africa was facing,” she recalled. “Mike Hough was a senior lecturer in Political Science at the time and encouraged open debate and critical thinking in his classroom. I have great memories of very lively debates on South Africa’s future in an evolving geopolitical landscape.”

She also recalls meeting a variety of people from abroad who studied at UP for a semester or did postgraduate degrees there. “The outpouring of appreciation for UP and the whole community by these international students made me feel proud of my alma mater.”

Author: Xolani Mathibela



Dietrich von Staden (95), his wife, Sannie (93), and their daughter, Liebeth Turbati (63) – all graduates of the University of Pretoria (UP).



New thinking about law

The University of Pretoria and the Faculty of Law are on an upward trajectory of renewal, innovation, excellence and transformation, which makes this an even more exciting time to work here with colleagues and students.

Says Professor Joel Modiri, the youngest current professor in the Faculty of Law and the University at large, and the new Head of the Department of Jurisprudence. “My relationship with the Department began a decade ago when I was employed as a tutor and then moved up the ranks to now reach the level of associate professor. It has been central to my academic, professional and intellectual formation as a scholar and teacher,” he said.

Prof Modiri’s broad vision for the Department of Jurisprudence is to:

- pursue the central intellectual mission of an academic department in a research-intensive university engaged in hybrid learning and curriculum transformation
- advance, in teaching and research, a critical, transformative and contextual approach to and understanding of law, and
- situate the Department as a leading department of jurisprudence focused on foundational legal education and critical and socio-legal scholarship.

The Department of Jurisprudence will also, in collaboration with the Office of the Dean, work to formalise ties with the upper echelons of the South African

judiciary. Further, the Department is establishing a ‘Pretoria Legal Theory Lab’, which will be the flagship research and fundraising platform, combined with a focus on niche areas of critical enquiry in legal theory, such as political economy, critical constitutionalism, and culture, sexualities and knowledges.

Prof Modiri adds: “Jurisprudence is more than an academic unit, it is a discipline focused principally on the idea of law at a conceptual level. The UP Department of Jurisprudence has made important strides in shifting the discourse of law, legal theory and jurisprudence away from an abstract study of law to one firmly grounded in the socio-economic realities and historical complexities of our society and world. Attentiveness to the question of historical justice is central to how I understand the discipline of jurisprudence and its place in the legal academy and LLB curriculum.”

Prof Modiri envisages that the Department will continue to “create an enabling environment for critical intellectual inquiry and embed a morally, socially and politically-engaged approach to the law in its teaching and research endeavours at all levels”.

Author: Elzet Hurter



Fast Fact

Professor Joel Modiri holds the degrees LLB cum laude (Pret) and PhD (Pret). His PhD thesis is titled *Jurisprudence of Steve Biko: A Study in Race, Law and Power in the ‘Afterlife’ of Colonial-apartheid*.

He was the acting Head of Jurisprudence from October 2020 and was promoted from senior lecturer to associate professor on 1 January 2021. His appointment as the Head of the Department of Jurisprudence came on 1 June 2021 for a four-year term.

No motion sickness for our smart avos

Smart people at Engineering 4.0 have sent a batch of ‘smart avos’ on a cruise to determine the impact of transportation conditions on agricultural products. Bon voyage!

Scientists at the University of Pretoria’s (UP) Engineering 4.0 research facility are tracking the journey of 3D-printed avocados on a ship from South Africa to the Netherlands. These avocados have microsensors and are part of a research project to determine damage to fresh produce that is being transported from producers to supermarkets.

According to Professor Wynand Steyn, Head of the Department of Civil Engineering in the Faculty of Engineering, Built Environment and Information Technology (EBIT): “This is a flagship project of Engineering 4.0 which focuses on smart transport, infrastructure and cities. The researchers have made use

of the Department’s unique smAvo and smaTo sensor platforms, which are used to monitor the entire value chain, from farm to fork.”

Wrinkle-free travel

He said many producers in South Africa face the challenge of ensuring that their agricultural products intended for the export market arrive at their destination unblemished. Furthermore, the products need to be suitable for further distribution and sale. “But sometimes damage to products leads to a loss for the producer.”

Prof Steyn says: “The department has experience in determining the impact of

transportation conditions on agricultural products and optimising these conditions to ensure that products such as tomatoes and avocados arrive at the consumer in the best condition.”

To determine the damage on avocados, the UP researchers developed a concept known as “civiltronics”, which entails the combination of traditional civil engineering with electronics, the internet of things (IoT), programming, computer science and additive manufacturing (3D printing). The project involves monitoring the transportation by cargo ship of a consignment of avocados destined for Rotterdam in the Netherlands, from where it will be further distributed throughout the European Union.

“The avocados are 3D-printed with microsensors that send data back to UP’s Engineering 4.0 research facility, tracking the effects of accelerations in speed, rotational movements of the ship and temperature, as well as other elements of the ship’s behaviour, to determine whether this impacted on the produce itself and the condition in which it arrived at its destination.”

Measuring the damage

To optimise the data recorded during the transportation of the avocados, the team developed a measuring instrument with microsensors embedded in a number of 3D-printed avocados with a soft water-resistant outer covering that would be exposed to the same conditions as the real produce surrounding them.

“Inherent in this innovative technology is the potential to apply it to other fields as well to promote the transdisciplinary research for which the University of Pretoria is so highly regarded.

