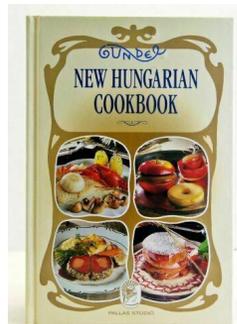
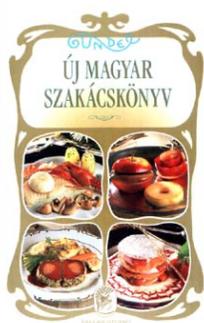
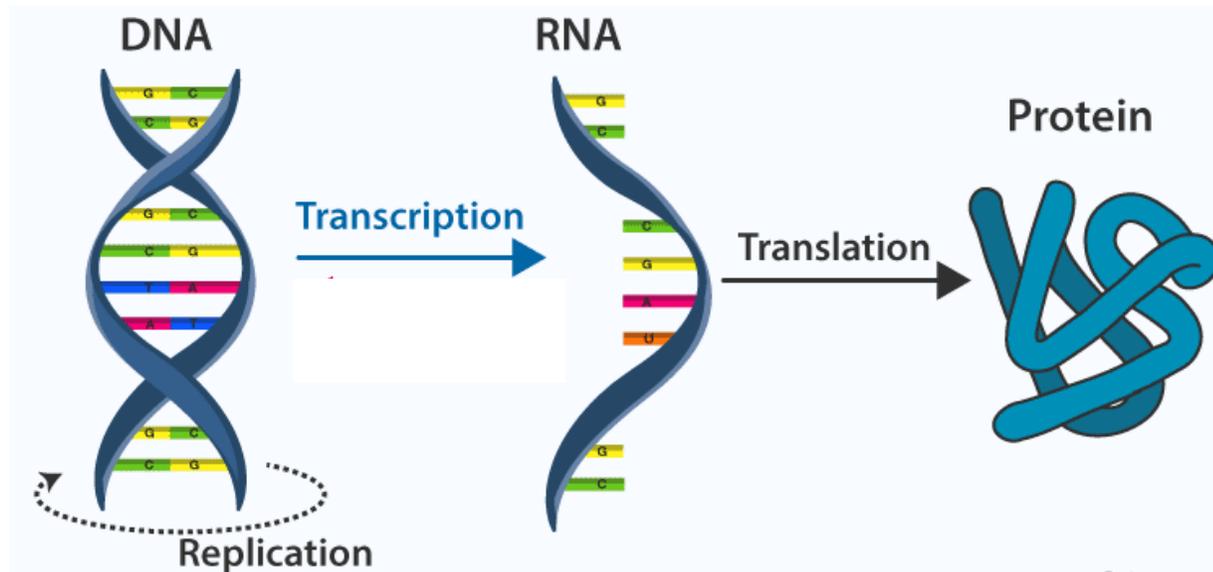


