

ILLUMINA



MiniSeq System

Power and simplicity for targeted sequencing.



MiSeq Series

Small genome and targeted sequencing.



NextSeq Series

Everyday genome, exome transcriptome sequencing, and more.



HiSeq Series

Production-scale genome, exome, transcriptome sequencing, and more.



HiSeq X Series

Population- and production-scale human whole-genome sequencing.



NovaSeq Series

Population- and production-scale genome, exome, transcriptome sequencing, and more.

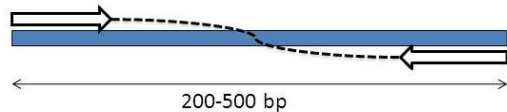
The Genome Access Course

Types of Sequencing Libraries

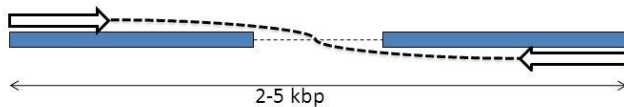
Single-End Reads - 5' or 3' (random)



Paired-End Reads - 5' and 3'



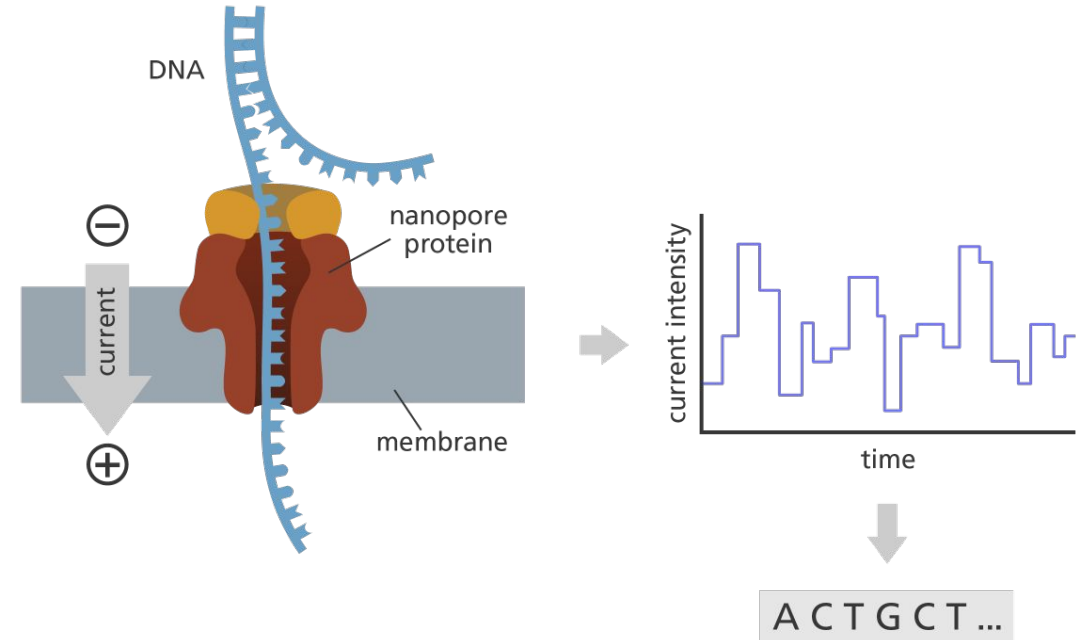
Mate-Pair Reads - 5' and 3'



November 2014

- Short-reads sequencing
- 25 to 300bp
- A large choice of sequencing machine

Oxford Nanopore Technologies



PACIFIC BIOSCIENCES (PACBIO)

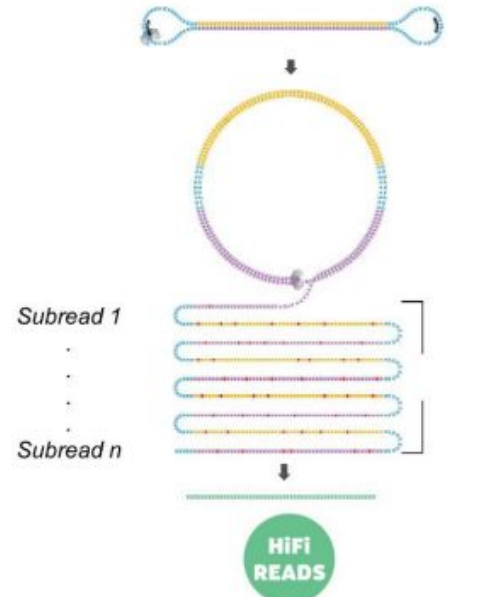
TWO MODES OF SMRT SEQUENCING



SEQUEL (I or II)

Circular Consensus Sequencing (CCS) Mode

Inserts 10-20 kb



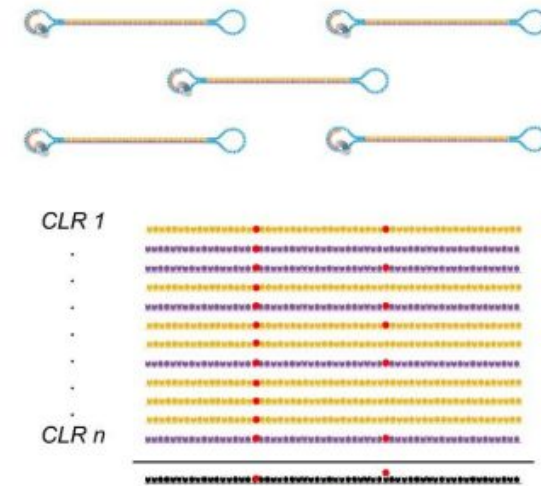
Single-molecule consensus sequence

99% Accurate

Single molecule;
multiple reads

Continuous Long Read (CLR) Sequencing Mode

Inserts >25 kb, up to 175 kb



Multi-molecule consensus sequence

90% Accurate

Multiple molecules;
single reads

Hifi = High Fidelity