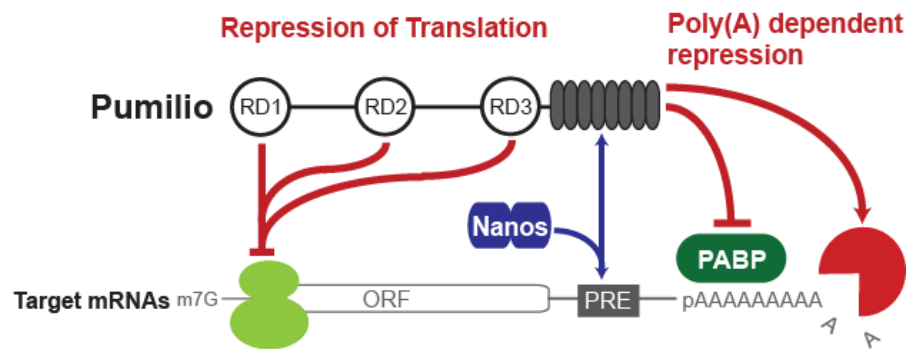




Mechanisms of mRNA regulation by Pumilio proteins: master regulators of development, fertility, and neurological functions



Pumilio proteins are cytoplasmic post-transcriptional repressors that control diverse biological processes including embryonic development, stem cell maintenance, and neurological functions. Pumilio proteins bind to specific sequences within the 3' untranslated regions of different target mRNAs, resulting in repression of protein expression. We seek to discover how Pumilio proteins repress mRNAs and determine how repression is controlled. We then utilize our understanding of RNA binding and repression to identify the target mRNAs that are regulated by human Pumilio proteins, PUM1 and PUM2. These goals are being pursued using a combination of cell-based and biochemical assays combined with deep sequencing and bioinformatics approaches in *Drosophila* and human systems.

Dr. Aaron Goldstrohm

Assistant Professor
Department of Biological Chemistry
University of Michigan Medical School

Host: Dr. Craig Smibert

Date: Monday June 8th, 2015

Time: 4PM

Place: 1 King's College Circle, Medical Sciences Building, Room 4279