

TTO NEWS

**New funding
agreements**

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UP's IP Open Day

**TuksNovation
accelerates
innovation**

UP
Intellectual
Property
Day



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

**Department of Research
and Innovation**

Departement Navorsing en Innovasie
Kgoro ya Dinyakišišo le Tšweletšopele

Newsletter of the Technology Transfer
Office of the University of Pretoria

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Letter from the editor



Looking back at another successful year of supporting the innovative ventures of the University of Pretoria's researchers, the Technology Transfer Office (TTO) celebrates several milestones.

A highlight during the second half of the year was the first Intellectual Property Open Day, which was hosted on the University's Hatfield Campus in July 2018. This event focused particularly on the collaboration of the TTO with entrepreneurial initiatives on campus, such as the University of Pretoria Business Incubator and TuksNovation, which support the University's inventors.

In this issue of the newsletter, you can read about several of the exciting inventions that are heading for commercialisation. These include slow-release formulations and composite polymer fibres for malaria control, markers for disease resistance in maize, and plant extracts and compositions to treat skin cancer.

The University, through the TTO, has also concluded various funding agreements that will support research, innovation and knowledge transfer in the fields of primary health care, nuclear safety and security, energy and forest molecular genetics.

We wish all our readers a productive year ahead, and welcome you to contact the TTO for advice to turn your inventions into products that can be commercialised.

Adv Lawrence Baloyi
Head: Innovation and
Contract Management

Major research funding for technology transfer

The University of Pretoria has a long history of linkages with public and private institutions across several sectors in society, illustrating the importance of linking research, innovation and knowledge transfer.

Despite strong research partnerships, most inventors face the challenge of raising investment to support the commercialisation process.

The University's Technology Transfer Office (TTO) supports researchers by coordinating processes, systems and structures to facilitate the transfer of UP-created discoveries into new products and services.

As such, it offers commercialisation services that include identifying and securing initial seed funding, recruiting management teams and securing first-round venture funding.

It also provides support for financial and project management services for IP activities, and facilitates the formation of "spin-off" companies by assisting with due diligence, financial and legal services, business plans and feasibility studies.

Together with the University of Pretoria, we are therefore pleased to announce the conclusion of four significant agreements that will support research, innovation and knowledge transfer in the fields of primary health care, nuclear safety and security, energy and forest molecular genetics.

Primary health care

Eli Lilly and Company signed a global health collaboration agreement with the University of Pretoria to the value of over \$2.5 million. The project will tackle the challenge of initiation and up-titration of insulin in primary health care. The University of Pretoria will undertake a pilot project in the Tshwane District and it expects to integrate the intervention into the routine care of participants and roll out the programme to other districts and clinics across South Africa. Eli Lilly and Company plays an important role in discovering medicines that help people live longer, and lead healthier and more active lives.

Nuclear safety and security

The University of Pretoria also signed an agreement with the National Nuclear Regulator (NNR). This is a public entity that was established in 1999 and is governed in terms of Section 3 of the National Nuclear Regulator Act (Act No. 47 of 1999) to provide for the protection of persons, property and the environment against nuclear damage through the establishment of safety standards and regulatory practices.

Funding agreements go a long way towards successful technology transfer at the University of Pretoria.

A Centre for Nuclear Safety and Security (CNSS) was established at the University of Pretoria with funding received from the European Union (EU) International Science and Technology Centre (ISTC).

The NNR CNSS is the first nuclear safety and security research facility of its kind in South Africa and the NNR will host it at the University of Pretoria, which will collaborate with various local universities.

The CNSS has now received funding to the value of €1 250 000 from the ISTC to further research in nuclear safety and security in Africa.

Energy

The collaborative energy research hub and spokes programme of Stellenbosch University and the University of Pretoria has received funding from the Department of Science and Technology to the value of R1 446 500.

