TCAG New Technologies Seminar

Complete Human Genome Sequencing Through The Centre for Applied Genomics/Complete Genomics Partnership

Date: Tuesday Jan 18, 2011

Time: 1:30 PM

Location: Room 14-203,

MaRS Centre East Tower

101 College St.

Speaker: Donald A. Skifter PhD, MBA

Complete Genomics

Complete human genome sequencing provides a comprehensive snapshot of genetic variation within individual tissue samples. The recent formation of a partnership between The Centre for Applied Genomics at The Hospital for Sick Children and Complete Genomics facilitates both sequencing and analysis at a low cost. In the present talk, this partnership and Complete Genomics' technique for sequencing complete human genomes with high accuracy and coverage leading to clinically-relevant outcomes will be presented. Complete Genomics' novel approach allows for identification of not only small variants including SNPs and InDels, but also with an extensive genome assembly and analysis pipeline, for the characterization of larger SVs including CNVs. Variant annotation and a suite of software tools further provide researchers with a comprehensive ability to analyze both coding and noncoding genetic variants. Declining complete human genome sequencing costs will enable a translational genetic understanding of individual disease risk, causation, and potential treatment options.

Hosted by The Centre for Applied Genomics



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