

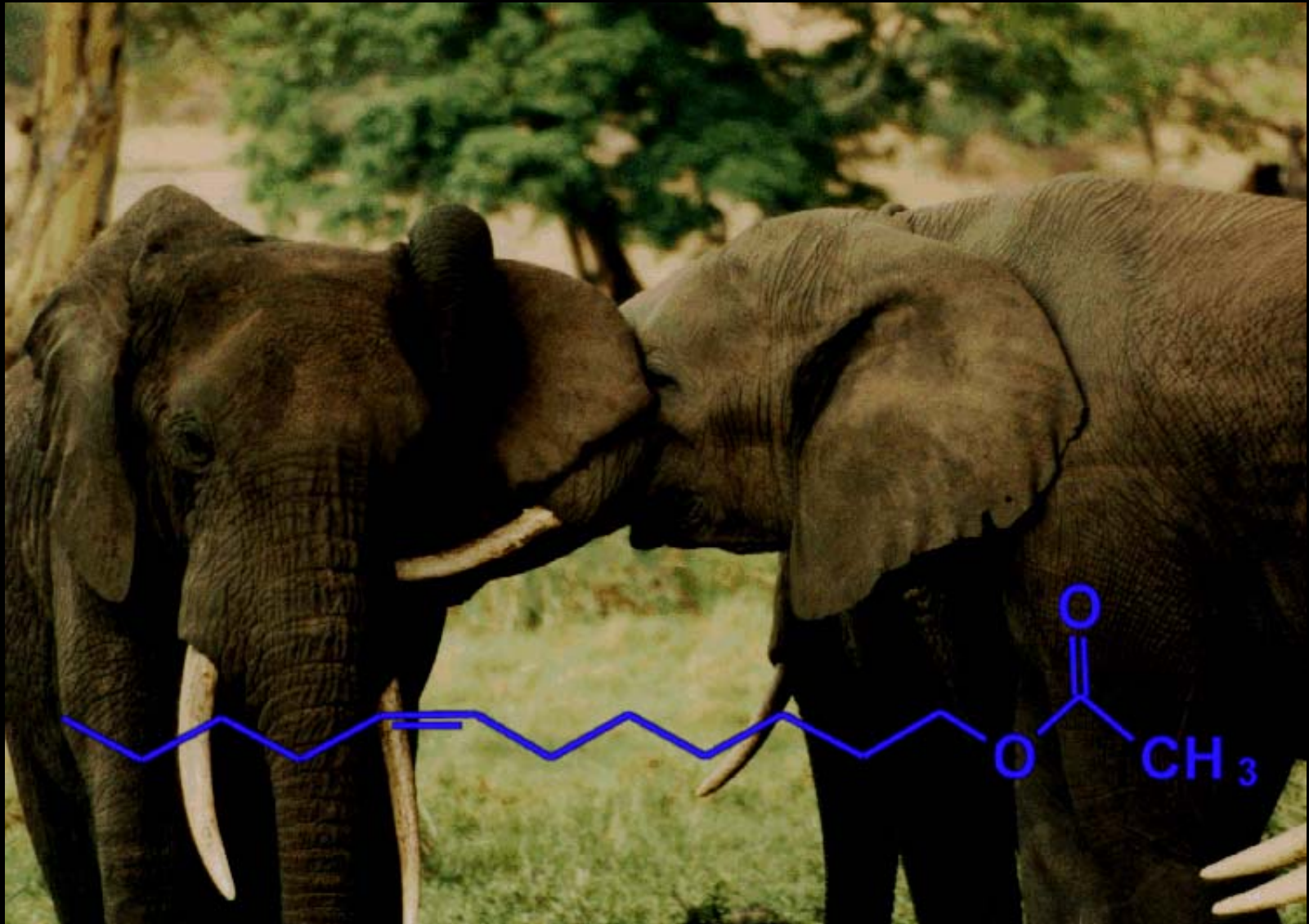
Ceci n'est pas un nez







Pheromone Elicits Discrete Behavior





Magnus

Different Sensory Modalities Employ Receptor Repertoires of Vastly Different Size



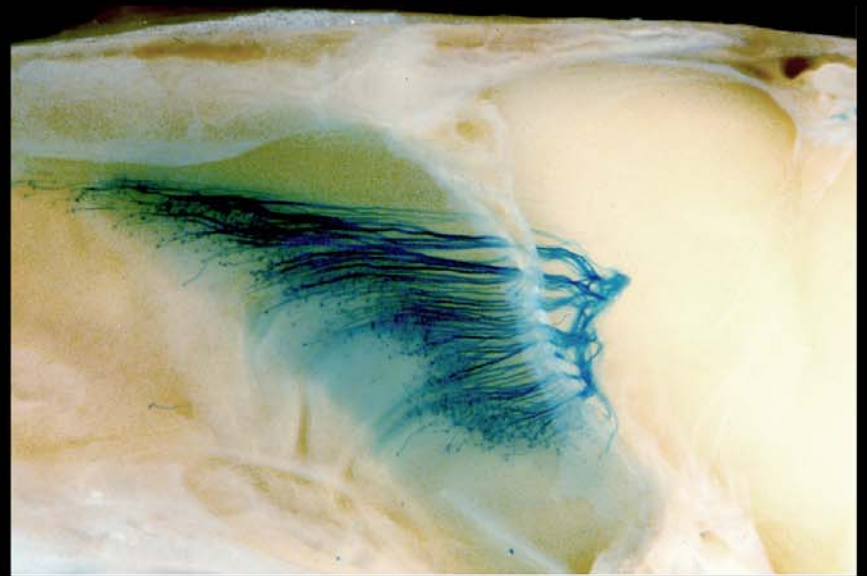
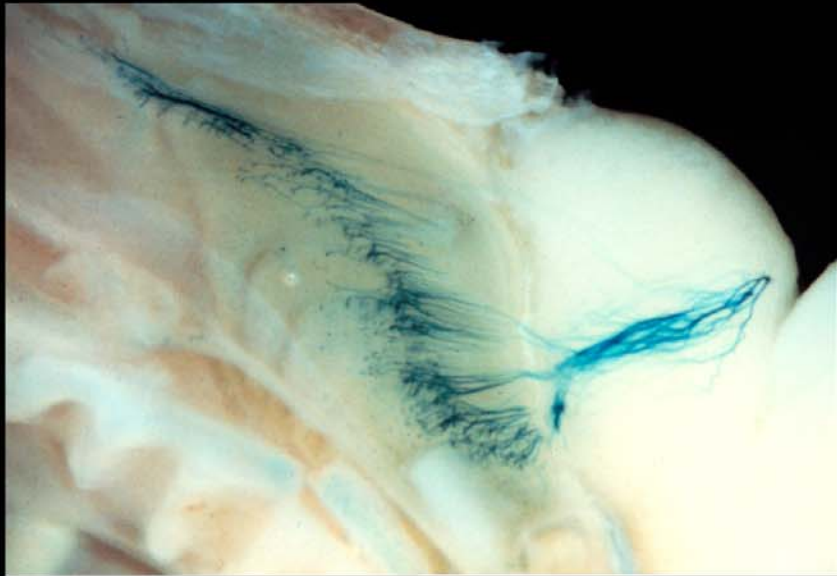
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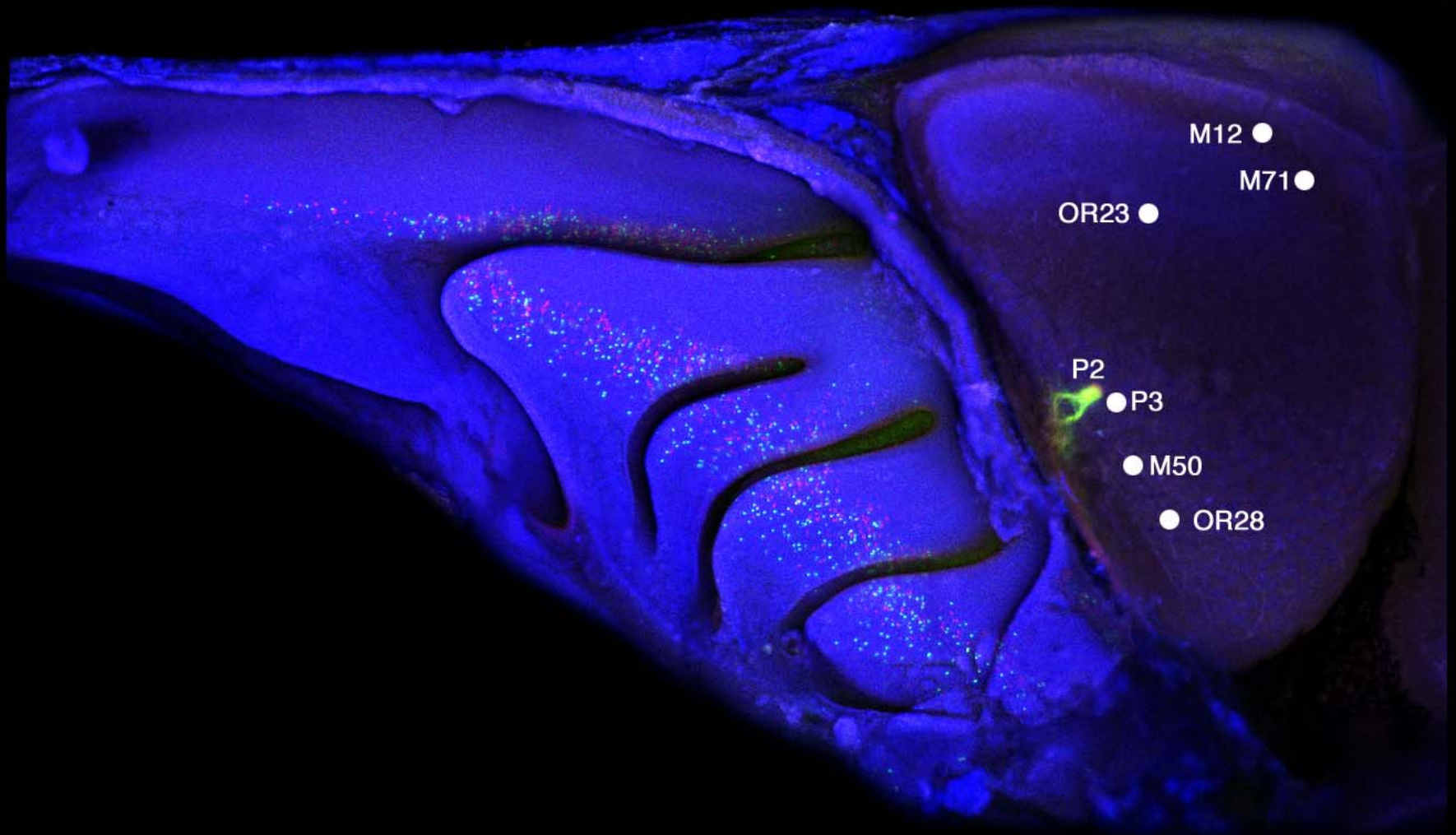
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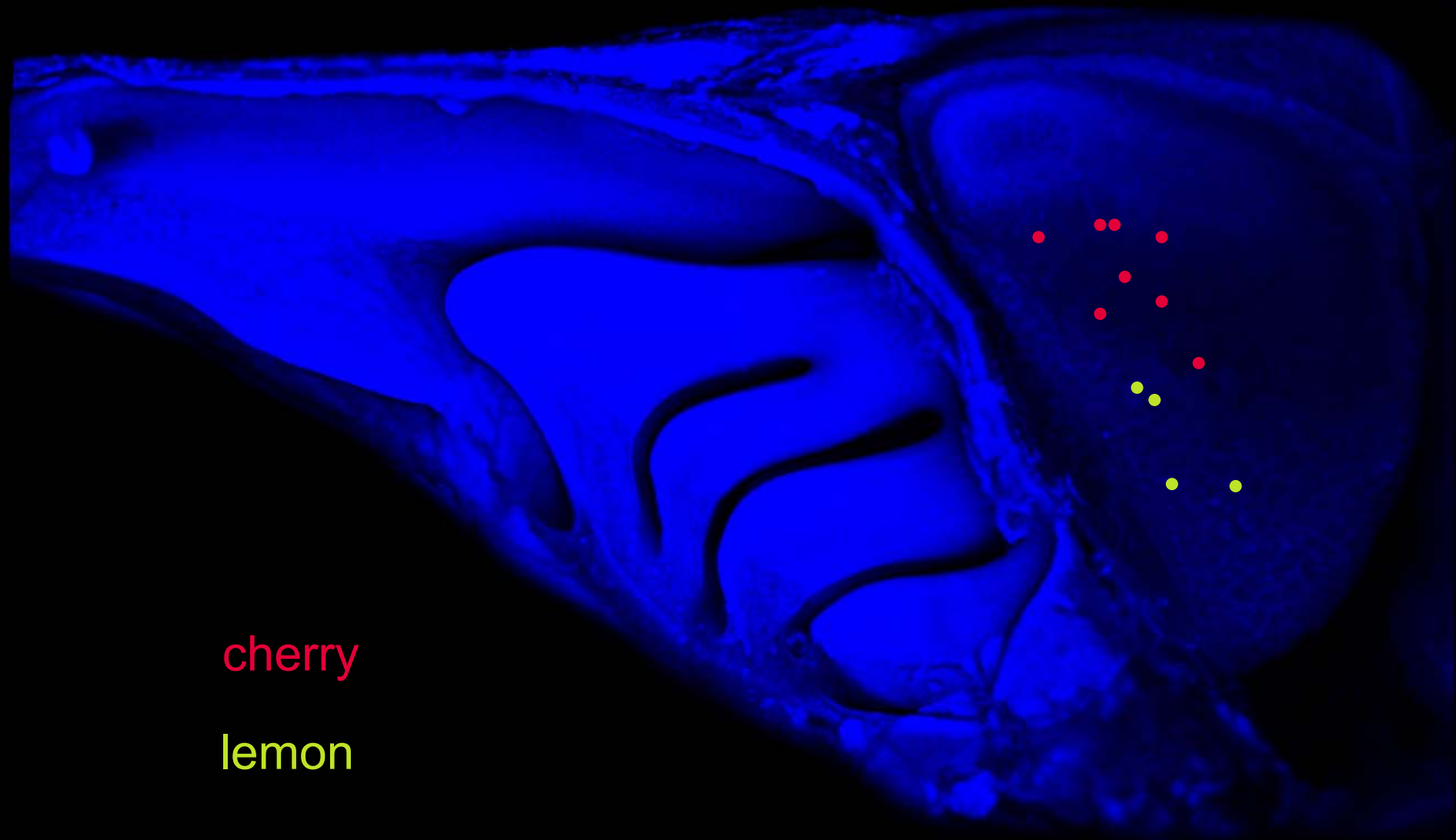
900



