Sun rises on University of Liverpool - RIKEN partnership



Photo: Marcus Gallagher-Jones immediately after his successful viva for his PhD. He is photographed (I to R) with internal examiner (Dr Svetlana Antonyuk), external examiner (Prof Ian Robinson from UCL) and his primary supervisor (Prof Samar Hasnain)

Established four years ago, the strategic agreement between University of Liverpool and RIKEN for a joint graduate school program has now seen the successful completion of a graduate degree. Marcus Gallagher-Jones of UoL's Molecular Biophysics group, the first student enrolled in the program, successfully defended his thesis on the 11th of November 2014.

RIKEN is Japan's largest and most comprehensive research organisation's, and supports a diverse array of both basic and applied research. Under its International Program Associate (IPA) scheme, RIKEN currently allows doctoral students from the UoL to spend up to two years of their PhD at a sponsoring RIKEN institution, with UoL being the first UK based university to enter into such an agreement.

The IPA scheme aims to foster talented doctoral students from universities outside of Japan through access to the high class facilities and experience available at RIKEN. In this way not

only the student, but also the hosting laboratory will be exposed to working as part of a global research environment, as well as strengthening RIKEN's ties to institutions all over the world.

Marcus, who spent over 2 years at RIKEN's SPring-8 Center in Japan, had this to say about the experience. "Taking part in the IPA program has been a fantastic opportunity to really extend my research horizons and perform pioneering science in a world class institute at such an early stage in my career. The chance to work with researchers from many different backgrounds gave me new insights into different ways to research, which I'm sure will be a great help in the future. Following my initial 2 years in Japan, I was able to return on a JSPS fellowship becoming a JSPS alumni".

Professor Ian Robinson, who has been developing methods of using the very high coherence of the latest SR sources to enable direct 3D imaging of structure and has been awarded several prizes including Warren prize (2000) and the Royal Swedish academy Aminoff prize (2015) was the external examiner. Commented on the opportunity that Marcus had, he said "Marcus has served as an ambassador for UK-Japan scientific relations. On top of building this relationship, he has done the excellent scientific work presented in his PhD thesis. He is one of the first UK persons to use the new Japanese X-ray Free-electron Laser and publish papers already. I hope there will be many more following."

Prof. Samar Hasnain, international lead for the Faculty of health and life sciences of the University of Liverpool and Marcus's primary supervisor, shared his thoughts on the joint graduate school program. "RIKEN-Liverpool partnership is providing unique opportunities to our PhD students of not working with some of the best scientists and facilities in the world but also experiencing a very rich culture away from home. These graduates are likely to be the global research leaders addressing important scientific challenges of the future via mutli-national cross-disciplinary teams".

Prof Tetsuya Ishikawa, Director of the RIKEN SPring-8 Center and Marcus's supervisor in Japan, gave his opinions on the IPA program. "We had a very good first start, and look forward to more".

With several more students due to graduate next year, and even more to follow, this looks to be the start of what is expected to be an exemplar partnership between Japan and UK.