

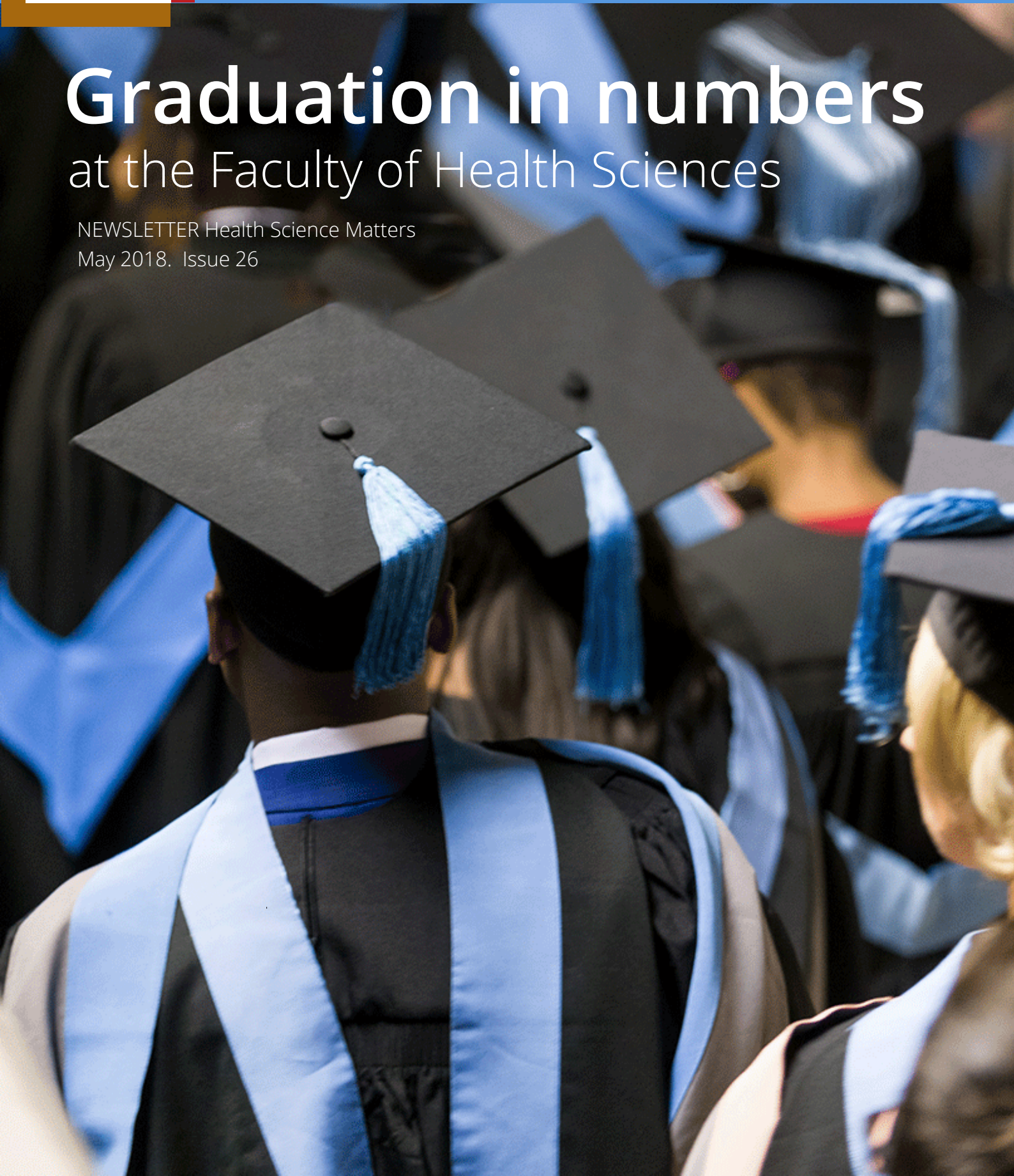


Faculty of Health Sciences

Fakulteit Gesondheidswetenskappe  
Lefapha la Disaense tša Maphelo

# Graduation in numbers at the Faculty of Health Sciences

NEWSLETTER Health Science Matters  
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# Three NSTF Award nominees for the Faculty of Health Sciences

The University of Pretoria's (UP) Faculty of Health Sciences has three nominees in the highly acclaimed National Science and Technology Forum (NSTF) Awards for 2017/2018.

