

JOHN RUSSELL



Bigger IS Better

When it comes to researching proteins, the fundamental molecules of biology, anyway. College of Arts and Science researchers have created the largest human-designed protein contain 242 amino acids, more than doubling the previous record. The super-sized protein, FLR, is a computer model of the protein that creates the amino acid histidine. Associate Professor of Chemistry Jens Meiler and his team used algorithms and 400 processors of the supercomputer at Vanderbilt's Advanced Computing Center for Research and Education to engineer large proteins with shapes unseen in nature. "This gives us the tools we need to create new, more effective antibodies and other beneficial proteins," Meiler says.