New Perspectives on Corneal Wound Healing and Graft Survival from Multi-modal X-ray Scattering

Abstract of talk:
The cornea provides around two-thirds of the eye's light focussing power. Corneal refractive properties rely on the tissue's transparency and precise curvature, which are, in turn, governed largely by the cornea's unique fibrous collagen architecture. X-ray scattering has contributed to our current understanding of the relationship between corneal form and function by providing quantitative measures of collagen fibril organisation across multiple length scales. This talk will present recent findings from post-transplant corneal specimens using a multi-modal X-ray scattering approach.

About the speaker:
Craig Boote currently is a Associate Professor in Cardiff University in the School of Optometry and Vision Sciences. He received his BSc and PhD from Keele University in 1999. His main research interests are the biophysical properties and structural biology of the cornea and sclera. He is using x-ray scattering and microscopic imaging to investigate the factors that govern corneal transparency and refractive status, and their compromise in disease and surgery. He is also researching the structural biology and biomechanical function of the sclera and optic nerve head, and investigating their role in the development of glaucoma.

All are Welcome!  
Wednesday  
12th Nov 2014

1.30 pm – 2.30 pm  
Level 6, Discovery Tower, The Academia  
SGH-AC-6-2

Chairperson  
Dr Michael JA Girard