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Official Opening of Tuks Bophelong

New residence officially opened at the Medical Campus

The newly built Tuks Bophelong residence, a comfortable and contemporary home away from home to just under 300 health sciences students was officially opened on Monday, 1 February 2016, by the Honourable Minister of Higher Education and Training, Dr Blade Nzimande.

'The provision of accessible, decent and safe student accommodation that is conducive to learning is of great importance to the quality of the higher education system and the success of students at South African Universities, especially those from rural and poor backgrounds,' the Minister said in his speech. 'Decent and affordable student accommodation allows students to focus their energies on their academic endeavours, improving their chances of success. Data provides conclusive proof that the throughput of students in residences is far better than those that reside off-campus and commute to universities,' he added.

The Vice-Chancellor and Principal of the University of Pretoria, Prof Cheryl de la Rey, said the new residence forms part of the University's response to a call made to universities by the Ministers of Health and Higher Education and Training to increase their medical student intake to meet the need for more doctors in the country.

'In accordance with the University's Strategic Plan UP2025, we have committed ourselves to being a public university that fully serves the national interest. Therefore, we deemed it our responsibility to respond to the call to increase the intake of medical students and to advance access for black South Africans to become medical doctors,' Prof de

la Rey said.

UP was granted funding to upgrade the medical school campus by the National Skills Development Fund. The Tuks Bophelong residence is the first major project to result directly from the infrastructure grant, and was completed at a cost of about R96 million.

The facility is situated on the hill above the Steve Biko Academic Hospital, on the University's Prinshof Campus. The design includes five residential blocks with 301 single bedrooms, a communal facility and 200 m² house parents' residence. Four of the bedrooms were designed and equipped to meet the needs of students with physical disabilities.

The various buildings were situated in such a way as to create landscaped courtyards where students can gather and interact, thereby promoting social cohesion in both the internal and external spaces.

The communal facility provides, among other facilities, an IT lab, a study area, a food kiosk and a recreation hall.

The buildings have been designed to be as energy-efficient as possible, from orientation and internal layout, to technical aspects such as solar water heating and water-saving sanitary fittings. Natural lighting and ventilation have also been incorporated into the design.

In 2016, the residence is home to 292 male and female students. The remaining rooms are in the process of being filled.

Faculty academics appointed in prominent positions at the Colleges of Medicine of South

Two academics from the Faculty of Health Sciences, Prof Mike Sathekge and Dr Flavia Senkubuge, have been appointed as President and Junior Vice-President of the Colleges of Medicine of South Africa (CMSA), respectively.

The CMSA is the custodian of the quality of medical care in South Africa and is unique in the world in that it embraces 28 constituent colleges representing all the disciplines (fields of specialisation) in medicine and dentistry. Because of this feature, the CMSA has the potential to promote and advance aspects of education and professionalism common to all medical and dental disciplines.

Prof Sathekge, an internationally acclaimed researcher and Head of the Department of Nuclear Medicine in the Faculty of Health Sciences at UP, also serves as Chairman of the Medical Research Council of South Africa. On the international front, he is the President of the International Society of Radiolabeled Blood Elements (ISORBE) and has served as Secretary-General of the World Federation of Nuclear Medicine and Biology. Prof Sathekge has won various prestigious awards for his research in the field of nuclear medicine and holds a B-rating from the National Research Foundation (NRF). He has produced numerous publications that has advanced and impacted the field and community of nuclear medicine significantly, both locally and internationally.



Prof Mike Sathekge



Dr Flavia Senkubuge

Dr Senkubuge, a specialist in Public Health Medicine and Head of the Health Policy and Management Track in the School of Health Systems and Public Health at UP, is the first black woman to occupy such a senior leadership position in the CMSA. She is the current Vice-President of the African Federation of Public Health Associations and Secretary of the African Advisory Council on Research and Development. Dr Senkubuge's research interests are global health diplomacy, health policy and management, leadership, and the social determinants of health. She is a philanthropist at heart and passionate about mentoring young people.

