

DNA movies? Gene editor CRISPR used to store 'movie' in bacteria

Internet users have a variety of format options in which to store their movies, and biologists have now joined the party. Researchers have used [the microbial immune system CRISPR–Cas](#) to encode a movie into the genome of the bacterium *Escherichia coli*.

The technical achievement...is a step towards creating cellular recording systems that are capable of encoding a series of events, says Seth Shipman, a synthetic biologist at Harvard Medical School in Boston, Massachusetts.

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Shipman's team exploited the ability to [capture snippets of DNA from invading viruses](#) and store them in an organized array in the host genome...The team designed its system so that these snippets corresponded to pixels in an image. The researchers encoded the shading of each pixel — along with a barcode that indicated its position in the image — into 33 DNA letters. Each frame of the movie consisted of 104 of these DNA fragments.

Below, original images of the galloping mare Annie G. (left) are shown next to images encoded into bacterial DNA and recovered (right) using the gene-editing tool CRISPR.

"It's full of limitations, but this is pioneering work that they're doing," [notes bioengineer Randall Platt at the Swiss Federal Institute of Technology (ETH) Zurich in Basel].

[Read the full study [here](#)]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Lights, camera, CRISPR: Biologists use gene editing to store movies in DNA](#)