Experiments

Friday, May 01, 2015
7:23 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Mutagenesis	**Leon + Phillip**	**Called people**	**8000nt to mutate ACT**	**We're gonna do it**	**Let's do it**
Organization	**Leon**	**Cleaned out fridge plates**	**Very clean**	**Dr. Chiang approved**	**Throw out all the plates that are being neutralized as I speak/type**

Experiment

Thursday, May 07, 2015
3:15 PM

Prototype	**Evonne and Byran**	**1. New blue membrane 2. Syringe filter 3. White filter membrane 4. Bandage membrane (positive control)**	**1. Successful! Colonies grew on the top LB+agar plate and corresponding side of the membrane, but none passed through the membrane so the bottom LB+agar plate had no grown colonies. However, the other plate had two red RFP colonies, indicating contamination and sterilization techniques. There were no GFP colonies though. 2. Syringe filter had two plates: 1 failed while 1 succeeded. The positive control was full of colonies while the failed plate had several colonies. The other plate had no grown colonies 3. Both worked and had no colonies. 4. Both showed positive control and had colonies growing on the bottom LB+agar plates**

Pictures

Thursday, May 07, 2015
3:16 PM

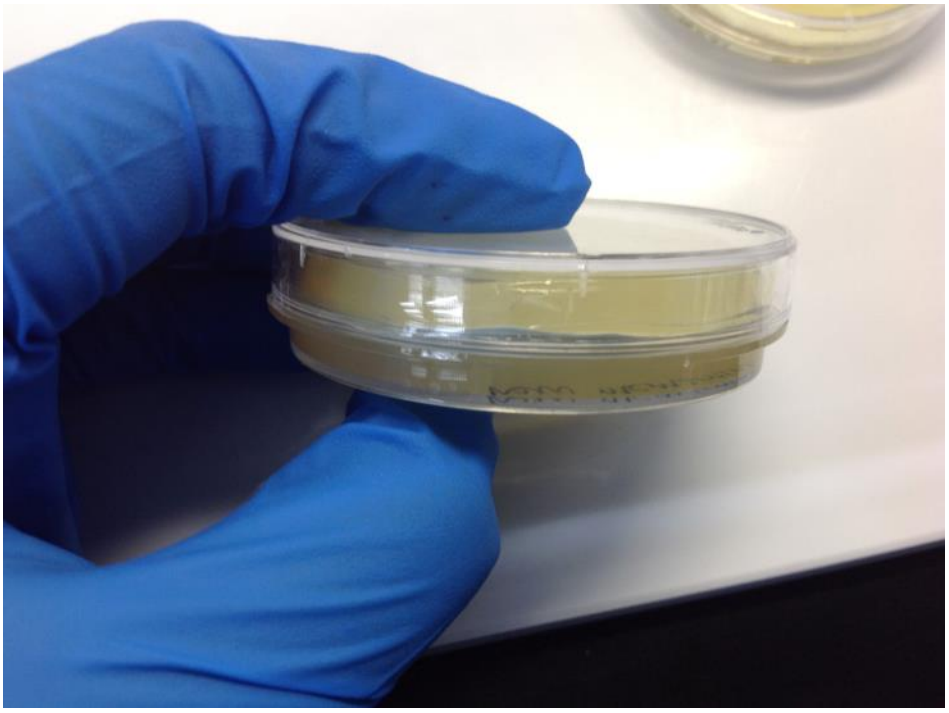


Figure 1: Set up for Prototype

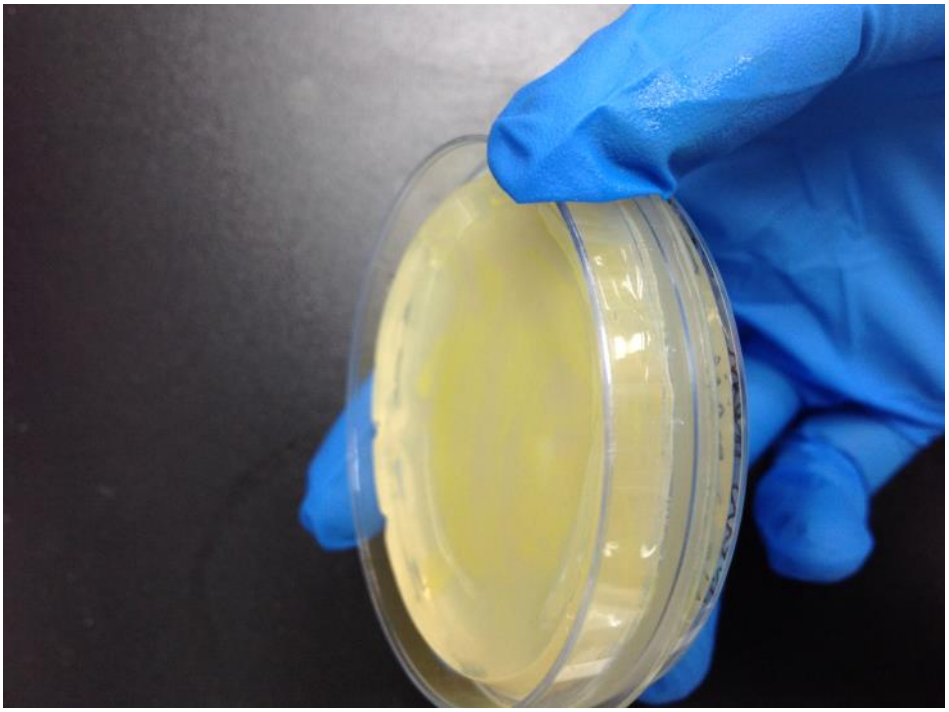


Figure #2: Set up for prototype (with membrane between 2 LB agar plates)

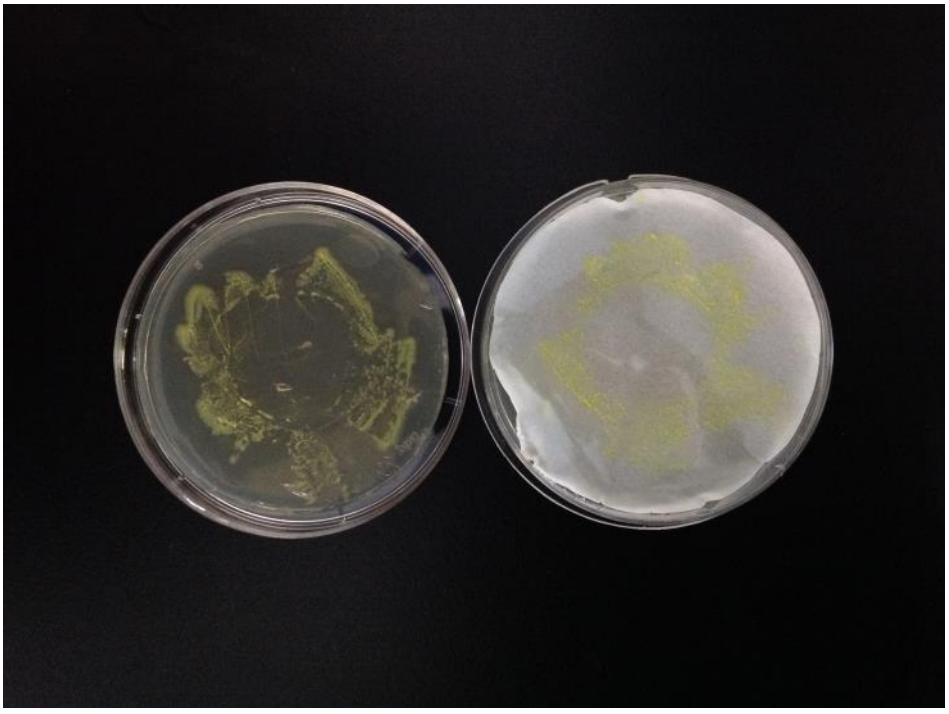


Figure #3: Set up for Prototype with white filter membrane (before sandwiching top LB agar plate over membrane)

