

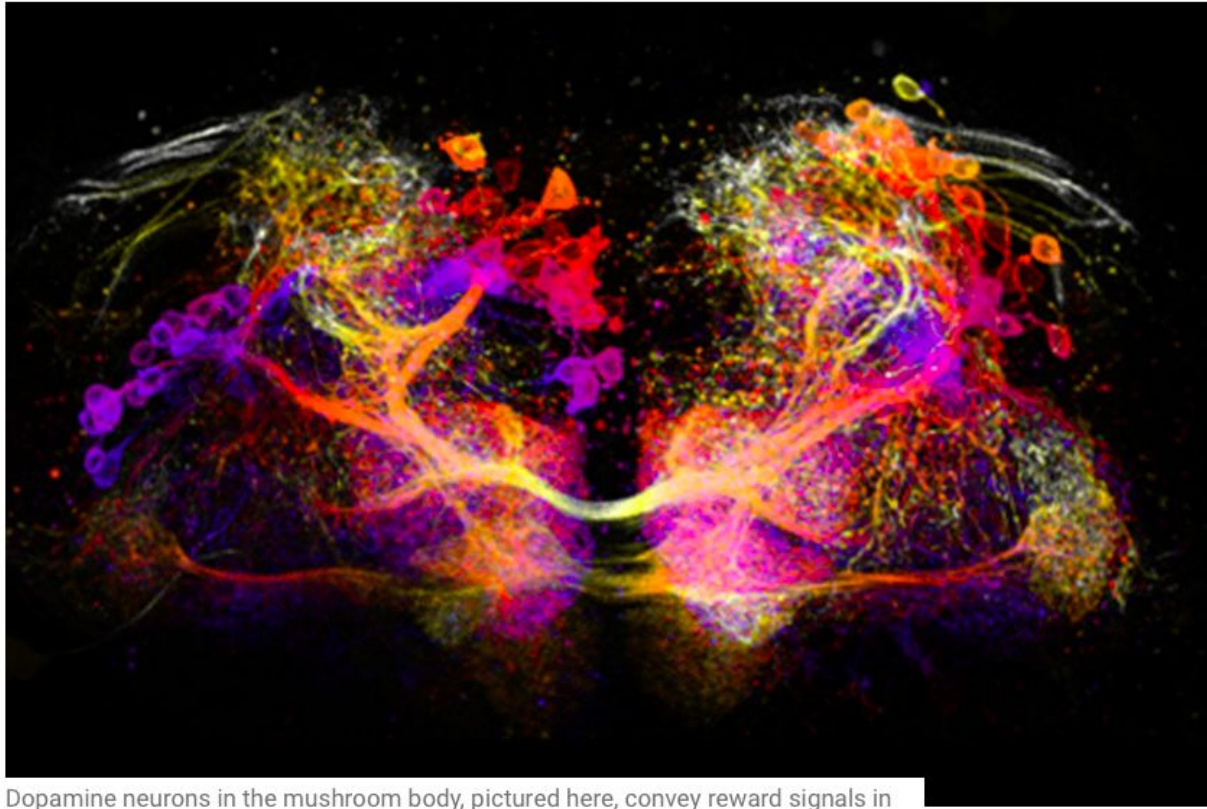
# **Distinct Dopamine Receptor Pathways Underlie the Temporal Sensitivity of Associative Learning**

