



University joins €1 Million Forest21 project

In gearing up for its newly developed programme in Forestry, The Department of Crop Sciences has joined four education institutions that teach forestry in South Africa, as well as three European universities in a project entitled Forest21. The aim is to advance the quality of education in the field of forestry entrepreneurship through problem-based learning.

The €1 Million project, funded by the Erasmus+ programme of the European Union entitled *21st Century Climate-Smart Forestry Education for Livelihood and Sustainability in South Africa*, is a collaborative project for strengthening the capacity in South African higher education in forestry entrepreneurship.

According to Professor Puffy Soundy, Head of the Department of Crop Sciences, the department visited Finland at the end of 2019 on a benchmarking exercise with HAMK Häme University of Applied Sciences.

“We are in the process of introducing a Higher Certificate in Forestry Management in our Department that will be offered at the Mbombela Campus, because of proximity to commercial forests. During our visit to HAMK University, we were informed of the opportunity to join a consortium of local universities offering Forestry

with European partners in Finland and Norway to apply for an EU Erasmus+ funding. We joined, our consortium’s project was successful, and we were awarded around one million Euros. The Department will mostly focus on curriculum development, which will be helpful for our Higher Certificate programme. In addition, TUT has also been appointed as the lead on the international and national Dissemination & Exploitation part of the Project which will be headed by Mario Smit from the Faculty of Science.”

Through curricula reformation in forestry education, students will be equipped with entrepreneurial skills and have a deeper understanding of climate-smart forestry. All South African higher education institutions with forestry curricula are participating in project FOREST21.

Prof Soundy added that Forestry is in a critical position in increasing local employment, as well as in mitigating global climate change. Young entrepreneurs have enormous potential for addressing these challenges through developing the production and processing of forestry resources.

Forestry education will be reformed to meet the needs in the industry, and climate-smart forestry will be emphasised in all phases of education and working life in the newly launched project FOREST21.

“Entrepreneurship education and problem-based learning methods will be developed together with the teaching staff and managerial staff. Students will learn practical skills through solving real-life challenges in real companies,” he added.

“FOREST21 provides a unique opportunity for the forestry sector to work closely with all forestry HEIs in South Africa and partner with HEIs in Finland and Norway,” says Norman Dlamini, Director of Business Development at Forestry South Africa. “The project supports the key efforts of the country in dealing with the triple ills of unemployment, poverty and inequality. It also improves the country’s efforts towards the mitigation of and adaptation to climate change. The emphasis on forestry entrepreneurship and climate change is exactly what the country needs right now,” Prof Soundy concluded.

“ We are in the process of introducing a Higher Certificate in Forestry Management ”

COVID-19 PROTOCOL



EXPERT WARNS AGAINST POSSIBLE EARLIER COVID-19 WAVE

Information from BusinessTech and NICD communication

With the pending Easter weekend early in April and the relaxation of regulations around gatherings, an expert from Wits University and the Chair of social security systems administration and management studies, Prof Alex van den Heever, warned that the third COVID-19 wave might hit the country earlier than expected.

He explained that Easter time is typically a period of family and religious gatherings, holiday breaks, and increased alcohol consumption - all of which have been closely associated with a rising number of Covid-19 cases. Large indoor religious gatherings represent a significant potential driver of transmissions over the Easter weekend.

According to Prof van den Heever, excess death data shows that there are already signs in the Free State and the Western Cape that surges may be on the way (also see NICD information).

Health Minister Dr Zweli Mkhize, echoed these worries in a media statement, saying: "We are all concerned about the possibility of a third wave, or resurgence after Easter," adding that the virus will likely spread again as the country heads into winter.

Experts and officials had previously hoped that a third resurgence would only be seen in the country at the start of winter, around May or June, but mid-to-late April has also been flagged as a possible start.

The NICD's Weekly Epidemiology Brief for week 10, based on data collected up to 13 March 2021, which summarises data from national laboratory-based surveillance that is used to monitor the COVID-19 pandemic in South Africa, also highlighted the following:

- As of 13 March 2021, a total of 1 529 420 laboratory-confirmed COVID-19 cases including 51 326 deaths had been detected in South Africa.
- In the past week, the Northern Cape Province reported the highest weekly incidence risk (38.2 cases per 100 000 persons), followed by the Free State Province (22.6 cases per 100 000 persons), and the Western Cape Province (14.5 cases per 100 000 persons).
- In the past week, two provinces reported an increase in weekly incidence risk, the Free State Province (1.4 cases per 100 000 persons, 6.4% increase) and the Northern Cape Province (11.6 cases per 100 000 persons, 43.6% increase), and other provinces continued reporting a decrease in weekly incidence risk, compared to the previous week.

