## CRISPR's new upgrade cleans up messy aftermath

## The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Molecule by molecule, the transformational genome-editing technology called CRISPR-Cas9 is getting <u>so many upgrades</u> so quickly it's like scientists are changing a flip phone into a Galaxy S7 overnight. Scientists just unveiled two more improvements that could speed the development of drugs and increase the chance of any CRISPR-based gene therapies succeeding.

"It's remarkable science and unquestionably spectacular work," said Eric Kmiec, director of the geneediting program at Delaware's Christiana Care Health System, who was not involved in the new study. "But the field is moving so quickly, I'm concerned that we might be doing things just because they're really cool."

The latest advances, <u>reported in Nature</u>, come on the heels of the recent <u>announcement</u> of a hack that allows CRISPR to change a single DNA "letter" into another without wreaking collateral damage on the genome.

CRISPR-Cas9's enthusiasm for cutting DNA has another consequence: It usually edits both copies of a gene, one from mom and one from dad. Until now, there has been no good way to edit only one copy and leave the other alone.

That might seem like a good problem to have: If CRISPR-based gene therapies ever arrive, presumably fixing both disease genes would be beneficial. But for basic research on what goes wrong in a disease, as well as on drugs to treat it, an edit that makes cells carry only one copy of a disease gene is more valuable than an edit that creates two.

Read full, original post: Scientists solve CRISPR's 'Energizer bunny' problem