

Designer proteins could help us fight flu, remove gluten from foods

[Researchers have] been stumped by one great mystery: how the building blocks in a protein take their final shape. David Baker, 55, the director of the Institute for Protein Design at the University of Washington, has been investigating that enigma for a quarter-century.

...

In a series of papers published this year, Dr. Baker and his colleagues unveiled the results of this work. They have produced thousands of different kinds of proteins, which assume the shape the scientists had predicted.

...

This expertise has led to a profound scientific advance: cellular proteins designed by man, not by nature. “We can now build proteins from scratch from first principles to do what we want,” said Dr. Baker.

Scientists soon will be able to construct precise molecular tools for a vast range of tasks, he predicts. Already, his team has built proteins for purposes ranging from fighting flu viruses to breaking down gluten in food to detecting trace amounts of opioid drugs.

...

[T]echnology is improving so quickly that the team is now testing longer, bigger proteins that might do more complex jobs — among them fighting cancer.

...

“There’s a lot of things that nature has come up with just by randomly bumbling around,” he said. “As we understand more and more of the basic principles, we ought to be able to do far better.”

Read full, original post: [Scientists Are Designing Artisanal Proteins for Your Body](#)