Professor Wynand Steyn



This instrument was developed from “off-the-shelf” components and microcontrollers. It was programmed and customised for the objectives of this particular project so that live, real-time data could be collected and stored for analysis.

“If you can’t measure the damage, you can’t manage it,” says André Broekman, a PhD student working on the project.

“Real-time data on the ship’s location in the Atlantic Ocean, as well as weather conditions throughout the trip, is being sent to the University’s researchers at Engineering 4.0, where all the data will be captured on the Department’s central platform for analysis, interpretation and the recommendation of future action,” he explains.

This data will later be linked to maritime data such as the height of the waves, wind speed and the direction in which the ship is travelling, which are obtained from satellite data. “This information is not just of value to producers to ensure

that they can obtain top prices for South Africa’s best products, but also to avoid additional costs related to transporting products that have been damaged or are no longer suitable for trade in the export market back to South Africa,” he explains. The data should assist in understanding where in the logistics chain damage potentially may occur, and therefore assist in eliminating events that may cause such damage.

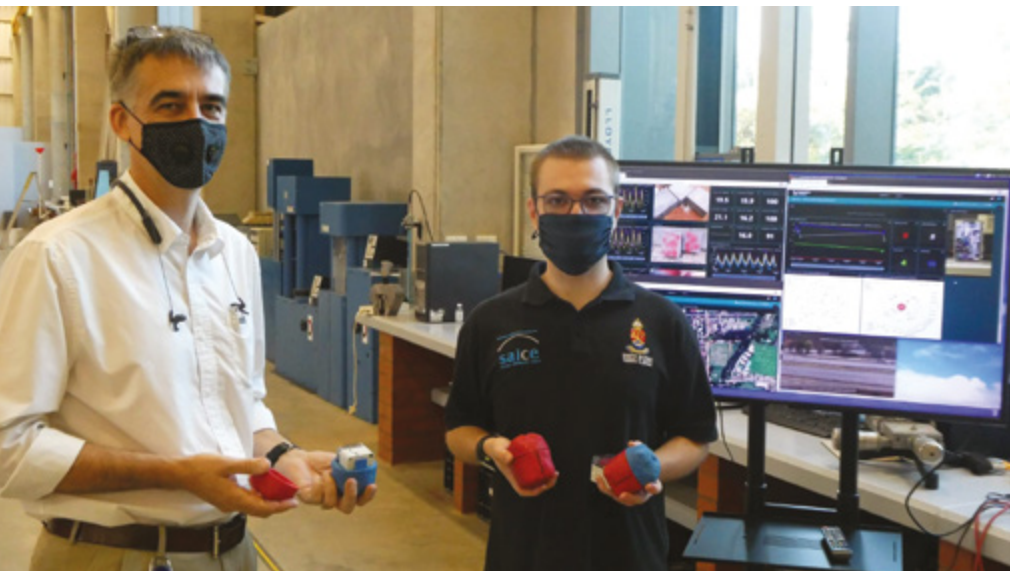
“The University’s world-class research footprint entails focusing on digital information across a transdisciplinary platform,” says Prof Steyn. “The success of this project will therefore not be restricted to a single product or engineering discipline. Inherent in this innovative technology is the potential to apply it to other fields as well to promote the transdisciplinary research for which the University of Pretoria is so highly regarded.”

Author: Prof Wynand Steyn



New word for Scrabble lovers: Civiltronics

The combination of traditional civil engineering with electronics, the internet of things (IoT), programming, computer science and additive manufacturing (3D printing).



Professor Wynand Steyn, Head of the Department of Civil Engineering at EBIT, and André Broekman, a PhD student, with the 3D-printed avocados that are sailing the seas in the interest of science.

The unspoken message of ceramics

Unspoken, a long-term exhibition by the University of Pretoria (UP) Museums, showcases signature South African ceramics from the Corobrik Collection. But it is so much more than an exhibition of some of the best South African ceramics.

Artist name: Majolandile Dyalvane
Medium: Earthware
Height: 290 mm Width: 260 mm



Are ceramics more than an iconic art form on the African continent? How do artists view their art and is ceramic art in the eye of the beholder? How has the tradition of ceramic-making from precolonial Africa been passed on as an Unspoken tradition from one generation to the next?

These are some of the provocative questions that the exhibition, *Unspoken*, aims to explore. Showcasing signature South African ceramics from the Corobrik Collection, this long-term, rotational loaned exhibition by the UP Museums is held in partnership with Corobrik, Ceramics Southern Africa (SA) and the City of Tshwane's Pretoria Art Museum (PAM).

Over 230 ceramics are on display, and the selected ceramicists will be changed each year, to explore their Unspoken biographies. They have been selected to examine how and why their art is influenced by personal journeys, the artistic profession and the role ceramics play within contemporary art.

Over time, the exhibition will rotate selected artists annually to feature in *Unspoken*. This is more than just an exhibition of some of the best South Africa seminal ceramics. It serves to open discussions and questions about how ceramics are currently viewed and interpreted by a diversity of audiences within a university museum context.

A form of social commentary

On many occasions ceramic art is a form of social commentary, allowing artists to speak of heritage, politics, or religion. *Unspoken* aims to remove the boundaries between ceramics as a craft and fine art. Artists utilise ceramics to explore everyday issues, moments, and emotions through their art and to express who they are and their origins.

Some artists have been inspired by generations of ceramic-making as a tradition, where skills were passed on from one generation to the next.



