# Article information:

Nanopore sequencing technology, bioinformatics and applications | Nature Biotechnology  
<https://www.nature.com/articles/s41587-021-01108-x>

# Article summary:

1. Nanopore sequencing technology has been around for three decades and is used to sequence DNA molecules.

2. It uses a membrane channel to detect single polynucleotide molecules, and has been improved with time-varying cross membrane voltage.

3. The technology has been applied to various applications such as structure of staphylococcal α-hemolysin, cloning of the mspA gene, and sequence-specific detection of individual DNA polymerase complexes.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its presentation of the topic. It provides an overview of nanopore sequencing technology, its bioinformatics applications, and recent advances in the field. The article cites multiple sources from peer-reviewed journals that support its claims, providing evidence for the accuracy of its statements. Furthermore, it does not appear to be biased or one-sided in its reporting; rather, it presents both sides equally by exploring potential risks associated with nanopore sequencing technology as well as potential benefits. Additionally, the article does not contain any promotional content or partiality towards any particular viewpoint or application of nanopore sequencing technology.

However, there are some points that could be further explored in order to make the article more comprehensive and reliable. For example, while the article mentions potential risks associated with nanopore sequencing technology, it does not provide any detailed information about these risks or how they can be mitigated. Additionally, while the article discusses various applications of nanopore sequencing technology, it does not explore any unexplored counterarguments or missing points of consideration related to these applications. Finally, while the article provides evidence for its claims through citations from peer-reviewed journals, it does not provide any direct evidence for some of its statements such as those related to structure of staphylococcal α-hemolysin or cloning of mspA gene encoding a porin from Mysocbacterium smegmatis.

# Topics for further research:

* Mitigation of risks associated with nanopore sequencing technology
* Unexplored counterarguments related to applications of nanopore sequencing technology
* Structure of staphylococcal α-hemolysin
* Cloning of mspA gene encoding a porin from Mysocbacterium smegmatis
* Potential benefits of nanopore sequencing technology
* Ethical considerations of nanopore sequencing technology

# Report location:

<https://www.fullpicture.app/item/8a634a6c7b437ed599ac48cf0306623c>