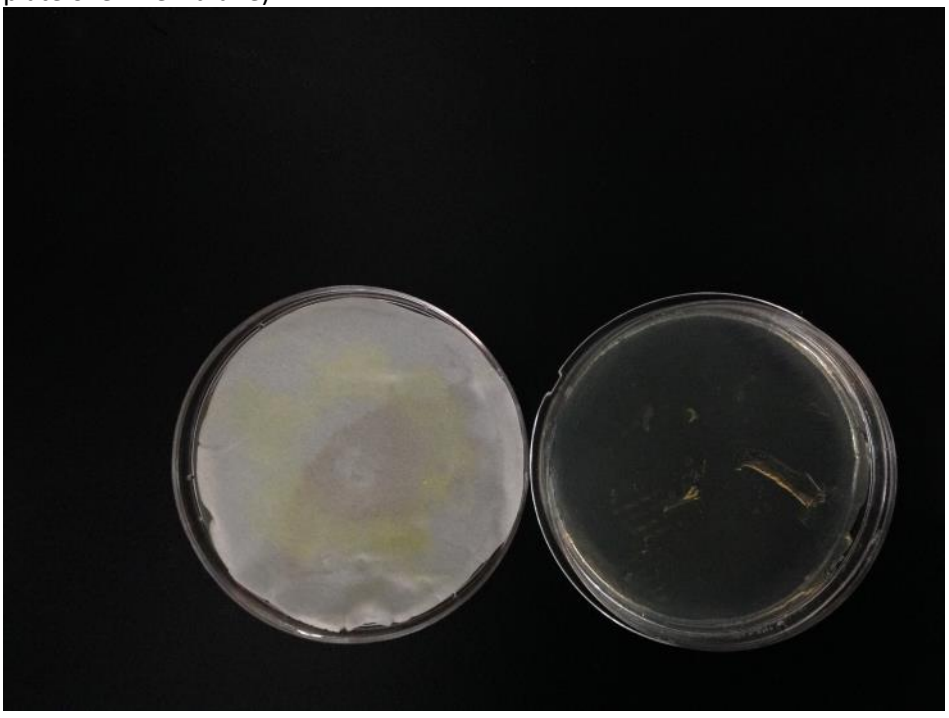
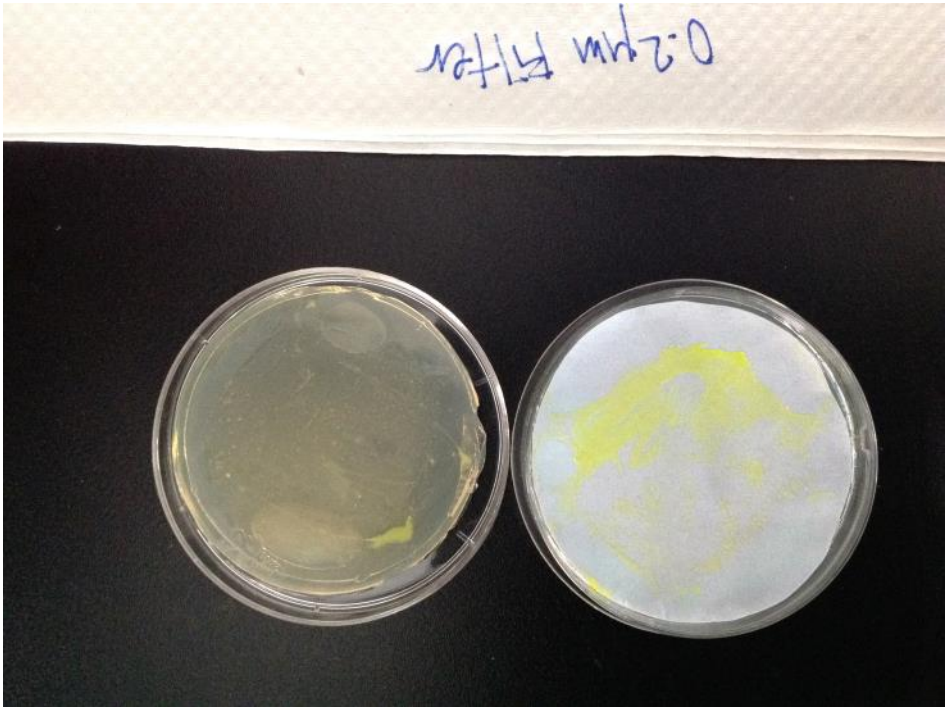


Figure #4: Set up for Prototype with white filter membrane (before sandwiching top LB agar plate over membrane)- 2nd plate



? Figure #5: Set up for new 0.2 micrometer blue membrane (1st plate)

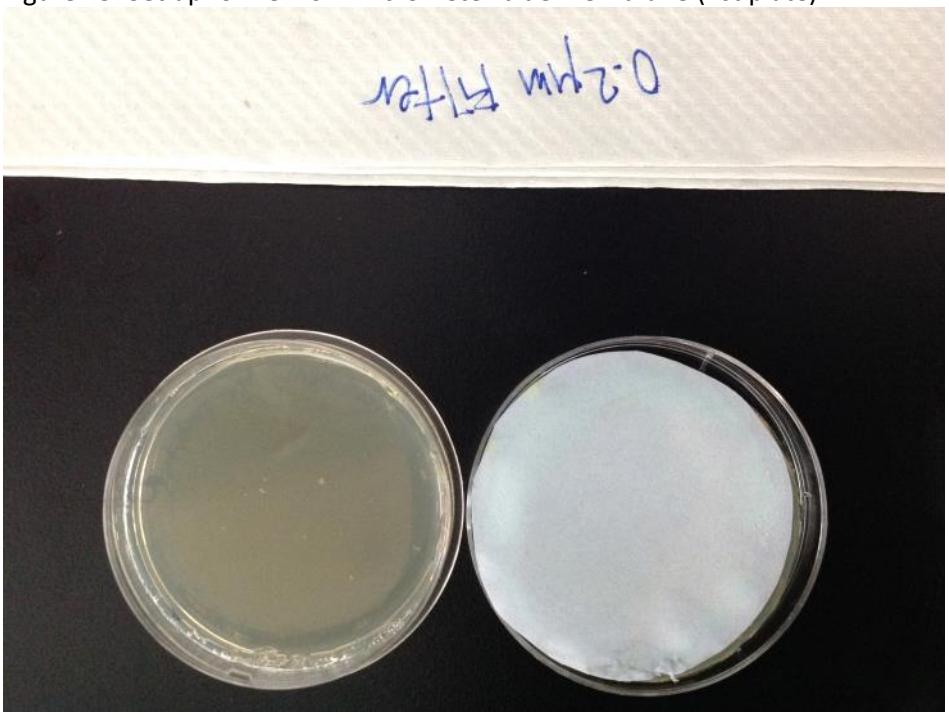


Figure #6: Set up for new 0.2 micrometer blue membrane (showing bottom LB agar plate)