Annie Handler

# Introduction

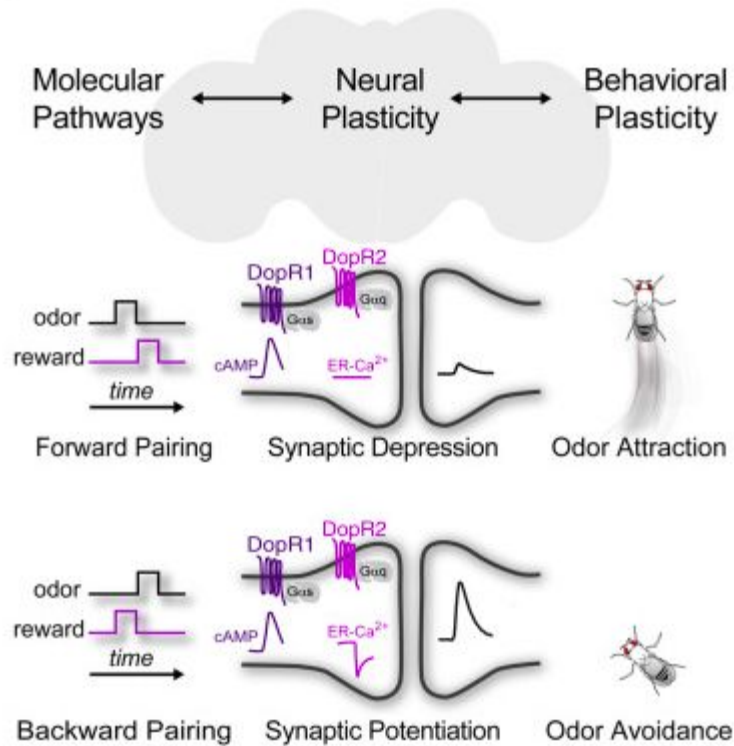


# The Mushroom Body!

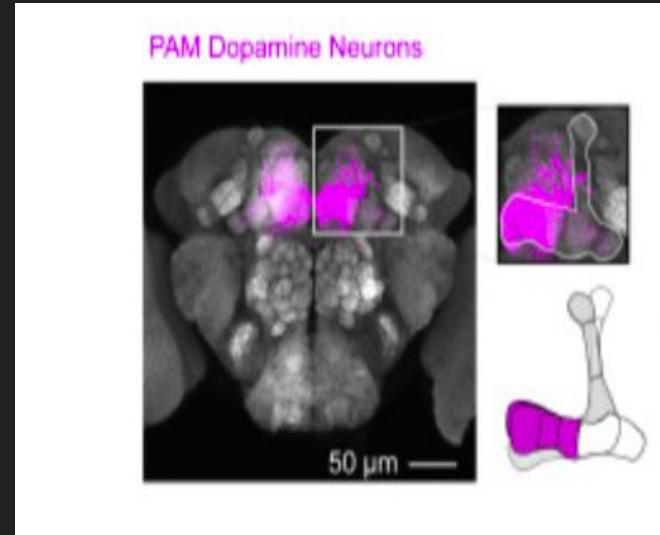
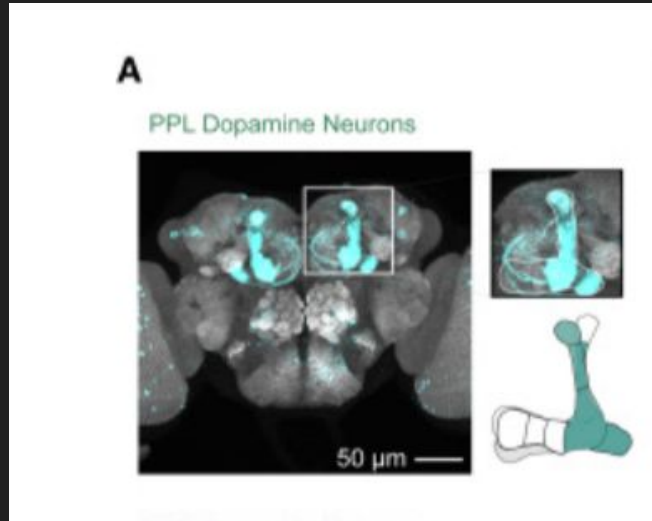


