

Seminar Announcement
- All Are Welcome -

Speaker : **Professor Carien Niessen**
University of Cologne, Germany

Title : ***“Regulation of cell and tissue architecture
in epidermal morphogenesis, homeostasis
and stem cell regulation”***



Date : **17 April 2014 (Thursday)**

Time : **11:00am – 12:00pm**

Venue : **Aspiration Theatre, Matrix Level 2M**

Host : **Prof Birgit Lane**
(Tel: 64070151, e-mail: birgit.lane@imb.a-star.edu.sg)

Abstract:

Intercellular adhesion and cell polarity are crucial determinants of cell and tissue architecture. They couple intercellular communication to cell shape, migration, cell fate and division orientation. The main research interest in my laboratory aims at understanding how the regulation of cell and tissue architecture is coordinated with the growth, metabolism and innate immunity status of cells to drive morphogenesis and tissue homeostasis. We ask through which mechanisms intercellular adhesion, polarity and metabolic signaling pathways communicate to regulate the establishment and maintenance of epithelia using the selfrenewing epidermis as a paradigm. Our work has identified key roles for adhesion, polarity and insulin/IGF signaling in epidermal morphogenesis, cell fate and skin homeostasis. Overall, our data suggest that the regulation of cell and tissue architecture and metabolism are coupled and control stem cell behavior and tissue homeostasis.

About the Speaker:

After studying biology at the University of Utrecht The Netherlands, Carien Niessen obtained her PhD on structure/function studies of the integrin $\alpha 6 \beta 4$ at The Netherlands Cancer Institute in Amsterdam in the laboratory of Arnoud Sonnenberg. She received a Dutch Cancer Society fellowship to do her postdoc at Memorial Sloan Cancer Center in New York in the laboratory of Barry Gumbiner. Here she focused on cadherin cell-cell adhesion biology. She then moved to the University of Cologne as a junior research group leader at The Center for Molecular Medicine Cologne where she was appointed as a tenured professor in the Department of Dermatology and the Cologne Excellence Cluster CECAD (Cologne Excellence Cluster on Stress Responses in Aging-associated Diseases) in 2008.