**Luria-Bertani (LB)**

**NOTE:**The lab uses both LB Broth (liquid media) and LB-Agar Plates.  Be sure that you are clear which one you are making.  The only difference is whether or not agar is added.

**1L of LB Broth (liquid media)**

1. Add 500mL ddH20 and a stir bar into a 2L flask and start a magnetic stirrer.

2. Add each of the following while stirring:

                10g Tryptone

                5g Yeast Extract

                10g NaCl

3. Stir for ~5 minutes until powder is dissolved.

4. Add ddH20 up to 1 liter.

5. Aliquot the solution into 100mL, 250mL, or 500mL bottles, or leave in flask if you plan to grow a large culture.  Autoclave on liquid cycle.

6. \*If making LB Broth with antibiotic, add the antibiotic after the flask/bottle cools to ~55C.  The antibiotics are made in a stock solution that can be diluted 1:1000 to make achieve the working concentration.  Thus, add 1mL of antibiotic stock per liter of media.

7.  Store LB Broth at 4C.

**1L of LB-Agar for Plates**

1. Add 500mL ddH20 and a stir bar into a 1L flask (or larger) and start a magnetic stirrer.

2. Add each of the following while stirring:

                10g Tryptone

                5g Yeast Extract

                10g NaCl

                17g Agar

3. Stir for ~5 minutes (Note that the agar will not go into solution.)

4. Add ddH20 up to 1 liter.

5. Autoclave in a flask with a foil lid on liquid cycle.

6. \*If making LB-Agar Plates with antibiotic, add the antibiotic after the flask cools to ~55C.  The antibiotics are made in a stock solution that can be diluted 1:1000 to make achieve the working concentration.  Thus, add 1mL of antibiotic stock per liter of media.

7.  Hand pour ~25mL into 100x15mm plates.  This should make almost 40 plates.