Artist name: Sisanda Mbana
Medium: Earthware
Height: 250 mm Width: 400 mm

The making of vessels, beer pots, cooking pots – whether as functional household items or symbolic works – has been an ongoing indigenous art form in South Africa, and perhaps is even at risk today of becoming a lost tradition. These early skills may have inspired later generation artists to be creative in the construction of contemporary ceramics.

As example, the world-renowned South African Zulu artist, Nesta Nala (1940-2005) passed her ceramic-making skills onto her three daughters who are now also ceramic artists. Mamelodi-based artist Nic Sithole (b.1964) learnt the art of ceramic making from his maternal grandmother.

Ceramics as a medium can accordingly transition seamlessly from the past into the present, through the histories of its makers and that which is Unspoken. In this exhibition, works in the Corobrik Collection are paired into collectives to deliberately create conversations, explore shared histories, tensions and their contemporary functions and meaning. This allows for more nuanced perspectives in the world of ceramics.

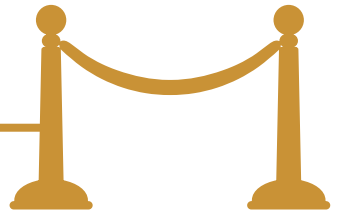
This prestigious local ceramic art collection was formerly housed at Tatham Gallery in 1996 and the Sandton Art Gallery until 2001 when it relocated to the Pretoria Art Museum, where the collection is currently catalogued and housed. UP signed a long-term loan agreement with Corobrik in 2020 and a Memorandum of Understanding with PAM in 2021 regarding the *Unspoken* exhibition. This brings nearly the entire Corobrik Collection, comprising 276 works, onto post-pandemic public display within a single classic gallery in the Old Arts Building on UP's Hatfield campus.

Unspoken

Exhibition of the South African Ceramics from the Corobrik Collection

October 2021 – December 2022

Co-curated by
**Gerard de Kamper
& Lelani Nicolaisen**



Artist name: Nic Sithole
Medium: Terracota Earthware
Height: 300 mm Width: 400 mm



Artist name: Madoda Fani
Medium: Stoneware
Height: 100 mm Width: 250 mm

You can count on us

UP Accounting develops an innovative student support programme to help future chartered accountants become #FITForLife.

As the country continues to grapple with funding issues in higher education, the University of Pretoria (UP)'s Accounting programme has developed an innovative student support programme called FIT. The programme involves the synergy of three funding and bursary programmes – FASSET Bursary Scheme, Ikusasa Student Financial Aid Programme (ISFAP) and the Thuthuka Bursary Fund (hence the acronym FIT).

The structure of the financial support provided by the funders differs slightly between these programmes, but they all include tuition fees, textbooks, accommodation, food, pocket money and wrap-around support.

According to Aneesa Carrim, Senior Lecturer and FIT Programme Coordinator: "The vision of the FIT team is to establish and maintain a reliable, approachable and exemplary support system for FIT students; thereby being a positive catalyst for these students to achieve academic success and become 'FIT-for-life'. This effectively also means that we want to produce UP alumni who are well-rounded individuals,

and employees who can function independently and effectively in the workplace."

She adds that these programmes have chosen to work together and pool resources in order to optimise their reach. "We use the strengths of each team member to have a maximum support impact on our students. The FIT team is managed by four programme managers and is supported by an administrator and academic trainees."

While previous UP support programmes provided students with several additional academic interventions, 2017 marked a change in approach, sparked by the FIT vision and values, together with an acknowledgement that UP's core offerings were more than sufficient to ensure students' academic success. Instead, students required wrap-around (psycho-social) support.

As part of this wrap-around support, the FIT team now offers essential life skills sessions, which students on the programme are expected to attend regularly.

These include:

The "7 Habits of Highly Effective Students" training

The 7 Habits course is one of the foundational pillars of support at UP. "It has been a game-changer for our students," says Carrim. "Students receive their own 7 Habits textbook/

We want to produce UP alumni who are well-rounded individuals, and employees who can function independently and effectively in the workplace.

Aneesa Carrim

workbook, and there is also an app with many handy features. All the FIT team managers have been formally trained to present the course. Teaching the 7 Habits has enabled the team to establish a common skills language that can be used throughout the students' time on the FIT programme. We believe the 7 Habits course helps students prioritise, plan and manage themselves better and gives them overall good life skills that will assist them even after their studies."

Exam technique, planning and time management

These sessions are scheduled a few weeks before an exam or test series. These sessions are sometimes presented by the FIT team and at other times assistance is provided by other people at the University.

Work readiness, CV and interview skills, and personal finance

An internal UP provider called Enterprises UP presents these courses at a third-year level and keeps them basic. The course is intended to give students a good start rather than being fully comprehensive.

Personal management

These sessions are presented by FIT managers and trainees and cover things like sleeping habits, physical activity and eating healthily. At times there are gender-specific sessions.

General motivational sessions

These motivational sessions are provided by chartered accountants who have branched out into different career paths.

By sharing their journey they hope to inspire students to create their own inspirational path.

Leana du Plessis, Senior Lecturer and UP Thuthuka Programme Manager, adds that their priority is students' academic responsibilities, such as tests and assignments, and that they plan their support initiatives around this. "We monitor all their class and test timetables and will never schedule an intervention which we don't believe is essential for the development of the students."