Olfactory Sensory Map



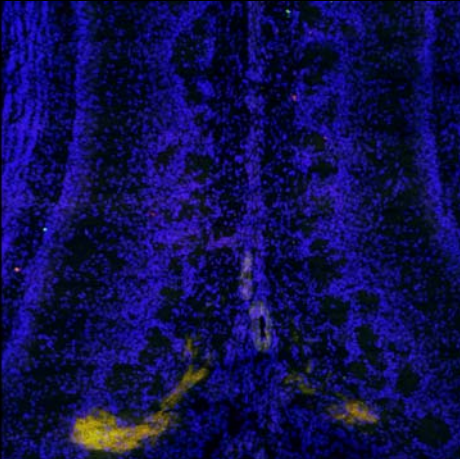
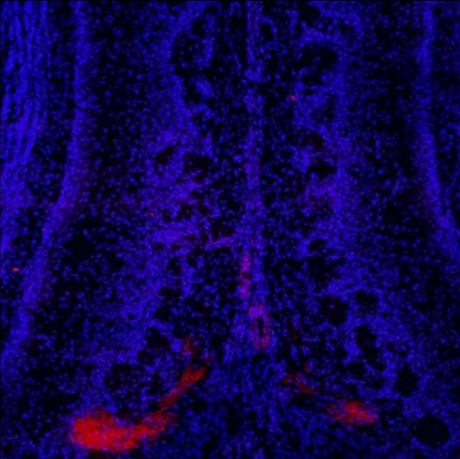
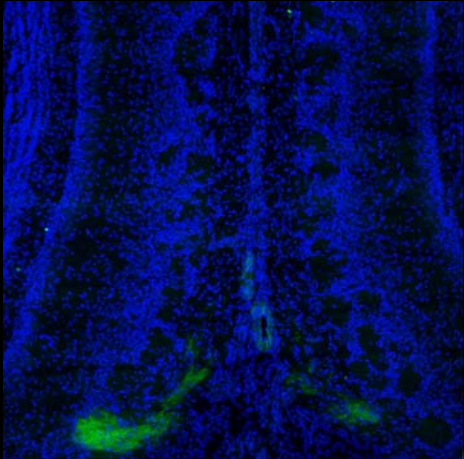
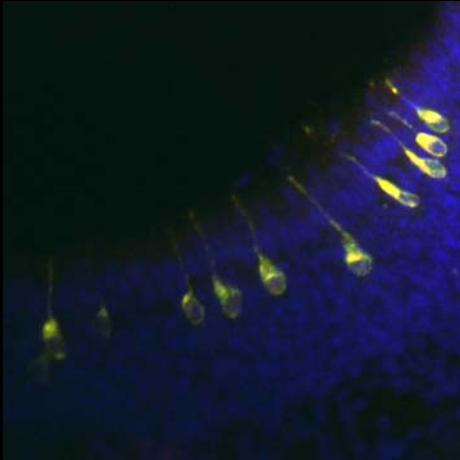
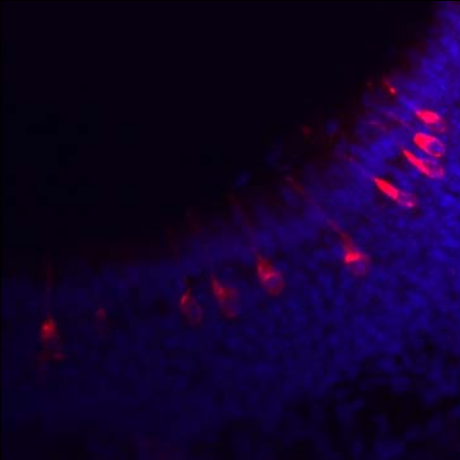
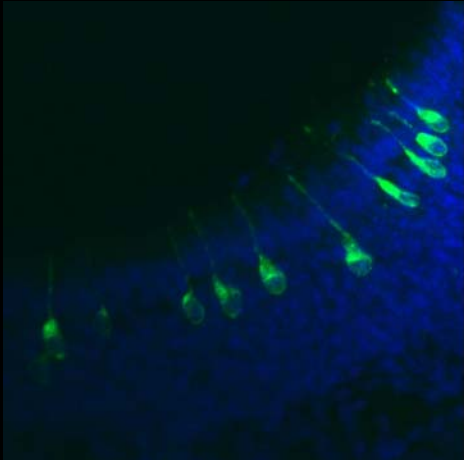
Odor Quality Encoded By Spatial Pattern of Activation



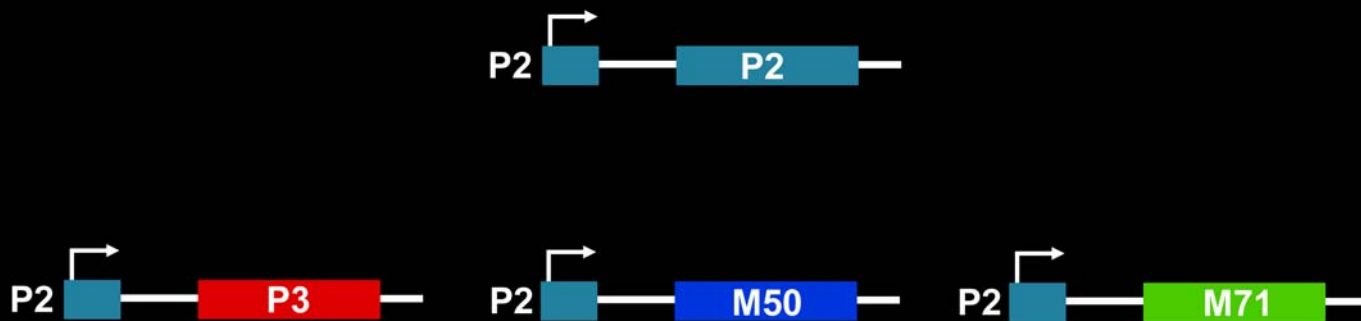
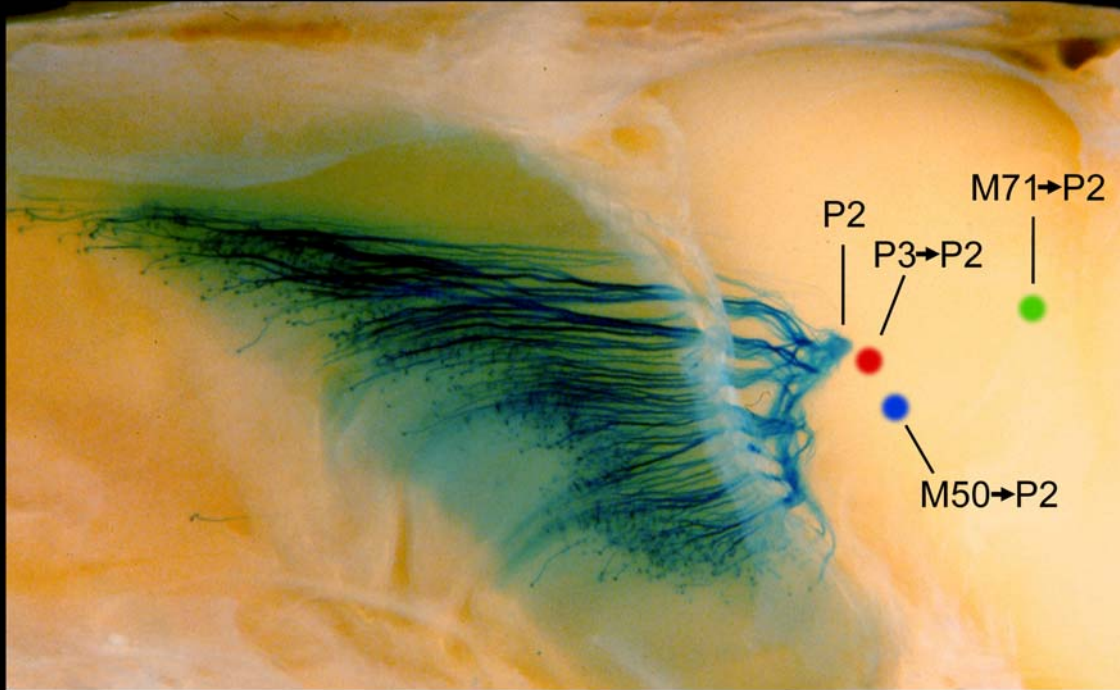
MOR28 Protein is Present in the Axon Terminal

Cytoplasmic

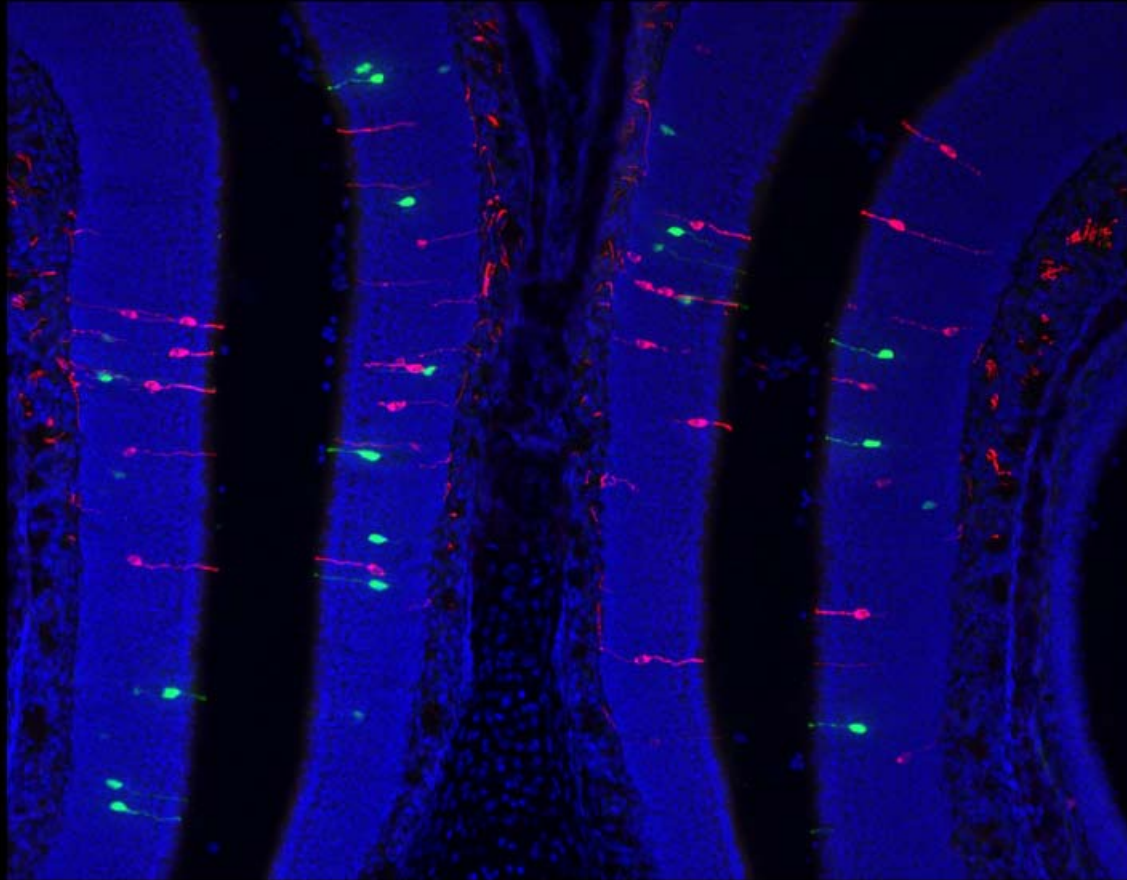
Extracellular



Receptor Governs Formation Of The Olfactory Sensory Map



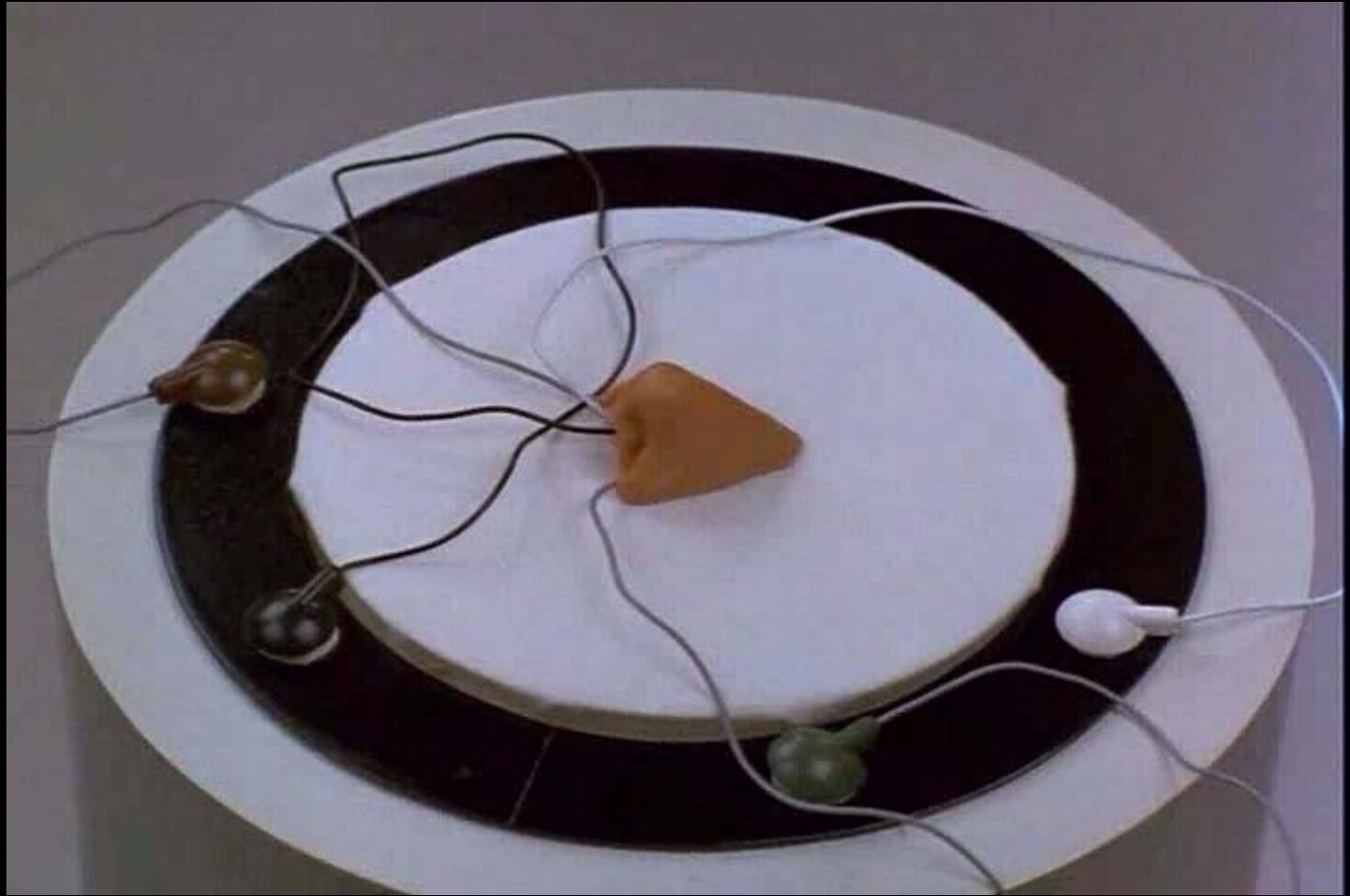
Singular Expression of OR Genes



Genotype:

