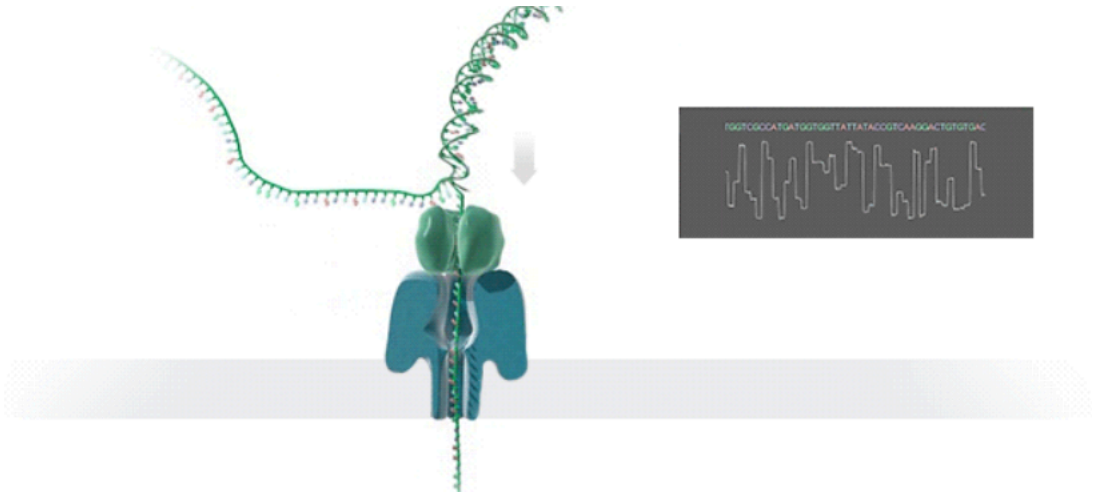
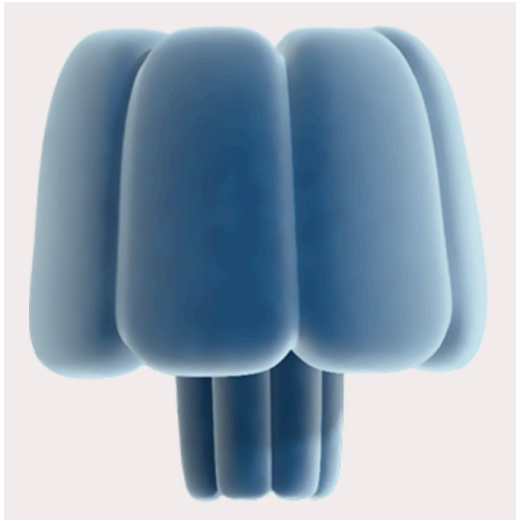
NANOPORE WORKFLOW

- A nanopore is a nano-scale hole.
- Oxford Nanopore passes an ionic current through nanopores and measures changes in current as biological molecules pass through the nanopore. This latter information is used to identify the molecule (e.g. G, A, T and C).
- This technology could be used to work on DNA, RNA and proteins.
- **Direct readout of long DNA strands/sequences (100 of kb), with minimum need for library construction (10 mins). Neither DNA synthesis nor degradation is involved.**





What can you do with the Nanopore platform?

- Small Whole-Genome Sequencing.
- Large Whole-Genome Sequencing.
- Targeted Sequencing.
- RNA Sequencing.
- Metagenomics.
- Methylation Sequencing (epigenetics).

SELECTING THE BEST SYSTEM FOR THE TASK

MinION

- Pocket-sized, portable device for biological analysis
- Up to 512 nanopore channels
- Simple 10-minute sample prep available
- Real-time analysis for rapid, efficient workflows
- Adaptable to direct DNA or RNA sequencing

About MinION | Start using MinION

Choose MinION if you:

- would like access to sequencing for $1,000
- want to sequence immediately, not wait
- want to sequence outside a lab
- need 10–20Gb per 48 hours
- want to avoid CapEx investments.

Sequence outside of a lab!

SmidgION

- Designed to be our smallest sequencing device so far
- Same nanopore sensing technology as MinION and PromethION
- Designed for use with a smartphone in any location

Learn more about SmidgION

GridION X5

- Multiple sequencing devices, one compute module
- Use up to five MinION Flow Cells at a time
- Benchtop processor capable of handling high data volumes in real time
- Rapid, real-time applications such as *Read Until* ...

About GridION | Get in touch

Choose GridION X5 if you:

- would like to offer nanopore sequencing as a service
- want the choice to invest from a CapEx or consumable budget
- work on larger sequencing projects (50–100Gb per 48 hours)
- would like on-device basecalling – no local infrastructure requirement.

PromethION

- High-throughput, high-sample number benchtop system
- Modular: Up to 48 flow cells, each with up to 3,000 nanopore channels (total up to 144,000)
- Flow cells may be run individually or concurrently
- Same workflow as MinION at larger scale

Choose PromethION if you:

- would like to offer nanopore sequencing as a service
- are interested in very large data volumes projects (Tb)
- are seeking on-demand sequencing for large numbers of samples
- would like to avoid CapEx investments