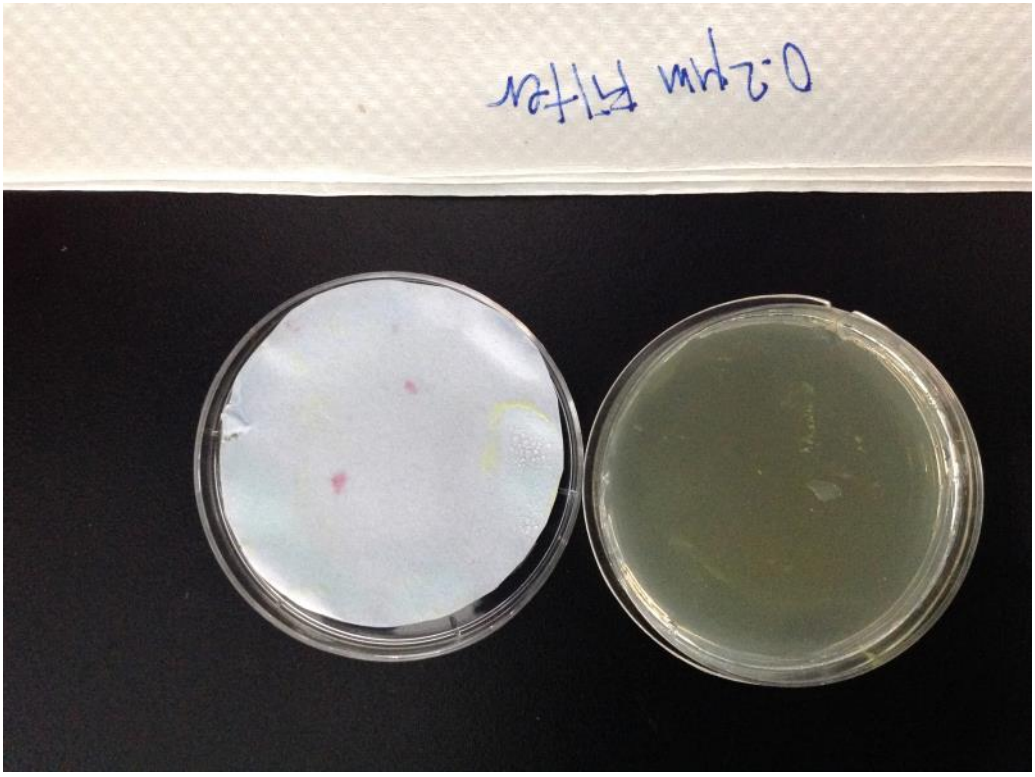


Figure #7: set up for new 0.2 micrometer blue membrane

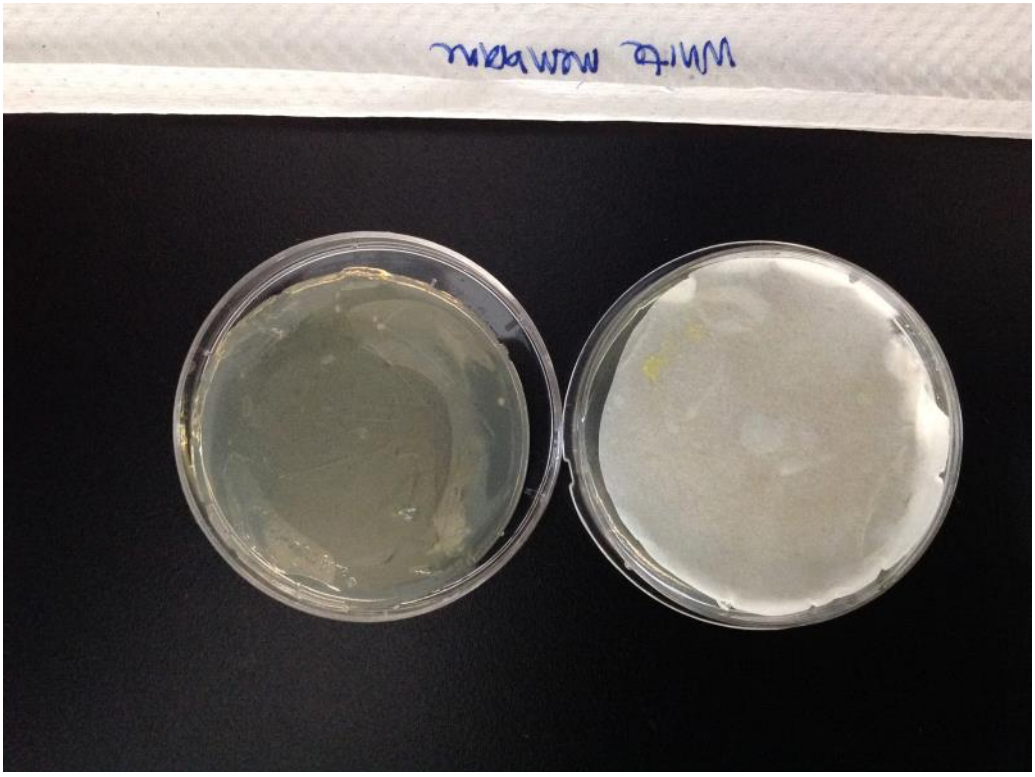


Figure #8: set up for white membrane

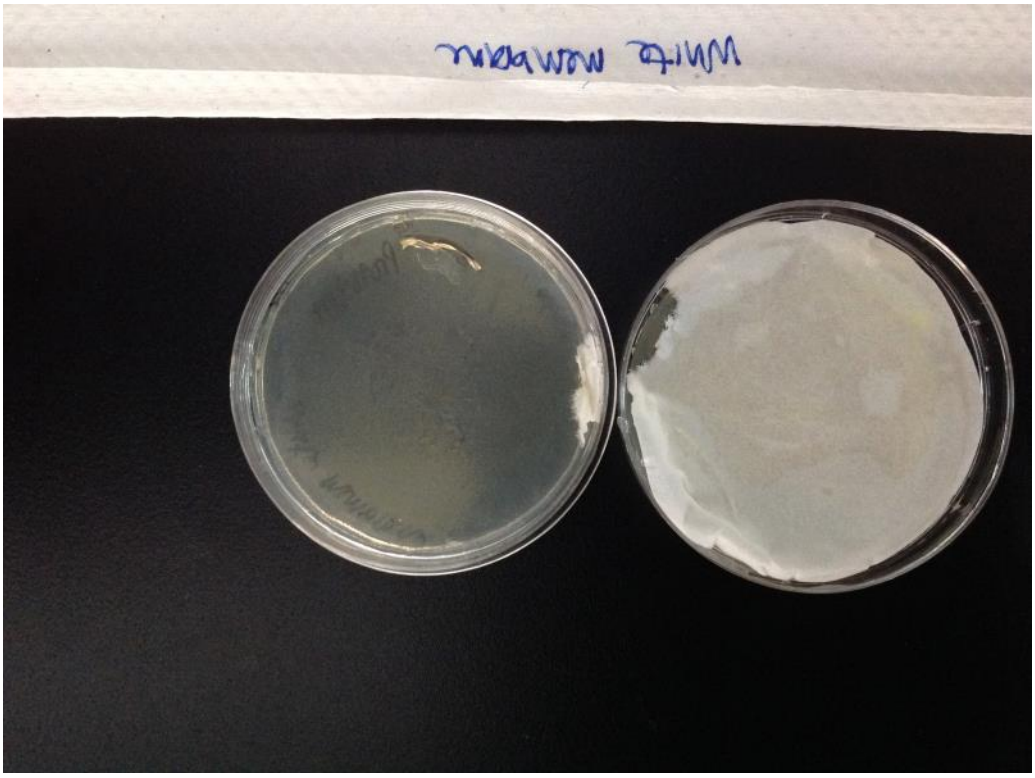


Figure #9: set up for white membrane (bottom plate)

