

Gene editing's biggest challenge: Figuring out what makes us human

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

People in pain write to Jennifer Doudna. They have a congenital illness. Or they have a sick child. Or they carry the gene for Huntington's disease or some other dreadful time bomb wired through every cell in their body. They know that Doudna helped invent an extraordinary new gene-editing technology, known as CRISPR.

But they don't all seek her help. One woman, the mother of a child with Down syndrome, explained: "I love my child and wouldn't change him. There's something about him that's so special. He's so loving in a way that's unique to him. I wouldn't change it."

The scientist tears up telling this story.

"It makes you think hard about what it means to be human, doesn't it?" she says.

CRISPR is not the first method for manipulating genes, but it's by far the cheapest, easiest, most versatile. Its many attributes have generated incredible excitement as well as apprehension. While the approach hasn't been applied yet in humans for therapeutic purposes, that's on the horizon. So are worrisome scenarios involving genetic enhancements and purely cosmetic applications.

This is all happening with dizzying speed. CRISPR has spawned two contentious, parallel debates, with Doudna squarely in the middle of both.

The first is the ethical issue raised by the mother of the child with Down syndrome: How far should we go in editing the human genome?

Read full, original post: [Pondering 'what it means to be human' on the frontier of gene editing](#)