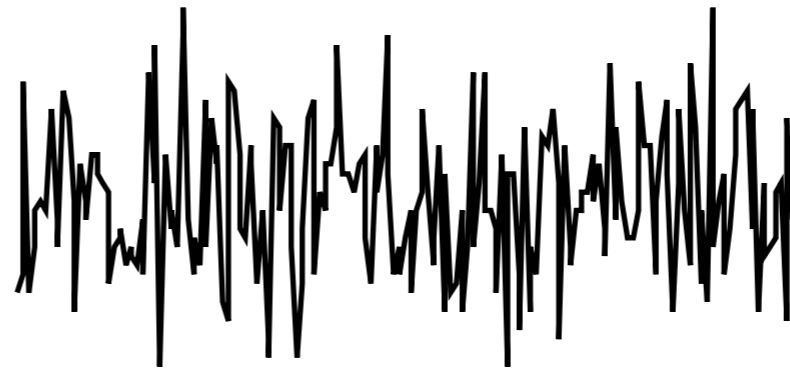
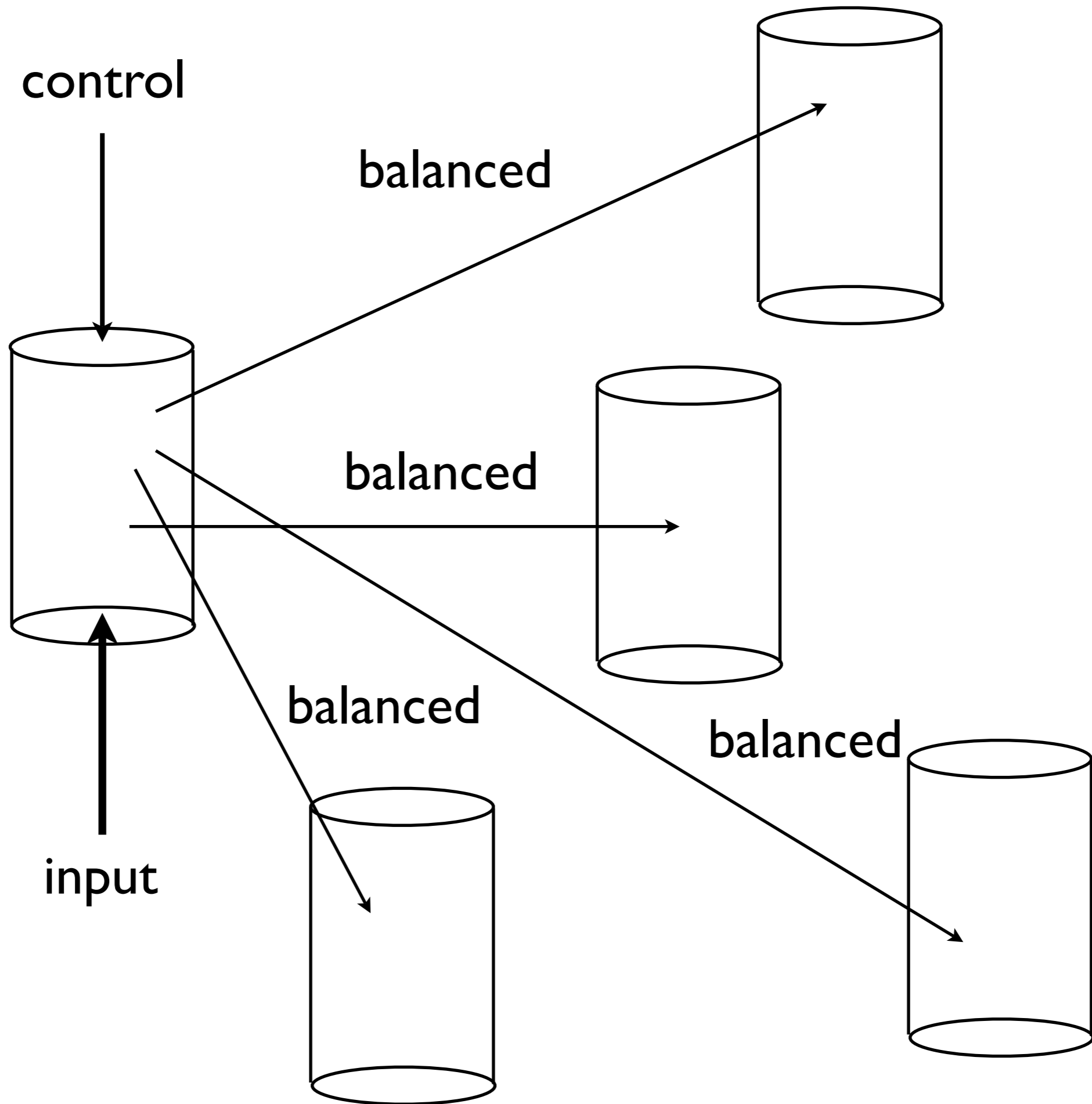


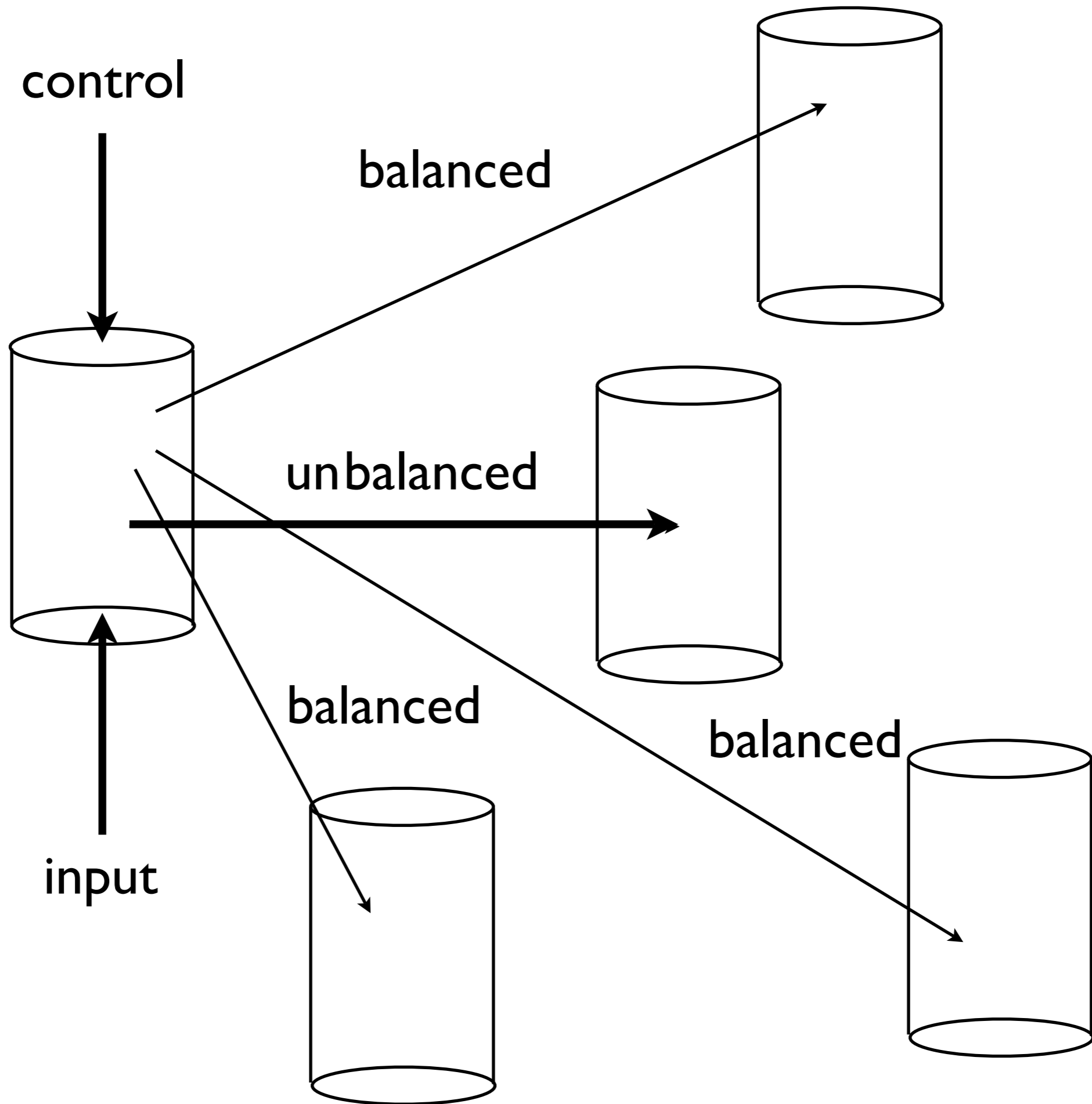
balanced input

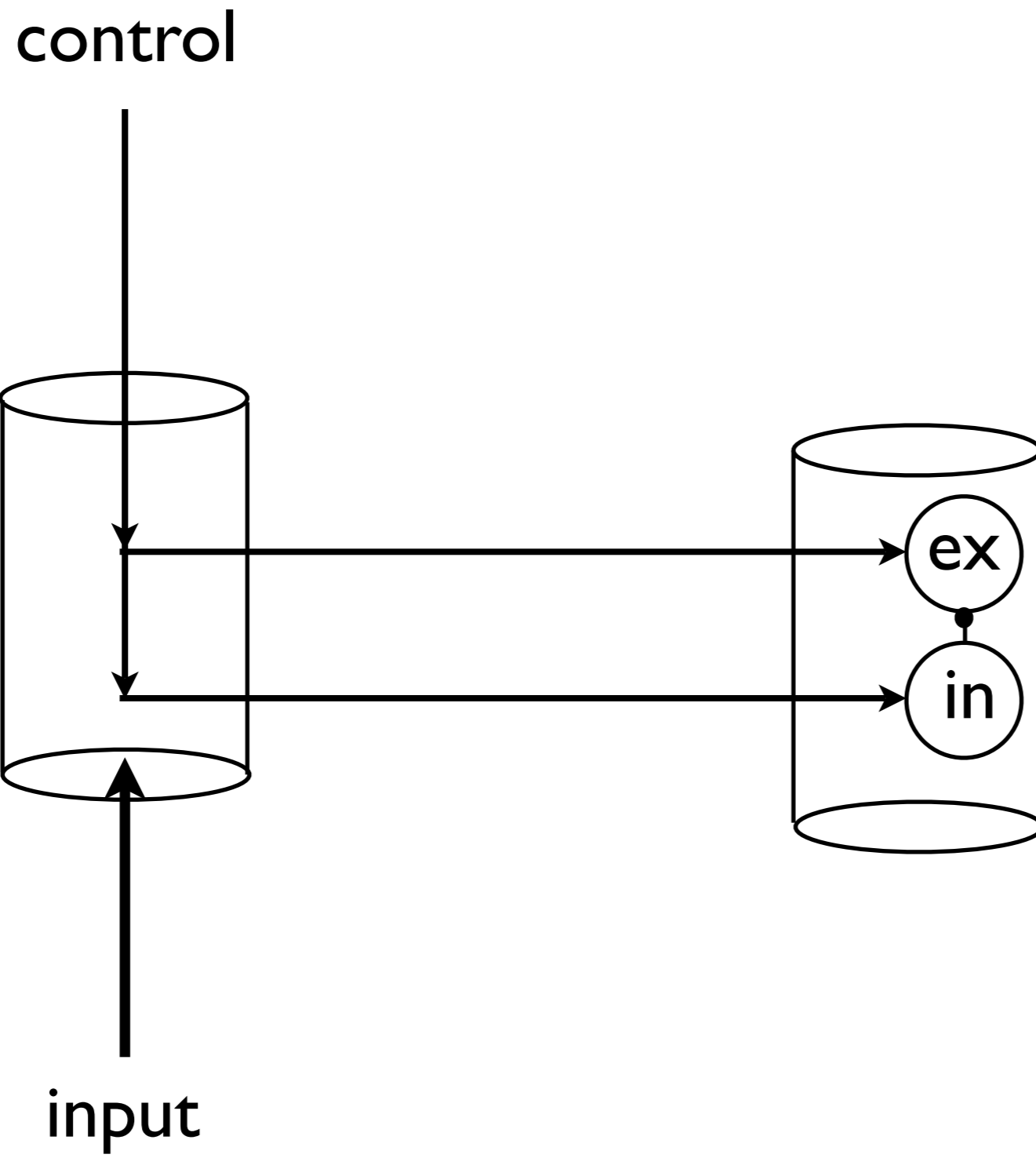


Shadlen & Newsome  
Amit & Brunel  
Van Vreeswijk & Sompolinsky  
Anderson, Lampl, Gillespie, & Ferster  
Troyer and Miller

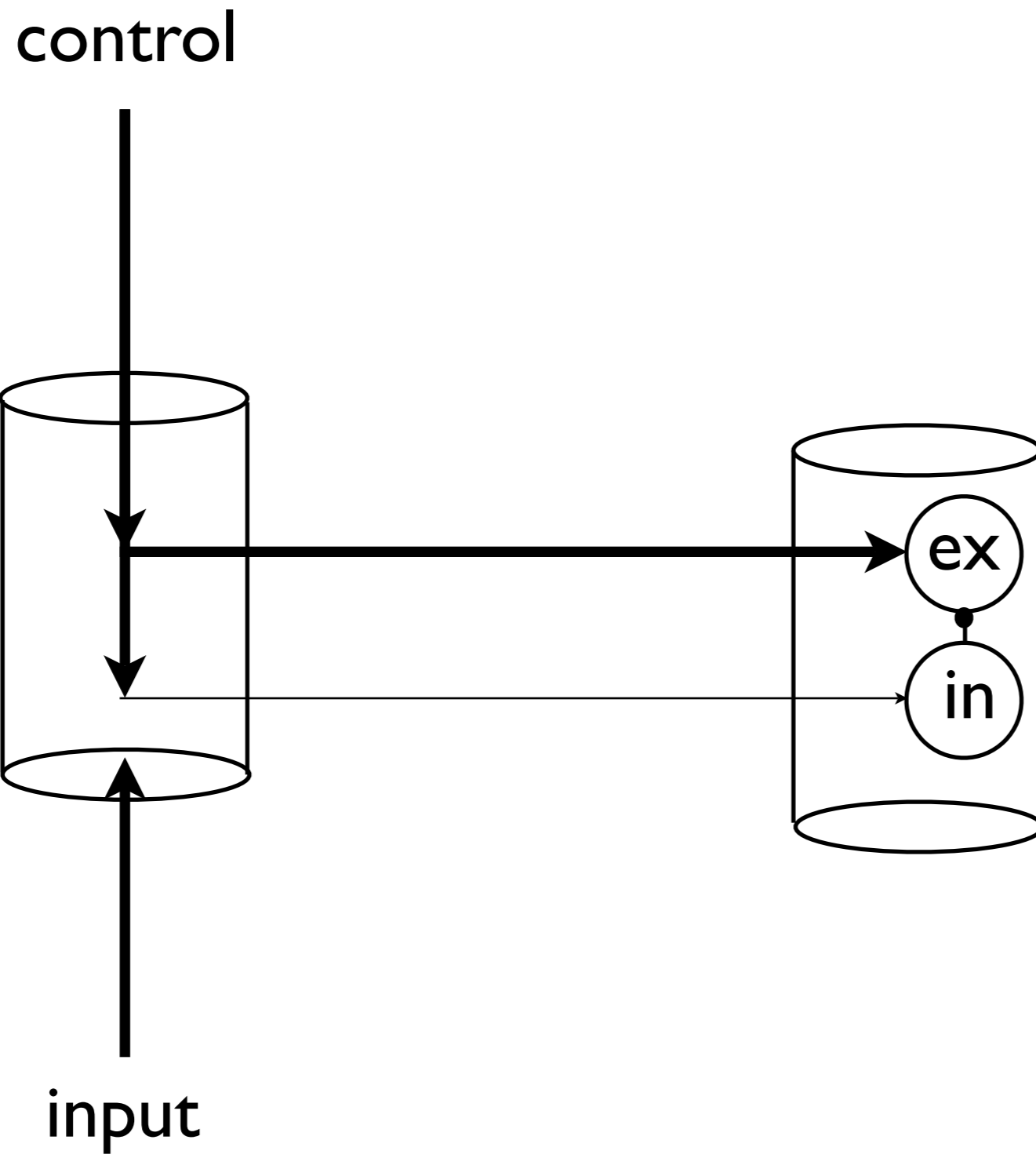
with Tim Vogels

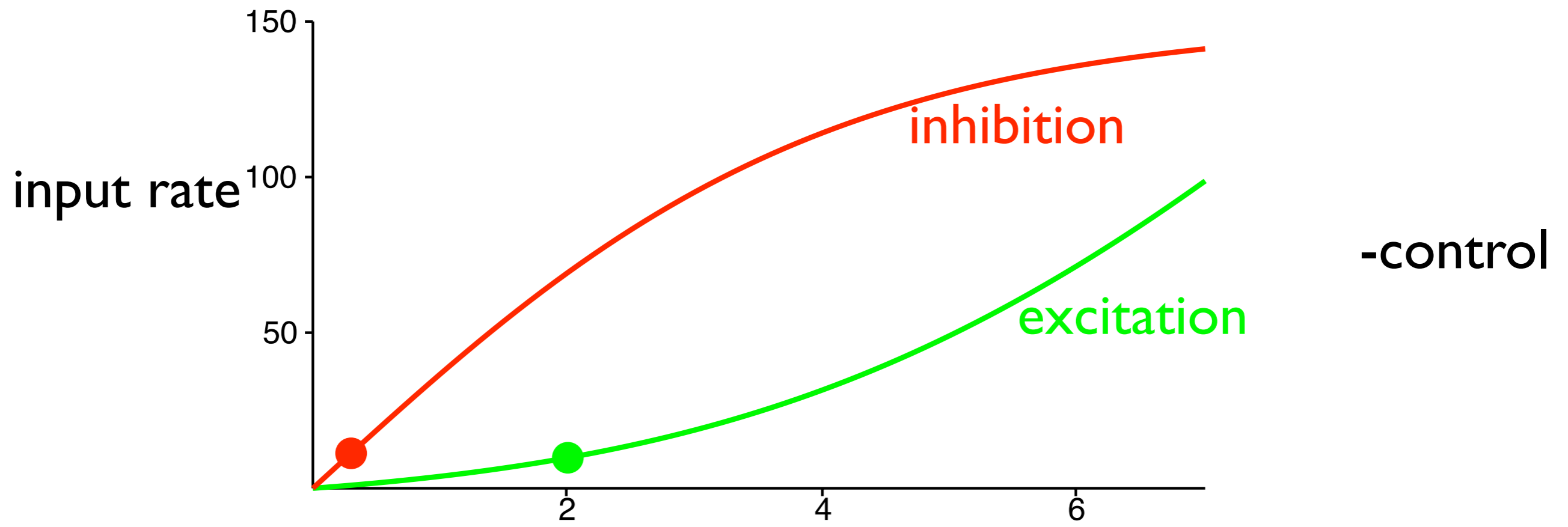


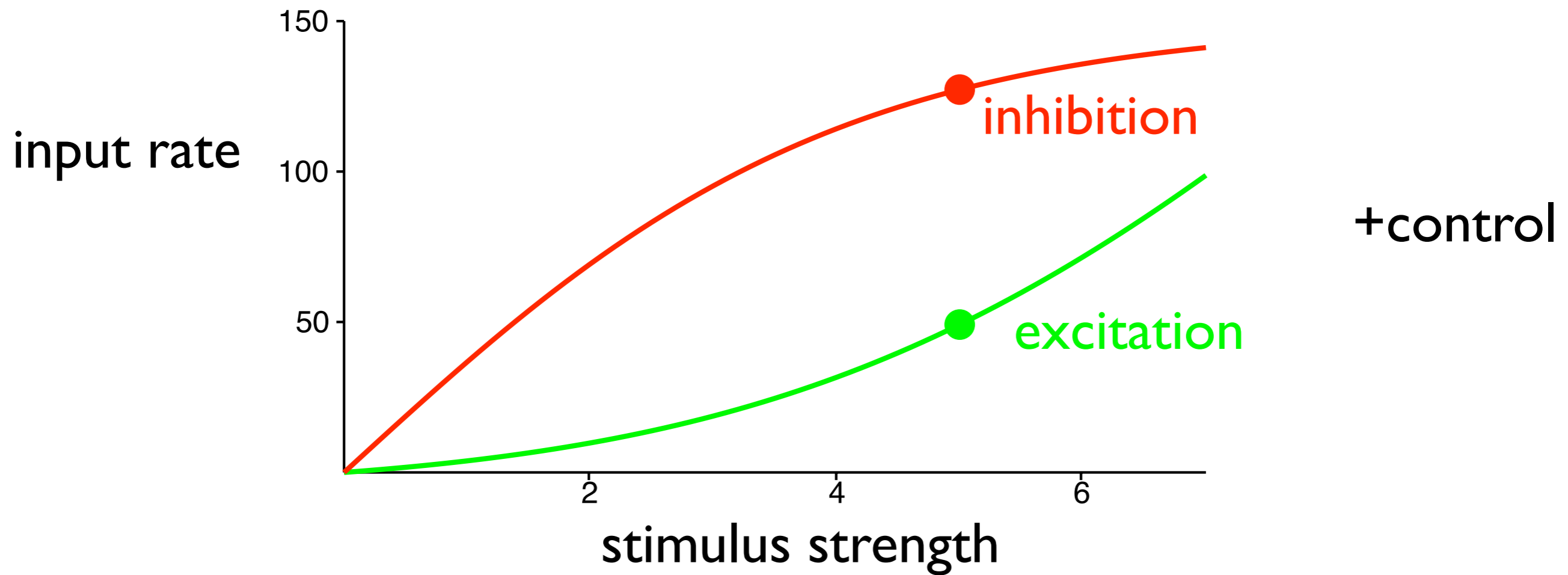
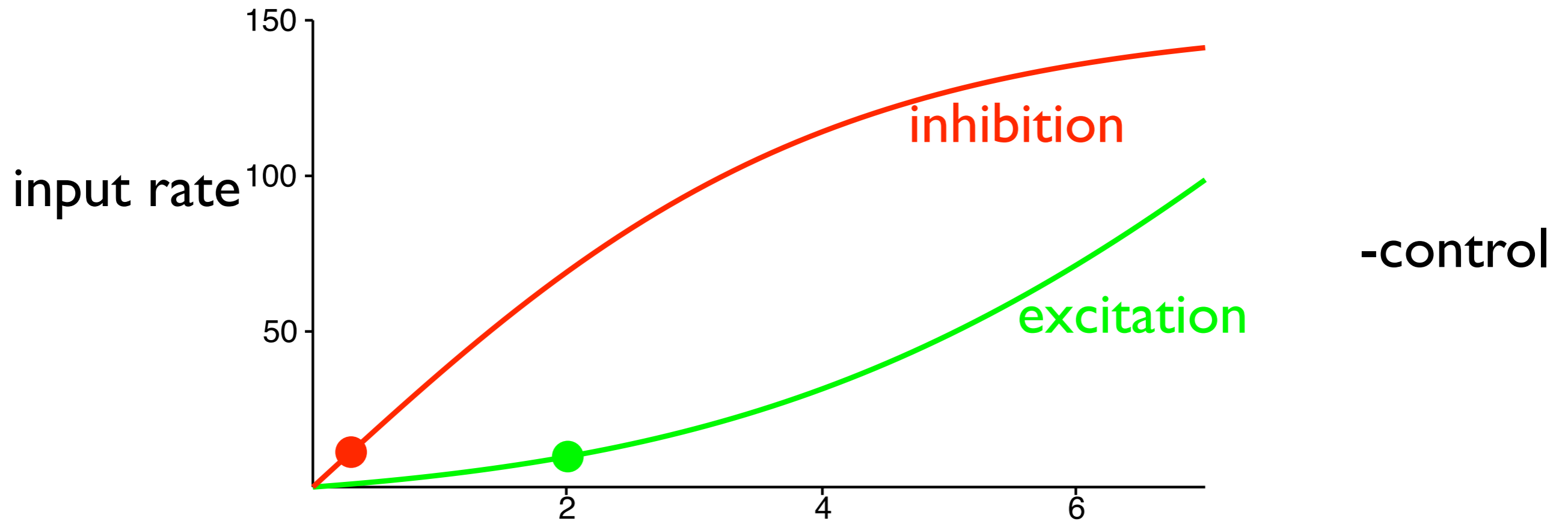


