## **HEMOLYMPH EXTRACTION**

- Hydrate adult flies after eclosion using a wet Whatman strip. The filter paper we use for Western transfer works well. Re-hydrate every day until you bleed them.

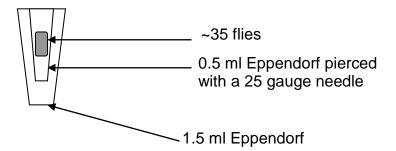
- Prick up to 200 adult flies in the thorax with a tungsten needle

- Centrifuge 35-40 adult flies in a small (500  $\mu$ l) Eppendorf, which has been pierced in the bottom with a 25 gauge needle. This small eppendorf should already be in a 1.5 mL Eppendorf.

\*Close the top of the 0.5 ml tube, but not the 1.5 ml tube.

\*Centrifuging must be done relatively quickly after the pricking

- Centrifuge at 5000 rpm for 5 min at 4°C. Your hemolymph will be at the bottom of the 1.5 ml tube.



- Prepare your 96 well plate with 99  $\mu I$  reagent per well ; add glucose standards to wells during the 5 minute spin.

- Add 1  $\mu l$  hemolymph to glucose assay reagent, incubate at 37°C, and read within 3 minutes.

\*Trehalase is very active in adult hemolymph, so do not incubate more than 3 min.

- <u>To measure both glucose and trehalose</u>, dilute your hemolymph 1 :10 in PBS before assay, and use 2  $\mu$ I + 198  $\mu$ I of reagent. Read at 3 min for glucose concentrations. You don't need to add trehalase; just incubate at 37°C, covered *tightly*, for 10-24 hours and it will be digested by the endogenous trehalase.