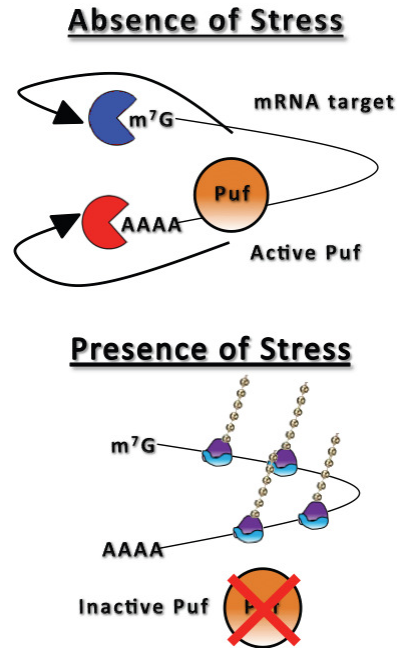




## The Role of Puf Proteins in Cellular Stress Responses in Yeast



Cells respond to environmental stresses by transcriptional up-regulation of stress response genes, as well as activation of more rapid post-transcriptional regulatory pathways such as modulation of mRNA degradation and translation rates. The Puf family of eukaryotic RNA-binding proteins control critical decisions in cell development and differentiation by regulating the degradation and translation of target mRNAs through interactions with 3' untranslated regions. Our research has focused on understanding how Puf proteins in *Saccharomyces cerevisiae* are involved in cellular stress responses. We provide evidence that Pufs are post-translationally inactivated under stress conditions, relieving their repression of target mRNAs, and that different Pufs act coordinately to control overall metabolism of an mRNA target.

**Dr. Wendy Olivas**

University of Missouri - St. Louis

Hosts: Dr. Timothy Hughes  
Dr. Howard Lipshitz

**Date:** Tuesday May 28, 2013

**Time:** 4:00 p.m.

**Place:** Medical Sciences Building  
1 King's College Circle  
Room 4171