Experience co-regulates feedforward excitation and inhibition during whisker map plasticity

The relative levels and timing of excitation and inhibition onto principal cells are thought to direct many aspects of information processing in sensory cortex (including sensory tuning, spike timing, and gain). One of the circuit components responsible for these features is feedforward inhibition. Here I present evidence for how specific elements of a feedforward circuit change after sensory deprivation and the net effect of these changes on excitatory-inhibitory ratio and timing in pyramidal cells.