Prof Tahir Pillay elected as a member of ASSAf



Professor Tahir Pillay, Head of the Department of Chemical Pathology and Director of the Division of Clinical Pathology in the Faculty of Health Sciences at the University of Pretoria

(UP), has been elected as a member of the Academy of Science of South Africa (ASSAf). Membership in the academy is a great honour and is indicative of a scientist's significant contributions to the advancement of science and technology in South Africa.

ASSAf members are drawn from the full spectrum of scientific disciplines. In 2015, the academy had 472 members in 11 categories. The key objective of ASSAf is to promote and apply scientific thinking in the service of society. Furthermore, given its unique position as the only national science academy that is officially recognised by the South African government, it aims to provide evidence-based scientific advice on issues of public interest to government and other stakeholders.

Prof Pillay is a Fellow of the Colleges of Medicine of South Africa and the Royal College of Pathologists, London. He has a doctorate from Cambridge University and previously led the Departments of Chemical Pathology at the University of Cape Town and the University of KwaZulu-Natal. He is one of the two most senior chemical pathologists in South Africa, the South African country advisor for the Royal College of Pathologists and a Ministerial appointee to the Medical and Dental Board of the Health Professions Council of South Africa (HPCSA). Prof Pillay is also a former Deputy Vice-Chancellor and Head of the College of Health Sciences at UKZN.

Prof Tshifularo rewarded at GAP sciences awards

The annual Gauteng Accelerator Programme (GAP) innovation competitions attracted more than 700 entries in the last four years and researchers and entrepreneurs from across the country were awarded over R7 million in seed funding and incubation support to launch their innovative projects.

The competitions span various sectors and innovations are entered in four distinct categories, namely GAP Green, GAP Biosciences, GAP ICT and GAP Medical. Prof Mashudu Tshifularo, Head of the Department of Otorhinolaryngology (Ear, Nose and Throat Studies, ENT), received an award at the GAP sciences awards function that took place at The Innovation Hub in Pretoria.

Prof Tshifularo received a GAP Medical Special Recognition award for his innovative hearing prosthesis. The GAP Medical competition is run in partnership with World Innovation Day, which is organised by the University Hospital in Geneva, Switzerland. The competition focuses on identifying and nurturing health innovations that will contribute to improving health service delivery in hospitals and finding novel



Prof Tshifularo

medical technologies and innovative hospital processes. Prof Tshifularo's invention involves a middle ear medical prosthesis used to restore hearing more quickly, more easily and more safely and has minimal complications. The award includes incubation at The Innovation Hub's Maxum Business Incubator, as well as R50 000 in seed funding.

Junior Tukkies Open Day



The Faculty hosted an open day for Grade 12 learners and their parents in March. The event attracted approximately 650 learners and parents. The Open Day kicked off with the Dean giving an introduction and overview of the Faculty.

Parents and learners were introduced to the various undergraduate disciplines, support programmes, student life and residences we have within the Faculty. As more applications are received than places are available, a selection process is necessary in the Faculty of Health Sciences. Thus, the selection and admission process and procedure was explained at length. Learners and parents were also afforded an opportunity to ask questions. The open day was a success and parents and learners alike gained a wealth of information on the day.

Winners – Name the New Building Competition

Congratulations to Nelly Baloyi & Mienkie Esterhuizen who both made the winning suggestion for the Name the Building Competition. The new building has been named Tswelopelo. It's a Sepedi word that means Success / Progress / Advancement. Well done ladies, we hope we enjoy your prizes.



Nelly Baloyi & Mienkie Esterhuizen



Tiaan Eskteen

Swimming for a cause

Tiaan Eskteen, Operations Manager at the School of Health Systems and Public Health participated in the Midmar Mile Swimming event recently. He was part of a group of swimmers for the Princess Charlene of Monaco Foundation and they raised an estimated R200 000 for the charity. They swam the Midmar Mile 8 times over two days. The Princess Charlene of Monaco Foundation focuses on the importance of water safety, which was established in 2012 by Princess Charlene of Monaco and her husband Prince Albert.