"As a team we believe our support to students is a constant work-in-progress," Carrim says. "Every year we re-think our core support offering and try to be innovative and move with the times and student needs. We strive to make our students our first priority and we know that there is always room for improvement and learning. We believe that, like our students, we are also on our journey to become 'FIT-for-life'."

Authors: Aneesa Carrim and Leana du Plessis

Fit for anything

The FIT team wants students to have and develop certain values in line with the FIT vision.

1. Independent
2. Responsible
3. Hard working
4. Courageous
5. Kind and respectful
6. Thankful
7. Growing continuously
8. Ethical
9. Balanced

Top of her class, bottom of her age group

A 24-year-old University of Pretoria (UP) student has become the youngest person to graduate with a PhD from the University's School of Health Systems and Public Health in what she describes as "a dream come true".

Dr Rose Nabi Deborah Karimi Muthuri graduated with a Doctor of Philosophy in Health Systems at the faculty's virtual Spring 2021 graduation ceremony, at which 147 graduates were honoured. "I hope this will inspire more young people to pursue their dreams," she says. "Earning my Doctor of Philosophy is one of the highlights of my academic career. It was an extremely challenging journey, but also a blessing and a dream come true."

Dr Muthuri is a Kenyan citizen who was born in South Africa in 1997 but left for Kenya when she was a year old. She holds a Master of Arts degree in Counselling Psychology (*magna cum laude*) and a Bachelor of Arts degree in Psychology (*magna cum laude*) from the United States International University-Africa in Kenya, and graduated top of her class in both instances.

The enthusiastic academic is passionate about using research to enhance the performance of health systems. Her doctoral thesis highlights the importance of improving the health and well-being of healthcare workers, with a view to improving the performance of the national health system. "I realised that there was a gap in the positive mental health aspects among the health workforce, and chose to pursue a PhD in health systems to gain an in-depth understanding of these workers and their well-being," she explains.

She is grateful for the administrative and academic support that she received from the UP community.

"The University helped me in many ways, mainly by creating an enabling environment that encouraged me through the various learning resources available to students and to strive for

excellence throughout my studies." She also credits her supervisors for their unwavering focus, which helped her to cultivate her creativity and drive for excellence when things got challenging. "I was privileged to have knowledgeable, experienced, committed and inspiring supervisors – Professors Flavia Senkubuge and Charles Hongoro."

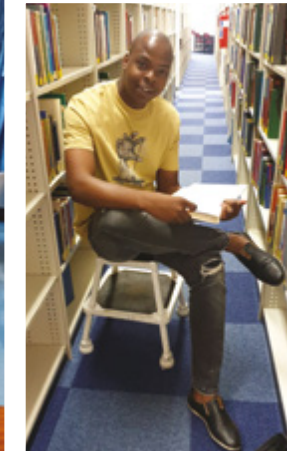
Author: Mmane Boikanyo

"I realised there was a gap in the positive mental health aspects among the health workforce, and chose to pursue a PhD ... to gain an in-depth understanding of these workers and their well-being"

Dr Rose Muthuri
"

147

Number of graduates who were honoured at the 2021 virtual Spring graduations.



"My time as a packer prepared me mentally to be fearless and not to blame anyone when things didn't go my way. All the hardships made me strong, inside and out."

Tintswalo Maluleke

"

From shelf packer to physiotherapist

When Tintswalo Maluleke told his fellow shelf packers that he dreamt of becoming a physiotherapist, they laughed at him. After receiving his BPhysT degree from the University of Pretoria (UP) during the Autumn 2021 graduation season, he's the one who's smiling now.

When Maluleke started working at Makro as a packer it was with one goal: to save as much money as he could so that he could go back to school. "It was not easy," he says. "I would work long hours to supplement the little that I did earn. I used to tell everyone that I would go back to school and everyone would laugh at me. But nothing stood in the way of my dream of becoming a physiotherapist. As I was packing stock, I would tell myself that this is not my job – I want to be a physiotherapist one day. My dream has become a reality."

Maluleke recalls that he sometimes attended classes and did clinical work on an empty stomach.

"I had no money to buy lunch or even to buy study materials," he says. "My family, my partner, lecturers and clinicians helped me with food. I am very thankful to each one of them."

Despite the hurdles, Maluleke notes that his time as a packer prepared him for his studies in many ways. "Mentally, it prepared me to be fearless and not to blame anyone when things didn't go my way. All the hardships made me strong, inside and out."

The graduate says he applied to study physiotherapy at three universities and was accepted at two; he then investigated each institution before opting for UP. "UP is considered to be one of the most prestigious universities in South Africa,

and provides its students with all the support for academic success."

He believes the University has prepared him well for the work environment. "From the lecturers who taught us, to the clinical settings where we had to apply the theory taught to us, UP has really prepared each one of us to give our patients the best treatment possible."

Maluleke's dreams continue to grow. "Studying further has been on (my mind) ever since I started doing my community service," he says. "I want to further my studies at UP and continue to manifest the great work that the University has prepared me for."

Author: Xolani Mathibela



Dr Paolo Pazzi

Collaboration enhances cancer care

UP's Faculty of Veterinary Science and the Southern Africa Animal Cancer Association (SAACA) have teamed up to create an oncology centre for clinical cases and research in animals.

Having spent many years fundraising for the Cancer Association of South Africa (CANSAs), Munnik Marais wanted to create awareness of cancer in animals and encourage treatment and research. To achieve this goal, SAACA was created and at the end of 2020, he approached the Faculty to join forces.

