

## **The role of environment on conformational transitions in peptides and proteins**

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In this talk I will discuss some of the affects of environmental conditions, e.g., pH, presence of membranes, etc. on conformational equilibria and folding (or unfolding) of peptides and proteins. Specific examples will focus on the role of pH in modulating helix content in peptides and proteins that form amyloid fibrils and the role of the membrane environment in controlling peptide conformation and assembly thermodynamics. With this work we will introduce new implicit models for the treatment of membrane environments as well as the techniques that enable pH-coupled conformational transitions to be examined.