**Male fly response to spider vs cricket ques. June 2016**

February 16, 2017

1st experiment

**Prediction**: Male flies in vials with predator cues will be less active during the day than male flies in vials with cricket cues.

**Protocol**.

Use males from our wild fly population. Use 32 DAM vials and caps with holes. Mark 16 caps **1S,** and 16 caps **1C**.

Use flies eclosing on June 13.

Prepare humidified chambers with lights on at 10 AM and off at 10 PM for holding the predators. Also prepare the 2 tupperwares for the DAMs and their lights. Food vials: each vial will contain ~4 ml food medium (12 mm high). Vials are 22 mm wide and 48 mm long with snap cap containing a ventilation hole in the centre. The horizontal distance between the food and the IF sensors is about 7 mm. An LED light bulb will provide illumination with lights on at 10 AM and off at 10 PM.

Get spiders and place them in B123 on 10-10 light cycle (Ian keeps them on 8-8). Connect the chamber outlets and verify that lights and fan are on after 10 AM.

Day 1. Thu, June 9. Feed spiders by adding 3 flies into each spider vial. Prepare 32 DAM vials with regular food (for both spiders and crickets).

Day 2. Fri. 1 PM. Move spiders individually into 16 DAM vials with regular medium + filter paper. Place in B123 chamber on 10 to 10. Also move 16 crickets individually into 16 DAM vials with regular medium + filter paper and place in right chamber in B133A.

Day 5. Mon 7:30 AM. Clear flies.

Day 5. Mon 11:30 AM. Remove spiders and silk and crickets, then place newly eclosed live-sexed males in each vial.

Monitors will be in their default vertical position with the vials being in horizontal position as they were with the flies.

Monitor 1: Top row: spider cues. Bottom row: cricket cues.

Monitor 2: Top row: cricket cues. Bottom row: spider cues

Start DAM. Feed spiders.

Day 6. Tue. Stop DAM after a bit longer than 24 h.

Spider, cricket and Fly need: 16 spiders, 16 crickets, 32 males.