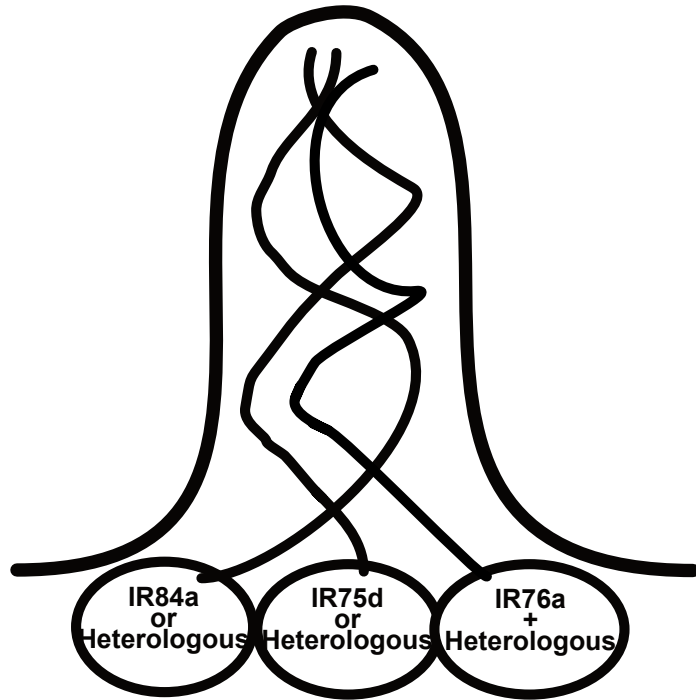
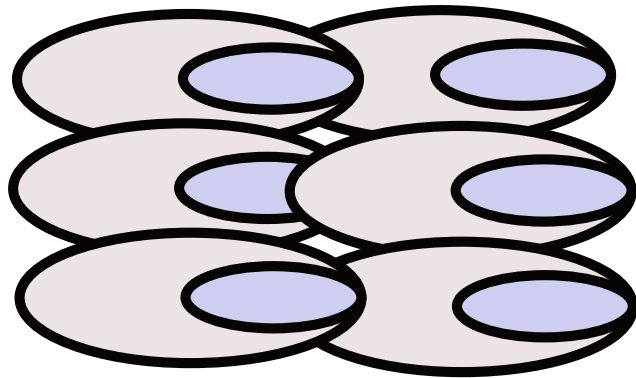


## *D. melanogaster* neurons



## HEK293 cells



### ***Pros***

- Similar intracellular environment (co-receptors/co-factors)
- Similar extracellular environment (olfactory binding proteins)
- More realistic physicochemical environment for odor delivery (vapor)
- Increased sensitivity/high fidelity receptive field for the heterologous chemoreceptor

- Fast and easy to transfect (transient or stable)
- If stable, transgenic cells can be stocked for long term
- Scalable to high throughput screening
- Accessable to electrophysiology and fluorimetry upon needs: combination of both methods

### ***Cons***

- Time consuming (multiple crossing)
- Insects need to be reared
- Not suitable for high throughput screening (HTS)
- Interferences with the ligand sensitivity from local neurons (biased effects)
- Diverse intracellular environment (issue with receptor folding and targeting)
- Needs of complex co-expression methods to combine various subunits of the same receptor
- Less realistic physicochemical environment for odor delivery (liquid)