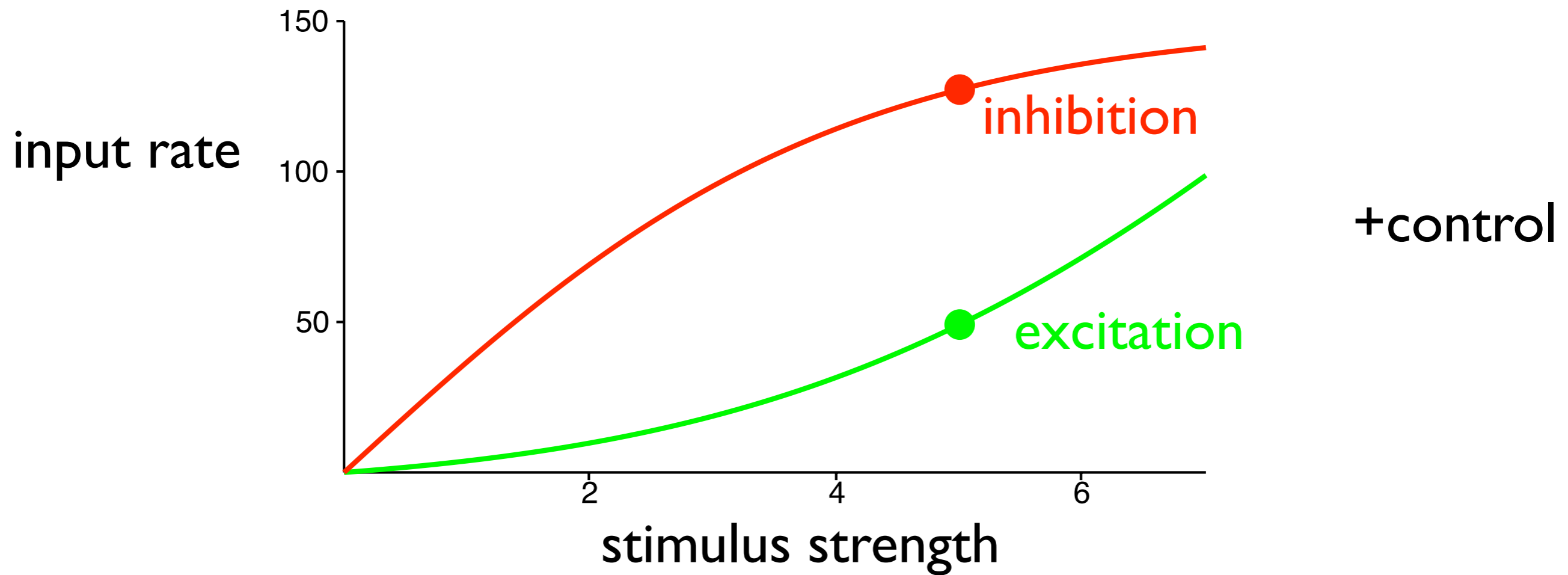
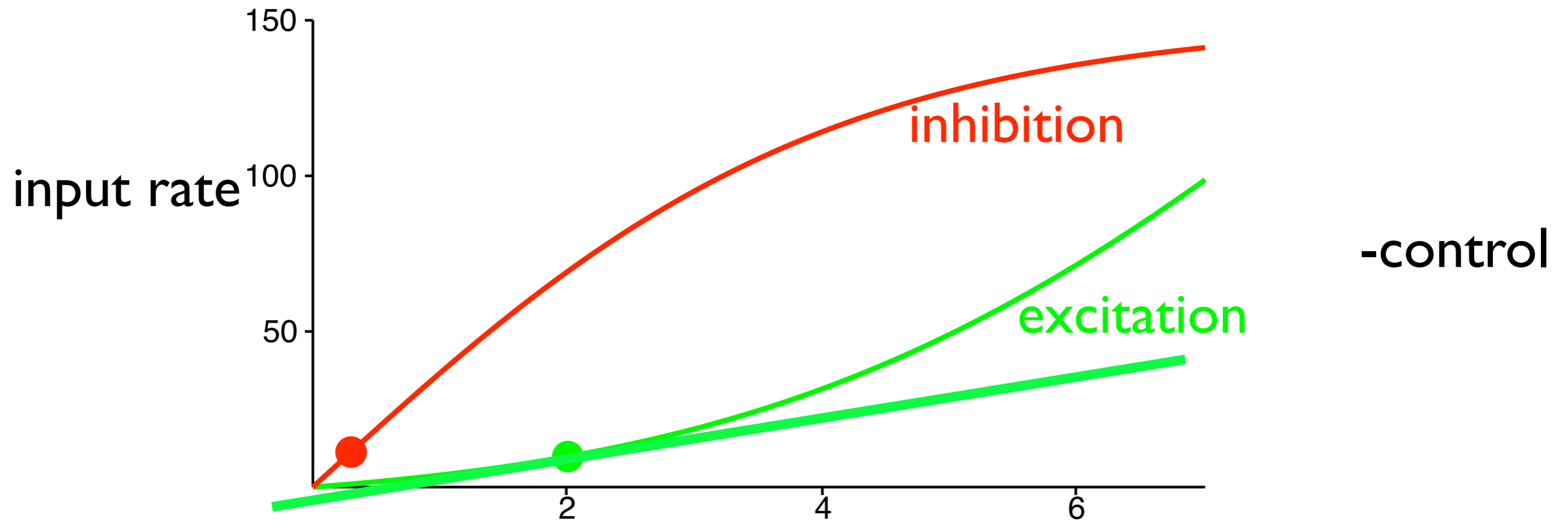


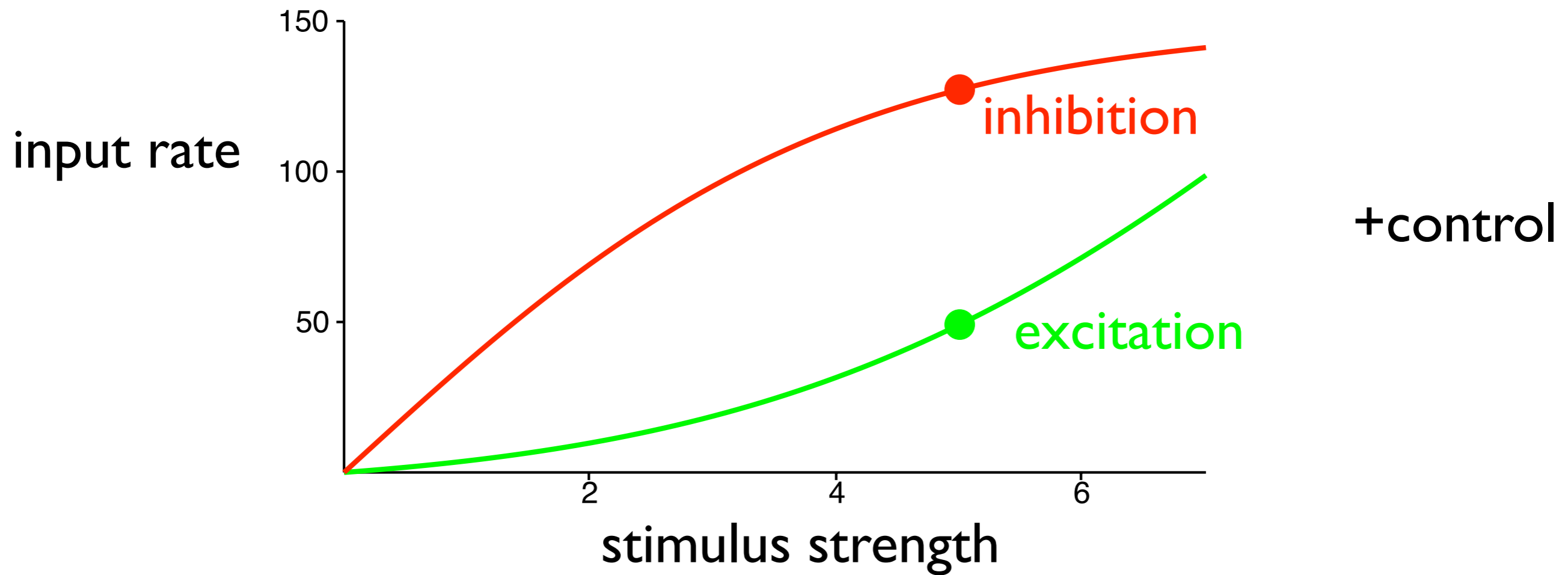
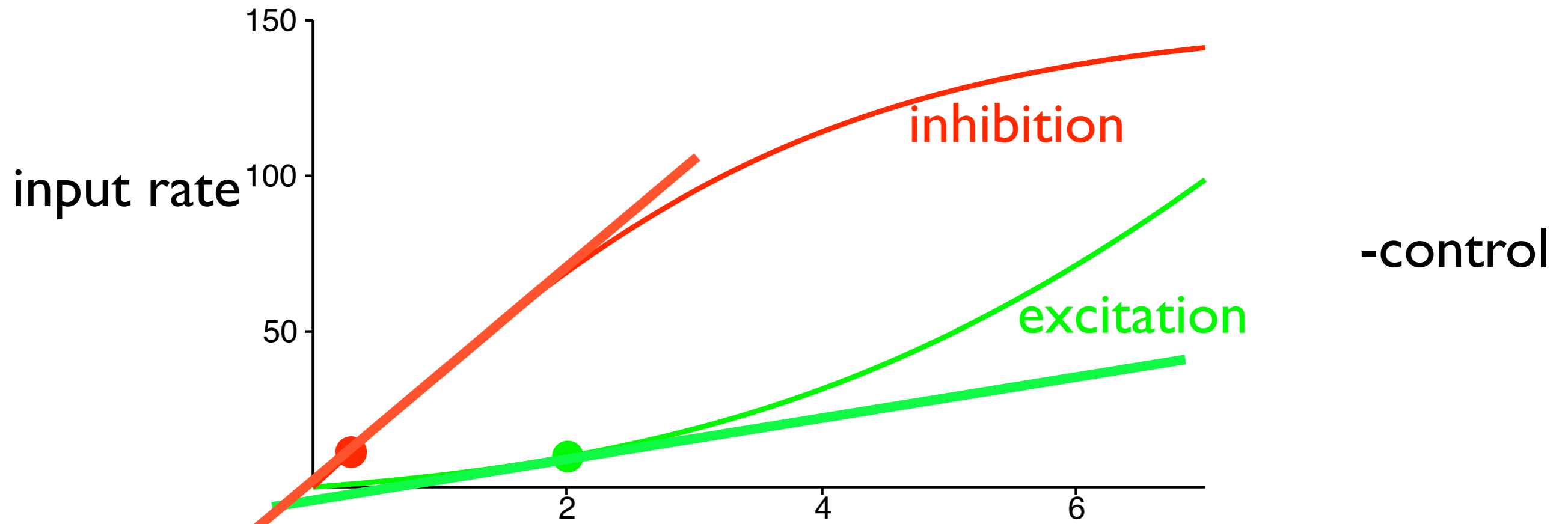


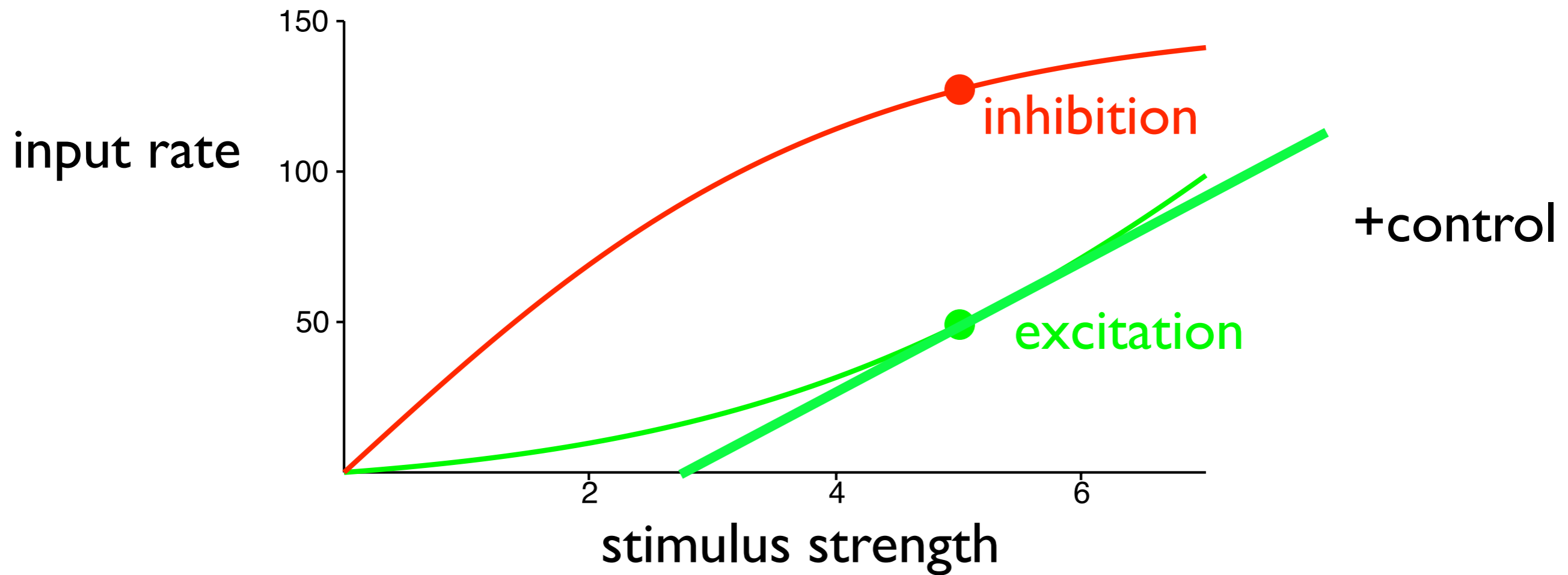
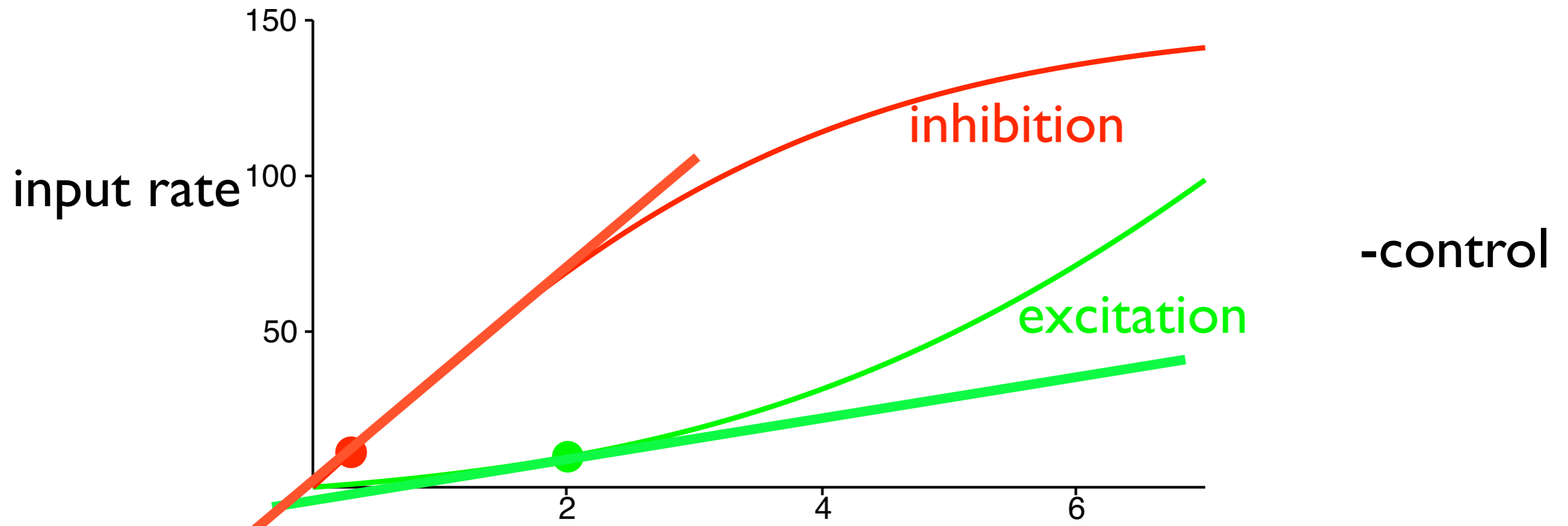


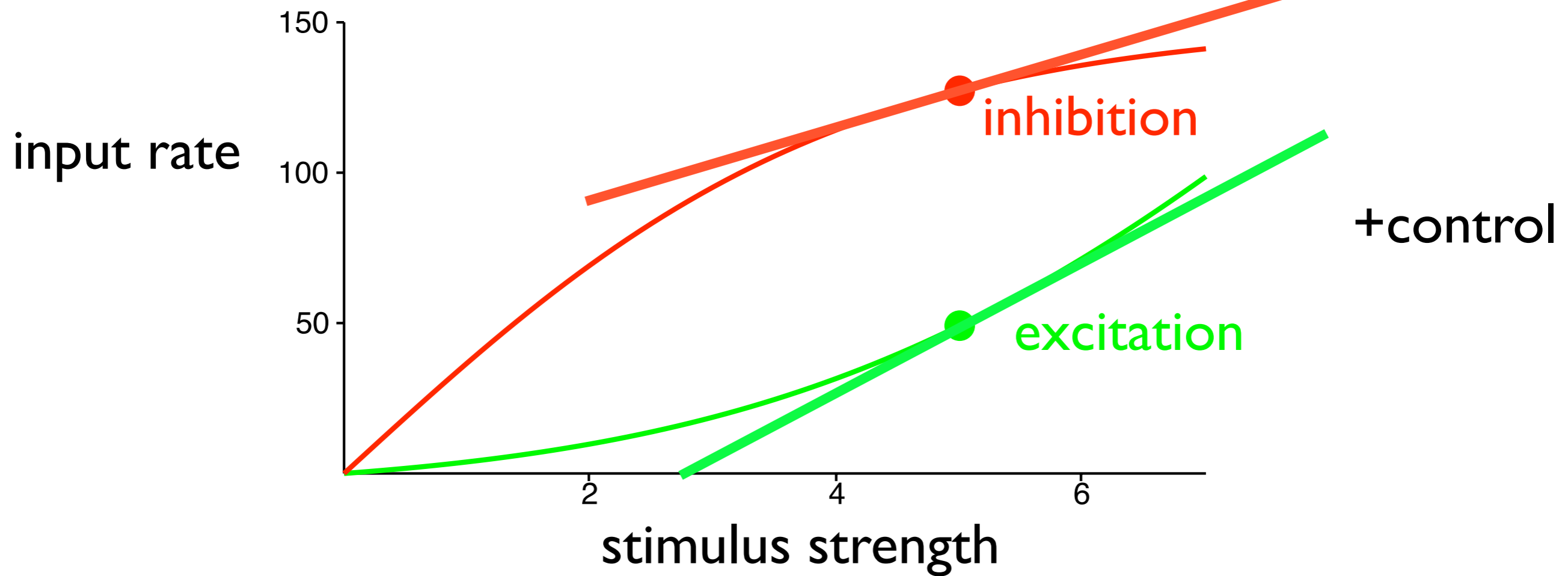
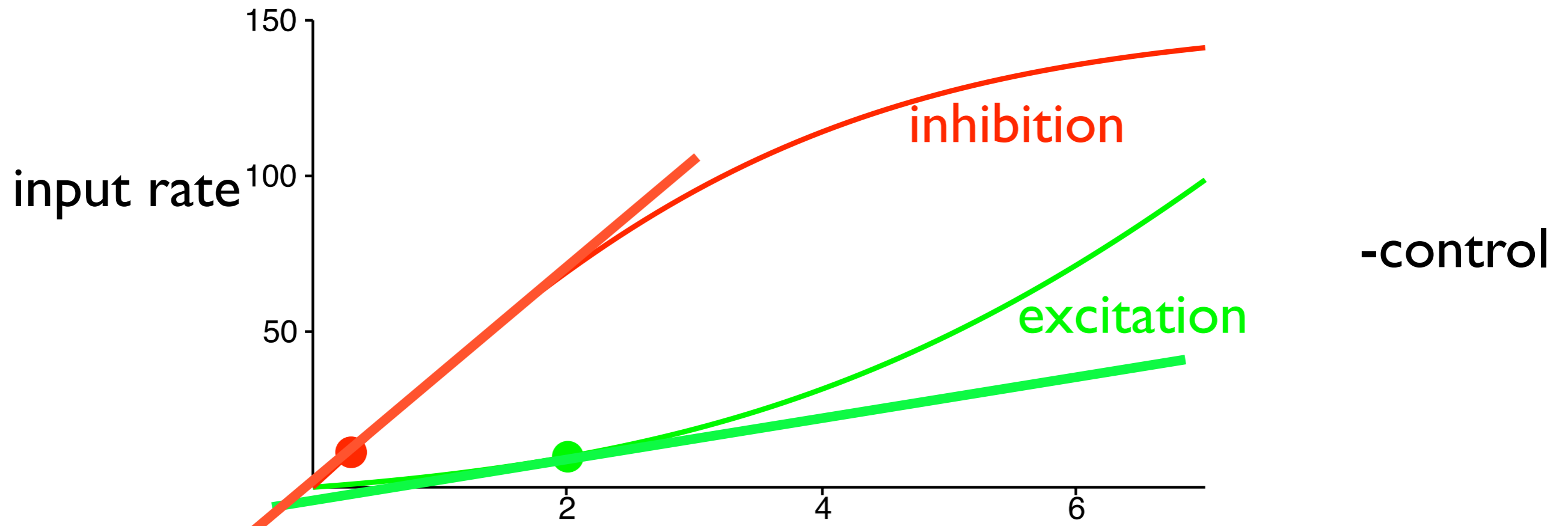






