UC San Diego Center for Computational Biology & Bioinformatics

Scope of Work
2020
RNA-seq Analysis

UCSD Internal rate: $180/hour
Non-profit rate: $261/hour
For-profit rate: $362/hour

Bulk RNA-seq

Primary Analysis

1. Raw data quality control (method: FASTQC)
2. Alignment of raw data to genome (method: STAR)
3. Gene or transcript level quantification (method: RSEM or Kallisto)

Cost: 0.5 hours/sample for ≤ 20 samples ; 0.25 hours/sample for any additional samples above 20 (bulk rate)

Secondary Analysis

1. Assessment of experimental design and analysis design
2. Quality control of read quantification & outlier detection (method: MDS plot)
3. Normalization (method: TMM normalization)
4. Differential expression analysis (method: limma-voom)
5. Functional enrichment analysis & pathway analysis (method: Hypergeometric test and GSEA)
6. Standard figures: MDS plots, MD plots and heatmaps of top 25 DE genes

Cost: 15-25 hours. Additional time in 5 hour increments for additional design complexity and custom downstream requests or visualizations.

Data Overlay

1. Assessment of second data set and methods for data overlay (~2-5 hours)
2. Correlate RNA-seq results and other dataset (~10-25 hours)
3. Overlay RNA-seq results and other dataset on significantly dysregulated pathways (~5-10 hours)

Cost: Hourly

Deliverables:

1. Consultation meeting to discuss experimental design, biological questions and analysis
2. Results files from all analyses outlined
3. Open source code from all analyses
4. Summary powerpoint presentation of all results
5. Post-analysis meeting to discuss results

Single cell RNA-seq

Primary Analysis

- CellRanger

Cost: 1 hour/sample

Secondary Analysis

- Seurat

  Cost: 20-40 hours depending on scope. Additional time in 5 hour increments for additional design complexity and custom downstream requests or visualizations.

Trajectory Analysis

Cost: 20-60 hours depending on scope.

Spatial Transcriptomics

Visium

Primary analysis cost: 2 hours/sample
Secondary analysis cost: 20-40 hours depending on scope.

Nanostring GeoMX

Cost: 20-40 hours depending on scope.