2015 La Verne Leos
Team Notebook

JUNE:

6/1/2015 – 6/16/2015

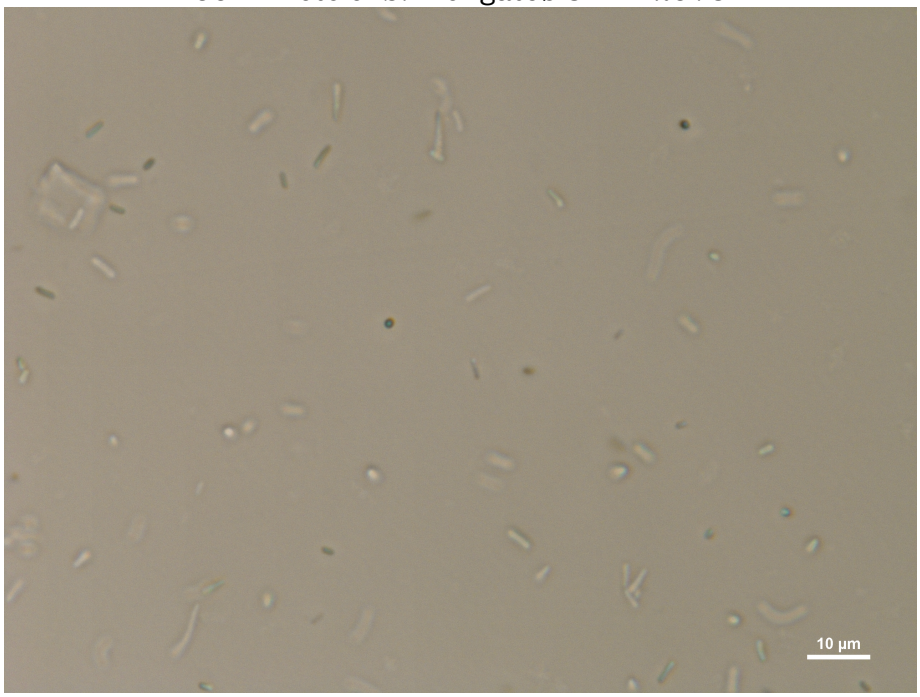
- The period between these dates consisted of research fine tuning the project details and the methodology to approach the circuits.

6/17/2015

- Rehydrated and transformed:
  - K817002
  - K542003
  - C0012
  - I742158
  - B0015
  - E0430
  - K206000
  - B0034
  - J04450
  - J23101

6/18/2015

- Synechococcus Elongatus UTEX 2973 arrived and was inoculated from the stock into 4 tubes of BG-11 media.
- Two growth conditions were looked at. Two inoculations were placed in an incubator with a photoreactor, and another two were placed under a light and heat bath. Both were not shaking, nor aerated.
  - 60X Photo of S. Elongatus UTEX 2973



6/19/2015

- Miniprep Analysis:
  - K817002 – 213.8 ng/uL
  - K542003 – 158.7 ng/uL
  - C0012 – 277.4 ng/uL

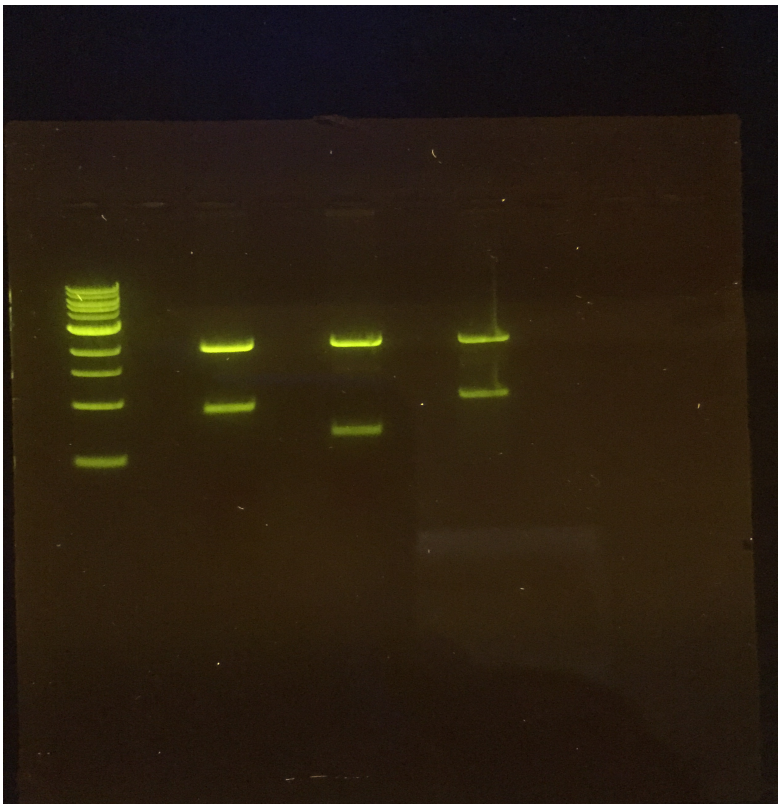
- I742158 – 168.0 ng/uL
- B0015 – 116.1 ng/uL
- E0430 – 224.4 ng/uL
- K206000 – 185.0 ng/uL
- B0034 – 178.3 ng/uL
- J04450 – 322.3 ng/uL
- J23101 – Transformation did not work.

6/24/2015

- Digestion and Ligation of K817002+I742158 and K817002+E0430

6/26/2015

- Gel analysis of the two ligations done on 6/24/2015
- Gel photo Lane 1: Ladder, Lane 3: J23101, Lane 5: K817002+I742158, Lane 7: K817002 + E0430



JULY:

7/1/2015

- Determined that Propidium Iodide is the best cell viability assay for Synechococcus Elongatus UTEX 2973.

7/7/2015

- Miniprep analysis:
  - K1033906 – 72.9 ng/uL
  - K29006 – 133.4 ng/uL
  - I20260 – 37.5 ng/uL
  - K817033 – 109.4 ng/uL
  - K75400 – 100.1 ng/uL
  - K861060 – 72.7 ng/uL
  - K317007 – 75.8 ng/uL
  - K395704 – 206.7 ng/uL
  - I13504 – 124.9 ng/uL

7/9/2015

- SE02 strain from Anne Ruffing, and BG-11 arrived. Working to figure out the best way to grow the bacteria with optimum conditions.