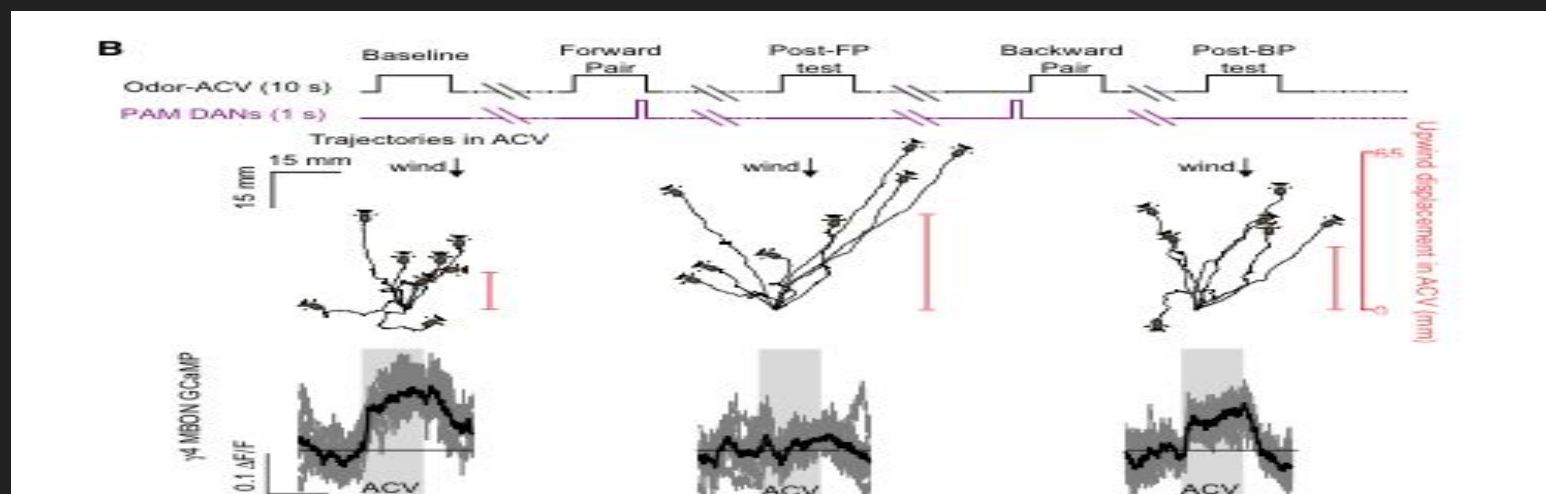
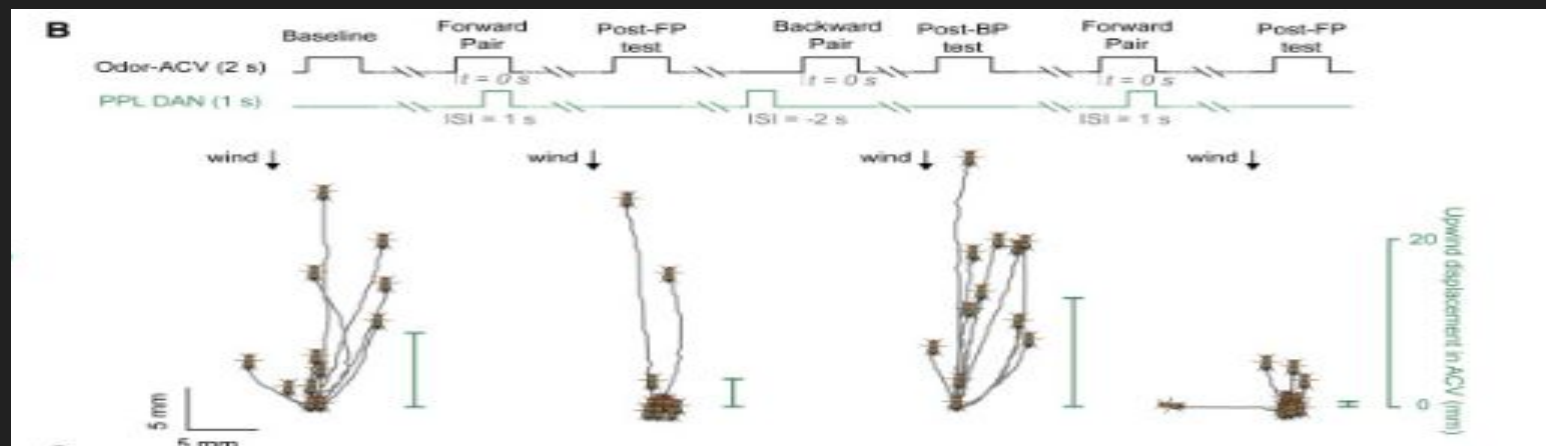
Dopamine neurons in the mushroom body, pictured here, convey reward signals in the fly brain.

