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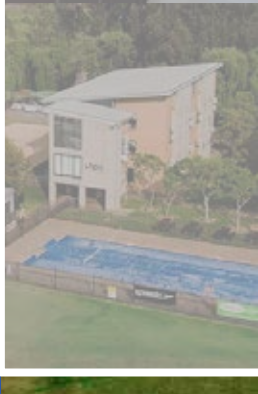
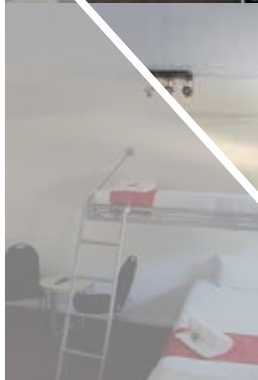
HEALTH SCIENCES MATTERS

FACULTY OF HEALTH SCIENCES NEWSLETTER

Issue 28. October 2018



University of
Pretoria launches
**Sport, Exercise
Medicine and
Lifestyle Institute
(SEMLI)**



University of Pretoria launches Sport, Exercise Medicine and Lifestyle Institute (SEMLI)



The launch of the Sport, Exercise Medicine and Lifestyle Institute (SEMLI), University of Pretoria, was celebrated on the 11th of October, 2018. The SEMLI promotes safer exercise for the health of all, and aims to be an “international leader in scientific research that is translated into tangible benefits that will promote well-being in the population through lifestyle interventions, reducing exercise-related injuries and medical complications, and promoting sporting excellence on a platform characterised by world-class education, service delivery and the use of modern technology”.



The Institute is based on the University's Hillcrest Campus, which is not only the training ground for future sporting heroes, but also offers world-class medical, nutritional and scientific expertise to the general public.

As a research institute, SEMLI focuses on research and teaching. SEMLI also offers a clinical and scientific services platform that provides specialist services to patients, clients, visiting national and international athletes and the public. According to the SEMLI Director, Prof Martin Schwellnus, it “serves as an experiential mechanism for post-graduate students. It encompasses the disciplines of Sport and Exercise Medicine, Biokinetics, Sports Science, Sport and Lifestyle Psychology, Sport and Lifestyle Nutrition, Sports Physiotherapy, Orthopaedics and Radiology.”

UP's Vice-Chancellor and Principal, Prof Cheryl de la Rey said: “With the launch of SEMLI, UP as the leading sports tertiary institution in SA will strengthen its sports science capacity and affirm its position as the top sports university on the continent. ”



Prof Tiaan de Jager, Dean: Faculty of Health Sciences, Prof Martin Schwellnus, Director of SEMLI, Prof Cheryl de la Rey, UP Vice-Chancellor and Principal and Mr Aki Anastasio, radio personality and technology expert.



FROM THE DEAN'S DESK

Colleagues,

As we welcome the onset of longer, sun-filled days, we recognise that the final exams have started, and that the academic year is drawing to a close. This time of year normally calls for reflection; and we should consider how to effectively position ourselves to best support the immense strengths of our Faculty.

Our undergraduate teaching and learning offerings are nationally and internationally renowned and are a huge drawing card to prospective students. We need to maintain this reputation by providing excellent medical education that attracts high quality students and produces the best trained doctors. Going forward, we need to stimulate opportunities for postgraduate students, who will become our future researchers, and who will play an integral role in the university's growth, and improve healthcare and service delivery. As a tertiary institution, we need to be completely committed to research-led education, which defines the quality and value of our courses and academic mission: as a Faculty, we all need to support this commitment.

One of the challenges of a large and geographically dispersed Faculty is establishing lines of communication – from the coal face to Faculty management and vice versa. Our quarterly newsletter is a great platform with which to share and celebrate our successes, keep us informed, and inspire everyone with outreach initiatives, encourage involvement or even start new initiatives. This newsletter showcases our multi-talented students, performing at the Pulse Talent Show and at the Deans Concert, which we hosted to celebrate the talent and achievement of our Health Sciences Residents in the Tuks A Capella Competition. We read about exciting research activities, including expert lectures presented by our lead researchers, research entities hosting flagship discoverers, involvement in community-based outreach projects as well as predicting injuries in super rugby teams. We are proud to boast a number of awards and accolades – for our Physiotherapy and Radiotherapy staff, young scientists who attended the Lindau Nobel Laureate Meeting in Germany and many more.