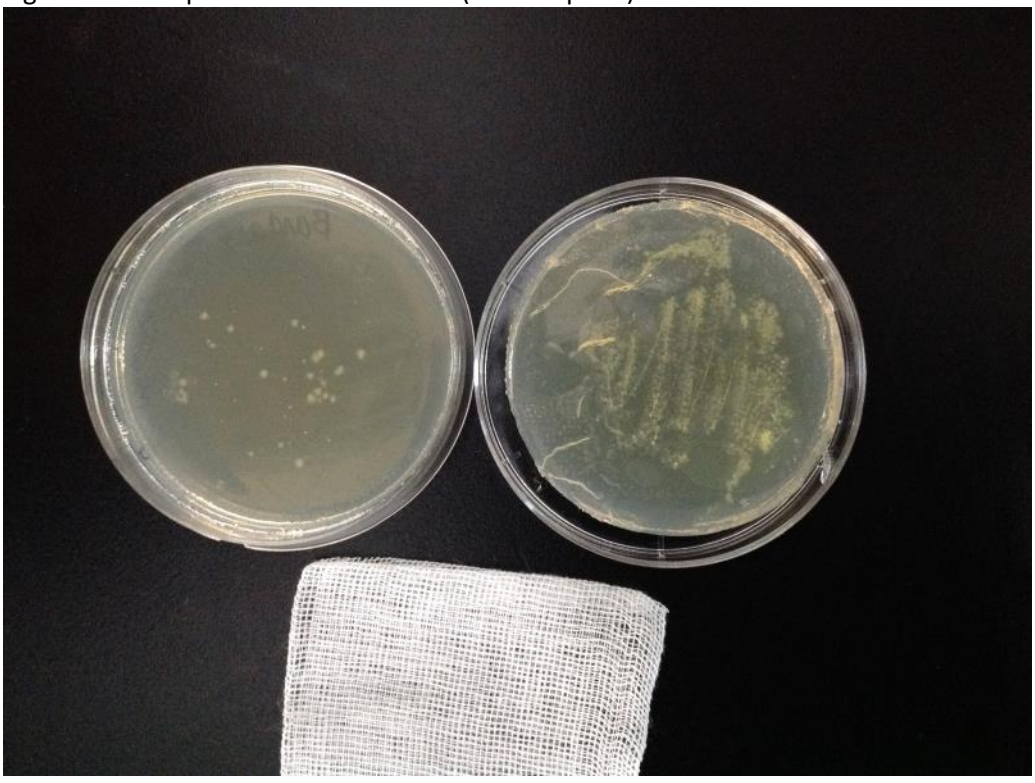


Figure #10: set up for prototype (bandage method; positive control)

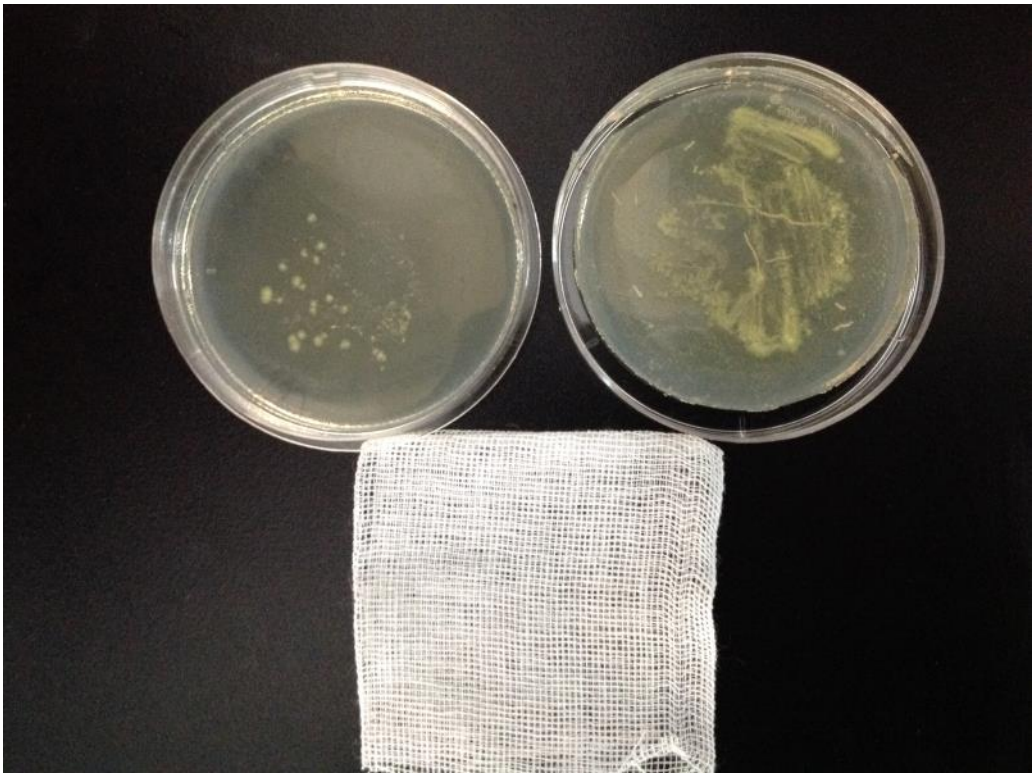


Figure #11: set up for prototype (bandage method; positive control)

