UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

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NEWS RELEASE
Nuclear Medicine Research Infrastructure (NuMeRI) Facility: A World-First for Cancer and TB Drug Development and Clinical Research

Researchers who are radiolabelling of the radionuclide to the pharmaceutical to produce the final radioisotope

Pretoria — The Ministry of Higher Education, Science and Innovation together with the University of Pretoria and other institutional partners, are celebrating a world-first in South Africa – the launch of the Nuclear Medicine Research Infrastructure (NuMeRI) facility.

The NuMeRi facility, housed at the Steve Biko Academic Hospital, is set to advance drug development, clinical research and provide cutting-edge diagnostics and treatment in relation to cancer, tuberculosis (TB) and other major diseases that are burdening public health.

Speaking at the launch that was held at the University of Pretoria, the Minister of Higher Education, Science and Innovation, Prof Blade Nzimande explained that: “The NuMeRI is a one-stop-shop medical imaging facility dedicated to drug development and imaging-based clinical research.”

It is one of 13 research infrastructures facilities established by the Department of Science and Innovation under the South African Research Infrastructure Roadmap. The department invested R85 million towards the establishment of the NuMeRi facility.

“NuMeRI’s capabilities will contribute to the precision medicine approach and targeted personalised therapies being developed in South Africa. The facility is another key milestone in advancing South Africa’s bio-economy strategy – it will assist in taking bio-innovations further down the value chain, from radiolabelling to preclinical testing, and it will contribute to good manufacturing practices and with clinical trials,” Prof Nzimande said.

NuMeRi, Prof Nzimande added, will enhance South Africa’s research in medicinal chemistry and this will expedite the development of drugs to address national priority diseases such as cancer and TB. “This will enable new pharmaceuticals to reach market sooner and give South African pharmaceutical development a competitive edge with global equivalents.”

Speaking at the launch, which was also attended by Gauteng Premier, Panyaza Lesufi, and other government as well and local and international academic and industry partners, University of Pretoria Interim VC and Principal, Prof Themba Mosia said: “At the University of Pretoria we pride ourselves on being future-focused, making sure that the programmes we offer equip our students for the workplace, needs and environments of the future, and that our society and communities in South Africa, Africa and internationally benefit from our research, development and innovation.”

“This is precisely what the magnificent NuMeRI facility represents. It is the first of its kind on the continent and a flagship of the use of nuclear for good.”

Prof Mosia commended Prof Mike Sathekge, the CEO and President of NuMeRI, and the facility’s medicine team for having the most advanced medical imaging equipment available.

“Prof Sathekge’s nuclear medicine team is dedicated to novel drug development and clinical research and leads in cancer diagnostics and treatment, as well as in TB… In brief, for the non-medical guests here today, for diagnosis, nuclear medicine uses small amounts of radioactive material combined with a carrier molecule in the body to see how organs or tissue are functioning, and thus detect the diseases very early. It then selectively targets and treats the diseased area in the body with molecular precision, sparing healthy adjacent cells,” Prof Mosia explained.

Prof Sathekge emphasised the importance of accurate imaging and assessment and the role these play in curbing cases of misdiagnoses and cancer related fatalities. He pointed out that the lack of access to imaging technologies, and the wide disparities that exist between low- and high-income countries when it comes to accessing them, are “scandalous”.

“That is what NuMeRi wants to change. If you have such wide disparities and high numbers of people in low-income countries who can’t access this technology, you’ll forever misdiagnose patients and you won’t be able to potentially save millions of lives,” he said.

Dr Lehlohonolo Majake, CEO of the Steve Biko Academic Hospital reiterated the importance early detection when it comes to cancer treatment. “Early detection is the cornerstone of effective cancer treatment... by finding diseases early we can intervene in the early stages and significantly improve treatment outcomes and save lives.”

“The possibilities that NuMeRi present are endless, offering hope to patients and medical professionals alike. The Steve Biko Academic Hospital leadership is honoured and proud to have provided the site for NuMeRi, not only for our patients but to the community at large,” she said.

Before becoming a fully-fledged facility at the Steve Biko Academic Hospital, the NuMeRi facility was incubated at the South African Nuclear Energy Corporation (Necsa). “Necsa incubated the NuMeRI project on behalf of the Nuclear Medicine Community and Department of Science and Innovation from 2016 to 2019," said Thabo Tselane, Group Managing Director for Nuclear RadioIsotopes (NTP), a division of Nesca.

"We are very excited to see this project becoming a reality. We believe that Necsa has demonstrated its capability in handling projects of this magnitude and we are happy that the South African citizens can benefit from this Nuclear Medicine Research facility," he said. Prof Mosia said “the University of Pretoria is delighted to be in this dynamic and robust partnership the government and other role players in our quest to improve the health and well-being of people.”

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- Watch a video overview about NuMeRi
- Watch a stream of the launch
- Take a virtual tour of the facility
- Download pictures from the event/ facility

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ABOUT THE UNIVERSITY OF PRETORIA

The University of Pretoria (UP) is one of the largest contact and residential universities in South Africa, with its administration offices located on its Hatfield Campus in Pretoria. This 115-year-old institution is also one of the largest producers of research in South Africa.

Spread over seven campuses, it has nine faculties and a business school, the Gordon Institute of Business Science (GIBS). It is the only university in the country with a Faculty of Veterinary Science, which is ranked the best in Africa. UP has 120 academic departments and 92 centres and institutes, accommodating more than 56 000 students and offering about 1 100 study programmes. It has the most academic staff with PhDs (70%), NRF-rated researchers (613).

The 2024 Times Higher Education subject rankings placed UP first in South Africa in the fields of Law, Veterinary Science, Accounting and Finance; Agriculture and Forestry and Electrical and Electronic Engineering. Quacquarelli Symonds (QS) ranked the University among the top five in Africa, as part of their 2024 World University Rankings (WUR). UP was the only South African university featured in the 2023 World University Rankings for Innovation (WURI), falling within in the 101-200 range of innovative universities.

For more information, please go to www.up.ac.za