

What is CRISPR? And why should you care?

If you haven't heard of CRISPR yet, the short explanation goes like this: In the past six years, scientists have figured out how to exploit a quirk in the immune systems of bacteria to edit genes in other organisms — plants, mice, even humans. With CRISPR, they can now make these edits quickly and cheaply, in days rather than weeks or months.

...

Let that sink in. We're talking about a powerful new tool to control which genes get expressed in plants, animals, and even humans; the ability to delete undesirable traits and, potentially, add desirable traits with more precision than ever before.

...

But there are real limits to what CRISPR can do, at least right now. Scientists have recently learned that the approach to gene editing can inadvertently wipe out and rearrange large swaths of DNA in ways that may imperil human health.

...

As scientists work to overcome these limitations, much of the hype around CRISPR has focused on whether we might engineer humans with specific genetic traits (like heightened intelligence). But in some ways, that's a sideshow. "Designer babies" are still far off, and there are enormous obstacles to making those sorts of complex genetic modifications. The stuff that's closer at hand — from new therapies to fighting malaria — is what's most exciting.

Read full, original post: [A simple guide to CRISPR, one of the biggest science stories of the decade.](#)