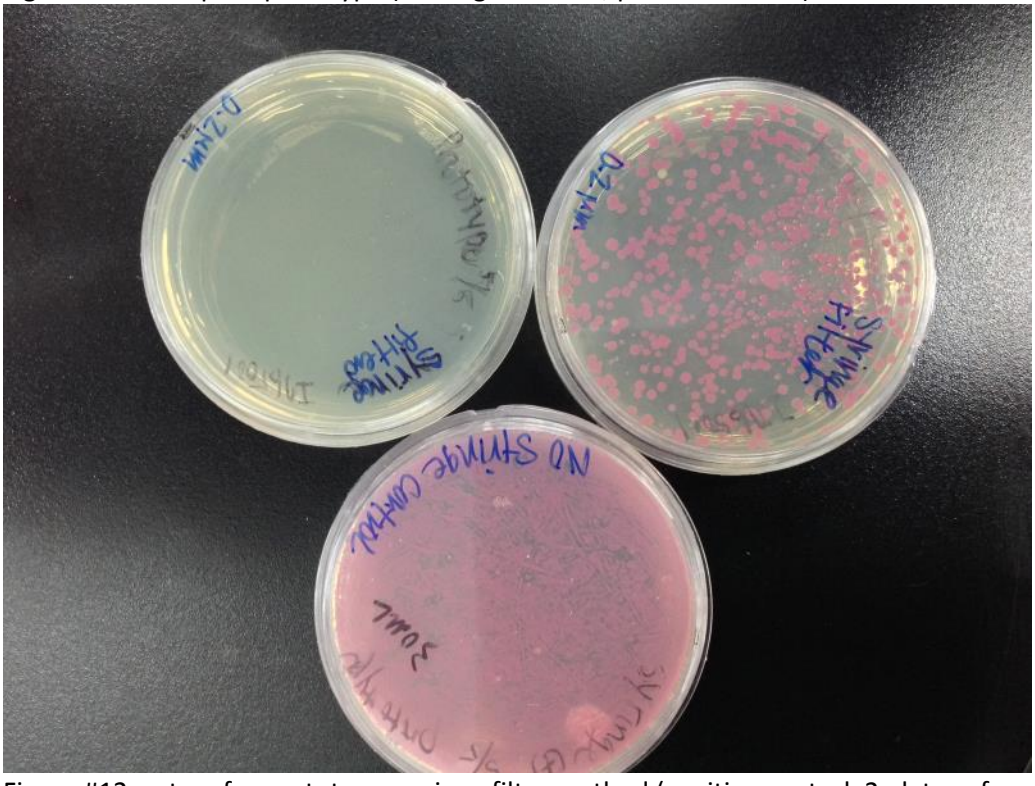


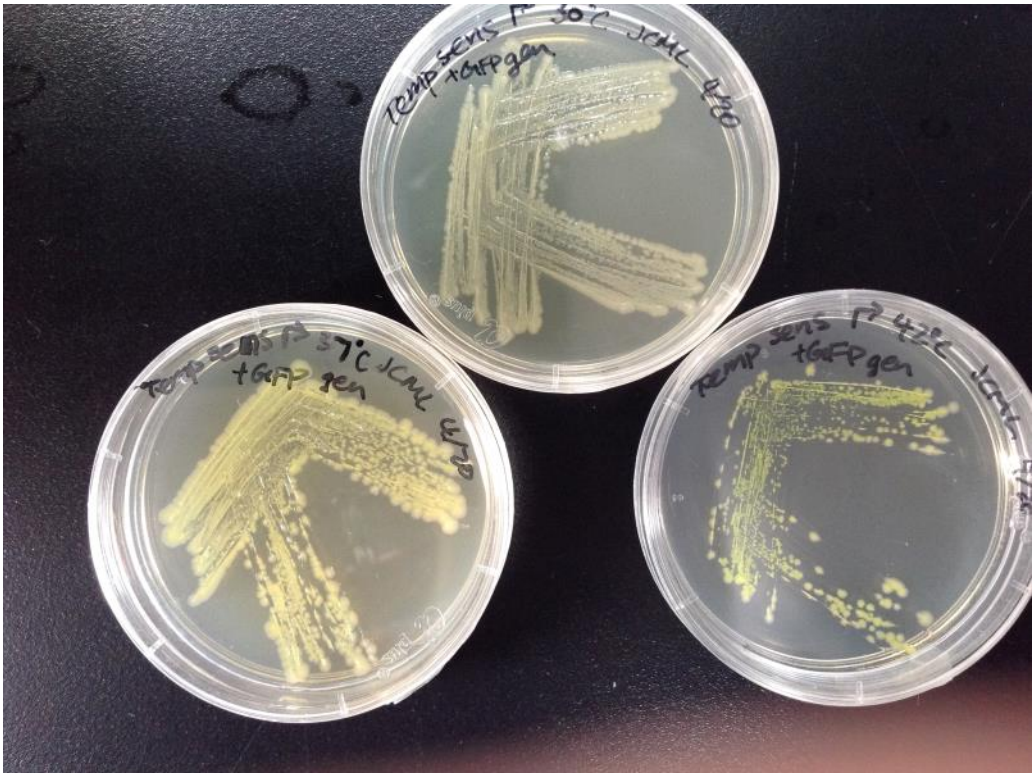
Figure #12: set up for prototype- syringe filter method (positive control, 2 plates of experimental)

Temperature Sensitive Promoter

Monday, April 27, 2015
2:24 PM

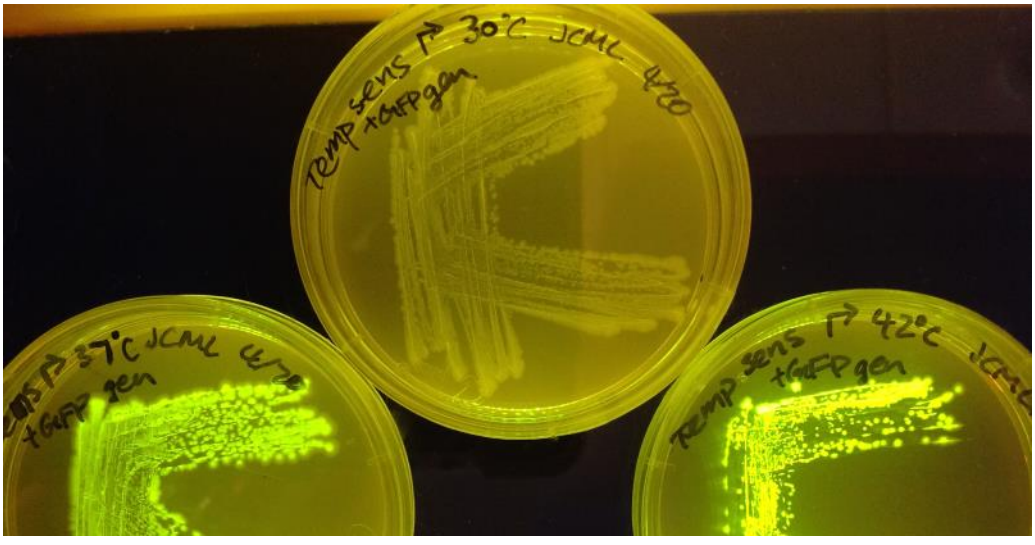
Purpose: testing sensitivity of temperature sensitive promoter

Figure 1. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 30, 37, 42 degrees C



Plates in all the temperatures grew. There were fewer colonies in the 42 degrees C due to the high temperature.

Figure 2. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 30, 37, and 42 degrees C under blue light