These annual awards, presented in partnership with the mining company, South 32, are the 'Science Oscars' of South Africa. They are the largest, most comprehensive and most sought after national research awards. In South Africa, the NSTF is a representative multi-stakeholder, non-profit forum for the promotion of science, engineering and technology (SET), and promotes innovation through collaboration. The NSTF awards were introduced in 1998, a first of its kind in South Africa. Over the years, the NSTF awards have become a prestigious accolade bestowed on researchers, teams and organisations, and receiving a nomination is considered a great honour.



Prof Riana Bornman, Senior Research Fellow, Environmental Health, School of Health Systems and Public Health.



Prof Maureen Taylor, Professor and incumbent of the Rand Water Chair in Public Health at UP



Prof Tiaan de Jager, Director: UP Institute for Sustainable Malaria Control

Prof Riana Bornman, Senior Research Fellow, Environmental Health, School of Health Systems and Public Health, was nominated for a NSTF-Green Matter Award. The award is bestowed on individuals or organisations for their outstanding contributions to science, engineering and technology, and an innovative approach towards achieving biodiversity conservation, environmental sustainability and a greener economy.

Prof Maureen Taylor, Professor and incumbent of the Rand Water Chair in Public Health at UP, was nominated for the NSTF-Water Research Commission Award for sustainable water management, knowledge generation and solutions. The awarded is presented to individuals or organisations in recognition of demonstrated leadership and impact over the last 5 to 10 years.

The UP Institute for Sustainable Malaria Control (UP ISMC) under the directorship of Prof Tiaan de Jager, Dean, Faculty of Health Sciences, was nominated in the category Communication for Outreach and Creating Awareness, which recognises outstanding contributions made by a communicator who has substantially raised public awareness of SET and innovation.

The finalists will be announced in the middle of May 2018.

According to Prof Tiaan de Jager, Dean of the Faculty of Health Sciences, "The accepted nominations are proof and recognition of the impact of the research that is done in Health Sciences and the UP ISMC."

# From the Dean's desk

Dear Colleagues

We are already in April and I am amazed at how time flies! I hope that you have accepted the challenge issued in the first newsletter **#MakeThingsHappen2018**. If you have, your challenge for May 2018 should be to submit an application for one or more of the numerous funding opportunities currently available.

In the current economic climate, external funding is vital to furthering our research endeavours. If you have missed any of the funding notifications, have a look at the Faculty funding [webpage](#) for more information. The Call season is currently open to both researchers and postgraduate students. We encourage our postgraduate students to apply to suitable funding initiatives for 2019. Postgraduate funding opportunities are also available on the [UP website](#).

Please remember that any health-related research performed by any member of staff, affiliate or student of the University of Pretoria has to be approved by the Faculty of Health Sciences [Research Ethics Committee \(REC\)](#). Failing to obtain ethics approval amounts to research misconduct according to University Regulations and is a transgression of the National Health Act No. 61 of 2003.



**Prof Tiaan de Jager**  
Dean: Faculty of Health Sciences

We are very proud of our three nominees for the 2017/2018 National Science and Technology Forum (NSTF) awards. The NSTF research awards are highly acclaimed and being nominated in an achievement in itself. Congratulations to Dr Alisa Phulukdaree who is the third UP Next Einstein Forum (NEF) fellow, chosen from nineteen (19) candidates across Africa. This year, three students from our Faculty will meet some of the incredible Nobel Prize winners at the 68<sup>th</sup> Lindau Nobel Laureate Meeting. We are very proud of these students, who were selected after a competitive multi-stage screening process and obtained competitive funding support to attend the international meeting in Lindau, Germany.

