Cancer and blood diseases expert

PROFESSOR John Wong, 52, is dean of the Yong Loo Lin School of Medicine at the National University of Singapore (NUS).

He is also the deputy chief executive of the National University Health System, which brings together the National University Hospital (NUH) and the NUS medical and dental faculties.

Prof Wong is director of the National University Cancer Institute, Singapore.

A medical oncologist-haematologist, he specialises in cancer and diseases of the blood.

In 1997, he formed the Cancer Therapeutics Research Group, which brought together cancer centres here and in Australia, Hong Kong, Korea and Taiwan to develop better treatments for cancers.

It has since conducted clinical trials on new cancer drugs and worked to fine-tune the dosages of cancer drugs to suit different ethnic groups here.

Prof Wong led a group doing research into H1N1 this year. In 2003, he headed a consortium of local laboratories and researchers during the Sars crisis. This collaboration led to the development of diagnostic kits for the Sars virus.

Earlier this year, he received the National Outstanding Clinician Award from the Health Ministry, in recognition of his contributions to medicine and clinical research.

He is married with a daughter, 18, and a 10-year-old son.

Prof Wong, a third-generation doctor, posing with his grandfather's haematology set at the Yong Loo Lin School of Medicine Museum. He had donated it to the museum. ST PHOTO: SINAHIRA YAHA
Training doctors for ‘best in the world’ care

NUS medical dean John Wong is passionate about nurturing a new generation of specialists

On SATURDAY morning, oncologist John Wong saw what for him was a typical patient. The 66-year-old woman had a history of three different cancers, on top of diabetes, high blood pressure and cholesterol, heart damage, asthma, osteoporosis and kidney problems.

Singapore’s ageing population means that it is treating more patients like her. The median age of Singapore’s resident population shot up to 37 this year, compared to 30 in 1970. And by 2030, those aged above 65 will rise to 20 per cent of the population.

“When I was a young doctor in 1981, we still had a relatively young population and patients came with one problem. You fixed it and they were fine,” says Professor Wong, 62, who heads the National University of Singapore’s Yong Loo Lin School of Medicine.

“Now we are treating far more elderly people. With people growing older, a large number are coming in with multiple problems and the cost of treatment has gone up substantially.”

Alongside this ageing of patients, there is an escalation in the sophistication of treatment and grant advances in medical science.

For example, 30 years ago, a heart attack victim was given oxygen, one or two drugs, and put on a drip. Nowadays, there are at least six steps to rush through. If an angioplasty is needed to restore normal blood flow to a blocked blood vessel, it is done within 30 minutes from the time a patient lands in the National University Hospital (NUH) emergency room.

He says that the growing numbers of elderly people and the complexity of medical treatment these days mean that the training doctors have never been more important.

“This is best in the world care, it puts the doctors under tremendous pressure, and we have to have the training for it,” he says.

The revamped postgraduate medical education unveiled last month by the Health Ministry is key to keeping training in line with the seismic changes that are taking place in medicine, he said.

The new regime will see the present “more ad hoc” training of doctors replaced by a formal curriculum at a specialist hospital, with interns taken under the wing of senior specialists. The time taken to produce a medical specialist will rise from five to seven years.

What trainee doctors have to master each year will be clearly spelt out and tested via a formal assessment. And individual hospitals are to be responsible for training rather than having trainees assessed by the various heads of department as they cover disciplines in rotation.

If a doctor wanted to do medical oncology, for example, the first three years would be devoted to a structured programme in general medicine, because cancer can affect multiple systems. Once this was mastered and assessed by examination, the resident would then move into three years of specialty training in medical oncology which would be similarly structured with graded responsibilities and complexity of cases and skills. At the end of this would be another exit assessment.

The best mentors need to be chosen as training is a new system, with dedicated time during working hours for teaching.

Currently, doctors train on top of having to attend to their patients.

“When I taught, I had to do it before 8am or after 7pm,” says Prof Wong. “And I can’t tell you how many times I had to stop to see a patient. Something had to give.”

“Need good doctors to be given the time to teach, and teach well. The last thing we want to think is ‘those who can’t do, teach’,” he says.

He does not think allowing graduating medical students the option of skipping 12 months of broad-based hospital training as housemen to head straight for specialty training, as compromising skills in any way.

The change – structured along the lines of residencies in the United States – has bad some doctors here worried that interns might miss out on critical generalist core skills picked up during the housemanship year, including practical work in internal medicine and general surgery, will be built into the new curriculum, enhanced and further refined.