Forest Molecular Genetics

The Technology Innovation Agency (TIA) has funded the Forest Molecular Genetics Programme to the value of R7 500 000. The project relates to the genetic modelling of forest trees. TIA agreed to provide the University of Pretoria with research funding to

develop the technology. The research group concerned has constituted a consortium with industry players such as Mondi, Sappi and York Timbers, who also provide research funding.

Adopting new technologies

Financial resourcing plays a critical role in innovation as it allows organisations to conduct research, adopt the technologies that are necessary for inventions, as well as develop and commercialise innovations.

These funding agreements will go a long way towards promoting technology transfer at the University of Pretoria.



Panel discussion informs young people about IP processes

Extracting value from intellectual property (IP) and preventing others from benefiting from it is an important responsibility for any university.

The Department of Science and Technology (DST) invited Ms Refilwe Ngoato, Manager of the Technology Transfer Office at UP, to participate in a panel discussion entitled “Intellectual Property Economy: From Lab to Market and Barriers to Commercialisation in South Africa”. The discussion took place during the Next Einstein Forum (NEF) Africa Science Week at the DST on 28 September 2018.

The panel unpacked the challenges and opportunities concerning the commercialisation of technologies in South Africa, while promoting the protection of intellectual property.

Launched in 2013, NEF is an initiative of the African Institute for Mathematical Sciences (AIMS) in partnership with the Robert Bosch Stiftung.

This platform connects science, society and policy in Africa and the rest of the world to leverage science for human development globally. NEF believes that Africa’s contributions to the global scientific community are critical for global progress. At the centre of NEF’s efforts are Africa’s young people, the driving force for Africa’s scientific renaissance. One of the ways that NEF engages young people is through its ambassadorship programme. The NEF

Africa Science Week (launched in 2017) is led by NEF ambassadors, which comprise local science and technology champions, together with the support of local academics, public and private sector stakeholders and sponsors.

Intellectual property protection is critical to fostering innovation. Panel discussions such as the one in which Ms Ngoato participated are vital for making more young people aware of intellectual property protection and the commercialisation process in South Africa.

On the pathway to technology commercialisation

In today's globally competitive environment, intellectual property (IP) is positioned at a high level in the context of economic growth and is becoming increasingly important.

The Southern African Research and Innovation Management Association (SARIMA), in conjunction with the National Intellectual Property Management Office (NIPMO), presented IP Wise workshops in Grahamstown and Gaborone, Botswana, to help researchers (academics, as well as postgraduate students and postdoctoral fellows) understand the basics of IP and how to identify and protect it.

Dr Simon Thanyani, Contracts and Innovation Manager at the University of Pretoria's Technology Transfer Office (TTO), was invited to be one of the presenters at these workshops to raise IP awareness. The TTO is pleased to have these opportunities to raise IP awareness, which is an integral part of technology transfer.

Raising awareness of the Intellectual Property Rights from Publicly Financed Research and Development Act (Act No. 51 of 2008) (the IPR-PFRD Act), NIPMO and general IP issues among researchers and institutional management is vital to enhancing compliance with the Act and increasing the disclosure, protection and commercialisation of IP for the benefit of South Africa.

NIPMO contracted SARIMA to present these IP Wise workshops in all major cities in South Africa to fulfill this need to raise awareness on IP rights among researchers and institutional management. The workshops covered topics such as IP rights, IP identification, the role of IP in research, IP utilisation and commercialisation, licensing and spin-out companies.

Eleven participants attended the Botswana workshop in Gaborone from 14 to 16 August 2018. Dr Thanyani introduced the concept of technology transfer and explained the evaluation of an invention disclosure. He also gave a presentation at the IP Wise workshop at Rhodes University in Grahamstown on 19 September 2018. Topics covered included the IPR Act, IP ownership, IP identification, and the role of the Act in the utilisation and commercialisation of IP as it related to research.

Dr Thanyani's involvement in these two workshops emphasises the importance of keeping the big picture of IP in Southern Africa in mind. The TTO should not operate in isolation, but should strive to collaborate with other IP role players in South Africa to become a leading technology transfer office in the country.