Tiaan explained that "It was important for me not only to swim for myself, but also to give something back. Sports development is so important, especially for children. If I can help to promote it, I'm happy. Through sport children learn how to set goals and work hard to reach their milestones." The Faculty would like to congratulate Tiaan on his achievement.

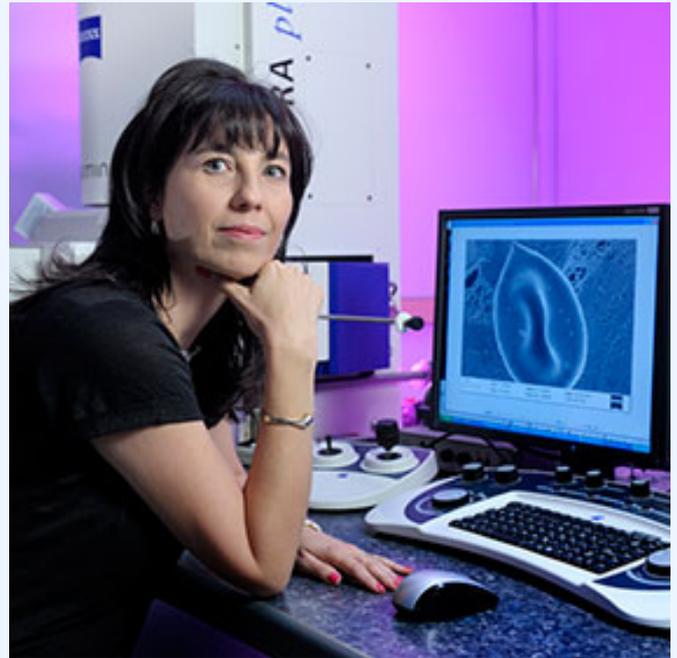
Culture Fashion Show

Staff and students recently participated in a fashion show to celebrate our culture



Landmark editorial identifies microbes as major cause of Alzheimer's Disease

A global team of senior scientists and clinicians have collaborated to produce an editorial which indicates that certain microbes - a specific virus and two specific types of bacteria - are major causes of Alzheimer's Disease. Their paper, which has been published online in the international multidisciplinary peer-reviewed journal, *Journal of Alzheimer's Disease (JAD)*, stresses the urgent need for further research - and more importantly, for clinical trials of anti-microbial and related agents to treat the disease.



Professor Resia Pretorius

This major call for action is based on substantial published evidence on Alzheimer's Disease. The team's landmark editorial summarises the abundant data implicating these microbes, which until now has been largely ignored or dismissed as controversial - despite the absence of evidence to the contrary. Therefore, proposals for the funding of clinical trials have been refused, despite the fact that over 400 unsuccessful clinical trials for Alzheimer's based on other concepts were carried out over a recent 10-year period.

Opposition to the microbial concepts resembles the fierce resistance to studies some years ago which showed that viruses cause certain types of cancer, and that a bacterium causes stomach ulcers. Those concepts were ultimately proved valid, leading to successful clinical trials and the subsequent development of appropriate treatments.