At the start of this year, we posed critical questions about the definition of success for 2018. This vision has shaped many of our information and brown bag lunch sessions, with everyone working towards common goals for teaching and learning; and research and transformation. Read about the successful Transformation Day hosted at the Department of Radiography. Some of the attendees said that "The transformation day equipped us with tools and knowledge to tackle challenges experienced with patients in clinical settings. Finally we understood what transformation was, how it came about and what one had to have to be able to transform." Read up on all the exciting initiatives in this edition of the newsletter and keep sending your stories for us to share.

Going forward, we need to build on our strengths to ensure growth and continued success and this can only be done with your continued commitment and contributions. I encourage you to keep up the good work, establish research and teaching partnerships, apply for funding and support; and stay positive despite any obstacles!

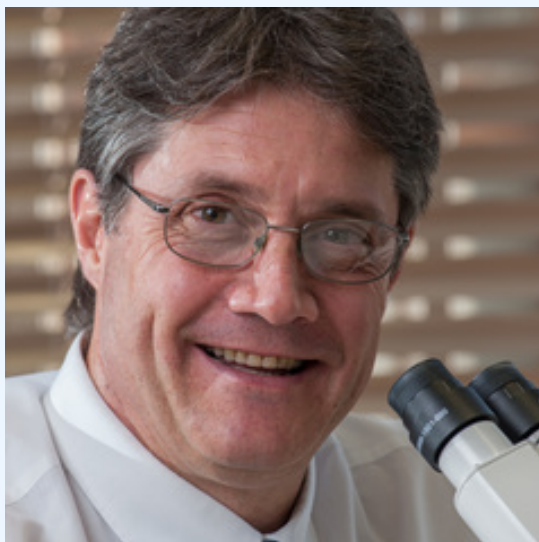
**#MakeThingsHappen2018!**

*Tiaan*

# Spotlight on

## Institute for Cellular and Molecular Medicine (ICMM)

The Institute for Cellular and Molecular Medicine (ICMM) undertakes translational research aimed at addressing critical elements of the disease burden in South Africa. The ICMM promotes collaborative research that is multidisciplinary, interfaculty and interinstitutional in nature. The Institute currently comprises 15 research groups in six of the nine Faculties at the University, and strong links exist with national and international partners and collaborators.

