

## **GEN Day 7/ PBC Day 1 Interpretation Questions**

### **GEN Day Seven:**

1. Interpret your data from Experiment IV-A: Part 1. Some topics to discuss:
  - a. Were the Ara<sup>-</sup> and Kan<sup>R</sup> phenotypes of your mutant strains linked?
  - b. Were the phenotypes of your transductants from the same strain consistent?
  - c. Was the LacZ phenotype the same before and after transduction?
  - d. Any other observations?

**Note: The answer to this question, and your GEN 7 "prelab," should be turned in to your GEN TA on PBC Day 2!**

### **PBC Day One:**

1. In this experiment, we combine three different methods to break open the *E. coli* cells. What are they, and what is the purpose of each step?
2. a) Does total activity increase or decrease during purification? Explain your answer.  
  
b) Does specific activity increase or decrease during purification? Explain your answer.
3. Interpret your data, focusing especially on the beta-gal activity assay results for the CL-S and CL-P samples.
  - a) What was the total activity of each sample?
  - b) Where was the majority of the activity after centrifugation?
  - c) You have not yet measured the activity for your ammonium sulfate samples, so instead predict where the majority of the activity will be in the ammonium sulfate samples (supernatant or pellet) and explain why.

**Note: The answers to these questions, and your PBC 1 "prelab," should be turned in to your PBC TA on PBC Day 2!**