

TCAG New Technologies Seminar

Nextera Rapid Exome and RNA Sequencing: NGS Applications to Advance your Research

Date: Wednesday, May 8th, 2013
Time: 10:00-11:30 AM
Location: Room 4-204, MaRS TMDT
101 College St.

Speaker: Michael Smith, Ph.D.,
Illumina, Inc.

Illumina has an extensive portfolio of sequencing systems, from the powerful, high-throughput HiSeq systems to the ultra fast MiSeq system. Empowered by TruSeq and Nextera technologies, each sequencer features the industry's simplest, most streamlined workflow and delivers unparalleled data quality for a wide range of research applications. This seminar will focus on the following two applications.

Nextera Rapid Capture Exome enables sample prep and exome enrichment for up to 96 samples in only 1.5 days. Rapid sequencing with the HiSeq2500 system allows experiments to go from DNA sample to data in only 2.5 days, dramatically faster than all other technologies.

RNA sequencing has revolutionized the exploration of gene expression. With the greatest daily output available for any sequencing system, transcript profiles can be generated in a single day. RNA sequencing reads can be aligned across splice junctions to identify isoforms, novel transcripts and gene fusions. Identify and quantify both rare and common transcripts, with over six orders of magnitude of dynamic range. Derive strand information with high precision. Perform robust whole transcriptome analysis on a wide range of samples, including low-quality and FFPE.

**Hosted by The Centre for Applied Genomics and
the Ontario Genomics Institute**



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