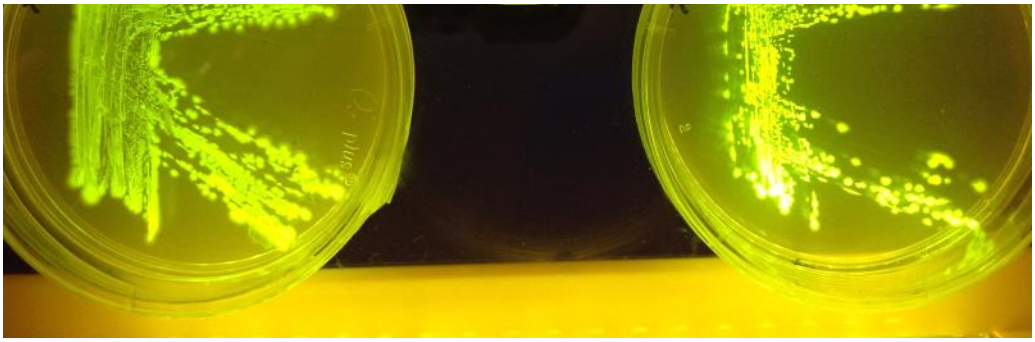
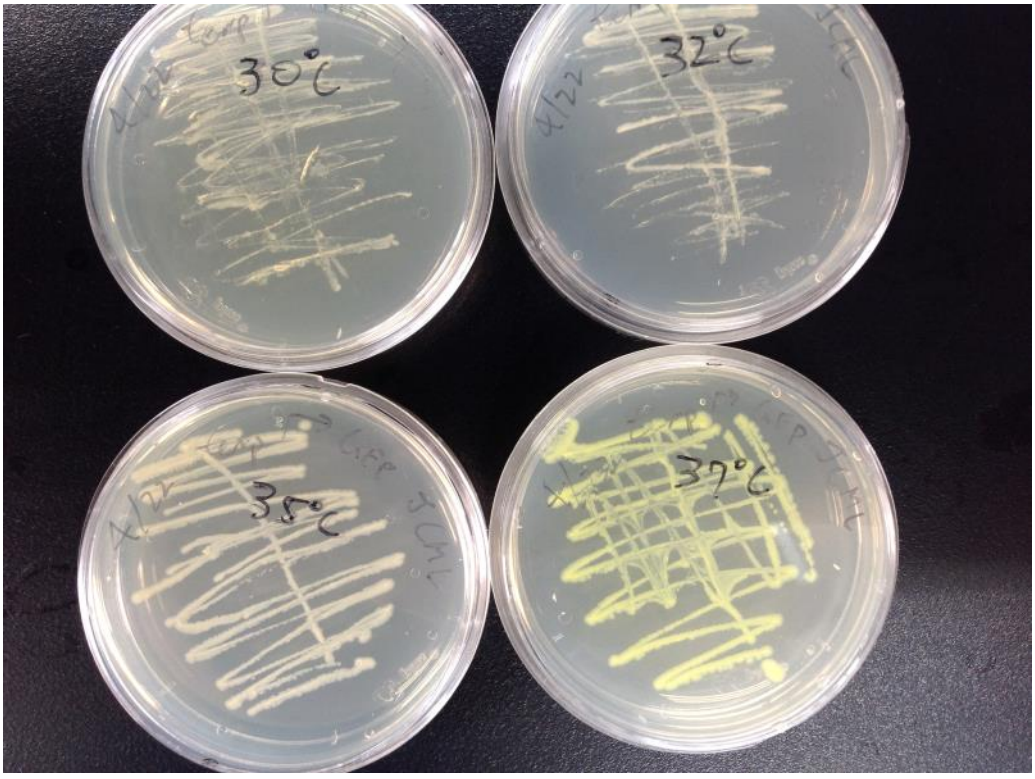
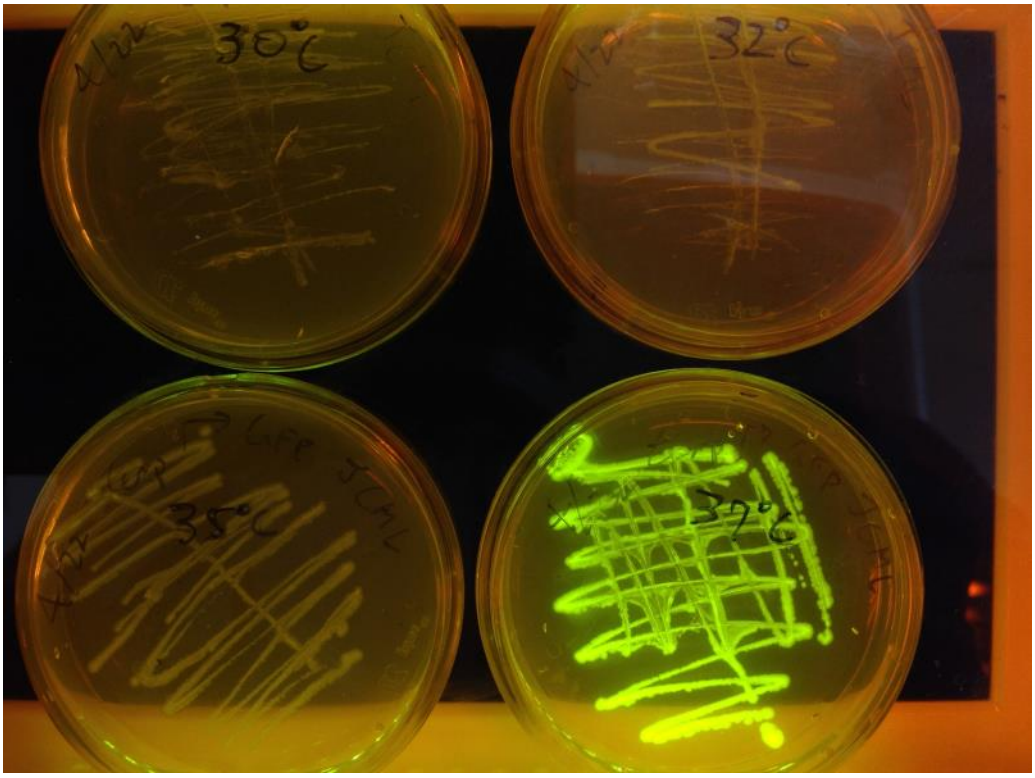


Figure 3. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 30, 32, 35, and 37 degrees C



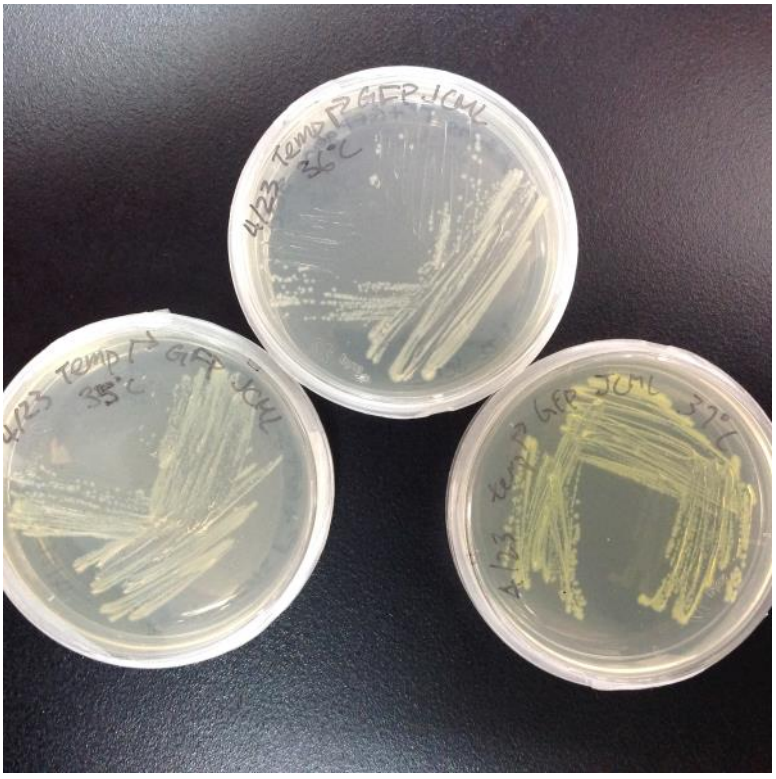
Colonies grew in all the temperatures.

Figure 4. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 30, 32, 35, and 37 degrees C under blue light



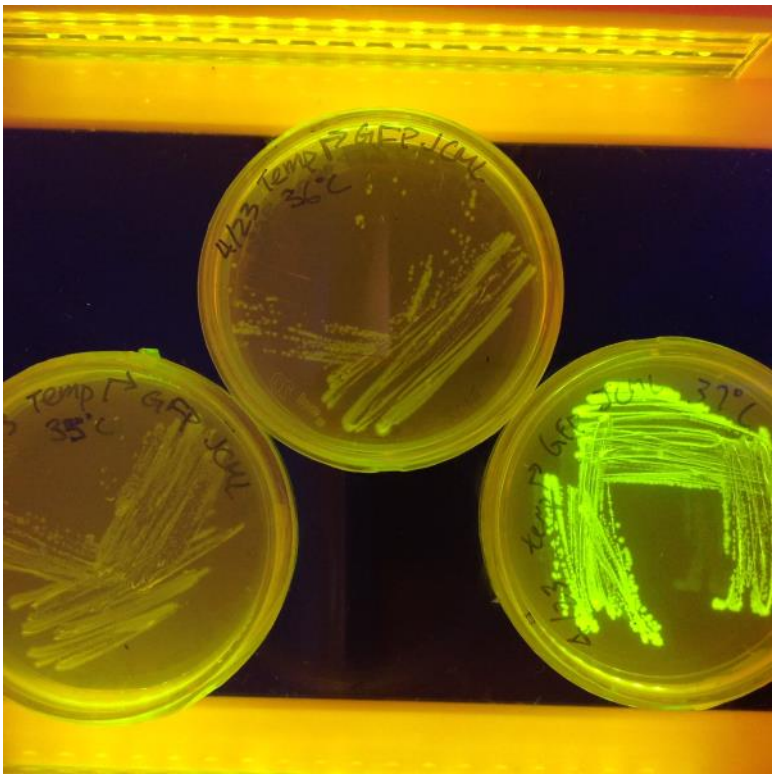
Only the plate grown at 37 degrees C glowed.

