Name: Ewelina Golebiewska, PhD

Host Research Institution: Department of Clinical and Laboratory Medicine,

Faculty of Medicine, University of Yamanashi

Host Researchers: Professor Yukio Ozaki and Dr Katsue Suzuki-Inoue

Research plan:

Rheumatoid arthritis (RA) is a chronic autoimmune disease that affects approximately 1% of the population. In Japan, there are approximately 700,000 patients with RA. Because it is associated with systemic increased inflammatory state, people with RA are more prone to atherosclerosis, and risk of myocardial infarction (heart attack) and stroke is markedly increased. The precise aetiology of RA is not known, but increased activity of fibroblast-like synoviocytes (FLS) is linked to the disease. FLS express a protein called podoplanin, which activates a receptor on platelets first identified by Dr Suzuki-Inoue in 2006 - CLEC2. In my project I aimed to characterise the interactions between FLS and platelets which could contribute to RA development.

**Experience in Japan:** 

The University of Yamanashi is located in small town surrounded by mountains, approximately 2h from Tokyo. I visited in winter, and I have never realised how cold it would get – Japanese houses are not very well insulated! On the plus side I managed to see both koyo (autumn leaves) in Kyoto, and sakura (cherry blossom) in Tokyo during my stay. I brought my road bike with me and spent most of the weekends, when I was not travelling, cycling around the extremely picturesque area. Oh, and I was also waking up to the view of Mount Fuji every morning..!

On weekdays, I ended up working significantly longer hours than in the UK... But it was mostly because of the time constraint on my project as my colleagues would often leave before me..! In summary, my work in Japan resulted in interesting and significant results that will hopefully result in a high impact publication in the future. Most notably, I found that deletion of CLEC-2 in platelets slows the disease progression in animal model of RA. In addition, I have also learned a number of new techniques that I am going to use in my further research, and, probably most importantly, I have developed my confidence as a

scientist. I found that I got used to living in Japan very quickly – and I really miss the people (and the food!) already!

One 'little' thing that would have definitely made my stay even more enjoyable and let me experience the culture more fully would be learning more Japanese before the fellowship... I learned hiragana and katakana and some basic phrases when still in the UK, and attended half of the 10 week 'Campus Japanese' course organised by the University, but with the pressure of conducting research in the new lab I quickly found I did not have much time left to learn the language.

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Koio in Kyoto



Hamami with Professor Ozaki and some of the lab colleagues