NGS WHOLE GENOME SEQUENCING

Achieve Maximum Efficiency Without Losing Quality

Flexible Project Design

Library Preparation Methods

- Short fragments with Illumina® TruSeq DNA & PCR-Free
- Nextera Mate Pair Library Prep Kit from Illumina
- Long fragments with PacBio® Libraries

Sequencing Technology

- Illumina
  - NovaSeq 6000 Sequencing System
  - HiSeq X Series
  - HiSeq 2500 System
  - HiSeq 4000 Sequencing System
  - MiSeq System
- PacBio
  - RSII Sequencer
  - Sequel System

Accurate Analysis

De novo Assembly

- Genome survey: filtering and K-mer analysis
- Assembly:
  - Assembly (contigs and scaffolds)
  - Gap filling
  - Gene prediction and annotation

Re-Sequencing

- Assembly to reference genome
- Variant calling and annotation
- Comparative analysis
- Variant merge and filtering

Low-Pass Sequencing

Library Prep

- iGenomeX and SeqWell

Sequencing

- HiSeq X and NovaSeq 6000

Analysis

- Raw data and imputation

LEARN MORE ABOUT OUR WGS SERVICES

https://psomagen.com/research-sequencing-services/ngs/whole-genome-sequencing