

Address at the launch of Future Africa 29 March 2019

The Minister of Science and Technology, Ms Mmamaloko Kubayi-Ngubane

Chancellor of the University of Pretoria Professor Lumkile Wiseman Nkuhlu

Chairperson of the Council of the University of Pretoria, Ms Futhi Mtoba

Members of the Council of the University of Pretoria

Your Excellencies, Ambassadors and High Commissioners here present

Members of the Diplomatic Corps

Executives of Universities in SA, our continent Africa and from across the globe

Deans and Directors at the University of Pretoria

Senior Academics and Researchers in SA, our continent Africa and from across the globe

Research Administrators in SA, our continent of Africa and from across the globe

Representatives of regional, multi-lateral and international organisations

Partners and collaborators

Early career and emerging researchers

All protocol observed

It is my pleasure as the Vice-Chancellor and Principal of the University of Pretoria to welcome each of you to the University of Pretoria, Future Africa and Africa reimagined. Thank you for joining us today for a momentous event that heralds well for Africa's futures. **Today we are making history.** We can confidently say 'yes we can transform Africa's futures for the better'. Today there is hope you can believe in that an African knowledge institution is rising, which will contribute to making a decisive difference to Africa achieving sustained, sustainable inclusive development.

As you look at the facilities and people around you, what you are also looking at is the ***future OF Africa***.

Future Africa took shape when UP staff members from different disciplines discussed the needs of researchers, the importance of transdisciplinary research and the imperative need to uplift Africa through research and development. A tiny seed, which was planted, has grown into the roots and branches stemming from the University of Pretoria to what we see here today.

The launch of Future Africa is a testimony to the University of Pretoria's responsiveness to the need to create institutions that seek to address Africa's challenges by turning them into opportunities and to do something substantive, long term and sustainable. It is also testimony to its ability to use whatever resources it may have to put a stake in the ground and then leverage resources from partners, donors and collaborators to collectively generate and disseminate high-level knowledge for multiple purposes.

This new campus is more than just the picturesque setting, the state of the art buildings, and sustainable, edible, forageable gardens... the physical surroundings represent a dream. Our country and the continent as a whole will see the fruits of this labour in the future.

What do I mean by this?

Future Africa is the first of its kind. It is a collaborative space designed for transdisciplinary research. It is a space for thinking, researching, learning, a collaborating platform and connecting in transdisciplinary ways. In other words, it is a space for creating new knowledge in new ways to address current and emerging complex often seemingly intractable challenges that face primarily our continent but also resonate globally. This means that we find solutions to problems from a holistic view point because problems rarely occur in a vacuum. At Future Africa, we aim to transform the world through African research excellence. In the near future, Africa will produce the highest quality peer-reviewed research possible, nurture and train the next generation of researchers who can collaborate, network and communicate knowledge to specialist audiences and multiple audiences as well influence policy and decision making and generate resources for research.

Future Africa is becoming and will become an agent of change that will revolutionise knowledge creation in Africa and by Africans and their global collaborators to transform lives, sectors and industries, societies and nations, thereby making a contribution to the global archive of life-affirming knowledge.

Future Africa is located in what is at present called the Experimental Farm. You might have seen or even been blocked by some of our cows on your way here. Quite near to Future Africa is the Technology Innovation Agency, the CSIR, the NRF and innovation agencies of other organizations. **Future Africa at the University of Pretoria is part of a fast emerging most Innovative Square Mile in Africa comparable internationally to other innovative spaces, squares and valleys.**

Africa has seen centuries of colonialism reap its negative effects all over the continent, and together with this, Africa has been built on extractive economies in which its raw materials and wealth are extracted in order to produce items that are developed elsewhere in the world and then sold back to Africans. This has brought with it numerous problems such as poverty, war and social upheaval, ecological disasters, environmental and health hazards, and famine.

At Future Africa, we aim to transform lives through education, research, development and using science to solve problems, improve conditions and have a positive impact on society.

We need to remember that research and the broader scientific endeavour are not the absolute truth that is beyond question. Scientific and research findings, in general, across the knowledge spectrum, be it from the arts to zoonotics are, therefore, just the very beginning and not the end of the quest for truth. Empirical data used in science that can be verified, forms a sound basis for robust discussion, debate and decision making. Research, trends and findings form the basis of the narrative of our collective understanding of phenomena. But the human impact of empirical data and natural phenomena cannot be ignored. We live in a society where everything is in constant flux and technological advances are rapidly changing our lives on a daily basis. Societies are becoming increasingly industrialised; robotics and artificial intelligence, social networking, crowdsourcing and the internet of things are all hallmarks of the Fourth Industrial Revolution, which is unfolding around us. But how do all of these advances impact on humanity, on society, on quintessentially human

and universal values of care and kindness for example. Transdisciplinary research is research that goes beyond the confines of disciplines **to co-create new knowledge** that seeks to address complex multi-dimensional societal challenges.

