# BE 159 Spring 2014
# Talking points: Goehring, et al., "Polarization of PAR Proteins by Advective Triggering of a Pattern-Forming System"

1. How can the results of the Mayer paper we covered last week serve to inform this paper?

2. How are mechanics and biochemistry coupled in this system?

3. What is a Péclet number? What is its relevance in this paper?

4. The authors used the "feeding method" or RNAi. What is this?

5. What is a spinning disc confocal microscope?

6. What is particle image velocimetry? (This was in the talking points last time, but we did not get to it.)

7. Why are the authors so careful in their exploration of the $k_{AP}$ and $k_{PA}$ parameter space? What does this parameter space exploration tell us?

8. What is bistability in the context of the reaction system, and why is it so important?

9. What is meant by "limiting pools" or PAR proteins?

10. What is meant by "passive advection"?