Figure 5. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 35, 36, and 37 degrees C



Colonies grew at all temperatures.

Figure 6. Bacteria with GFP gen driven by temperature sensitive promoter cultured in 35, 36, and 37 degrees C under blue light



36 degrees C plate glowed faintly. 37 degrees C plate glowed.

Conclusion: Temperature sensitive promoter is activated at 37 degrees C.

Summary

2015年6月4日
上午 11:51

Temperature sensitive promoter

After successfully testing the temperature sensitive promoter and GFP gen construct, this week, we collected the temperature sensitive promoter and GFP gen plasmids for future uses.

Experiments

Wednesday, April 29, 2015
2:46 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Temp promoter	Jo and Monica	Miniprep - grow cultures	Let it grow	Let it grow	Can't hold it back anymore
ACT	Leon	Grow some cultures	Cultures grew	They're ready	Miniprep them

Pictures

Wednesday, April 29, 2015
3:24 PM

Experiments

Wednesday, April 29, 2015
2:46 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Temp promoter	Jo and Monica	Miniprep - continue	142.7 ng/ul for temp promoter 133.4 ng/ul for temp+GFP		
ACT	Leon	Miniprep some DNA for mutagenesis	Good conc high 100s and low 200s	We have plasmid DNA ready	Miniprep was good Send them out

Pictures

Wednesday, April 29, 2015
3:24 PM

Experiments

Wednesday, May 06, 2015
7:26 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Organization	Leon	Make LB agar plates with chloramphenicol resistance	Made a lot of plates	We got plates	Use the plates

Wednesday, May 06, 2015
2:03 PM

This is just for the searching function for one note.

The biobrick number for the temperature promoter is K608351.

Summary

2015年5月17日
下午 07:21

SOS promoter

This week we miniprepped SOS promoter to use it in place of the UV promoter as we were having problems with it. We ran the gel check and the parts (SOS promoter and GFP gen) were the right sizes.

Experiments

Friday, May 15, 2015
12:41 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
SOS GFP plasmid	Andrew and Phillip	- Miniprepped SOS Promoter - Digested SOS Promoter at SP - Digested GFP at XP - Ran Gel and Gel extraction (the results are under the pictures tab)	Gel picture under UV is put under pictures tab. Please refer to figure 1. The gel results suggest that the GFP is correct because we see a faint band at the 800 bp mark. The SOS promoter also seems to be good enough to continue because it includes the backbone length.	This is going to work. As today is a Friday, we will not be able to do transformations.	- Ligation+Transformation

Picture

Friday, May 15, 2015
2:55 PM

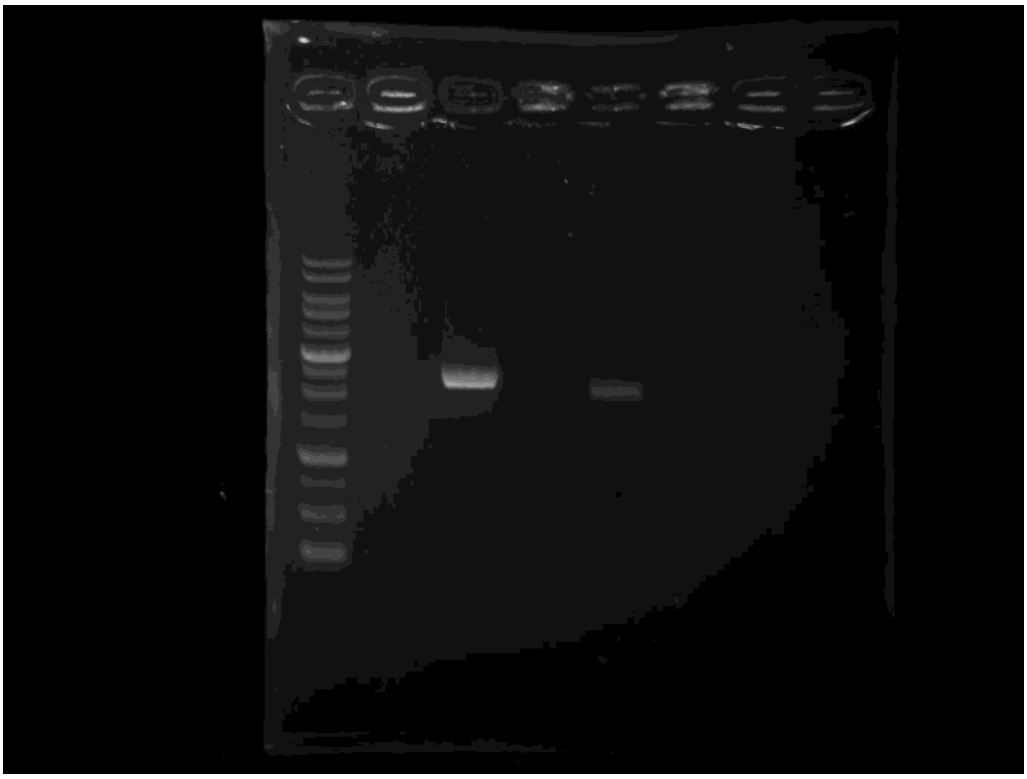


Figure 1: Order from left to right.	Ladder	Blank	SOS Promoter cut at SP	Blank	GFP cut at XP

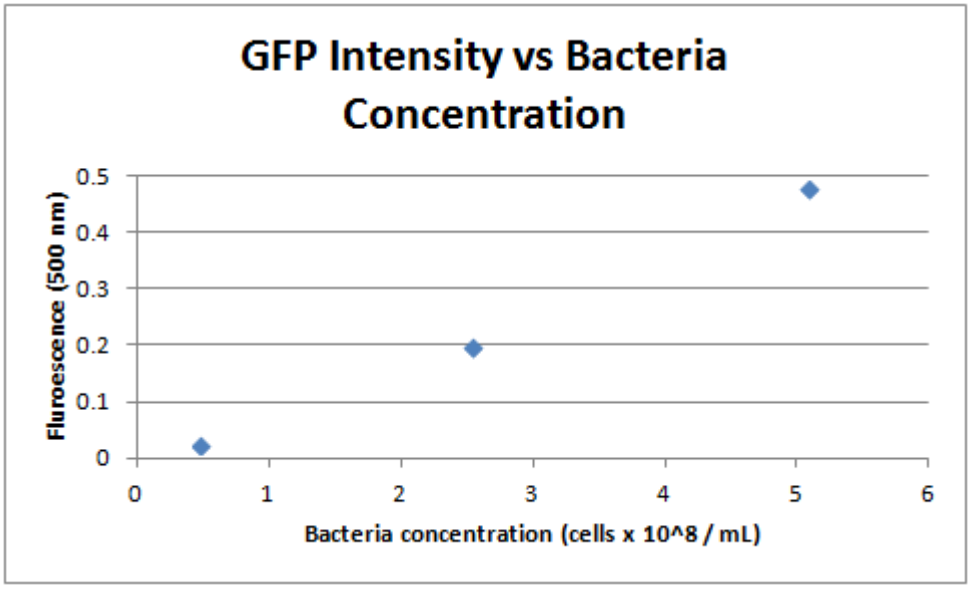


Figure 2. Measure of GFP intensity using spectrophotometer for different concentrations of bacteria culture