Dr Tlameo Sekambo,
Director: Statistics, Research
Development and Innovation
at the Human Resource
Development Council;
Dr Janine Chantson, Chief
Director: Technology Transfer
and Innovation Support at
North-West University and
Dr Simon Thanyani, Contracts
and Innovation Manager at UP.

Building the bio-economy at the BIO Africa Convention

Making industry aware of innovation is just as much part of the commercialisation process as obtaining patents. Five University of Pretoria inventions were exhibited at the BIO Africa Convention in Durban.

The BIO Africa Convention is an international event organised by AfricaBio, a biotechnology stakeholder association in partnership with the Innovative Pharmaceutical Association of South Africa (IPASA) and the Technology Innovation Agency (TIA), and endorsed by the South African departments of Science and Technology, Health, and Trade and Industry.

The South African Minister of Science and Technology, Mmamoloko Kubayi-Ngubane, opened the exhibition, which was held from 27 to 29 August 2018. The convention provides a platform for dialogue and discussion with stakeholders in the global biotechnology environment.

It is also a showcase of bio-innovations from the broader biotech community of South Africa and the Africa region, creating an enabling environment for the commercialisation of local innovations.

The UP Technology Transfer Office (TTO) exhibited the following inventions:

- Markers for disease resistance in maize
- An extract of *Greyia radlkoferi* and use, extracts and compositions of *Helichrysum odoratissimum* for preventing and treating skin cancer
- A pollen substitute for domesticated bees
- Insect repellent composition
- Composite polymer fibres

sent an expression of interest to higher education institutions to apply for SARIMA exhibition funding.

The TTO applied for and was awarded exhibition funds to the value of R78 400, specifically to exhibit the “composite polymer fibres invention”. The other exhibit stands were funded by UP. Please see page 7 for brief descriptions of the inventions that were exhibited.

Policy leaders, academics, business leaders, investors and other industry experts attended the convention to discuss inventions and share knowledge on the most pressing problems in health, agriculture and environment, and explore investment

opportunities within Africa as an emerging market. The convention was organised along the following four themes:

- Health biotech (pharmaceuticals, devices, biologics and biosimilars)
- Agricultural biotechnology (crops, animals and feed)
- Industrial biotechnology (biofuels, bioremediation, biochemicals and enzymes)
- Biotechnology industry cross-cutting matters (funding, IP issues and entrepreneurship)

The convention comprised plenary talks, parallel tracks, business partnering, as well as a student and postdoctoral career fair.



Early in 2018, the Southern African Research and Innovation Management Association (SARIMA)

The Technology Transfer Office exhibited the University of Pretoria's inventions that are focused on building the bio-economy.



Insect repellent composition (also known as “controlled-release repellent formulations”)

This invention relates to controlled-release formulations of repellents based on the engineering of interactions between the components of the repellent mixtures, particularly by forming higher boiling azeotropes to reach a constant reduced boiling point and evaporation rate for repellents. What makes the technology unique is that this formulation takes longer to evaporate, resulting in the repellent effects lasting longer. The blend has proved to be toxic to mosquitoes.

Composite polymer fibres (also known as “polyolefin biocomponent filaments” as slow-release devices for liquid actives)

This invention relates to a composite polymer filament with a core that contains a liquid active and an outer membrane layer that reduces the rate at which the active ingredient is released into the atmosphere. The composite filament can be used to manufacture fabrics (for example, insecticidal fabrics or mosquito-repellent fabric). The filament was produced by means of a process of simple melt extrusion and drawing.

What makes this technology unique is that it is the only technology on the market that can slowly release liquid insect repellents using synthetic textiles.



Extract of *Greyia radlkoferi* and its use

This invention relates to the isolation and use of a semi-pure fraction of a plant extract for an application for even skin tone. It is based on the isolation of a tyrosinase inhibitor from an extract of plant material from the plant known as *Greyia radlkoferi*.



