CRISPR 'democratizing' genetics, medicine

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

When Feng Zhang was a kid growing up in Iowa, he saw *Jurassic Park*, like just about everybody else. He was struck by the idea that biology might be programmable, like a computer. Now a core member of the Broad Institute of MIT and Harvard, he pioneered a powerful new gene editing system, <u>CRISPR/cas9</u>, that lets scientists rewrite genetic code.

In the past few years, the use of CRISPR has exploded. All five of the scientists announced as <u>winners</u> of the 2016 Canada Gairdner International Award—a prestigious \$100,000 prize that's often called a precursor to winning the Nobel—worked on CRISPR's development: the others were Jennifer Doudna, Emmanuelle Charpentier, Philippe Horvath and Rodolphe Barrangou. (Anthony Fauci received the John Dirks Canada Gairdner Global Health Award, and Frank Plummer the Canada Gairdner Wightman Award, both for for HIV research.)

"CRISPR has democratized gene editing," Zhang told me.

Zhang's hope is that CRISPR will give us a better way to understand psychiatric diseases, including depression, schizophrenia, autism and Alzheimer's. They're all very hard to study in lab animals, and drug development has lagged. "When the mechanism of disease isn't clear, developing drugs is hard," he said. "With CRISPR, we can start to understand the genetic basis of disease."

Read full, original post: CRISPR Pioneer Feng Zhang Talks About What's Next for Gene Editing