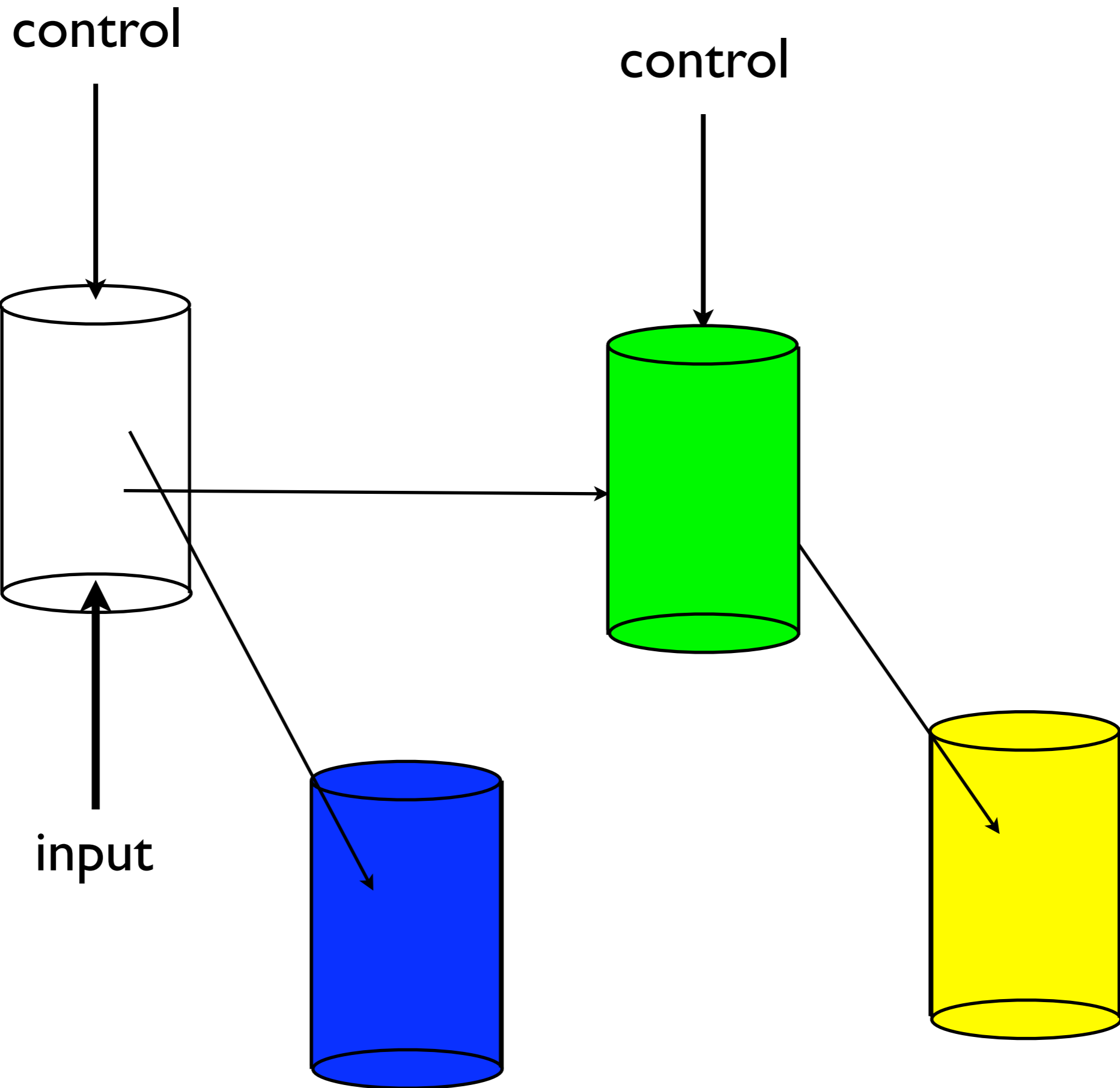






# Control Demo





# Network Demo

# Network Balance

Inhibitory

[pA]

150

Mem. Current

-150

Excitatory

[mV]

-50

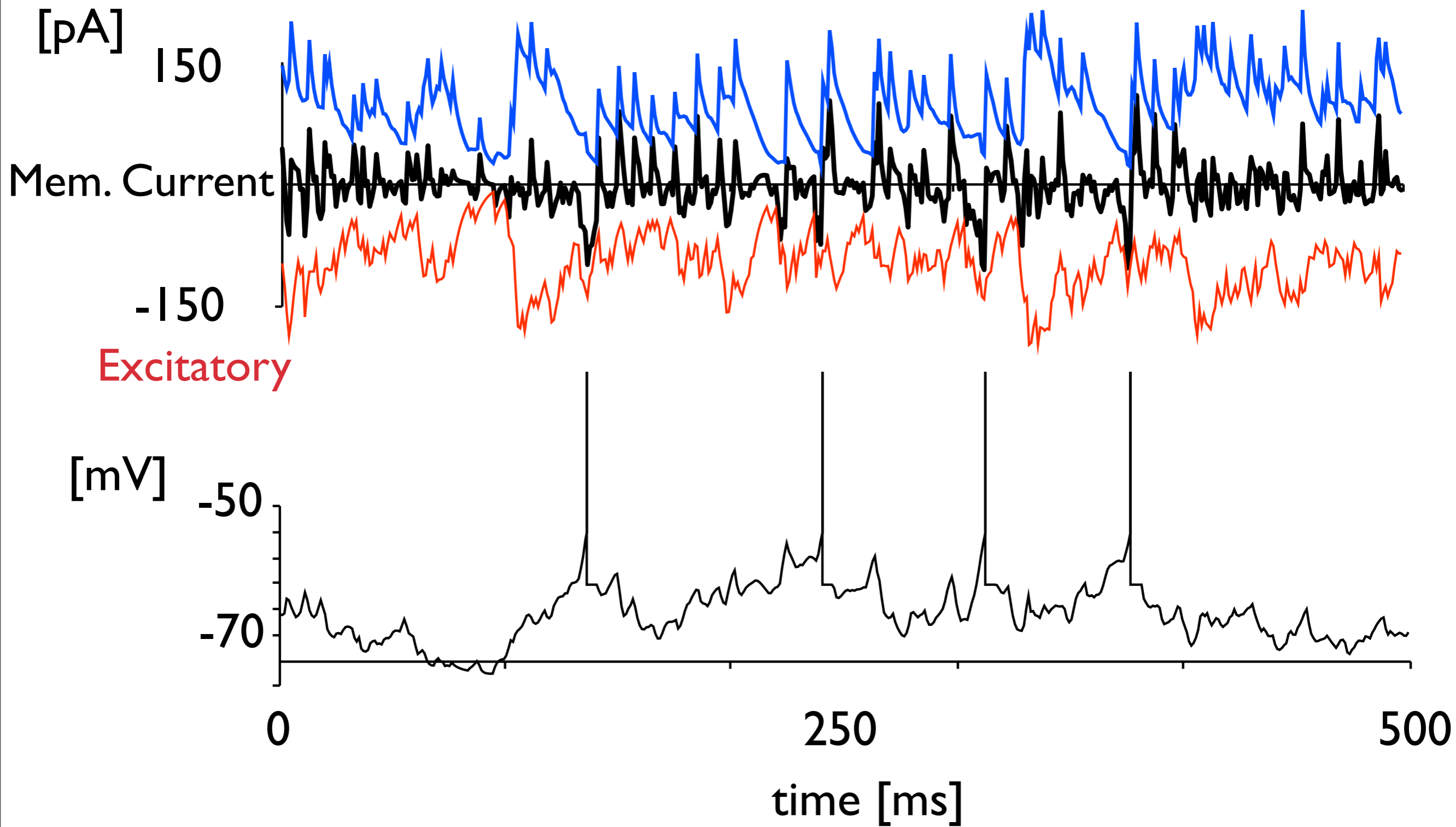
-70

0

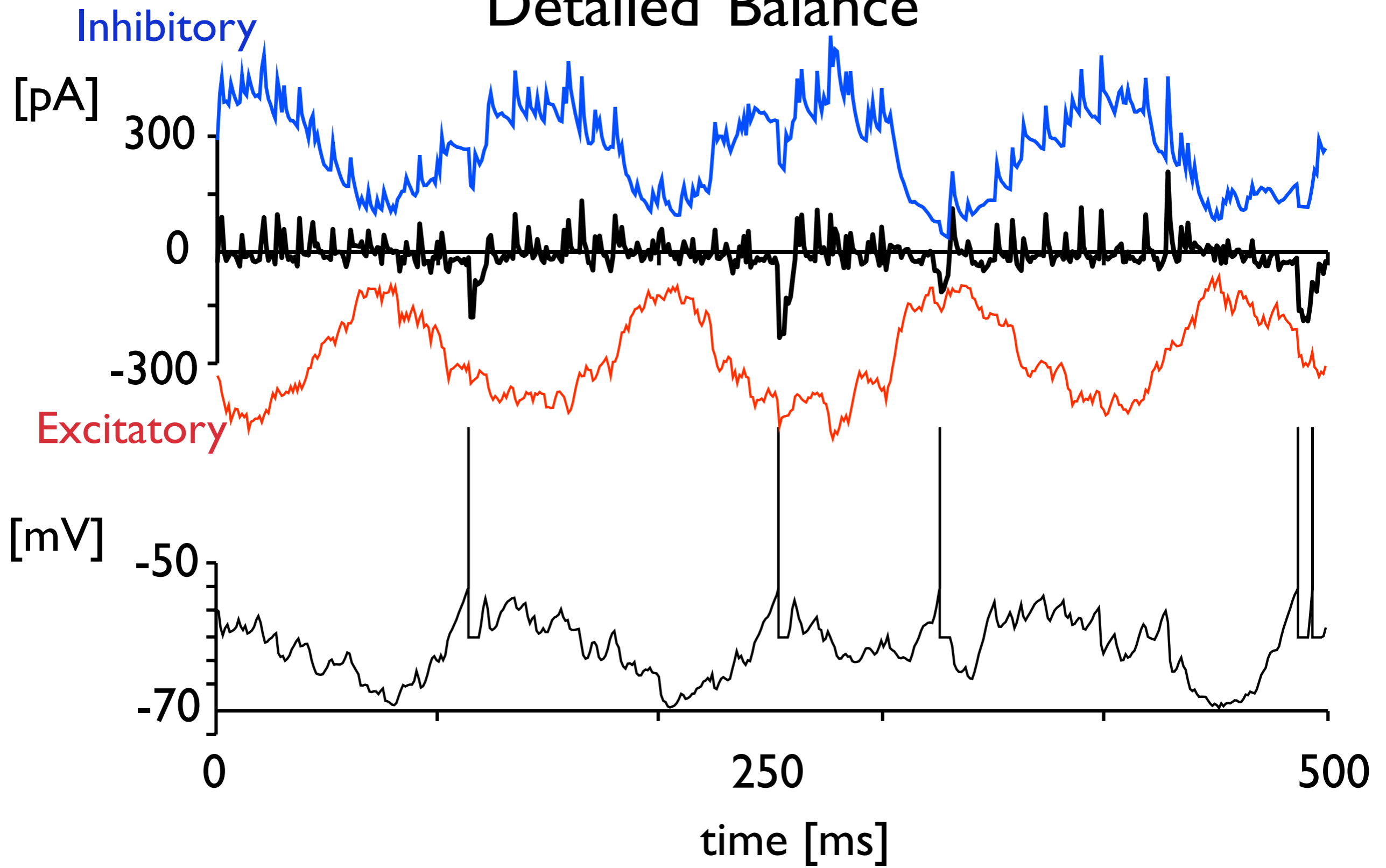
250

500

time [ms]



# Detailed Balance



# Unbalance

Inhibitory

[pA]

300

0

-300

Excitatory

[mV]

-50

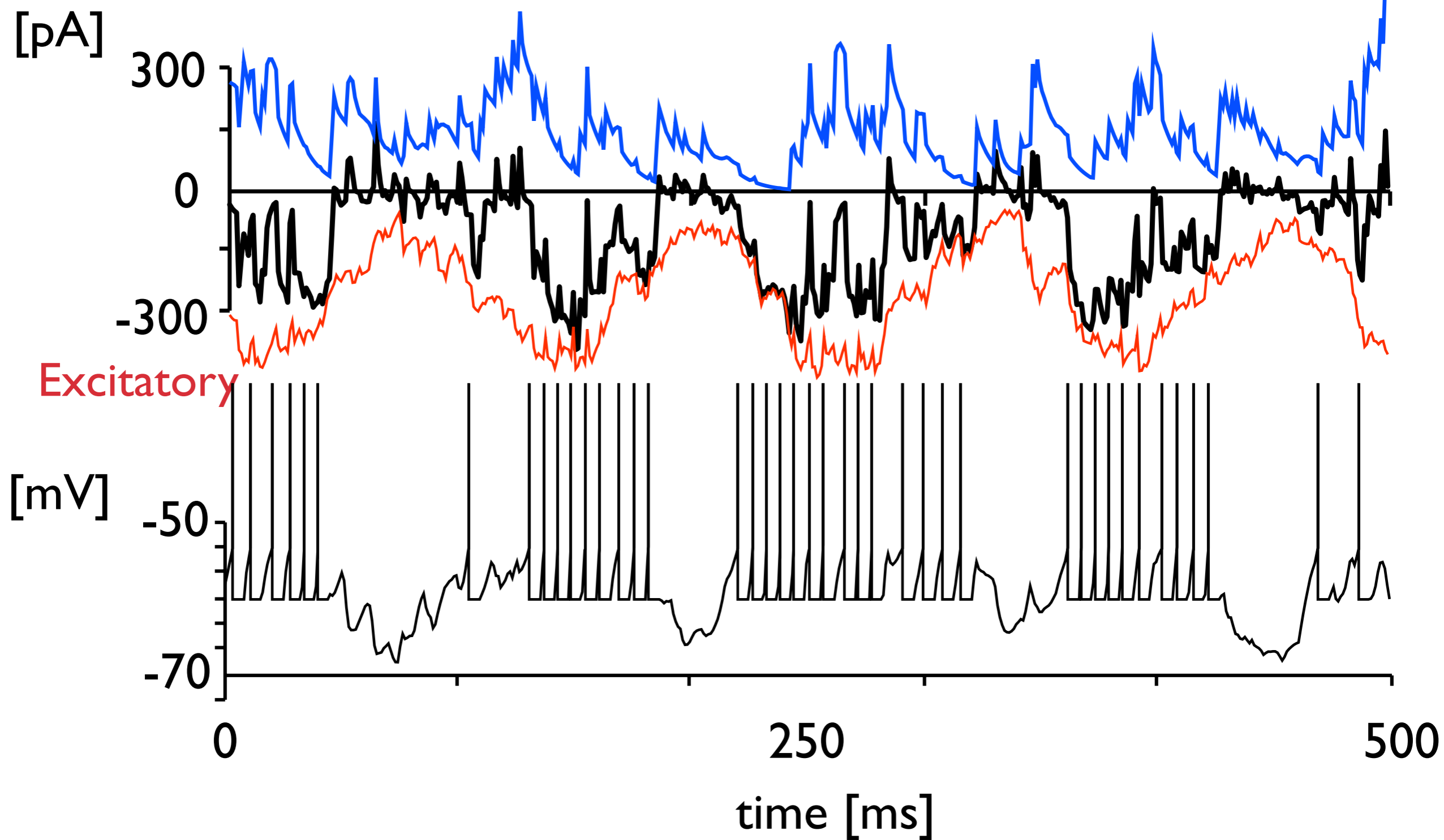
-70

0

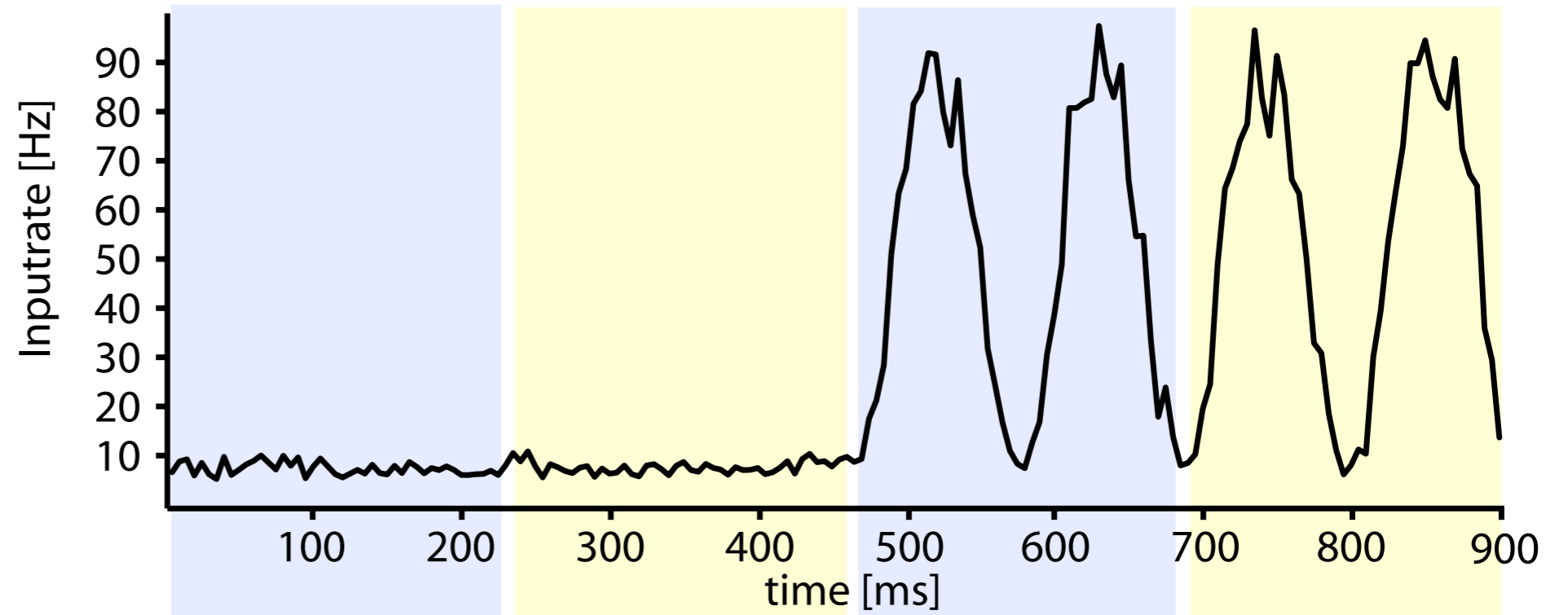
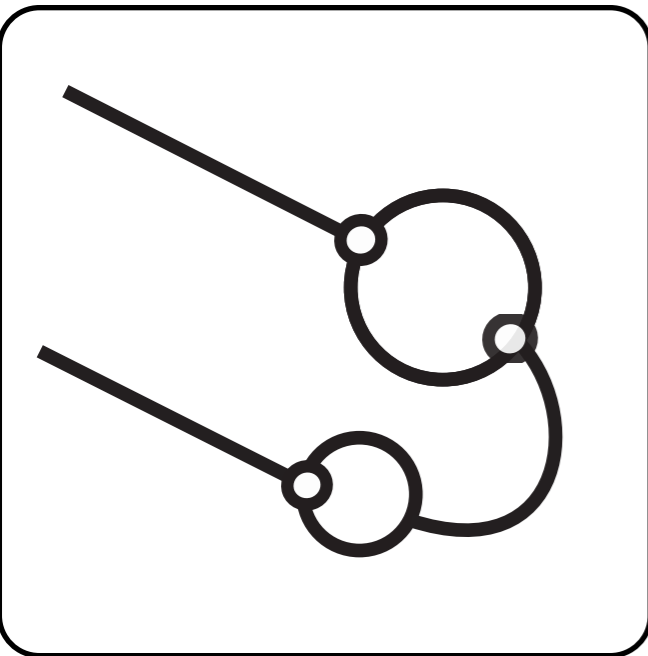
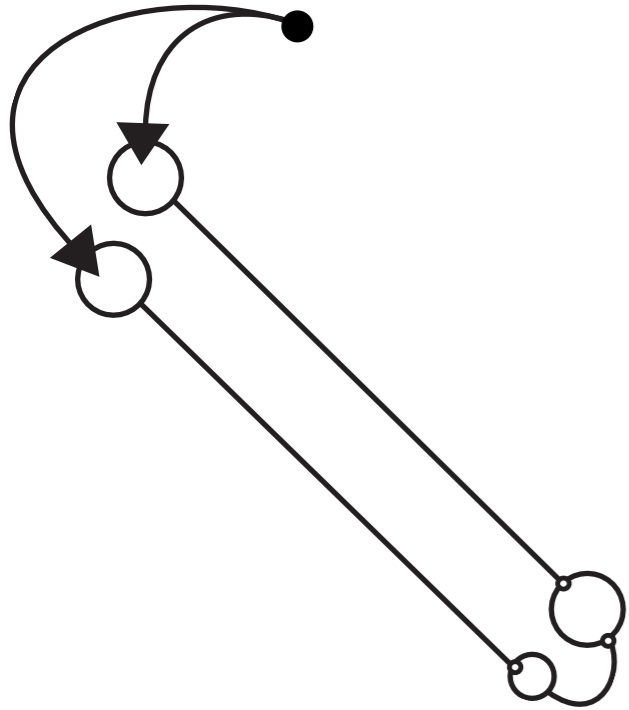
250

