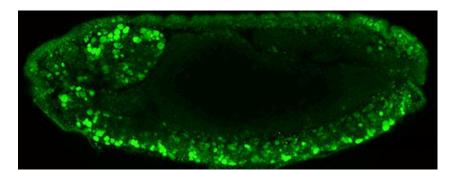
California State University, Fresno Department of Biology presents

## Dynamic regulation of mRNA decay during Drosophila neural development



Dr. Mike Cleary, Ph.D. Associate Professor, U.C. Merced

- Molecular and Cell Biology
- Quantitative and Systems Biology Graduate Group

## Friday, September 5, 3:00 PM Science II 109

Studies of gene expression during development traditionally focus on the regulation of mRNA transcription. However, an additional and essential level of control occurs via mRNA decay. We are using a variation of the "TU-tagging" technique to measure genome-wide mRNA decay kinetics during *Drosophila* embryonic neurogenesis. We have identified mRNA decay properties that likely contribute to essential processes including localized translation, synapse formation, and cell fate specification. We also discovered a role for the RNA-binding protein Pumilio in regulating neural mRNA decay. Our results suggest that an intricate mRNA decay network regulates neural development.

For further information: <a href="http://www.csufresno.edu/biology">www.csufresno.edu/biology</a> or phone 278-2001

If you need a disability-related accommodation or wheelchair access information, please contact Nancy Wright at the Department of Biology @ 278-2001 or e-mail <u>nawright@csufresno.edu</u> (at least one week in advance of the event).