MEDIA RELEASE

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For immediate release

Asia’s First Critical Care Nursing Simulation Laboratory - A New Benchmark for Post-Graduate Training of Nurses

The National University Hospital (NUH) debuts the Mrs Lee Kong Chian Critical Care Nursing Simulation Laboratory to provide continuous post-graduate education and training for nurses who wish to specialise in this area of care.

Funded by the Lee Foundation, the 100-square feet simulation laboratory, which costs S$250,000, consists of a seminar room for conducting classes, a High Dependency (HD) room and an Intensive Care Unit (ICU) room with live feed facilities for practical training. To ensure that the training is realistic, the set-up is a replica of the actual HD and ICU room.

“We embarked on this project in November 2007 and are proud that Singapore is the first country in Asia to have such an advanced simulation facility for nurses within the hospital setting,” said Mrs Lee Siu Yin, Director of Nursing, NUH. “Upgrading of skills benefits our nurses which in turn translates to better care for our patients. Singapore’s nursing standard is good and we hope to further raise it.”

Heralding New Ways of Nursing Training

An integral part of the training centers on the high-fidelity simulation mannequin. Coupled with a state-of-the-art computer and audio-visual system, the mannequin is able to simulate most critical medical conditions in an ICU environment for practical training.

The intelligent mannequin will mimic the patient’s vital statistics and physical responses, as well as “respond” correspondingly to the treatment rendered by the nurses. As a result, the nurses are able to refine and strengthen their clinical skills before attending to patients. This greatly improves the quality of treatment that patients receive.
High-fidelity simulation mannequins are commonly used in the training of medical doctors and the trend of simulation-based learning is on the rise. This is the first time such programme is being extended to the training of post-graduate nurses. The programs have proven to be effective and the next step of training nurses and doctors side by side has already begun.

Ms Chia Lay Hoon, Assistant Director, Nursing said, “Undergraduate nursing schools provide our nurses a good foundation and general skills. Our course aims to help postgraduate nurses go deeper in their pursuit of niche skills. ICU nursing is very intensive work and nurses need to manage patients whose conditions are acute and often unpredictable. Our aim is to prepare our nurses to be able to respond to such situations competently and confidently”.

“In the past, training for nurses used to mean learning on the job. “ said Ms Sabrina Koh, Senior Nurse Educator, NUH who was trained in the United States and now teaches the key courses on Critical Care and Cardiac & Cardiothoracic-vascular Nursing “With this facility, nurses can now learn in an environment that simulates reality, before attending to actual patients. Furthermore, the collaboration with the University Medicine Cluster has widened our scope of training to incorporate team-building for both doctors and nurses.”

**Integrating Nursing and Medical Training for Seamless Care**

The simulation laboratory has also allowed NUH to do what was previously not done before in Singapore hospitals: the systematic training of doctors and nurses alongside each other using high-fidelity medical simulation technology. "The concept was piloted in the Yong Loo Lin School of Medicine and the Alice Lee Centre for Nursing Studies, National University of Singapore last year. Now, with a simulation laboratory in the hospital, this innovative way of bedside learning is brought to the junior doctors and the nurses in the hospital." said Dr Gerald Chua, Associate Chairman, Medical Board, Postgraduate Medical Education.

"The crisis scenarios that we create bring doctors and nurses out of their respective training silos to work together at trying to save the patient's life. Good teamwork and communications, especially during an emergency, needs to be taught and rehearsed in a deliberate manner. It doesn't happen naturally just because the two groups are put in the same working space," added Dr. Chua who is also a Consultant in the Division of Respiratory Critical Care Medicine, NUH.

**Branching Out Regionally**

Depending on the field of specialisation and complexity, the courses range from compact day-long seminars to month-long programs, with the longest module being a 10-month programme on Critical Care which requires about 300 hours of coursework and clinical practicum. Nurses who successfully graduate from the courses will receive accreditation of specialisation from NUH.
Each year, more than 50% of the NUH nursing staff will benefit from the various courses provided at the simulation laboratory, and the hospital aims to take in about 70 nurses annually for the Critical Care program and 15 for the Cardiac & Cardiothoracic course.

Currently available only to NUH nurses, the laboratory is looking to extending its training programs to other local and regional hospitals. Hospitals in countries such as Thailand, Malaysia and Indonesia have expressed interest to send their nurses for the training.

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**The National University Health System**

Established in January 2008 and jointly owned by the Ministry of Health Holdings and National University of Singapore (NUS), the National University Health System groups the National University Hospital (NUH), NUS Yong Loo Lin School of Medicine and NUS Faculty of Dentistry under a common governance structure to create synergies to advance health by integrating excellent clinical care, research and education.

The enhanced capabilities and capacity will enable the NUHS to deliver better patient care, train future generations of doctors more effectively and bring innovative treatments to patients through groundbreaking research.

**The National University Hospital**

The National University Hospital (NUH), a member of the National University Health System (NUHS), is a tertiary specialist hospital that provides advanced, leading-edge medical care and services. Equipped with state-of-the-art facilities as well as dedicated and well-trained staff, the NUH is a major referral centre that delivers tertiary care for a wide range of medical and dental specialties including Cardiology, Gastroenterology & Hepatology, Obstetrics & Gynaecology, Oncology, Ophthalmology, Paediatrics and Orthopaedic Surgery. It is the principal teaching hospital of the NUS Yong Loo Lin School of Medicine.

With combined resources from the teaching hospital and NUS Yong Loo Lin School of Medicine and Faculty of Dentistry, the NUH will be able to meet the healthcare needs of patients, train future generations of doctors more effectively, and help develop solutions to our healthcare problems through research.
Backed by substantive expertise and experience, the NUH was chosen by the Ministry of Health to develop two new national specialist centres, the National University Heart Centre, Singapore and National University Cancer Institute, Singapore to meet the growing need for cardiac and cancer treatments.

In 2004, the NUH became the first Singapore hospital to receive Joint Commission International (JCI) Accreditation, an international stamp for excellent clinical practices in patient care and safety. It was also the first hospital in Singapore to receive a triple ISO certification concurrently for Quality, Environmental, and Occupational Health & Safety Management Systems in 2002.

For more information, please visit www.nuh.com.sg