Lesson 15 -Folding

02/15/2021

Central Dogma

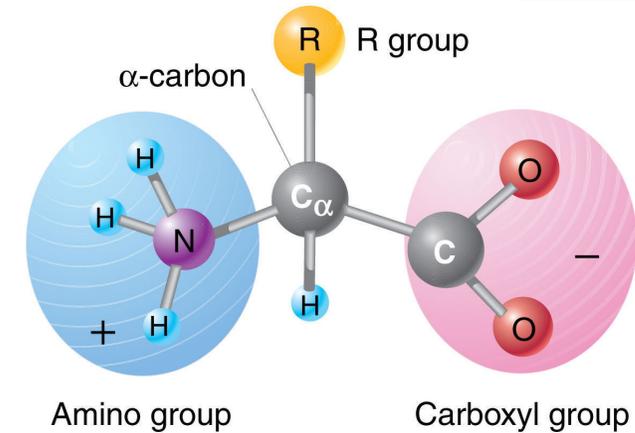


Amino Acids

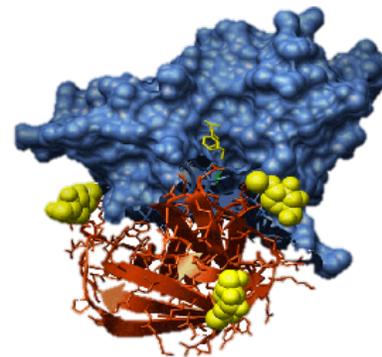
Amino Acid = monomer of proteins

20 naturally occurring AAs

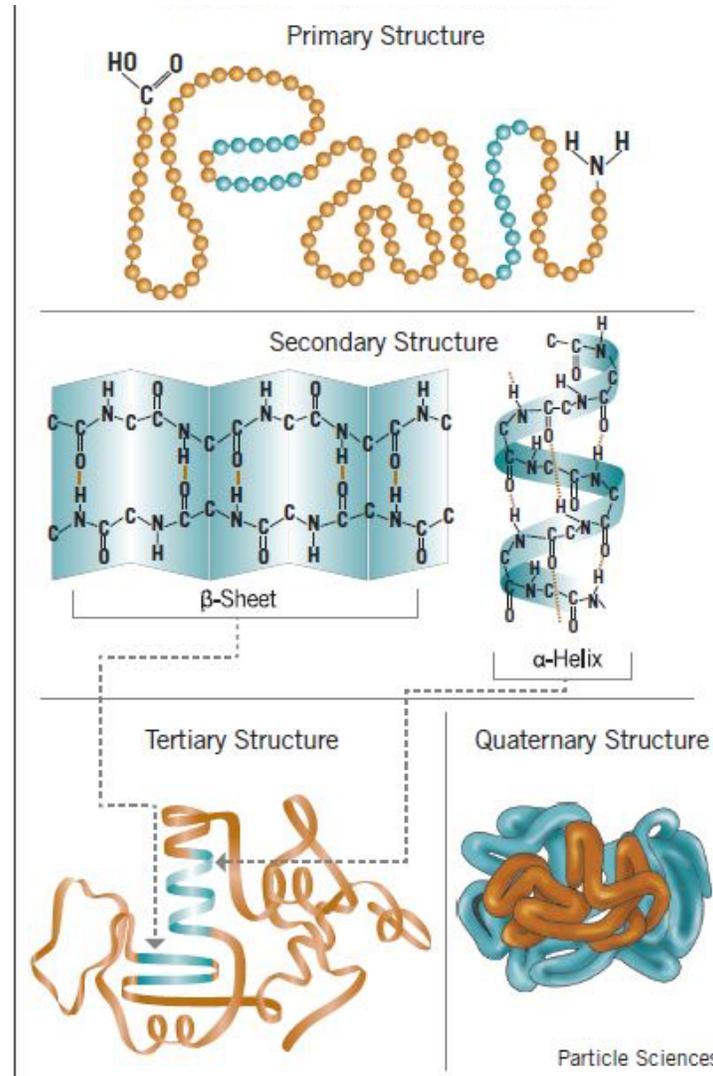
Protein = macromolecules within biological systems that are responsible for functioning



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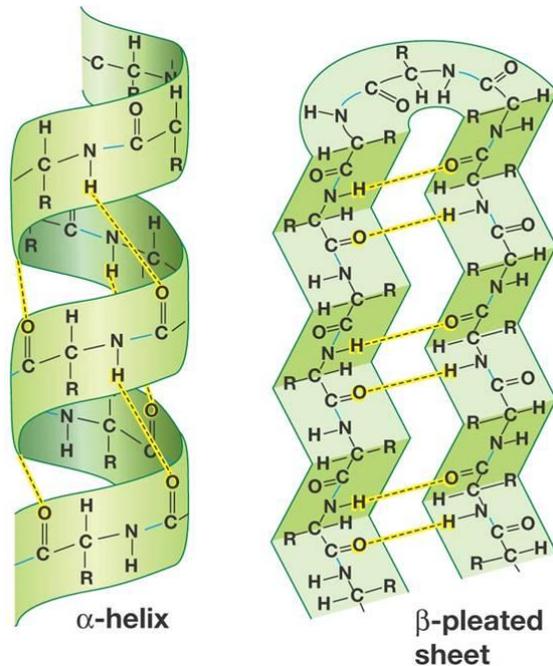
Protein Structure



