**Week 7: Oral Presentations, Design for v2 Promoter**

Learning Objectives for Promoter Discovery

*Skills*

* Present quantitative data in context of biology
* Generate coherent PPT presentation
* Extract sequence information from paper for promoter v2 design

*Cognitive*

* Synthesize data and procedures to build comprehensive analysis of promoter function
* Design a new promoter based on published research paper

**Pre-Lab**

1) Prepare presentation, rehearse all four parts

2) You will be emailed which section you are presenting 1 hour before presentation

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

A) Was the sequence you tested identical to the published promoter sequence?

B) What can you do to improve the function of your assigned promoter?

C) How can you build a new promoter? What design constraints must you consider?

D) How can you make promoter v2 clone directionally into a new pClone Red?

**Information: Quantify Phenotype and Start Genotyping**

In Lab

1) Give your oral presentation. While listening to others, take notes on what you think they did well and what they could improve upon. One person from each group will use iBOP Bingo to score the other groups.

2) SKIM the associated paper and look for your promoter sequence. Compare the your v1 sequence to the sequence you found. Are they the same?

3) What happens if your promoter contains a BsaI restriction site? Wouldn’t it be good if the Oligator could flag this for you? See if it can.

4) Email your instructor the research proposal (Word file) for grading.