

Will palm-sized DNA sequencers be a staple of the future?

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An inexpensive handheld device that can read strands of DNA has been hailed as revolutionary by scientists who tested the product.

The palm-sized sequencer gives researchers the power to analyse DNA almost anywhere, and could help track disease outbreaks, run checks on food, and combat the trafficking of endangered animals.

The gadget marks a major step towards what Mark Akeson, a co-inventor at the University of California Santa Cruz, called “the democratisation of sequencing”, where anyone can gather and process DNA samples for themselves.

The 10cm-long, 90g device, named MinION by its British developers, Oxford Nanopore, has already been used by some scientists. In April, a team in Guinea read the genomes of 14 Ebola samples within 48 hours of them being taken from patients. Early next year, astronauts are due to use gadget to read DNA for the first time on the International Space Station.

In a [report](#), an international team of researchers, including Buck, describe a series of experiments that put MinION through its paces. Though an earlier prototype suffered from technical glitches, they found the latest version performed well.

The device is not designed to read very long genomes, such as the 3bn letters that make up the instruction book for human life, nor read them with the accuracy of one of the small car-sized machines found in major genetics labs. But it can quickly identify bacteria and viruses from their DNA, tell one strain from another, and spot different gene variants in sections of human genetic code.

Read full, original post: [Handheld DNA reader revolutionary and democratising, say scientists](#)