

# TCAG New Technologies Seminar

## Applications of Single Molecule, Real-Time (SMRT) Sequencing to Understand Complex Human Diseases

**Date:** Thursday April 18  
**Time:** 11:00 AM - noon  
**Location:** Room 14-203, MaRS TMDT  
101 College St.  
**Speaker:** Jonas Korfach, Ph.D.  
Chief Scientific Officer



SMRT sequencing is a new DNA sequencing technology which is characterized by long read lengths and high consensus accuracy, regardless of the sequence complexity or GC content of the DNA sample of interest. These characteristics can be harnessed to gain information about human genomic regions previously inaccessible with other technologies. This seminar will highlight these new applications, including the study of trinucleotide repeat expansions, structural variations, large-scale deletions, and palindromic sequences. I will also discuss applications of SMRT sequencing for long-range haplotype phasing and splice isoform characterizations, minority species detection in cancer, and the direct determination of epigenetic information alongside the DNA sequence.

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



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