500

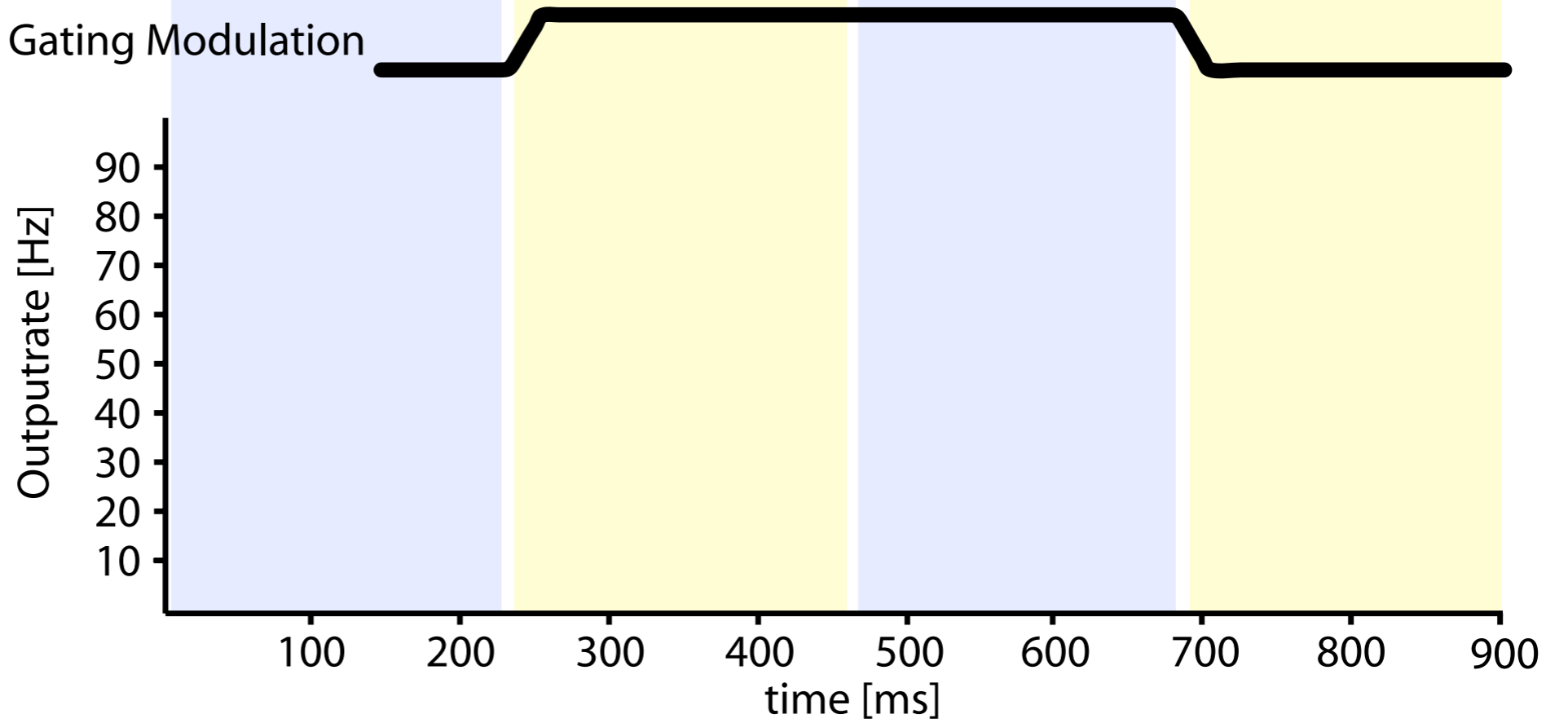
time [ms]



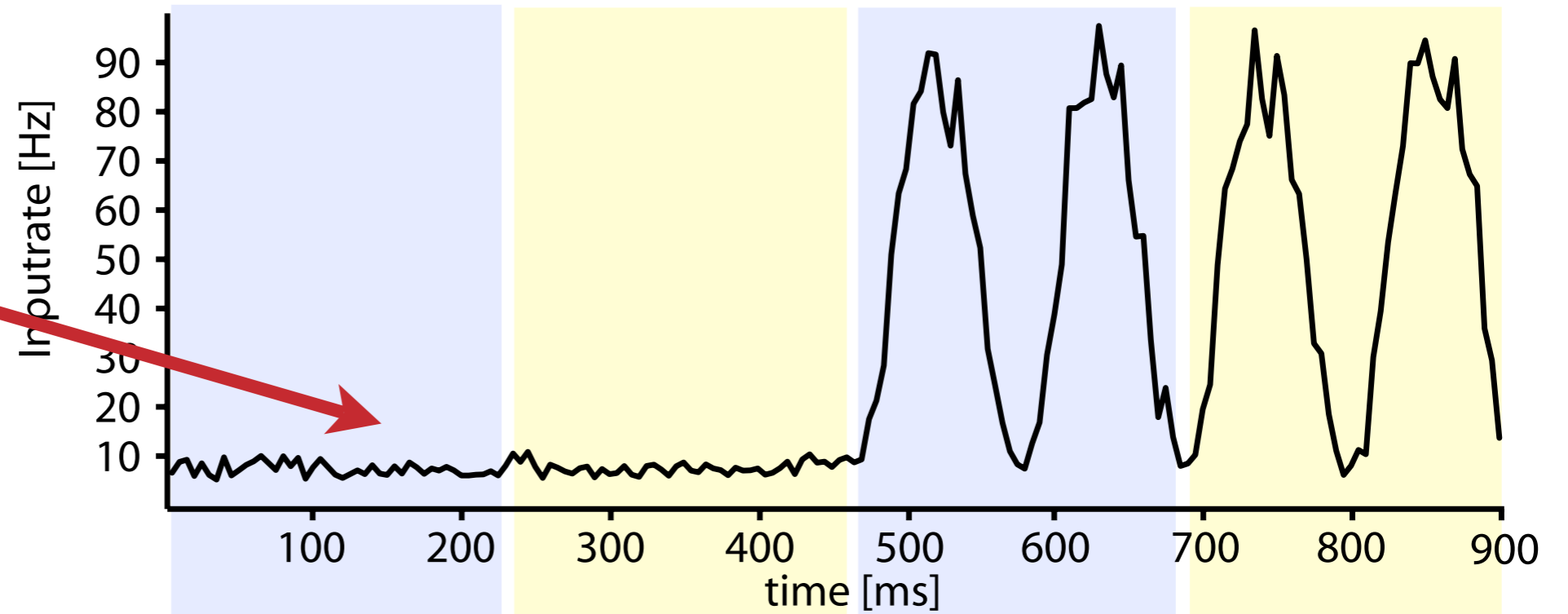
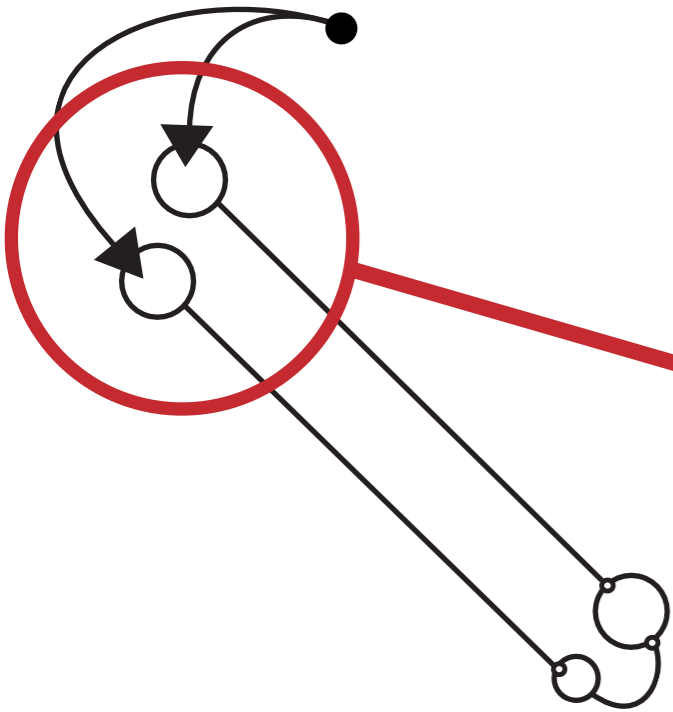
# Detailed Balance



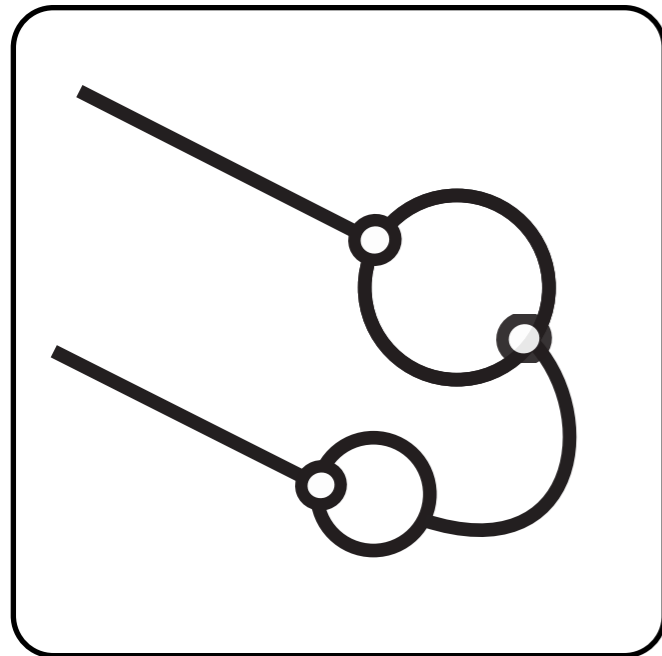
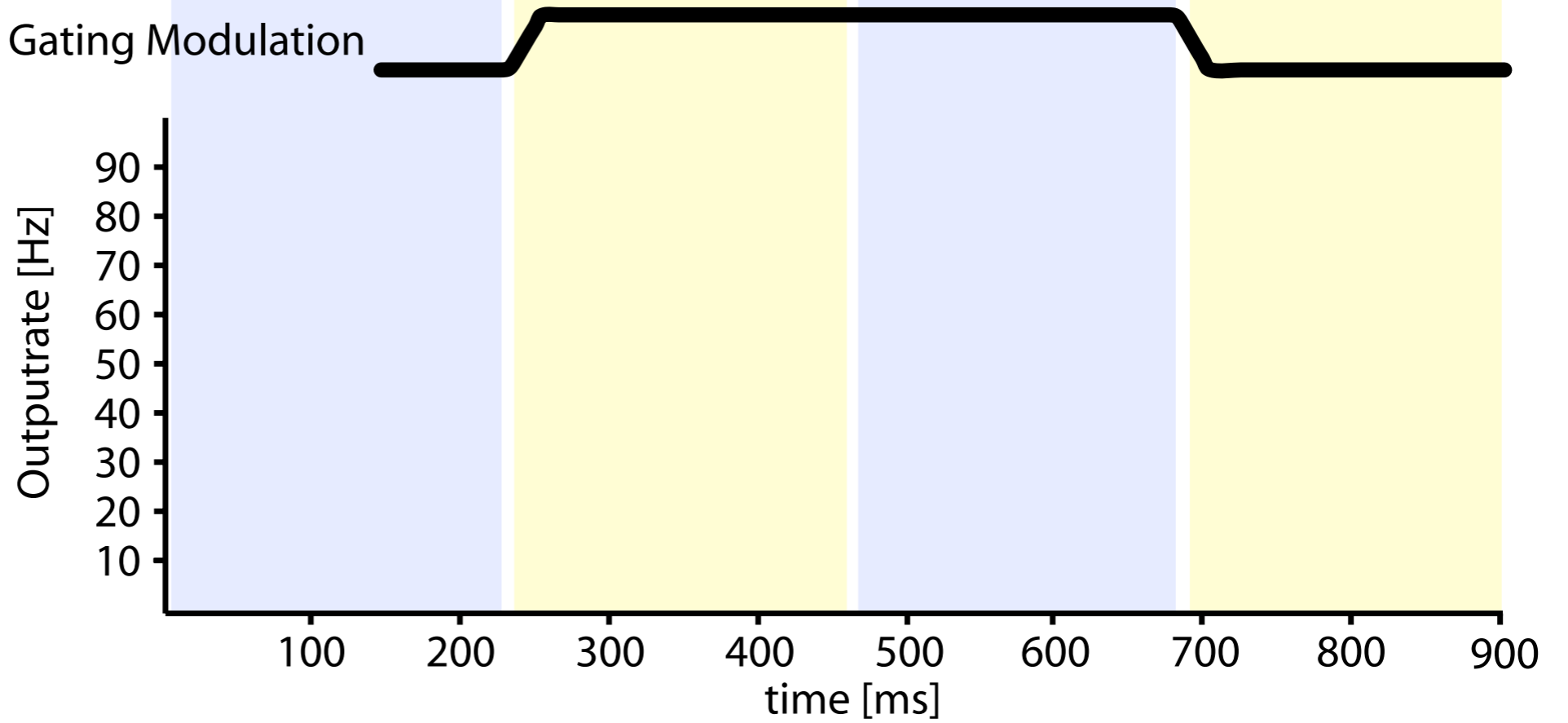
Gating Modulation



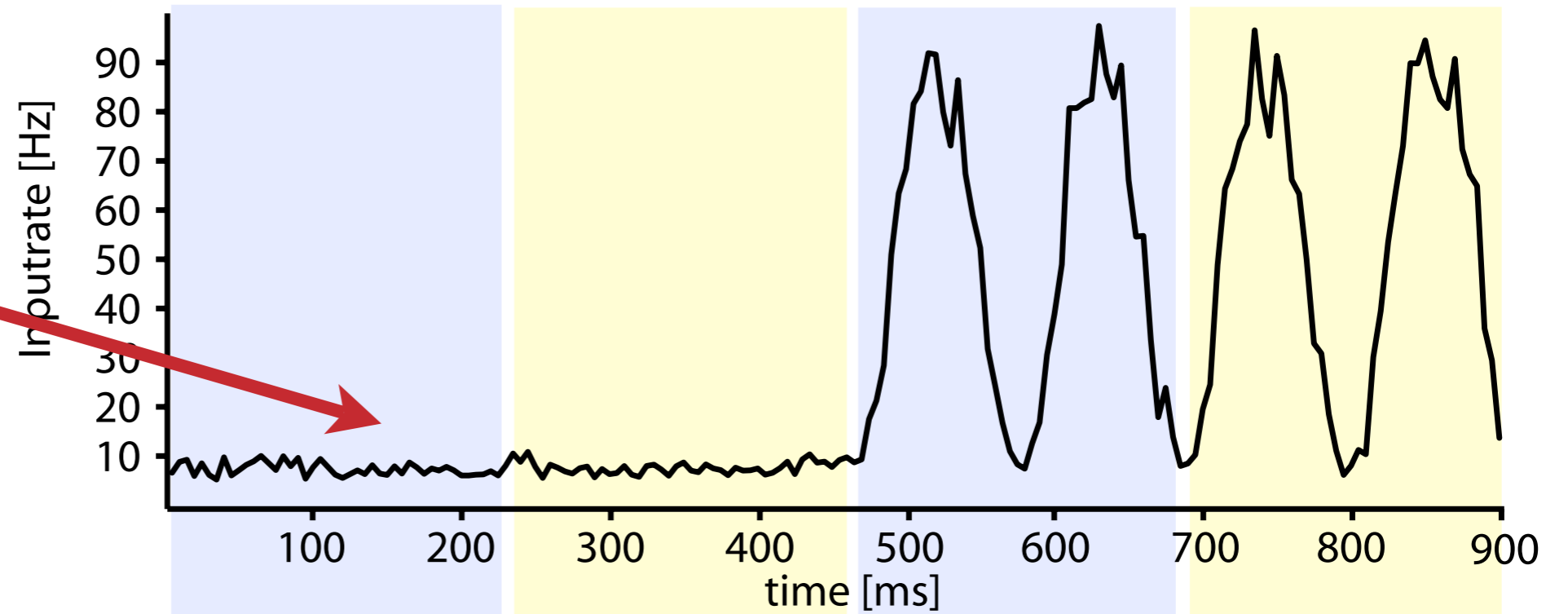
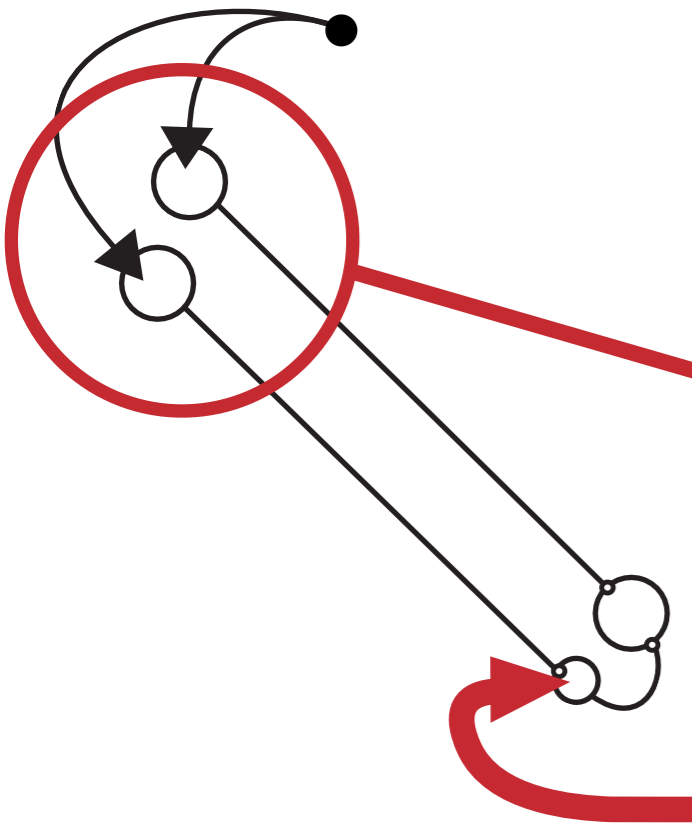
# Detailed Balance



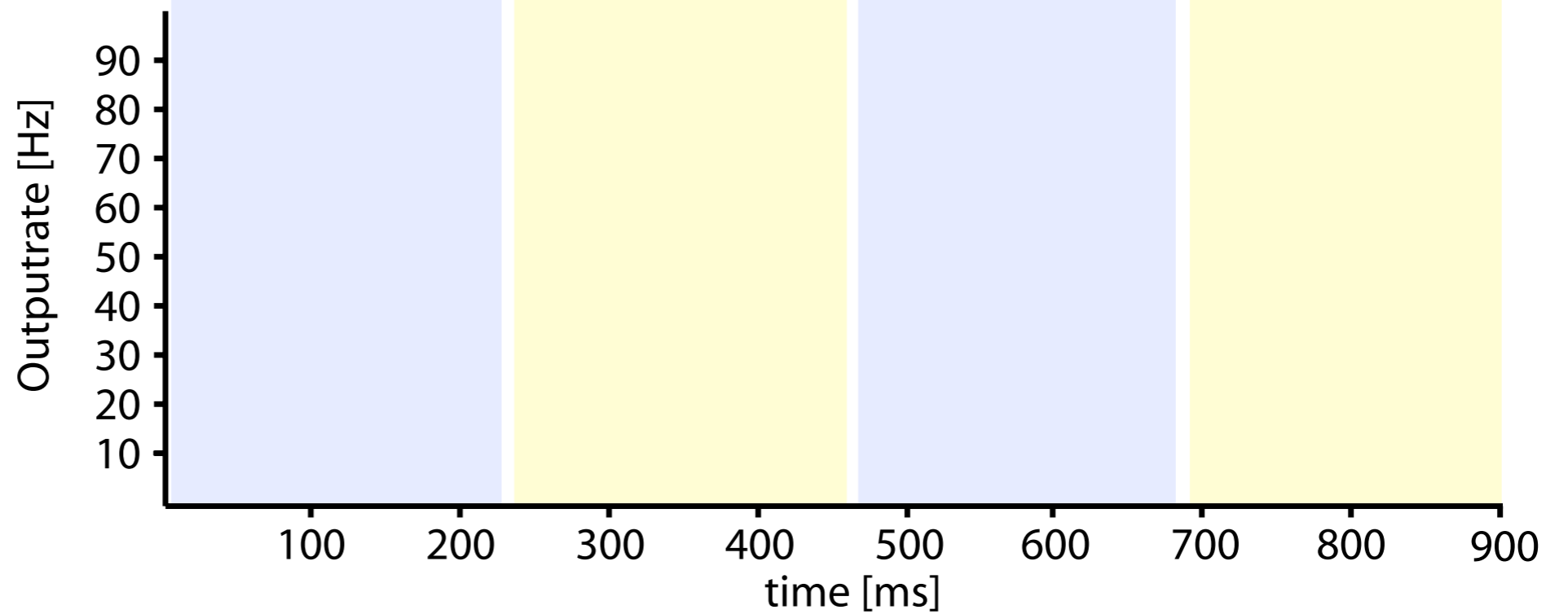
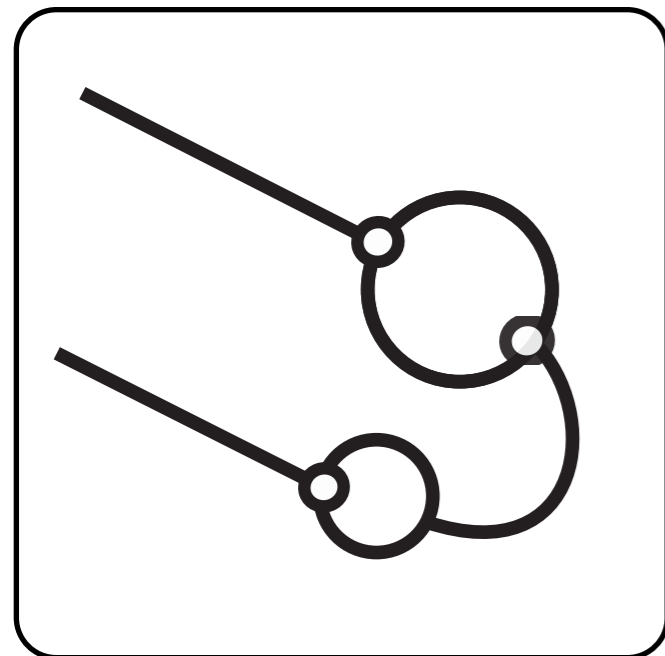
Gating Modulation



