

Rebuilding the Lungs at Single Cell Resolution

ABOUT THE LECTURE

Tata lab research focuses on the lung cell biology in normal and pathological tissues. In the past few years, my research has focused on understanding how cells maintain their identity in an adult organism, and how they balance the need to ensure stability and allow plasticity when necessary. Over the years, we have made a number of fundamental conceptual advances in the field of regenerative biology. More recently, our work identified novel and rare cell types and identified a new mode of regeneration in airways and identified the role of inflammatory cytokines in alveolar repair following influenza infection. We utilize genetic, live imaging, 3-D organoid models, and next generation sequencing technologies including spatial transcriptomics to study the behavior of tissues at single cell level.

Speaker: **Dr Purushothama Rao Tata**
Assistant Professor,
Department of Cell Biology
Regeneration Next Initiative
Duke University School of Medicine

Host: **Dr Fu Naiyang**
Assistant Professor
Cancer and Stem Cell Biology Programme
Duke-NUS Medical School

Date: **Tuesday, 12 November 2019**

Time: **12.00 PM - 1.00 PM**
(Light refreshments will be served at 11.30 AM)

Venue: **Duke-NUS Medical School**
Amphitheatre, Level 2

Contact Person: **Ms Serene Wie, Duke-NUS Research Affairs Department**
Email: Serene.wie@duke-nus.edu.sg

ABOUT THE SPEAKER

Purushothama Rao Tata, PhD, is an Assistant Professor of Cell Biology at Duke University. Tata received his PhD from University of Ulm, Germany and then moved to Massachusetts General Hospital and Harvard Medical School in Boston for his postdoctoral training. During his time in Boston, Tata uncovered novel communication between stem and progenitors and the cellular plasticity mechanisms that are operant in tissue homeostasis, regeneration and tumorigenesis. Currently, Tata lab in the Department of Cell Biology at Duke University School of Medicine is focusing on understanding the cellular ensembles in the context of homeostasis, regeneration and tumorigenesis in diverse epithelial tissues including lung.



** Please be informed that photography and videography may be taken by Duke-NUS authorized personnel during the event for publicity purposes.*