Prof Resia Pretorius of the Department of Physiology in the Faculty of Health Sciences, is one of the editorial's authors. She said: "The microbial presence in blood may play a fundamental role as causative agent of systemic inflammation, which is a characteristic of Alzheimer's disease - particularly, the bacterial cell wall component

and endotoxin, lipopolysaccharide (LPS). Furthermore, there is ample evidence that LPS can cause neuroinflammation and amyloid- β plaque formation. Prof Pretorius works closely with Prof Douglas Kell of The University of Manchester's School of Chemistry and Manchester Institute of Biotechnology, who is also one of the authors. He says that supposedly sterile red blood cells were seen to contain dormant microbes, which also has implications for blood transfusions. "We are saying there is incontrovertible evidence that Alzheimer's Disease has a dormant microbial component, and that this can be woken up by iron dysregulation. Removing this iron will slow down or prevent cognitive degeneration - we can't keep ignoring all of the evidence." Dr. Perry, JAD Editor said: "In consideration of the great social and financial impact of Alzheimer's disease, and the slow progress to a cure, it is imperative for the field to be open to vigorously explore alternative approaches that are supported by experimental findings."

The findings of this editorial could also have implications for the future treatment of Parkinson's Disease, and other progressive neurological conditions.

NRF Ratings

The Faculty is exceptionally proud of all our Health Sciences researchers who have received new National Research Foundation (NRF) ratings or re-ratings for 2015.

Congratulations **Prof Mike Sathekge** for attaining a B-rating and to **Dr Ryan Blumenthal**, **Prof Christa Janse van Rensburg**, **Prof Ericka L'Abbe**, **Prof Una MacIntyre** and **Prof Louw Roos** for attaining a C-rating. A B-rating is awarded to Researchers who enjoy considerable international recognition by their peers for the high quality and impact of their recent research outputs. Established researchers with a sustained record of productivity in their respective fields and who are recognised by their peers as having produced a body of quality work, the core of which has coherence and attests to ongoing engagement with the field are awarded aC - rating.

These researchers should also have demonstrated the ability to conceptualise



Dr Alisa Phulukdaree



Prof Albert Van Schoor

problems and apply research methods to investigating them. In addition to the NRF-specific criteria, the Faculty acknowledges that these researchers are making huge strides internationally in their specific domains and thereby contributing to internationalisation which is high on the strategic agenda.

Emerging researchers **Dr Alisa Phulukdaree**, **Dr Andre Stander** and **Prof Albert Van Schoor** received a Y-rating for 2015. A hearty congratulations to **Dr Cheryl Tosh**, the newly appointed scientific editor who also received a Y-rating. They have been recognised by the reviewers as having the potential to become established researchers in the next five years based on their performance and productivity of quality research outputs during their doctoral studies and/or early post-doctoral careers. This brings the number of rated researchers in the Faculty to 33, with three pending applications.

Research support in the Faculty

Much progress has been made over the last three years in shifting the research culture and support in the Faculty. There are notable improvements in the pipeline: the increased number of applications for funding support and a two-fold increase in third stream income over the past two years, consistent reporting of research outputs, an increase in the number of NRF rated scientists with a marked increase in the number of rating applications submitted in the 2016 round.

This encouraging shift in the research culture that is underway did not go unnoticed by the Faculty and UP management. Research support has therefore been sharpened in both a proactive manner and in response to this upward trend. The previous year has seen the appointment of forty Research Assistants with the hope of appointing more in 2016. In addition to these assistants, the NRF Internship Programme allocated twenty six interns across the Faculty, with interns taking up duty from April 2016 to March 2017.

Other initiatives include the sabbatical / lecturer replacement programmes which are in aid of staff pursuing their doctoral degrees. This initiative has brought support to more than twenty emerging researchers in the period 2014/2015. The Faculty has also seen an increased request for the appointment of both Postdoctoral Fellows and Research Fellows and have managed to increase these numbers significantly and the resulting increase in research outputs and the enrolled postgraduate student cohort are indicative of the success of this research support programme.

There are many exciting support opportunities available to aid both emerging and established researchers, ranging from editing and biostatistical services, funding support, availability of writing rooms and regular information and training sessions/workshops. To stay up-to-date with support opportunities, you are encouraged to visit the research webpage which is updated regularly and is available on the following url <http://www.up.ac.za/faculty-of-health-sciences-research>.