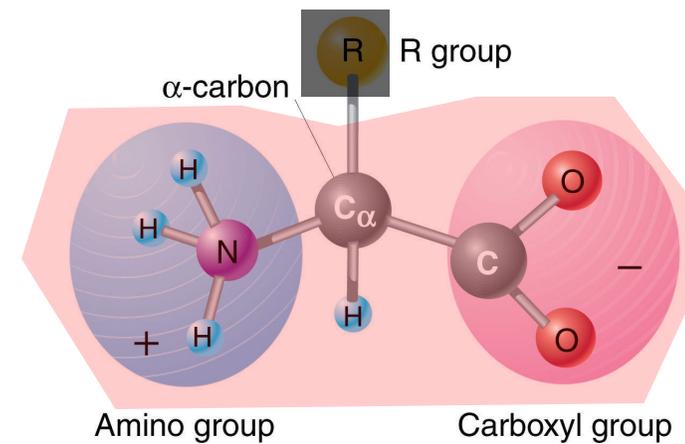
Secondary Structure

α -helix: Met, Ala, Leu, Glu, Lys (MALEK)

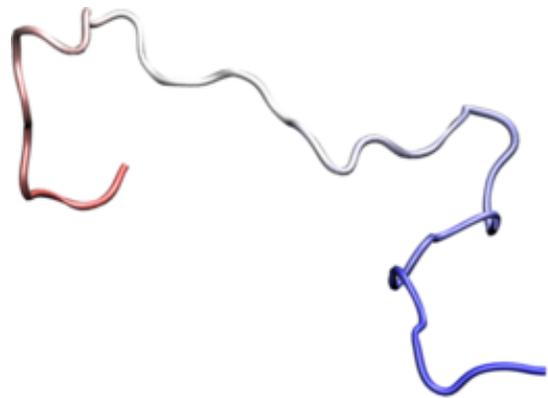
β -sheet: Tyr, Trp, Phe, Ile, Val, Thr



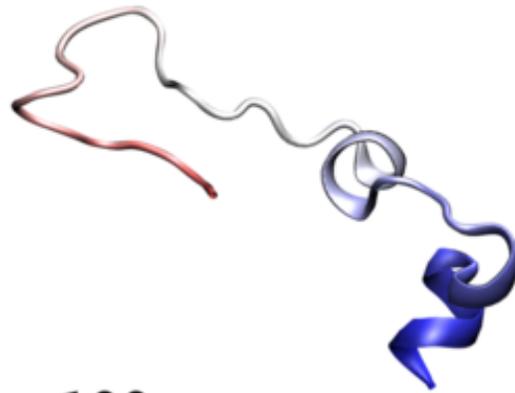
Due to _____ bonds **between backbone atoms!!**



