



Figure 5 — figure supplement 1. Mean and variance gain control at transduction and spiking.

(a-d) Gain due to changing the mean stimulus. Transduction gain as a function of mean stimulus for different odor-receptor combinations. Red lines are power laws with exponent -1 (Weber-Fechner prediction). **(e-f)** Comparison of gain changes at transduction and firing due to changes in stimulus variance. **(e)** Trial-wise overall gain fold change (γ_{Total} = ORN gain at low variance/ORN gain at high variance) vs. trial-wise product of gain fold changes at transduction (γ_L) and firing (γ_F). **(f)** Comparison of average fold change in gain due to changing stimulus variance. Pie chart shows relative contribution (in percent) of transduction gain change (purple) and firing gain change (green) to overall gain change.