

Figure 6 - figure supplement 1

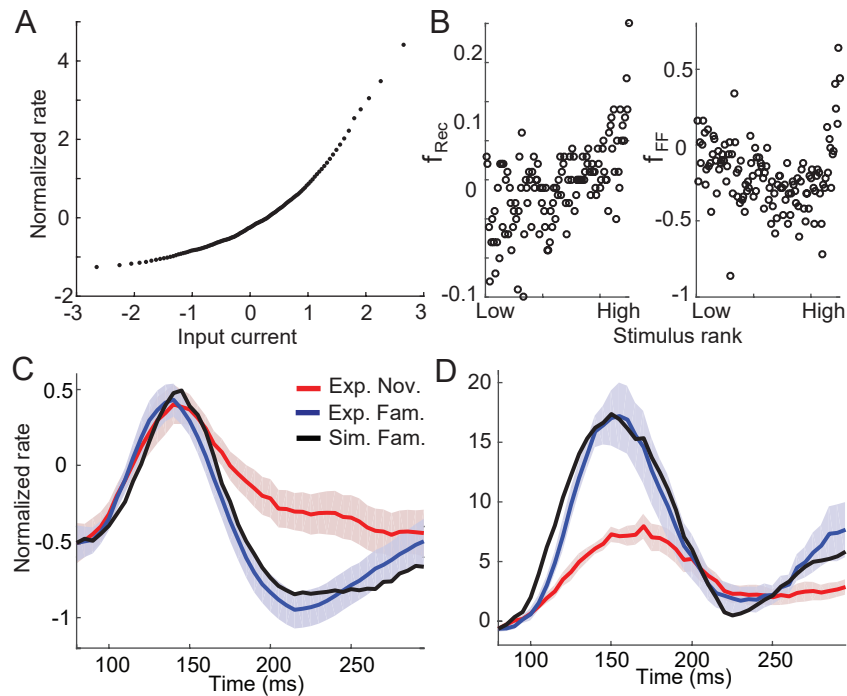


Figure 6 – figure supplement 1. Example nonlinearity in dynamics and synaptic plasticity inferred under nonlinearity. (A) Nonlinear input current-output firing rate transfer function that leads to nonlinear dynamics in the circuits. Under the assumptions of a normal distribution of input currents before learning and monotonically increasing transfer function, the transfer function was obtained from the distribution of time-averaged responses to novel stimuli (Lim et al., 2015). (B) Post-synaptic dependence of synaptic plasticity in the recurrent (left) and feedforward (right) connections that best fit the changes in response dynamics with the nonlinear transfer function in (A). (C,D) Comparison between data and network simulations for average (C) and maximal responses (D) (blue for data and black for network simulation).