BACILLUS SUBTILIS TRANSFORMATION:

Make an overnight pre-culture in ~5ml LB + Can

D (-1)

Incubate overnight at 30°C with agitation.

D-DAY

**make sure to label tubes as you proceed with performing the assay!

- 1. Pipette 1000 µl of overnight culture **1** into two 2 mL tube; repeate this step for overnight culture **2**. Also, dispense 1000µl into an additional tube as a control.
- 2. Spin culture-containing tubes for 3-4min at 5000 rpm.
- 3. Pipette 1000 µl of solution **I** into each tube ****and spin; dispense of supernatant
- 4. Re-suspend each tube in 100 μl of solution **I**.
- 5. Next, transfer the contents of each *eppendorf* tube into its own, separate Falcon tube.
- 6. Again, pipette 900 μl of solution **I** into each Falcon tube.
- 7. Place the 3 Falcon tubes into the incubator at 37°C.
- 8. After 1hr, check the OD. Continue this process until it measures at ~0.5

. .

D-DAY

**make sure to label tubes as you proceed with performing the assay!

- 1. Pipette 1000 µl of overnight culture **1** into two 2 mL tube; repeate this step for overnight culture **2**. Also, dispense 1000µl into an additional tube as a control.
- 2. Spin culture-containing tubes for 3-4min at 5000 rpm.
- 3. Pipette 1000 µl of solution **I** into each tube ****and spin; dispense of supernatant
- 4. Re-suspend each tube in 100 μl of solution **I**.
- 5. Next, transfer the contents of each *eppendorf* tube into its own, separate Falcon tube.
- 6. Again, pipette 900 µl of solution **I** into each Falcon tube.
- 7. Place the 3 Falcon tubes into the incubator at 37°C.
- 8. After 1hr, check the OD. Continue this process until it measures at ~0.5
- 9. Add 900 µl of solution **II** to each Falcon tube to dilute by 10 fold.
- 10. Pipette 500 µl of each Falcon dilution into 2 individual eppendorf tubes.
- 11. Add 2.5 µl of **s.020** into a tube containing overnight culture**.**
- 12. Next repeat this step, instead with **s.021** in a separate.
- 13.Incubate for 1h30 at 37°C.
- 14. Plate on chloramphenicol plates and grow overnight at 37°C.