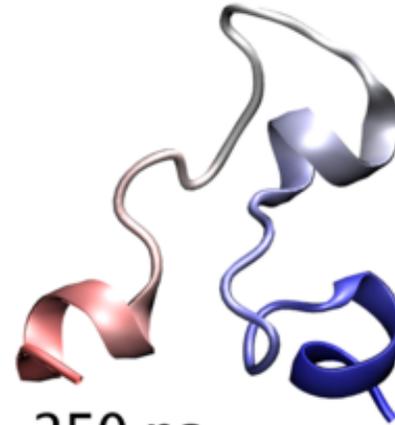
Protein Folding



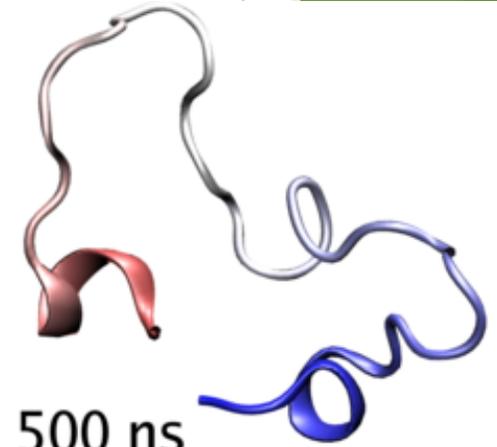
Start



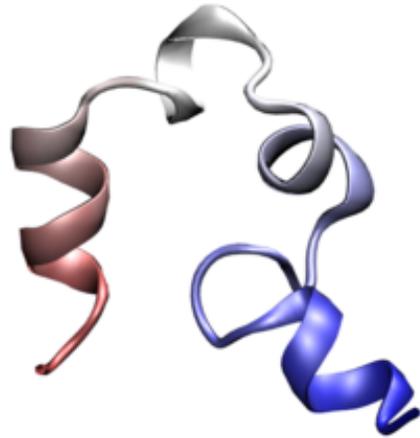