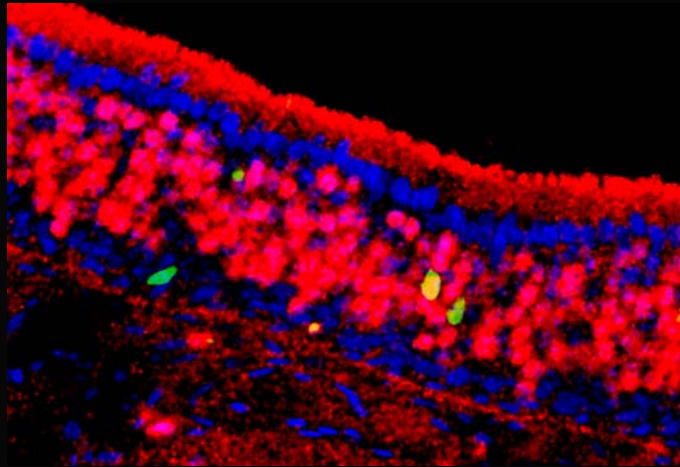
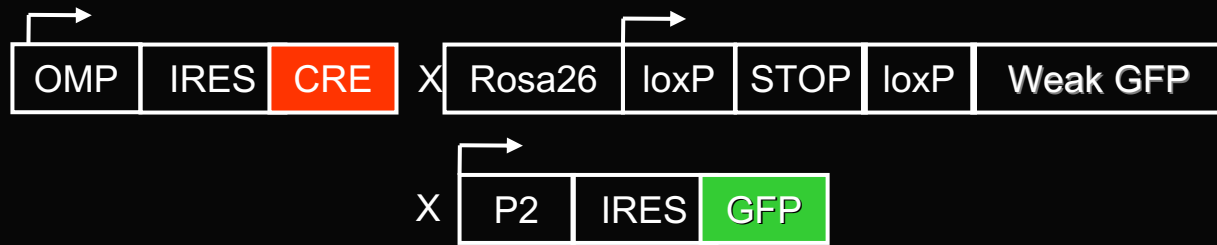
— **P2 i τ lacZ** — Endogenous

— **P2 iGFP** — Transgene

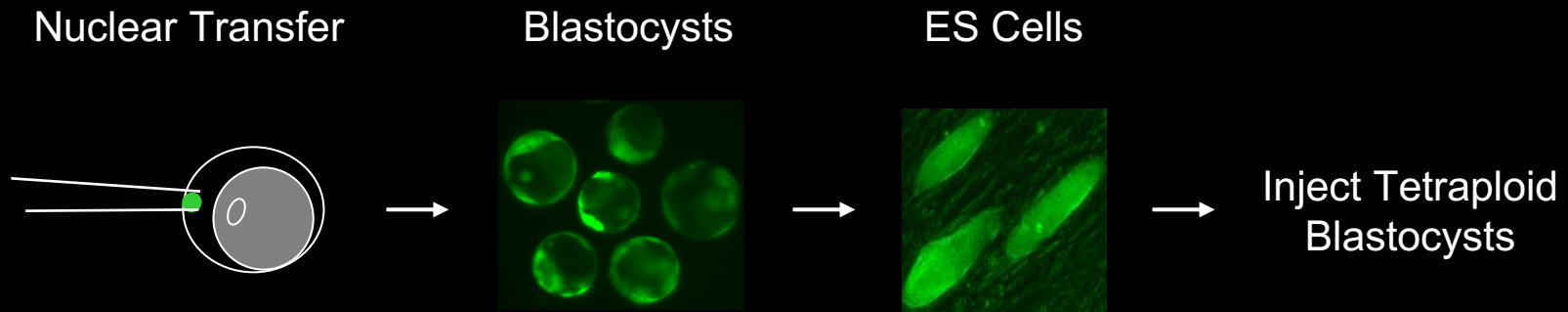




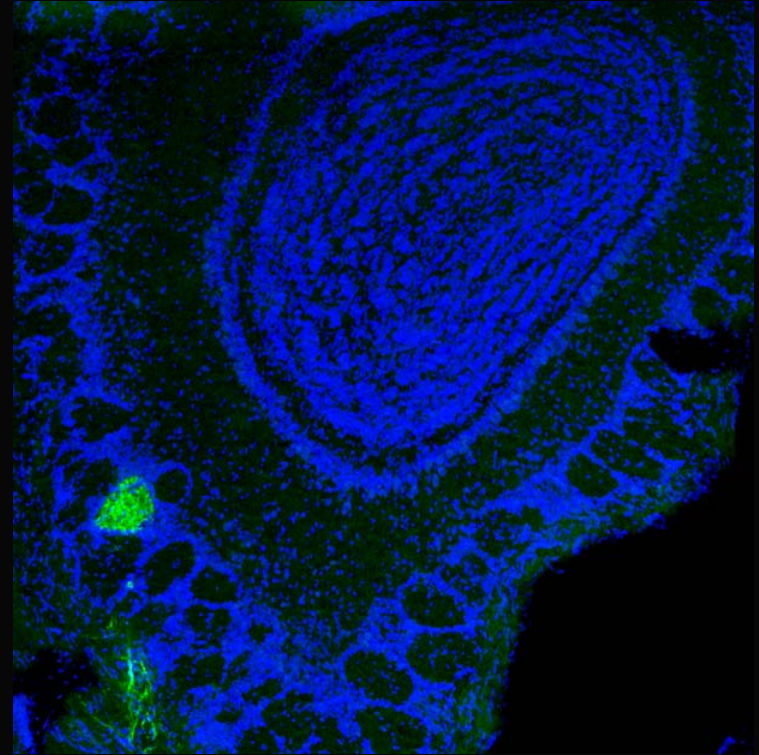
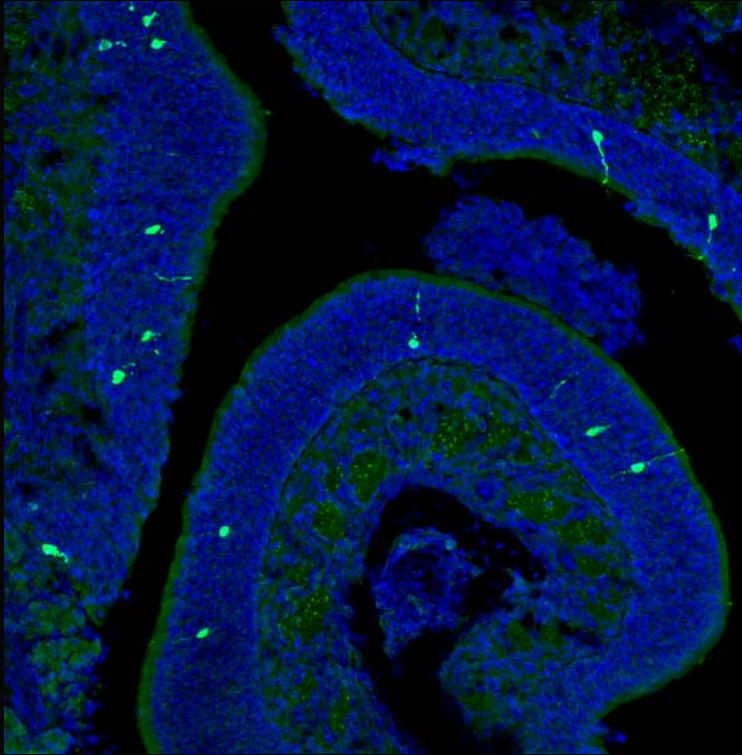
Cloning mice from a P2 sensory neuron nucleus



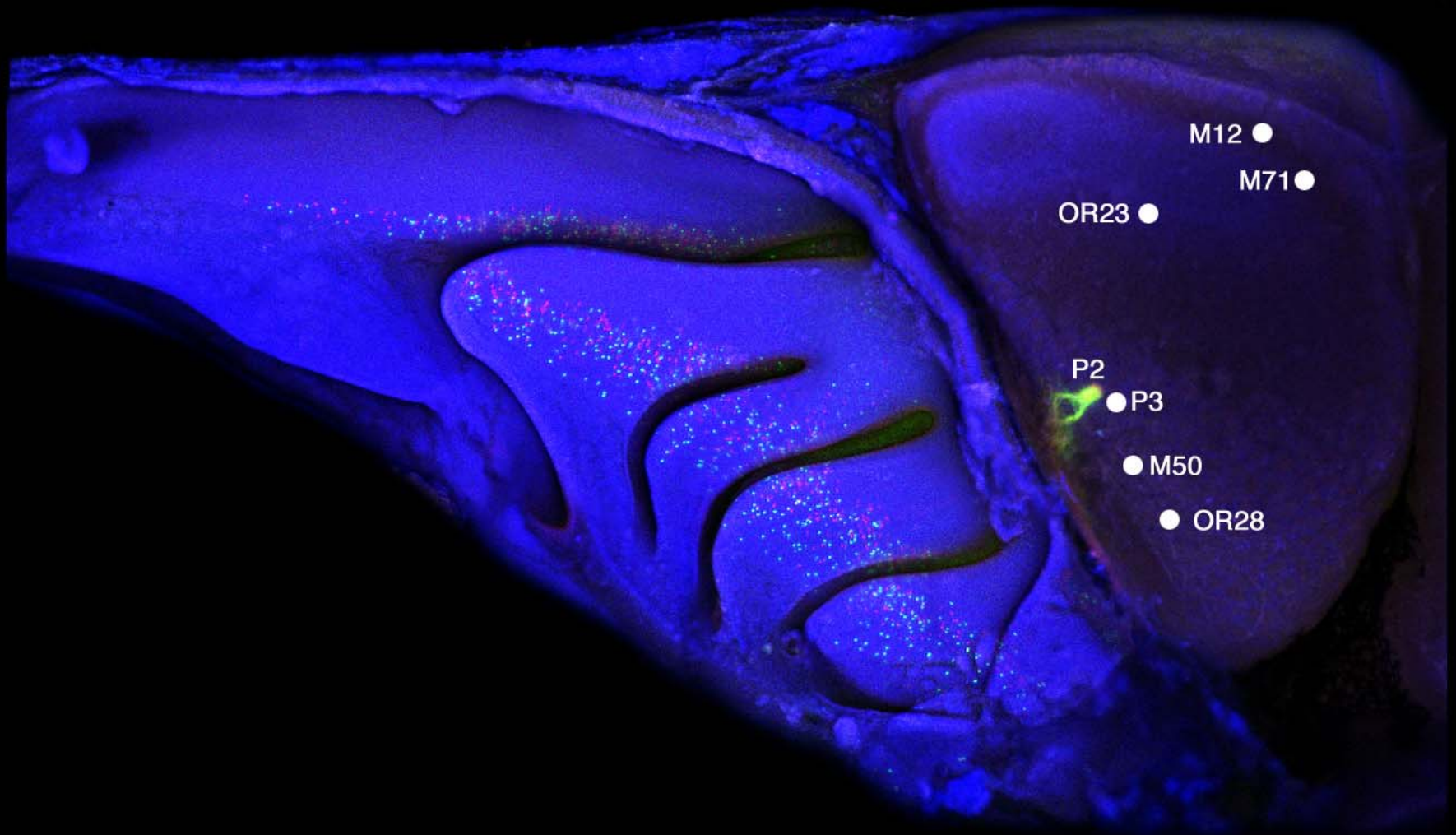
Cloning mice from a sensory neuron nucleus

