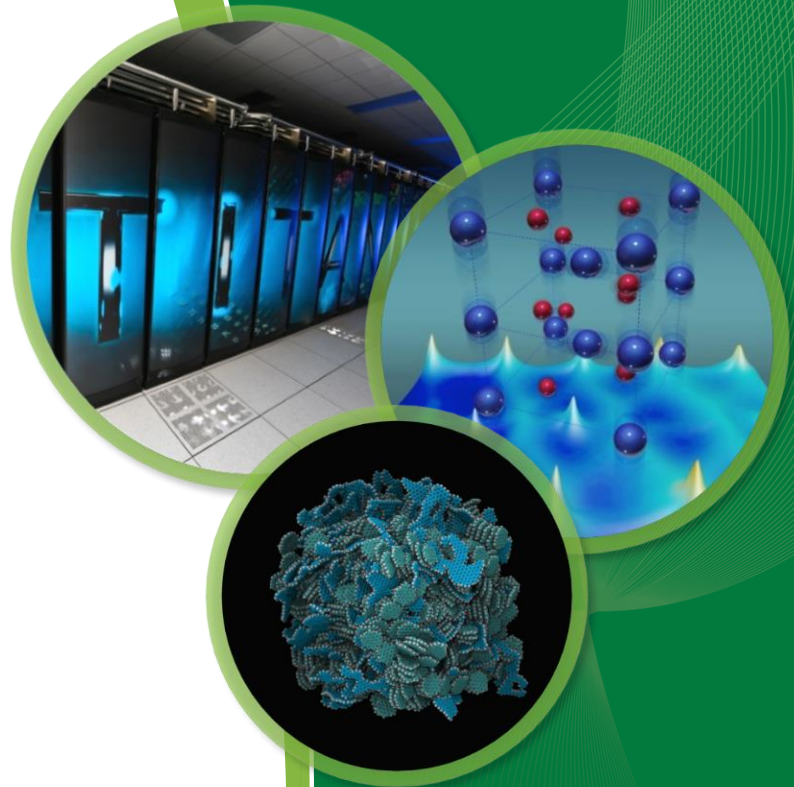


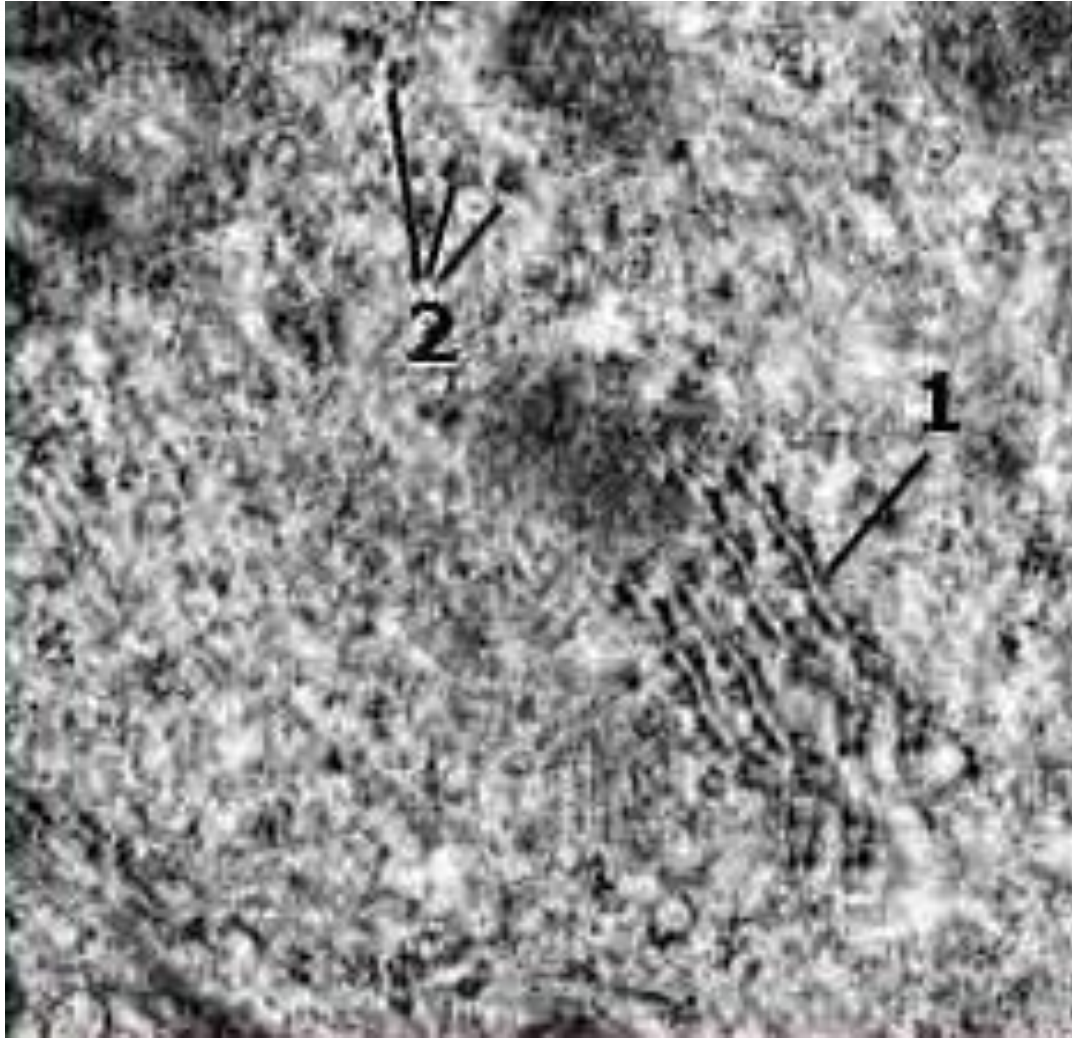
Capturing Hyper-Rotated Solution Structure of the *E. coli* Ribosome