Dr Paolo Pazzi, Section Head of Small Animal Medicine at UP, heads the research aspect of the oncology centre. "The goal of this collaboration is to increase the faculty's capacity to treat cancer in animals," he says. "This will result in an increase in research in this field and allow for earlier diagnosis of cancer and a wider spectrum of effective treatment options for animals." Dr Anri Celliers and Dr Varaidzo Mukorera, lecturers in Small Animal Internal Medicine, and Professor Gerhard Steenkamp, Section Head of Small Animal

Surgery, head up the clinical side of the oncology centre, which is based at the faculty's Onderstepoort Veterinary Academic Hospital (OVAH). While there are specialist hospitals in South Africa that treat cancer in animals, OVAH is the only one with on-site specialist clinical pathologists/cytologists, and medical and surgical clinicians who work as a team to diagnose and treat cancers.

"Our aim at the oncology centre is to focus on common cancers such as mammary cancers as well as various carcinomas and sarcomas," said Dr Pazzi. "Blood or urine tests will help easier diagnosis and earlier treatment of cancers in animals. Other planned future studies will look at the role that certain blood cells play in the promotion or inhibition of cancer."

In the near future, an electro-chemotherapy unit will be available at OVAH, which will allow for the treatment

of localised skin tumours through a combination of chemotherapy and a local electrical current. This avoids the need for surgery or radiation therapy in many cases. "The centre will also acquire a new computed tomography scanner unit to help identify the spread of cancer to the lungs and other parts of the body, thereby improving diagnostics and ultimately patient quality of life," Dr Pazzi said.

Most patients are cats and dogs with cancer. The clinic currently sees 10 to 30 cancer patients a month, but with the collaboration with SAACA, these numbers are predicted to double.

According to Dr Paolo Pazzi the collaboration will allow for earlier diagnosis of cancer in animals and a wider spectrum of effective treatment options.



Munnik Marais, founder and CEO of SAACA.

Hello UP Alumni

We would like to stay connected with you!

To ensure you receive our alumni communications, invites, updates and alumni benefits, make sure you update your latest contact details in case they've changed at <https://www.up.ac.za/alumni/alumniform>. Don't forget to join our exciting UP Alumni Connect Platform or App.

Simply register to join as follows:

1. To join the UP Alumni Connect platform, go to www.upalumniconnect.com and click on "Get started", sign up using your LinkedIn, Google or Facebook account, or your email address. The team will verify that you're an alumnus/alumna/UP employee and approve your profile within three days. You can then sign in and enjoy the many benefits of using the platform.

2. Go to the App Store or the Play Store, search "Graduway Community", install the app, select "University of Pretoria" as your institution and register or login. Connect to this community of over **10,000 alumni** and never miss out on **job postings, mentor/mentee opportunities**, and updates from UP including **news** and chances to **win prizes**. We look forward to seeing you online!

Alumni Relations Team



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Tuks Alumni

“Your purpose in life should have an element of helping others to excel”

Community engagement is an important part of UP life, and even forms part of the curriculum. Learn from an engineer who starts work at 4am, see how the simple act of letter writing is a gift for both parties, find out how we can all contribute to someone’s future and why caring for animals is good for humans.

Write a gift

Author: Mecayla Maseka

Many people felt isolated and lonely as a result of COVID-19 restrictions that prevented people from visiting one another. One group felt this most keenly: elderly residents at senior homes who needed to be isolated from human contact and who missed the laughter their grandchildren brought with them on each visit.

Michelle Kretzschmar, a microbiology student at UP and house committee member of Azalea residence, put forward an initiative at her residence called Adopt-a-Grandparent, which entails writing a letter to grandparents at the Ons Tuis, Van Rensburg and St Johns Home.

“Children and students are sometimes scared to engage with older people,” says Kretzschmar. “Taking an interest in them truly opened our eyes. Through the Adopt-a-Grandparent programme, we now have the opportunity to get to know them and learn from their amazing and interesting experiences.”

Kretzschmar delivered all the letters to the homes. “Handing out the letters was such a special experience,” she says. “One lady couldn’t resist the suspense and immediately opened and read hers. I’m really passionate about this programme and hope this will be an ongoing project for our residence.”



Follow your calling

Author: Primarashni Gower



Professor Wynand Steyn,
Head of the University
of Pretoria’s (UP) Department
of Civil Engineering,

Professor Wynand Steyn, Head of the University of Pretoria’s (UP) Department of Civil Engineering, actively encourages community engagement. “It provides an opportunity to get out of your comfort zone, develop an appreciation for your privileges, and ensure that you do not live a selfish life. It should not be a once-off activity but should become a habit.”

For him Mandela Month is a reminder that each of us has a calling and purpose in life. “If we do not understand and follow our calling, we miss our purpose. Whatever your purpose in life is, it should have an element of helping others to excel. Various communities have a saying

that ‘it takes a village to raise a child’. I believe it takes a community of colleagues, mentors and others to raise a competent, capable and mature adult too. “He believes students are the reason that academic institutions exist, and it is the responsibility of academics to guide them on a path of discovery. “They are a huge responsibility, as they are the future of the profession and the people that will form the world for the next generation.

“Engaging with students allows me to see the world in ways that are sometimes uncomfortable yet part of someone’s reality. Such insights should allow us as academics to grow with them.”