Profs elected to CRIMSA council

By Willa de Ruyter



Prof Adewale Olutola



Prof Kholofelo B Mothibi

Two criminology experts from the Faculty of Humanities, Prof Adewale Olutola and Kholofelo B Mothibi, have been elected as members of the Council of the Criminological Society of Africa (CRIMSA). They will both serve a two-year term from 2021 to 2023.

CRIMSA is a non-profit corporate academic society that aims to contribute to the broader transformation of society through equity and to endorse those values enshrined in the South African Constitution and the Bill of Rights.

Election to these prestigious positions, shows their dedication to the criminological sciences while it also demonstrates that the Tshwane University of Technology (TUT) is moulding and shaping the future of criminology and related disciplines through its dedication to its academic staff.

Serving as a member of Council is not a ceremonial role, but an active role with added duties and responsibilities.

Sport management leader represents TUT at SASCOC

By Suzette Landman

Dr Pam Serra, Academic Section Head of Sport and Recreation Management within the Department of Marketing, Supply Chain and Sport Management has been appointed as a member of the Education and Culture Commission of the South African Sport Confederation and Olympic Committee (SASCOC).

The Commission's mandate is to provide policy guidelines and recommendations to the SASCOC Board on all matters related to education and culture. Dr Serra is one of 50 Sport Integrity Global Alliance (SIGA) global sport management mentors who lead the SIGA Africa Youth Forum as well as SIGA Africa.

"I am blessed and honoured to be recognised as one of the sport management leaders in Africa and South Africa. I look forward to this big task and hope that I will be a beacon of hope and possibility for TUT's sport management students and set an example that anything is possible through hard work, diligence, ethics, integrity, and professionalism," said an excited Dr Serra.



“I am blessed and honoured to be recognised as one of the sport management leaders in Africa and South Africa”

Two of our own REPRESENT COUNTRY AT SIGA YOUTH FORUM

By Suzette Landman

TUT's Tshepo Sedumedi (23) and Anouschka Swart (23) are two of eight young South Africans selected to represent the country and Africa at the Sport Integrity Global Alliance (SIGA) Youth Forum.

The SIGA Youth Forum, one of the SIGA initiatives, provides an exceptional platform for young people to unite in addressing the critical challenges and issues affecting sport and the wider industry. The youth, in this instance, would share their experiences while activating cultural changes and integrity reforms in the sport industry.

Their first task as members of the SIGA Africa Youth Forum was to attend the inaugural SIGA Youth Forum webinar on 27 and 28 January 2021. Together with other members from all over Africa, they shared their personal stories as active members in the sporting industry.

Dr Pam Serra, Section Head of Sport and Recreation Management at the Department of Marketing, Supply Chain and Sport Management, as well as member and global mentor of SIGA, had only praise for the two. "These are big shoes to fill, but I have no doubt that Anouschka



Tshepo Sedumedi and Anouschka Swart

and Tshepo will do it successfully. Their passion for empowerment through sport, dedication, staying power and commitment are the values needed to drive such a movement in South Africa and Africa," she added.

Tshepo is currently enrolled as an Advanced Diploma Project Management student at the Operations Management Department. In 2019, he completed his National Diploma in Sport and Exercise Technology and he works as an intern at the Supersport United Football Youth Academy.

Anouschka is currently enrolled at the Department of Marketing, Supply Chain and Sports Management as a Postgraduate Diploma in Sport Management student. She completed her National Diploma in Sport Management (*cum laude*) in 2018 and started working at TUT Rugby in 2019.

Dr Elizma Wannenburg, HoD of the Department of Marketing, Supply Chain and Sport Management (MSS) commented; "Anouschka has always been a diligent, committed, high achieving student of the Department. I am extremely proud of her and know she will fly the MSS, TUT and South African flags high," she said.

“These are big shoes to fill, but I have no doubt that Anouschka and Tshepo will do it successfully”

Artificial intelligence expert receives NRF C-rating

By Phaphama Tshikhawe

Dr Manoj Lall, a distinguished scholar and senior lecturer at the Tshwane University of Technology's department of Computer Science is now a National Research Foundation (NRF) C-rated researcher.

