

# Intercellular signaling in mouse heart development and disease

## About the lecture

Despite great advances, the heart continues to be the target of many serious congenital and acquired diseases. The Klingensmith laboratory at Duke University (USA) uses the mouse as a model to understand the cellular contributions and interactions that underlie formation of rostral organs during embryogenesis. This work includes an interest in the development of functional cardiac tissues from precursor populations. They have found multiple roles for both Hedgehog signaling and Bone Morphogenetic Protein signaling in this process. This talk will focus on the requirements for correctly regulated levels of BMP signaling in the control of heart tube formation and laterality, and in the regulation of proliferation and differentiation of the myocardium. They also consider the possible role of BMP signaling in the tissue response to myocardial infarction in the adult. The studies presented will provide an overview of mammalian heart formation, and the role of BMP signaling in mediating essential cellular interactions in heart development and disease.

**Speaker:** **Prof. John Klingensmith**

*Dean, Associate Professor of Cell Biology, Duke University Medical Center.  
Associate Dean for Academic Affairs, The Graduate School, Duke University*

**Host:** **Prof Shirish Shenolikar**

*Senior Associate Dean, Office of Research, Duke-NUS Graduate Medical School,*

**Date:** Tuesday, 18 June 2013

**Time:** 4.00PM – 5.00PM  
*(wine and cheese served after the seminar)*

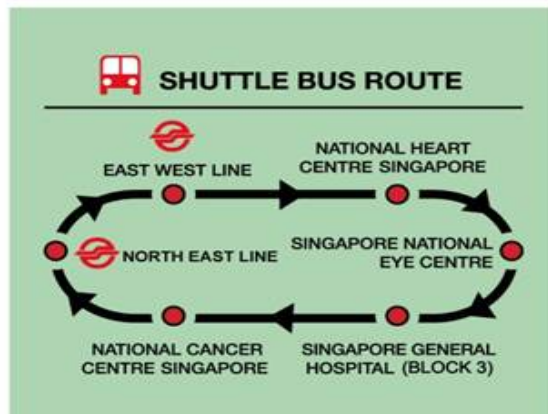
**Venue:** Duke-NUS Graduate Medical School, Amphitheatre, Level 02

**Contact:** Ms Shanti Rajaram, Duke-NUS Graduate Medical School  
*Tel: 65167266 or Email: shanti.rajaram@duke-nus.edu.sg*

## About the Speaker

Prof John Klingensmith is an expert in the field of developmental biology. He holds a PhD in Genetics from Harvard Medical School and a PhD in Developmental Biology from Stanford University. Currently, he is an Associate Professor of Cell Biology at Duke University Medical Center, and the Associate Dean for Academic Affairs at the Graduate School at Duke University. His research focuses on the signaling pathways involved in the development of the heart and associated tissues.





**LEGEND**

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