Learning anatomy on touch-screen table

By AMELIA TENG

DOCTORS-TO-BE at Singapore's newest medical school are to learn anatomy using a human-size virtual operating table.

The $120,000 touch-screen gadget – which resembles a giant iPad – will let 54 students interact with a full-size virtual cadaver when Lee Kong Chian (LKC) School opens at Nanyang Technological University (NTU) in August.

The Anatomage Table, designed by American firm Anatomage, offers interactive 3-D images of full-body anatomy using computed tomography (CT) and magnetic resonance imaging (MRI) scans.

The tool "will help medical students to visualise muscles, blood vessels, organs and soft tissues", said Assistant Professor Dinesh Srinivasan, who heads the school's teaching of anatomy.

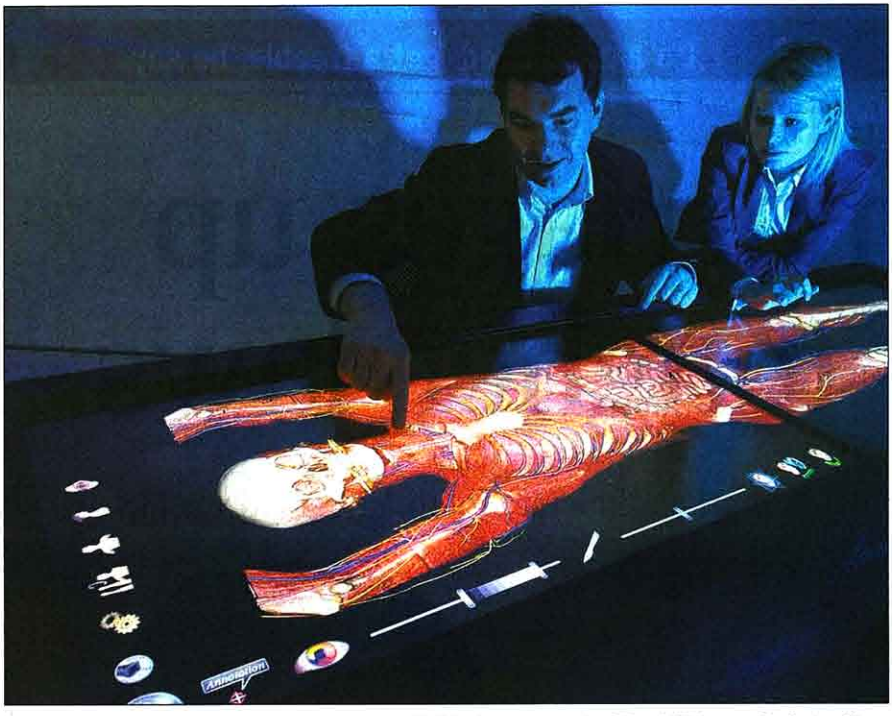
The new technology will allow students to view the body's internal structures such as the muscles, organs and skeleton system – something previous cadaver-based teaching methods were unable to do.

He added that students will also practise slicing and dissection by using a virtual knife to remove layers of tissue.

Professor Dermot Kelleher, dean of the LKC School of Medicine, said: "Users can also upload their own patient data, for example from MRI or CT scans, to showcase to students real patient anatomy in a life-size scale."

The table could be used for clinical and residency training in the future, he added, in a statement released by the school yesterday.

The LKC School of Medicine – a partnership between NTU and Imperial College London – will be the first in South-east Asia and one of the few in the world to use such a tool to study human anatomy.



The Anatomage Table offers interactive 3-D images of full-body anatomy using CT and MRI scans. Students will practise slicing and dissection with a virtual knife. PHOTO: NANYANG TECHNOLOGICAL UNIVERSITY

The table, which has been in use at Imperial College since 2011, will be used primarily to teach anatomy during the first two years of the students' five-year curriculum.

A spokesman for the National University of Singapore's Yong Loo Lin School of Medicine said that its students learn anatomy from both human cadavers and 3-D models and multimedia software developed by the school.

Students at Duke-NUS Graduate Medical School learn anatomy and dissection through practice on cadavers, together with clinical materials such as X-rays, CT scans and scope images.

The LKC School of Medicine has also made several key leadership appointments, which took effect yesterday.

Professor Jenny Higham, who is also vice-dean and director of education at Imperial's medicine faculty, will support the dean in her new role as pro-dean.

Associate Professor Naomi Low-Beer will be the vice-dean of academic affairs.

Professor Martyn Partridge will step down from his role of senior vice-dean in May, after three years of helping to set up the school.

Team-based learning, simulation training and interactive and multimedia technology are some of the features of the school's five-year undergraduate medical degree programme.

Teaching materials such as e-books, videos and assessment materials for the first-year curriculum are being finalised in London.

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