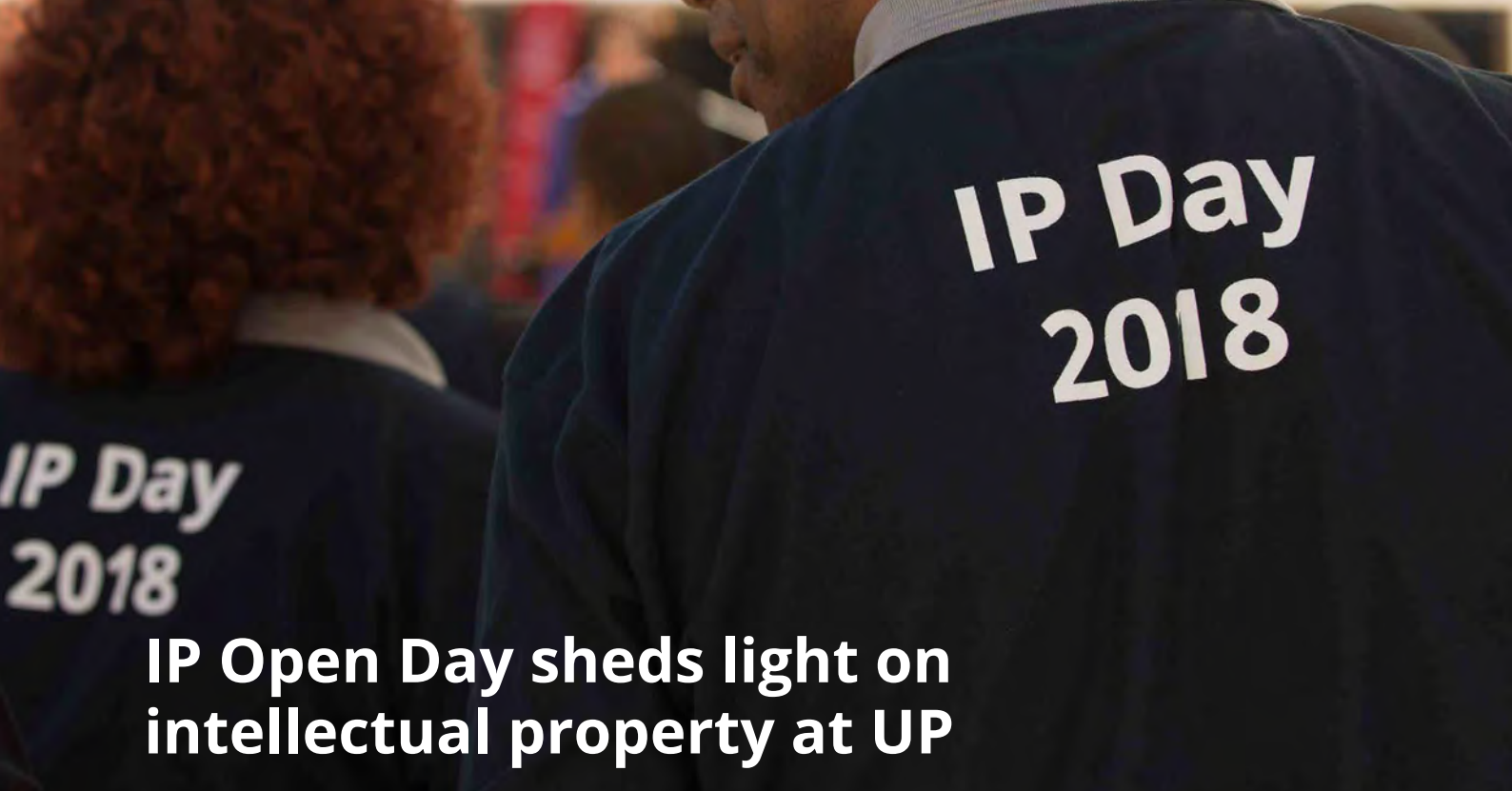
Extracts and compositions of *Helichrysum odoratissimum* for preventing and treating skin cancer

This invention relates to an extract of *Helichrysum odoratissimum* for use in the prevention and treatment of skin cancer. The invention provides for pharmaceutical compositions containing the semi-pure fractions and use of medicaments containing the semi-pure fraction.



