

Win4Science Spotlight Series: **Prof. Ajitha Thanabalasuriar**

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From academia to industry and back again, Prof. Ajitha Thanabalasuriar has always done “what [she] enjoyed and what fit”. Win4Science sat down with Prof. Thanabalasuriar to hear more about her unique career path and mentoring approach.

Arriving in Canada as a refugee from Sri Lanka, Prof. Thanabalasuriar pursued a degree in Agriculture and Environmental Science at McGill as, “growing up, this concept of feeding the world and making everybody happy in that sense was really what [she] was interested in.” However, while in second year, she fell in love with learning about host-pathogen interactions. Thus, she transitioned into microbiology and completed an undergraduate honours degree and subsequent PhD in the lab of Prof. Samantha Gruenheid.

During her PhD defense, Prof. Thanabalasuriar was asked several immunology-related questions that revealed a knowledge gap. Inspired to fill this gap, she joined the lab of Prof. Paul Kubes at the University of Calgary where she investigated host-pathogen interactions with the immune system using intravital microscopy. This was a big jump for her, as she was not only learning a new topic in immunology, but also moving from *in vitro* work to performing complex *in vivo* microscopy work. However, this did not deter her. In fact, she noted that “where [she] thrive[s] is when [she is] challenged with something new [...it’s] the concept of learning something and learning it independently.” This proved to be true as she was able to secure her own funding from a pharmaceutical company, mentor a PhD student, and train a laboratory assistant, just 1-year into her postdoc.

After 5 successful years in the Kubes lab, with several publications in high impact journals such as *Journal of Clinical Investigation* (JCI), *Cell Reports*, and [Cell Host & Microbe](#), Prof. Thanabalasuriar began applying to Faculty positions, but received rejections claiming she was too junior for the position, despite her impressive resume. However, she was not discouraged and was recruited by the company that she collaborated with during her post-doctoral fellowship. There, she investigated chronic diseases and how to target the lung microbiota with therapeutics. While this was an enriching experience, Prof. Thanabalasuriar decided to return to academia because she missed mentoring students. With her second round of Faculty applications, she received 4 offers, and eventually chose McGill, starting her lab in 2020 which focuses on the interplay between immune cells, the lung microbiota, and pulmonary infections.

Throughout her career, Prof. Thanabalasuriar had the unique experience of working in both industry and academia, which afforded her a rare viewpoint in terms of the various challenges and considerations that women in STEM may face in different environments. Two major points that she touched on were the availability of childcare and how her academic skill set translated to industry.

In industry, Prof. Thanabalasuriar noted that childcare was available on site and there was a great infrastructure that helped women be both productive researchers and mothers – two full time jobs. She also found that the management and leadership skills she developed in academia enabled her to excel in her industry position and surpass her colleagues. Overall, she recommends that before joining a company or accepting a job offer, try to ask other women working there what the environment is like and whether any disparities exist. She noted that this can vary greatly depending on the company and leadership.

On the flip-side, generally in academia, “there is a huge push to increase women in research, especially women of minorities. [...] When I moved from industry to academia, [...] it was like all these doors opened for me.” However, despite the support she found in academia, the lack of accessible childcare makes it difficult for women in STEM to balance their work and family – in fact, it is one of the biggest obstacles that they face. Furthermore, Prof. Thanabalasuriar noticed that nature of academia combined with the pressures of the pandemic did not always facilitate an environment of collaboration. Prof. Thanabalasuriar strongly believes that as women researchers “we need to work together” despite the high competition. From these experiences, she has learned to approach everything with a collaborative spirit, focusing on teamwork, and mentoring, rather than competition.

While Prof. Thanabalasuriar did not follow the ‘traditional path’ to academia, she has shown that industry experience is not a detriment but instead a strength. Her conviction in following her own interests has led to a dynamic and successful career thus far, as she continues to push the boundaries of our knowledge by establishing her own research program, and serving as a mentor to the next generation of scientists.

To read more about Prof. Thanabalasuriar’s research visit her profile on the Department of Pharmacology and Therapeutics [website](#), check out her publications on [PubMed](#), or follow her on Twitter (@AjithaT4).

References

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