



香港中文大學醫學院
Faculty of Medicine
The Chinese University of Hong Kong



Seminar:

New Technologies for Sensitive, Low-Input and Single-Cell RNA-Seq

Date: 16 June 2016 (Thursday)

Time: 11:00 am – 12:00 noon

Venue: Room 407-408, 4/F, Li Ka Shing Medical Sciences Building,
Prince of Wales Hospital, Shatin, New Territories

Speaker: Dr. Nathalie Bolduc
Scientist, Clontech Laboratories

Abstract:

Next-generation sequencing (NGS) has increased our understanding of biological phenomena and human disease by enabling highly sensitive transcriptome analysis. As new applications for NGS emerge, Clontech continues to develop powerful new tools built on their proprietary SMART[®] technology that use the template-switching activity of customised reverse transcriptases to sequencing libraries and to analyse challenging samples. These kits are suitable for ultra-low input or single-cell RNA, noncoding RNA, and RNA from degraded samples. The newest generations of ultra-low input/single-cell mRNA-seq, small RNA-seq, and picogram-input total RNA-seq kits have brought increased sensitivity to SMART technology by improving upon the SMART-Seq[®] method and incorporating locked nucleic acid (LNA) technology. Expanding applications for SMART technology include a ligation-free method for generating ChIP (chromatin immunoprecipitation) sequencing libraries, and a 5' RACE-based approach for profiling human T-cell receptor (TCR) diversity. This seminar will take you on a tour of these new technologies and applications, and will highlight ongoing research on a variety of NGS applications, including small RNA-seq, single-cell RNA-seq, and immune repertoire analysis.

Speaker Profile:

Dr. Nathalie Bolduc is a Scientist at Clontech and has been developing cutting edge tools for next-gen sequencing. She has a Masters and Ph.D degrees in Biochemistry from the Universit Laval, Canada. She worked as a post-doctoral research fellow and subsequently as a Researcher at UC Berkeley. She also held a Researcher of Molecular Biology position at the USDA-ARS. Since then she has been a scientist at Clontech Laboratories, Inc.

All are welcome.

For enquiries, please contact Mr. Jonathan Lee at 3763 6005.