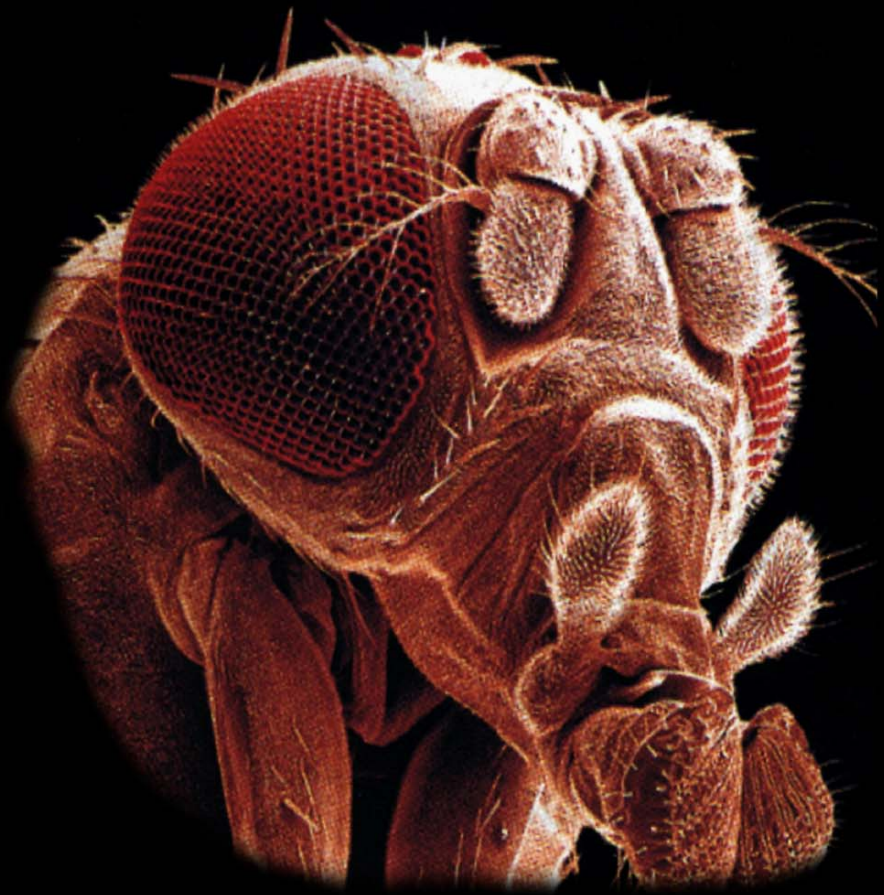


Expression of the P2 IRES GFP allele in P2 clones

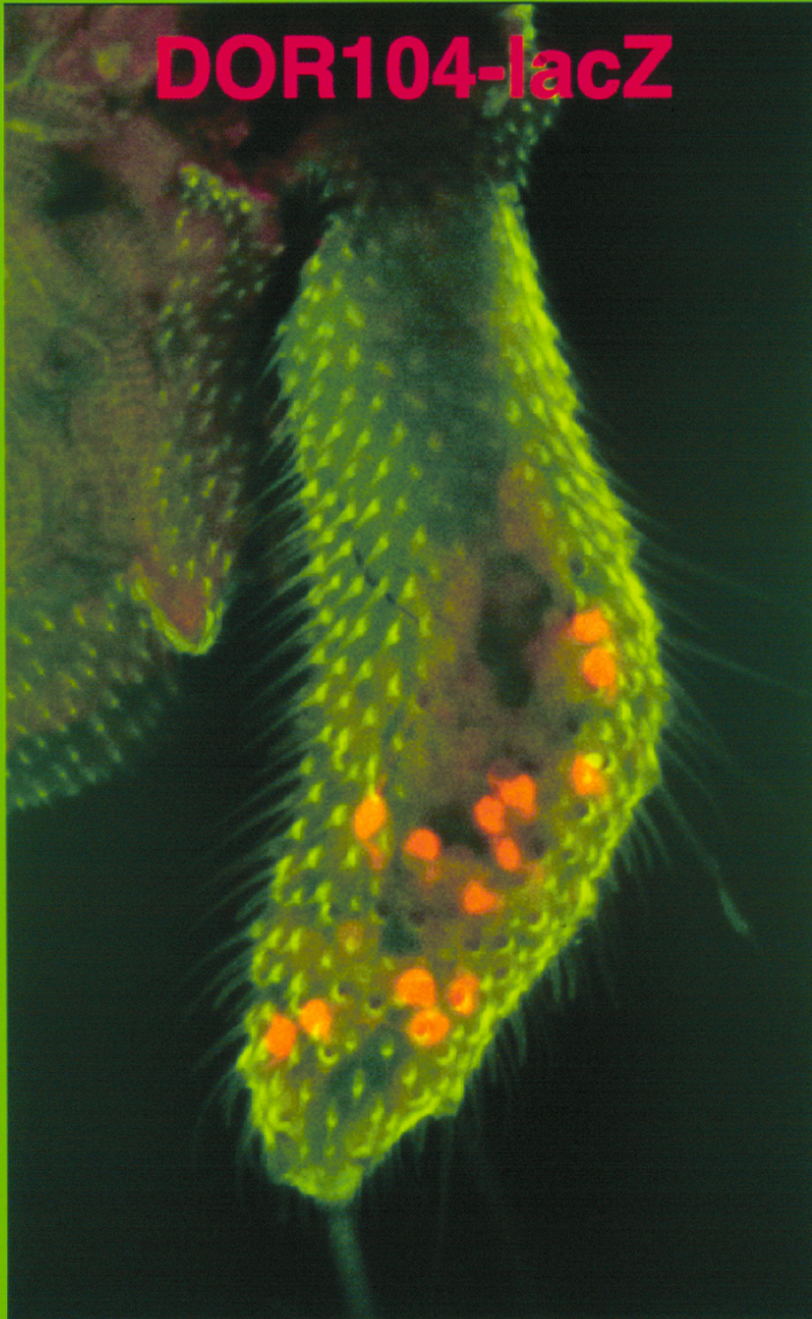


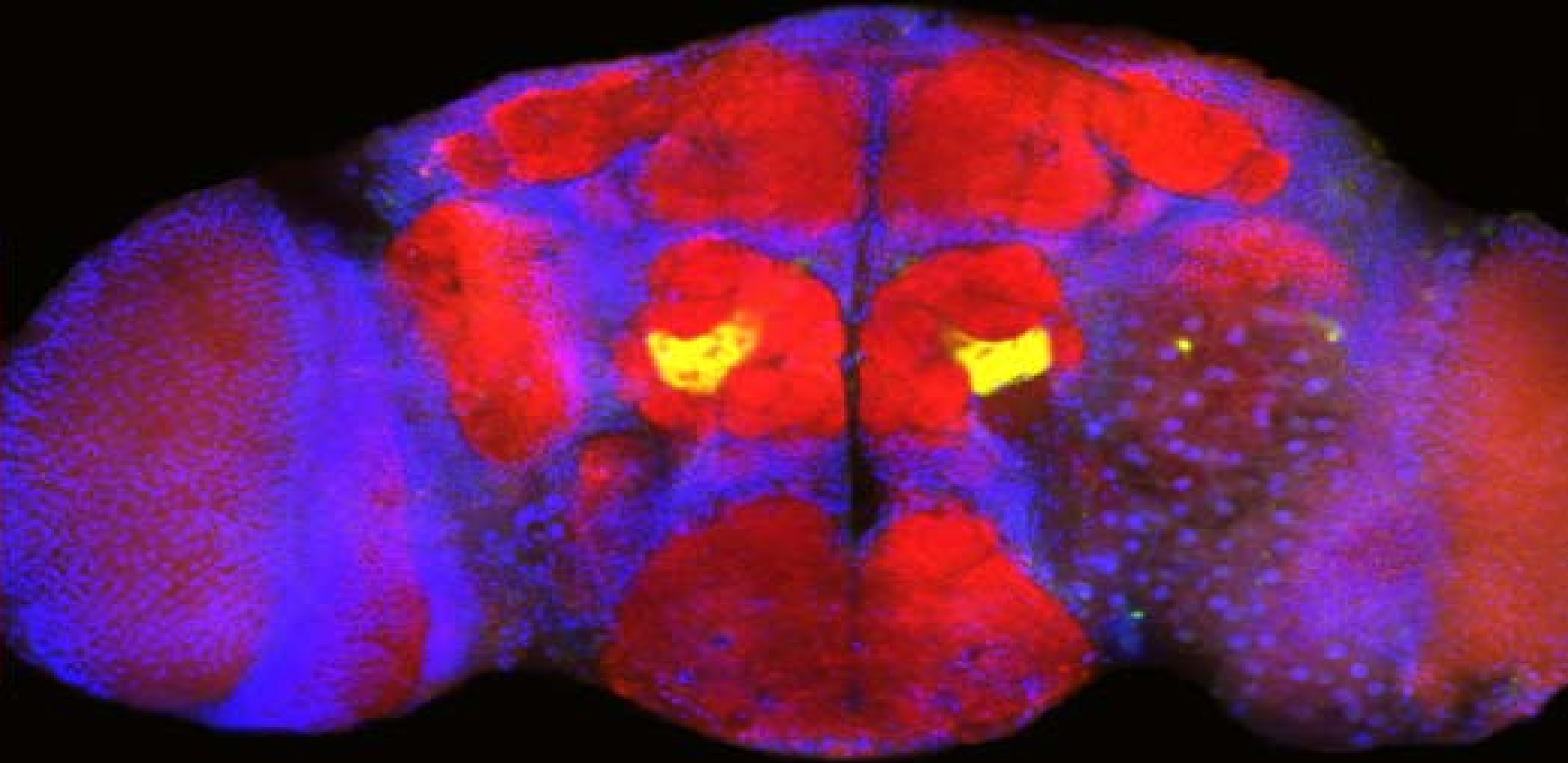
Olfactory Sensory Map





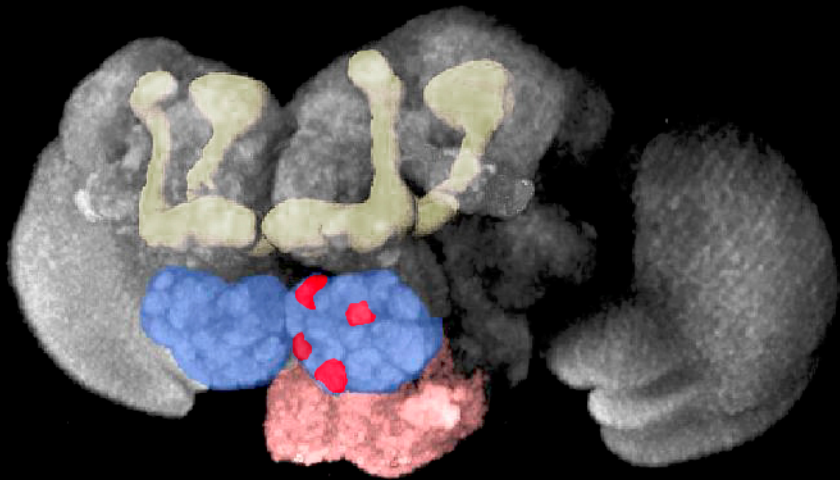
DOR104-lacZ



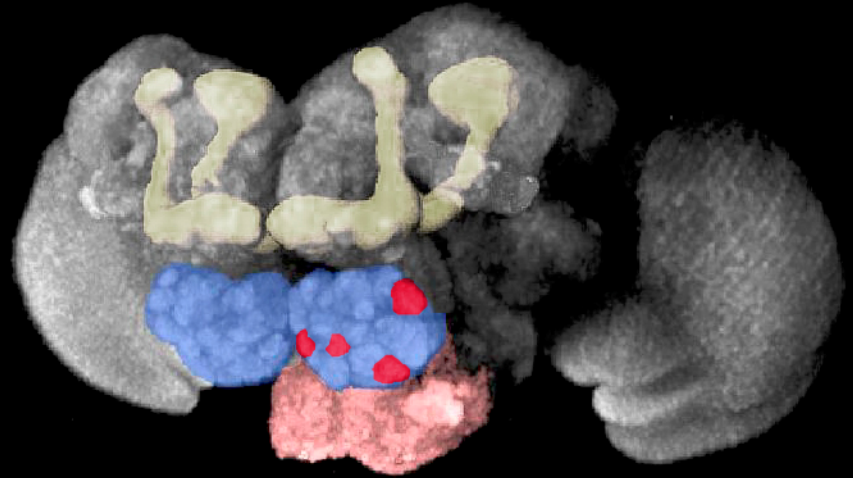


An Olfactory Sensory Map in the Antennal Lobe

A Topographic Map of Odor Quality

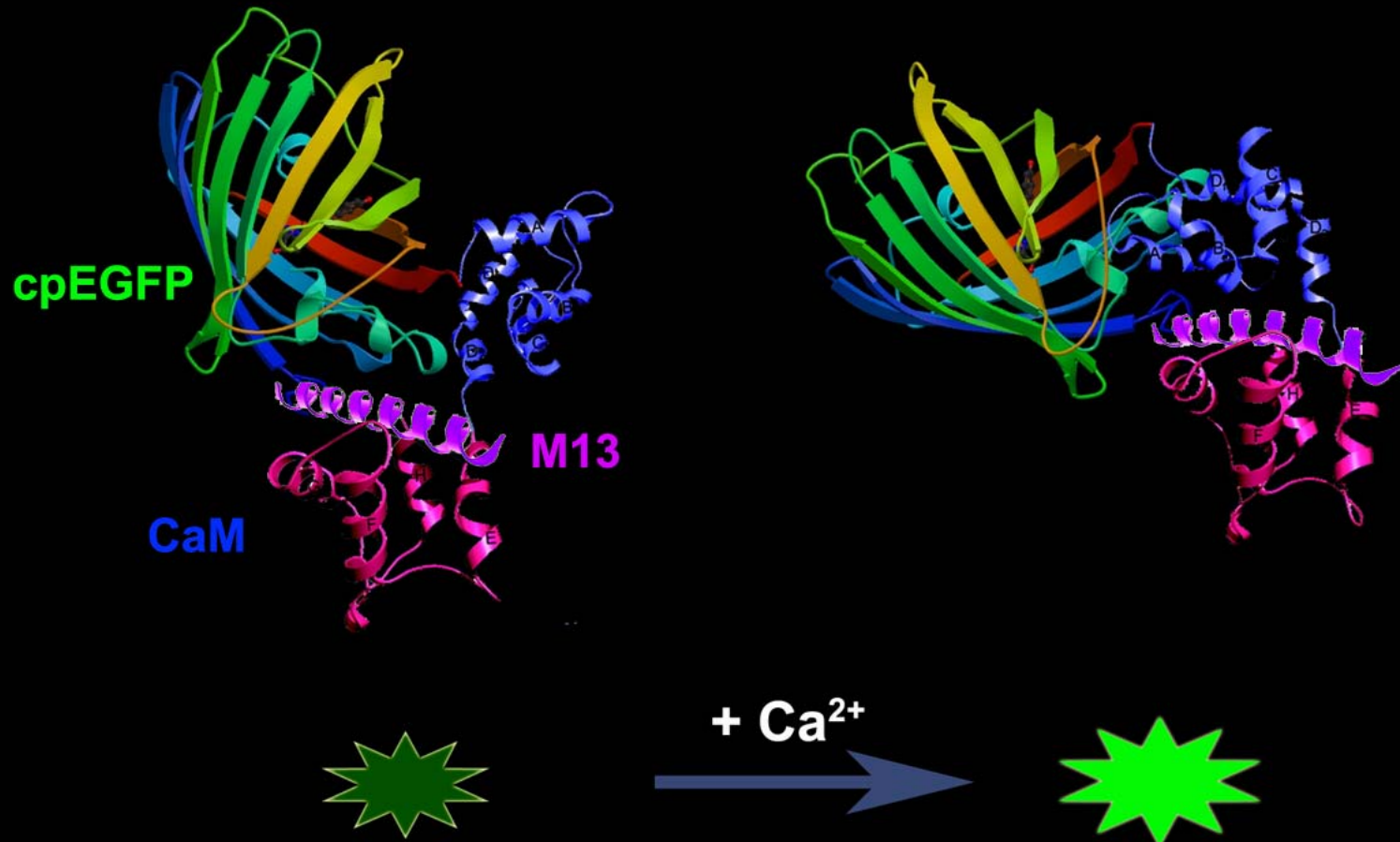


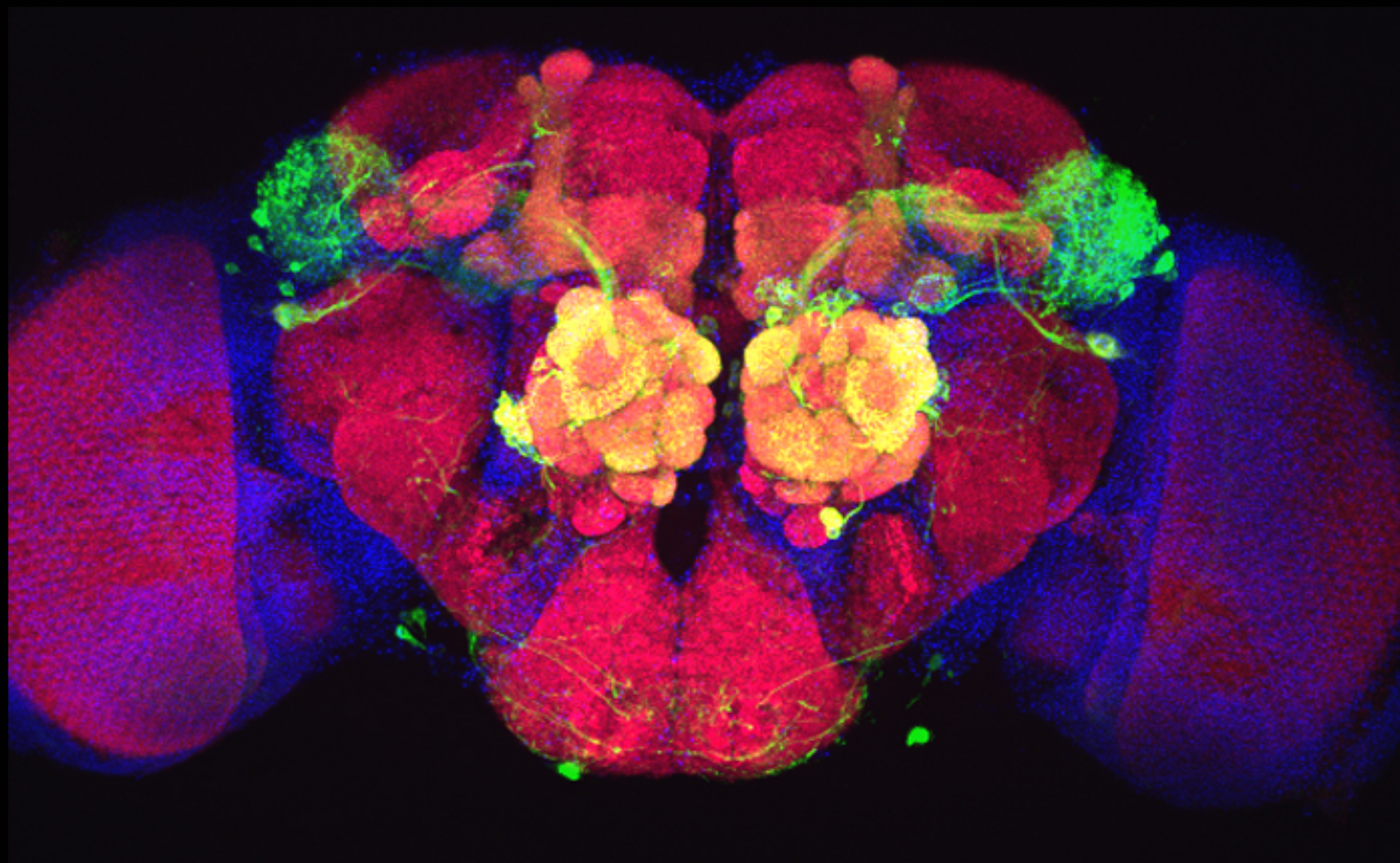