Make a ripple

Author: Primarashni Gower

Noluvuyo Mogale, a final-year University of Pretoria Education student, co-founded Girls on the Move with her colleague Tumie Motumi. It is an organisation that seeks to restore the dignity and pride of the girl child. “We recently launched Amajita on the Move for men as well in light of the increase in gender-based violence,” she says.

“Our initiatives include a sanitary pads drive; a father-daughter bonding initiative; the Cry of the Girl Child campaign; and a women and youth conference. We also work with the adolescent clinic in Hillbrow to ensure that youth are aware of their sexual health.”

She is part of the Youth Sector Parliament of 2021, representing Commission 1, which seeks to assess the impact of the pandemic on the healthcare system and addresses youth unemployment. “I was privileged to be elected as one of the top three representatives who will voice the concerns of the youth.

“We should help each other because life is a journey and you are creating a ripple effect. One individual you help today will help someone else in the future who will help another, and so on. That will ensure that the world becomes better than what it is.”



Practise One Health

Author: Mecayla Maseka

Olebile Olibile and Deborah Mushwana are part of the group of final-year Veterinary Science students who offer their skills every day at the Hluvukani Animal Clinic in Mpumalanga or in the surrounding community. This clinic’s outreach programme not only benefits farmers and the community at large but also the students involved. “The clinic is located in an area where many South African-controlled animal diseases [any animal disease or infectious agent that is not known to occur in South Africa] occur – this has given me insight into how to deal with scenarios involving these diseases,” says Olebile.

“By attending this rotation, my perspective has been swayed towards believing that a One Health approach [where various disciplines work together locally, nationally and globally to attain optimal health for people, animals and the environment] is the best way to control infectious diseases. Many emerging infectious diseases have a zoonotic [animal-to-human transmission] potential, and the human-animal interface seems to be on the rise with the increasing popularity of pets. It is therefore important that modern-day veterinary practitioners not just look at protecting the health and well-being of the animal, but consider that of the human involved in that specific human-animal interface too.”



Honouring academics solving real-life problems

The University of Pretoria (UP) celebrated its top researchers at its 21st annual Academic Achievers’ Awards ceremony, held virtually on 28 October 2021.



The awards are hosted annually by the university to acknowledge the work of UP’s academics, who increasingly ensure that their research helps to solve “real-life problems” and has a transformative impact on South African and global society. Due to the environment created by the COVID-19 pandemic, this was the second time the awards were hosted online.

The evening celebrated 141 winners across nine categories. This includes 119 academics who were acknowledged for being included on the list of the National Research Foundation (NRF)-rated scholars or for the outstanding work they had done over the past year. There were 3 A-rated researchers, 25 B-rated researchers, 74 C-rated researchers and 17 Y-rated researchers honoured.

In his address, UP Vice-Chancellor and Principal Professor Tawana Kupe noted the successes that the university has enjoyed, despite the pandemic creating continued global uncertainty. “This is the second consecutive year that this awards ceremony is taking place in a hybrid mode, as COVID-19 is still a feature in our lives. While there is a campaign to get our population vaccinated, UP has risen to the challenge again in the face of this global health crisis, by being one of the first in the higher education sector to open a vaccination site at the Faculty of Health Sciences’ Prinshof campus. This site services students and staff, and the bookings are easy to make,” he said.

The event’s keynote speaker, South African epidemiologist and A-rated

researcher Professor Quarraisha Abdool Karim, used her address to reflect on the past 18 months and the impact of the COVID-19 pandemic.

“We’ve also seen the importance of science in society,” she said. “The scientific knowledge that has been generated in an unprecedented timeline has set a new bar in terms of knowledge generation. In less than a year we have come up with new diagnostics, new treatment modalities, and six new vaccines. That is amazing. It has highlighted not only the importance of science in society, but also has increased public engagement in science, public appreciation of science, and what is possible.” She also took the opportunity to congratulate UP’s researchers on their achievements.

Among the notable award winners of the evening were the recipient of the Chancellor Award: Research, which is awarded to a researcher in recognition of exceptional achievement in the field of research aimed at the advancement of science, and the associated promotion of the interests of the University of Pretoria.

Professor Brenda Wingfield was given the award for her pioneering work in fungal genomics in South Africa. In her acceptance speech, Professor Wingfield said she receives the Chancellor’s Award with humility and pride. “This award recognises more than just one person, but also my collaborators, colleagues and students. They have contributed hugely to the research and outputs that I have achieved over a lifetime. This award also recognises excellence. Excellence is not achieved easily, or rapidly. In



From top clockwise: Professors Brenda Wingfield, Tawana Kupe, Quarraisha Abdool, and Namrita Lall (centre).

UP alumna Nozipho Tshabalala acted as Master of Ceremonies.

contrast, excellence requires a lifetime of investment and of focus in doing the very best that one can do,” she said.

The Vice-Chancellor’s Award for Excellent Supervision is another prestigious award which is given in recognition of the contribution of members of academic staff who excel as supervisors of postgraduate research students. The award is made on the grounds of exceptional performance measured in terms of the students’ academic achievement. Professor Namrita Lall of the Department of Plant and Soil Sciences received this honour, and said

she is overwhelmed with gratitude. “I am so honoured to have my work recognised in this way by the University of Pretoria. Many hours went into students’ supervision, and it means so much to me that the work that I am so passionate about also resonates with others. This accomplishment is not something that I did alone, and there are many others who deserve to share this award. This award is a result of the collective efforts of many of my collaborators, friends, students, and funders. I therefore want to share this recognition with you and thank you all for all the support you have given me,” she said.