# Detailed Balance

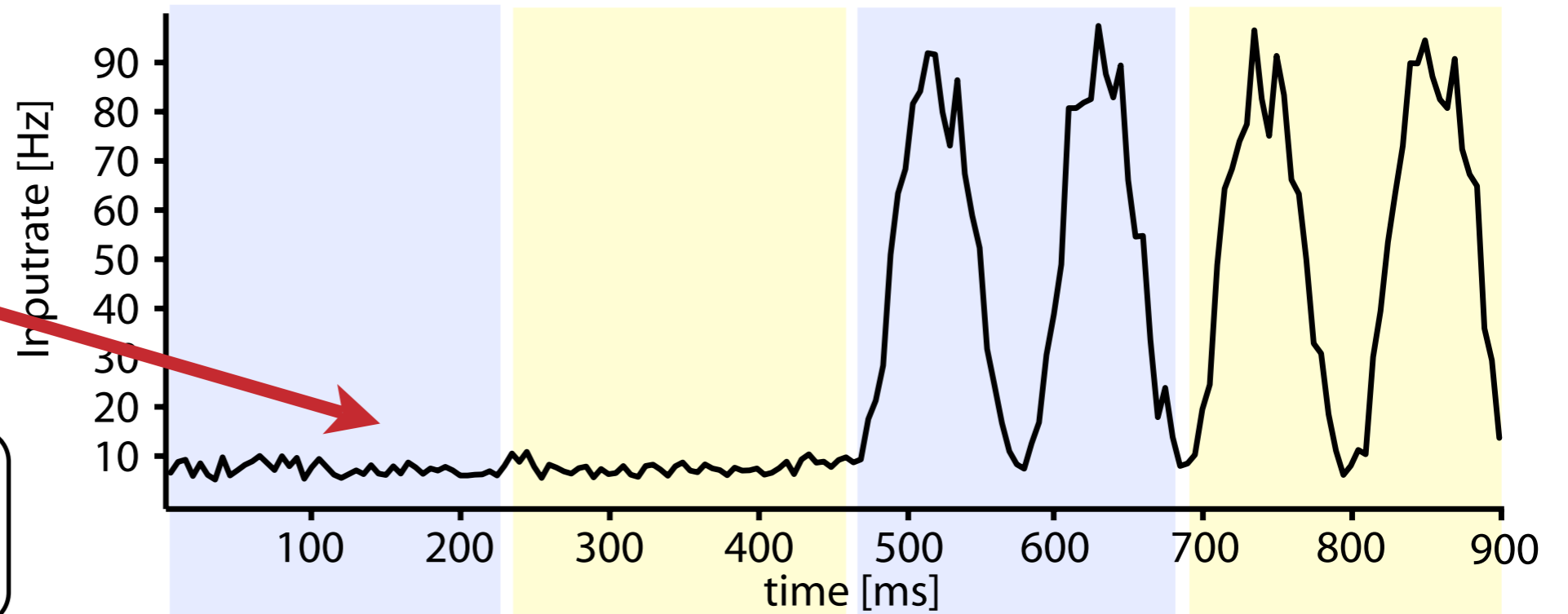
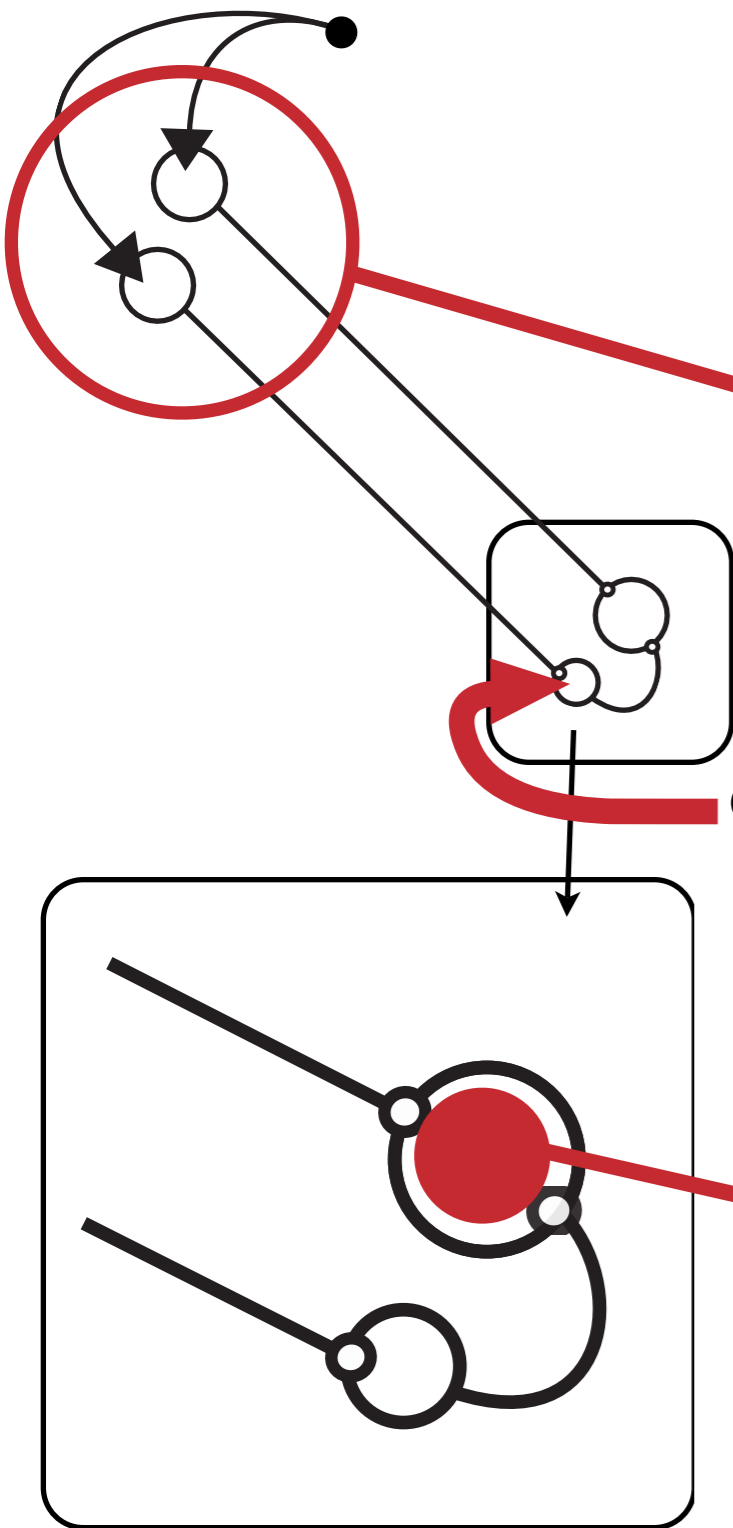


Gating Modulation

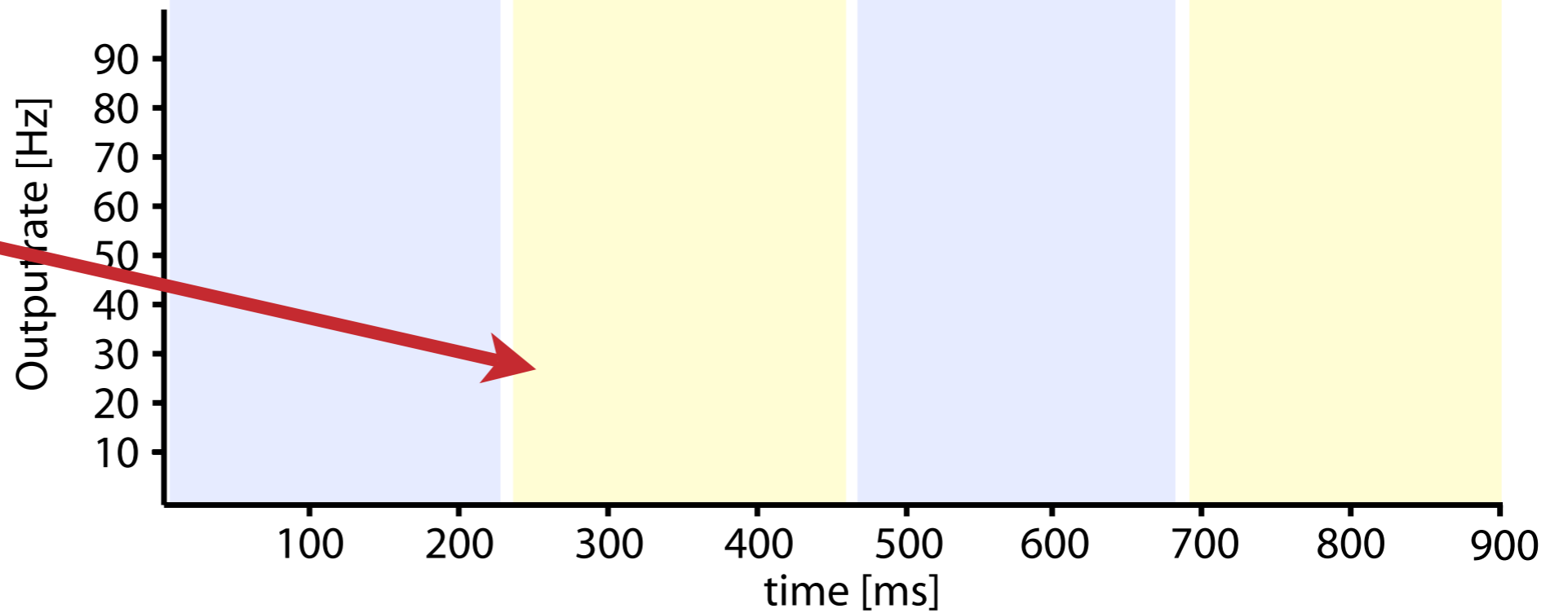




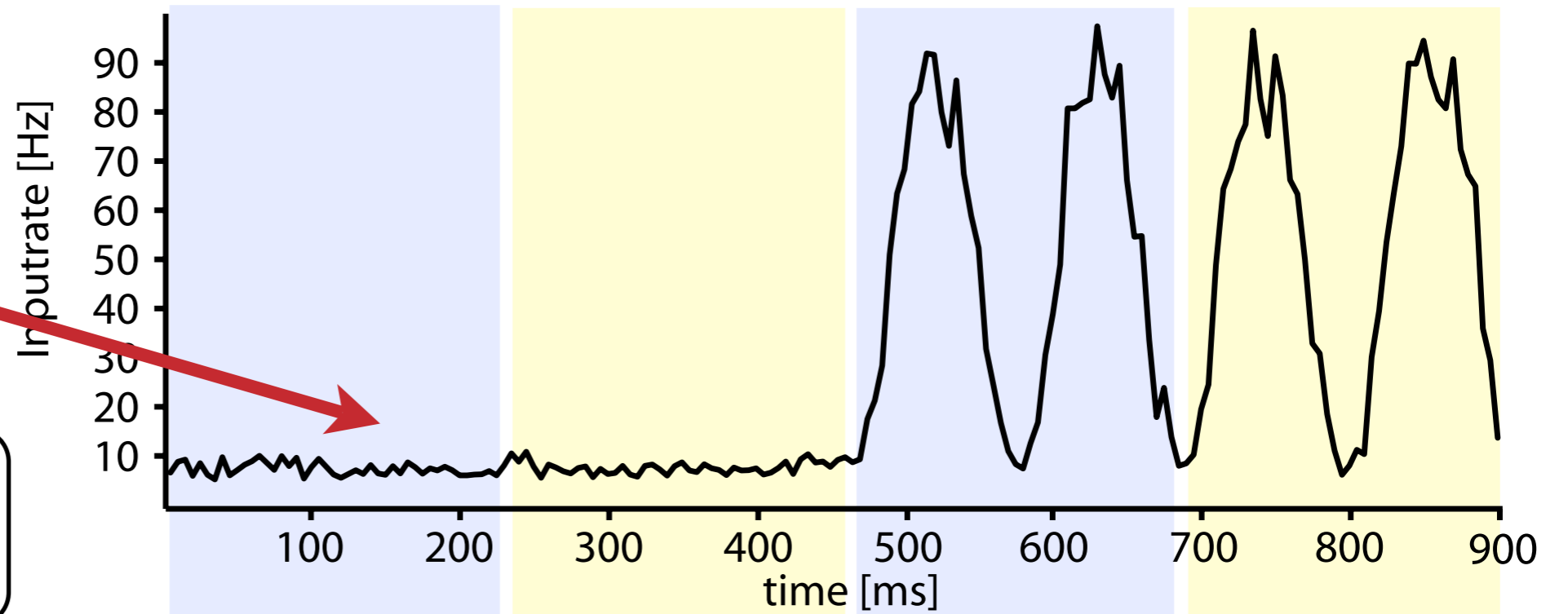
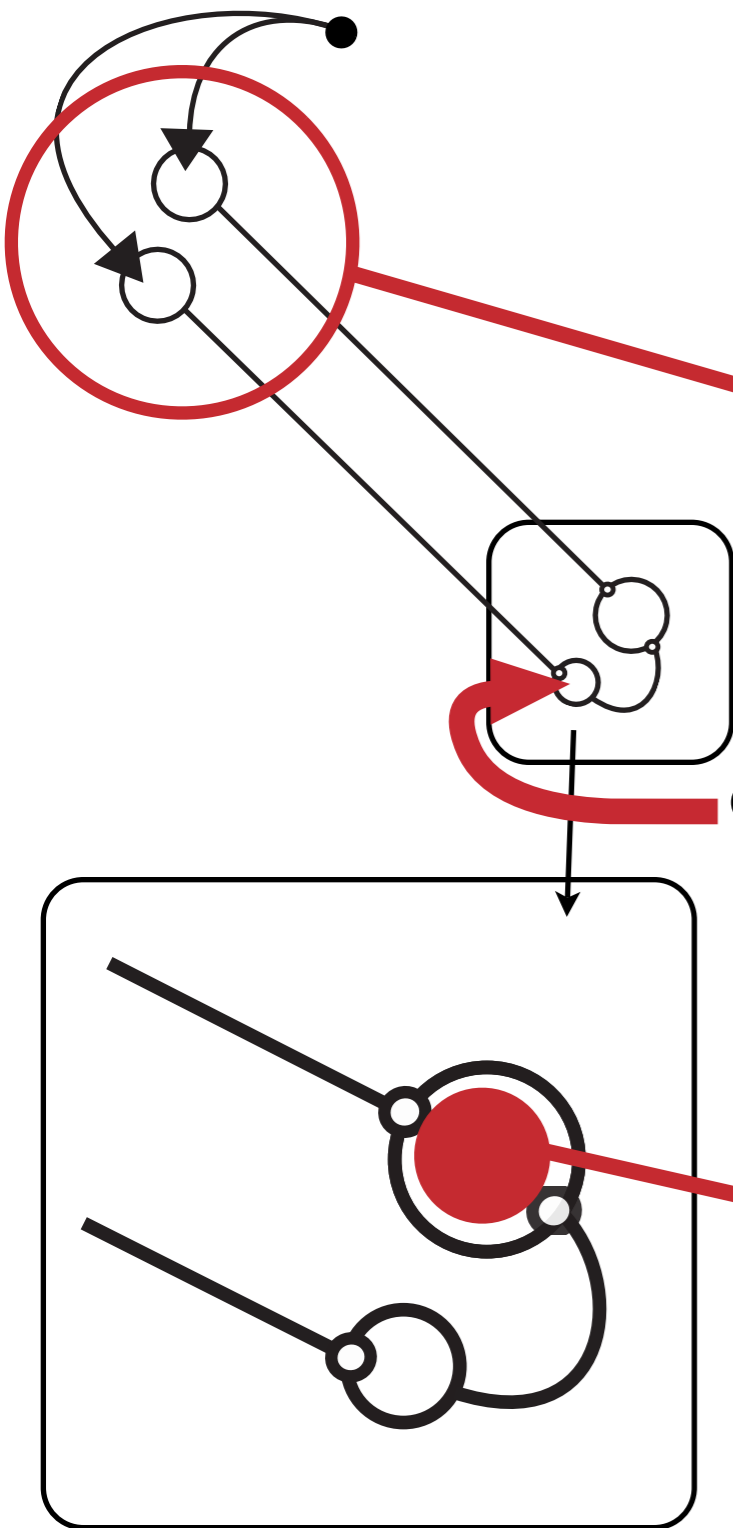
# Detailed Balance



