Former Novartis chief Joseph Jimenez discusses breakthroughs in gene therapy, future of CRISPR in medicine

Editor's Note: Novartis CEO Joseph Jimenez retired in January after eight years in the top job at one of the world's top pharmaceutical companies. During his tenure, the company helped lead a movement that put gene therapies on the map. Scientific American recently interviewed Jimenez.

Scientific American spoke with Jimenez about CAR-T therapy, his hopes for new game-changing treatments that could target disease-causing proteins and problems with the U.S. health care system.

What made you pursue CAR-T, even as other large pharmaceutical companies decided not to bet on the technology?

Novartis was known for breakthrough innovations in oncology back in the early 2000s. We developed Gleevec [which treats certain types of blood and intestinal cancers with less collateral damage to healthy cells than a typical chemotherapy]. When we saw the data on CTL019 CAR-T coming out of Penn—the really early data about five years ago—we decided that this was a place where we were going to place a big bet. The data reminded us of the early days of Gleevec, and so we went out on a limb.

Is there another gamble like that in the works now?

There's a new technology that Jay Bradner, the head of our research organization, is championing: protein degradation [essentially tricking the body into disposing of harmful proteins], which is a new approach to addressing intractable [disease] targets. We're also investing heavily in gene editing because we do believe there will be therapeutic value coming out of gene editing.

How confident are you that CRISPR will be usable to edit genes in sick people?

So far it's promising, but I think everybody is in a wait-and-see mode. There will be twists and turns along the path, as there is with any new technology.

Read full, original post: The Pharma Exec behind the First Approved Gene Therapy Is Hunting for His Next Big Break