Revolutionize your capacity to understand the scale of transcriptomic diversity one cell at a time.

The offers a novel approach to single-cell genomics. The systems allow investigators to rapidly and reliably isolate, process, and profile hundreds to thousands of individual cells in parallel for multiple genomics applications:

- Targeted gene expression of up to 96 targets by qPCR on the Biomark HD
- RNAseq
- miRNA expression profiling

The Fluidigm workflow consists of:

- The C1 system for isolation of single cells into individual reaction chambers on Fluidigm's integrated fluidic circuit (IFC). The optically clear IFC lets you automatically capture cell based on cell size; 5-10 uM, 10-17 uM, or 17-25 uM. Cells are automatically lysed and template is prepared for qPCR or sequencing analysis.
- The Biomark High Density real-time PCR systems enables parallel analysis of 12, 48 or 96 single cell cDNA's against 12, 48, or 96 user selected genes on a single IFC.
- Downstream sequencing can be performed on Illumina sequencing platforms and data can be analyzed by the Integrative Genomic Analysis Shared Resource.

Examples: a) and b) 96 single cells captured from cell suspension and RNA sequence data generated on 96 single cells. c) 96 single cells captured from cell suspension and RTPCR on 96 genes (user provides Taqman assays)

a) $1693 (single cell isolation) + $3552 (library prep) + $1057 (50 bp SR Illumina HiSeq for differential expression) = $6,302

b) $1693 (single cell isolation) + $3552 (library prep) + $2064 (125 bp PE Illumina HiSeq for differential expression and alternative splicing) = $7,309

c) $2193 (single cell isolation and qRTPCR assay with user provided Taqman assays)

Data analysis support through the Integrative Genomic Analysis Shared Resource and data storage up to 1 Tb for $92/year