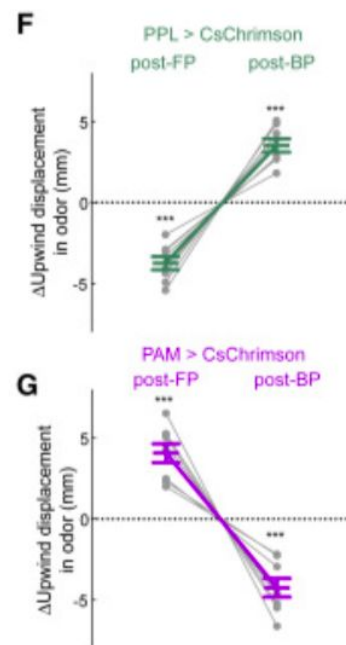
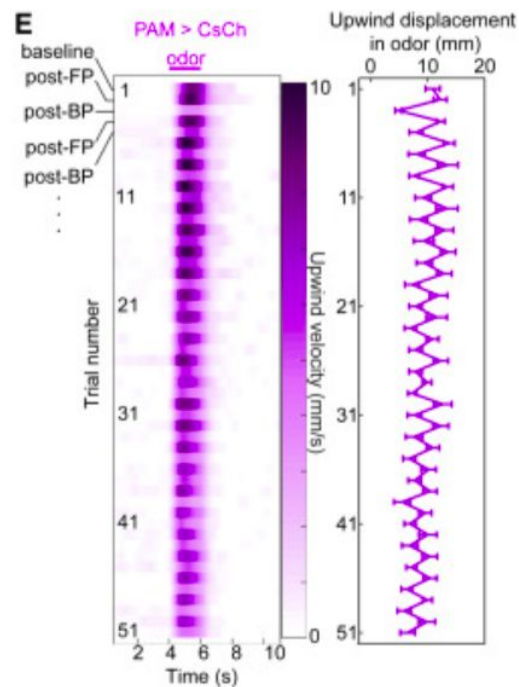
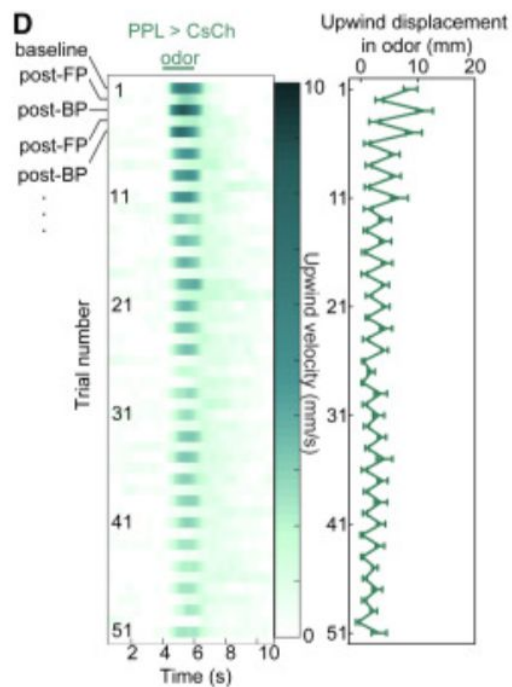
# Graphical Abstract