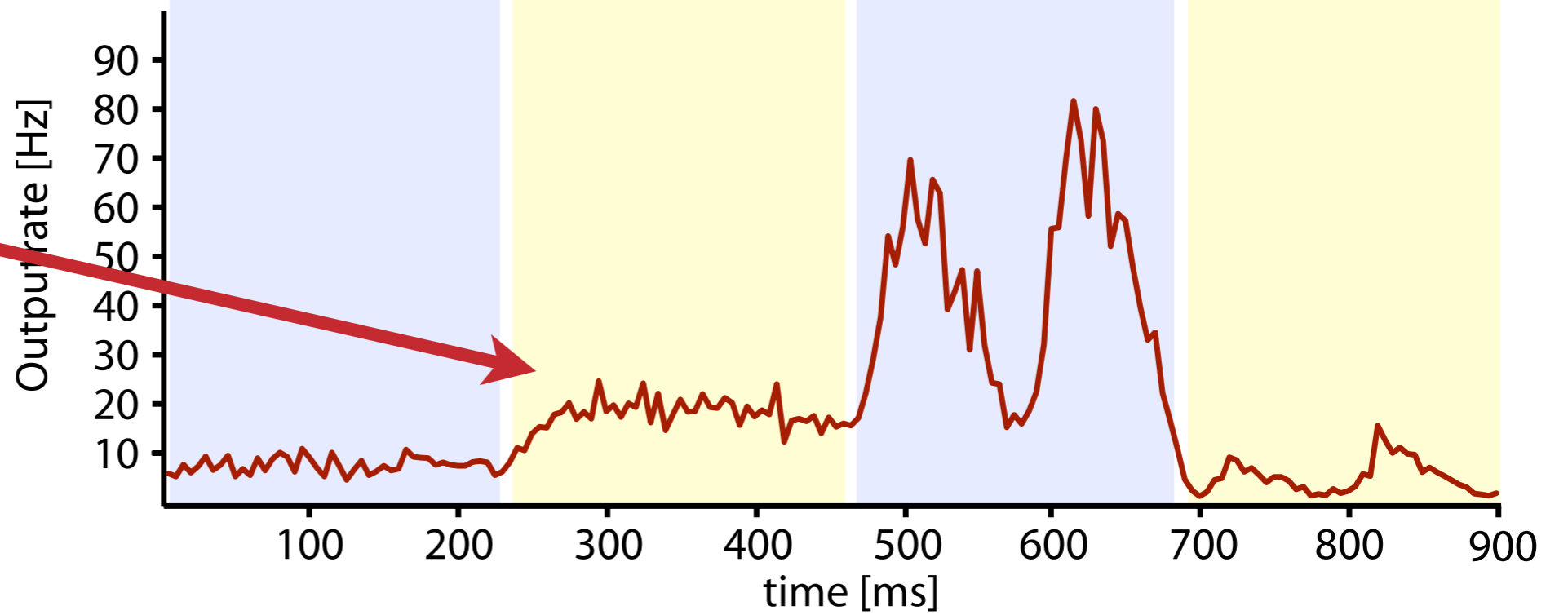
Gating Modulation



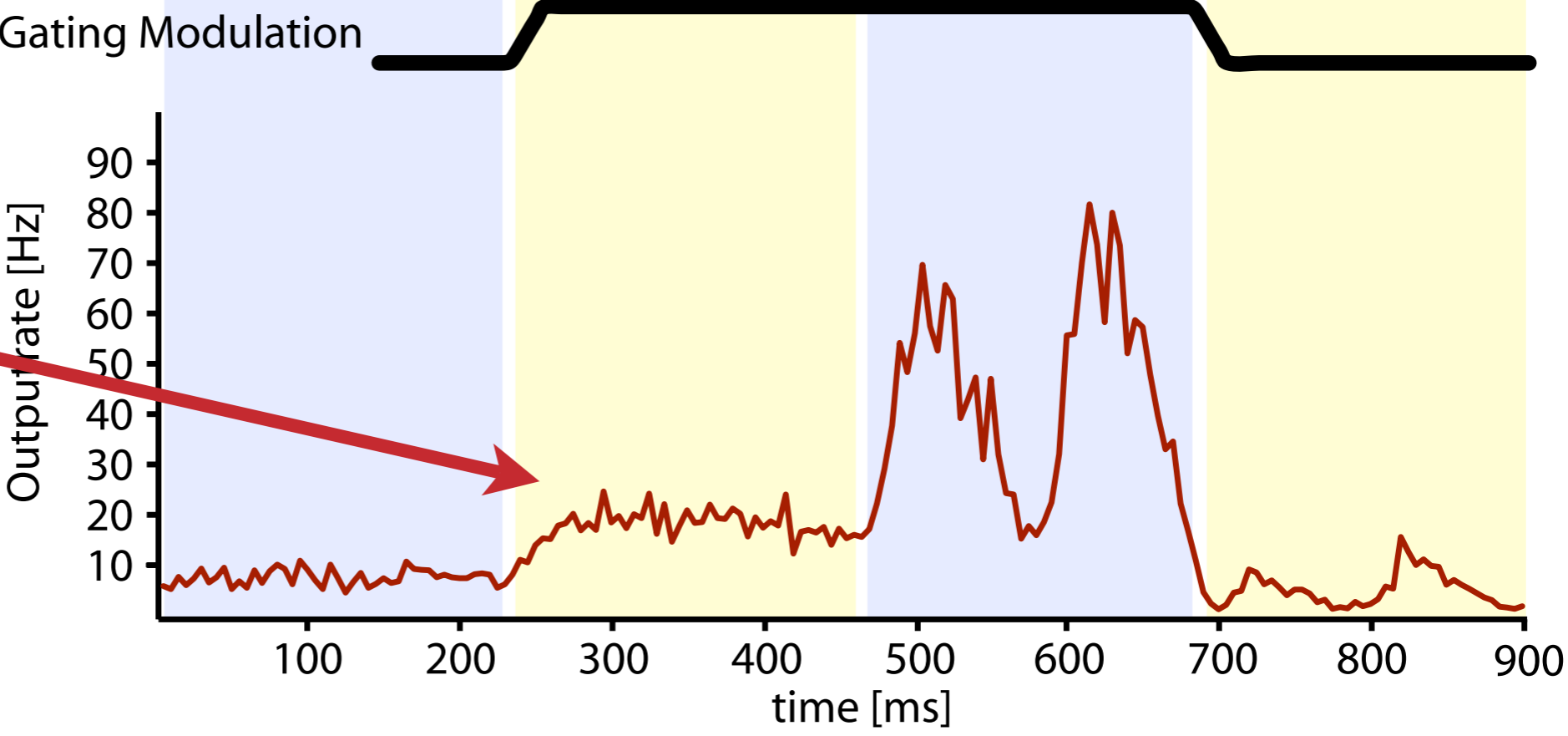
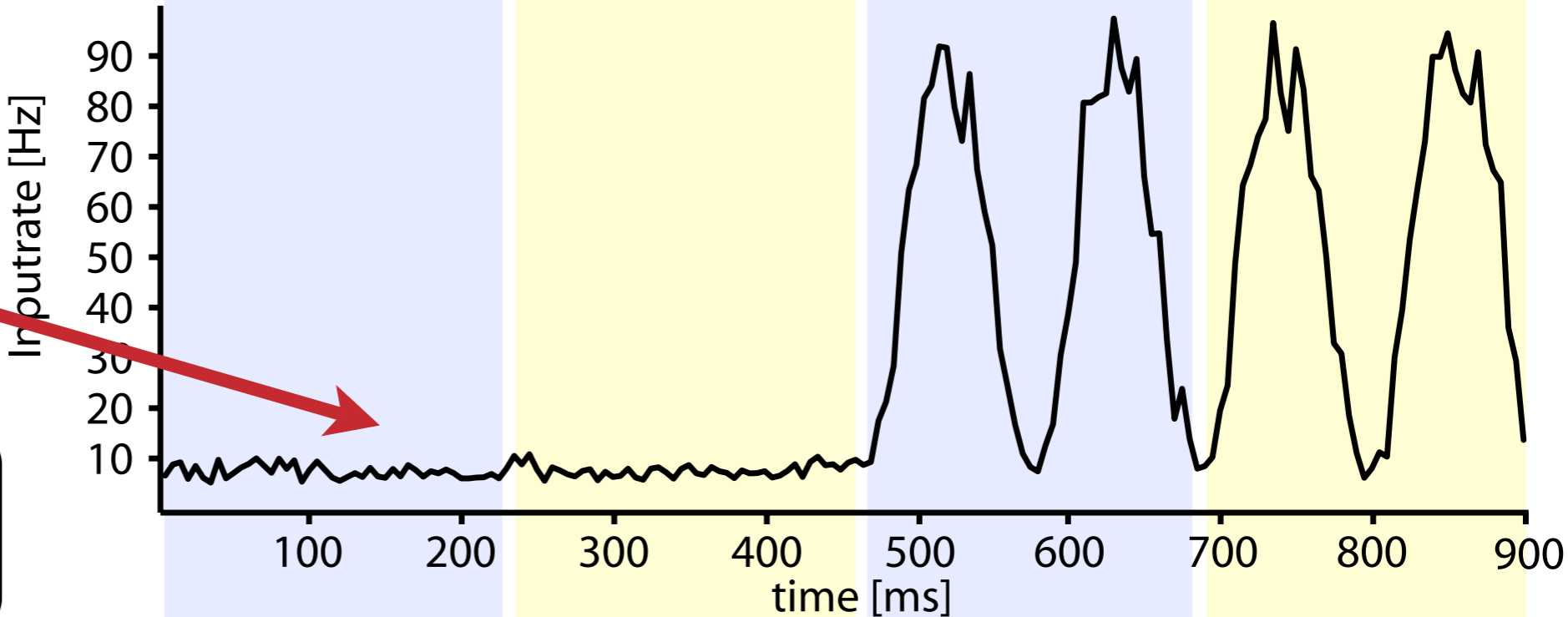
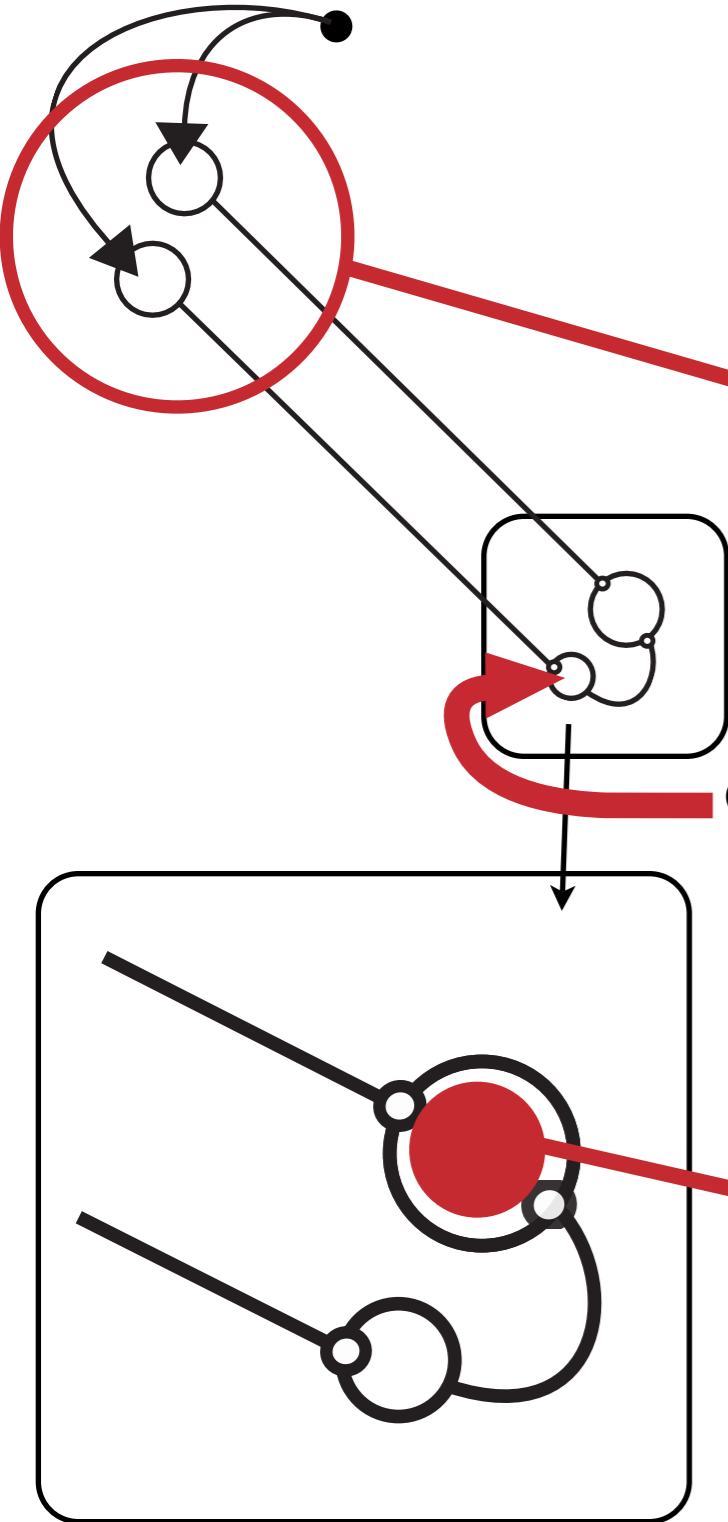
# Detailed Balance



Gating Modulation



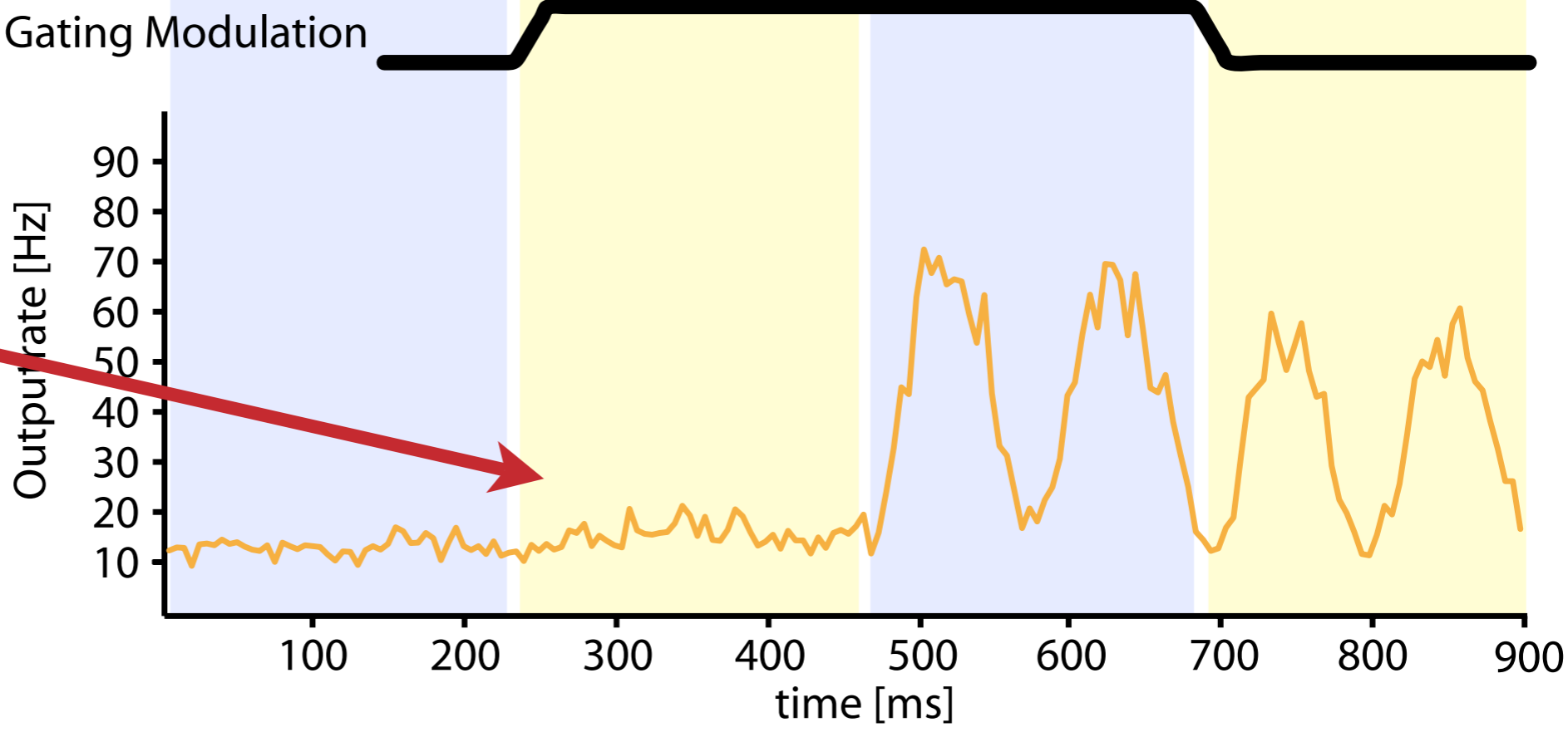
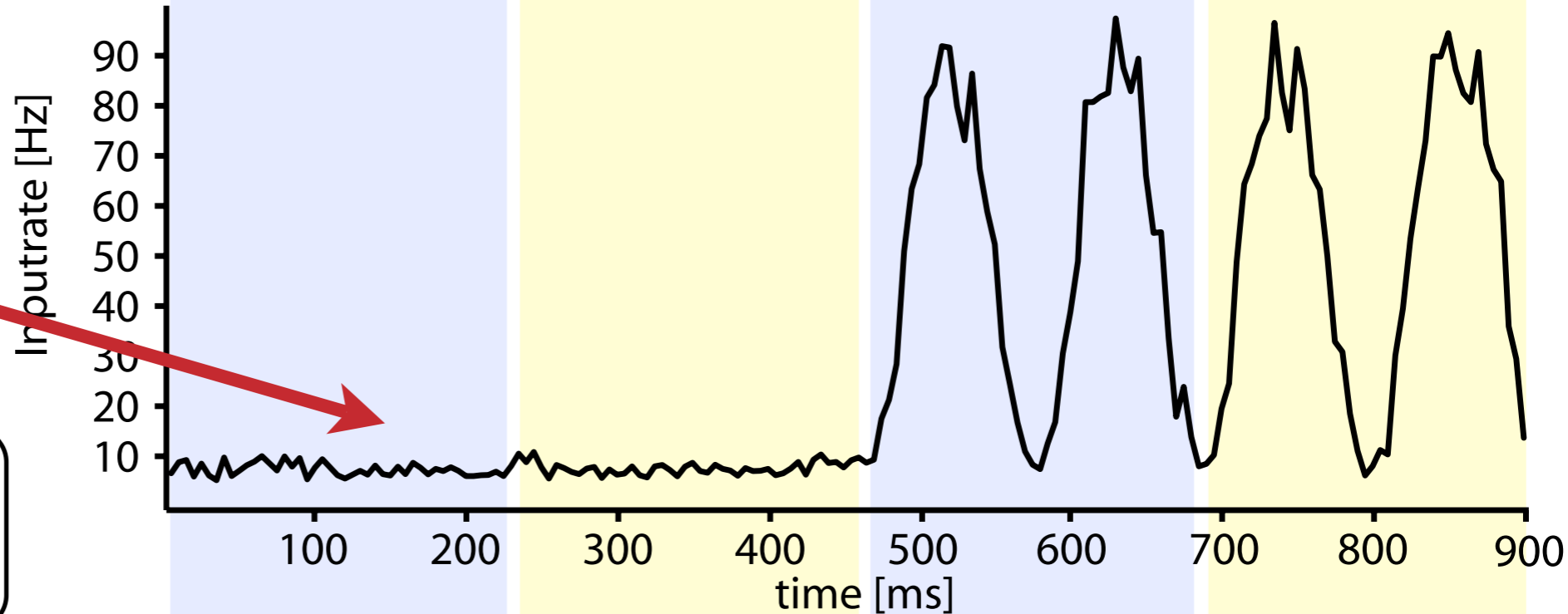
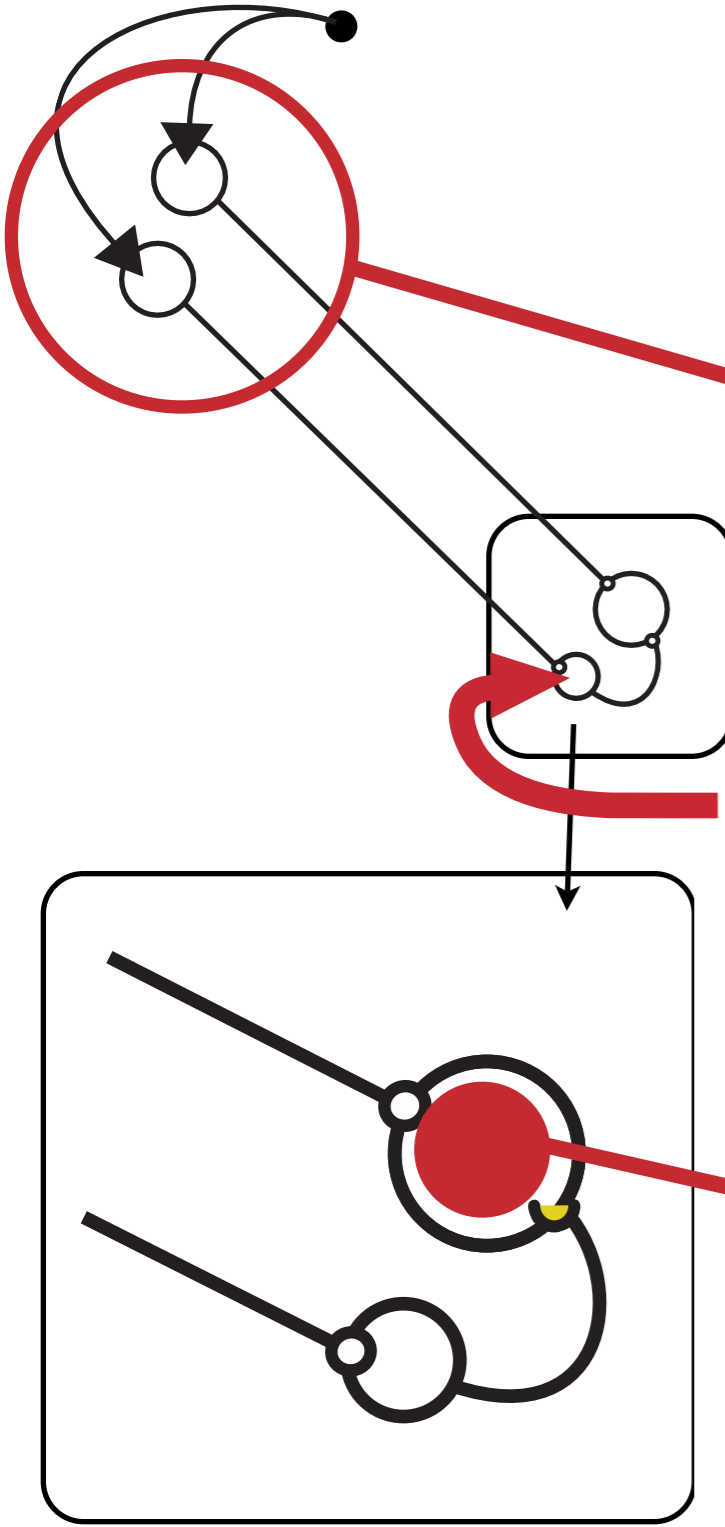
# Decreased Inhibitory Function



