Fellow - Professor Duncan Graham ID: S-14179 University of Strathclyde, UK Duncan.graham@strath.ac.uk

Host – Professor Shinya Kimura, Professor and Chairman, Department of Experimental Medicine, Saga University, Japan

The JSPS Short Term Fellowship was set up to allow me to travel to Japan for research discussions with Professor Kimura but also to engage with other leading researchers in Japan by visiting 8 institutions during my short stay. I covered over 3000 miles and gave 7 research lectures and also spoke at a 1-day symposium organised as the first Raman symposium on biosensing which brought together a diverse range of Japanese research scientists with a view to creating critical mass and sustainable research programmes. My trip began with a visit to Saga University where I presented my research to the Department of Experimental Medicine and then engaged in in-depth discussions with a number of members of staff. Specific research projects have been defined and I will use funding available from the Scottish Funding Council to encourage Early Career Research exchanges to continue the specific research discussed through the exchange of research staff between the University of Strathclyde and Saga University.

I then moved up to Hokkaido and gave a lecture there, developed a research programme before moving to Nagoya where discussions with a neuroscientist have led to a research programme being developed. Following that I moved to Osaka and visited Kwansei Gakuin University where again research discussions have led to two new collaborations which will generate research publications. Following this I attended a 1-day symposium where there were 8 speakers and an audience of around 50 interested researchers. I then moved to Osaka before travelling to Shikoku where I visited AIST and gave a lecture and developed further research links there and then visited Osaka University to again create more research momentum. My final visit was to Kyoto University where again a lecture was delivered and potential research programmes discussed. I used a mixture of air and rail transportation to get around Japan. It was incredibly efficient and I also had significant support and input in my organisation from Renishaw KK who are the Japanese subsidiary of a UK based engineering company I work with.

On returning to the UK I have several active research collaborations now well developed with colleagues in Japan and we are now discussing timing of our next get together, which PhD students and postdoctoral researchers will move between the two different countries to generate new research and how we can harness our research collaborations through specific dedicated research project funding. There are 2 papers currently being worked on which will be collaborative outputs from this trip with potential for at least another 3 joint publications to arise following in-depth discussions during my time in Japan. I had an excellent trip and will most definitely be developing my linkages with Japan and look forward to a long and fruitful collaboration between my research group and those in Japan as catalysed by JSPS.



Prof Kimura (Host) and D Graham (Fellow) during a shellfish BBQ and the line up of invited speakers at the first Raman biosensing semiar held at Kwansei Gakuin University.