

Having the chance to visit Japan on the JSPS fellowship has been a great opportunity to both stretch my research and learn new things. Also it has given me a chance to experience a different culture in a way that is not possible by simply visiting on a holiday or short trip. I would recommend anyone thinking about applying to go for it; it will be an experience you won't forget!

My research is focused on cell reprogramming and my host research institute, RIKEN's Omics Science Centre, is a world leader in this field. I was able to work with Dr Carsten Daub who was my supervisor in Japan to develop a research plan that aimed to facilitate the discovery of transcription factors for cellular reprogramming. This was research that was motivated by a discovery by a Japanese scientist (Dr Yamanaka) in 2006. He discovered that cell type is a much more plastic phenomenon than was previously thought. It was shown that by adding 4 transcription factors to a fully differentiated cell type it could be made to revert to a stem like state. Our research plan was aimed at discovering a way of identifying the transcription factors that are required for trans-differentiation (this is going from one specialized cell type to another). The plan took advantage of the mathematical and computational skills that I had acquired already during my PhD and the biological knowledge and facilities that are available at RIKEN.

In terms of an opportunity for a final year PhD student I can't think of a better situation than this. The research culture in Japan is one that strives for excellence in everything they do. This is reflected both in the enthusiasm and dedication of the people whom you will work with but also in the forward thinking nature of the research centres. In terms of settling in to working in a Japanese lab my experience may have been different to some owing to the fact my laboratory was an even mix of Japanese nationals and foreigners. This meant that life was not too different to what I am used to and all communications were carried out in English.

Outside of work I found communicating and navigating Tokyo was quite daunting at first but that settling in took much less time than I expected. Whilst Japanese can seem like a difficult language to learn at face value, I found learning enough to get by very straightforward. As well as this I found that everywhere I went people would do their best to help you, and those that spoke even a little English were actually very keen to get a chance to practice when my limited Japanese failed me!

It is a great opportunity that will benefit you as well as your research but if you need further convincing then please contact me: owen.rackham@bris.ac.uk



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