

LEADing in Learning

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At KKH's Children's Intensive Care Unit...

I'm part of a great team. I really enjoy the multidisciplinary aspects of the work and the way we need to gel as a team to serve the best interests of the patient. Paediatric Critical Care is in some ways very esoteric; there are very few of us, and thankfully not that many patients need our services. However in some ways it can be very broad, in that we never know what patient is going to come through our doors, and we have to deal with all the problems they might face. Of course we get to call upon the resources and skills in the whole Children's Hospital, but we have to own all the issues that the kids under our care face.



I chose to specialise in Paediatrics...

Because I love kids, but also because I was attracted to the idea of a specialty where the preservation of potential for growth and development was a priority, and it was not enough to just get the patient out of the hospital. It is also one of the specialties where one can and needs to be a generalist, because differential diagnosis can be quite challenging. I then decided to try intensive care because I really liked physiology and technology, but I stayed in it mostly because I found the work to be very meaningful and satisfying. All the issues faced by our patients take on a larger than life character, because the kids are all critically ill. Some have organ failure, most have significant organ dysfunction, and some have had high-risk surgery. Even simple things like suctioning, turning, and insertion of a nasogastric tube have to be done carefully, and may have significant consequences.

I also get a lot of satisfaction in dealing with the parents of these children. There are no "minor" concerns, because fundamentally they are frightened for the life of their child, so we have to be patient, empathic, and hopefully reassuring.

(source: Duke-NUS)



At the same time, I am also Medical Director for Faculty Development at Duke-NUS. A typical day...

Starts by taking my son to school, and then try whenever possible to cycle or run to work. This means that I get all my weekly exercise done as part of my commute, and don't have to find time away from my family to stay healthy. Also between emails and wireless access, I can pretty much clear paperwork from either job regardless of which desk I'm at. But the main factors allowing me to juggle both roles are the teams that I have the privilege to work with. My colleagues in KKH and Duke-NUS have been very supportive of the fact that I have to manage travel between the two sites, as well as prioritise tasks and responsibilities. We have all worked together to ensure that we get the most and the best from each other, and that our patients and students are served in a way that meets their needs. I was worried about managing the two roles at the beginning, but after getting the logistics and workflow sorted out, I have found having two different jobs a source of satisfaction, especially when it leads to cross-fertilisation of ideas.

My perspective on the unique Duke-NUS teaching curriculum...

I went through quite a traditional, British, lecture-based curriculum. So most of my time was spent in a lecture hall, listening to an expert speak at length on a subject, and in retrospect I spent quite some time imagining how I might teach the subject in a different and hopefully better way.

Many years later, when I met Prof Bob Kamei (Vice Dean of Education at Duke-NUS), I was taken with his idea of using Team Based Learning (TBL) to deliver the Duke curriculum here in Singapore. But I was really "converted" only when I visited the Boonshoft School of Medicine at Wright State University in Ohio, and I saw the extent of their use of TBL and the effectiveness of this particular methodology. At Duke-NUS we have modified the methodology, and now call it TeamLEAD (Learn, Engage, Apply and Develop).

The approach and methodology emphasises personal responsibility for learning content and knowledge, and class time is focused on interaction, discussion, and clarification rather than transmission of facts. Furthermore, the process of interaction in

the classroom has many effects. Having to defend their thinking and decisions means that the students are more likely to understand and remember important principles. They also improve their skills at articulating and explaining complex issues. For the faculty, it rapidly identifies misunderstandings and gaps that can then be corrected on the spot. The single biggest difference is the fact that the faculty interaction process starts after the test, rather than the test being the last thing done in the semester. Now that I've done TeamLEAD for the past four years, I would use it preferentially over any other teaching methodology, but there are significant administrative and logistic challenges in running a TBL session. If these can be dealt with, it turns teaching into a much more enjoyable interactive learning process for both the students and the faculty.

One of the most remarkable sessions I've had with my students...

Was when only one student in the class proposed what would turn out to be the correct answer. It was quite a complex and challenging scenario they were dealing with. Without knowing which the correct answer was, she went on to persuade her team, and then the whole class, of the merit behind her thinking. They were convinced and changed their answers to match hers. When I revealed that she had been correct, and that they had made the right choice in listening to her, the class erupted in cheers. What was remarkable to me as an educator was not only that they had got it right, but also that they had been able to articulate why, in the face of a complex set of issues, and did so with no help from me.

My advice to the Duke-NUS pioneer class graduating this May...

When they were Year 1 students with me, I spent a lot of time giving them advice. They don't need any more! What they need to do is find their own path. **SMA**

One for the cameras!



(source: SingHealth Academy)