Successes with Research Funding

The Faculty is extremely proud of the research funding obtained in 2015. The researchers overall need to be commended for the significant efforts made to apply and access funding during 2015. Please keep this momentum going during 2016 and become part of our success story!

Hearty congratulations to the leaders in Family Medicine and Nursing Sciences who have been awarded grantholder-linked funding in excess of R1M for Masters and Doctoral students in the field of Allied Health. Under mentorship of **Proffs Jannie Hugo** and **Tessa Marcus** at least 12 doctoral and 14 masters students will be funded. Under lead of **Prof Mavis Mulaudzi** a further investment was made by the NRF to five doctoral students under the SANTRUST Nursing PhD Programme.

Warm congratulations to our emerging researcher who received NRF Thuthuka funding for 2016. New awards were made to **Dr Xiao Xing Stander**. Renewed funding was given to **Mrs Celmari Dorfling, Ms Tracey Hurrell, Dr Anne Mercier-Theron, Ms Thandi Mqoco, Dr Jan-Gert Nel, Mrs Gisela van Dyk, Prof Theresa Rossouw, Dr Andre Stander, Dr Natalie Aneck-Hahn, Dr Chrisna Durandt and Dr Marleen Kock** which confirms that the research they are busy with is regarded as valuable by their peers.

Further NRF awards include the Scarce Skills Postdoctoral Fellowship awarded to **Dr Michelle Visagie** under the mentorship of Prof Annie Joubert for her project on "In vivo and ex vivo signalling of glutamine deprivation". **Mr Ewura Seidu Yahaya** received funding from the NRF – TWAS Doctoral and African Renaissance



Doctoral Fellowship for 2016 to complete his Doctoral focusing on "Assessment of the wound healing potential of selected medicinal remedies used by Ghanaian traditional healers for managing wounds".

The University of Pretoria has awarded the Vice Chancellor's Postdoctoral Fellowship funding to **Dr RA Jacob**. The VC Postdoctoral fellowship enables recent doctoral graduates to join the University as postdoctoral researchers, and to develop their research skills and academic careers through participation in the University's areas of research strength and strategic priorities. The UP Postdoctoral Fellowship Programme funding was awarded to **Dr M Chaundry, Mr S Ujewe, Dr C van Heerden** and **Ms K Reid** to conduct further research at the University of Pretoria.

Professor Riana Cockeran was awarded the NRF equipment grant. The award to Prof Riana Cockeran allows for the acquisition of a Suspension Bead Array which is used to analyse different proteins (cytokines, chemokines, phosphorylated proteins etc.) in serum, plasma and tissue culture media, to mention a few. This instrument has the ability to analyse 100 proteins in a single sample, which has major cost saving and sample volume implications. **Prof Resia Pretorius** received an award from this programme as well for the acquisition of Confocal Microscope systems with super-resolution capabilities, which is state of the art and the latest development in confocal microscopy for which the 2014 Nobel Prize for Chemistry was awarded to the developers. This piece of equipment will allow the researcher to resolve structures that are less 100 nm apart. This is double the ability of conventional light microscopes.

Science Editor appointed in the Faculty

We are pleased to welcome the new Science Editor in the Faculty, **Dr Cheryl Tosh**. Cheryl completed her PhD in 2010 and was a research fellow with the Department of Zoology until 2015.

Her research interests are diverse and her new appointment aligns well with her interest in the research process. She has published scientific articles

and presented at international conferences. Her main role in the Faculty is to assist authors during the publication process with technical and language editing. Her focus is on formulating articles that are easy to read with the intended impact. Accessible research will gain more citations over time and contribute to academic profiles. Authors are encouraged to submit completed manuscripts, along with the intended journal details. Cheryl is available to assist with writing retreats and writing workshops for post-graduate students.



Dr Cheryl Tosh



We would love to hear more from departments and staff.
Please e-mail your ideas and contributions for the next edition to Ronel Leyds
Email: ronel.leyds@up.ac.za