

Science journals should publish negative results to speed technological advances, CRISPR expert urges

Near the end of April, my colleagues and I published an [unusual scientific paper](#) — one reporting a failed experiment [T]rying to navigate through three other journals and countless revisions before finding it a home at *Genome Biology* has revealed to me one of the worst aspects of science today: its toxic definitions of ‘success’.

[Editor’s note: [Devang Mehta](#) is a synthetic biologist, plant scientist and science-writer.]

Our work started as an attempt to use the much-hyped CRISPR gene-editing tool to make cassava (*Manihot esculenta*) resistant to an incredibly damaging viral disease, cassava mosaic disease However, despite [previous reports](#) that CRISPR could provide viral immunity to plants by disrupting viral DNA, our experiments consistently showed the opposite result.

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Scientists have become so accustomed to celebrating only success that we’ve forgotten that most technological advances stem from failure When negative results aren’t published in high-impact journals, other scientists can’t learn from them and end up repeating failed experiments, leading to a waste of public funds and a delay in genuine progress. My study did not solve the scourge of viral disease in cassava, but it did show researchers where not to look for a solution, and that’s important for real progress.

Read full, original article: [Highlight negative results to improve science](#)