The Conversation Africa’s Science Communication Awards category honoured three academics for the performance of their articles on The Conversation Africa’s website: Professors Wanda Markotter, Henning Melber and Daniel Bradlow.





One-of-a-kind Varsity Cup

After the absence of any spectator-based sporting events in 2020 during the nationwide pandemic lockdown, supporters of the annual FNB Varsity Cup were delighted to once again cheer for their team, albeit via televised broadcasts. Making use of UP's premier facilities, the 2021 Varsity Cup and Varsity Shield tournaments were played in a secure bio-bubble from 4 April to 24 May. The matches were played across five "bubbles" at three venues in Pretoria with all 17 teams hosted at the Varsity Cup Village at UP's sports centre.

This format enabled players to return to their respective universities for the 11 days between bubbles for in-person tutorials, practicals and tests. Although being able to leave the village between bubbles gave the players the chance to relax and recharge, they had to be extra-vigilant around family and friends to ensure that they tested negative on their return to the Varsity Cup Village.

The players benefitted from free time between matches to study or to just switch off from rugby, and could make use of dedicated study areas. Team managers had to ensure that the players were well prepared mentally for this new format, which entailed playing without any fans to cheer them on, with the marked absence of the famous Varsity Cup student vibe. The media – and particularly SuperSport – played an important role in bringing the excitement of the tournament to spectators. Of the 48 Varsity Cup matches, 34 were broadcast live, while all 22 Varsity Shield fixtures were broadcast.

According to the players, the accommodation provided by UP was phenomenal, and all the arrangements were impeccable. The organisers of the FNB Varsity Cup commended the University for the amazing support that was provided for this unusual tournament.

"It was a massive and structured effort, in which we solved a major problem in a controlled, structured and responsible manner," said Steven Ball, TuksSport Director and Acting CEO of the High Performance Centre. "Our appreciation goes out to UP's Executive for its support and backing in this initiative, which allowed us to plant a stake as the leading sporting university in Africa," concludes Ball.

The UP-Tuks 1 team "were the cherry on the top" when they claimed victory by beating UCT 34-27 in a special final.



As hosts, Future Africa and TuksSport celebrated the magnitude of the event and it being a first, by planting one tree for every Varsity Cup team. This represented a sign of unity among the teams to improve their environment not only on the field of play.

Photographs by Reg Caldecott



#TuksAthletics

Ntando wins two gold medals

Ntando Mahlangu won not one but two gold medals at the Tokyo Paralympic Games in Japan. He shone in both the 200 metres and the long jump, where he set a world record with a leap of 7.17 metres.

"Ntando is one of the most disciplined and dedicated athletes I have ever worked with," said coach Cathy Landsberg. "It does not matter how tired he is, he always gives 100%."

Landsberg has been coaching Mahlangu since he was 13 and guided him to win his first Paralympic medal when he was only 14. Mahlangu finished second in the 200 metres during the Rio Games. Two years ago, he won his first world title.

Landsberg best understands what it takes for Mahlangu to perform at his best as she is an amputee herself following a horse-riding accident in Switzerland.

Author: Wilhelm De Swardt

#TuksTennis

Outright winner under difficult conditions

The battle to be Africa's best at the 2021 FASU Tennis Slam Championships in Kampala, Uganda, had a dark side. "When we took to the court, we still could see our opponents at the other side of the net. But once we started to play, the light quickly began to deteriorate. You could hardly see the ball," is how Jo-Ané Verhoef describes the match. She and Carli Bruhns won the women's doubles. "It was amazing to win. As Tuks, we had been trying to win big for some time," said Verhoef.

Tuks's André Snyman was victorious in the men's singles. According to him, even in daylight, the playing conditions were challenging. "The surface we played on resembled a dirt road with pebbles. It often led to an unpredictable bounce. But generally, the ball slowed down. That suited me. I love playing from the baseline, putting in long rallies to wear an opponent down."



#TuksRowing

An 'oarsome' men's crew claims 12th consecutive title

After winning the men's race during the 2021 USSA Boat Race Championships in Port Alfred, the Tuks men's A-rowing crew can claim to be "12 not out". The only thing that has kept on changing since 2009 is the seating of Tuks men's A-crews in the boat. The results have remained the same. Tuks wins. Their winning streak of 12 consecutive victories is possibly one of the longest in any South African sporting code.

"To coach a crew to win for the first time is always special," said Tuks's coach Mpumi Geza, "but the real reward is to get the same result with different rowers. It proves our process of leaving nothing to chance and always striving to find ways to get the boat to be faster still works." The Tuks's women's A-crew won for the fourth consecutive time, beating UCT.





In memory of ...



Professor Christof Heyns

Professor Christof Heyns, who was the Director of the Institute for International and Comparative Law in Africa at UP's Faculty of Law, died on 28 March 2021 while walking with his brother in the mountains surrounding Stellenbosch. He was 62.

A professor of Human Rights Law, he was internationally recognised for his wide-reaching initiatives on human rights in Africa and beyond. He also directed UP's Centre for Human Rights and was the Dean of the Faculty of Law for a four-year period.

As an expert in human rights law, he was the rapporteur (main drafter) of the committee that published the General Comment 37 (2020) of the United Nations (UN) Human Rights Committee, which offers global guidance on peaceful assembly.

