ANNOUNCEMENT
August 8, 2018

Illumina NovaSEQ, Pacific BioSciences Sequel and 10x Genomics Chromium System: New, Updated and Expanded Services provided by the University of Chicago Genomics Facility.

The University of Chicago Genomics Facility has:

- ❖ purchased an **Illumina NovaSEQ 6000 Sequencing System.**
  The NovaSEQ represent Illumina's most advanced sequencer and provides the largest data output at the lowest price amongst the currently available Illumina Sequencers. This instrument over time will replace the Facility's current instrument, a HiSEQ4000. To celebrate the NovaSEQ addition the Facility is running an RNA-SEQ promotion (oligo-dT based library, PE50bp sequencing, ~30M clusters (60M PE reads) per sample) for $199 per sample (minimum number of samples =12, other rules and restrictions apply).
  Website: https://www.illumina.com/index-d.html

- ❖ purchased and installed a **Pacific Biosciences Sequel.**
  Different from Illumina-based sequencing by providing single molecule sequencing and (much) longer read-lengths the Sequel is well suited for whole genome sequencing of complex genomes, full-length transcriptome sequencing as well as epigenetics (nucleotide modifications can be detected).
  Website: https://www.pacb.com/smrt-science/smrt-sequencing/

- ❖ purchased a **10xGenomics Chromium System.**
  This system is a powerful addition to the Illumina short-read sequencing systems through the following applications: Chromium Single Cell 3' (deep single cell gene expression profiling of complex cell populations), Chromium Genome (long-range information on a genome-wide scale, including variant calling, phasing and extensive characterization of genomic structure, enabling identification of critical variants in heritable disorders and discovery of key alterations in cancer) and Chromium Exome (long-range information for phasing, structural variant detection and copy number determination, giving researchers access to low-complexity and repetitive regions previously missed with short-read sequencing).
  Website: https://www.10xgenomics.com/

- ❖ existing Micro-Array services: **Illumina Infinium** arrays and all **Affymetrix** gene expression arrays

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