

SINGAPORE

Holograms and 3D virtual worlds to help medical, nursing undergrads at NUS

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NUS will be developing two VR Simulation projects: The first, Virtual Interactive Human Anatomy, is a 3D holographic human cadaver, while the second, a Virtual Interactive Simulation Environment, will provide a 3D virtual environment platform for life-like scenarios.

PHOTOS



CAPTION

SINGAPORE: The National University of Singapore will be developing two "Virtual Reality Simulation" (VRS) projects for undergraduate medical and nursing education, it was announced on Friday (Apr 27) at the official opening of the Tahir Foundation Building.

The projects will be built by NUS Yong Loo Lin School of Medicine's Centre for Healthcare Simulation and the KEIO-NUS CUTE (Connective Ubiquitous Technology for Embodiments) Centre.

The first, Virtual Interactive Human Anatomy, is a 3D holographic human cadaver to allow students to better learn about anatomy dissection. The second project, a Virtual Interactive Simulation Environment, will provide a 3D virtual environment platform for life-like scenarios within which teams of students can train. Scenarios includes a mass casualty incident, a hospital emergency room or an operating theater.

Professor Tan Chorh Chuan, President of NUS, said that training students on VRS systems will help to improve the quality of clinical care and patient safety.

"Both basic procedural skills and difficult surgical procedures can be practised and rehearsed to improve performance in real-life situations," he said.

He added that VR systems are cost-effective as it allows the training of large groups of students at the same time.

Speaking at the event, Minister for Education Heng Swee Keat said that Singapore has moved beyond basic health challenges through better resourcing and education of medical professionals. He added that current paradigms and practices are shifting rapidly and that Singapore must seek inspiration in multi-disciplinary ways.

"I read with interest the collaboration between YLL and Engineering Faculty on a robotic sock, inspired by the tentacle movements of corals. The sock emulates natural lower leg muscle contractions, promotes blood circulation, and prevents a potentially life-threatening condition caused by blood clots in bed-ridden patients," said Mr Heng.

The 17-storey Tahir Foundation Building is located at their Kent Ridge Campus. It houses a mix of research laboratories, teaching and learning spaces and student activity areas.

The Tahir Foundation Building is named after prominent Indonesian business leader and philanthropist Dato' Sri Dr Tahir, who donated S\$30 million to the school in 2012. The donation made by Dr Tahir will support the advancement of medical education and research of the school and include projects such as the VRS.

- CNA/av