Testing the effectiveness of UV Protocol

-Grow liquid cultures of *E.coli* Top10

-Measure OD of the culture and apply a correction factor so that the OD is 1.

({OD you want /OD you have} x volume you are inoculating = Volume of LB to add)

-Reduce the OD of the culture (so that colonies are distinguishable/countable when grown on a plate) by making two 1 in 1000 dilutions with LB so that the resultant culture is a 10ml 1 in 1,000,000 dilution.

-Place 200μl of the culture in 3 wells of a 96 well plate. Keep the remaining amount of the liquid culture for the control and repeats

-Pipette 200μl of the culture and spread onto a LB plate, label it control

-Irradiate the samples in the 96 well plate for 1 minute in the UV Trans illuminator operating at 254nm (This was part of our uvp Bio Doc it^2 Imager).

-Plate up on an Agar plate each of three 200μl samples from the 96 well plate

-Incubate overnight

-Using the same culture repeat this but irradiate for 1 minute, 2.5 minutes, 5 minutes and 10 minutes using the same culture

-Count the colonies on each plate (Note: should be done in the morning so the colonies do not grow too large)