banana



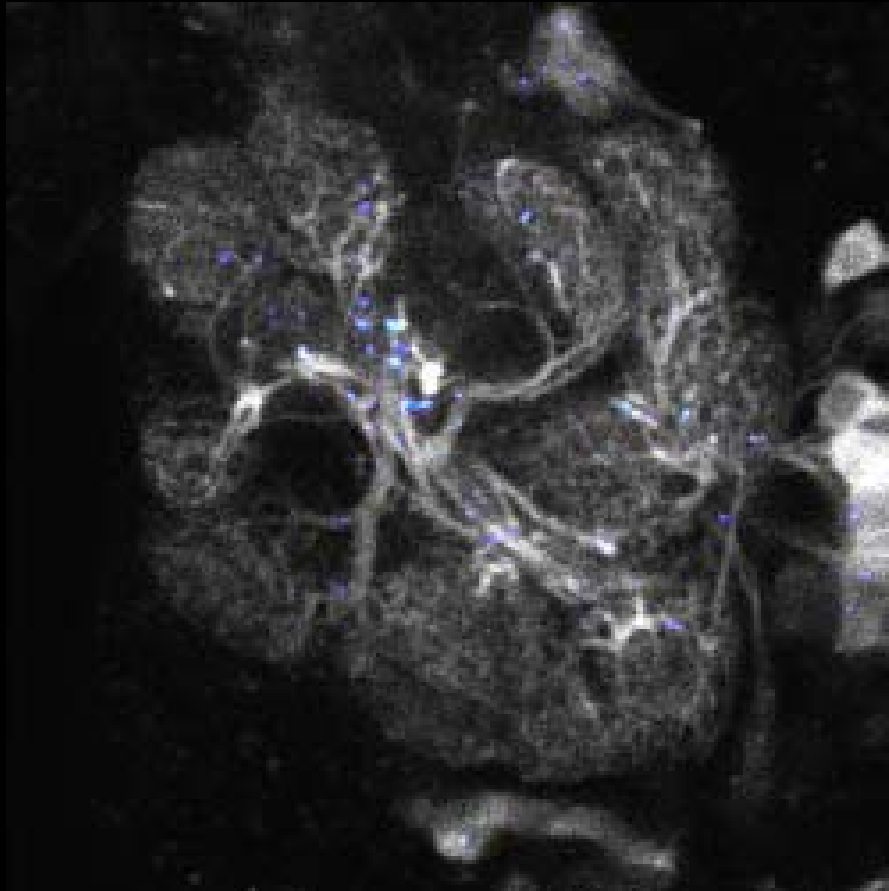
cherry

G-CaMP: a Calcium Sensitive Fluorescent Protein

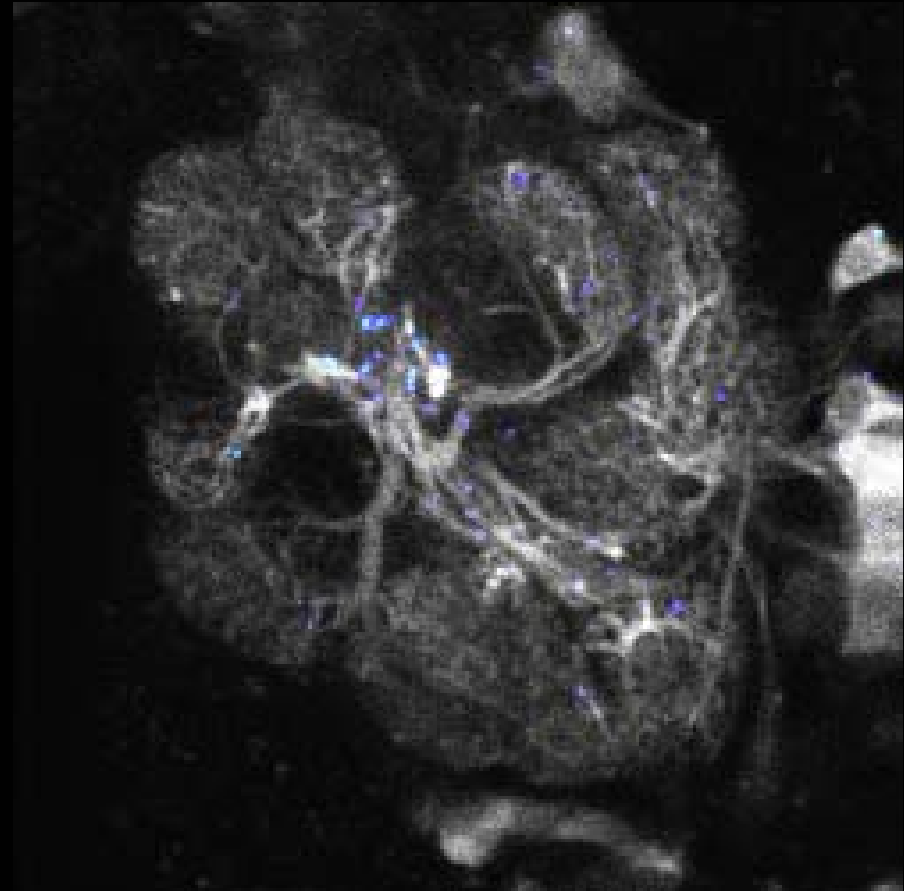




Glomerular Response to Odor Stimulation at 2% SV

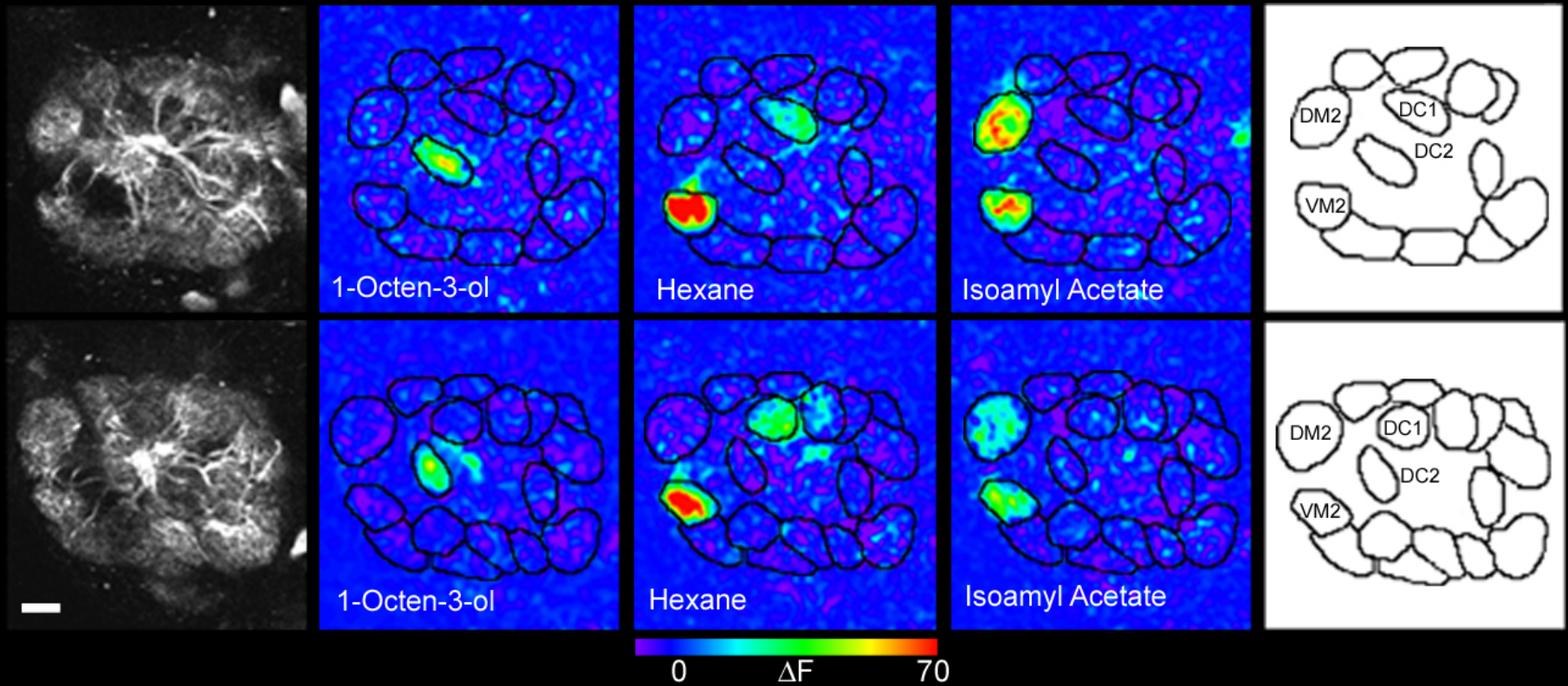


Ethyl hexanoate

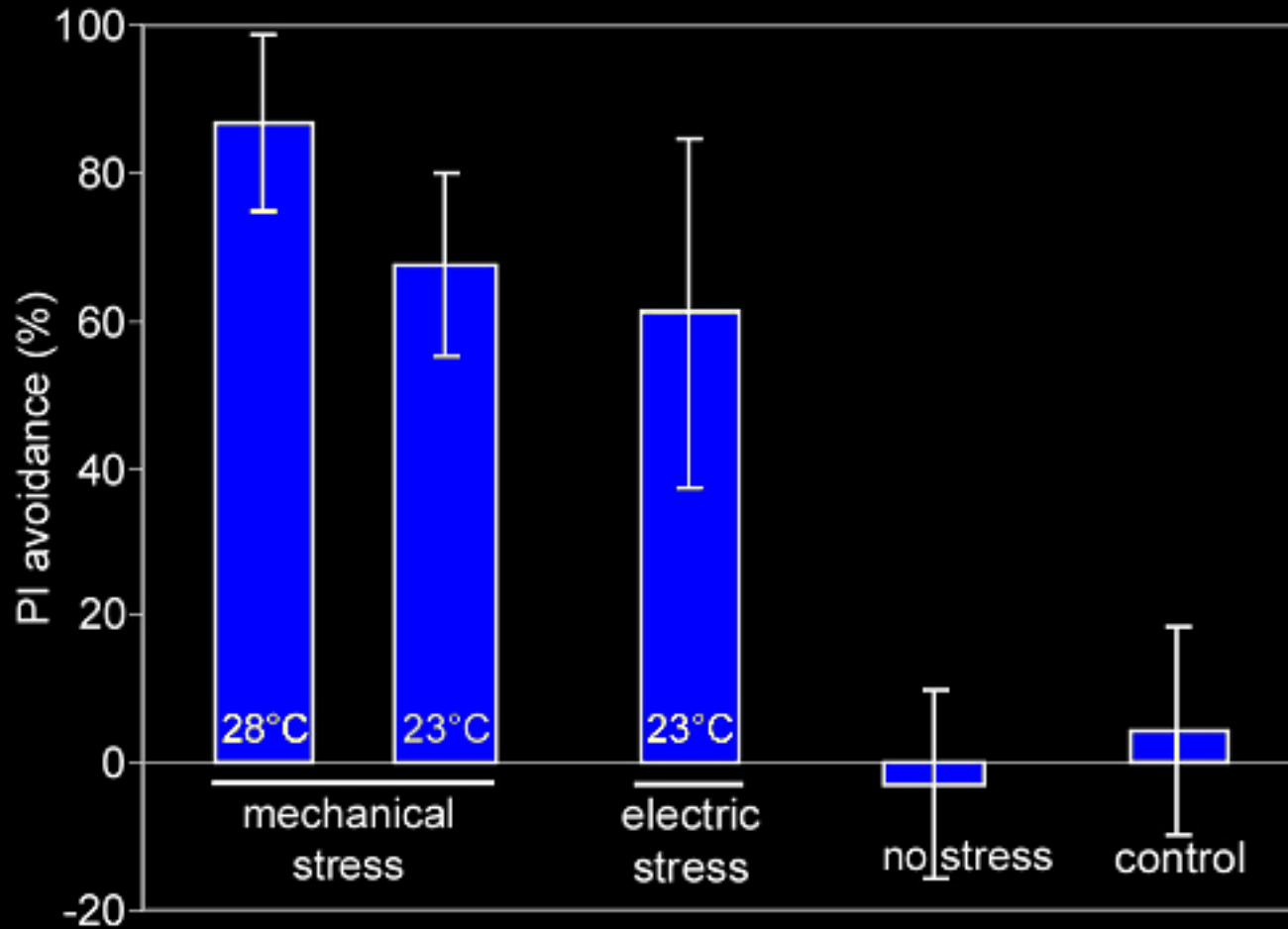


Isoamyl acetate

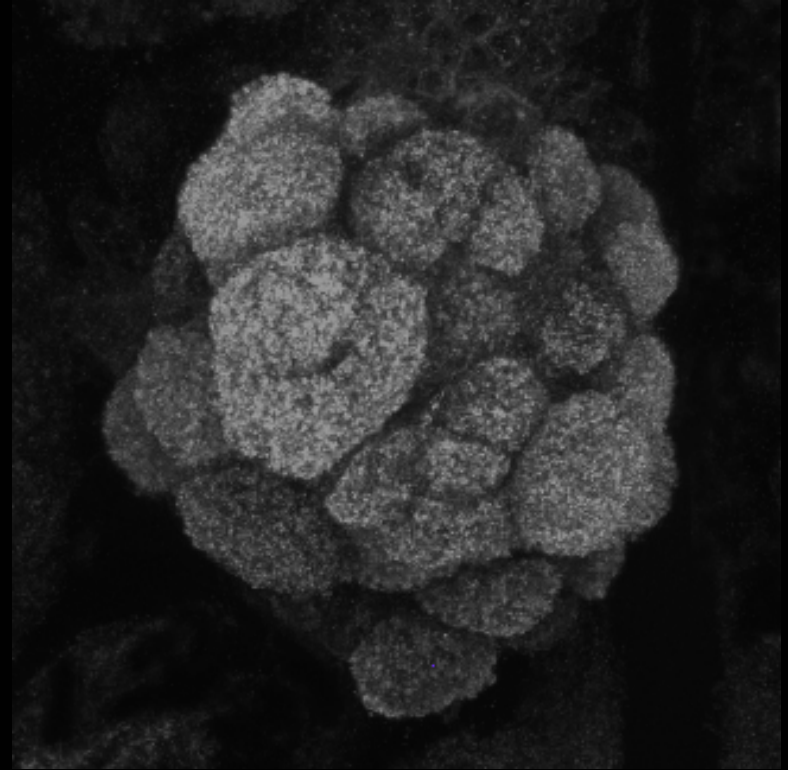
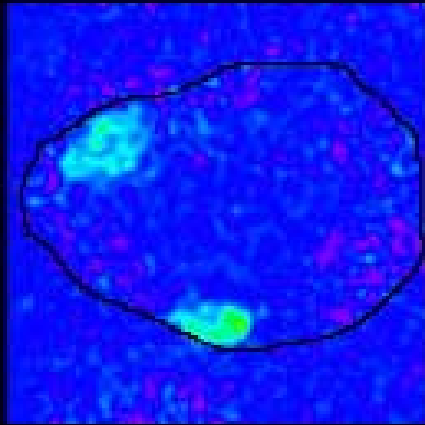
Conserved Glomerular Patterns in Different Animals