Emily Armbruster
University of Missouri

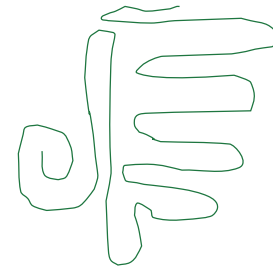
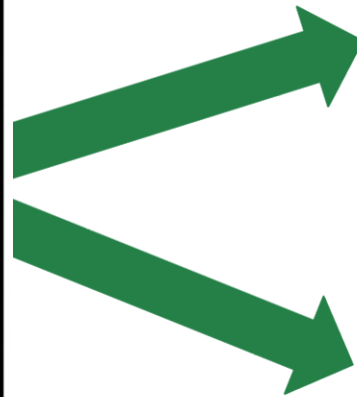
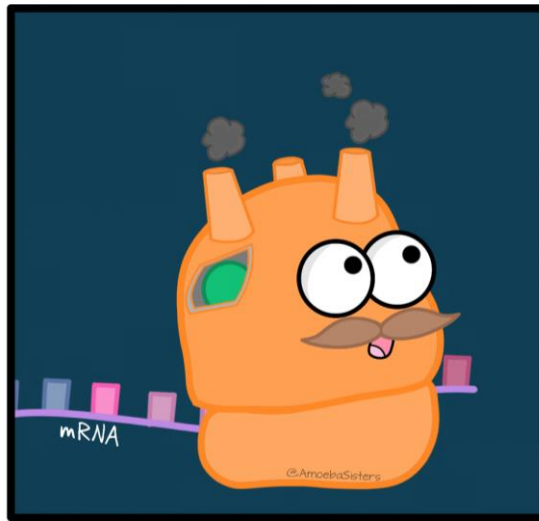
Advisor: Prof. Peter Cornish
ORNL Mentor: Venky Pingali



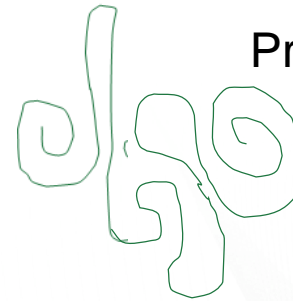
Birth of Cell Biology – First Picture of Ribosome in a Cell



How Ribosome Reads Template Impacts the Form of Protein Created

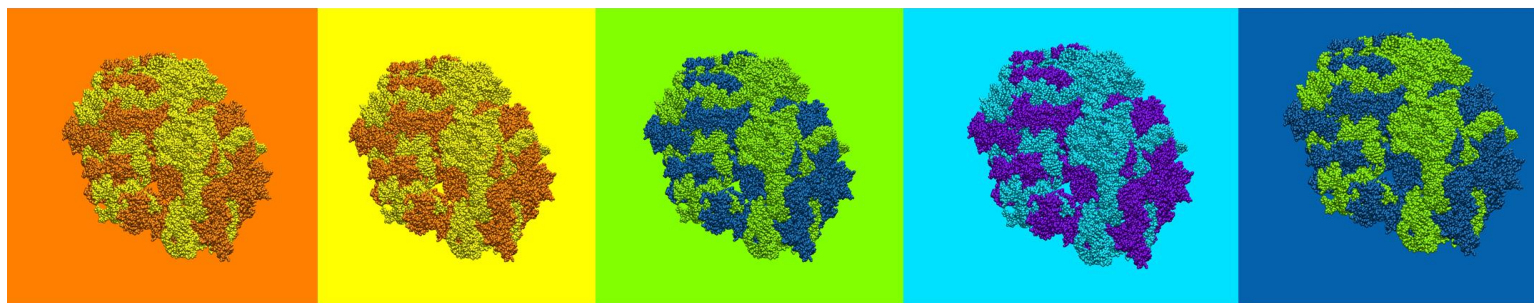
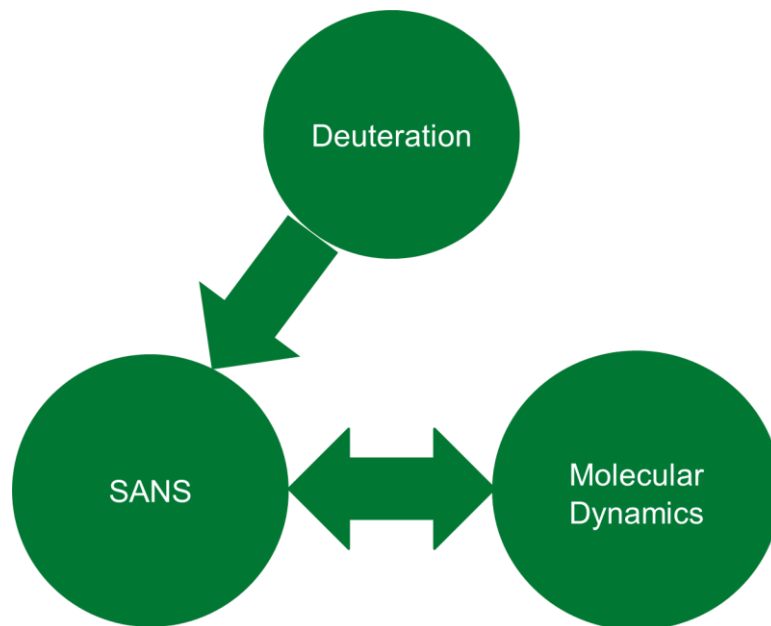


Protein A



Protein B

Integrated Multi-Modal Approach



0% D₂O  100% D₂O