Gating Modulation

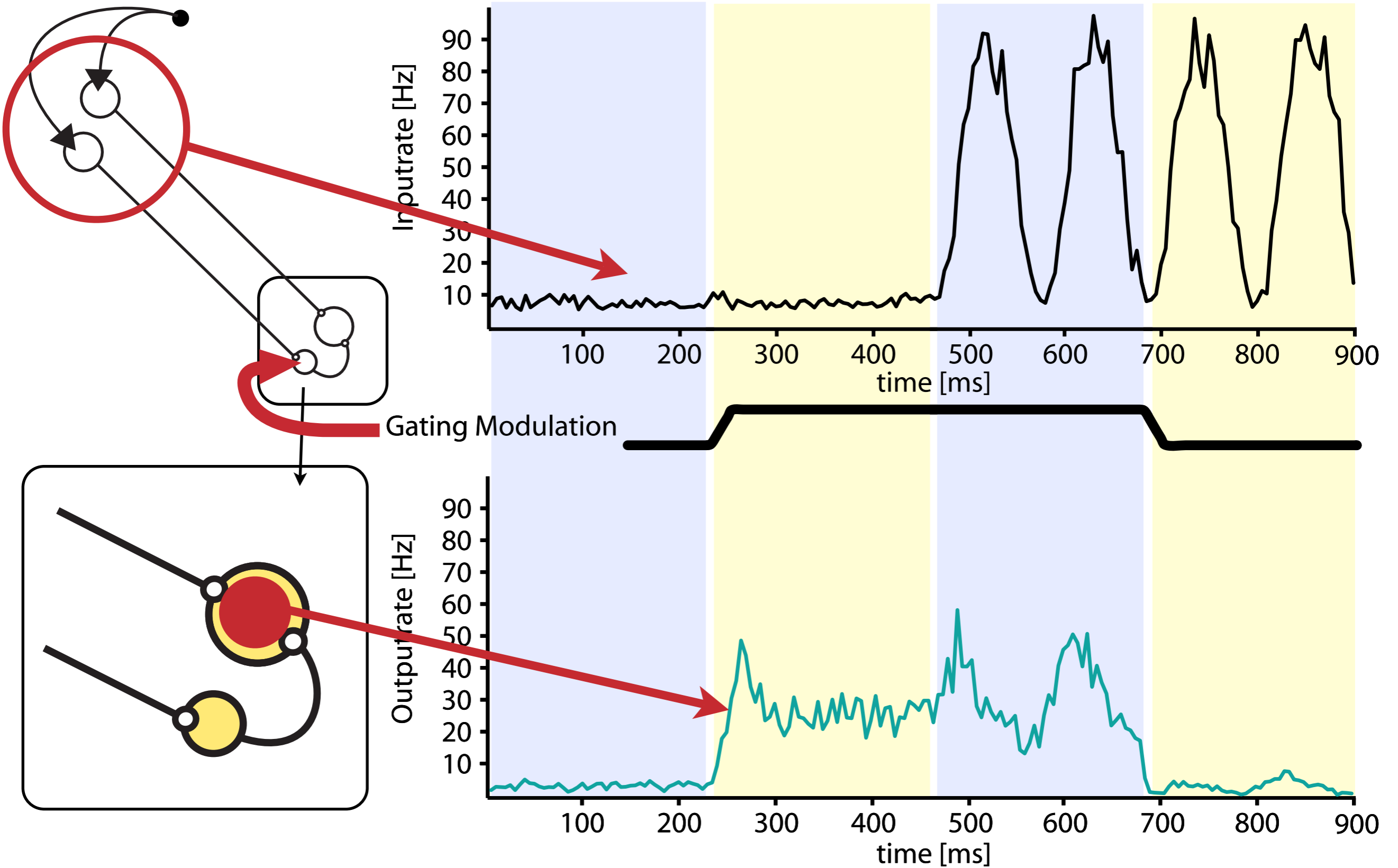


# Decreased Inhibitory Function

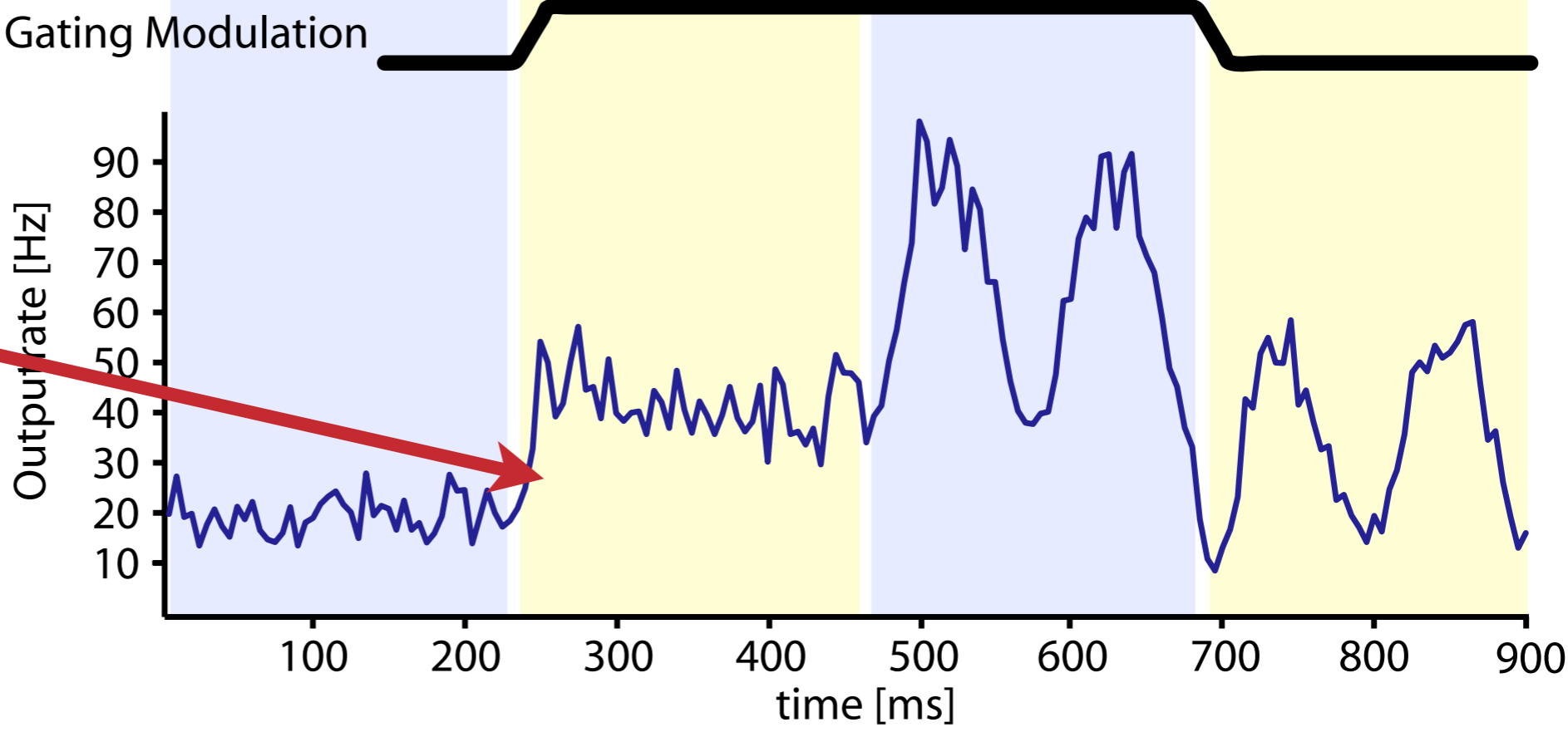
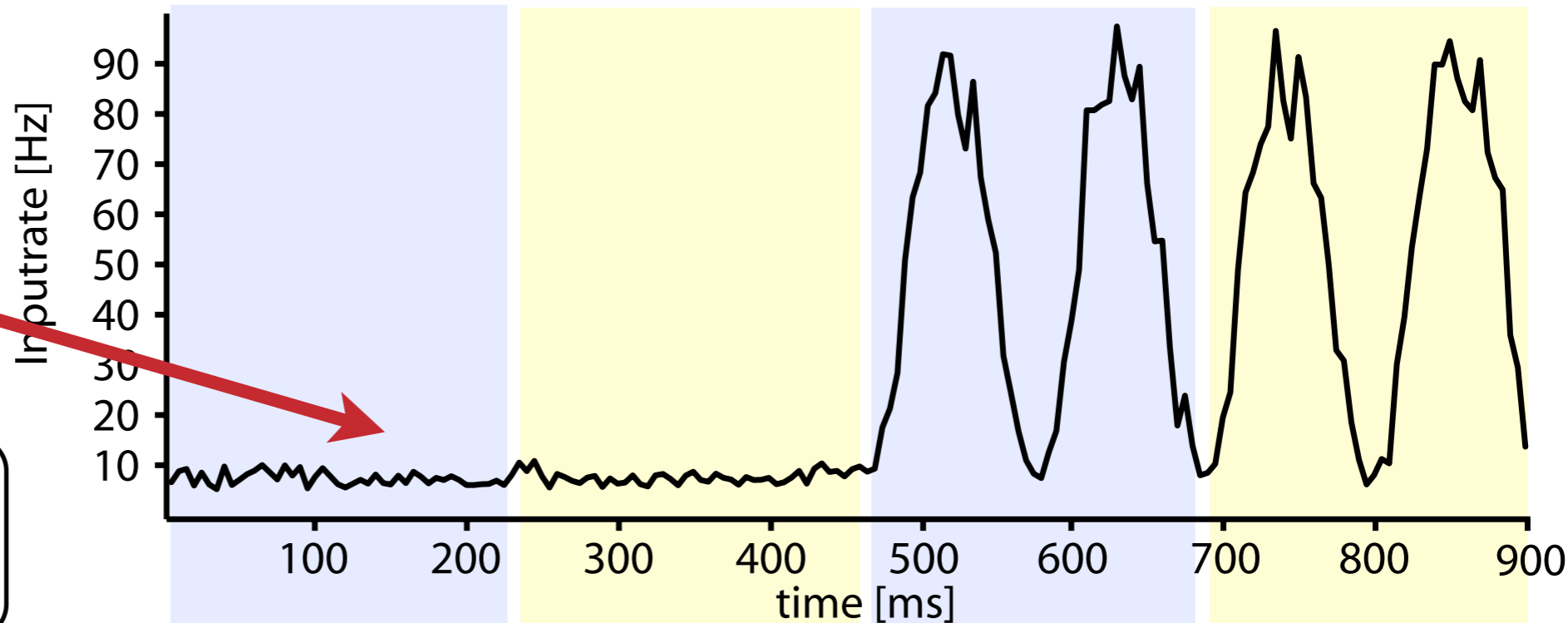
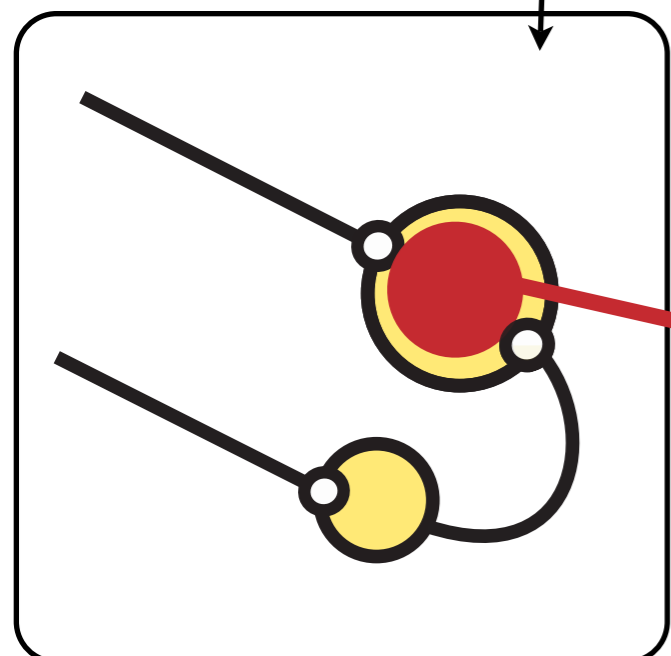
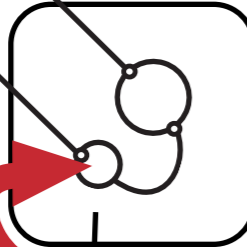
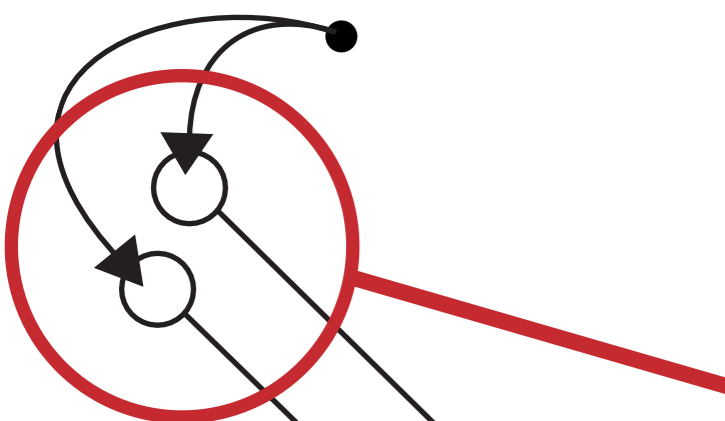


Gating Modulation

# Hyperexcitability in the Target



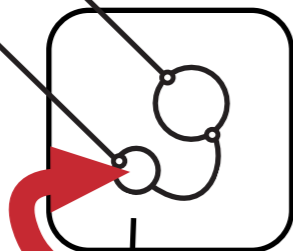
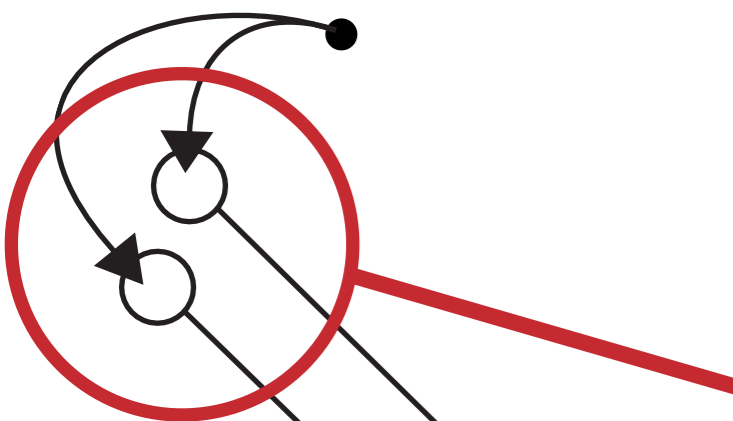
# Hyperexcitability + Inhibitory Deficit



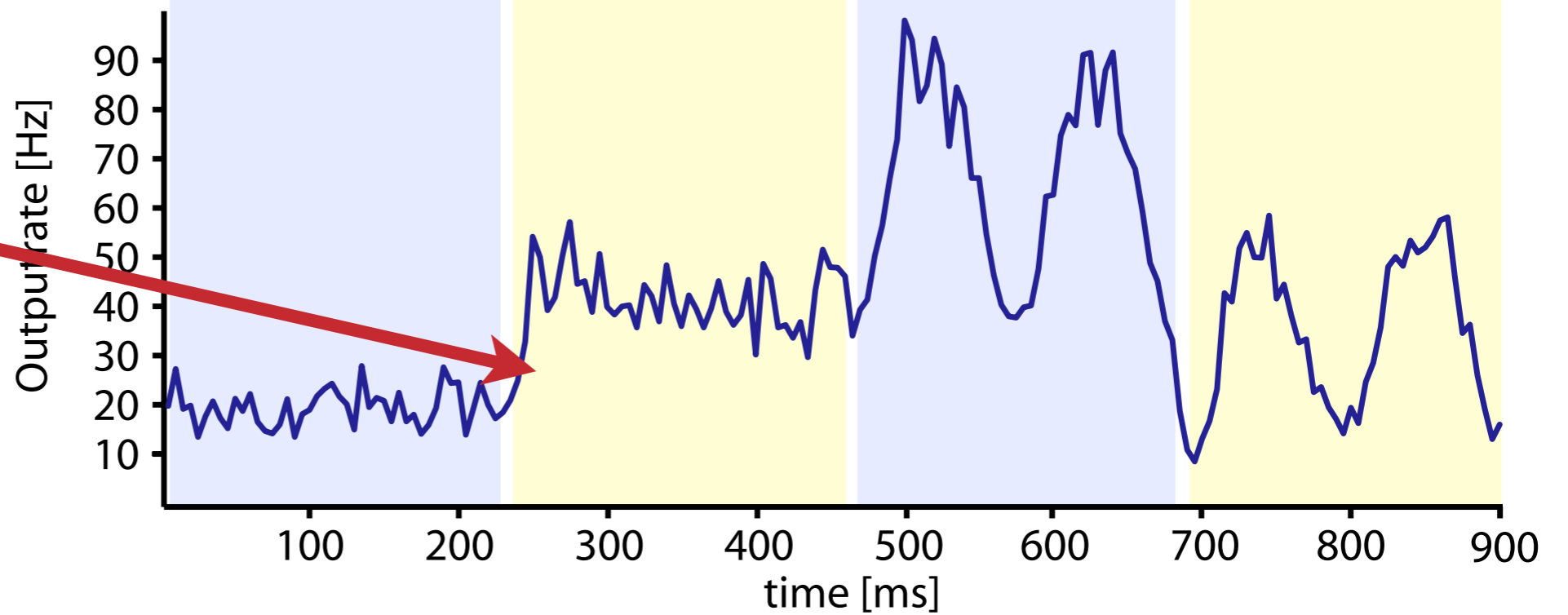
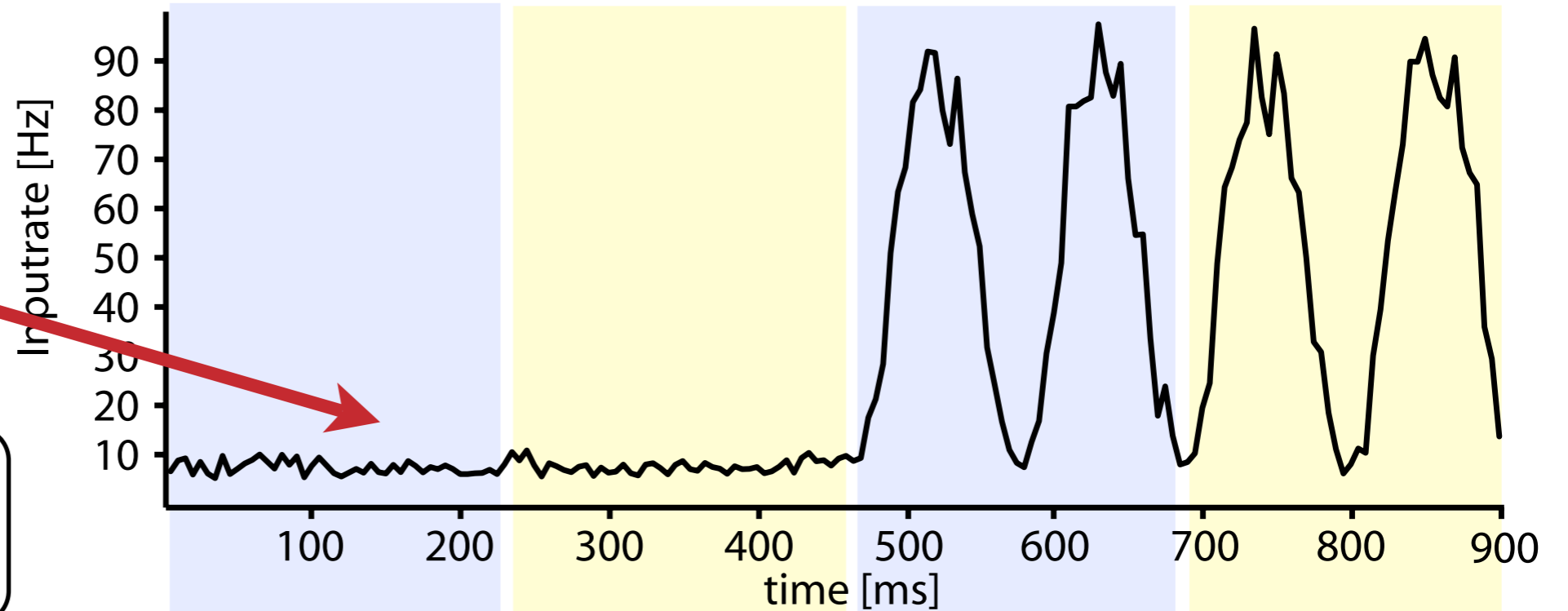
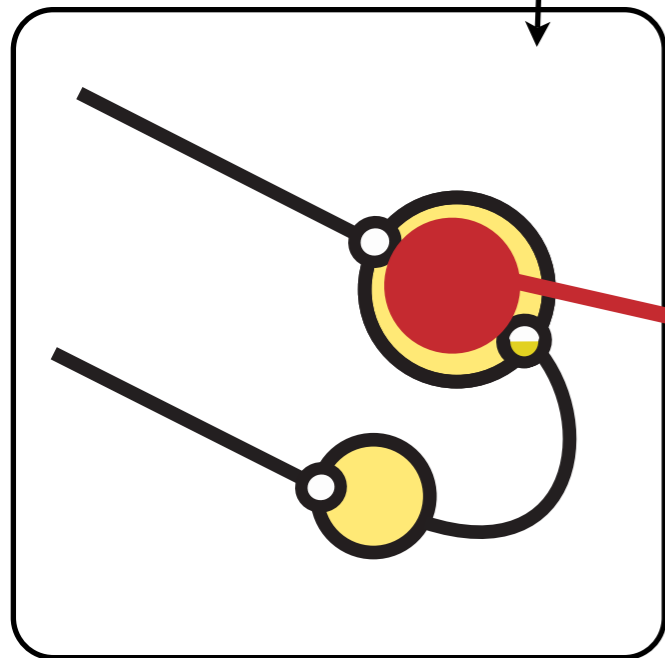
Gating Modulation



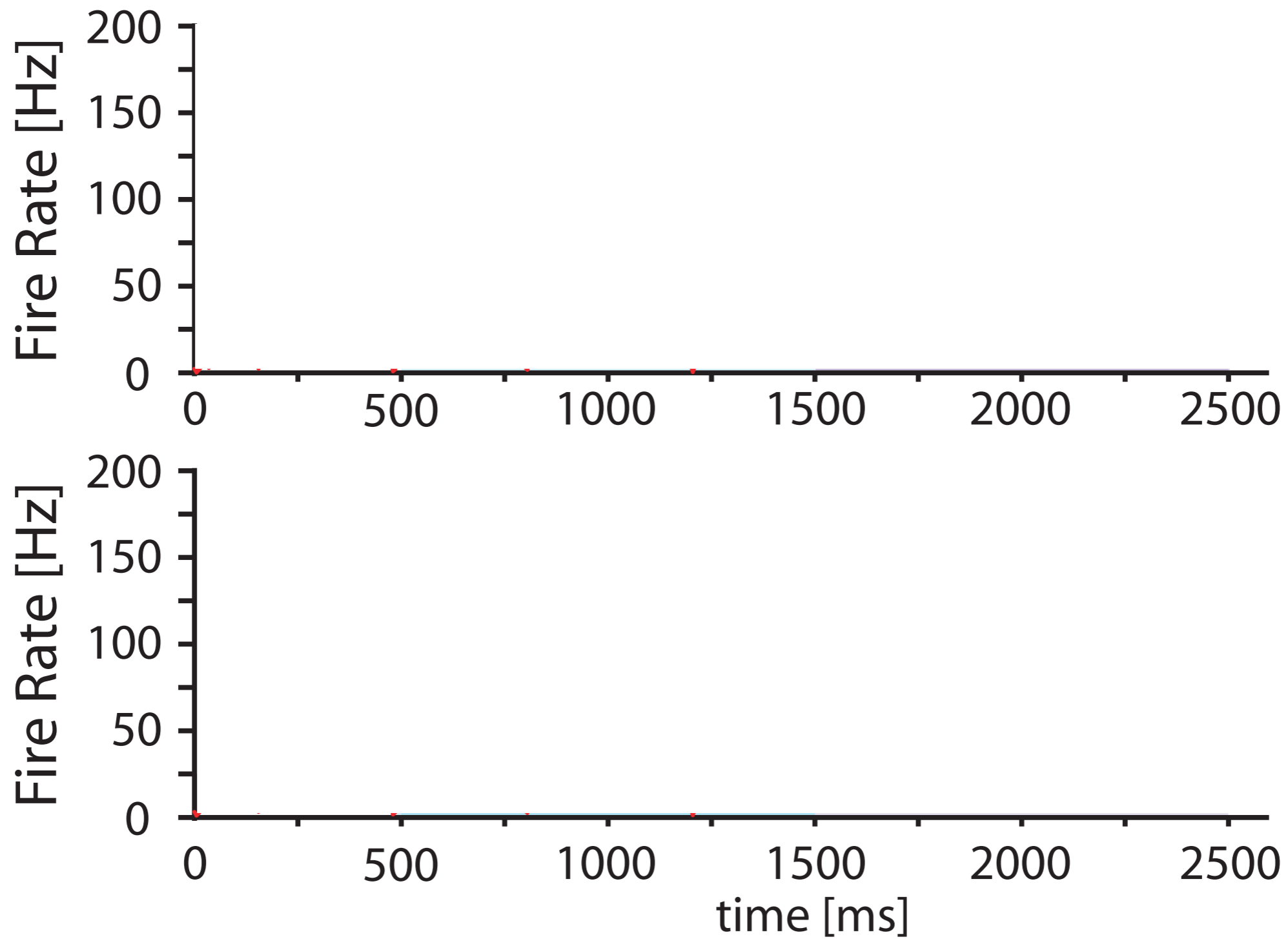
# Hyperexcitability + Inhibitory Deficit