Transdisciplinary researchers are people who don't just think out of the box, but actually throw away the box and find new ways of understanding our current and emerging contextual realities. Genuine transdisciplinary research, while based on existing forms of knowledge, is not just an aggregation of what we already knew. It seeks to unsettle received wisdom in every respect and challenges all the co-creators to unlearn and learn anew. **It requires to rethink and create new ways of doing research. Excellence in transdisciplinary research can transform, renew and revive disciplinary and multidisciplinary research.** It valorises multiple modes of translating research into solutions for real world challenges. **It is not as Chris Brink puts it a solution looking for a problem to solve!**

Future Africa is ideally built on the idea that research generates solutions that directly impact society. So we've created a space where these types of debates, engagements and enquiries can happen by bringing together people from a variety of backgrounds, cultures, worldviews and disciplines.

Africa is a young continent with the average age of under 20. Our continent also represents around 20% of the world's population. The complex problems that we face as a continent are reflected in nearly every country to a certain degree. But that is where Africa's solutions must come from.

Our continent is making great strides in leapfrogging technology. As an example, the University of Pretoria has been at the forefront of scientific enquiry, which has the potential to help millions of people, not only in SA, but around the world. For example, we recently did the world's first middle ear transplant using 3D printed ossicles or tiny ear bones to allow a patient to hear. Our library is equipped with a MakerSpace, which has a 3D printer that students use to print out bones and anatomical models for their studies. We are the only university in South Africa that has a Faculty of Veterinary Science that has a strong focus on food security and wildlife conservation. Our efforts in conservation saw a team of UP scientists lead the world's first artificial insemination of a lioness that led to the birth of healthy cubs. Our researchers in the Faculty of Humanities and the Faculty of Engineering Built

Environment and IT have worked together to create a mobile hearing screening app that can save thousands of people from going deaf. Our research into malaria not only looks at medical cures, but also art and drama educational awareness approaches to ensure that our research matters and has an impact.

It is imperative that Africa's youth are empowered, educated and enabled to find solutions to issues facing the continent because for such a young continent, the future is theirs. South Africa and Africa urgently need, in every sector, good leaders, who have foresight and wisdom, well-educated, well-skilled, rounded citizens, and strong institutions that can anchor sustainable democratic futures, inclusive economic development and social progress.

Today, we've made a commitment to give our young researchers from across the continent a platform on which to make a difference.

Many industrialised countries of the North use their resources and invest heavily in research and development. Some of the researchers who work in these countries are African scholars, researchers and specialists who do not find the opportunities they need in Africa, and in so doing take much of Africa's intellectual capital with them.

As we launch Future Africa today, we are also saying, stay at home, in Africa, and help us build and rebuild our societies. At the University of Pretoria, our call is a pan-African one, and we are making research opportunities available at Future Africa across the continent.

There is the stereotype of the professor who is old and doddering, and to a large extent this is based on fact since it takes many years of expertise and dedicated scholarship to be regarded as an academic expert in a field. At the University of Pretoria, and through Future Africa, we are changing that stereotypical view by fast-tracking excellent research through programmes like the Africa Science Leadership Programme, the Early Career Research Leader Fellowship and the UP Young Research Leader Programme all of which are designed to build a diverse skills set, research capacity and expertise to benefit society. According to the Department of Higher Education and Training's *Report on the Evaluation of the 2016 Universities' Research Output* published in March 2018, the University of Pretoria is the largest

producer of research outputs in the country. We continue to make our mark by encouraging our students to excel at an undergraduate level and then pursue further specialisation and postgraduate studies. We are proud to be home to a large cohort of postgraduate students, more than 70% of whom are black and the majority of whom are women. This is a significant achievement socially, economically and historically in South Africa's research landscape.

Our commitment to sustainability is an institutional one. We uphold the strongest values of ethical and responsible leadership and corporate governance. At the same time, we believe in being kind to the environment and by using science to harness nature, to minimise our impact. As you look around the garden, you will find that the facilities have been built around the natural landscape. The gardens are beautified with edible fruit, vegetables, and herbs which encapsulate all the benefits of urban living with rural and agrarian charm.

It is true that research is a long and slow process, which can be lonely, and time and labour intensive, but it is a rewarding one. The accommodation that we have on this campus ranges from single rooms to family spaces. The idea is that all are welcome at Future Africa, and one's personal life should not be a barrier to one's research ability, so we've created a collaborative space that embraces the nuances and conveniences (*or inconveniences*) of a lifestyle that revolves around one's research work and passion.

We call on governments, multilateral organisations, donors, trusts and foundations, business and wealthy individuals to pledge their support to Future Africa and to partner with us to ensure that we have the funding that we need to transform Africa's futures. Such support will provide the sustained and long-term impact that will benefit society. The University of Pretoria (**as do other universities in our continent**) has a proud history of excellence in knowledge creation, impactful and relevant research, high-quality academic programmes, innovative teaching and learning, and social responsiveness and engagement needed to make a decisive difference in transforming Africa's futures. **Working together with all our partners and stakeholders, we can achieve the scale and critical mass to be successful.**

What we will do at the University of Pretoria, is to work collaboratively through Future Africa to uplift societies in our continent Africa and make a contribution the world by using our knowledge, skills and resources to make today, and every day, matter.

Welcome to Future Africa, the ***future OF Africa.***

Professor Tawana Kupe
Vice--Chancellor and Principal
University of Pretoria
South Africa
Africa
29. 04.2019