These inspiring stories create an enabling environment for realising our strategic vision and principal objectives of maintaining research excellence while supporting and enhancing our teaching base. I wish to thank everyone for working hard to build our positive reputation and for stimulating a creative environment for our staff and student communities. Our Faculty can only grow through our collective efforts! I hope our newsletter provides everyone with a burst of energy and determination to successfully complete the 2018 academic year.

Finally, as we head into the home stretch, I encourage everyone to reflect on how we can contribute to the teaching and learning environment, enabling our students to complete their studies timeously. By taking responsibility for delivery on our individual key performance areas, we create a work environment that is enjoyable, fulfilling and encouraging. I would like to conclude with the famous quote by Benjamin Franklin *"Tell me and I forget. Teach me and I remember. Involve me and I learn."*

Regards


#MakeThingsHappen2018

UP ISMC and libraries bring relief to people affected by malaria



The UP Institute for Sustainable Malaria Control (UP ISMC) Student Forum visited two clinics in Tshikodeni in the malaria-endemic Vhembe District, Limpopo Province, as part of a field excursion at the start of October. The purpose was to deliver items that were collected during the Forum's 'Malaria is Everyday' initiative in collaboration with four UP libraries -- Medical and Basic Medical Sciences libraries on Prinshof Campus, Merensky 2 Library on Hatfield Campus and Jotella F Soga Library on Onderstepoort Campus -- to commemorate Mandela Day. Non-perishable food, toiletries, clothing for babies, children and adults, and also some toys were collected during the month of July. The poverty-stricken Vhembe District has the highest number of malaria cases in South Africa, and a lack of basic provisions create additional health challenges for the communities that are exposed to the deadly disease on a daily basis. According to Sister Munyai at Masisi clinic, "the donations may not seem like much but every little bit helps to ease the burden of the people". - *Dr Taneshka Kruger*



Prof Martin Schwellnus, Professor of Sport and Exercise Medicine and Director of SEMLI



SEMLI researchers predict injuries in super rugby teams

Recently, the *British Journal of Sports Medicine* published findings that South African Super Rugby teams have a particularly high incidence of injuries during matches. On average, each team can expect two injuries per match.

Prof Martin Schwellnus, Professor of Sport and Exercise Medicine and Director of SEMLI, and his team followed 482 players over five Super Rugby seasons (2012–2016) during training and match time, recording injuries that occurred during a total of 93 641 player hours. This is the largest study conducted to date in this tournament. The five-year study revealed a total of 936 time loss injuries, of which, understandably, the vast majority (85.7%) occurred during matches. Most of these match injuries occurred in contact situations, with more than half of all injuries occurring during a tackle. Prof Schwellnus and his team at SEMLI, are already collaborating with the South African Rugby Union and the medical doctors of South African Super Rugby teams, to design and test vitally important injury prevention programmes. - *Prof Martin Schwellnus*

24TH ANNUAL PULSE TALENT SHOW 2018

On the 22nd of July, the Musaion Theatre on Hatfield Campus hosted the 24th Annual Pulse Talent Show.

Students from the Faculty of Health Sciences showcased their talent and culture. This year's Talent Show exceeded the audiences' expectations in terms of superb quality, diversity, and top-class entertainment.

The audience was treated to a variety of acts including classical piano, singing, poetry and, dance. What a truly fantastic way to spend an evening!



