CANCER SCIENCE INSTITUTE OF SINGAPORE

SEMINAR ANNOUNCEMENT

Dr Mo Chen, PhD

The Rockefeller University
New York, USA



JMJD1C, A Novel Tumor Dependency, Functions as an Essential Cofactor for Leukemic Transcription Factors

Date: **Tuesday 13 December 2016**

Time: **11am - 12pm**

Venue: **CeTM Active Learning Room #01-01A**
14 Medical Drive, Centre for Translational Medicine, Singapore 117599

Host: **Prof. Daniel Tenen**

Abstract:

Hematopoietic stem cells (HSC) are controlled by the expression of key HSC transcription factors (TFs) that act cooperatively to maintain a balance of self-renewal and differentiation. The functions of key TFs are frequently dysregulated in leukemia by chromosomal translocations or mutations. AML1-ETO (AE), generated by the t(8; 21) translocation, dictates a leukemic program by forming a stable TF/cofactor complex (AETFC) containing several HSC TFs. Dr Chen shows that the demethylase JMJD1C functions as a coactivator for AETFC and is required for its transcriptional regulation. She also show a critical role for JMJD1C in the survival of multiple human AML cell lines, suggesting that it is required for different AML cell types through its association with key transcription factors.

Biography:

Mo Chen obtained her PhD at Columbia University in New York after working in James Manley's laboratory on the mechanisms and regulation of pre-mRNA splicing. In 2012, she joined the lab of Robert Roeder at The Rockefeller University, also in New York, as a post-doctoral fellow, to work on transcriptional regulation in AML1-ETO dependent leukemia.