

SHOULD I STAY OR SHOULD I GO?

As the year draws to a close, many PhD students may be thinking "what should I do next?"

For those who are considering the research path, the idea of moving overseas to postdoc seems like a great opportunity to explore the world and gain more experience. Others may want to stay in Australia for reasons such family obligations or the difficulty of relocating, to name two common reasons. We interviewed two recent PhD graduates who have either moved abroad or remained in Australia and are now pursuing successful research careers.



Dr Tim Larkin completed his PhD at the School of Molecular Bioscience, Sydney University, in 2010. He is now working as a postdoctoral fellow in Cambridge, UK.

What is your research project?

My current research project is based on analysis of heterogeneity in magnetic resonance (MR) images of tumours to detect treatment responses to chemotherapy before changes in tumour size become apparent. The appearance of a tumour on an MR image is sensitive to the underlying biology, and we have been quantifying changes in image heterogeneity using Minkowski functionals following chemotherapy in a preclinical model with promising results. We are now investigating the applicability of Minkowski functionals to clinical data from brain and breast tumours.

How did you find your current position?

I approached my current supervisor by email before finishing my thesis and he had a position available that he offered to me.

What skills have you taken from your PhD, both academic and otherwise?

I think the biggest skills I have taken are perseverance and a positive attitude. Academically, the basic research and writing skills gained during my PhD have been the most important.

There is a lot of emphasis on gaining further research experience in another lab. In your experience, do you think it is important to do this and why? What would you look for in a lab?

Yes, I think it is important to see how a different lab works and to extend yourself by doing research in a different area to what you did in your PhD. I would look for a lab that does research that stimulates me, and that is at the cutting edge in that field.

What do you enjoy most about research?

I like discovering new things and answering questions that you get to do in scientific research.

Where do you see yourself in five years' time?

My goal is to have established myself as an independent researcher with my own lab.

What advice would you give to upcoming PhD graduates about their next step?

A PhD is like a passport. It can take you anywhere in the world that you would like to go.

What is the hardest thing about moving to another country?

Moving to another country has been challenging in many ways, but also very rewarding at the same time. The most difficult thing that I have found is being so far away from family and friends in Australia. The ability to stay in contact and see them using Skype does help to make you feel less far away.

Now that you are in the UK, how do you rate the standard of research conducted in Australia? What are the benefits and disadvantages that you can think of?

The standard of research in Australia compares well with that in the UK, and Australia does perform well considering its population. The amount of investment in scientific research in the UK and Europe does provide more opportunities to be involved in high-class research due to the larger research community. I have found it stimulating to have the chance to exchange ideas with colleagues from different backgrounds.

Have you had any chance to travel since you moved? If so, where to?

Being in UK has given me many opportunities to travel, particularly to do weekend trips to places in Europe. So far I have visited Paris, Amsterdam, Munich, Dublin, Italy and Greece. I have also had the chance to explore lots of the UK.

What are your research highlights to date (e.g., fellowships, grants, awards)?

My research highlight to date has been winning a poster prize at the Australia and New Zealand Society for Magnetic Resonance (ANZMAG) conference.



Dr Emily Colvin was awarded her PhD in November 2011 and is now working as a postdoctoral researcher at the Kolling Institute of Medical Research in Sydney. Her research highlights include the 2009 NSW Premier's Award for Outstanding Cancer Research Scholar and an early-career researcher grant from the University of Sydney.

Why did you stay in Australia?

I stayed in Australia primarily for family reasons. My partner and I were building our first home and his occupation also meant it wasn't feasible for him to work overseas. The plan was for me to try and get a postdoc in Sydney first, as well as secure local sources of funding and, if I was unsuccessful, to then consider doing an overseas postdoc.

How did you find your current position and why did you choose it?

My current position was advertised on the University of Sydney website. I primarily chose the position because the research project sounded very interesting and novel, but also because I was familiar with a lot of the experimental procedures listed in the requirements.

What are you currently researching?

My current work focuses on the ovarian tumour microenvironment and the characterisation of specific cell types that make ovarian tumours more aggressive.

What skills have you taken from your PhD, both academic and otherwise?

Better problem-solving skills would be one of the main things that I have taken from my PhD. There is always a good chance that experiments aren't going to go to plan, so you need to be prepared to think through all the reasons why this might be. Also, being able to write and speak about the research I am doing clearly and concisely has been a very valuable skill when setting up collaborations and writing grant applications.

There is a lot of emphasis on gaining further research experience in another lab. In your experience, do you think it is important to do this and why? What would you look for in a lab?

I think this is important to do for several reasons. Firstly, you broaden your experience by working on something new. Also, moving labs opens you up to meeting new researchers and forming new collaborations, which is always a good thing. Moving labs also helps you when applying for early career fellowships, as they strongly encourage you to do this.

How do you rate the standard of research in Australia compared to overseas? What are the benefits and disadvantages?

I think the standard of research in Australia is excellent and comparable to overseas. For me, the main benefits of remaining in Australia were that I got to stay close to family and friends, however I do miss out on the great opportunity researchers have of being able to work overseas and live in locations totally different to Australia. I do think that it is a personal decision whether you decide to stay in Australia or move overseas, but it is a really great opportunity to work overseas if you can and is often very well regarded when applying for jobs once you return to Australia.

What advice would you give to upcoming PhD graduates about their next step?

Try not to stress too much about what you are doing next, although that's easier said than done. Make sure you take the time to look at all your options, and if you are planning on staying in research, try and find a project that really interests you. It's hard to stay motivated if you don't enjoy what you are doing.

Where do you see yourself in five years' time?

Hopefully, in the next five years, I will have been successful with some fellowship and grant applications, and of course continuing in cancer research.

What do you enjoy most about research?

There are lots of things I enjoy about research, but knowing you are working on something that hasn't been done before, with the reward of discovering something new, would have to be the aspect I enjoy the most.

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