Markers for disease resistance in maize

This invention relates to methods and compositions for identifying maize plants that have newly conferred tolerance or enhanced tolerance to, or are susceptible to gray leaf spot (GLS) disease. The methods use molecular genetic DNA markers to identify, select and/or construct tolerant plants or identify and counterselect susceptible plants. Maize plants that display newly conferred tolerance or an enhanced tolerance to GLS that are generated by these methods are another feature of the invention.



IP Day
2018

IP Open Day sheds light on intellectual property at UP

An integral part of the University of Pretoria's mandate is the commercialisation of its knowledge base through technology transfer. The University's Technology Transfer Office (TTO) hosted an IP Open Day on the Hatfield Campus in July 2018.

Several speakers addressed the audience in the Piazza on various topics. Prof Stephanie Burton, Vice-Principal: Research and Postgraduate Education, was the first speaker.

She emphasised the value of IP and encouraged the University's research community to take advantage of the intellectual property support that the TTO offers. She also mentioned that the Fourth Industrial Revolution would bring changes to our world. The way industry operates will change, which will require innovation. The role of humans will also change as machine learning technology develops. Students have to realise that they will need to do things differently in future, which is why commercialising new inventions and protecting intellectual property is so crucial.

Nic Klopper, CEO of the hearX Group, was invited to address the audience. The Group was founded to commercialise hearScreen, a successful UP invention. Prof De Wet

Swanepoel of the Department of Communication Pathology and Dr Herman Myburgh of the Department of Electrical, Electronic and Computer Engineering developed this award-winning hearing test solution on a smartphone.

The development of hearX is a testimony to the successful commercialisation of a UP invention.

Aaron Bornmann, Executive Director of the University of Pretoria Business Incubator (UPBI), a student-run business incubator based at the University, was next to address the audience. UPBI equips aspiring young entrepreneurs with the tools, skills and connections they need to turn their business dreams into a tangible reality.

Sean Kruger, coordinator of the UP Makerspace, explained to students how the Makerspace supports their entrepreneurial efforts. This facility, located on Level 3 of the Merensky 2 Library on the University of Pretoria's

Hatfield Campus, also presents classes on Arduino electronics and programming, mobile gaming, leatherwork, bookmaking/artist bookmaking, drones, finch robotics, computer-aided design and application development.

The protection of intellectual property rights is an essential factor in the process of commercialising new inventions. A representative of the National Intellectual Property Management Office (NIPMO), Jetane Charsley, explained the impact of the Intellectual Property Rights from Publicly Financed Research and Development Act (Act No. 51 of 2008) on the intellectual property rights of the University of Pretoria's research community. Members of the audience received a great deal of valuable information.

Plausible inventions need funding to be developed and commercialised, and Tshembani Khupane of the Technology Innovation Agency (TIA) made use of this

opportunity to introduce the TIA's seed funding programme to the audience.

The event also featured an exhibition of University of Pretoria inventions that are in various stages of commercialisation. Five spin-out companies exhibited

inventions, and students and staff could hear first-hand how the TTO supports projects with potential. Mabu Casing Soil (Pty) Ltd exhibited a novel mushroom casing soil, African Applied Chemicals (Pty) Ltd showcased NoBuzz mosquito-repellent socks, Hycat Oil (Pty)

Ltd presented a catalyst in the process of manufacturing a polymer additive, SR Snacks (Pty) Ltd displayed SoYhum, a nutritious cookie made at a low cost from sorghum, and hearX (Pty) Ltd exhibited hearScreen, a smartphone-based hearing test application.



NIPMO and the TTO were on hand to answer questions related to IP.