Gating Modulation

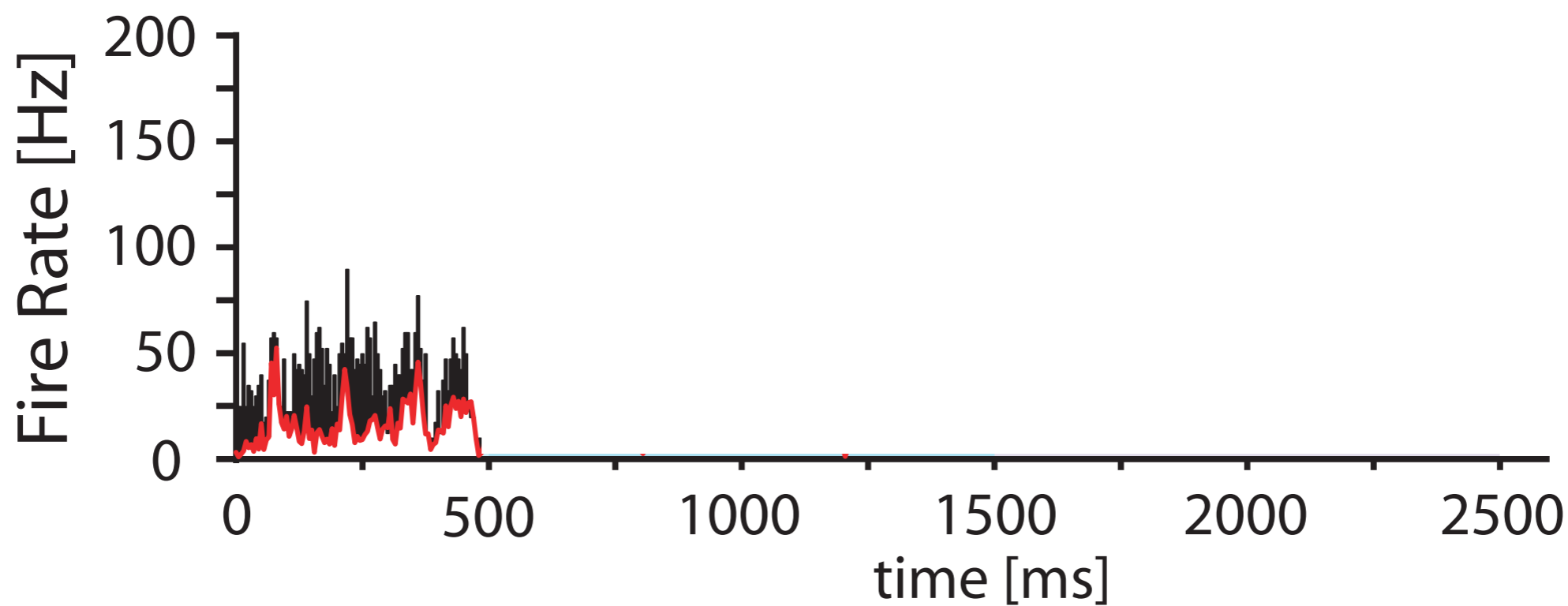
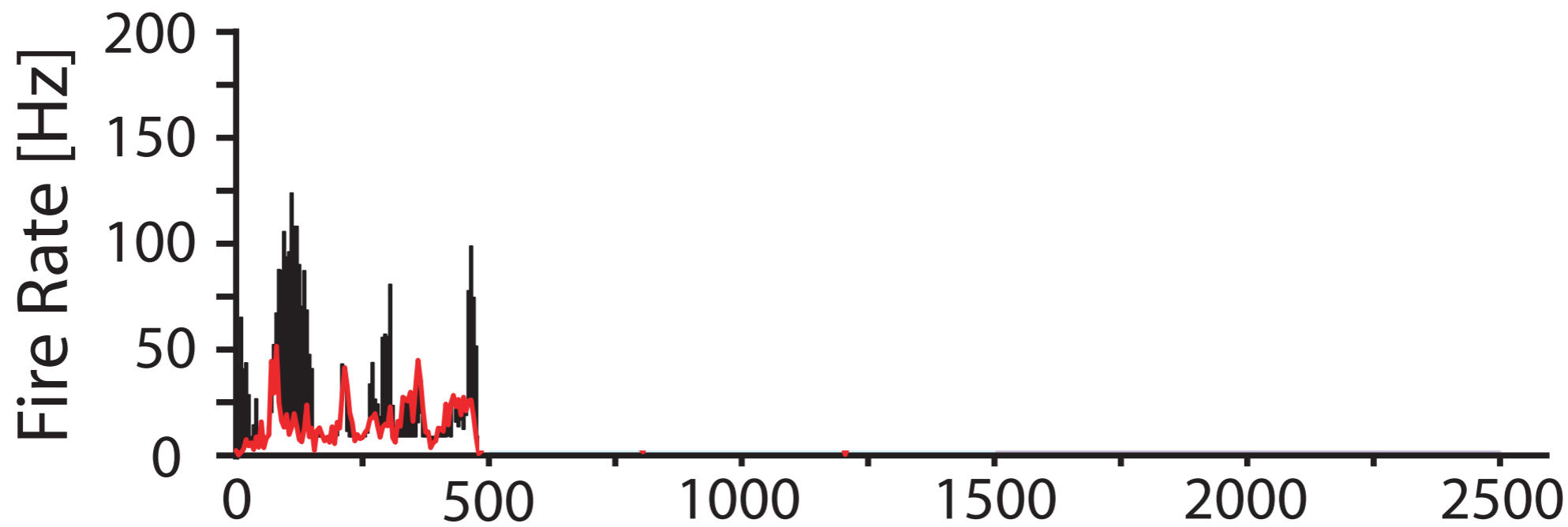
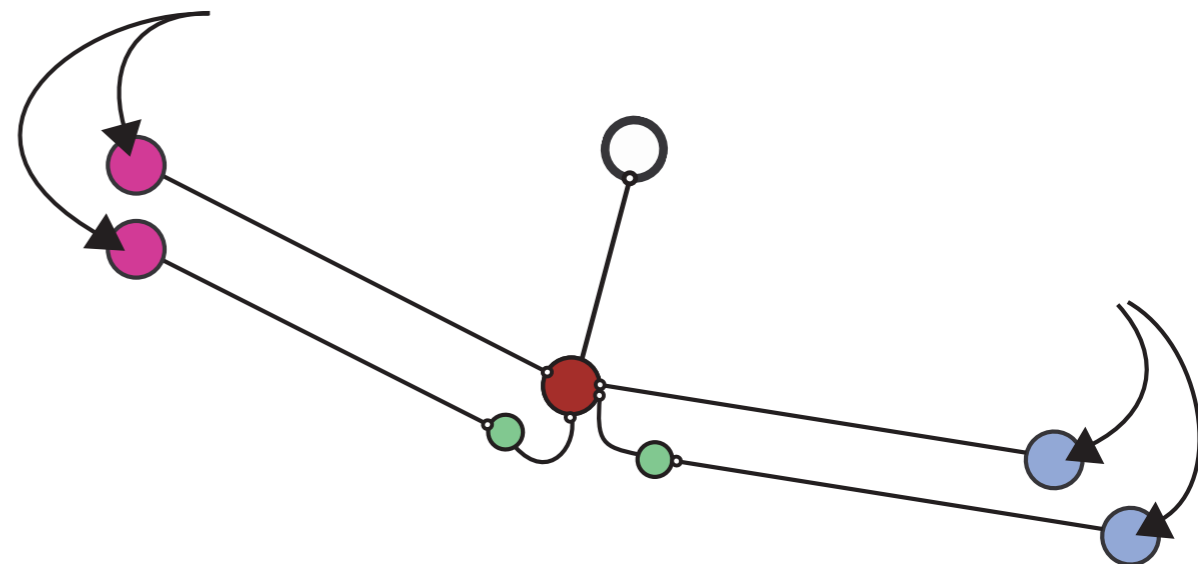


# Multiple Signal Gating

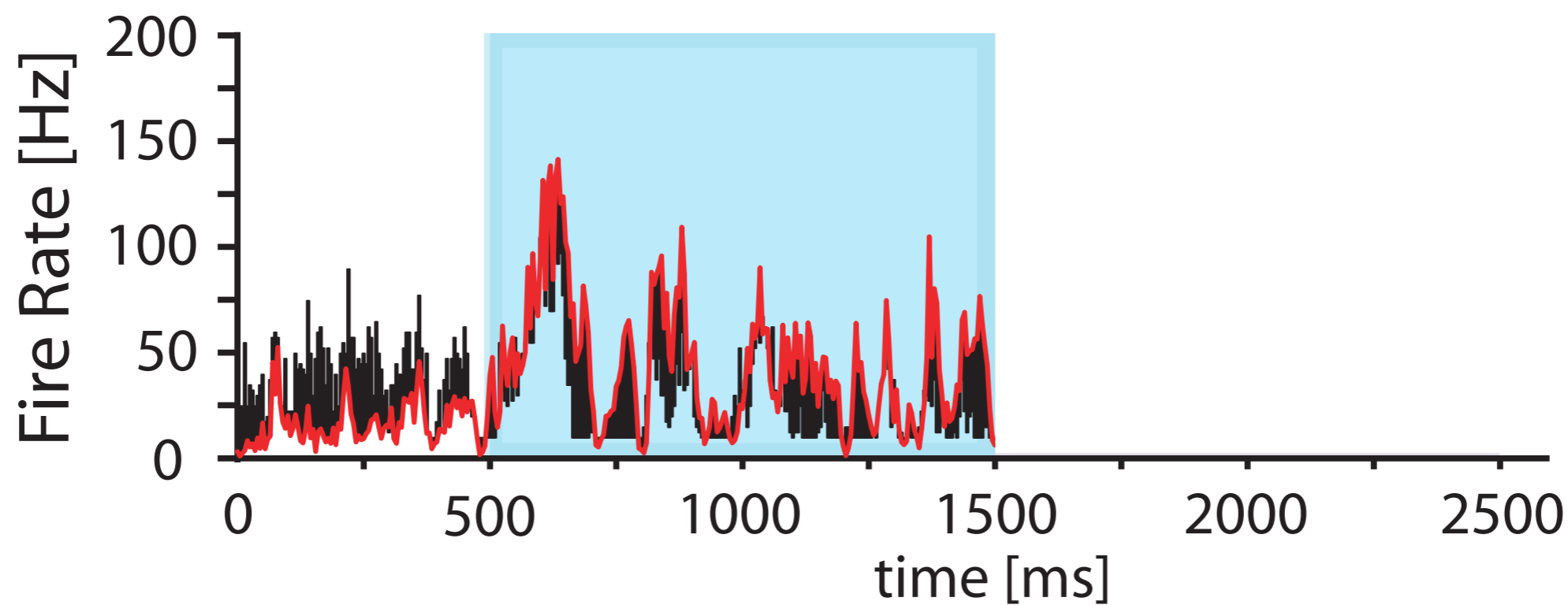
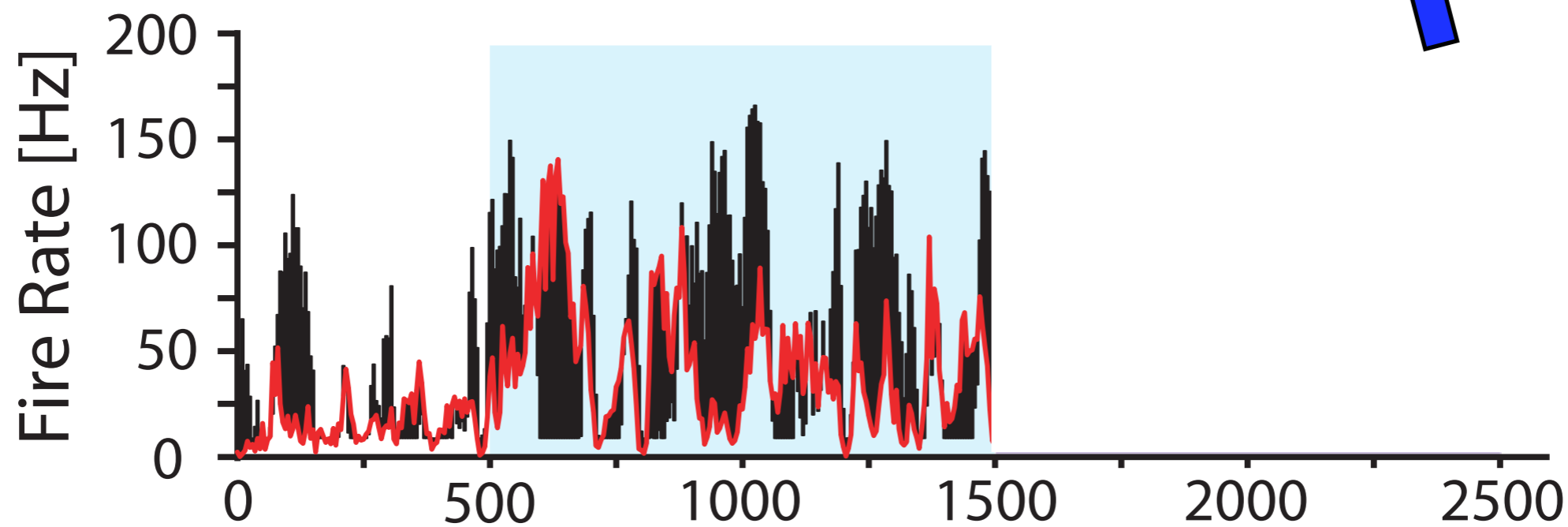
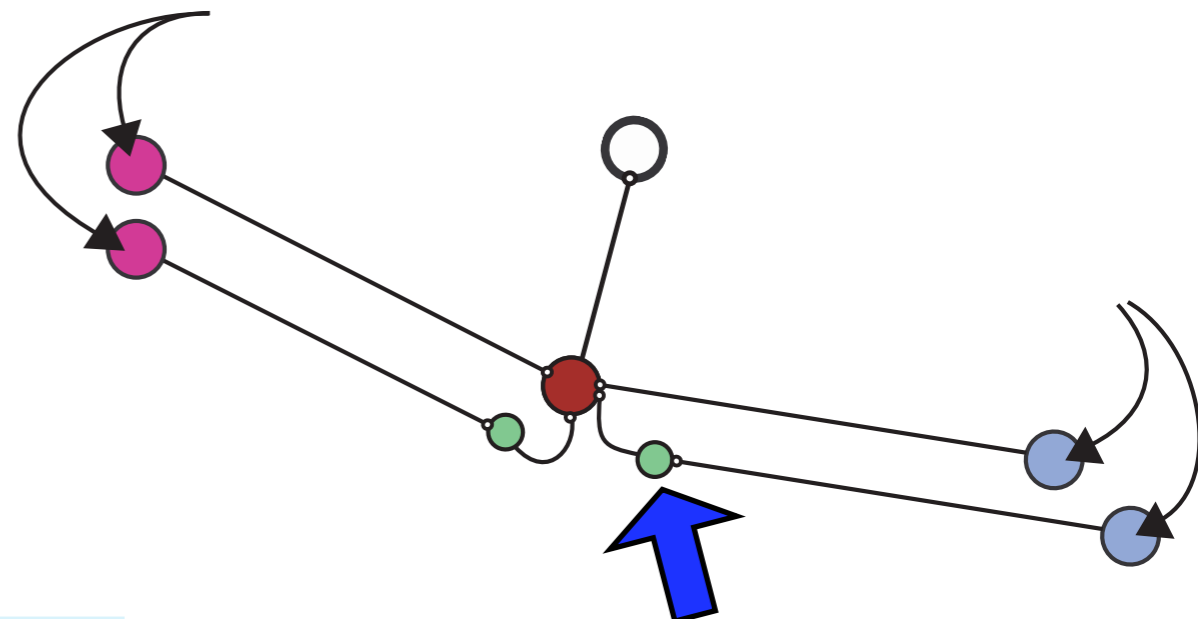




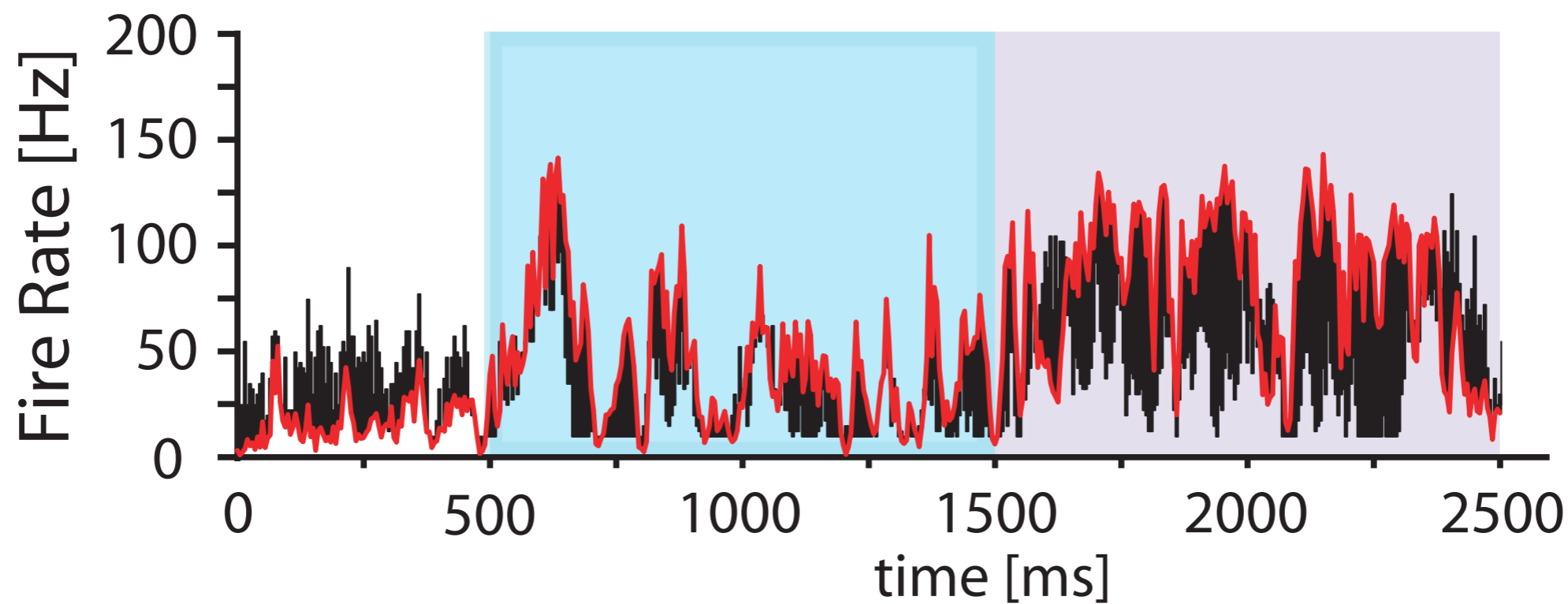
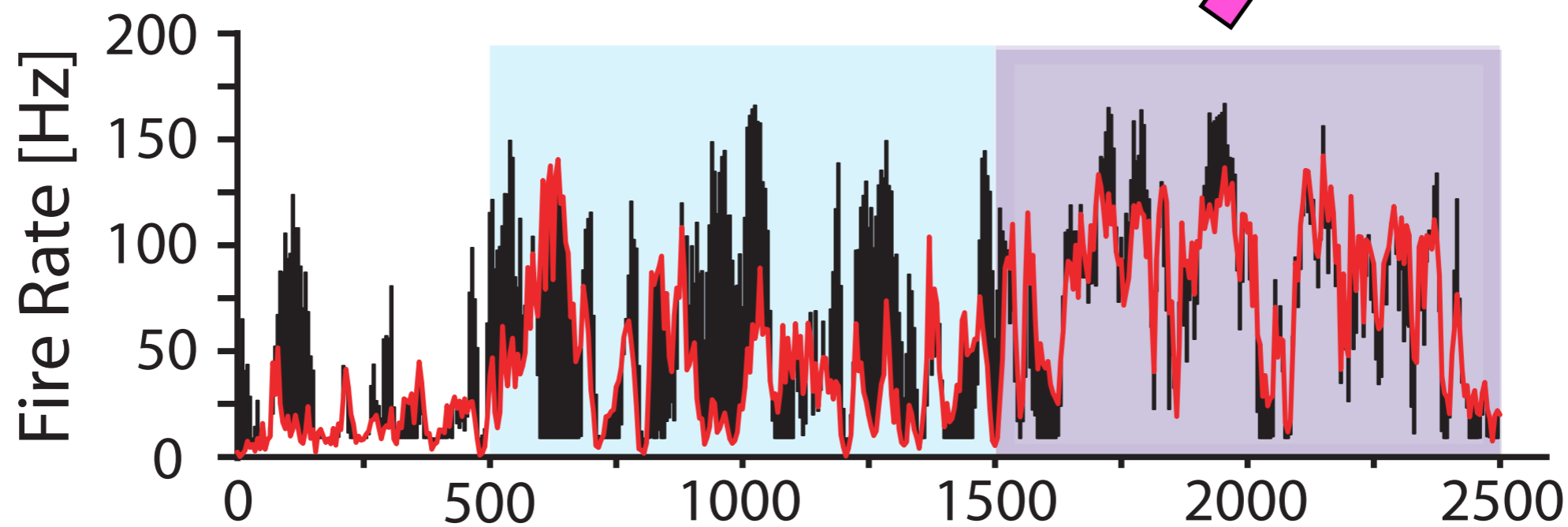
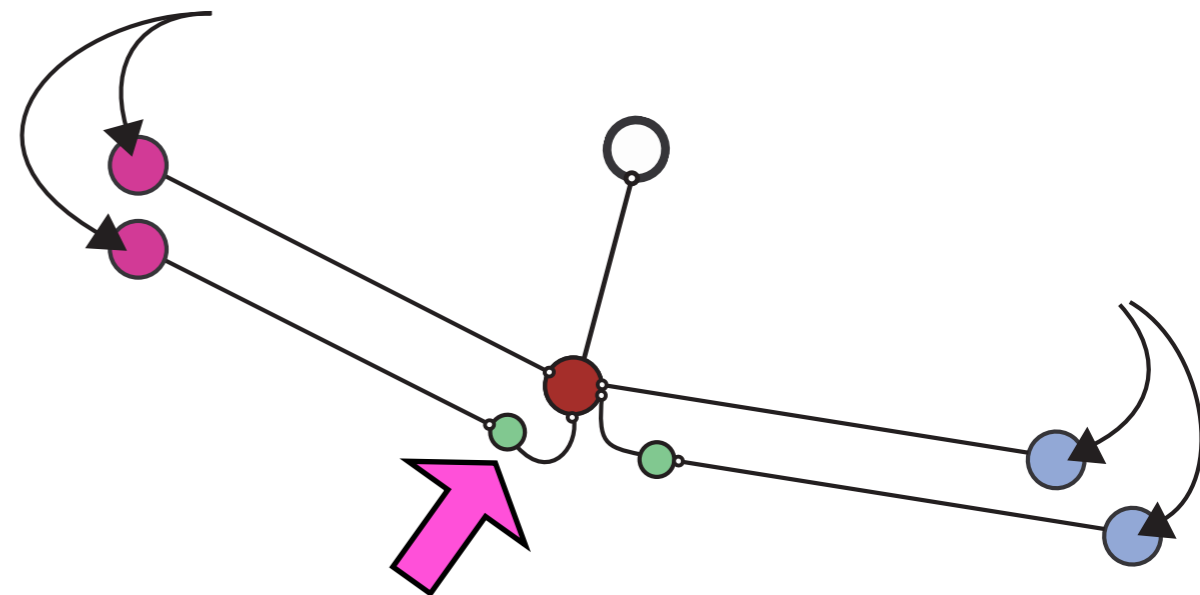
# Multiple Signal Gating



# Multiple Signal Gating



# Multiple Signal Gating



# 200 inhibitory neurons

