

The Road Less Travelled

- Journeying with the Duke-NUS MD/PhD Programme

By Kenneth Goh

"Two roads diverged in a wood, and I – I took the one less travelled by,

And that has made all the difference."

– from "The Road Not Taken" by Robert Frost

t has now been four years since my classmates and I started at Duke-NUS Graduate Medical School. Early last month, we finally celebrated the graduation of our MD Class of 2013. These are the gallant and resourceful heroes who started school together with us way back in 2009. Our first year class photo shows 56 idealistic, energetic, and rather young-looking MS1s of various nationalities and backgrounds. With hopes bright, we ploughed through innumerable TeamLEAD sessions together, in an unending stream of quiz after quiz, like standing at the outflow tract of the Augean stables when Heracles drops by for his once-in-a-century bout of area cleaning.

For our MD classmates, striding confidently down the stage in their flowing graduation gowns, at the graduation celebration, four years represents the completion of their medical school years. However, for the handful of us remaining in the Duke-NUS MD/PhD programme, four years only brings us to our halfway mark as we go through our PhD qualifying examinations. My well-meaning colleagues, concerned for our collective sanity, often asked me why anyone would want to delay graduation by at least three more years for additional PhD training. (Luckily for us, "doing an MD/PhD" is not included in DSM-5!) It is at this point that I would like to share a little bit about the mysterious things we get up to in our laboratories, in the hope of educating and entertaining the reader.

Our MD/PhD programme focuses on the basic sciences in five broad disease areas. The goal of the PhD phase of our training is for us plucky lab rats to venture



The MD Class of 2013 with Prof Pierce Chow (first from right) at a Christmas party in 2011



Preparing for Camp Simba 2010 with friends from Yong Loo Lin School of Medicine



march into the Graduation Gala Dinner

off into realms of knowledge much farther from the clinic than many readers of this august newsletter are accustomed to. Ever since we switched our short-sleeved medical student white coats for the long-sleeved lab variety, we have skipped straight ahead to the very cutting edge of medical research – molecular and cellular biology, genetics, genomics, and proteomics. To some, these words might as well be magic spells from Harry Potter, but they are actually amazing new tools that allow us to study diseases, their causes and effects in greater detail than ever before. "Exotic" scientific tools like pyrosequencing, genomic microarrays, and digital polymerase chain reaction have now been brought to bear on patient samples for research; the day will soon come when these tools become cheap, fast, and reliable enough for routine clinical use. Such exciting progress was unimaginable just a few years ago when we first started medical school.

With all these new medical developments rapidly surfacing, who wouldn't want to be a part of making progress happen? Those of us with a certain masochistic scientific bent will tell you that we would never dream of missing out on this opportunity to advance clinical knowledge on behalf of the patients that we are unable to treat today. The beauty of taking combined MD and PhD training is that it unites two great and mutually beneficial fields - each with its own quirks, cultures, and traditions into one larger whole. (This is the same principle behind



the Megazords [combinations of smaller zords or robots] from Power Rangers, and many other giant fighting robot cartoons.) Our promise for the longer term is a better understanding of diseases and better ways to treat them.

And now, here we are, after four years of school at Duke-NUS. Our beloved MD classmates have completed their time as students here, while we will be staying behind for a few more years of exciting scientific discoveries. We wish them all the best as they enter the hospitals. We will catch up with you soon! SMA



Kenneth is currently in the fourth year of the Duke-NUS MD/PhD programme. When he's not running science experiments in the lab, he can be found taking photos for school events or reading PubMed for leisure. Before medical school, Kenneth spent his undergraduate years at the University of Chicago.