# Anatomy

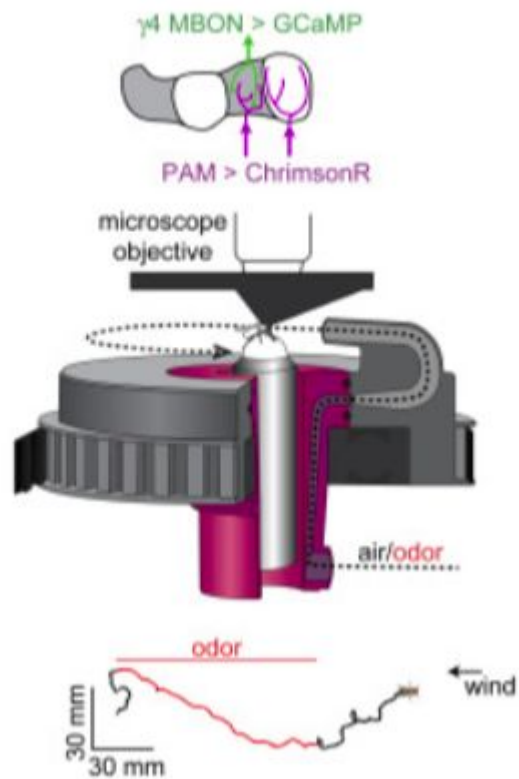
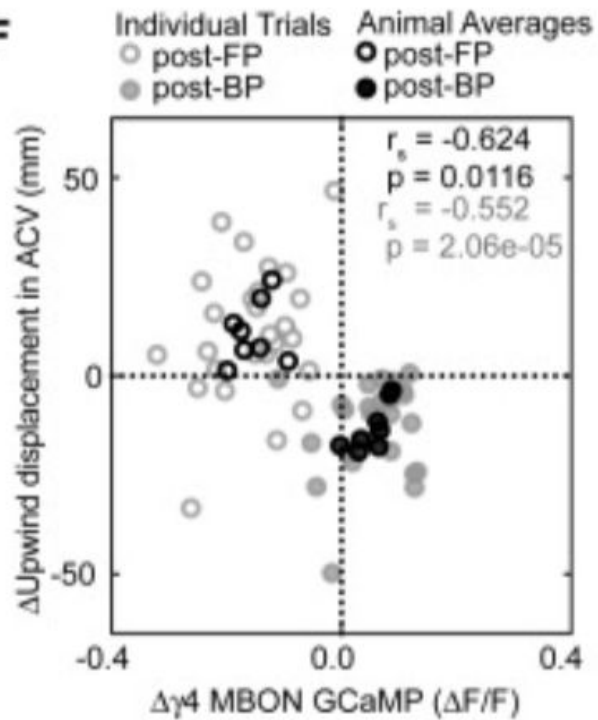