On several occasions he served as a technical adviser on human rights to the African Union and the African Commission on Human and Peoples' Rights. Notably, he served as adviser to the African Commission in developing its influential General Comment on the Right to Life, adopted by the Commission in 2015.



Professor Hans Boon

Professor Hans Boon passed away at his Pretoria home on 30 April 2021, at the age of 75.

During his tenure as Head of the Department of Library and Information Science at UP, he played a key role in developing long-term strategies to position the Department as a leader in the modern university sector.

He also served as Registrar and as Chairperson of the Advisory Board for the newly established University Archives.

In 1997, Prof Boon was appointed as Director of the new Department of Telematic Education and Education Innovation, which led to the establishment of a virtual campus in 1999 and the introduction of a range of online courses.

During this time Prof Boon also led a process to optimise and transform the University's library services. From 2004 to 2006 he took on the role of Acting Director: Library Services alongside his duties as Director: Education Innovation. After the untimely and tragic death of his son, Prof Boon returned to core academia as a Professor in the Department of Information Science, conducting research and acting as postgraduate supervisor, until his official retirement.



Professor Michael Cross

Acknowledgements to Professor Chika Sehoole, Dean of the Faculty of Education.

Professor Cross succumbed to COVID-19-related complications on 6 June 2021. His legacy is that of instilling the discipline of writing and scholarship and producing the next generation of black academics. He would always talk inspirationally about the need and role of a black intelligentsia in South Africa and he set himself the mission of training and producing this intelligentsia.

He believed that to change the face of knowledge production in this country, new voices had to be brought on board. This could be accomplished through teaching, training, mentorship or role modelling. He would supervise a dissertation or thesis with the end goal of having it published. To instil such beliefs and courage in young black students during the apartheid era was visionary and transformational.

Professor Cross received the first Association for the Development of Education in Africa Award in 2012 as the most Outstanding Mentor of Educational Researchers in Africa. At the time of his passing he was Director of the Ali Mazrui Centre for Higher Education Studies at the University of Johannesburg.



Louis Martin Cloete

Chairman of TuksClub 60+ Louis Cloete passed away on 5 April 2021 in an accident.

He served as Chairman of the alumni club between 2013 and 2021, and from 2020 he also served on the Convocation Advisory Board, immediately volunteering for one of the sub-committees.

His wife, Annette, who played her part in making TuksClub 60+ a success, was with him. The couple will be sorely missed by their three children, their grandchildren and everyone whose lives they touched.

Louis lived by the saying, "You are never too old to set a new goal or dream a new dream". Not content to sit and wait for something to happen, he was someone who made things happen. It was inspiring to see how enthusiastically he lived life.

He obtained master's degrees from the University of Pretoria in Architecture (1978), Town and Regional Planning (1979) and Landscape Architecture (1989), and was awarded a British Council scholarship in 1963 and a Rotary Exchange Scholarship in 1970.

TuksSport

TuksAthletics:

Ammie Sutton: Manager
012 420 6044
ammie.sutton@up.ac.za

TuksAquatics (Lifesaving, Swimming, Triathlon, UnderwaterHockey, WaterPolo):

Rocco Meiring: Manager
012 420 6075
tuks.aquatics@hpc.co.za

TuksFootball:

Boitumelo Lekalakala: Administrator
012 420 6001
boitumelo.lekalakala@up.ac.za

TuksGymnastics:

Christine van Wyk: Administrator
012 420 6082
admin.gymnastics@up.ac.za

TuksRowing:

Xilia Dreyer: Manager
012 420 6122
xilia.dreyer@up.ac.za

TuksSquash:

Alex Verhage: Administrator
tukssquash@up.ac.za

TuksArchery, TuksBadminton, TuksFencing, TuksJudo, TuksTrampoline, TuksWrestling:

Ilze Wicksell: Manager
012 420 6135
ilze.wicksell@up.ac.za

TuksCricket:

Blanche Conradie: Manager
012 420 6151
blanche.conradie@up.ac.za

TuksRoadRunning:

Jet Moses: Administrator
012 420 6174
jet.moses@up.ac.za

TuksGolf:

Neil van Vliet: Head of Program
076 873 3937
neil.vanvliet@hpc.co.za

TuksHockey:

Kgothatso Maboea: Administrator
012 420 6156
tukshockey@gmail.com

TuksNetball:

Lifalethu Khumalo: Administrator
012 420 6081
lifa.khumalo@up.ac.za

TuksRugby:

Ansie du Plessis: Administrator
012 420 6068
tuksrugby@up.ac.za

TuksTennis:

MK Moloantoa: Administrator
012 420 6083
tukstennis@up.ac.za

TuksAikido, TuksCanoe, TuksCheerleading, TuksChess, TuksCueSport, TuksESport, TuksExploratio, TuksKarate, TuksTaekwondo, TuksUltimate, TuksYachting:

Letladi Lekolwane: Manager
012 420 6173
letladi.lekolwane@up.ac.za

TuksBasketball, TuksCycling, TuksVolleyball:

Sibongile Maswanganye: Manager
012 420 6061
sibo.maswanganye@up.ac.za

Switchboard: 012 420 6060
(Monday – Friday 07:30 – 18:00)



#EarnYourStripes

#AWorldOfAnswers



RESEARCH MATTERS

*Discover something new today from the University
of Pretoria's top researchers.*

Visit www.up.ac.za/research-matters



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Make today matter