UP Sport Science student at the International Scholar Laureate Programme



Mignon Black, a third-year UP BSport Science student attended the International Scholar Laureate Program (ISLP) for Medicine and Science in Australia. The Golden Key International Society selected Mignon, along with three other South African students, to join students from around the globe to examine the fields of health care, medicine and science through an Australian lens. Students attended numerous talks and held interactive workshops. Mignon's group discussed health care systems in America, South Africa and Australia, with specific reference to rural areas.

The students visited the University of Melbourne and the University of New South Wales. Through ISLP, Mignon had the opportunity to develop as a young researcher, to network with students from across the world and to explain the role that exercise and sport science play in the fields of health care, medicine and science.

UP Facial Cleft Deformity Clinic at MTN Walk The Talk



The MTN Walk the Talk with 702 is one of the biggest events on the Marks Park Sport Club's calendar. This event brings over 50 000 people together each year from Johannesburg and surrounds to "Walk for a Cause".

This year, the HAPPY SMILES team from the Facial Cleft Deformity Clinic at UP and the Parental Support group walked for a cause close to their hearts.

One out of 725 babies is born with a cleft lip & palate and MTN Walk the Talk is a wonderful opportunity to raise awareness for children and parents living with cleft lip and palate.

TUKS Student Surgical Society annual Scrub Run



The TUKS Student Surgical Society hosted their annual Scrub Run on the 22nd of September at the Pretoria National Botanical Gardens. Proceeds from this event go to the Hospitals of Pretoria's Pediatric fund (HoPP). Students from all years, degree programs and campuses, from medical students to engineering students, attended and enjoyed a day in the gardens made for the entire family. Doctors from the Faculty of Health Sciences, Dr Prashilla Soma, Dr Wim Wijnant and Dr Denise Parris, also ran in their scrubs! - Jomarie Weyers

Albertina Sisulu Centenary Memorial



Anti-apartheid struggle icon, Albertina Sisulu

Anti-apartheid struggle icon, Albertina Sisulu was a “rock” to her family, a nursing role model and icon of South Africa’s liberation, and would have been 100 years old this year. MaSisulu was married to ANC stalwart Walter Sisulu, and in 1964 she was left to care for her children when he was sentenced to life imprisonment on Robben Island.

She should be remembered for her bravery and society could emulate her in many ways. These were some of the thoughts shared by humanitarian and former First Lady Graça Machel when she delivered the Albertina Sisulu Centenary 2018 Memorial Lecture at the University of Pretoria’s Health Sciences Campus.



Dr Graça Machel



Former First Lady Graça Machel and Prof Cheryl de la Rey, UP Vice-Chancellor and Principal



The event was attended by government officials, struggle stalwarts including the Sisulu family, Advocate George Bizos, and the nursing fraternity. The lecture was hosted by the Albertina Sisulu Executive Leadership Programme in Health (ASELPH), a partnership of the University of Fort Hare, the University of Pretoria, the Harvard TC Chan School of Public Health; in collaboration with the National Department of Health.

ASELPH provides high-quality strategic leadership training to healthcare managers. - Primarashni Gower



Dean's Concert 2018

The inaugural Dean's Concert took place on 28 September 2018. The concert celebrated the achievements and talent in the Health Sciences residences, who won all the categories in the Tuks A Capella Competition. We are proud of our exceptionally talented students.

- **Olympus Residence** was the OVERALL Winner of the competition and the winner of the Male Residences Category;
- **Curlitzia** was the Winner of the Female Residences Category;
- **Tuks Bophelong** was the Winner of the Mixed Residences Category.



Tyger Valley College learners visit the Department of Physiology



Grade 12 learners from Tyger Valley College visited the Department of Physiology for 'A fun-filled day of cellular and molecular biology' in August 2018. Learners watched scientists demonstrate how to analyse and interpret data using spectrophotometry and light microscopy. These methods were used to explain tumourigenic cell growth and cellular morphology. Learners visited the Institute for Cellular and Molecular Medicine and the Centre for Neuroendocrinology.

Princess of Africa visits Faculty of Health Sciences



Musician and Princess of Africa, Yvonne Chaka Chaka, recently visited the Faculty of Health Sciences as the New Partnership for Africa's Development (NEPAD) Goodwill Ambassador for TB and nutrition.