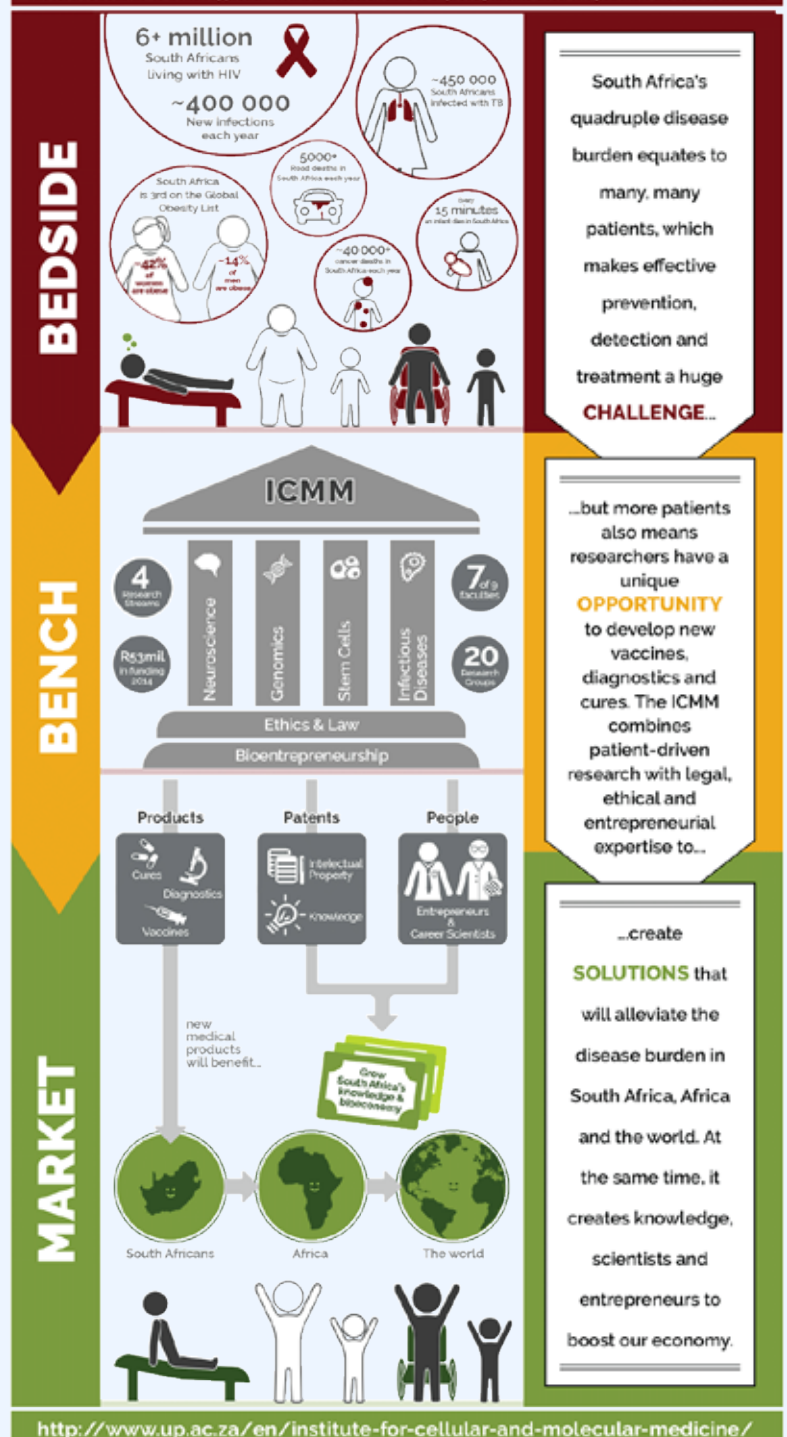


Prof Michael Pepper, Director of the ICMM

According to Prof Michael Pepper, Director of the ICMM, "The ICMM is well positioned to make a major contribution to the alleviation of the high disease burden in South Africa, and will also contribute to global efforts to reduce morbidity and mortality and the impact that they have on all facets of our lives."

### What drives the Institute of Cellular and Molecular Medicine (ICMM)

The ICMM's bedside-to-bench approach means its research aims to improve patients' lives. The patient is the ICMM's market.





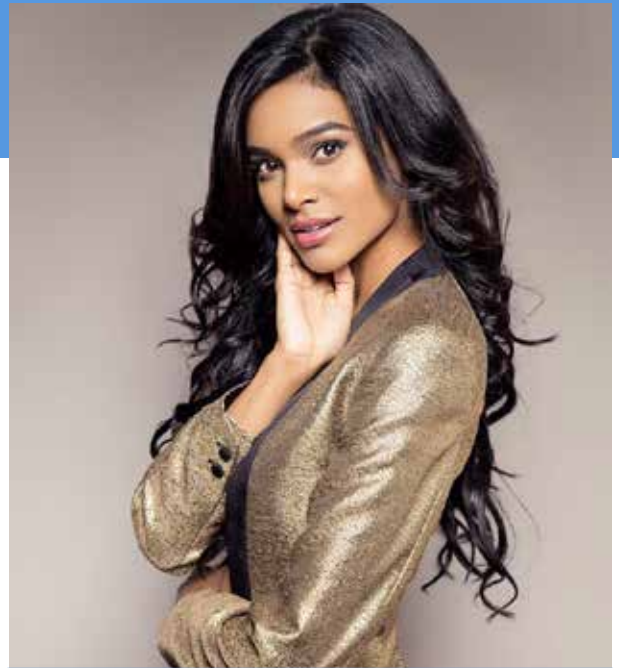
## Students

### Medical student enters the Miss SA pageant

Karishma Ramdev, a 5<sup>th</sup> year MBChB student is currently one of the top 12 in the 2018 Miss SA competition. Karishma stated, "From the time I was young I've had an innate desire to help people. It's the reason why I pursued medicine and it's one of the main reasons I entered Miss South Africa. The platform is one that inspires, empowers and uplifts. I want to work towards educating young ladies and the youth around South Africa. The resources and opportunities that the pageant has are endless."