100 ns



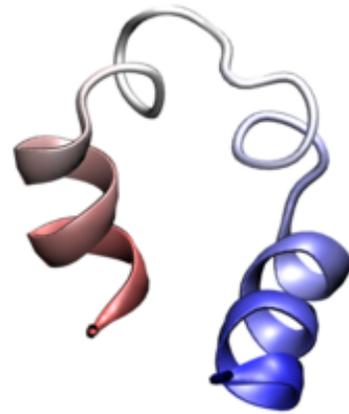
250 ns



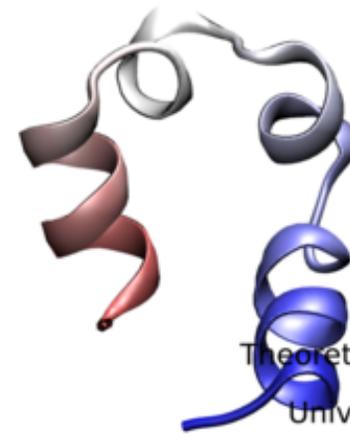
500 ns



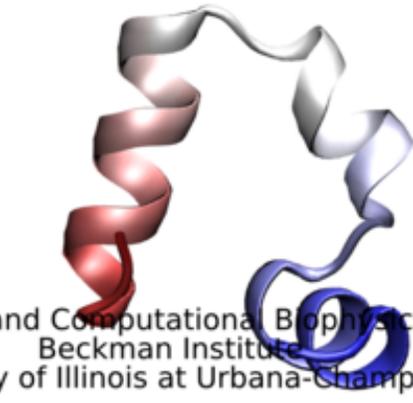
1000 ns



2000 ns



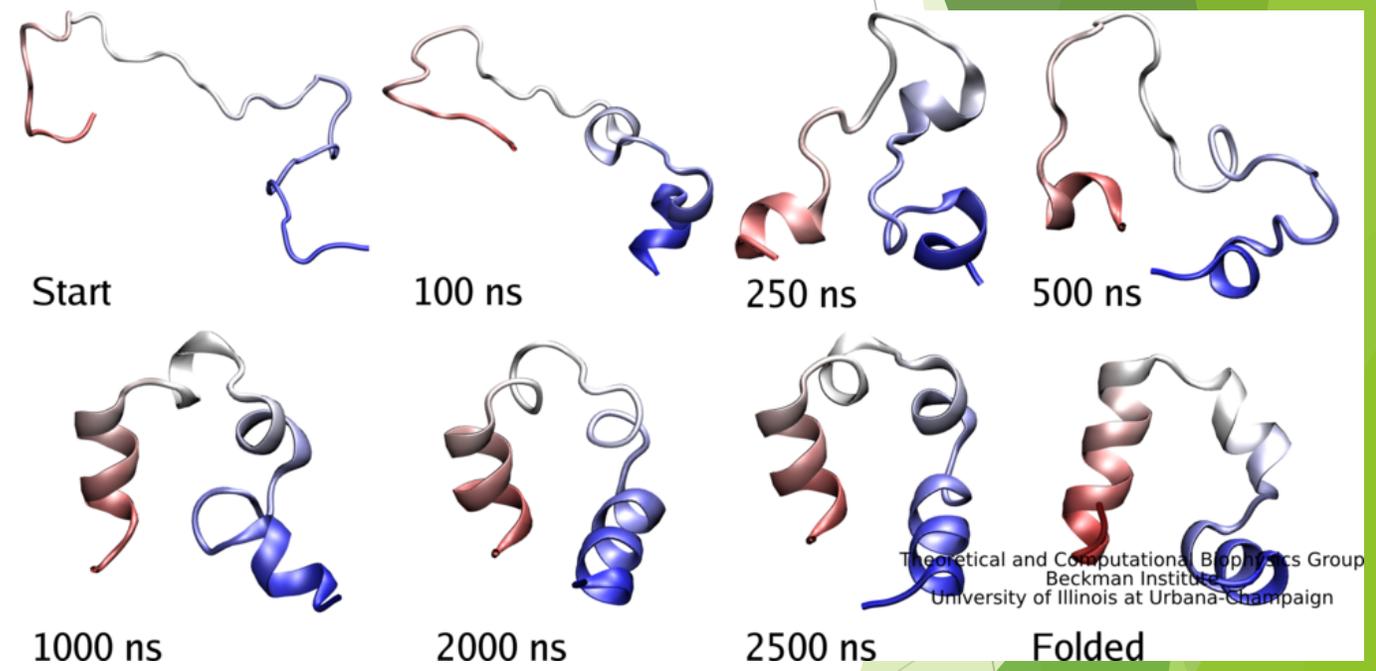
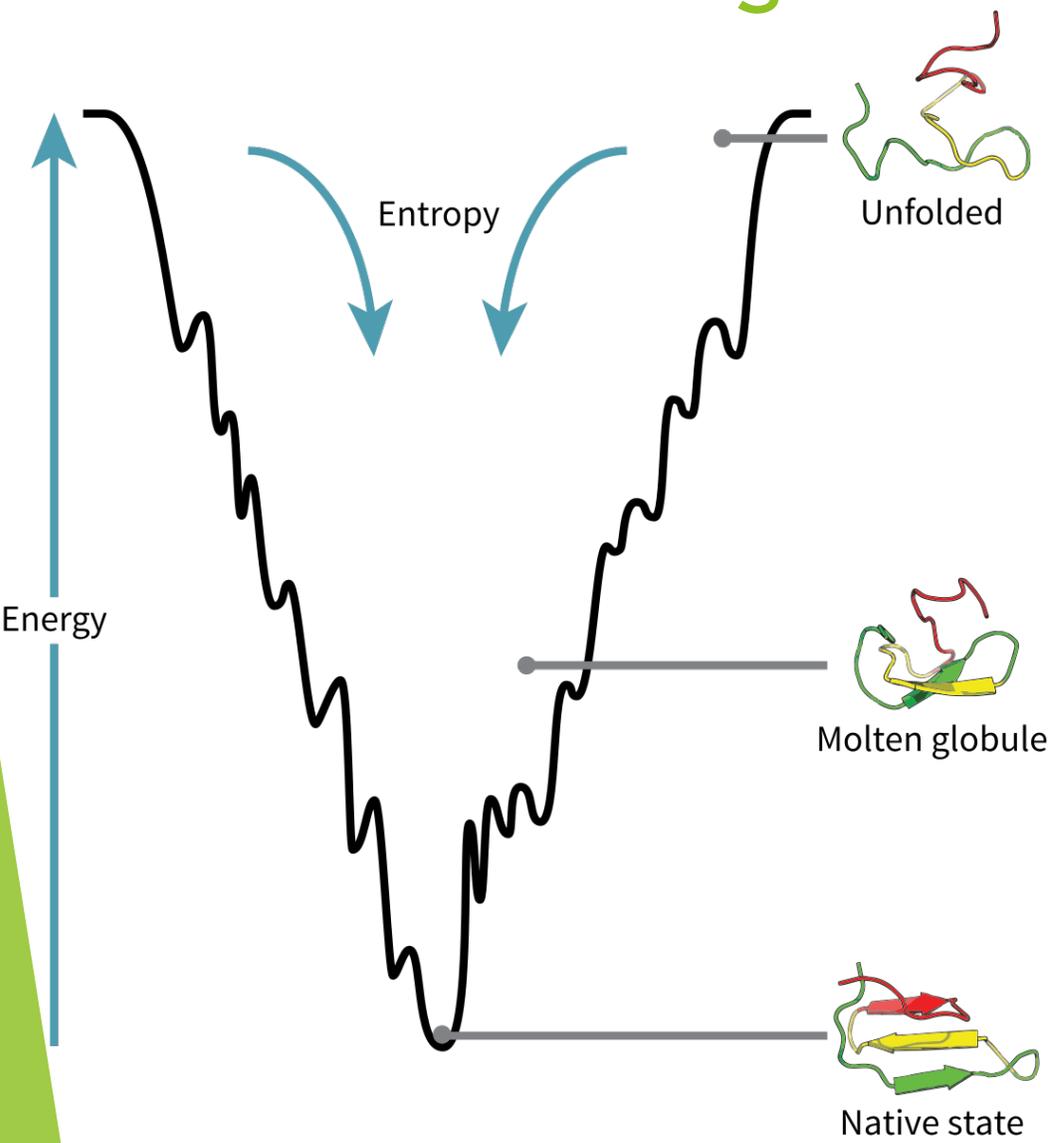
2500 ns



