

Chocolate producers look to CRISPR gene editing to help cacao trees adapt to climate change

With the help of a suite of genetic engineering tools including [CRISPR](#) — and money from Mars Inc., one of the world's biggest chocolate producers — researchers with Berkeley's Innovative Genomics Institute are [working to breed a super-resilient variety of cacao tree](#).

The institute's work starts with light-pink cacao flowers taken from trees grown on a plantation near Miami and then shipped to Berkeley. The tiny flowers may hold the key to making cacao trees more tolerant of weather extremes and more resistant to disease.

Scientists at the institute remove cells from the petals, sterilize them to kill off fungi or germs, and then place single plant cells into culture dishes. From there, the scientists plan to use the [gene-editing tools](#) in an attempt to create mutations within the DNA inside the cells, which would then grow into cacao trees; one or more of these many gene-edited trees may prove superior at resisting disease.

At some point, the scientists might even be able to engineer trees whose flowers bloom at different temperatures, or trees with higher yields of cacao beans.

Read full, original post: [These scientists are on a mission to save chocolate](#)