Extracting DNA from Tail Tips/Cells

Materials:

- Falcon tube
- Tail tips
- Tail 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 Tail Buffer (see tail buffer protocol for reagents to make it) with 200 µl Proteinase K (Life Technologies CAT#: 25530-049) stock in a falcon tube.
2. Add 500 µl of the lysis buffer mix (Tail buffer + Proteinase K) made in step 1 to the tail tip sample.
    a. Note: each individual tail tip will be processed in a separate vial containing 500 µl of lysis buffer.
3. Incubate sample in an oven at 55° C overnight.

Day 2:

1. Remove sample from oven, if there is a box of samples shake the whole box.
2. Centrifuge the samples at 14000 rpm for 10 minutes in a cold room.
3. Add 500 µl of 100% isopropyl alcohol into separate tubes labeled to correspond to the samples. Pour the supernatant from step 2 into each tube containing isopropanol.
4. Vigorously shake sample until DNA precipitates.
    a. Note: DNA precipitate has a white, stringy appearance.
5. Using a 20ul pipette tip, scoop out the precipitated DNA and carefully transfer it to the appropriately labeled tube containing 200 ul of TE Buffer. Change tips in between samples.
6. 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.