

Building Foundations

Since the pioneer batch of students has recently graduated from Duke-NUS Graduate Medical School, SMA took the opportunity to catch up with three eminent faculty members of Duke-NUS to find out how far the school has come since its founding in 2005. Duke-NUS Dean Prof Ranga Krishnan, Senior Vice Dean of Research Prof Patrick Casey and Vice Dean of Education Prof Bob Kamei share their thoughts.



L to R: Prof Ranga Krishnan, Prof Patrick Casey and Prof Bob Kamei

SMA: What are some of the major milestones that Duke-NUS has achieved since its beginnings in 2005?

Prof Krishnan: We set many goals, starting with getting the building ready on time, targeting a certain number and type of faculty, number and quality of students and their performance, and also the number of publications and patents.

We achieved all of them, and even exceeded some of them. The achievements include: over 83 regular rank research faculty and close to 400 clinical faculty primarily with SingHealth. We have 370 publications, applied for several patents, have numerous research collaborations with the relevant industries, and one spin out entity by faculty. We have also exceeded enrolment targets

with 196 students for the MD and MD/PhD Programme as of May 2011. A significant number of students with master degrees and a few with PhDs have enrolled with us. Our Duke-NUS students scored higher than the US national average in the Basic Science and Clinical Knowledge exams in the US Medical Licensing Examination. Finally, our PhD programme in Integrated Biology and Medicine started last year.

SMA: How have the unique selling points of the Duke-NUS curriculum benefited students in a tangible manner, and what can we expect from the school in the near future?

Prof Kamei: Our curriculum follows the successful Duke School of Medicine curriculum, noted for its ability to train high-quality clinician-scientists and academic physicians in the US. We have adapted the curriculum to improve our students' leadership, teamwork, and critical and creative thinking skills. We have evidence that they have superior medical knowledge, and also have informal evidence that their self-directed learning skills, communication skills and ability to help each other and their team, are at very high levels as well. I expect that in the near future, they will perform at an outstanding level in residency training, and beyond that, many of them will take on leadership roles in Singapore's medical community, including the areas of Academic or Research Medicine.

SMA: Since their inception, how have the five Signature Research Programmes at Duke-NUS enhanced the area of biomedical sciences in Singapore, with one or two specific examples?

Prof Casey: The five Signature Research Programmes we have established, namely Emerging Infectious Diseases, Cancer and Stem Cell Biology, Neuroscience and Behavioural Disorders, Cardiovascular and Metabolic



One for the cameras!

Disorders, and Health Services and Systems Research, address key healthcare concerns for Singapore and the region.

Examples of recent discoveries from the Programmes include the discovery of a hybrid gene that controls the growth of stomach cancers that may provide doctors a more effective way to use current therapies, and the establishment of a collaborative programme with a local biotech company to develop vaccines against infectious diseases such as dengue fever, hand, foot and mouth disease and chikungunya.

SMA: What were three major challenges that you encountered in the process of setting up a brand new medical school, and how they were solved?

Prof Krishnan: The first anticipated challenge was faculty recruitment. However, this turned out to be easier than expected, thanks to the great support and warm welcome by SingHealth clinicians.

The second was adapting the Duke curriculum to fit the Singaporean context.

Despite many struggles, with Prof Kamei, Dr Sandy Cook, Prof Soo Khee Chee and SingHealth onboard, the curriculum has turned out to be a great success. It is testament to the resourcefulness of people both from Duke-NUS and SingHealth!

Finally, the last was getting the research enterprise off the ground. Prof Casey was amazing. He managed to persuade the first few faculty members to relocate. In the beginning it was difficult, but now our pathway is much clearer. At the end of the day, it is the quality of the people that matters, including our terrific administrative team led by the Vice Dean of Corporate Services Ms Giselia Giam.

SMA: Do you have any words of wisdom to impart to the first batch of graduates, and also to the new students starting in July?

Prof Kamei: I would ask them to continue with the same courage they have demonstrated over the past several years, and to take the calculated risks that will create outstanding opportunities for them as well. They should stay grounded in their goals of improving the lives of others, no

matter if that is in clinical service, education of other healthcare workers, or in research.

Prof Casey: Never forget that a career in Medicine or biomedical research requires lifelong learning; if that does not appeal to you, best to find out now and consider alternate career paths! You have successfully passed through one phase and are entering another, hopefully with the same level of excitement and enthusiasm you had when entering the previous phase. Each phase is different and presents its own challenges and rewards, and I hope you have great fun in each.

Prof Krishnan: To the graduating students: we thank them, for they were truly pioneers. Moving on, the whole world is open to them. My advice to them would be to live life to the fullest, take every opportunity to learn and grow with every encounter with a patient and every opportunity to engage with others, and finally, lead with your heart, mind and soul.

To our incoming class: we extend a warm welcome; you are in for a treat, an adventure and an opportunity of a lifetime! **SMA**