10x GENOMICS

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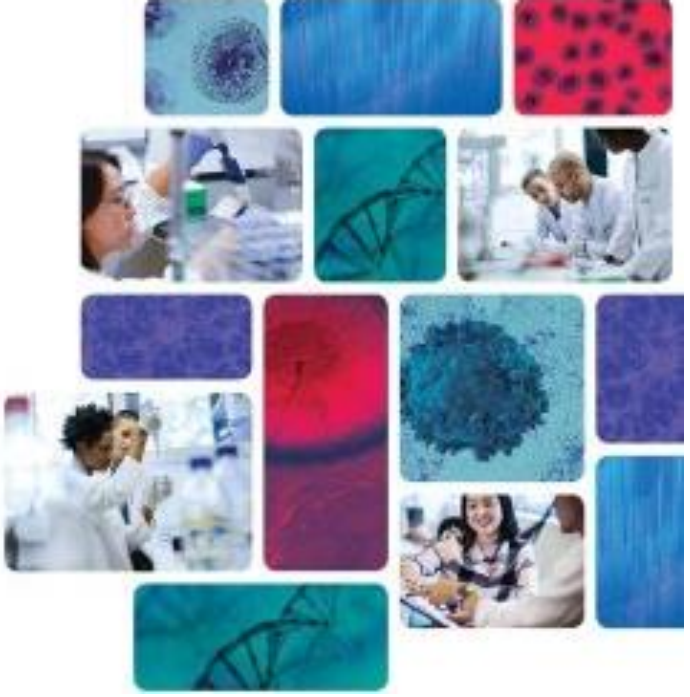
DukeNUS Medical School

Biology at True Resolution

Seminar Series



DATE
15th` Jul 2019 (Mon)

TIME
10.00am-11.30am

LOCATION
Duke-NUS Meeting Room 7C
(Level 7)

HOSTED BY

A/P Nai Yang FU
PhD. Assistant Professor, Programme in Cancer & Cell Biology
Duke-NUS Medical School

REGISTRATION

All Are Welcome!

Please register at the link below or via the QR Code

https://www.surveymonkey.com/r/2019jul10xoutram

For more information, contact Jowin NG
M: 9726 3442
E: jowin.ng@ri.com.sg

THE CHROMIUM SINGLE CELL ATAC AND SPATIAL TRANSCRIPTOMICS SOLUTIONS

ABSTRACT

In this seminar, we will introduce the Chromium Single Cell ATAC and Spatial Transcriptomics solutions from 10x Genomics. The Chromium Single Cell ATAC solution is a robust and scalable approach to study the epigenetic landscape at single cell resolution. It simultaneously profiles tens of thousands of single cells, allowing researchers to determine how chromatin compaction and DNA-binding proteins regulate gene expression at high resolution. This application can be used to study developmental plasticity and cellular heterogeneity, unravel gene regulatory networks, and enable biomarker discovery. The groundbreaking Spatial Transcriptomics solution allows scientists to measure gene activity in a tissue sample and map where the activity is occurring. Researchers can choose any gene of interest and display its spatially resolved expression on the original tissue section, facilitating a holistic understanding of cells in their morphological context. This application is instrumental in helping scientists to gain a better understanding of biological processes and disease pathology.

SPEAKER

Leo Chan obtained his PhD in Marine Biosciences (Microbiology) from the University of Delaware in the US in 2009. He competed his postdoctoral research studies at the University of Georgia then at the US DOE Joint Genome Institute (JGI) in 2013. Briefly, he worked as a Senior Research Associate at the JGI, then from late 2013 to early 2017, as a Technical Support Scientist, a Bioinformaticist, and a Global Field Applications Scientist at WaferGen Biosystem. His expertise is with single cell genomics and transcriptomics and with environmental metagenomics and metatranscriptomics. Since March of 2017, he has worked at 10x Genomics, currently serves as a Field Applications Scientist for Asia Pacific.