Dr Lall is a seasoned researcher with more than 26 years' experience in higher education. He obtained a PhD, MSc and BSc (Hons) degree in Computer Science from the University of South Africa, and a BEng (Mechanical) degree from Bangalore University, India. He has been working for TUT since 1995 and is currently a senior lecturer in the department of Computer Science. Furthermore, he has over 55 publications in journals, conferences and book chapters. Fifteen master's students have graduated under his supervision.



Dr Manoj Lall

Dr Lall is a regular reviewer of papers for conferences and journals and serves on the editorial board of the Zambia ICT Journal. He is an external examiner for several universities in South Africa and abroad.

His field of expertise and research specialisation is Computer Science with the focus on machine learning, data mining, complex adaptive systems, artificial intelligence (AI), agent-based modelling and formal methods.

Through his research, Dr Lall aims to make a profound impact on business, governments, and society by applying AI (and its subfields) to solve existing critical problems.



PROF PIUS OWOLAWI,

Head of the Department of Computer Systems Engineering has been rated as one of the

Scopus top 500 researchers in Africa (number 444) for the period 2015 to 2020.

His rating is based on his 102 scholarly outputs, 195 citations, and Hirsch number 9, which is an author - level metric that measures the productivity and citation impact of the publications of a scholar.

The rating is done by SciVal, a web-based analytics solution that provides comprehensive access to the research performance of more than 20 000 research institutions and their associated researchers from 230 nations worldwide. SciVal is based on the publication database called Scopus.

The TUT FC has won their three opening games to claim a top spot in the ABC Motsepe league.



TUT FC starts year *magnificently*

by Mokete Radebe

It seems like the festive break is just what the TUT high-performance Football Club (FC) players needed ahead of their magnificent start in the ABC Motsepe league. The team started 2021 with a whopping three win's away from home just three weeks into the season.

The Red Army, as the team is affectionately known, ended the previous season on a disappointing note. They lost on penalties in their quest to gain promotion into the ABC Motsepe league, despite dominating the league for two consecutive seasons. Based on the talent and dedication of the players, the Directorate of Sport and Recreation nonetheless acquired the ABC status for the team.

The team thrashed Captain Eleven FC 1-0 at the Brits Sports Complex on 10 March, out-classed Ally Tigers FC 2-1 at Holy Family Field-Mogwase on 13 March and whipped Tigane United 6-0 at the Holy Family Field-Mogwase on 17 March.

Under the stewardship of coach, Bushy 'Tower' Moloi and his technical team, TUT FC is now on top of the log with nine points and a difference of eight goals.

Dr Shadrack Nthangeni, Director of Sport and Recreation, said the team's maiden season in the ABC Motsepe league was a positive one, having collected the maximum points. He said they have capacity to go all the way and win their stream. "The Directorate will give Coach Bushy, his technical team and the players all the necessary support to triumph at the end of the season," he said.

According to David Papo, TUT Football Mentor and acting Head of the Department of Sport and Recreation at the Ga-Rankuwa Campus, it was impressive to see their team controlling almost all their matches despite playing on rough football pitches. He said the scores are not a full reflection of the amazing performance showed by the team. David believes the score could have been 10-0 in all their games, had they not missed a lot of scoring chances due to the pitches.

"What impressed me most is that our boys were able to create a lot of scoring opportunities. This is something positive that we can learn from as we continue with our journey. Well done to the coach and his technical team. All three points are well deserved," David said.

“What impressed me most is that our boys were able to create a lot of scoring opportunities”

Female professor among top researchers in Africa

By Phaphama Tshisikhawe

Prof Patricia Popoola, an outstanding metallurgical and materials engineer and Full Professor at the Department of Chemical, Metallurgical and Materials Engineering, is one of the few women listed among the top 500 researchers in Africa based on scholarly output, between 2015 and 2020.

Prof Popoola is recognised as an exceptional scholar, a multi-talented woman and a perfectionist, who exudes passion for research. She has a combination of qualifications that encompasses all areas of metallurgical and materials engineering. She holds a National Diploma in Materials Technology, which deals with the study of metals, polymers, ceramics, glass and cement technology. She has a BSC (Honours) degree in Metallurgical and Materials Engineering as well as Master's and Doctoral degrees in Metallurgical Engineering. She completed her Doctoral degree in Physical Metallurgy/Laser Materials Deposition at TUT.

