DukeNUS Medical School

CSCB Cancer and Stem Cell Biology Seminar Series

The Integrin Network: Role of Integrins in Epithelial Homeostasis and Inflammation

Abstract:

We use the mammalian skin as a model system to functionally interrogate the intricate regulation of cell adhesion, migration, basement membrane organization, stem cell regulation and the immune microenvironment required for the maintenance of epithelial homeostasis. In this talk, I will present our investigation into the role integrins in maintaining epithelial homeostasis and immune regulation at the barrier surface. Integrins are a large family of heterodimeric trans-membrane receptors that integrate signals between cells and the extracellular matrix. The epidermal KO of integrin beta-1 results in neonatal lethality due to a complete loss in organization of the epithelial basement membrane. The KO embryos display a strong sterile inflammatory and wound response phenotype marked by the recruitment of resident immune cells to the basement membrane. I will elaborate on our current understanding of the earliest molecular events that set up the inflammatory response, and the tools we have developed to mitigate this inflammatory state.



Speaker:

Dr. Srikala Raghavan

Associate Professor

Center For Inflammation and Tissue Homeostasis (CITH)
Institute for Stem Cell Biology and Regenerative Medicine
BANGALORE

Dr. Raghavan received her Ph.D. from the University of Cambridge in 1998. She joined the lab of Prof. Elaine Fuchs at the University of Chicago and the Rockefeller University for her postdoctoral research. She established her lab at Columbia University in the College of Dental Medicine and Dept. of Dermatology in 2005. In 2012, she moved to inStem, Bangalore as a Group Leader. Dr. Raghavan also holds a joint appointment as a Principal Investigator at the SRIS/IMB, A*STAR.

Date:

23 Aug 2018 (Thursday)

Venue:

Meeting room, 7C

Duke-NUS Medical School
8, College Road,
Singapore 169857

Time:

4:00 - 5:00 p.m.

Host:

David Virshup

Professor & Director
Programme in Cancer & Stem Cell Biology
Duke-NUS Medical School
Singapore

No registration is required. All are welcome.

Any enquiries, please contact:
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