**Bio111 Week 10**

Before you come to lab

1) Review the cAMP signaling process in Dictyostelium.

2) Answer each of these four questions in two sentences or less.

A) Will your cells be resistant to more than one antibiotic? (evolution)

B) What is done for patients who are infected with antibiotic resistant bacteria? (evolution)

C) What variables do you need to explore to figure out the timing of cAMP waves? (emergent property)

D) What would happen to cells that varied within the population and had different timing? Have you seen evidence of this variation? (emergent property)

**Week 10 (October 27th)**

Emergent Properties In Lab

1) Experiment with the Slime-U-Lator simulation and determine the general rule cells must use for their cAMP waves and refractory period.

2) What is the optimum combination of settings to produce the fastest streaming in Dictyostelium?

Evolution In Lab

3) Analyze your results from the last experiment and perform your next one. If you want to use your frozen cells, you will need to give us at least 24 hour advance notice so we can have them growing for you in liquid media.

4) Complete lab skills survey #3 online.