

Using CRISPR to drive genes through a population likely to lead to 'resistance' in organisms

We might finally be able to beat evolution at its own game.

Using the gene editing tool CRISPR...biologists can arrange it so that a gene will spread exponentially through a population of organisms.

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But there is a chink in gene drives' armor. Specifically, it is possible for organisms to escape through an age-old trick, one that we're growing more familiar with by the day—by evolving resistance, just as bacteria evolve resistance to antibiotics. In a recent paper, ...evolutionary geneticist Rob Unckless of the University of Kansas and colleagues lay out mathematical models of what may happen when gene drives are released, and find that even under the best of conditions, resistance is certain to arise.

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Which is why researchers have begun to design ways to thwart resistance...It's possible, too, that resistance, in certain situations, could be useful.

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Still,...there have not been very many tests in real organisms or in realistic populations. No one thinks we have enough information yet about how gene drives work in practice to be able to reliably predict their effects.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [For Gene Drives, Resistance May Be Inevitable](#)