Lab 1: Eau That Smell

Biological Materials:
Strain 1-1    NB376  stationary phase, indole-
Strain 1-2    NB377  stationary phase + inverter, indole-
Strain 1-3    NB378  log phase, indole-
Strain 1-4    NB379  no ATF1, indole-

Reagents:
ampicillin    e.g. Sigma, A0166  100 mg, use at final concentration of 100 mg/liter
isoamyl alcohol e.g. Sigma, W205710  700 ul, dilute in LB
banana extract e.g. Amazon, "Frontier" brand 1.5 ml, dilute in H2O as instructed for smell standards

Next steps (per student team):
Day 1: grow overnights of each strain in LB+A (4x2.5 ml)
Day 2: innoculate each into 50 or 75 ml LB+amp+isoamyl (<300 ml LB+Amp, 250 ul isoamyl)
Day 2, 3, (4): follow growth and smell intensity
Final data: data analysis

Teacher provides:
Consumables
Luria Broth (LB), 1 liter
Sterile toothpicks, innoculating loops or sterile tips
Sterile tubes (16x150mm)+ loose caps (4)
50 ml conical tubes for smell stds (6 stds)
Pipet tips
Latex or nitrile gloves

Equipment
125 ml flasks (sterile) + stir bar (4)
Roller drum or shaker at 37° for growing liquid overnights
Room temperature shaker or stir plates for growing cells
Spectrophotometer or turbidity stds*
Sharpie pens
Pipetmen (P1000, P200, P20)

*Turbidity stds require
1.75 ml BaCl2
80 ml 1% H2SO4