

## ‘Just because we can do it, should we?’ How CRISPR co-creator Jennifer Doudna is furthering the discussion over the ethics of human genome editing

In 2012, [Jennifer] Doudna, then a relatively unknown biochemist at the University of California Berkeley, [published](#) a paper with Emmanuelle Charpentier of Umeå University proposing that the bacterial enzyme Cas9 could be used to edit genes through a method called CRISPR. They weren't the first to demonstrate that gene editing could be done, but CRISPR was a revolutionary leap in its precise ability to manipulate genes.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

From the start, she understood that precise gene editing would have enormous consequences for the entire species, and that scientists could not wait before grappling directly with those ethical questions.

In 2015, she [led a group of scientists](#) calling for a worldwide moratorium on the use of CRISPR to alter human genes in a way that could be inherited. Her 2017 book [A Crack in Creation](#) was concerned as much with the ethical questions surrounding CRISPR as it was with the revolutionary science that led to its discovery. In between her research and her role commercializing CRISPR at Mammoth Biosciences, a biotech startup she [co-founded](#), she has continued to ask tough questions about gene editing applications. As she [told the New York Times recently](#): “If we can do it, should we be doing it? If we are going to do it, in what circumstances, and who decides?”

[This is an excerpt. Read the full article here](#)