

Q & A with YASAMAN NEMATBAKHSH

Entrepreneurship

Yasaman, one of our NGS alumni, is the CEO & cofounder of 42LAB. 42LAB develop educational biotech mini-lab for students. They provide a portable modular biotech equipment for students to conduct experiments as well as a companion app which is the e-manual for students and the management tool for teachers.

1. Why did you start your own company? We also noticed that you are the fellow of Entrepreneur First. Could you share the experience?

After I graduated from my PhD in biomedical engineering from NUS, I was in a cross road to decide whether I want to pursue industry jobs or set up my own company. It was then that I heard about a venture builder called Entrepreneur First (EF). I thought there is no harm in trying. EF has created a platform where you can find a co-founder to start a company with. I talked to a few people before I met my current partner. We both shared strong passion for education and biotechnology. With the rise in STEM (Science, Technology, Engineering & maths) education and the fact that biotechnology is revolutionizing the next decade, we decided to use our expertise and make biotech education accessible to students. Along the way, we have had invaluable help from EF, SGinnovate, & The Hangar by NUS Enterprise which we are very grateful for.

2. What are the challenges you faced from the start till now?

There have been many challenges since we started our venture. Many of the challenges pertain to the fact that I do not have much business background. So I had to teach myself about finance, accounting, etc. I have made a lot of mistakes along the way; and I am sure I will continue to make mistakes, but to me, this is part of the learning journey as an entrepreneur and it is very similar to my PhD journey.

Another main challenge was that I found out I was pregnant when we started our company. Raising a baby girl along establishing my startup has not been an easy task. My daughter is my whole world and she is the main inspiration of why I want to disrupt the conventional education system and be a force for more hands-on experience in the classroom.

3. What are the advantages to be an entrepreneur as a PhD?

To me, PhD is not about the project that you do but rather the skills you learn along the way like teamwork, time management, project management, leadership to name a few. These skills come to my rescue almost every day. PhD has taught me that no matter what the challenge is, I can overcome it by researching and breaking it down to smaller problems.

4. What do you think is the most important quality to be an entrepreneur?

I think the most important quality is the willingness to learn and adapt. Things change rapidly in a startup and the ability



to adjust positioning is the key thing. It is definitely not an easy task specially that entrepreneurs usually fall in love with their idea. What PhD has taught me is to always rely on obtained data, in this case market response, and make conclusions based on facts rather than emotions.

5. How do you think we can encourage more PhDs to be entrepreneurs?

There has been a trend recently that PhD projects are moving more towards application based projects. More professors are entering or collaborating with industry key players. Consequently, more PhDs will naturally be involved in solving real life problems in parallel to fundamental research. Direct communication between different industries and research institutes is the key force to have more PhDs be interested in taking their projects into market.

6. Do you have other things to share with us?

I like to thank NGS for giving me the opportunity to pursue a PhD. When I moved to Singapore with my husband in 2012, I was not sure whether I wanted to do a PhD. However, when I joined Prof Chwee Teck Lim's lab as an intern and saw the quality of the research that was been done, I made a decision that I wanted to do a PhD. Thanks NGS for providing the scholarship and opportunity to pursue a PhD. I feel honored to call myself an NGS alumni.