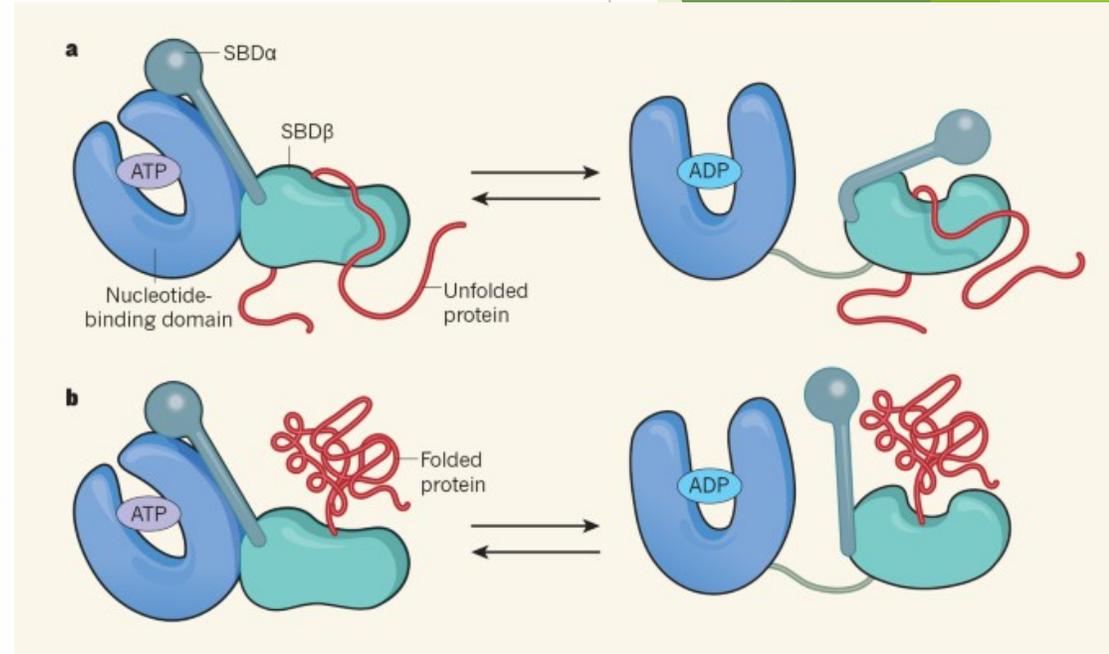
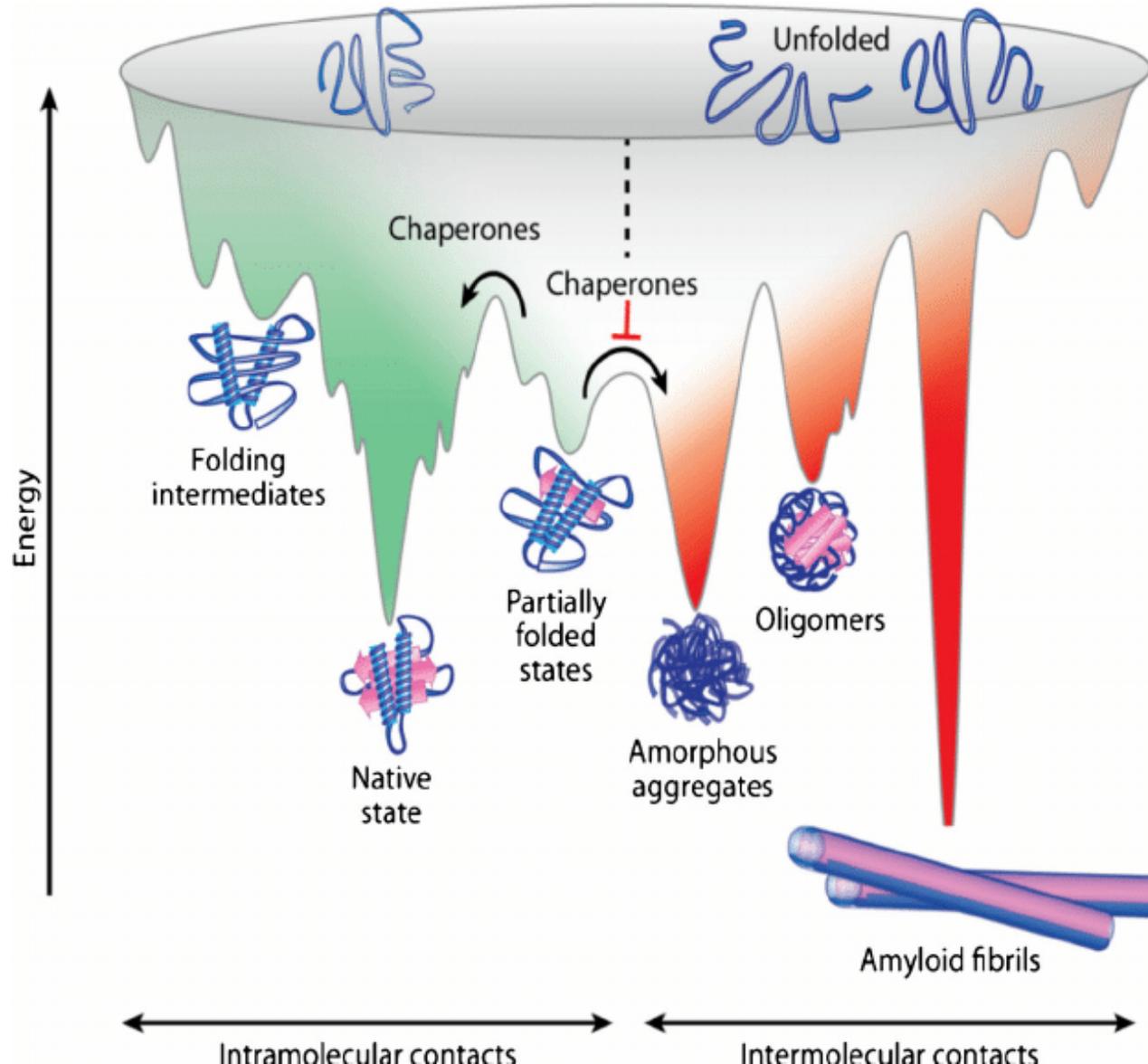
Folded

