## **Luke Saunders**

**Short-term JSPS Fellow** 

Fellowship Period: March 2015 to July 2015 (four months)

Institution: University of Tokyo Hospital Host name: Professor Satoshi Kato Department: Ophthalmology

Current Position: Postdoctoral Fellow in the Department of Ophthalmology, University of California,

San Diego

Contact e-mail: lukesaunders@hotmail.co.uk

I am a past recipient of the JSPS short-term fellowship, which gave me the opportunity to work at the University of Tokyo Hospital for four months. Although the fellowship was for a relatively short period, it was a very productive, but also enlightening and enjoyable time.

My project related to using measurements from perimetry (which measures what can be seen by the patient) taken in the hospital to develop a new metric to better measure if vision is getting worse or not in glaucoma. Glaucoma tends to result in patches of blindness (called scotomata) within an individual's vision, so I wanted to investigate whether measuring how large these scotomas were was a better way of following patients in clinical practice than using common summary indices from the modern devices. However, I soon found that there existed a larger problem of how to accurately compare approaches due to the fact that there is no gold standard for determining whether eyes are getting worse or not. As a result, I worked towards developing a new unbiased means of comparing results that did not rely on arbitrary classification of progression status using accurate simulations of stable series to estimate method false positive rates.

Although my host was Professor Satoshi Kato, I mainly worked closely with two senior clinical staff including Dr Ryo Asaoka, who I had previously met in London whilst completing my PhD. I was placed in a research lab with a couple of other colleagues working for Dr Asaoka and they were really helpful in aiding me to adjust to working in that area. Neither had strong English-speaking skills initially, but we found ways to communicate using a combination of sign language and google translate, became friends, had lunch at the (very cheap and good quality) canteen every day and are still in contact. It was a great experience for exchanging English and Japanese language and culture.

There are a few pieces of advice that I would give any future awardees of the award:

- 1. Try to learn some of the basic language whilst you are out there. Japanese people do not tend to be fluent speakers of English, but are highly encouraging of any efforts to speak the language. In Tokyo there were a plethora of cheap and free classes, which are a great way of learning the language and culture and meeting people. There are three "alphabets" in Japanese, but I would prioritise memorising katakana primarily (rather than hiragana as often recommended) Japan borrows a lot of words from English and all of them are written using katakana symbols. Most items in shops have names and ingredients written in katakana, so learning these symbols was like being able to read overnight.
- 2. Japanese people work very hard and for many career is their number one priority. Japanese working culture has a strongly emphasises the collective, so fitting in and fulfilling expectations are important. However, foreigners are often allowed some leeway, as there is a strong division in the expectations and identity of being Japanese and non-Japanese.
- 3. It is also important to know that Japan is very bureaucratic and often not as welcoming to technology as is often stereotyped. Make sure to send hand-signed copies by post for all

the forms that the JSPS asks you to fill out as they will not accept scans or copies. Also make sure laptops are modem compatible as wireless is not guaranteed. Finally, also be prepared to carry plenty of money around with you, as you cannot pay by card in most places. Unless you stay a long time it is very difficult to open a bank account, so people visiting are reliant on keeping large amounts of cash. However, it is a very safe place to live.

4. Japan has so many interesting sights and incredible food. Meals are also very cheap – eating out most nights is culturally acceptable and usually fairly healthy. Be open-minded, culturally-flexible and willing to try everything!