Karishma plans to become a reconstructive plastic surgeon. She explains that "Something really close to my heart is children who are born with cleft lip and palate as they are isolated from society for a condition that is medically fixable."

The Faculty wishes Karishma well in the competition and we are proud of her progress thus far.



Karishma Ramdev

### Transformation Day at the Department of Radiography

Due to a lack of knowledge and understanding relating to different cultures and religions across South Africa, the student executive committee in the Radiography Department hosted a Transformation Day. Students working in hospitals face daily challenges on how to engage respectfully with patients from different cultural and religious backgrounds. At the transformation day, lecturers from UP, including the Radiography Department, and radiographers from Kalafong, Pretoria West and Mamelodi hospitals shared their knowledge and experiences with the students.



The transformation day gave us the tools and knowledge to engage with patients in clinical settings. Finally we understood the meaning of transformation, how it came about and what was needed to transform. Qualified radiographers explained transformation as learning to treat different patients equally and with respect. The guest speakers from other departments addressed communication difficulties with patients, respecting different cultures and most importantly, personal changes needed to accommodate other people and facilitate transformation. As the 2017/2018 Radiography Executive committee, we would like to thank all presenters and students for participating in this wonderful and amazing experience. We encourage the incoming committee to carry on with the tradition and let it rub off onto other disciplines.

~Mabitjie Makeke

## Awards & Accolades

### UP students to be guided by **Nobel Prize Winners**



Dr Michelle Visagie



Dr Keith Ncube



Dr Elsie Nolte

Every year, about 30 Nobel Laureates come together at an international meeting in Lindau, Germany to meet promising young scientists from across the world. This year, three students from the University of Pretoria's Faculty of Health Sciences will meet some of these incredible men and women at the 68<sup>th</sup> Lindau Nobel Laureate Meeting (24 to 29 June 2018). These meetings foster valuable intergenerational and intercultural exchanges of scientific knowledge.

In a competitive multi-stage screening process, Dr Michelle Visagie (Department of Physiology), Elsie Nolte (Department of Physiology) and Keith Ncube (Department of Pharmacology) were chosen from a pool of leading young scientists from 83 countries to attend this year's meeting. The 68<sup>th</sup> Lindau Nobel Laureate Meeting is dedicated to physiology and medicine and will focus on several current scientific topics including gene therapy, scientific publishing practices and the role of science in the 'post-factual era'.

Sessions include lectures by Nobel Laureates, discussion panels and open exchange sessions. This will be the perfect environment for these students to grow in science, learning from "the greatest" in the world. Contact with other young leading researchers creates a space for future collaborations.

Visagie, Nolte and Ncube are all working on innovative breast cancer research that has the world's attention.

## Fab **four**



Prof S Adam, Prof P Soma-Pillay, Prof Z Abdool and Prof LC Snyman

Four staff members in the Department of Obstetrics and Gynaecology obtained their PhD's at the recent autumn graduation ceremonies. This is an accomplishment and we are proud of you! Well done to the Department.





Mr Neil Morris

## Secondment of Medical Criminalistics Lecturer to the ICRC

Mr Neil Morris, Lecturer and course coordinator for the BSc (Hons) Medical Criminalistics and MSc Medical Criminalistics course in the Department of Forensic Medicine has been seconded for a year to the International Committee of the Red Cross (ICRC), Pretoria regional delegation. He is recognised as a forensic specialist for the Anglophone and Portuguese African countries. Mr Fonsaeca, Regional ICRC Forensics Program manager described Mr Morris' role, " It is a pleasure to have Mr. Neil Morris join the ICRC's Forensic Unit. His background of academia and working within the medicolegal system will contribute immeasurably to the ICRC's development of forensic capacity across Africa and to promote professional and dignified management of the remains in conflict, disaster and migration.

