Scientist who discovered CRISPR/Cas9 weighs future of new technology

Three years ago, Jennifer A. Doudna, a biochemist at the University of California, Berkeley, helped make one of the most monumental discoveries in biology: a relatively easy way to alter any organism's DNA, just as a computer user can edit a word in a document.

The discovery has turned Doudna (the first syllable rhymes with loud) into a celebrity of sorts, the recipient of numerous accolades and prizes. The so-called Crispr-Cas9 genome editing technique is already widely used in laboratory studies, and scientists hope it may one day help rewrite flawed genes in people, opening tremendous new possibilities for treating, even curing, diseases.

But now Doudna, 51, is battling on two fronts to control what she helped create.

While everyone welcomes Crispr-Cas9 as a strategy to treat disease, many scientists are worried that it could also be used to alter genes in human embryos, sperm or eggs in ways that can be passed from generation to generation. The prospect raises fears of a dystopian future in which scientists create an elite population of designer babies with enhanced intelligence, beauty or other traits.

Scientists in China reported last month that they had already used the technique in an attempt to change genes in human embryos, though on defective embryos and without real success.

Doudna has been organizing the scientific community to prevent this ethical line from being crossed. "The idea that you would affect evolution is a very profound thing," she said.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Jennifer Doudna, a Pioneer Who Helped Simplify Genome Editing