

SCM Seminar

Disease mechanisms and therapies for aggregate myopathies

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Date	:	12 Oct 2016 (Wednesday)
Time	:	4:30 – 6:00 pm
Venue	:	SCM 809
Language	:	English
Facilitator	:	Prof. Bian Zhao Xiang

Abstract

Our research focuses on neuromuscular disease, spanning the spectrum from identification of new disease genes, to determination of the underlying biological mechanism, and subsequently evaluation of potential therapies. In investigating these areas we use the advantages of the zebrafish model system.

I will present examples of our work in these different areas, focusing on myofibrillar myopathies resulting from mutation of BAG3 or FLNC. Myofibrillar myopathies are late onset, progressive, disorders characterised by structural failure of the muscle and the formation of protein aggregates. Using the zebrafish models we have generated we identified a common mechanism in these diseases that explains the delayed onset and progressive nature and suggests a potential approach for the development of therapies. I will present our latest results in this area examining the cause of muscle weakness and exploring the manipulation of autophagy as a potential therapy.

Biography

Robert studied Human Genetics at the University of Nottingham, UK, before moving to the Medical Research Council's Human Genetics Unit in Edinburgh to complete his PhD and begin his work using the zebrafish model system. He completed his PhD in 2003 and continued his research at the Victor Chang Cardiac Research Institute in Sydney and the Australian Regenerative Medicine Institute, before joining the School of Biological Sciences, Monash University, Melbourne, Australia, as a lecturer and group leader in 2010, investigating neuromuscular disease.

~ All are Welcome ~