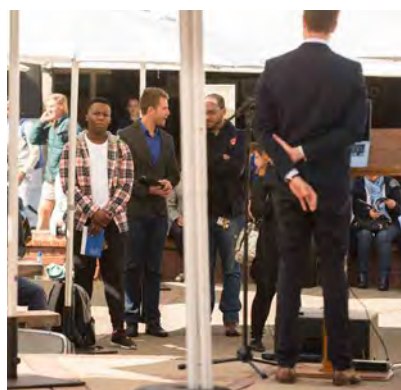
MABU Casing Soils is one of the TTO's IP success stories.



TuksNovation supports inventors at the University.



Visitors could sample the SoYhum sorghum biscuits.



Students had the opportunity to ask questions about intellectual property.

Prof Namrita Lall's cosmeceuticals group is in the process of establishing a spin-out company.

UP's new business incubator, TuksNovation, the TTO and UPBI also exhibited to inform visitors about the processes involved in IP protection and commercialisation.

Dr Nthabiseng Taole, Director of the Department of Research and Innovation (DRI), concluded the event by thanking everyone who helped make it a success.

She was especially grateful for NIPMO's involvement. Their support is invaluable to technology transfer in South Africa.

She echoed Prof Burton's emphasis on entrepreneurship and stated that DRI supports and encourages research that results in commercialisation.

She expressed the hope that the IP Open Day would yield an increase in invention disclosures at UP.



Prof Johan Labuschagne (left) and Jan Mentz exhibited a catalyst in the process of manufacturing a polymer additive.

TuksNovation accelerates innovation

In 2018, the University of Pretoria announced the launch of TuksNovation, a new high-tech business incubator that will initially support postgraduate students within the Faculty of Engineering, Built Environment and Information Technology (EBIT).



TuksNovation boasts state-of-the-art 3D printing facilities.



Prototyping is an important part of assessing a product's viability.



Collaboration is key to the success of a new venture.

Ms Lindiwe Zulu, Minister of the Department of Small Business Development, officially launched TuksNovation on 6 August 2018.

TuksNovation was established with the support of the Small Enterprise Development Agency (SEDA), the Department of Small Business Development, and the Department of Trade and Industry. It has access to an extensive network of industry partnerships through its affiliation with EBIT and is currently expanding its government and industry partnership networks.

There are more than 3 800 post-graduate students in EBIT, and services

could be expanded to other science and technology-linked faculties at the University in the future.

The goal is for TuksNovation to act as a catalyst for the development of industrial clusters that positively affect the Tshwane region.

TuksNovation offers world-class technology development and commercial support through the technology and business development life cycles. It provides technology development and entrepreneurship skills support up to the industrialisation (production) phase, to ensure that the technology is fully developed and addresses a relevant market need.

A virtual incubation programme focuses on technology and techno-entrepreneurship skills, while an acceleration programme focuses on commercialisation and business growth.

TuksNovation will collaborate with the University of Pretoria's Technology Transfer Office (TTO). Selected students will receive expert technical product development guidance from academics at UP, as well as business mentorship in the Virtual Incubation Programme, while the TTO will provide Intellectual Property (IP) support. One of the functions of the TTO is to analyse invention disclosures for any commercial potential, the likely success of such commercialisation,



Former Vice-Chancellor and Principal, Prof Cheryl de la Rey (left), and the Minister of Small Business Development, Ms Lindiwe Zulu, launched TuksNovation on 6 August 2018.



TuksNovation offers world-class technology development and commercial support.

TuksNovation will collaborate with the University of Pretoria's Technology Transfer Office (TTO).

the existence and form of the IP rights, the stage of development of the invention and the appropriate form for protecting those rights.

The TuksNovation model is based on allocating seed funding and training to mainly postgraduate students who are conducting their research on projects that have the potential to develop into commercially viable technology and who are keen on becoming entrepreneurs.

We hope that TuksNovation will work with some of the brightest innovators to add new names to South Africa's entrepreneurial hall of fame.

