Title: **Circulating microRNA signatures for breast cancer detection**

Speaker: **Dr Ann Lee**
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Date: 9 October 2013 (Wednesday)

Time: 3 pm

Venue: Workshop 1, Level 1, Department of Physiology, MD9

Abstract

The high prevalence of breast cancer, and the good prognosis for patients with early-stage disease, motivated an active search for diagnostic biomarkers for breast cancer detection. Traditional diagnosis by mammography has its limitations as a screening tool, and efforts to identify serum markers have generally revealed a lack of diagnostic ability of serum proteins. Although there is increasing evidence that microRNAs are linked to malignancy, little has been known about the status of circulating microRNAs in breast cancer, or their relationship to microRNAs in matched tumor cells. To address these issues, we embarked on a study to identify and validate discriminatory circulating microRNA signatures for breast cancer. From our research, we noted little correlation between tumor and serum expression of microRNAs. Importantly, novel microRNA expression signatures were identified which have sufficient diagnostic efficacy for the potential development of blood-based biomarkers for breast cancer detection.

About the Speaker

Dr Ann Lee is a Principal Investigator at the Humphrey Oei Institute of Cancer Research, National Cancer Centre, Singapore, and an adjunct Associate Professor at the Office of Clinical & Academic Faculty Affairs, Duke-NUS Graduate Medical School, Singapore.

She trained at the University of Melbourne in Pathology and Biochemistry and pursued an MSc degree at the WHO Immunology Centre, National University of Singapore. Thereafter, she completed her doctoral studies in molecular pathology at the University of Oxford.

Prior to joining the National Cancer Centre, she worked as a Senior Research Scientist at the Department of Clinical Research at the Singapore General Hospital (SGH), where she was involved in research projects in infectious diseases and cancer with SGH clinicians.

Her current research focuses on the predisposition and early detection of breast cancer. In particular, her group is interested in the elucidation of genetic aberrations and molecular mechanisms associated with cancer susceptibility and familial cancer, and the utilization of circulating microRNAs for breast cancer detection.

Convenor: Dr Thai Tran

All Are Welcome