She is also the UNICEF Special Ambassador on Malaria for Eastern and Southern Africa and has extensively promoted the work of agencies trying to combat malaria in the region.



Health, well-being and sustainable development, intrinsically connected

Prof Tiaan de Jager presented a lecture titled "An integrated approach to health and well-being – towards achieving SDG 3" as part of the UP Sustainable Development Goals Lecture Series.



Prof de Jager emphasised that health, well-being and sustainable development are intrinsically connected, where health is both an indicator and outcome of successful sustainable development.

Prof de Jager's lecture focussed on reducing morbidity and mortality from non-communicable diseases, promoting mental health, preventing new-born and child mortality, and reducing deaths and illnesses from hazardous chemicals which pollute and contaminate our air, water and soil.

To attain SDG 3, we need to focus our efforts on vulnerable populations, who are often the hardest hit by the epidemics of AIDS, TB and, malaria.

- Myan Subrayan

New smiles for 11 Pretoria children at Steve Biko Academic Hospital



The Smile Foundation recently held its first Smile Week at the Steve Biko Academic Hospital. The foundation is a NGO that helps children who need facial and other reconstructive surgery. Children with significant physical deformities are often teased at school, damaging their already low self-esteem. According to Prof de Jager, hospital registrars and consultants from Steve Biko Academic Hospital and the University of Pretoria, also benefit immensely in terms of skills transfer. This teamwork improves children's lives while equipping surgical staff with new skills.

Personalised medicine 'holds great promise for improved patient outcomes'



Prof Mike Sathekge, Head of the Department of Nuclear Medicine recently presented a UP Expert Lecture titled 'Theranostics: See it, treat it!' According to Prof Sathekge, nuclear medicine is rapidly facilitating the shift from 'trial and error' medicine to personalised medicine, which holds great promise for improved patient outcomes. In his lecture, he explained how the "see it, treat it" approach increases the quality of clinical care and saves costs by identifying the right therapy for the right patient at the right time. Theranostics is a revolutionary approach that improves therapy selection by considering the specific molecular features of disease, allows for greater predictive power of adverse effects due to improved patient-specific absorbed-dose estimates, and enhances the objective monitoring of response to therapy. - Myan Subrayan

Make a difference in the lives of others



Dr Alisa Phulukdaree lost her parents to cardiovascular disease. This experience ignited a passion to further her PhD studies in Medical Biochemistry. In 2014, she joined the University of Pretoria's Department of Physiology, contributing to the area of microRNA research. Dr Phulukdaree's research in biochemistry and physiology aims to reveal genetic alterations that may cause the symptoms and changes associated with cardiovascular disease.

Dr Phulukdaree explains that diseases such as type 2 diabetes, hypertension and obesity are underlying risk factor for heart disease. She explains that these conditions may affect coagulation pathways and increase the risk of thrombosis, which increases the risk of heart attack. Dr Phulukdaree's accolades include being made a fellow of the prestigious Next Einstein Forum, a programme that recognises Africa's best young scientists.

- Louise de Bruin

Launch of the Tshwane Insulin Project

The Tshwane Insulin Project (TIP) aims to optimise the control of blood glucose, blood pressure and lipids in people with diabetes, specifically focusing on initiation and up-titration of insulin by both primary care nurses and primary care clinic physicians. Under the leadership of Prof Paul Rheeder, this exciting new five-year research programme, is a partnership between UP and Eli-Lilly (through the Lilly Global Health Partnership), a global pharmaceutical research company that brought human insulin to the market in the 1980s.



Prof Stephanie Burton, UP Vice Principal for Research and Postgraduate Education, Prof Tiaan de Jager, Dean: Faculty of Health Sciences, Dr Evan Lee, Vice President, Global Health Programs & Access at Eli Lilly and Prof Paul Rheeder, Project Leader: Department of Internal Medicine

Prof Stephanie Burton, Vice Principal of Research and Postgraduate Education, proudly recognises the importance of this project, "Because it means we can have even more value and make even more of a difference. TIP is translational research in its prime."

