DukeNUS Medical School

CSCB Cancer and Stem Cell Biology Seminar Series

# Circadian clock regulation of inflammation.


**Abstract:**

It has long been established that the circadian clockwork plays a key role in innate immune responses, and several recent studies reveal that multiple aspects of adaptive immunity are also under circadian control. I will discuss the role that circadian clocks play in the regulation of pulmonary inflammation and how specific elements of the circadian clock drive elaboration of bacterial mediated inflammatory responses via interplay with epithelial and monocytic lineage cell types. Strikingly, different elements of the circadian clockwork also control the mobility and behaviour of macrophages, and tunes pulmonary fibrotic responses. These systems are known to interact with endogenous anti-inflammatory glucocorticoids, and links between the circadian clock and glucocorticoid hormones control both time-of-day variation in the magnitude of pulmonary inflammation and responses to bacterial infection.


**Date:**

**25 February 2020 (Tuesday)**

**Venue:**

**Amphitheatre, Level 2**
Duke-NUS Medical School
8, College Road,
Singapore 169857

**Time:**

**12:00 - 1:00 p.m.**




**Speaker:**

**Andrew Loudon**
Professor

School of Medicine, University of Manchester, UK


**Andrew Loudon** trained at the University of Oxford (BSc), University of Edinburgh (PhD, Post-doctoral studies), moving to the Institute of Zoology, London to lead the Reproductive Biology group. He moved to the Beyer Chair in Animal Biology at the University of Manchester in 1995, where he established the Centre for Chronobiology. He has a joint Professorship at the University of Oxford, and has been elected to Fellowship of the Society of Biology, and Academy of Medical Sciences.


**Host:**

**David Virshup**
Professor & Director
Programme in Cancer & Stem Cell Biology
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**No registration is required. All are welcome.**
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