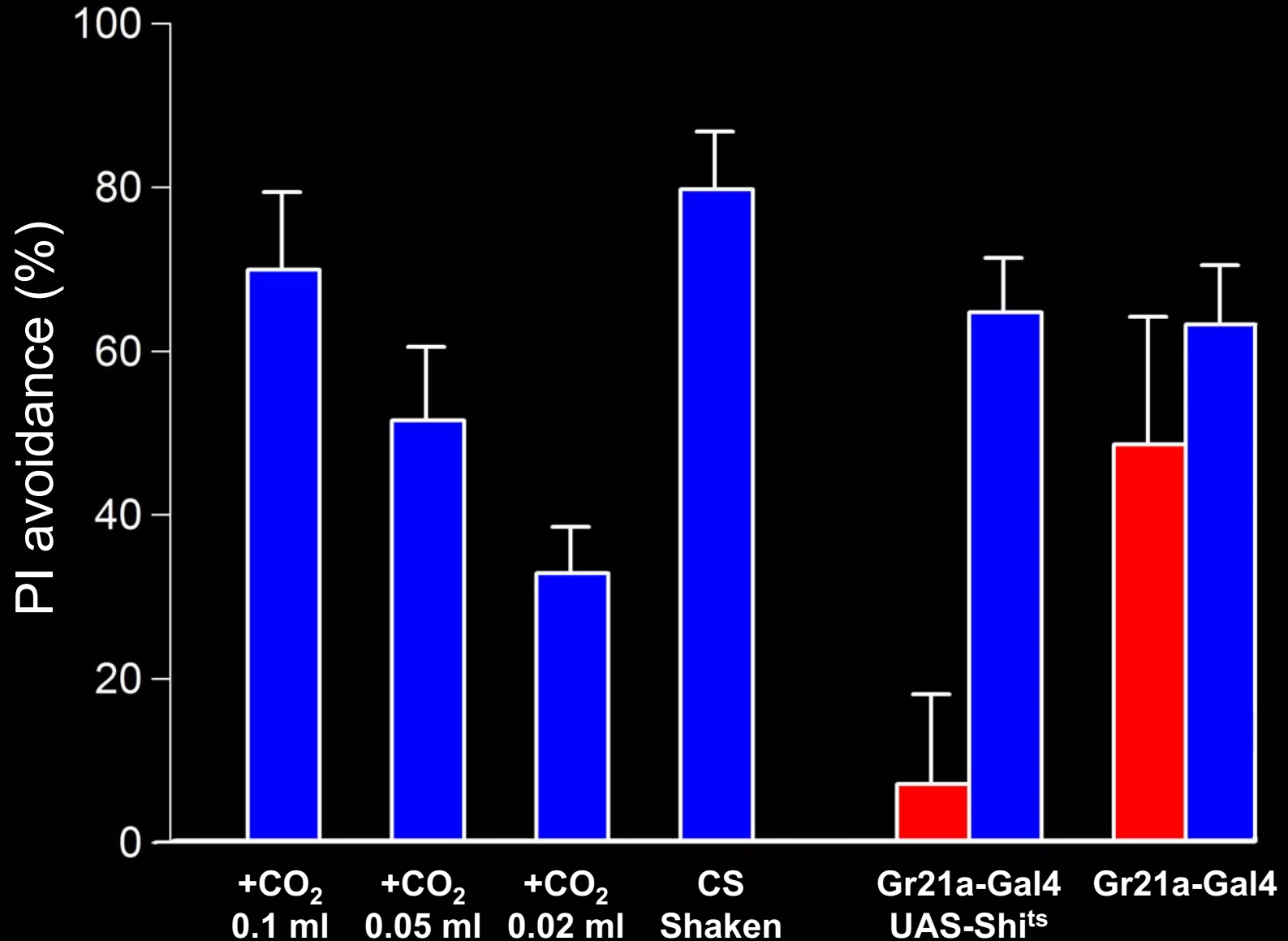
Stress Odors: *Drosophila* Alarm Response?



Activation of the V glomerulus by Stress Odor and CO₂



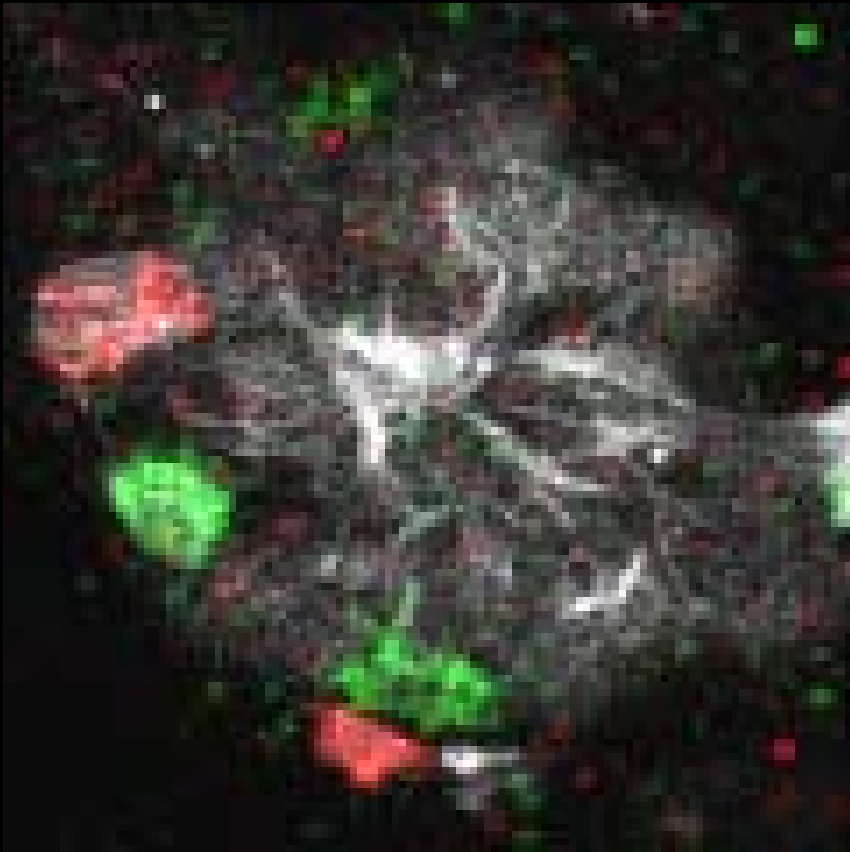
A Single Glomerulus Mediates the Behavioral Response to CO₂



Glomerular Response to Caproic Acid and Pyridine

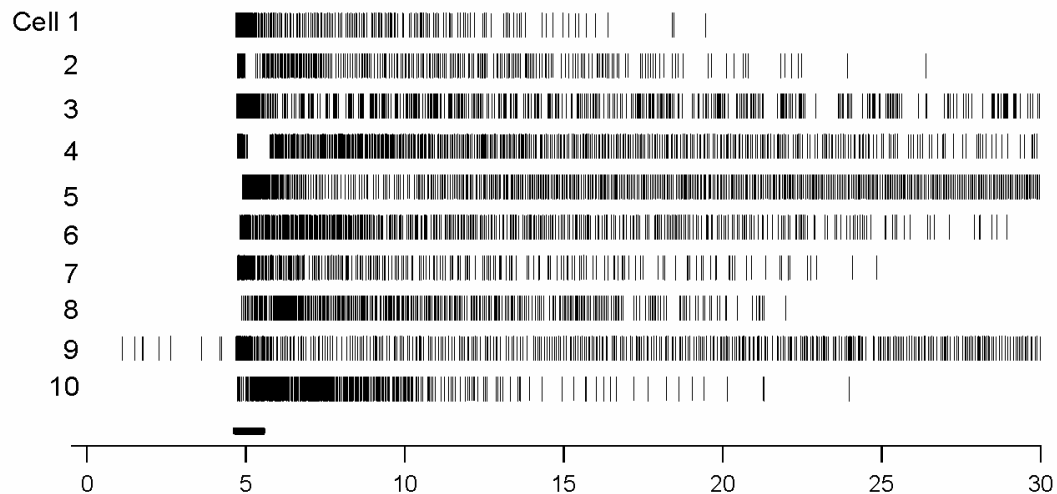
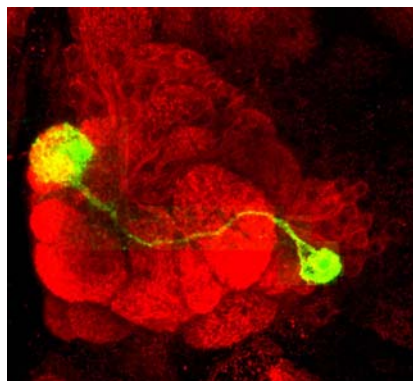
Caproic Acid

Pyridine

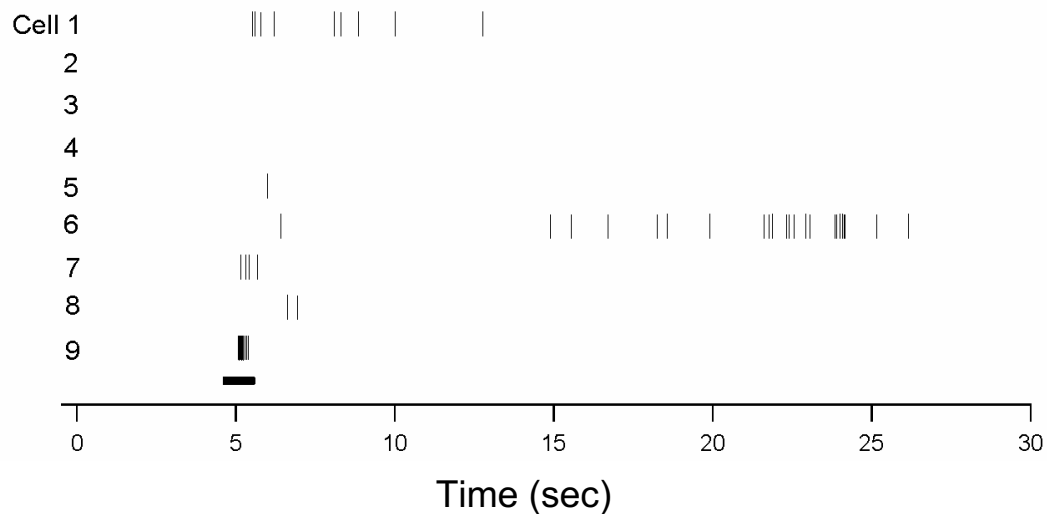
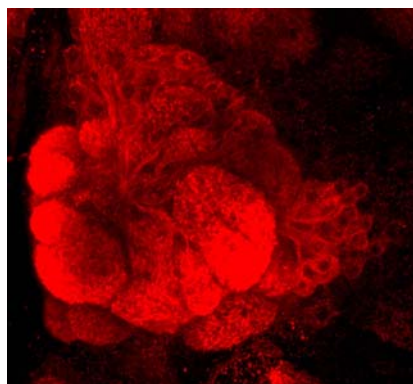