Theoretical and Computational Biophysics Group
Beckman Institute
University of Illinois at Urbana-Champaign

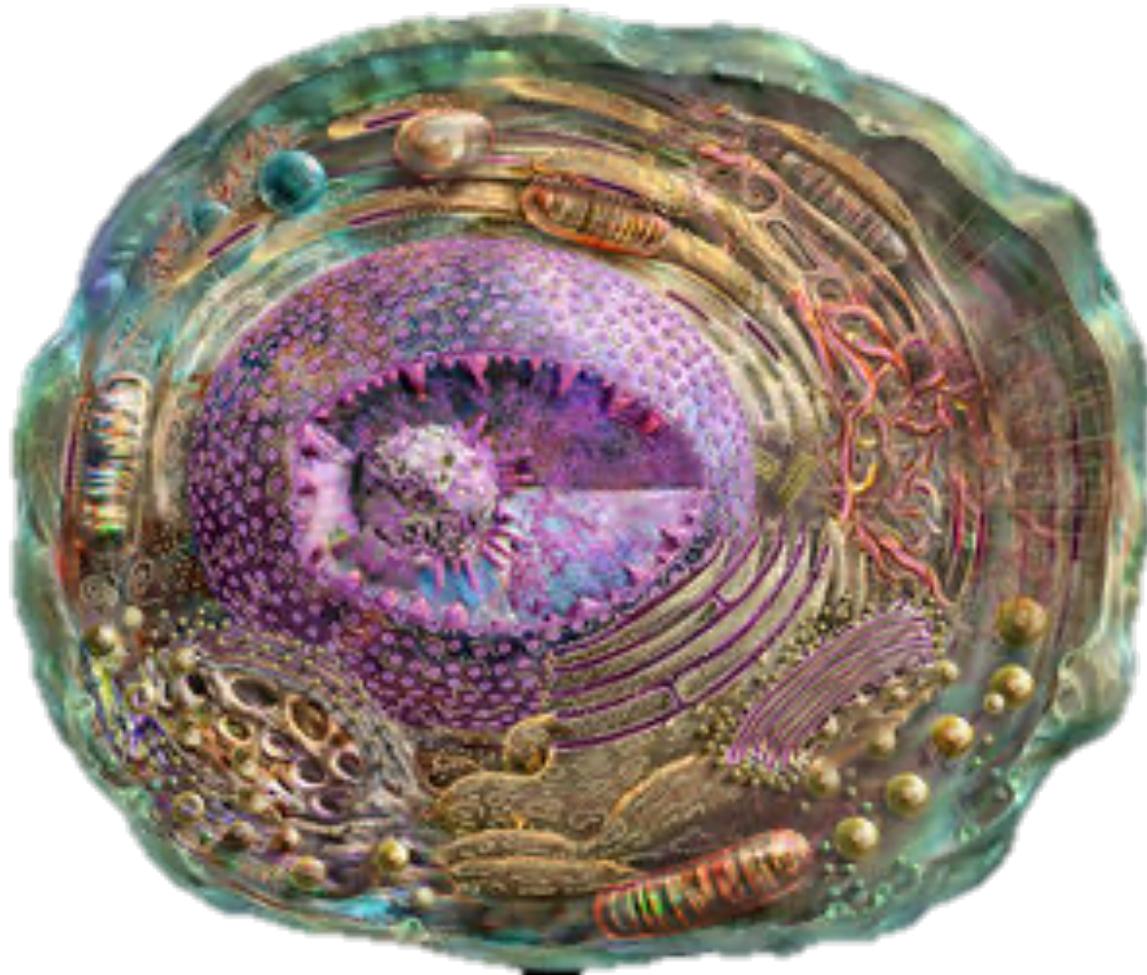
Protein Folding



Protein Folding



Expression / Folding Activity



Expression / Folding Activity

