FLUIDIGM®

The Power of Microfluidic Technologies available to you at SickKids

Presenter: Katy Richards-Hrdlicka, Ph.D, Fluidigm Application Scientist

Seminar Details:

Tuesday, May 10th, 2016 1:00pm – 2:00pm

with time for Q&A and discussions

Location: PGCRL rm 13.9701

Abstract: ***The Biomark HD*** fuels bulk and single-cell qPCR for dozens to hundreds of cDNA targets. By itself, the Biomark HD can do RT-qPCR, RT-dPCR, and SNP genotyping on bulk samples (traditional approach) and single-cells. At its highest throughput, the Biomark HD processes 96 samples against each of 96 targets - within a span of a just a few hours with <5uL of DNA; that's equivalent to running 9,216 qPCRs! The power of parameters enabled by the Biomark HD is producing and uncovering highly resolved gene networks, gene-gene correlations, cell types, cell line verification, and bold, new hypotheses. You can easily and confidently access the genetic data from degraded and precious sample types, since reactions occur at the nanoliter scale.

Like the Biomark HD, the ***C1 Single Cell Auto Prep system*** is enables high-parameter investigations, with a multitude of chemistry options**, but specifically designed for single cells**, not bulk samples. Analyzing single cells is one of the best ways to profile rare or heterogeneous populations of cells. For each of your single-cells, the C1 can prepare: full length cDNA, the whole amplified genome, targeted cDNA enrichment (for downstream qPCR on the Biomark HD!), open chromatin regions (ATAC seq), 3' end counting chemistry (CEL seq), 5'end counting (STRT seq), and many more!

Using Fluidigm's microfluidic technologies in your research provides many advantages, such as reducing reaction sizes to nanoliter volumes, and targeting more than 96 targets (SNP loci or genes, including miRNA), and automation in a single run within just a few hours.

Space is LIMITED: Please RSVP with Zeeshan.Farooq@Fluidigm.com