Lab Notebook - Week 2 (6/19/17 - 6/25/17)

Project: NU iGEM 2017 Shared Project
Authors: William Reinhardt
Dates: 2017-06-19 to 2017-06-23

MONDAY, 6/19

Summarized To-Do:

- ☒ Schedule daily times to meet Bon **Every weekday @9am**
  - ☒ and the professors (weekly)
  - ☒ and the grad students (possibly with the professors)
  - ☒ and schedule the last bootcamp
- ☒ Decides who has key
  - ☒ see about getting a locker **The locker is 156; combination 6061**
- ☒ Experiments: Extract DNA from strains of 2016 team
  - ☒ need miniprep kit
  - ☒ and plates
- ☒ Experiment: Email about Interlab availabilty
- ☒ Start on Project description and safety form parts 1,2,3

TUESDAY, 6/20

Summarized To-Do:

- ☒ Prepare for lab safety check
  - ☒ Empty out waste
- ☒ Figure out budget
  - ☒ Get 2016 budget
- ☒ Decide on side projects
  - ☒ testing different cas9? (like the jellyfish strain)
- ☒ Break into teams
- ☒ Human practices: map out when we want events to happen, start contacting schools
- ☒ Make sure everyone has a lab coat, lab notebook, etc
- ☒ Everyone write bio for website, and send photo
- ☒ Make inventory of stuff in fridge and freezer

WEDNESDAY, 6/21

Experiments:

- Purpose
  - Complete Spectinmyocin PCR
    - See Attached Protocol

Spectinmyocin_PCR_Protocol.docx

- Primers:
  - JTL035 (Forward): caataactgccttaaaaaaattatttgccgactaccttggtga
  - JTL036 (Reverse): caggagctaaggaagctaaaatgcgctcacgcaactggtc

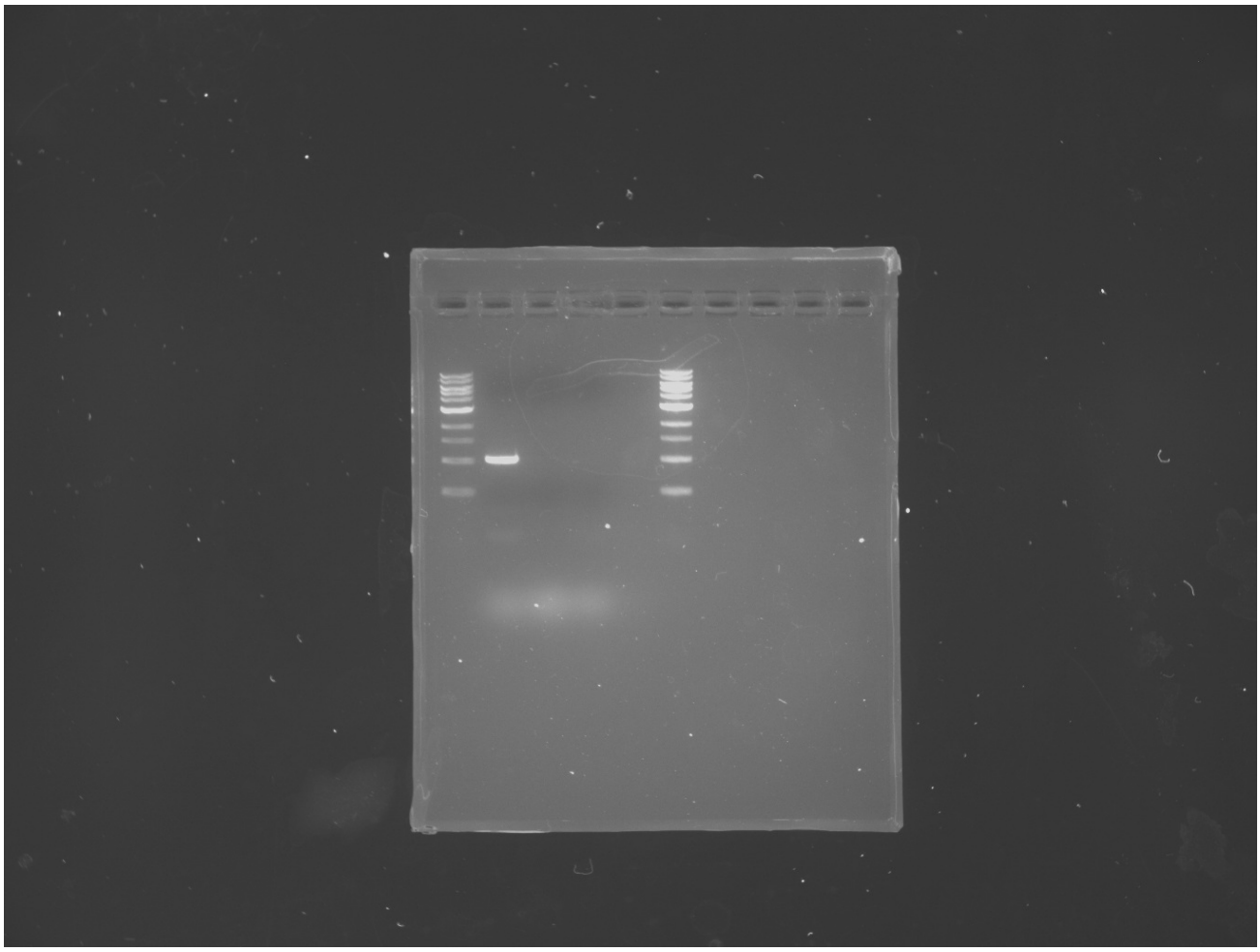
- Notes
  - 10X PCR Buffer Substituted for Phusion High-fidelity buffer
  - PCR set - exp002
  - Gel was filled 2/3 of the way
    - Looked too thick, too opaque
    - Run for around 35 minutes

- Ran out of 1 x TAE buffer, had to make our own
  - Some complications?
  - 10 x TAE made at 1/10 of the volume
  - Made 1 x TAE from it
- Gel setup:

  1) 1 x 1 kb ladder
  2) Kat and Lulu
  3) Charley and Jack
  4) Ayesha and Tyler
  5) Karen and Will
  6) 1 x 1 kb ladder

Expected Gel Results - Tyler

Results 06/21/2017



THURSDAY, 6/22

Experiments:

- LB + Agar prepped using **attached** protocol, along with 2 LB mixes
  - Quantities were halved to compensate for 500mL limit in container
  - Autoclaved at 250F for 45 minutes

Lbprotocol.pdf

FRIDAY, 6/23

Experiments

- Antibiotics will be added to plate at a later date
- LB + Agar didn't solidify
  - could be due to bad agar reagent
  - also should be lighter in color
- Team decided to use LB mix made yesterday, just adding agar
  - agar from before - exp in 2013; agar now has no exp date but is from 2011
  - Update: new LB+Agar is now solidifying
- Actual Plating