Institute of Medical Biology
A*STAR

SKIN RESEARCH SOCIETY (SINGAPORE)

Seminar Announcement

- All Are Welcome -



Speaker : **Dr Kurt Lu**
Assistant Professor
Department of Dermatology
Case Western Reserve University School of Medicine

Title : ***"Vitamin D & Modulation of Inflammation to Promote Skin Repair in Mice and Man"***

Date : 3 July 2017 (Monday)
Time : 11:00am – 12:00pm
Venue : Breakthrough Theatrette, Level 4 Matrix
Host : Dr John Common
(Tel: 6407 0508; email: john.common@imb.a-star.edu.sg)

Abstract:
Injury to the skin initiates an inflammatory cascade leading to infiltration by cells of the immune system. Macrophages recruited to sites of injury protect the skin from infection and work to promote repair. These differing roles are in part a function of diverse cellular polarization and activation states of these innate immune cells. Our laboratory's main research focus is to understand how the skin environment modulates differentiation of infiltrating macrophages with the goal of translating these findings into treatments for skin wounds. Using murine models, we describe the role of vitamin D3 in inducing a tissue-repair macrophage phenotype. We will discuss the role of vitamin D3 in suppressing tissue destruction mediated by excess inflammation and present work supporting the use of high dose oral vitamin D3 to attenuate skin injury *in vivo* in humans. Using a "reverse translation" bedside-to-bench approach, we will discuss potential underlying mechanisms of vitamin D3 in promoting skin repair.

Keywords: Skin, wounds, macrophages, vitamin D3

About the Speaker:
Kurt Lu, M.D., joined the faculty at Case Western Reserve University and University Hospitals Cleveland Medical Center in 2008. Dr. Lu's medical training began at the University of Rochester School of Medicine. After a pre-doctoral fellowship at the University of Rochester in Immunology/Dermatology he completed an internship in Internal Medicine at Columbia University College of Physicians and Surgeons. Dr. Lu then acquired a post-doctoral fellowship in Cellular and Molecular Dermatology at Case Western Reserve University combined with a Dermatology Residency at University Hospitals Cleveland Medical Center. Dr. Lu's translational research program in tissue injury and wound repair is funded by grants from the National Institutes of Health. His research focus is on the function of the skin immune system, specifically to investigate (1) how macrophages protect the skin from external injury and (2) how homeostasis is restored to minimize bystander damage to surrounding tissue.