

Illumina Sequencing (SBS)

1



Library Preparation

DNA fragments are prepared with adapters attached to both ends

2



Cluster Generation

DNA fragments bind to flow cell surface and amplify into clusters

3



Sequencing by Synthesis

Fluorescently labeled nucleotides are added one at a time

4



Imaging & Data Analysis

Camera captures fluorescent signals and converts to sequence data

Read Length

50-300 bp

Accuracy

>99%

Throughput

Market Share

Up to 6 Tb/run

~80% of NGS