Texas A&M University Institute for Genome Sciences and Society
Molecular Genomics Core

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Sample preparation



1. DNA/RNA extraction, including high molecular weight DNA, from various sources such as bacteria, animal tissues, plants, and soil, among others.
2. DNA/RNA Quality and Quantity Check services. (Agilent Bioanalyzer and Tapestation, Femto Pulse Qubit Fluorometric Assays)

Next Generation sequencer-illumina



1. Whole Transcriptome & Small RNAseq,
2. Whole Genome & exome
3. CHIPseq, Dovetail Omni-C
4. 16S rRNA Microbial Profiling,
5. Targeted Capture & Amplicon-seq,
6. SARS-CoV-2 sequencing

Next Generation sequencer-Nanopore



1. Unrestricted read length (DNA/RNA from 20 bases up to 4 million bases)
2. Direct sequencing (native DNA/RNA reads)
3. Ultra-long library preparation, N50>100kb.



Genotyping platforms



Illumina Infinium Microarray Assays,
ImmunoArra v2 Analysis,
Human Global Screening Array Analysis,
MethylationEPIC DNA Analysis, coming soon
Select Custom DNA Analysis.

Optical genome mapping



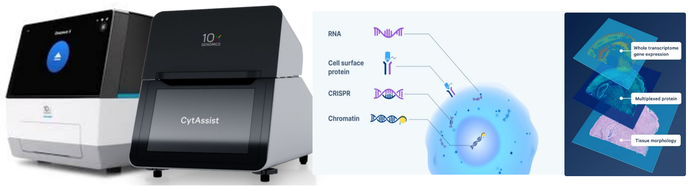
Bionano DLS Enzyme labeling,
plus, related solutions.

The Saphyr® System by Bionano Genomics images ultra-long, linearized DNA molecules labeled at specific sequence motifs. Comparative analysis of the label patterns over long contiguous reads across the whole genome reveals structural variants (>500 bp) at sensitivities as high as 99%, with false positive rates below 2%, even at allele fractions down to 5%.
This system is replacing traditional cytogenetics methods and has the capability of assembling the De novo genome across multiple species.

Webpage

Contact us

10x Chromium and Visium



Miltenyi tissue dissociator for dissociation of tissue into single cell suspensions.

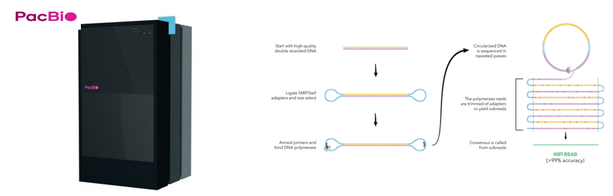
1. Single-cell Gene expression (3” GEX-M)
2. Single-cell Immune Profiling (5” GEX-M +VDJ)
3. Single-cell ATAC-seq
4. Single-Cell Multiome (ATAC+GEM)
5. Fixed Single-Cell Gene expression (Human and Mouse)
6. HT Gene Expression and Immune Profiling
7. Visium Spatial Expression (Fresh Frozen, FFPE, Fixed Frozen)
8. Nuclei isolation for Single Nuclei Gene Expression

Why choose us

1). State-of-the-Art technology
2). Experienced Team of Genomics Experts
3). Tailored Solution to Meet your Research Requirement
4). In-House Expertise in Bioinformatics
5). Comprehensive Support for Post-Genomic Research

Convenience, Credibility, Reliability

PacBio Revio



1. Whole Genome and Metagenome libraries
2. Kinnex Full-length RNA libraries
3. Kinnex 16S rRNA libraries
4. Kinnex Single Cell Full-length RNA libraries

Additional services

Adventitious Agent (AA) Testing

- Extensive experience using NGS for AA testing
- An efficient bioinformatics pipeline

Location



Reynold Medical Sciences Building, Rm 440
206 Olsen Boulevard, College Station, TX 77845