" The ICRC has already partnered with the University of Pretoria to train African forensic practitioners since 2016. This secondment demonstrates the commitment of the ICRC and it's academic partners in South Africa to work collaboratively in delivering technical skills combined with humanitarian principles to professionals in Africa who work diligently to uphold the dignity and rights of the dead while always ensuring respect for the surviving relatives and the community.

Commenting on his secondment, Mr Morris said, " I would like to thank the University of Pretoria, Professor Saayman and the Dean of the Faculty of Health Sciences, Prof de Jager, for seeing the potential of this secondment and for the opportunity to make such a meaningful impact on the African continent." He further stated that he was "specifically excited to be part of the exceptional work done by the ICRC's forensic team."

Prof Arthur Rantloane, Deputy Dean: Stakeholder Relations and Acting Chair: School of Medicine stated "This is a wonderful accolade for the Department of Forensic Medicine and School of Medicine, and a fitting tribute to the hard work and dedication that Mr Morris has shown through the years. The Faculty extends appreciation also to the department and its leadership for providing Neil with an environment that was supportive of his development. We would like to wish Mr Morris all the best with his assignment and look forward to the lessons he will share with the department upon his return."

## Dr Alisa Phulukdaree announced as a Next **Einstein Forum** fellow

Dr Phulukdaree, Department of Physiology, is the third Next Einstein Forum (NEF) fellow from the University of Pretoria. She was chosen from 19 candidates from across Africa. The NEF is a platform that connects science, society and policy in Africa, and the rest of the world – with the goal to leverage science for human development globally. The NEF believes that Africa's contributions to the global scientific community are critical for global progress. At the centre of NEF efforts are Africa's young people, the driving force for Africa's scientific renaissance.



Dr Alisa Phulukdaree

In terms of research, Alisa is in the process of setting up a microRNA analysis molecular laboratory which will complement current research in the Department of Physiology. Her aim is to create a link between clinical research and lab-based research such that clinicians may have access to a research laboratory which is not only capable of assessing genetic and epigenetic changes, but that will also evaluate pathological mechanisms of disease at the cellular and molecular level. To date, Alisa has authored and co-authored 41 publications in national and international peer-review journals.

Einstein Challenge: Alisa aspires to collaborate with mathematicians, computer scientists, basic scientists, clinicians and public health scientists to develop personalized health tools that are able to instantly screen genetic and epigenetic susceptibility risk factors with minimal costs and provide therapeutic interventions.

# Ivory Park **career Expo**

Lecturers and students from the Departments of Human Nutrition and Radiography participated in a career expo at Ivory Park stadium in Tembisa. Six schools from the Ivory Park area attended the expo. The learners were advised on undergraduate career choices available in our Faculty, the admission requirements and the support systems available in the Faculty. Thank you, Ms M Kekana and Dr H Sedibe for driving this initiative.

The learners asked very interesting questions and the facilitators from the Faculty recognised a need for more opportunities to engage with future university students. Many grade 10 learners were unsure of future subject choices, and career expos can provide valuable guidance. Representatives from the Faculty were happy to represent Health Sciences and UP as a whole. Thanks to the Marketing department for supporting this venture.



## **Pharmacology** tackles doping in sport



Ms Wafeekah Begg (SAIDS - legal manager), Dr Amanda Claassen-Smithers (SAIDS - education and research manager), Dr Andre Marais (UP Pharmacology / SAMA), Mr David Bayever (Chairman - Central Drug Authority), Mr Morne Adamson (Vice Chairman - SA Association of Community Pharmacists)

The Department of Pharmacology (UP) teamed up with the South African Institute for Drug-free sport (SAIDS), the South African Medical Association (SAMA) and the South African Association of Community Pharmacists (SAACP) to raise awareness and educate health-care professionals regarding the escalating problem surrounding steroid and supplement abuse by athletes. A workshop on anti-doping was held on the 21<sup>st</sup> of April 2018 at Prinshof Campus, University of Pretoria, and was attended by just over 200 delegates.