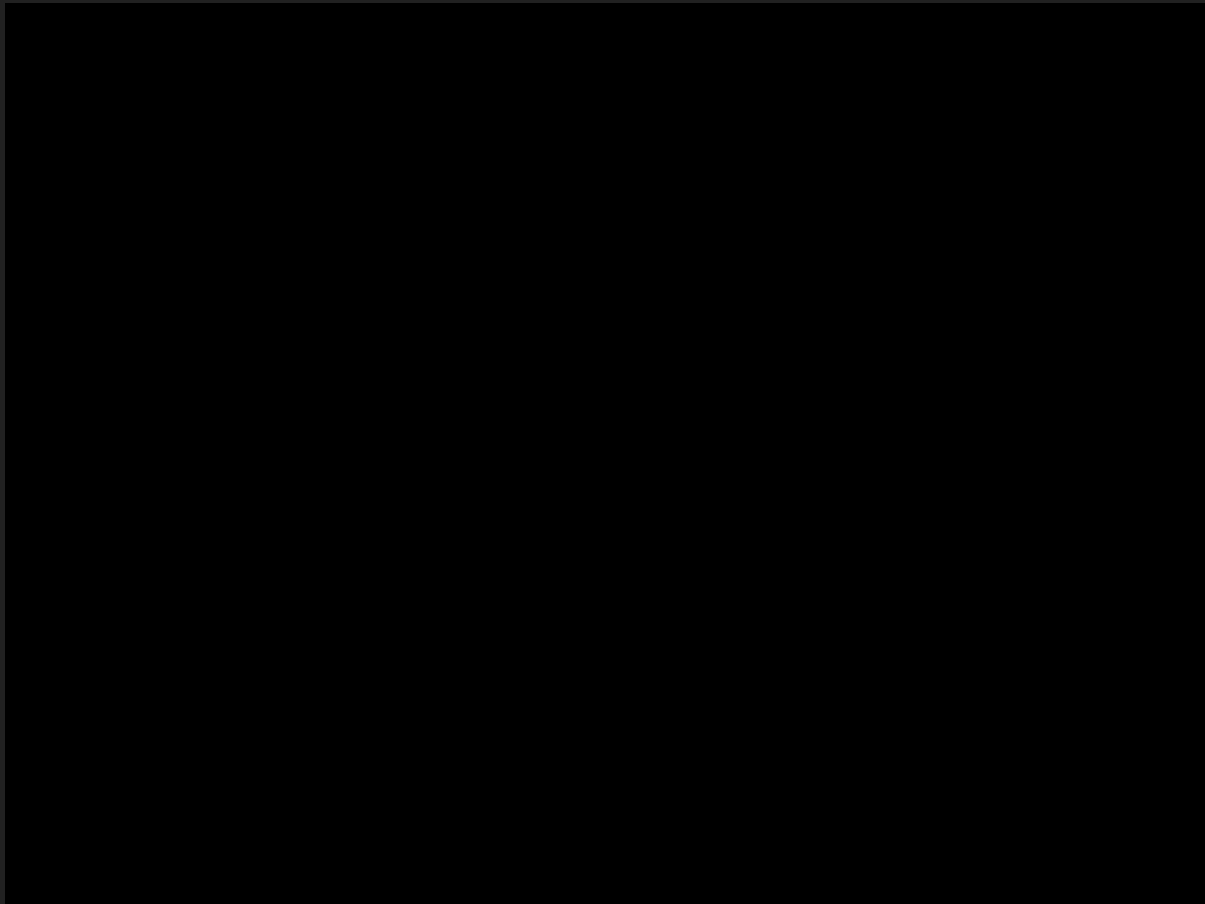




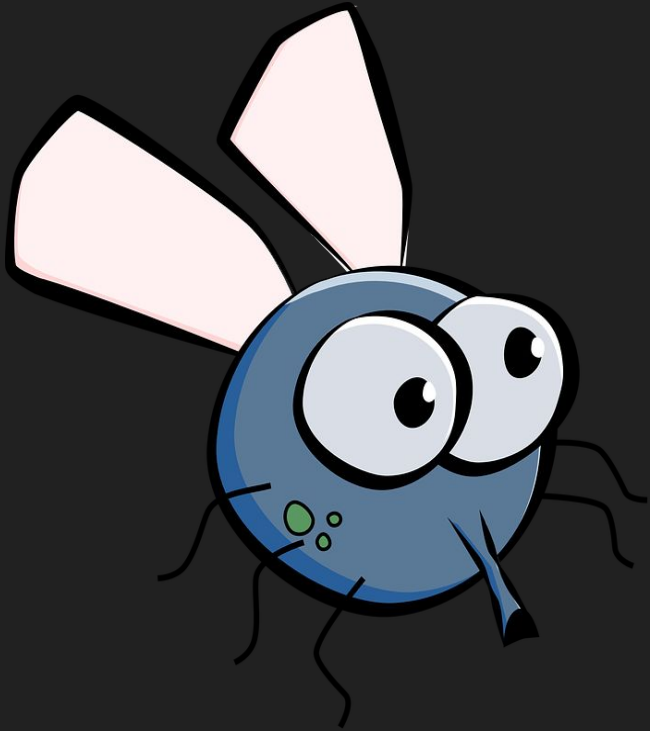




**A****F**



# Conclusion



- Animals learn the hard way which sights, sounds, and smells are relevant to survival.
- Memories are not set in stone, they're set in synapses