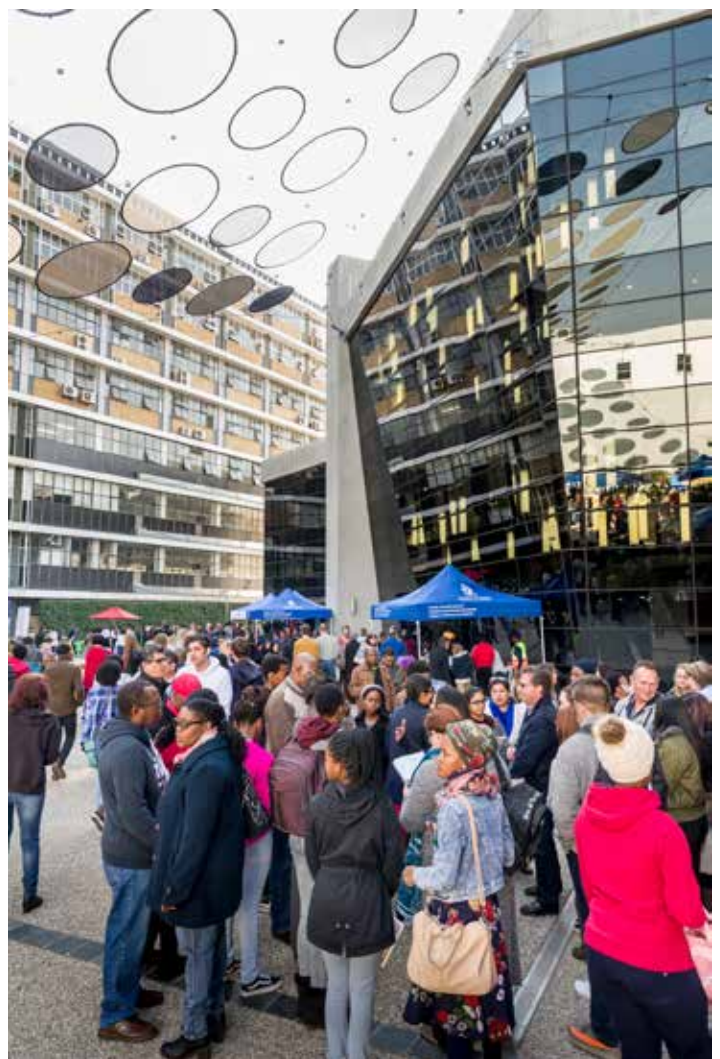
TIP is a collaborative project between Internal Medicine, Family Medicine, Human Nutrition and the School of Health Systems and Public Health; national and local health authorities, external experts and Eli Lilly. - *Louise de Bruin*

#ChooseUP day a success

There was an air of excitement and festivity at all of the University of Pretoria (UP) campuses on #ChooseUP day, which took place on Saturday, 4 August. Prospective students visited campuses, and spoke to faculty staff about their chosen degrees and residence life. The Faculty of Health Sciences showcased their academic offering during various information sessions.



A family from Egypt, whose daughter, Fadwa Salem is set to study dentistry, gave UP a thumbs up. Salama Salem said "the weather was warm but the people were warmer" and that UP had treated his family with dignity and respect. He said Africans often consider European universities but "everybody should come to UP" for the humanity he has experienced. - *Prim Gower*



UP Pharmacology scoops awards at annual conference



From left to right: Keith Mcube, Andrea Ellero, Werner Cordier, Vanessa Steenkamp and Vuyelwa Buque

The first Conference of Biomedical and Natural Sciences and Therapeutics (CoBNeST) took place at the Spier Estate, Stellenbosch, 7-10 October 2018. Its theme "Interdisciplinary Scientific Excellence" served as a platform for six independent learned societies with shared interests in basic, translational, clinical biomedical and pharmaceutical sciences and included the Academy of Pharmaceutical Sciences, the Physiology Society of Southern Africa, the South African Association for Laboratory Animal Science, the South African Society for Basic and Clinical Pharmacology, the Southern African Neurosciences Society and the Toxicology Society of South Africa.