The theme “A healthy approach to use of medicine by athletes” was generously sponsored by Pharmadynamics as a HPCSA accredited CPD activity, and participants comprised pharmacists, doctors, physiotherapists, dieticians and sporting professionals. The seminar provided an insight into the anti-doping rules, issues and intricacies that athletes face, and the role that the healthcare professional can play to assist and guide the athlete in this regard. The day long workshop touched on issues and case studies where athletes were involved in the use of banned substances, performance enhancing nutritional supplements, the illegal trade and manufacturing of steroids, and the latest on cannabidiol in sport.

The day was concluded with a panel discussion giving members of the audience the opportunity to comment on matters concerning the lucrative trade of stocking and supplying sports supplements, ethical dilemmas, and addressing the high prevalence of steroid use among adolescents and schoolchildren.



# Preserving the **gift of sight**

Glaucoma is one of the leading causes of blindness in the world. The Department of Ophthalmology, is committed to better understanding the eye disease that is described as the thief of sight by investing in research, training medical students and treating patients at the Steve Biko Academic Hospital.

Glaucoma is a complex disease that damages the eye's optic nerve, causing irreversible blindness. Usually, damage is as a result of fluid that builds up in the front part of the eye. This extra fluid causes more pressure in the eye and damages the optic nerve. While this increased intraocular pressure (IOP) or eye pressure is regarded as a significant factor of glaucoma, people with a normal IOP can also develop glaucoma.

Because peripheral vision is typically lost first, people often only go for an eye check when the disease is very advanced, and central vision is already impaired. The disease often goes unnoticed because it slowly and painlessly snatches sight.



Dr Priscilla Makunyane

Dr Priscilla Makunyane, Head of the Department of Ophthalmology, says many patients are only diagnosed incidentally, usually going to optometrists or ophthalmologists for minor ailments, only to discover that their sight is dramatically reduced. If, however, glaucoma is detected in its early stages it can be well managed with medical or surgical treatment, with a good chance that sight may not be lost completely. "Early detection and intervention either with the use of topical medication, surgical procedures or laser treatment can certainly control glaucoma and the damage caused can be minimized. Glaucoma cannot be healed but it can be controlled, just like other chronic conditions such as Hypertension," explains Makunyane.

Currently, the Department of Ophthalmology is involved in research that studies the prevalence of medically-controlled primary open-angle glaucoma patients who are at risk of glaucoma progression. The Department has also recently acquired a new micropulse cyclophotocoagulation laser machine which enables the treatment of glaucoma by reducing aqueous secretion and IOP. This new machine has opened more avenues for patient management and research in the Department.

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# Graduation in numbers at the Faculty of Health Sciences

Congratulations to our newest alumni, the Class of 2017! Graduation ceremonies are a time for celebration and a rite of passage, signalling the future to our students. We recognise and celebrate the achievements of our students and the role of our staff that assisted, educated, guided and mentored these young minds. Vice-Chancellor and Principal, Professor Cheryl de la Rey congratulated the new graduates, "Achieving an academic degree does not come easy. It requires persistence, dedication and hard work. Our graduates can be justifiably proud of reaching this milestone."



## Undergraduate

### School of Dentistry

Bachelor of Oral Hygiene: **16**  
Bachelor of Dental Surgery **57**

### School of Medicine

Bachelor of Clinical Medical Practice: **57**  
Bachelor of Medicine and Surgery: **226**  
Bachelor of Sports Science: **21**

## School of Healthcare Sciences

Bachelor of Dietetics: **21**  
Bachelor of Occupational Therapy: **48**  
Bachelor of Physiotherapy: **53**  
Bachelor of Radiography (Diagnostics): **39**  
Bachelor of Nursing Science: **56**  
Bachelor of Nursing Science (Education and Administration): **109**

## Doctor of Philosophy

(Public Health) **3**  
(Health Systems) **1**  
(Dentistry) **1**  
(Obstetrics and Gynaecology) **4**  
(Mental Health) **1**  
(Human Genetics) **1**  
(Medical Virology) **1**  
(Pharmacology) **1**  
(Medical Immunology): **1**  
(Psychiatry) **1**  
(Anatomy) **1**  
(Nursing Science): **4**



We would love to hear more from departments and staff.

Please e-mail your ideas and contributions for the next edition to Ronel Leyds

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