Extracting DNA from Tail Tips/Cells

**Materials:**
- Falcon tube
- Tail tips
- Lysis buffer (Ruthie’s stock)
- Proteinase K stock
- Oven at 55° C
- 100% isopropanol alcohol
- Centrifuge (cold room)
- Aspirator
- P1000 pipet
- P200 pipet
- 70% ethanol
- TE buffer
- 4° C fridge

**Day 1:**
1. Combine 10 ml lysis buffer with 200 µl Proteinase K stock in a falcon tube.
2. Add 500 µl of tail buffer made in step 1 to the tail tip sample.
   a. Note: each individual tail tip will be processed in a separate well containing 500 µl of tail buffer.
3. Incubate sample in an oven at 55° C overnight.

**Day 2:**
1. Remove sample from oven
2. Add 500 µl of 100% isopropanol alcohol to the mixture.
3. Vigorously shake sample until DNA precipitates.
   a. Note: DNA precipitate has a white, stringy appearance.
4. Centrifuge sample at max speed for 10 minutes in a cold room.
5. After centrifugation, vacuum off supernatant.
6. Resuspend the pellet in 500 µl of 70% ethanol.
7. Centrifuge sample at max speed for 10 minutes in a cold room.
8. After centrifugation, Vacuum off supernatant.
9. Let sample air dry at room temp for 15 minutes.
10. Add 30-60 µl TE buffer to the sample.
    a. Note: quantity of TE buffer is based on size of sample; i.e. a small sample of DNA will only require 30 µl of TE buffer.
11. Incubate samples in an oven at 55° C overnight.

**Day 3:**
1. Remove samples from oven and store them in a fridge at 4° C.