The conference offered an interesting, multi-faceted, well balanced and full programme, presented by highly distinguished international and South African speakers. It was a huge success! The interdisciplinary format lent itself to the flow of ideas, collaborations, partnerships, and ultimately, long-term success. What made it even more special was that UP won awards in the category of Basic Pharmacology. These awards were announced by Prof Vanessa Steenkamp who is the current President of the SASBCP, and the first woman to attain this position.

The Best Oral presentation were awarded to Vuyelwa Buque (1st place), Keith Ncube (2nd place) and Andrea Ellero (3rd place). Vuyelwa also received the best poster award. Dr Werner Cordier received the Educators award. What a proud moment – congratulations to the Department!

Faculty celebrates Women's Month

The Faculty hosted an event for women to recognise their roles and contributions to the Faculty. There was a varied line-up of speakers who shared their life experiences and views with the ladies. It was an uplifting and inspiring event.



Prof Joyce Mothabeng, Dr Prashilla Soma, Dr Emmanuel Matsebatlela, Ms Melissa le Roux and Prof Isabel Coetzee

UP Inter Campus Connectivity Project: Status Update

In January 2018, the University of Pretoria introduced the Inter Campus Connectivity Project to deliver broadband infrastructure to increase network capacity and speed between campuses. Capacity between campuses will be upgraded to 40Gbps to accommodate more users in the future. Dedicated fibre optic routes will connect the following campuses in two phases:

Phase I connects the Hatfield, Prinshof and Groenkloof Campuses, and will be completed by the end of October 2018.

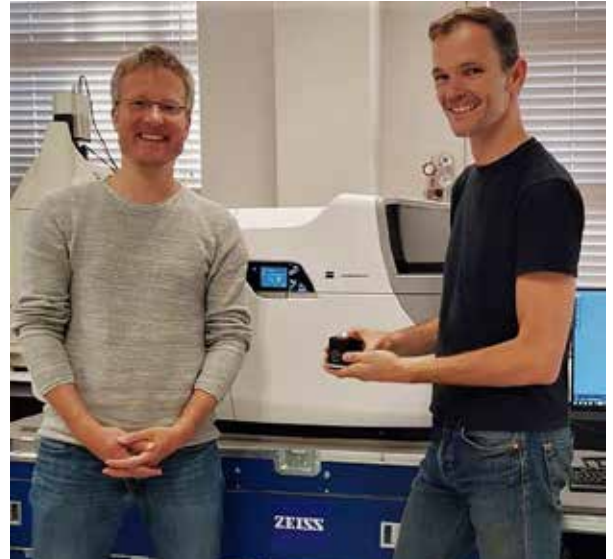
Phase II (still under tender) will connect the Prinshof, Onderstepoort, Hillcrest, Groenkloof and Prinshof Campuses, and will be completed by the end of 2019.

For more information contact Johanna Boonzaaier at johanna.boonzaaier@up.ac.za

Awards & Accolades

The Centre for Neuroendocrinology (CNE) hosted the flagship Zeiss Cell Discoverer 7 platform

Scientists from across Southern Africa visited the CNE to experience the automated high content microscope, Dr Sebastian Gleim and Dr Iman van den Bout in front of the Zeiss Cell Discoverer 7 platform. Dr Sebastian Gleim, product specialist from Zeiss demonstrated the platform and presented a number of expert lectures on different aspects of microscopy. Researchers from the CNE including Dr Iman van den Bout and Dr Ross Anderson as well as Dr Andre Stander from the Department of Physiology had the opportunity to use the platform to generate terrabytes of real time imaging data which are revealing interesting new avenues for further research.



