



Instruments

Illumina NextSeq550Dx instrument

- > High-throughput system
- > Four flow cell types (SP, S1, S2, or S4)
- > Output: from 65 Gb to 3000 Gb
- > Reads Per Run: 800 M – 10 B
- > Read Length: 35-500 bp
- > Key Applications: Whole-Genome Sequencing, Targeted Resequencing- WES



Illumina NextSeq2000 instrument

- > Maximum output: 15Gb
- > Reads Per Run: 1-25 million
- > Read Length: 50-600 bp
- > Accuracy: 99,9%
- > Key Applications: Small Whole-Genome Sequencing (microbe, virus), Targeted
- > Gene Sequencing (amplicon, gene panel), 16S Metagenomic Sequencing



Illumina NextSeq550Dx instrument

- > Maximum output: 120 Gb
- > Reads Per Run: 130-400 million
- > Read Length: 75-300 bp
- > Accuracy: 99,9%
- > Key Applications: Small Whole-Genome Sequencing (microbe, virus),
- > Exome Sequencing, Whole-Transcriptome Sequencing, Targeted Gene Sequencing
- > (amplicon, gene panel), Gene Expression Profiling with mRNA-Seq, miRNA & Small
- > RNA Analysis, DNA-Protein Interaction Analysis, Methylation Sequencing



Illumina MiSeqDx instrument

- > Maximum output: 15Gb
- > Reads Per Run: 1-25 million
- > Read Length: 50-600 bp
- > Accuracy: 99,9%
- > Key Applications: Small Whole-Genome Sequencing (microbe, virus), Targeted
- > Gene Sequencing (amplicon, gene panel), 16S Metagenomic Sequencing



Oxford Nanopore MinION

- > Output: 10–30 Gb of DNA sequence data Ultra-long read lengths (>100Kb)
- > Accuracy: ~92–97% single read Nanopore-based reader allowing the sequencing of single molecule DNA and RNA fragments, can detect methylated nucleotides. Best suited for RNA isoform identification, genome assembly purposes and long sequencing reads into repetitive DNA regions



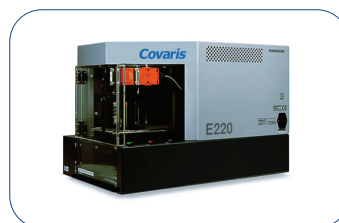
10X Genomics Chromium Controller

- > Powered by Next GEM technology, it enables the analysis of single cells at massive scale, in multiple samples. Integrated multiomic approaches allow simultaneous profiling of Gene Expression and Chromatin accessibility or Immune Profiling, at single cell level



Covaris E220evolution Focused-ultrasonicator

- > Capable of processing a wide range of sample types and volumes, it can process multiple samples in parallel.
- > Supports DNA and RNA Extraction from FFPE Samples, Chromatin Shearing for ChIP and DNA and RNA Shearing for Next-Generation Sequencing applications



NanoDrop® ND-1000 Spectrophotometer

- > Measure nucleic acid concentrations using only 1µL of sample
- > Quickly and easily quantify and assess purity of different type
- > of samples
- > No need for extra reagents



Agilent 2100 Bioanalyzer

- > For sizing, quantitation and quality control of DNA and RNA, proteins and cells
- > Quickly and easily quantify and assess purity of different type of samples
- > No need for extra reagents



Qubit™ 4 Fluorometer

- > Accurate measurement of DNA or RNA for rare and difficult-to-process samples
- > The fluorescent dyes are specific to the target of interest
- > Uses as little as 1 µL of sample

