

SÉMINAIRE

Sequencing and applications using Oxford Nanopore long reads at Genoscope

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Sequencing by nanopore is a promising technology that makes it possible to determine the sequence of a DNA fragment without amplification and without synthesizing a DNA strand. Available since 2014 the Oxford Nanopore sequencer, named MinION, is a portable device that enables the sequencing of complex genomes at low cost. Nowadays, the MinION can deliver several gigabases of data and is able to sequence DNA fragments up to 1Mb. The presentation will provide an overview of how the device has evolved over the last two years and what are the main applications today. Next we'll end up with the presentation of the PromethION, the high-throughput platform that promise to lower the cost of sequencing a human genome to <1000\$.