

Prague and IMG have engaging environment for foreigners

Srikant Ojha from the Laboratory of Integrative Biology describes how the state-of-the-art scientific facilities, modern technologies, and friendly atmosphere at IMG help international PhD students develop their scientific skills and expertise.

What made you decide to pursue a PhD at IMG Prague?

My master's degree was like a starter in the meal that is research. After, I finished master's, I had to go for the main course (that is PhD). So I started applying to labs which resembled my past lab in terms of work. Honestly, I was really excited about the prospect of being able to explore lab environments (and other environments) abroad. My search led me to a tweet sharing open positions at IMG in liver mechanobiology.

Given that I had worked on liver biology in my master's, I decided to check out the lab and the institute. I was nothing short of wowed at the imaging core facility and that sealed the deal for me and powered my dedication during the interviews.

What were you doing back home (in India) before you decided to pursue a PhD at IMG Prague?

My master's degree was a very unique programme at Tata Institute of Fundamental Research (TIFR, Mumbai, India) which offered a very unconventional framework for master's with 0.5 years coursework plus 2.5 years research. So for 2.5 years, I grew as a scientist, learning to fail successfully, and succeed with failure. It basically groomed my mind to always be wary and doubtful.

The best part was I was learning all this simultaneously with my friends, who were also newbies. I started my lab work with an organelle known as lipid droplets (LDs) in hepatocytes. Previously thought to be inert ball of lipids, recent research has put extensive signalling events regulating the localization, utilization and expansion of LDs.

I was lucky enough to contribute play a small part in deciphering the control of LD localization by motor proteins. When I was not learning the ways of the lab inside the institute building, I was learning the ways of the waves as my institute touched the shore to the Arabian sea. I also learned first-hand just how much sick you can get in a windy rain.

“I had been helped in all formalities to the fullest by my lab colleagues, They tried their best to make me feel integral to the lab”

Once you arrived here, was it a difficult or smooth transition to adapt to the country, the weather, and the people?

I will start with the weather, because I loved it the most. Even after several close to severe experiences with wind-chills and bone freezing snow, winter still remains my favourite season here. Summers here are quite similar to the spring season back in India (although its approximating early summers of India due to climate change). So I never had a problem with adapting to the weather here.

Having arrived here during peak COVID times, it took me about three months to really see faces of people. During these period, I finally understood the importance of facial expressions in communication and social bonding. However my lab mates came to rescue during these periods of sparse social connection. I had been helped in all formalities to the fullest by my lab colleagues. To the extent that I don't even know the whole procedure that is required to open a university email and get registered at the university. They tried their best to make me feel integral to the lab.

After about 3 months, I met some friends from India and the social engagement skyrocketed. We explored outdoor gyms, different parts of rivers, lakes, finally learnt cooking and etc etc. Then came the IMG bootcamp and that was awesome for expanding the network invariably. I think Prague (and IMG) right now has a much more engaging environment for foreigners with different social activities specific for pre-formed communities.

“I think science teaches us that we can be wrong and being comfortable with that is a huge learning from a PhD”

You are someone who is always positive when it comes to work, but when things don't go as planned, how do you cope up in these situations?

There's an amazing study by Herbert Benson titled “The nocebo effect: History and Physiology”. Among other things it says a story about post-surgery patients requiring lesser dosage of painkillers and being discharged earlier if they were talked to in a compassionate sense during anaesthesia. It goes on to claim that “history of medicine until the 1850s was really the history of placebo effects.” That's a strong statement and an amazing way to witness the strength of beliefs.

When you really think about it in this way, “positive” becomes a highly relative term. If you think you are suffering, you suffer more, if you don't, then you don't. In this context, I think the environment comes into play and sets the threshold for your perception of a “bad situation”.

Whenever, I feel like things are not going as I planned them, I make sure that I am putting in 100% of my effort (perceived effort, it's never really 100% in absolute terms, but believing it is, also has “positive” effects). When that still doesn't work, I try to change my environment. I go to the gym or go running or have a beer or go on a vacation or go to sleep. This more often than not results into me reshaping my plan and perception.

Another strategy that has greatly helped me is acknowledging the micro-wins. There is a big difference between saying that “The experiment failed” vs “I ruled out another way the experiment doesn't work”. For instance, if an experiment failed in the lab (everyone's been

there), but in the gym I lifted more than I did last time, or I slept better that night, I count that as an overall win for the day.

At the end of the day, I think science teaches us that we can be wrong and being comfortable with that is a huge learning from a PhD.

“I have been able to interact with great scientists while I was here at IMG and became a part of their scientific journey”

You are at IMG for quite sometime, can you tell us that how PhD at IMG has shaped you as a researcher?

IMG has supplied me with immense resources, and with that, made me highly responsible. When I come to the lab on a day when no one is around, playing with the microscopes, I have to make sure that I don't break the stage or leave a knob on (if it was supposed to be off). I have attended an amazing deal of scientific presentations during my coursework here, during the seminars and the workshops.

The passion that you see in the speaker for that 1 hour (or longer) becomes a part of you when you leave the room. I have been able to interact with great scientists while I was here at IMG and became a part of their scientific journey. I am definitely more aware of the scientific world and its rapid expansion now than I was and for that I have the nurturing environment of IMG to thank.

What are your plans after you finish your PhD?

I am highly motivated to pursue a post doc. I think this is also a win for my lab and the institute as a whole. I think scientists are needed now more than ever. Amidst a rapidly changing climate, and multiple epidemics on the brink, we need to make the decision-making parties, the top tier of human society hear what the scientists are saying. And for that, we need a strong and big community.

If someone is still sceptical about the role of science in a healthy long term survival of human beings, I highly recommend the movie “Don't look up”. For this reason, I intend to go into science communication alongside or after academia.

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What do you do outside of the lab?

As I was sharing about the importance of thresholds and environment in the perception of “positivity”. So I try to explore as many environments as possible. I go to the gym, not that frequently (about 3 times a week) but consistently. I go for badminton. I recently had the

chance to experience kayaking. I have been to bouldering several times (not enough to be an average there). I played basketball during my 2nd and 3rd year. I was never good, but I kept showing up still. I learned swimming here in Prague and still am trying to improve. I also have now and then some friends' get-togethers (every occasion possible). It's always awesome.

Will you recommend IMG to the potential students who plan on pursuing PhD?

I think you already know the answer to this if you read the previous answers. I have and I definitely will.

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