1098-92-197 **Bradford E Peercy*** (bpeercy@umbc.edu), **Ann Marie Weideman**, **Lathiena Manning**, **Bilal Moiz** and **Michelle Starz-Gaiano**. *Extracellular Geometry Impacts Intracellular Signaling.* Preliminary report.

The cellular decision to migrate depends on cascades of intracellular signals initiated in part by extracellular stimuli. In the fly *Drosophila melanogaster*, border cells in the epithelium of the developing egg chamber are triggered to migrate or not depending on a secreted morphogen Unpaired. While secretion into a uniform extracellular space should yield symmetry in activation, a majority of the time asymmetry in activation is observed experimentally. We propose that heterogeneity in extracellular space due to neighboring cells can divert Unpaired and affect the distribution of activation. We show this effect in modeling the diffusion and reaction of Unpaired in a relevant geometry. (Received January 25, 2014)