Experiments

Monday, May 18, 2015
3:05 PM

12:41 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
PCR for PFU and TAQ	Jon	- PCR for PFU and TAQ	- Created the mixture of PCR for PFU and TAQ for Leon.	- Wait for the result from PCR to test if the polymerase is functioning properly	- Leon takes over

Photos

Monday, May 18, 2015
3:05 PM

Experiments

Wednesday, May 20, 2015
3:24 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
3 in 1 for SOS + GFP	Andrew	Did restreak, liquid culture and PCR of SOS promoter + GFP			Do Gel Check of PCR nad miniprep of SOS GFP

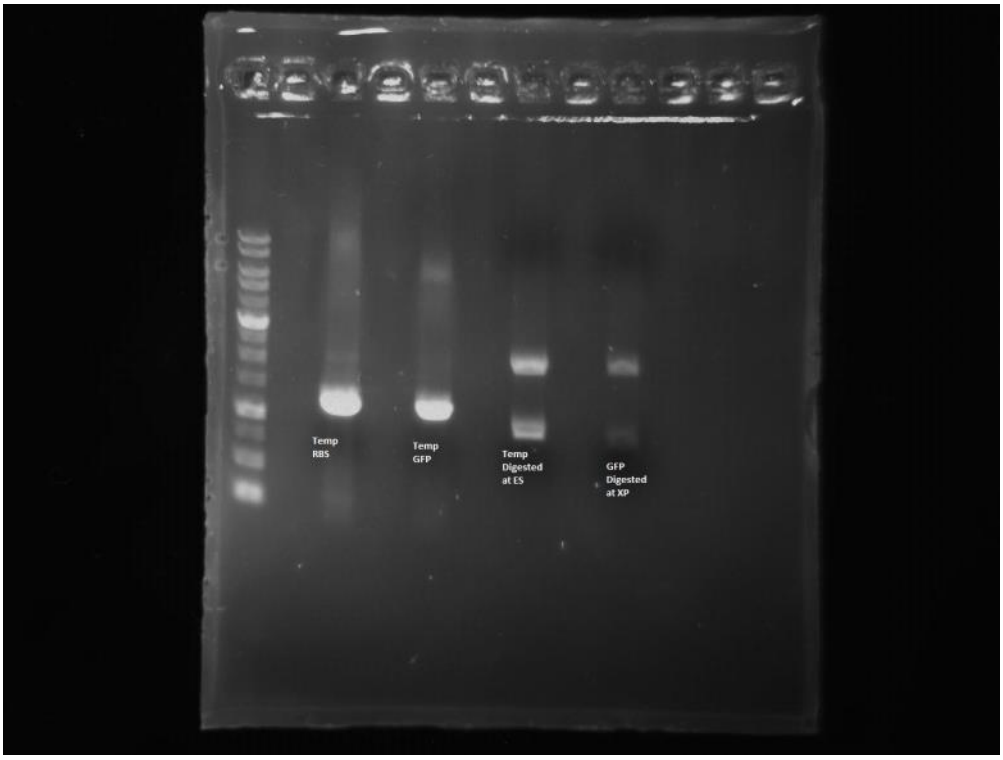
Experiments

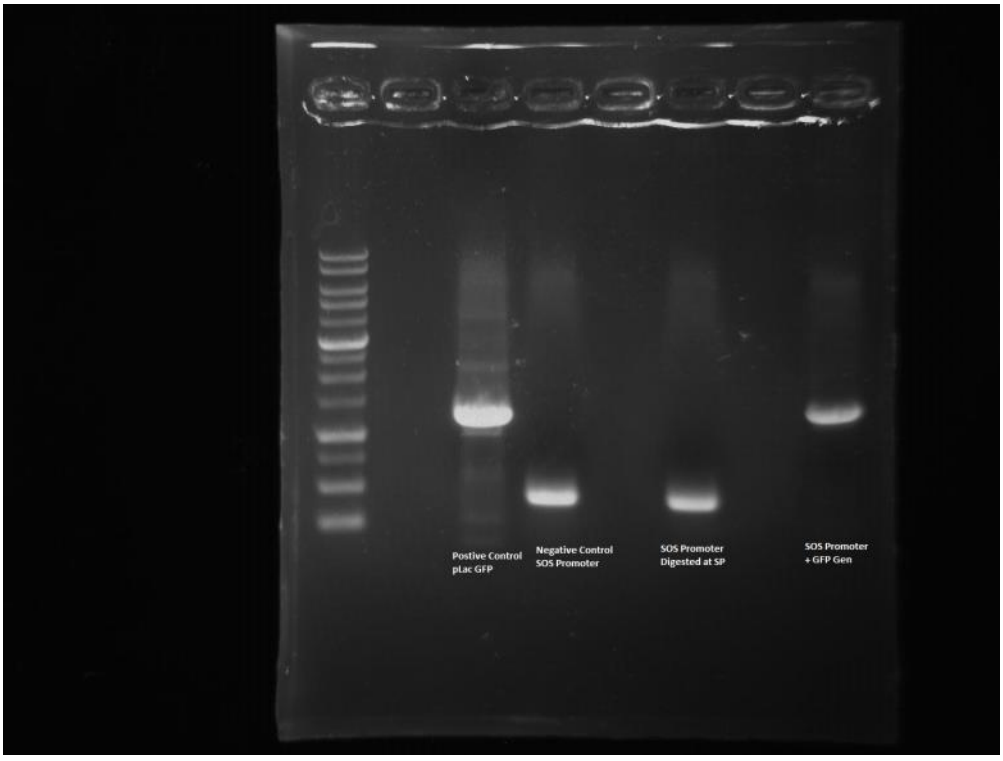
Wednesday, May 20, 2015
3:24 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Presentation Picture	Andrew	Ran Gel for Temp RBS, Temp GFP, Temp promoter cut at ES and GFP cut at XP			
PCR gel check of SOS GFP	Andrew	PCR checked SOS promoter + GFP			
SOS GFP miniprep	Andrew	Miniprep of SOS promoter + GFP with elution			

Pictures

Wednesday, May 20, 2015
3:25 PM





Tuesday, May 26, 2015
12:33 PM

12:41 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
plac	Leon Yim	Grow cultures 2x5mL	Cultures grew	good	miniprep
CFP	Leon Yim	Grow cultures 2x5mL	Cultures grew	good	miniprep

Tuesday, May 26, 2015
12:33 PM

12:41 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
plac	Leon Yim	miniprep	100+ conc	good	digest
CFP	Leon Yim	Miniprep	100+ conc	good	Digest
Terminator/rbs	Leon Yim	Transformation	Not sure yet		Liquid culture + miniprep
PCR gelcheck: PEV, TAQ	Jo Chuang	gel	good	Polymerase works	
Temp promoter timelapse	Jo Chuang	Growing at 33C	growing	growing	Record timelapse

Summary

2015年6月4日
下午 12:39

TAQ polymerase
This week we ran a PCR and gel check for TAQ polymerase. We found that the polymerase works.

Temperature sensitive promoter timelapse

Interval test of GFP expression

Wednesday, May 27, 2015
7:33 AM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps

Thursday, May 28, 2015
2:16 PM

Purpose	Group	Experiments	Results	Conclusions/Notes	Next steps
Intrv Test	JC	Checking GFP expression of TMP-GFP at 37C	Nothing so far		