Cutting-edge ZAR120 million boost for SA's surgical skills

A ZAR120 million state-of-the-art surgical skills simulation laboratory opened on the Tygerberg campus of Stellenbosch University (SU) this July, replicating realtime theatre scenarios and turbo-boosting healthcare for the entire sub-Saharan region. It is geared to train 1 200 physicians in its first year of operation.

Described by Prof. Nico Gey van Pittius, vice-dean of research at SU, as 'set to revolutionise training in sub-Saharan Africa, the laboratory houses eight fully simulated theatre operating stations, 'dry' and 'wet' capacity, a 100-seat lecture theatre and a virtual intensive care unit - all complemented and connected by versatile and breakthrough audiovisual capabilities. In the laboratory, which goes by the university acronym of the Sunskill Laboratory, surgical registrars in all disciplines, seasoned surgeons and primary care practitioners, nurses and related healthcare professionals will acquire and hone routine to gold-standard, high-end, niche skills.

Van Pittius said the laboratory would promote the increase of cross-disciplinary work, tapping into uncharted areas of research, while his neurosurgery division chief and colleague, Prof. Ian Vlok, enthused about the savings in theatre time and cost, the safe acceleration of learning and improved patient outcomes. 'We have to be accountable for the skillsets that come out of here. Basic surgical skills and proper, appropriate anatomical knowledge will be minimum entrance qualifications - the last thing we want to create is a bunch of loose cannons,' he stressed.



Tygerberg neurosurgeon Prof. Ian Vlok demonstrates possible procedures on a ZAR1 million human dummy.

Vlok leads the three-man neurosurgical team at Tygerberg Hospital that initiated the collaboration with sponsor Medtronic, a top global surgical equipment supplier. Medtronic's MD for Africa, Mr Peter Fuller, said the ZAR120 million equipment costs would be 'amortised' over the long term. Vlok said specialist training had always demanded a delicate balance between gaining surgical experience and not putting patients' health at risk in order to do so. On 26 July, just 6 days after the launch, 40 international neurosurgeons converged on the laboratory to conduct intensive training sessions that included the most advanced kevhole surgery, showcasing equipment ranging from ZAR1million human dummies able to replicate human functions and disease symptoms to endoscopes, high-definition surgical microscopes, image-guided navigation equipment and surgery-enhancing computed tomography scanners.

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