“Housemanship is not being dropped, it’s very much there under another name. Existing structures aren’t being demobilised, that’s a misconception. What we’re doing is actually a major improvement to the system.”

Alongside the changes to the postgraduate programme, the Yong Loo Lin School of Medicine is ramping up the number of medical students it takes on each year, from 200 currently to 300 students by 2012. This is to keep pace with the ageing population and the large number of senior doctors leaving for the private sector.

“The need for more and more highly trained doctors has never been greater... We’re ramping the health-care service so hard, down to the bone. Doctors are being stretched thin,” he says.

Known for his wonderful bedside manner, the doctor to many of Singapore’s elite accepts that medical school is only the beginning of a lifelong journey of continuing medical education.

He says on that it was not easy when he first started out in his medical career.

“I’ll never forget how I was terrified as a trainee, because all the drugs are so potent. And when I spoke to my first patient, I don’t think my explanations were in larynx yet.

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The professor counts pathologist K. Shambhoo Ramgobin, 64, as a great source of inspiration.

“K. Shambhoo is as passionate as ever, loves his craft, keeps up to date, and is a fountain of knowledge. Pathologists go to him for a second opinion. He’s a living legend.”

“Practice makes perfect. It’s hard for me to quit or feel tired when I see him still in the saddle at 88.”

And with a passion for training, it is in a quest to push the boundaries of research. He is involved in mentoring others – for cancers common here and the region, even before the life science push a decade ago.

His simply furnished NUS office has been the site of many recruitment successes, where many big names in research have been persuaded by him to come and work in Singapore.

But even at NUS, the nation’s Molecular and Cell Biology chief Neal Copeland – then with the US National Institutes of Health – was attracted to the chance to do focused work with NUS in translational research.

“Neal Copeland and I discuss the concept of ‘bootstrapping’ his lab in Singapore in the hopes of getting the lab off the ground and achieving a certain critical mass,” he says.

“Boothspring” is a term he coined for projects that start with a small group of researchers and a grant, which then grows and becomes a full-fledged project.

“’I’m trying to ease you up a bit. I had to go and see a patient at 9am the other night and I felt the next day. I tend to get cold if I sleep under 5/6 hours, and my blood pressure goes up. But when I sleep, I sleep very, very well.”

He misses playing squash, and has not got the time to play golf like some of his doctor friends because he does not have “four hours to spare to go to the golf course”, but does admit to enjoying a glass of wine since his decked stocked cellar.

His biggest regret about working such long hours is that he has very little time to spend with his wife and children – a daughter, 18, and son, 10.

“I can’t say sometimes, why I can’t be a ‘regular doctor’. But I feel that if our system needs help, I have to pitch in,” he explains.

“I’m this national service.”

Q&A

What made you choose oncology? I did think of doing obstetrics and gynaecology as I enjoyed my undergraduate posting, but on graduation, that I wanted something more general.

Surgery wasn’t attractive to me and I’m not very good with my hands. Doing it would have been a grave injustice to my patients.

During my stint in the US, I saw that many of the big breakthroughs in molecular biology were in cancer. Oncology had a good mix of general medicine, science and talking to patients. It had everything, and you develop a tremendous bond with your patients. You can only help the patients but also their families.

What do you always tell medical students? That our job in the medical profession is to make sure the next generation of doctors are better than us – this is the only way we can be sure we’re improving.

Of course there’s some self-interest here: we’ll require services of the next generation! We are already doing well, our clinical care isarguably one of the best in the region and research is world-class. If you should die tomorrow, there is a great team of people who would not skip a beat.

Your parents and grandfather were also doctors. Is your son or daughter going to do this? We’re in a phase where new entrants are less likely to be in the same field.

Doctors have been in the news for lapses in ethics, and Singapore-trained doctors have been accused of being less honest on their patients in this area compared to those trained abroad. Are we reviewing this area?

We have a strong focus on ethics at NUS, and the medical ethics programme has been incorporated in the syllabus for the entire length of undergraduate studies.

But ethics is a society issue. If you emphasise the car and cordon, then that’s what’s an 18-year-old will value. Sure, the medical school must do its part, and we’ve been doing what’s required. Yes, we have had five years of ethics, but they also need other role models. It starts off in the home, in school, is emphasised at university, but you then need the whole profession to mentor and self-regulate so that young graduates have people that they can model themselves on.