Dr Sebastian Gleim and Dr Iman van den Bout in front of the Zeiss Cell Discoverer 7



Dr Francois Theron, past SASCA chairman and Prof Mothabeng, Head of the Department of Physiotherapy

Physiotherapy staff excel at a multidisciplinary congress

The 2018 biennial congress of the Southern African Spinal Cord Association (SASCA) was held in August 2018. Two staff members from the Department of Physiotherapy, Ms Kholofelo Mashola and Prof Joyce Mothabeng, participated in the congress. Aside from presenting a paper, Ms Mashola was elected Vice-Chairperson of the association.

Prof Mothabeng received the Prof Hans Myburgh Award for the best presentation at the congress. Prof Hans Myburgh was a renowned Orthopaedic surgeon at UP, who himself had a spinal cord injury. He served on the SASCA committee for many years, and after his passing, the association named an award in his honour, using his life motto: 'what is left, not what is lost'.

Accolades for the Department of Radiography

The South African Society of Nuclear Medicine hosted their 18th biennial congress at the CSIR in Pretoria recently.

Two students from the Department of Radiography were awarded the 2017/2018 Nuclear Medicine students of the year.

We congratulate Anine de Wet and Michelle da Rocha, who are both studying in the BRad (Hons) Nuclear Medicine, on this achievement.



Anine de Wet and Michelle da Rocha

Young scientists attend the 68th Lindau Nobel Laureate Meeting in Germany

Michelle Visagie and Elsie Nolte from the Department of Physiology, and Keith Ncube from the Department of Pharmacology, University of Pretoria were invited to participate in the 68th Nobel Laureate Meeting in Lindau, Germany. This meeting gave young scientists an opportunity to meet other young scientists from around the world, as well as international leaders in research. Research leaders present at the meeting, included the Nobel laureates Prof Peter Agre (co-recipient of the Nobel Prize in Chemistry, 2003), Prof Dan Shechtman (recipient of the Nobel Prize in Chemistry, 2011), Prof Louis Ignarro (co-recipient of the Nobel Prize in Physiology or Medicine, 1998) and Prof Yoshinori Ohsumi (recipient of Noble Prize in Physiology,



Elsie Nolte, Keith Ncube and Michelle Visagie

Ms Marcel Nel awarded DAAD scholarship



Dr Anja Hallocker, Director of DAAD South Africa and Ms Marcel Nel

In September 2018, Ms Marcel Nel was awarded a highly sought-after German Academic Exchange Service (DAAD) scholarship for her PhD in Human Physiology. This programme is a collaboration between the German Federal Ministry of Economic Cooperation and Development (BMZ) and the NRF, to cultivate future academic staff in African universities. Ms Nel is currently conducting her research, entitled 'CD34⁺ haematopoietic stem cells: isolation parameters and contribution to the treatment of haematological malignancies', at the Institute for Cellular and Molecular Medicine, under the supervision of Dr C Durandt, Prof M Pepper and Dr AE Mercier. This project is a collaborative effort between the University of Pretoria, the Albert Alberts Haematopoietic Stem Cell Transplant Unit (Netcare Pretoria East Hospital) and Cellipse (a French research institute). She had a wonderful opportunity to visit a German university for up to six months to further her research skills, and to bring back these competencies for the benefit of future students in South Africa. - Dr Joji Mercier

Prof Tahir Pillay invited to present 25th FP Retief Lecture



Prof Tahir Pillay

Prof Pillay, Head of the Department of Chemical Pathology, was invited by the University of the Free State (UFS) to present the 25th FP Retief Lecture on the occasion of the UFS Faculty of Health Sciences' 50th Jubilee celebration on 30 August 2018. His lecture was titled *"New diagnostic probes for laboratory medicine using nanobodies and next generation technology"*.

Speakers are nominated to present the FP Retief Lecture if they have contributed meaningfully to the field of Health Sciences. The FP Retief lecture is named after Prof Francois Retief, the first Dean of the Faculty of Health Sciences, UFS.



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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