NANYANG TECHNOLOGICAL UNIVERSITY

School of Biological Sciences

Seminar Announcement

Mixed Lineage Leukemia 5: from cell cycle regulation to tumorigenesis

Date: 19 October 2015 Monday

Time: 2:30pm to 3:30pm

Venue: SBS Classroom 4 (SBS-01n-24)

Host: A/Prof Thirumaran Thanabalu



Speaker: **Prof Deng Lih Wen**
Department of Biochemistry,
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National University of Singapore (NUS)

Abstract

Human Mixed Lineage Leukaemia-5 (*MLL5*) gene is a mammalian trithorax group gene located at chromosomal band 7q22, one of the most frequently deleted regions found in acute myeloid malignancies. Mixed Lineage Leukemia 5 (MLL5) has been implicated in many aspects of cellular processes including cell cycle control, development and epigenetic regulation. In this seminar, I would like to share our recent findings on a dual function of MLL5 in maintaining mitotic fidelity and genomic integrity via regulation of the stability of the chromosomal passenger complex and polo-like kinase 1 (PLK1) centrosomal localization. In addition, our recent work on the characterization of a novel MLL5 isoform (MLL5β) as a specific and critical regulator of human papillomavirus E6 and E7 transcription in cervical carcinoma cells will be presented. Lastly, the potential of MLL5β as a biomarker and new therapeutic target in primary HPV-induced cervical cancers will be discussed.