The 54-year old was born in Lagos, Nigeria and began her academic career at TUT in 2003 as a part-time Lecturer in Metallurgy. "My research interest is in advanced engineering materials and surface technologies. The emphasis globally is on the development of engineering materials to address the challenges involved in technological development in our society. As such, my research is focussed on the creation of new processes, products or systems through the development of advanced multifunctional materials. We make use of emerging state-of-the-art technologies to design and fabricate novel materials," she explained.

Prof Popoola has been registered on the SciVal list twice already. She is 108th scholar on the list for her 2021 outputs and number 435 for the 2020 scholarly outputs. According to SciVal record, her total scholarly outputs for the two years are 303; total citations are 1774 and h-index of 38. SciVal is a web-based analytics solution that provides comprehensive access to the research performance of over 20100 research

institutions and their associated researchers from 231 nations worldwide.

Prof Popoola was recently awarded a total of R3.3 Million as an NEP equipment grant from the National Research Foundation (NRF) and TUT. In addition, Prof Popoola has mentored eight postdoctoral fellows, twenty-eight Masters' and fourteen Doctoral degree graduates, amongst whom are three full professors. Mentorship of students remains her prime objective. She is an outstanding study leader with many registered postgraduate students.

To her, it is critical to impart her skills with students towards alleviation of poverty and suffering. Prof Popoola and her students are recipients of numerous research grants and academic excellence awards.

To date, her publications have had huge impact locally and internationally, her works has attained high viewership and citations by different authors within the research field /community. Her research collaborations transverse the local and international space.

"I am grateful to God Almighty, who is the author of success and all good things. Therefore, when we seek HIM, all other things will follow. Glory, Honour and Power Majesty be unto God," concluded Prof Popoola.

“I am grateful to God Almighty, who is the author of success and all good things”



Prof Patricia Popoola

Polymer scientist listed among Africa's top 500 researchers

By Phaphama Tshisikhawe

Prof Emmanuel Rotimi Sadiku, a renowned polymer scientist and professor at the Faculty of Engineering and the Built Environment has been listed among the top 500 African researchers based on scholarly output between 2015 and 2020.

SciVal, a web-based analytics solution that provides comprehensive access to the research performance of over 20 100 research institutions and their associated researchers from 231 nations worldwide, made the listing. According to SciVal, Prof Sadiku has delivered 170 scholarly outputs during the period of assessment.

Prof Sadiku said the tribute is not a one-man show. He acknowledged the contributions of his colleagues, his dedicated students and his postdoctoral research fellows (past and present)

ent) who, have contributed significantly to his accomplishment.

Prof Sadiku was also credited with 1 562 citations and an H-index of 31. The H-index is an author level metric measuring the productivity and citation impact of the publications of a scientist or researcher. Prof Sadiku is 145th on the list

The Nigerian-born researcher is well known for his exceptional work in polymer circles in Nigeria, Scotland, Italy, Germany, Sweden, South Africa and India.

Prof Sadiku obtained a national diploma in textile technology from Kaduna Polytechnic. He then received a scholarship to enrol for a degree in fibres and polymer science at the University of Strathclyde in Glasgow, Scot-



Prof Emmanuel Rotimi Sadiku

land, UK. He also completed his PhD at the same institution.

In addition to his many accolades, he has authored and co-authored many articles and book chapters on aspects relating to polymers. His field of expertise and research specialisation is material sciences and technologies, as well as polymer sciences.

MEET FACULTY OF HUMANITIES' NEWLY RATED NRF RESEARCHER

Esteemed Professor, Thelma de Jager, HOD for Educational Foundation, is now a C-rated National Research Foundation (NRF) researcher.

It comes as no surprise as she blends astute scholarship with warm collegiality and over the years, colleagues have described her as a respected leader in the Faculty of Humanities.

Prof de Jager's teaching experience in primary, secondary, Learners with Special Education Needs (LSEN) schools and higher education spans more than 40 years. She completed her doctoral study at the University of South Africa and a four-year teaching diploma at the Normaál College of Pretoria. Her passion for teaching reflects in the numerous lecturer awards (including Best Lecturer of the Year) that she has received since 2011. She was also selected as a finalist in the HELTASA awards for Best Lecturer of the Year.

