

# Differential targeting of the apical extracellular matrix is associated with extreme cell shapes accompanying morphological diversification in *Drosophila* genitalia



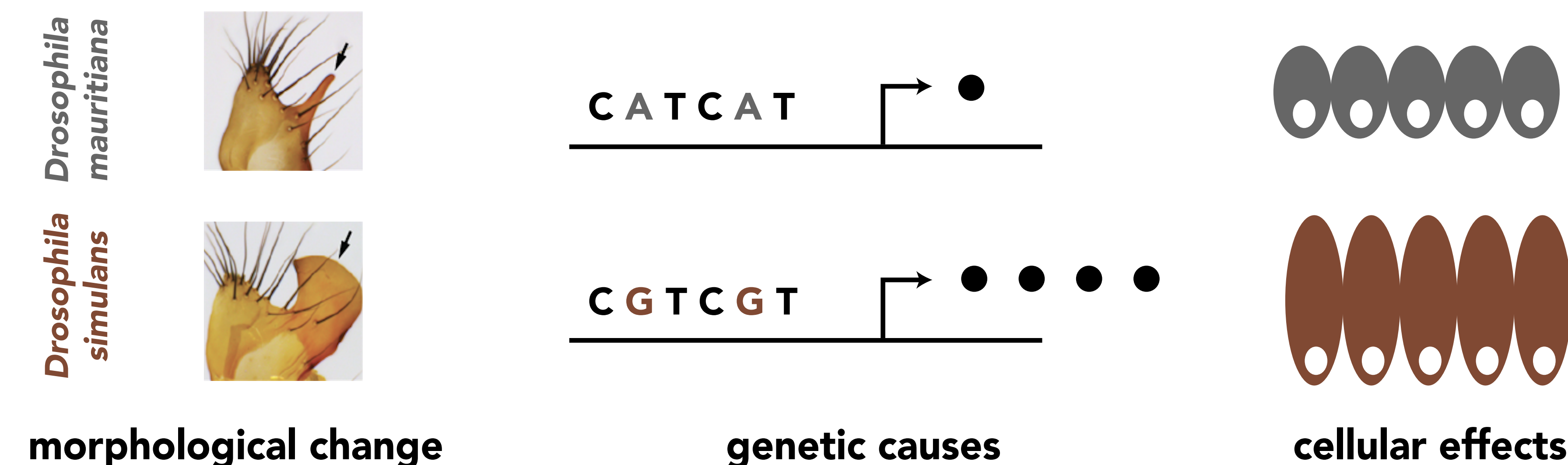
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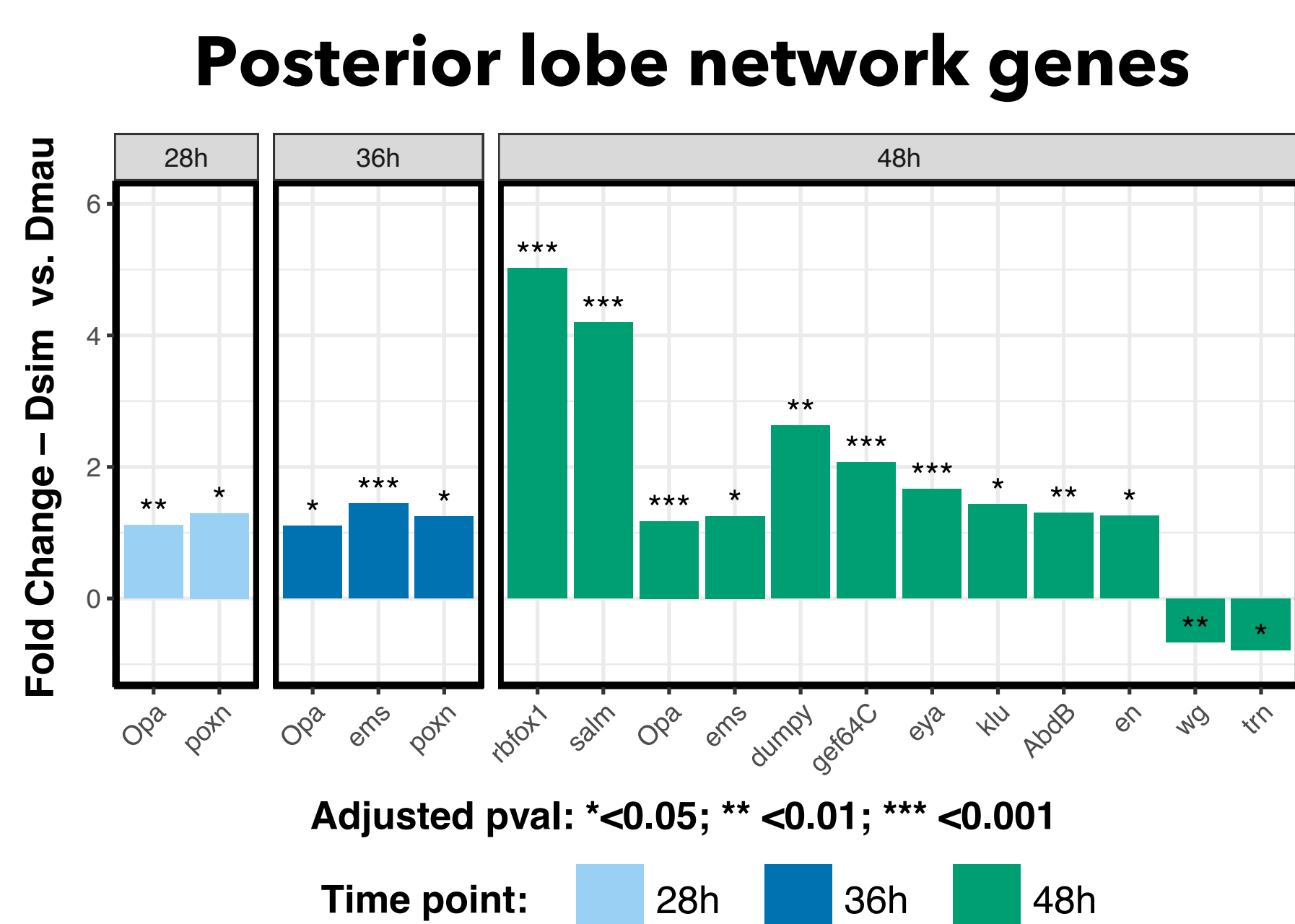
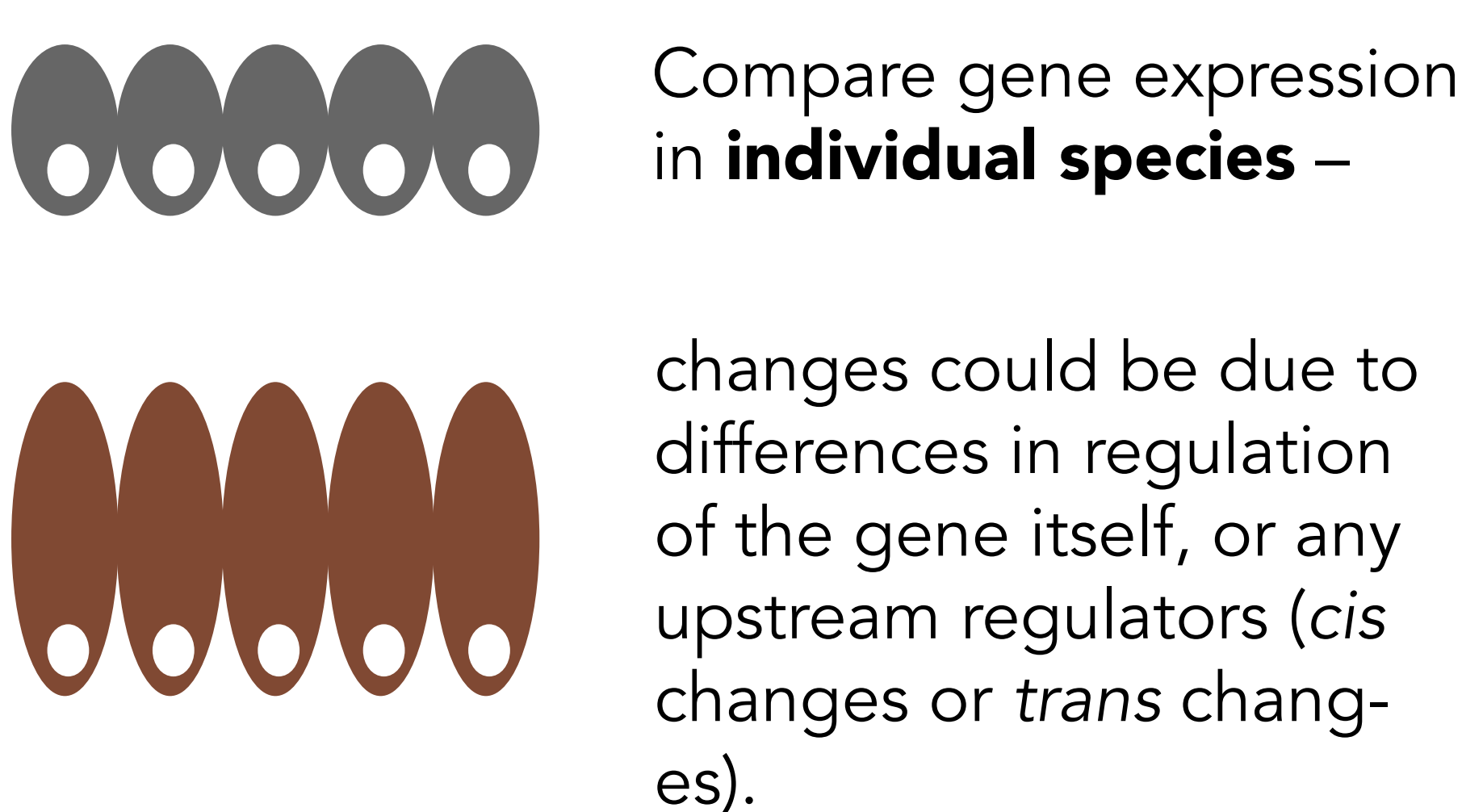
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**Our goal is to connect genetic changes between species with cellular phenotypes.**



**Finding genes that underlie lobe diversity with QTL mapping and RNA-seq**



**Figure 2: Differentially expressed genes in the posterior lobe network.** RNA-seq data from pupal genitalia at 28h, 36h or 48h after puparium formation reveals differences in gene expression between *D. simulans* and *D. mauritiana*. Genes shown here have been implicated in genital development in *D. melanogaster*.

**Genes that colocalize with one QTL peak**

