

# Teacher-Educator: Dr. Shirley Tse

From where do you think your passion for medical education stemmed?

It has always been great to be around learners of all levels, and not only being part of helping them acquire new knowledge but also learning from them as well. I am humbled that my trainees keep me young and current at the same time. This has translated well in my role as program director (PD) for the pediatric rheumatology training program at SickKids, University of Toronto. My PD role and completing the Education Scholars Program has laid the foundation for being innovative and creative in curriculum development, interactive teaching, learner assessments, mentorship and using technology to teach.



At the same time, I have learned from the best educators to acknowledge your own limits, and that you may not always have the answers, even as faculty members. However, you can make a plan together with your learners to explore the question at hand, review the literature, regroup and to discuss again. It is equally important to be flexible with your teaching, and to try to align it with the learning style that best suits your trainees. The ultimate goal is to develop independent critical thinkers, and for them to achieve their personal best, but at the same time to remind them it is important for them to share their knowledge with others.

You have been the recipient of many prestigious teaching awards, but what was your first thought when you learned that you would receive this particular award? Are you still surprised when you win?

I was completely unaware and very surprised when I learned that I was the recipient of this award. In fact, I was in the midst of a Competency by Design (CBD) workshop when I kept getting messages from my rheumatology colleagues (my amazing nominators) to check my email. It was an amazing feeling and a true honour to be recognized, considered and ultimately to receive this prestigious teaching award.

What do you believe are the qualities of a good educator? Moreover, how do they apply to you?

There is always a teachable moment even in a busy clinical environment. There is never a bad question, and learners should always be made to feel safe to ask their questions or to understand the rationale behind the answer. The key to making learning stick is to simplify and promote understanding rather than memorization. This is best demonstrated by many of our talented faculty who teach immunology to our trainees. It is one of the hardest topics to master but a vital one for all rheumatology trainees and the best educators do so in a passionate, clear and simple manner with associated clinical applications (“immunology talk-show translators”).

Can you recall a teacher in your own past who inspired your direction into education?

I have been very fortunate to be surrounded by a plethora of amazing and talented educators throughout my training and currently in my career. Akin to an anthropologist on a field excursion, I enjoy taking the time to watch and absorb how successful scholarly educators teach and produce scholarship and try to incorporate their valuable tips into my practice.

Currently you are involved in the development of national Entrustable Professional Activities and Milestones through the Royal College in preparation for the implementation of Competency by Design (CBD). Can you explain what CBD is and how this impacts the medical education environment?

It is aligned to the concepts of precision or personalized medicine in the care of our patients. CBD moves away from a time-based approach to a more personalized competence in key knowledge, skills and abilities that residents acquire as they progress along the developmental stages of their rheumatology training program. At each stage, there will be specific tasks or entrustable professional activities (EPAs) that residents must be able to demonstrate independently. Each EPA is broken down into multiple smaller tasks or milestones that residents can work on and develop to make this more manageable, and get coaching feedback, but also progress according to their proficiency. At the same time,

it will help teachers and assessors focus and observe on the specific clinical activities and skills necessary for the resident according to their stage of training, and to personalize the support and expectations according to each resident's development, progress and proficiency. Ultimately, CBD strives to ensure that graduating residents are competent and have the skills and behaviours to meet the evolving patient needs in addition to optimizing patient outcomes.

### What projects are you currently excited to be working on, and what projects would you like to undertake in the future?

I have different clinical, educational and quality improvement projects that I actively work on. In the educational field, I am really interested in using technology to teach, geared towards different learners including medical trainees, healthcare providers and patients/families. As such, my educational projects include web-based learning modules to teach pediatric rheumatology, development and use of educational videos and exploring use of virtual reality (VR) in the clinical learning environment. I am also interested in using gamification as a learning tool and enhancing learner engagement.

### Since becoming the Program Director for the Paediatric Rheumatology Training Program at the University of Toronto in 2007, how has the nature of training physicians in this field changed?

Both the fields of rheumatology and medical education have been very fluid and the training program has adapted to respond to the ongoing advances and changes accordingly. The curriculum and clinical environment has been transformed to keep the trainees abreast of the changes, including but not limited to increased understanding of rheumatologic diseases (e.g., expanding autoinflammatory disease spectrum), therapeutic targets (including biologic agents and small molecules), innovative imaging applications (e.g., vascular imaging techniques, whole body MRI, US/POCUS) and incorporation of personalized/precision medicine (utility of data, biomarkers, genes, motivational interviewing, shared decision making). From the medical education aspect, we have created a framework for developing holistic physicians via the Royal College CanMeds competencies, attention to quality improvement and patient safety initiatives, and ultimately a move towards a new CBD approach. Additionally, with our digital native learners, there has been the implementation of various technology into the clinical and teaching environment, including web-based learning, educational videos, e-rheumatology resources, joint injection simulators, e-health platforms and medical apps. There are also more opportunities for trainees to engage in scholarship in clinical research, basic/translational research, education/teaching, quality improvement,



Dr. Shirley Tse receiving her award from Dr. Vandana Ahluwalia.

musculoskeletal (MSK) ultrasound and leadership opportunities during their core fellowship or additional years of training.

### What is a hidden talent of yours that not many people know about?

I enjoy doing activities with my family. As such, we have been doing family karate for almost 12 years now. We are all third degree black belts and, yes, I can handle all the weapons that “The Teenage Mutant Turtles” use. I even placed first at a karate tournament.... in the women's middle age and early geriatric category.... but the trophy still sits proudly in my office.

### What was the first concert you ever went to?

I confess that I have a soft spot for “boy bands.” They have been my staple background music for simply relaxing, studying and writing. My very first boy-band concert was to watch the Canadian Band known as Glass Tiger. It would only take me 20 years later to finally enjoy the famous New Kids on the Block and Backstreet Boys (NKOTBSB tour). Fortunately at this later stage of my life, I could afford to sit in the front row seats by the concert stage.

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