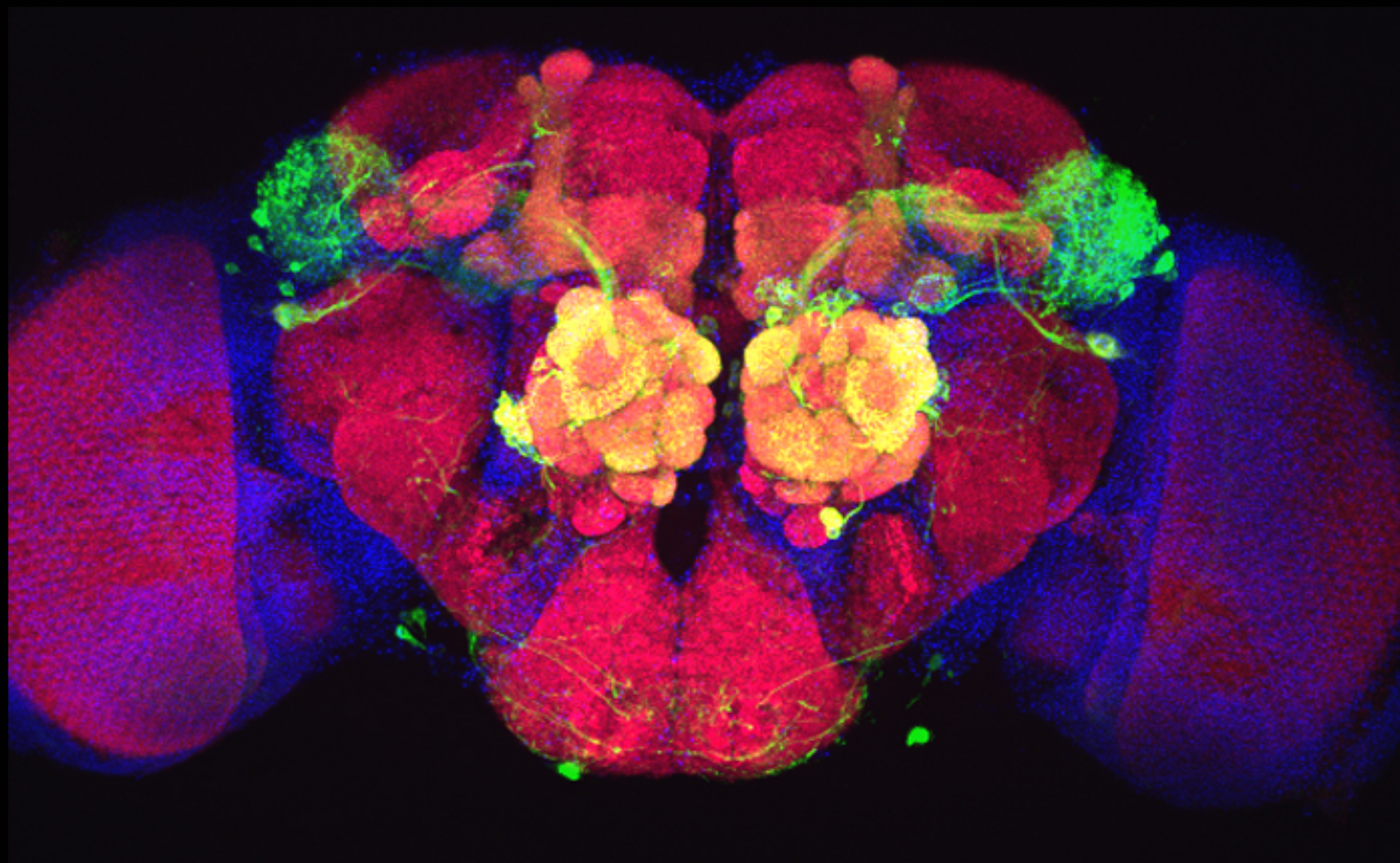
Calcium Influx Correlates to Robust Neuronal Firing

Calcium influx

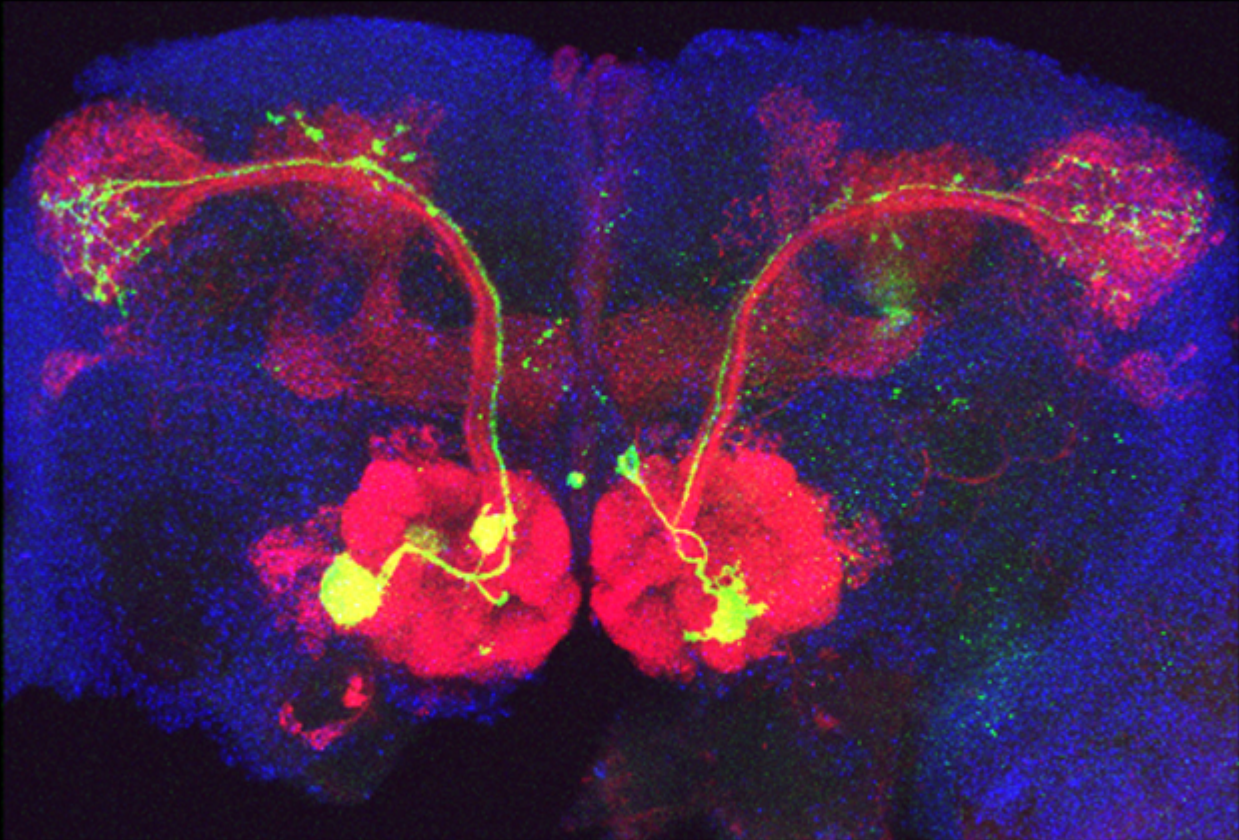


No calcium influx

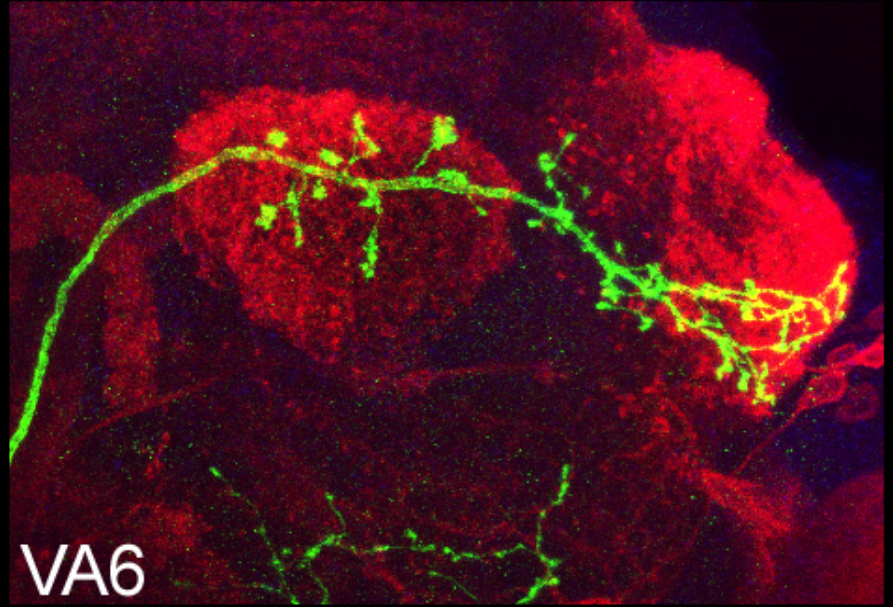
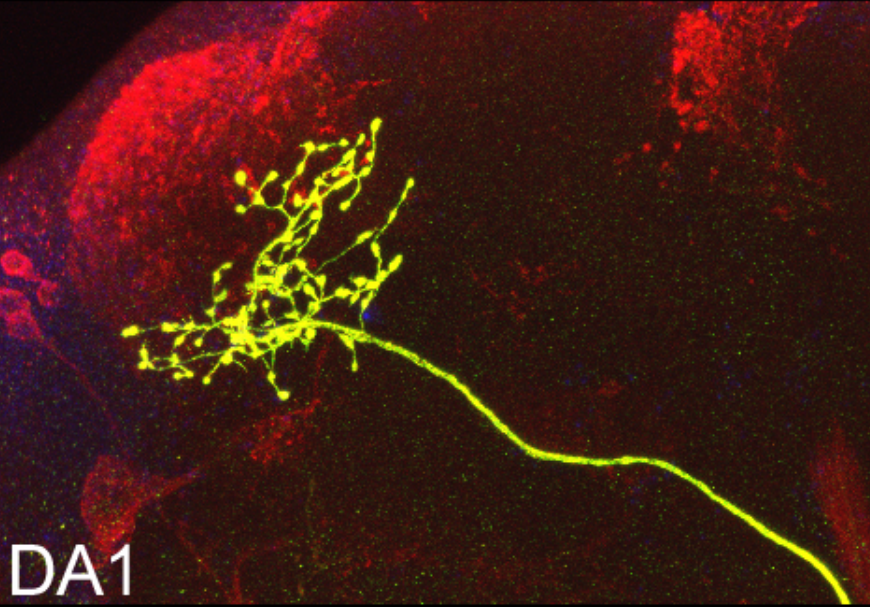
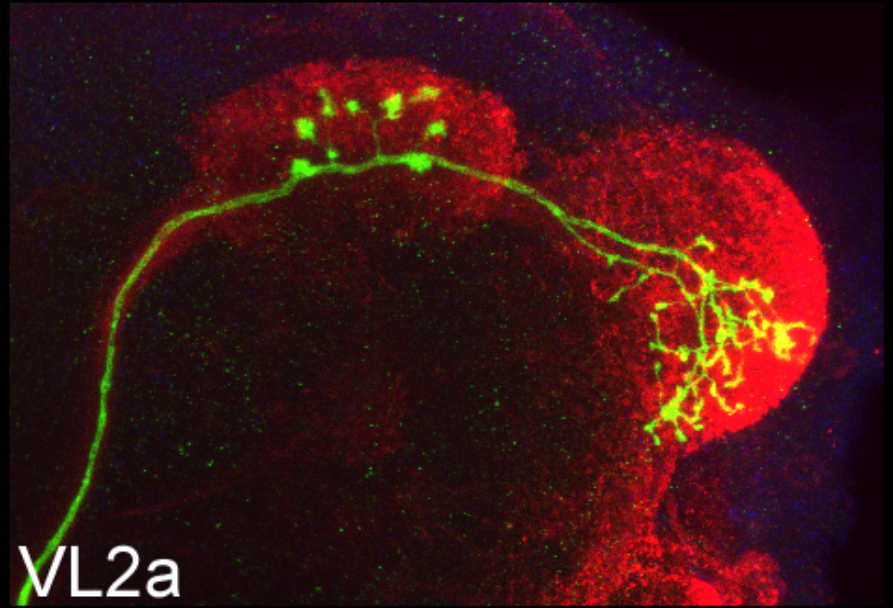
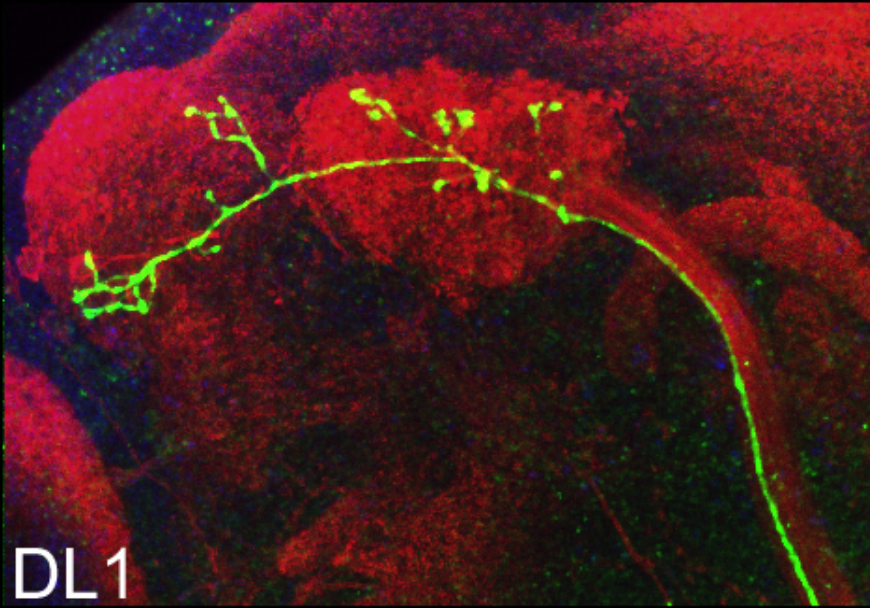




