August--05/08

- 1. Discussion on genome editing with CRISPR Cas 9 systems
- Understanding NHEJ (Non-Homologous End Joining) and HDR (Homology directed repair) methods of double stranded break repairs, with special focus on NHEJ
- Realizing elements involved like target gene, guide RNA, PAM Sequence etc.
- 1. Examples discussed on identifying target sites
- 2. Making of gRNA segment for desired modifications in bacterial strains
- 3. Emphasis on improve target efficiency
- 4. Two inoculations of pTD103luxl_sfGFP from glycerol stock

12/08

1. Preliminary test for Interlab

Plate Reader(SpectraMax M2e)

96 well black plate with black bottom, well capacity 500 ul.

We used 200 ul in each well.

1:100 dilution(test : LB broth)(2ul:198ul)
Chloramphenicol Resistance. (1:1000)
Excitation 501nm Emission 511nm
Excitation 395nm Emission 511nm

Plate: Standard Opaque(as set in the plate reader)

| | Tate. Standard Opaque(as set in the plate reader) | | | | | |
|---|--|-------------------------|--------------------|--------------------|--|--|
| Α | +ve test diluted | -ve test diluted | Test 1 diluted | Test 2 diluted | | |
| | | | | | | |
| В | +ve test diluted | -ve test diluted | Test 1 diluted | Test 2 diluted | | |
| | | | | | | |
| С | +ve test diluted | -ve test diluted | Test 1 diluted | Test 2 diluted | | |
| | | | | | | |
| D | +ve test diluted | -ve test diluted | Test 1 diluted | Test 2 diluted | | |
| | | | | | | |
| Ε | LB with antibiotic | LB with antibiotic | LB with antibiotic | LB with antibiotic | | |
| | | | | | | |
| F | +ve control fully grown | -ve control fully grown | Test 1 fully grown | Test 2 fully grown | | |
| | | | | | | |
| G | E.coli. | E.coli. | E.coli. | E.coli. | | |
| | | | | | | |
| | | | | | | |

| Н | Blank | Blank | Blank | Blank |
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- 2.) Discussion on flow cytometry to separate out the cells that glow and those which don't.
- 3.) Good result for OD600 obtained from transparent well plates but improper results for fluorosence without black well plates

14/08

- Design of Square wave generator completed
- Part ordered from GenScript

| MINOR 1 | BREAK | |
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