

Targeted evolution: Why are we so afraid of CRISPR gene editing?

Here's the paradox: modern gene technology is far less genetically invasive – and much better understood – than the time-worn practice of selective breeding, and yet so many of us live in fear of genetically modified organisms. Instead of adding, removing, or reshuffling thousands of unknown genes in order to breed traits in or out of organisms, we're now able to act on just one well-characterised gene with precision.

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The potential applications of CRISPR are enormous. It's the closest we've ever come to a cure for cancer. We've already been able to cure HIV infection in animal models, and even in human cell cultures, by removing the viral genes that insert themselves into our DNA. Incurable genetic diseases, like Duchenne's muscular dystrophy, could soon be a thing of the past. CRISPR has already been used to cure the disease in rats. But some are not so convinced. Couldn't this technology be used to create a dystopia where only the rich can afford genetic enhancements to make themselves better, faster, stronger? The short and long answer is no. There are limits to gene technology.

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We're getting there. But for some, the technology could not come soon enough. CRISPR will save lives.

Editor's note: Fahad Ali is a geneticist and member of the Sydney Nano Institute and the Sydney Institute of Agriculture. He works in developing novel delivery methods for the CRISPR mechanism in plant cells.

Read full, original post: CRISPR will save lives – and technology can't come soon enough