**9/17/16 Chao Chen adapted methods: ECB Brain Dissection**

**Tools:**

* 25mL cylinder filled with PBS
* Gel bottom petri dish
* dropper
* Pins
* Micro scissors
* Feather weight and fine tip forceps

Place a pin through the caudal end of the larva and above the thorax. Add a dropper full of PBS (Phosphate buffered Saline) to the dish to surround the larva. Using micro scissors and starting from the caudal end, begin by piercing through the exoskeleton and cut towards the head, exposing internal structures and the hemolymph to the surrounding solution. Using the pins, flay open and secure the exoskeleton to the dish.

* At this point it may be necessary to add more PBS to help mobilize the fat body

To excise the brain, use a pin to push forward the head cap and secure it. The brain is a “bow-tie” shape that can be moved. Beneath the brain is the subesophageal ganglion. To expose the subesophageal ganglion you must first remove the esophagous. Doing this will allow you to completely visualize the brain and proximate ganglion.