

Fellow: Melissa Gammons, Department of Physiology and Pharmacology,
University of Bristol

Contact: Melissa.Gammons@bristol.ac.uk

Host: Prof. Masatoshi Hagiwara, Developmental Biology and Anatomy,
University of Kyoto.



During the summer of 2012 I was fortunate enough to take up a JSPS fellowship position in Prof. Masatoshi Hagiwara's laboratory in the graduate school of developmental biology and anatomy at the University of Kyoto. Throughout this time I was able to build on research I had carried out at the University of Bristol, making use of the expertise and equipment available in Professor Hagiwara's laboratory. During my PhD I identified that a low molecular weight compound that inhibits SRPK1, characterized in Prof. Hagiwara's lab, was capable of preventing choroidal neovascularization after topical administration through altering VEGF splicing. Choroidal neovascularization characterizes Age-related Macular Degeneration (AMD), the leading cause of blindness in people over fifty years old. Current treatment regimes involve monthly intraocular injections that are very expensive and often lead to complications such as endophthalmitis and retinal detachment, therefore the identification of a topical treatment could prove beneficial to patients. Whilst in Japan I have been able to identify novel compounds through use of their in vitro kinase assay, that have the potential to achieve similar effects but with more potency and better solubility profiles.

Whilst having the opportunity to further my academic knowledge and learn new skills, I was also delighted to experience Japanese culture and cuisine. Japan is an amazing country with beautiful shrines and temples at every

corner. Being located in Kyoto I also had the pleasure of enjoying the spectacular mountainous background. A short trek up the Diamonji mountain provides views of the whole of Kyoto stretching as far as Osaka, and a cable car to the top of mount Hiei allows spectacular views of Lake Biwa. The restaurants and izakaya lining the Gion-Shoji encapsulate the heart of the city, and the Kamo river makes for a great evening cycle. It is difficult to describe in words the experiences the JSPS Summer fellowship has allowed me, I would recommend to future fellows to engross yourself into all aspects of Japanese culture, including their laborious work ethic. Working late in the laboratory can be both productive and social; the lab members have a wealth of knowledge of the local restaurants and places to eat and are eager to share in your experiences. Enjoy every minute and embrace the challenges that you will inevitably face, especially the language barrier, its not always easy but mistakes are quickly forgiven and the best way to learn. I hope future fellows enjoy their time in Japan as much as I have. Arigato gozaimasu!

Melissa Gammons: Melissa.gammons@bristol.ac.uk