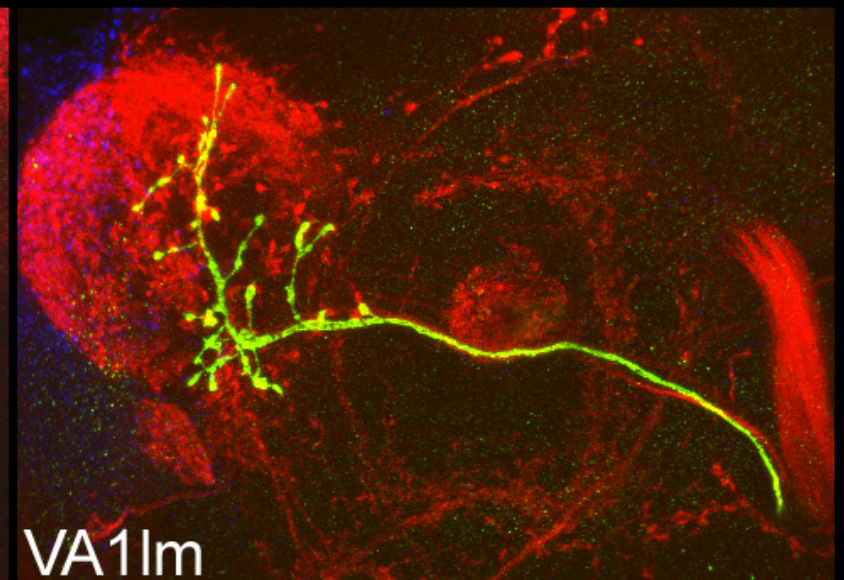
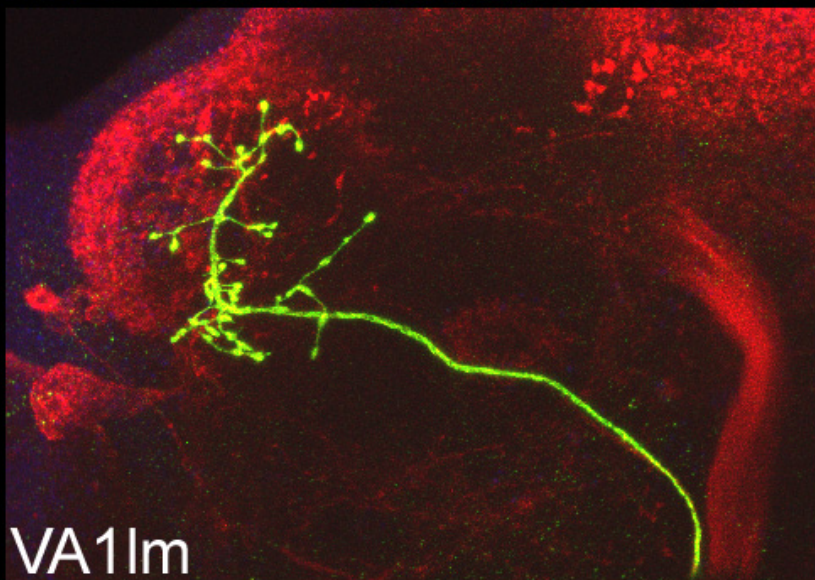
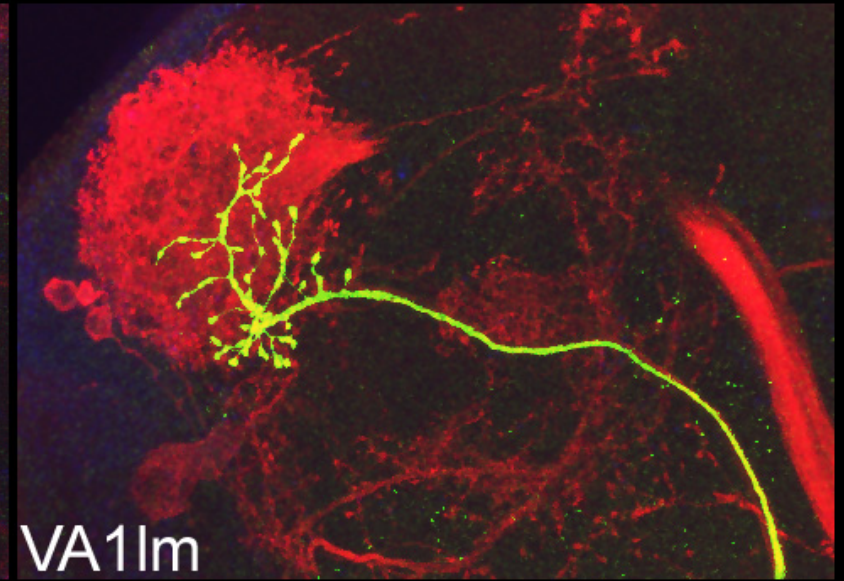
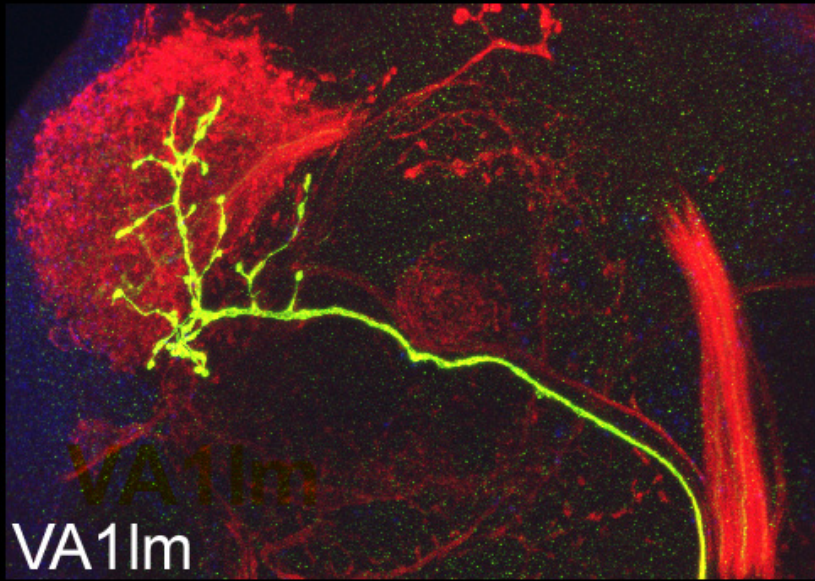
Expression of CD8-GFP in Single Projection Neurons



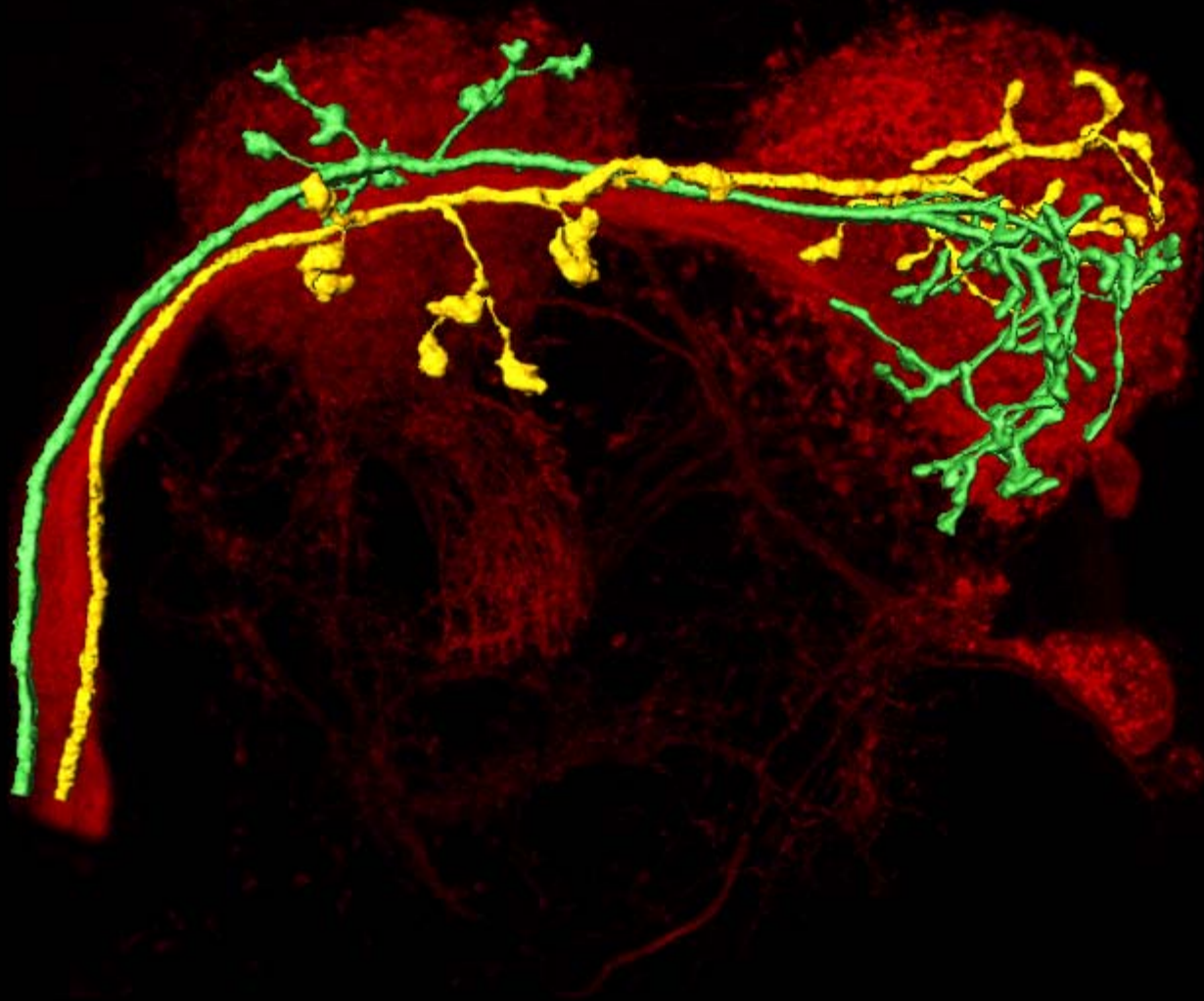
Different Projection Neurons Show Distinct Patterns in the Protocerebrum



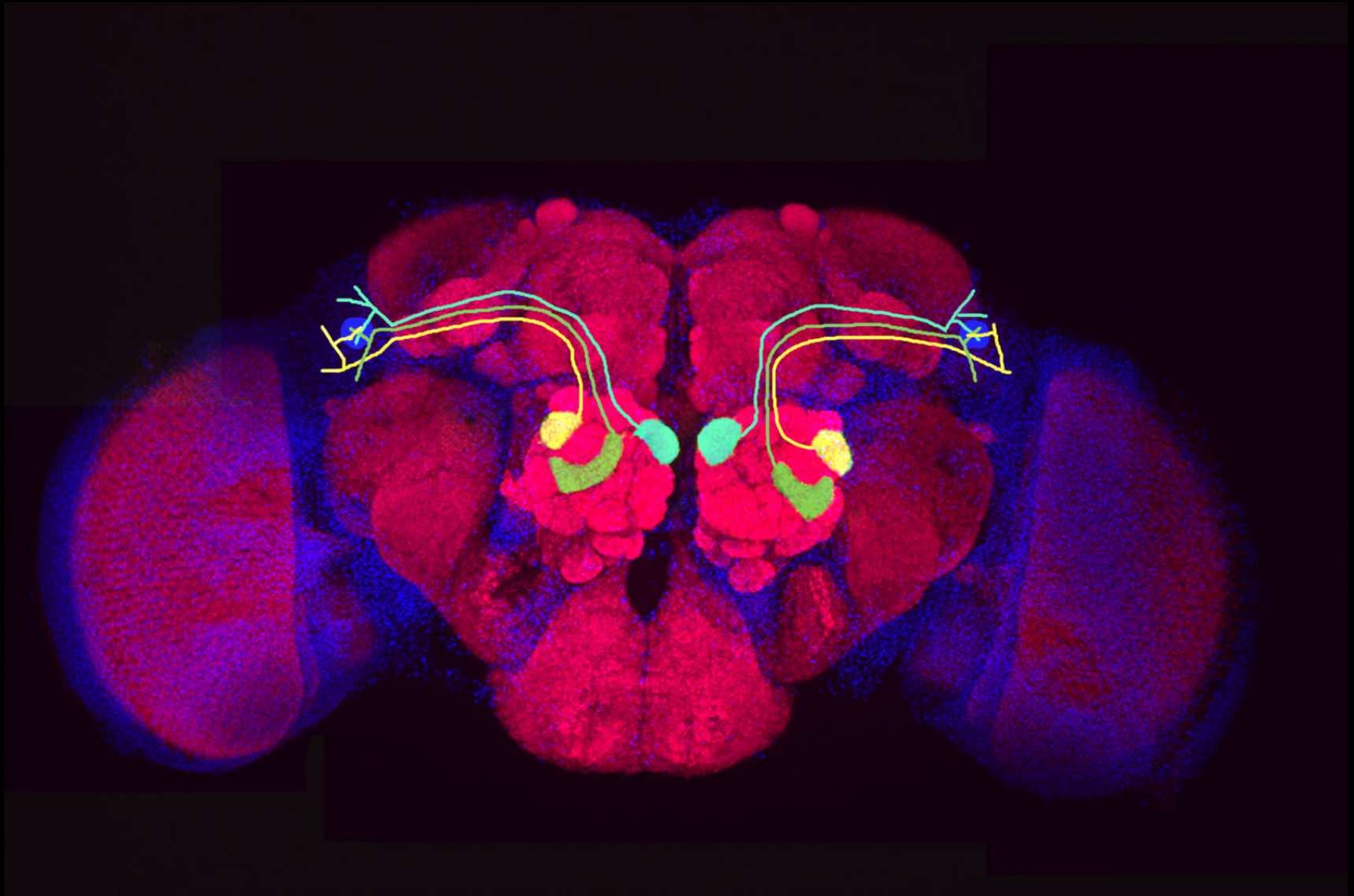
Maintenance of a Spatial Map in the Protocerebrum



Mapping the Fly Olfactory System



Convergence of Glomerular Information



Sten Grillner Torsten Wiesel Tomas Hokfelt



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THE SUPERNATURAL SPECTACULAR