Novel malaria technology receives special recognition

Dr Vinet Coetzee, a senior lecturer in the Faculty of Natural and Agricultural Sciences, received a Special Recognition Award from the Gauteng Accelerator Programme (GAP) for her technology on rapid and non-invasive malaria testing.

Dr Coetzee is also a Next Einstein Forum Fellow, a World Economic Forum Young Researcher and the principal investigator in the Faculty's Facial Morphology Research Group. The malaria technology involves an affordable, rapid and non-invasive method to test for malaria infection. The product offers customers the ability to conduct cost-effective, accurate and wide-scale screening for malaria in health facilities and various public settings, including border posts.

The device is a completely novel method of detecting malaria infection. Instead of requiring blood, the device works by briefly shining a harmless light onto the skin to collect sensitive skin colour measurements. It then couples these measurements with novel prediction algorithms to accurately determine whether someone has malaria.

The final product will provide results in under 30 seconds, have the ability to

connect to a near real-time surveillance network and require no consumables. Once the device has been purchased, testing is essentially free for the lifetime of the product.

Dr Coetzee received a R20 000 cash prize to cover expenses incurred during the competition and a one-year incubation contract at BioPark@Gauteng.

The GAP competition aims to close the gap between scientific research and commercialisation in Gauteng, based on the Gauteng Innovation and Knowledge Economy Strategy (2012). This strategy seeks to use competitions to identify innovations that will enhance the competitiveness of Gauteng-based companies, improve the efficiency of the public sector, and contribute to improving the quality of life of all citizens.

Dr Coetzee's award is good news for UP's technology transfer portfolio, as

the TTO filed a UK provisional patent application to protect the invention in 2018.



Ms Refilwe Ngoato (right), Manager of UP's TTO, congratulates Dr Vinet Coetzee on receiving the GAP Special Recognition Award at the GAP awards ceremony in November 2018.

HearX excels at Google Impact Challenge South Africa

The Google Impact Challenge came to South Africa for the first time in 2018, and the hearX Group has been chosen as one of 12 finalists out of 1 300 applications. The Challenge asks local innovators how they would

make their community – and beyond – a better place. The public and a panel of local judges vote for the ideas with the most potential, and Google.org pairs each winner with a package of strategic support, funding, and Google volunteers. Finalists each receive \$125 000 as they

continue to create better futures for all South Africans. These businesses pitched to a panel of judges on 28 November 2018.

Read more about the hearX Group on page 8 and page 14.

Patent applicant receives a prestigious award

Isa Lambrechts, a student of Prof Namrita Lall in the Department of Plant and Soil Sciences, received the Albertina Sisulu Fellowship (Doctoral) Women in Science Award of the Department of Science and Technology in the category Natural (Physical and Life) and Engineering Sciences in August 2018.



Isa Lambrechts received the Albertina Sisulu Fellowship (Doctorate) South African Women in Science Award in August 2018.

The South African Women in Science Award recognises the excellence of female scientists and researchers, and profiles them as role models for younger women. This year's theme was "Leveraging science, technology and innovation to enhance inclusive growth and development."

Isa obtained a BSc in Biochemistry (2013), a BSc Honours in Medicinal Plant Sciences cum laude (2014), and an MSc in Medicinal Plant Sciences

cum laude (2016), all from the University of Pretoria under Prof Lall's supervision. She is currently enrolled for a PhD in Medicinal Plant Sciences in the Department of Plant and Soil Sciences.

Her current research aims to investigate an indigenous South African plant used by Zulu and Xhosa communities for the treatment of acne vulgaris, a common chronic skin disease involving blockage and/or inflammation of hair follicles and their accompanying sebaceous glands.

Antibiotic resistance associated with acne vulgaris has become a cause of concern for dermatologists worldwide. Isa's research will be the first to report on the biofilm formation of acne-causing bacteria, and the use of an indigenous South African plant to target the biofilm formation and quorum-sensing mechanisms of these bacteria.

