8.3 GENOME PROJECTS

Sequencing

- Sequencing techniques are constantly improving
- Determining the base sequence of the entire genome
- Many organisms' genomes have been sequenced, including humans
- Application – knowing which genes allow some organisms to tolerate extreme conditions

Proteome

- Proteome = the complete set of proteins produced by the genome
- Application – determining the structure of antigens for vaccines
- By sequencing the genome of simple organisms, we can determine the proteome of specific cells
- Determining the proteome is more difficult in complex organisms
- There is lots of non-coding DNA in complex organisms, which makes it more difficult to identify the DNA coding for proteins

AQA

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