

## **RDM Day 6 + 7 Interpretation Questions (to be handed in on DEV Day 2)**

1. Interpret your results from Days 6 and 7. You should be sure to talk about:
  - a. What you saw on your transformation plates on Day 7?
  - b. The transformation efficiency of BL21 cells vs. AG1111 cells?
  
2. The BL21 cells have been engineered for use in research.
  - a. Describe the regulatory system in BL21 cells that allows the experimenter to control the production of "their mRNA" (and therefore "their protein") in these bacteria.
  - b. Although we didn't employ the regulatory system described in a) to induce GFP mRNA expression during RDM, in what experiment in GEN **did** we use this system? What protein were we trying to make using this system, and why was it helpful during that experiment?
  
3. Name a feature of BL21 cells that allows us to produce foreign proteins (like jellyfish GFP) in the bacteria. Why don't naturally occurring bacteria (i.e. "non lab" strains) have this feature?