She is loved and revered by all of her students, who talk about the uncompromising way she challenges and teaches them about the education system. As a researcher, she has supervised several doctoral and master's



Prof Thelma de Jager, HOD for Educational Foundation, now a C-rated National Research Foundation (NRF) researcher.

students and published articles in international and national accredited and peer-reviewed journals. She also received several excellence awards for Woman Researcher of the Year (Faculty of Humanities).

Prof de Jager's body of work places her among the most highly regarded education scholars in the country. She served on the advisory and editorial board of International Academy of Technology, Education and Development

(IATED), the International Journal of Science, Mathematics and Technology Learning, the Asian Conference on Psychology & the Behavioral Sciences (ACP2016). She was senior reviewer at the IAFOR conference, and in 2016, she was the organiser of the SAARMSTE conference held in Pretoria.

She conducted several keynote addresses at conferences, authored and edited textbooks such as: General Subject Didactics, Creative Arts Education (in collaboration with other institutions), and the Science to Teach and Differentiated Instruction. Currently, she is the project leader of the South African team for the ICALT 3 project (which involves ten other countries with Netherlands as main project leader) and the British Council on Inclusive Education, T4ALL project. Previously, she received the NRF Grant and Saturn bursary to conduct research.

Her research interests include differentiated instruction; inclusive education; teaching methods and strategies; science education; technology assisted teaching and learning; effective teaching practices; models of teaching and metacognitive learning.

Prof de Jager has a passion to improve teaching pedagogy and her studies could impact education policy that speaks to the implementation of differentiated learning.

Remember to download HealthCheck on your phone!



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



HIGHER HEALTH

HealthCheck | Higher Health Daily Screening

Daily screening is vital to ensure the safety of everyone, therefore, all staff and students, are reminded to download Higher Health's COVID-19 digital risk assessment and mapping tool, HealthCheck, on their phones. This is a mandatory screening tool that must be used daily to screen individuals. Staff and students should provide proof that they have done the self-check (i.e. show the result on their phones to security at the gate) to enter campus.

COVID-19 HIGHER HEALTH Solution

When **Higher Education institutions** begin to accept students and staff back onto campus, **daily health screening by staff and students** will be a critical step in ensuring their health and safety.

The **COVID19 Digital Risk Assessment and mapping tool known as HealthCheck** allows for early detection, mapping and management of COVID-19 cases using **USSD, WhatsApp and a simple web based form** and will be deployed by **HIGHER HEALTH** as a mandatory daily screening tool.



COVID-19 HIGHER HEALTH Solution

Step 1 Daily Screening

Staff and Students will be encouraged to do a daily HealthCheck through their channel of choice. Alternatively they will be screened before entering campus.



Step 2 Risk Classification

Once the check has been completed, actions are suggested based on NICD and NDOH guidelines.

- SELF ISOLATE
- TEST
- SEEK EMERGENCY CARE

Step 3 Verification

Before entering campus, students and staff must show that they have completed the daily HealthCheck and are cleared to continue onto campus.



Step 4 Follow Up

For those students and staff who have been classified as moderate or high risk, they will be entered into the NDOH tracking and tracing process.

COVID-19 HIGHER HEALTH Solution



MULTI-CHANNEL

HealthCheck will be made available on **WhatsApp**, a zero-rated webform and zero-rated **USSD** line to ensure access for all Staff and Students



MULTI-LANGUAGE

HealthCheck will be made available in multiple languages, starting with **English** for launch and then, in subsequent phases, rolled out to **isiZulu, isiXhosa, Sesotho and Afrikaans**.



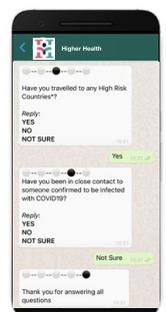
DATA GENERATION

The data collected using HealthCheck (including **age, gender and location**) will be mapped to individual campuses, allowing for detection of hot spots and to assist HIGHER HEALTH in decision making



NDOH VERIFIED

The HealthCheck algorithm has been approved by the National Department of Health as the official self screening tool. In addition, the system links to the national tracking and tracing programme of the NDOH



How to access the HIGHER HEALTH 24-hour student helpline:

- Toll-free call 0800 36 36 36
- SMS 43-33-6
- HealthCheck: Dial using USSD line (does not require data): *134*832*2#
- Add to WhatsApp contacts: 0600 11 0 000 and say HI: <https://wa.me/27600110000?text=hi>
- Download using the URL for the webform: <https://healthcheck.higherhealth.ac.za>