In recent years, significant research has gone on in the UK, Japan and elsewhere that tries to understand the character of the cells in eye tissues including cornea, lens and retina, and how they might be able to be regenerated to combat disease and loss of vision. One strategy for regeneration of damaged eye tissue is the expansion in the laboratory of adult stem or progenitor cells, either from donor eye tissue or from small samples of cells obtained from the actual patient suffering from vision loss. Another strategy is via the use of what are known as induced pluripotent stem cells (iPS cells). These are cells from adult tissue (skin, blood, etc.) which have been treated with various factors to make them become biologically "younger" and less differentiated, so that they can grow into cells of different tissues to those from which they were obtained. There is considerable research expertise in Japan and the UK into both approaches, and the main objective of this symposium was to bring together leading clinicians and vision scientists from both countries to discuss recent successes and the best way forward in our joint endeavour to understand ocular stem cells and iPS cells and how these can be employed to treat blindness. This symposium brought together leaders in the field of ocular cell biology, including stem cell biology, who are instrumental in setting the direction of future research.

The opening speeches given at the symposium were delivered by the Rt. Hon. Carwyn Jones AM, First Minister of Wales and Cardiff University's Vice-Chancellor, Prof. Colin Riordan. The symposium provided an excellent opportunity for networking and learning about the latest advances in stem cell applications in relation to ophthalmology. The event included talks from unique speakers from the UK and Japan, including Nobel Prize Award winner, Prof. Sir Martin Evans, FRS, and Dr Masayo Takahashi from RIKEN, Japan.

During this event, a total of 120 people attended including researchers with common interests in stem biology applied to the eye and vision from Japan. Doshisha, Osaka, Kyoto and Kobe Universities were represented by speakers from Japan and from the UK London, Oxford, Nottingham, Newcastle and Cardiff were represented as well as from the University of Houston in the USA. Early career scientists were also able to present their work and postgraduate students attended the event and were very enthusiastic to meet leading scientists in biomedical research and have stimulating opportunities for discussions.

Aside from the scientific impact, this event also permitted an important cultural exchange as attendees had the opportunity to experience a traditional Japanese sake ceremony and live musical

entertainment with a koto performance. Likewise, the Japanese scientists had the opportunity to experience some aspects of the British lifestyle and culture. The lead organisers of the Symposium, Prof. Andew Quantock from Cardiff University and Prof. Kohji Nishida from Osaka University also have plans in the near future to submit joint funding applications to work with other colleagues who attended the Symposium.

-Professor Andrew Quantock, Cardiff University

Symposium Attendees