

# Doctors need skills and heart

Dean hopes to nurture students who have compassion and not just technical expertise



**Chang Ai-Lien**  
Senior Correspondent

A typical patient today is around 70 years old and has several chronic ailments such as diabetes, high blood pressure and heart disease.

So it is more important than ever to have doctors who see the patient as a whole rather than just his disease, says Associate Professor Yeoh Khay Guan.

"They need heart as well as head, and should be as equally skilled in the art of medicine as its science," he says, in his first interview as the new dean of the National University of Singapore's Yong Loo Lin School of Medicine.

The school is already known for producing graduates with technical skills and knowledge as good as any in the world, but he hopes to raise it to the next level.

"To be a good custodian of people's health, the 21st-century doctor needs to be a good communicator, able to build rapport with patients and combine knowledge and technology with wisdom and compassion.

"The doctor's foremost quality must be compassion," says the 49-year-old gastroenterologist, who became dean six months ago.

All the more so in a nation that is growing greyer and more frail.

To help meet the needs of Singapore's ageing population, medical students will get a more thorough grounding in geriatric medicine, he says.

They will get patient contact not just in hospitals, but also in clinics, community and nursing homes and hospices.

Traditionally, three-quarters of such teaching has been in hospitals.

"Going forward, they will be spending much more time in these other settings because that's where our patients will be. It's a holistic approach," he says.

Acknowledging that students now come from Generation Y, sometimes accused of having a penchant for earning top dollar and seeking instant gratification, he counters that this is also an age group where idealism can be nurtured.

"We can't exist independently of society or avoid the bad role models, but in the medical school, we have a chance to try to nurture the right values."

Good grades alone are insufficient for admission, and students are selected from the entire socio-economic strata of Singaporean society, he adds. Those who need help get financial aid.

"We look for qualities which would make them good doctors. These include intrinsic motivation, a genuine desire in wanting to help others in need and to make a difference."

Students start working with patients early, within the first year of medical school. Indeed, many have themselves taken the lead in community outreach efforts, he points out.

"Such volunteer work has become an integral part of the curriculum,



## RESPECTED CLINICIAN AND RESEARCHER

Associate Professor Yeoh Khay Guan, 49, is dean of the National University of Singapore's Yong Loo Lin School of Medicine.

He is also a senior consultant at the National University Hospital's Department of Gastroenterology and Hepatology, and a member of the Singapore Medical Council and the Biomedical Sciences Executive Committee.

He chairs the National Colorectal Cancer Screening Committee of the Health Promotion Board, which recommends guidelines for the national colorectal screening programme in Singapore.

He serves as a member of several scientific grant funding award and review committees under the National Medical Research Council of the Ministry of Health, and the Biomedical Research Council of the Agency for Science, Technology and Research.

A respected clinician and researcher, Prof Yeoh's area of interest is in enhancing the early detection of gastric and colorectal cancers. He has published more than 110 papers in international journals.

He is the lead principal investigator of the Singapore Gastric Cancer Consortium, a multi-disciplinary group of

doctors and scientists awarded a record \$25 million in 2007 to improve the lot of stomach cancer patients.

It aims to do so through early detection, improving treatments and advancing the understanding of gastric cancer.

He has received several awards for his research work, including the Nishi-Takahashi Memorial Lectureship at the 9th International Gastric Cancer Conference in Seoul last year, and the Emerging Leader Lectureship award by the Journal of Gastroenterology and Hepatology Foundation in 2006.

lum, without us needing to make it compulsory.

"And apart from ingraining the right values, it also teaches them a lot of useful skills such as leading a project, planning and logistics, and writing up research papers."

This does not mean the strong emphasis on clinical training ever takes a back seat, he stresses.

In fact, learning has become more sophisticated than ever, with the faculty's gleaming new \$200 million Centre for Translational Medicine – a focal point of research and training at the medical school.

At the Centre for Healthcare Simulation there, training comes to life with the help of actors, virtual hospitals, simulators and all the trimmings, including fake blood.

There, medical students will get to make mistakes – say, in the emergency room, operating theatre or outpatient clinic – before they ever touch a real patient. They can also hone their skills on 13 life-like "high-fidelity mannequins" that can breathe, moan and react to drugs.

"This allows them to learn in a safe environment and keep repeating something until they get it right. It creates a safer doctor," says Prof Yeoh.

Students also get to do a stint of up to four months in one of the university's many medical school partners, ranging from Harvard Medical School and Johns Hopkins University in the United States to the Karolinska Institutet in Sweden.

It is telling, he says, that with the wealth of prestigious choices, one of the most popular with students is at India's Christian Medical College in Vellore, Tamil Nadu.

"They choose this institution so they can look at how medicine is conducted in rural areas, as well as study medical conditions in a more advanced state than what they might see here, and experience the ethos of service."

Come graduation day, the newly minted doctors will fully deserve those white coats: They will have a strong clinical grounding, be able to work well in teams, have the right values and a strong sense of public service, he promises.

"We are a proudly Singaporean school, with a global outlook. The school was started by Singaporeans for Singaporeans, and our doctors have a duty and privilege to serve our people and meet the nation's health-care needs.

"This is not just about training doctors with the requisite knowledge and technical skills, but about developing the next generation of leaders who will care for us when we are in need.

"These are doctors that you or I would be happy to send our mothers to."

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## Going beyond the science of a disease

Early this year, medical student Joshua Tan Kuan, 20, began visiting a stroke patient in a community hospital because he wanted to observe how chronic illnesses developed.

The first-year student at the National University of Singapore (NUS) has ended up developing a much deeper relationship with the patient, a former teacher in her 50s.

"I really feel for her, it can be lonely being stuck in the hospital bed," he says. "And I think my visits have made a difference."

Like him, medical students at the Yong Loo Lin School of Medicine have started visiting patients at home and step-down care facilities. And they continue keeping in touch throughout their undergraduate days.

They start on what is called the "longitudinal patient experience" from Year One. Students are paired with patients with chronic illnesses such as high blood pressure or diabetes,

meeting them in a community setting while being supervised by doctors and senior students.

They are also introduced to the patients' families and caregivers, and do follow-up visits throughout their five years in medical school.

The idea is to help the medical student go beyond the science of a disease and understand how it affects the lives of patients and their families, says dean of medicine Yeoh Khay Guan.

"Following the patient and his family through five years helps to build more of a rapport and allows them to empathise with his situation," he says.

In line with the aim to produce well-rounded doctors, other tweaks to the NUS medical school curriculum encourage more volunteer medical work in the community, and combined training with nursing students and other health-care trainees.

For instance, students could be

placed in a simulated hospital setting, with future doctors and nurses practising how to present information to one another, and who should be doing what.

"In the past, they trained separately, but since they will be working together in their professional lives, it makes a lot of sense to do team training," explains Associate Professor Yeoh.

For several years now, medical students have also been taking part in voluntary neighbourhood screening programmes to help detect and treat ailments in the poor and aged.

About seven in 10 students currently do such volunteer work during their free time, and the students are looking at how to expand the effort.

This work has already led to startling improvements for some patients, says Prof Yeoh, pointing to a recent study published in the medical journal *Academic Medicine*.

The health outcome of participating residents in one programme improved greatly, with a huge surge in those who took their high blood pressure medication and those who managed to control it.

For medical student Joshua Tan, getting to know the stroke patient has made an impact.

Although he was required to visit her twice in six months as part of the school's programme, he has actually done so five times.

"This experience has made me more interested in following up with my patients beyond the call of duty," he says.

"In future, as a doctor, I will try to visit them or at least call to give emotional support."

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