The plant extract has passed clinical studies and has proven to be effective for acne vulgaris. A patent on her findings is in progress.

Isa has published two papers in peer-reviewed journals including *Fitoterapia*, and a book chapter with Elsevier in the UK. Three further book chapters and two articles are in the process of being published.

In 2016, she presented her work at the 29th Congress of the International Federation of Societies of Cosmetic Chemists in Orlando, Florida. She has also presented her work locally at the Fanie de Meillon Postgraduate Symposium and the annual conferences of the South African Association of Botanists (SAAB) and the Society of Cosmetic Chemists South Africa (SCCSA).

Through her research, she aims to inspire young women to pursue a career in science. She believes it is possible to improve people's quality of life and empower them economically through innovative research.

UP's TTO visits two of its licensees

The primary goal of technology transfer is to improve national economic growth through technological innovation. Two UP technology transfer success stories are demonstrating real progress.

On 2 August 2018, Ms Refilwe Ngoato (Technology Transfer Manager), Adv. Lawrence Baloyi (Head: Innovation and Contract Management) and Mr Thabang Qumza (Commercialisation Coordination Manager) visited the hearX Group. The Group invited the TTO delegation to view their new offices at the Ashlea Gardens Office Park. These new offices are a testimony to the Group's growth and success.

The Group currently employs 38 people, most of whom are UP graduates. They are in the process of employing six more people. The Group's establishment can be attributed to the successful hearScreen product, which is an award-winning hearing test solution for smartphones.

Nowadays, the Group offers eight other products, and the development team is continually looking for new solutions to hearing problems across the world. The immediate focus is to establish hearX as the primary test method for audiology in South Africa, but the company opened offices in Singapore, the USA and the UK in 2018 to serve regional markets.

TTO staff members also visited MABU Casing Soils on 19 September 2018. The mushroom casing soil project, developed by Dr Linda Meyer and marketed by MABU Casing Soils, has made significant progress since its commercialisation. Dr Meyer invited the TTO staff members to see how the business has expanded. In addition to its mushroom casing soil, MABU now

grows and sells flowers at its nursery. MABU also manufactures a seedling and plant medium from composted sugar cane pith. The medium is disease-free, peat-free and contains no weeds. It has a high water-retention capacity, good drainage and is locally manufactured. Customers can expect consistent quality from all MABU's products.

Technology transfer contributes directly to technological innovation by supplying the private sector with new technologies that have commercial potential. These two companies are proof of the value of innovation and commercialisation in the South African economic landscape. The TTO hopes to see many more successful startups expand into fully fledged economic role-players.



Staff members of the TTO visited the hearX Group's new offices in Ashlea Gardens.



TTO staff members were invited to see how MABU Casing Soils has expanded.

TTO hosts three international students for a day

Three students from New York University (NYU) Steinhardt visited UP's Technology Transfer Office (TTO) in July 2018.

The University's Department of Student Affairs has a partnership with Prof Teboho Moja, a clinical professor of higher education at NYU Steinhardt. She is also a visiting research fellow at UP's Centre for the Advancement of Scholarship. Each year, she sends three postgraduate NYU Steinhardt students to South Africa to take part in various internships and research opportunities.

These students are placed at one of four placement options: Altus Sport, the South African Department of Basic Education, Future Families or UP's Department of Student Affairs. Therefore, the University of Pretoria receives these

students as interns as they spend up to four weeks learning more about the University and sharing their experiences in the USA. During their stay, the students also visited departments in their fields of interest or research areas, such as education, university student activities, youth support and development through empowerment activities, and youth development through microenterprise training.

The internship is offered in conjunction with a required class on education and social reform, and is open to NYU Steinhardt students of educational leadership, higher education and international education.



From left: Ms Stephanie Liu, Ms Dharini Partharathy, Ms Refilwe Ngoato (Technology Transfer Manager at the TTO) and Ms Meryll Anne Flores.

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Technology Transfer Office

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