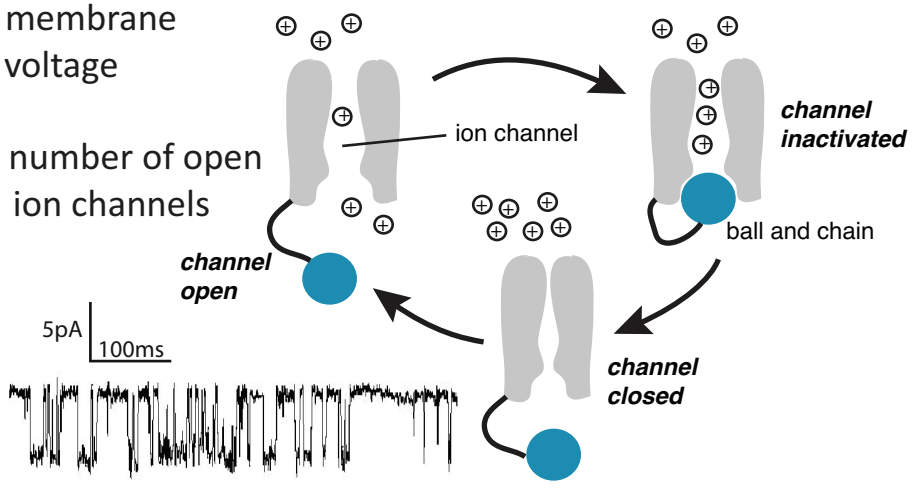
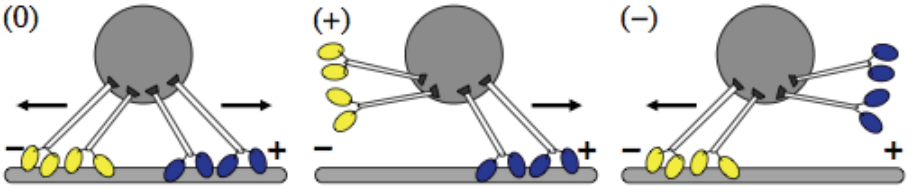
Ion channels and neuron spiking

x = membrane voltage

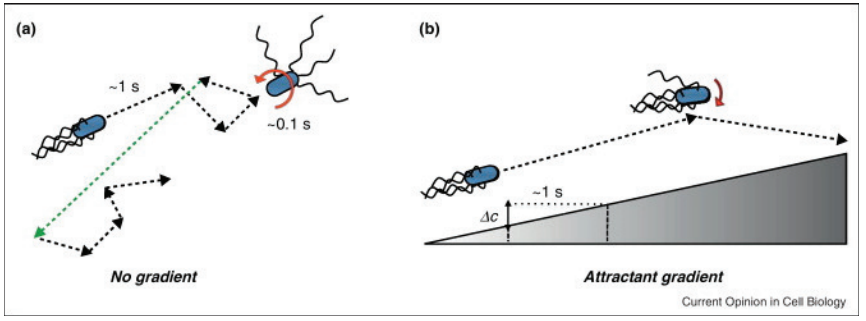
n = number of open ion channels



Bidirectional motor-driven intracellular transport



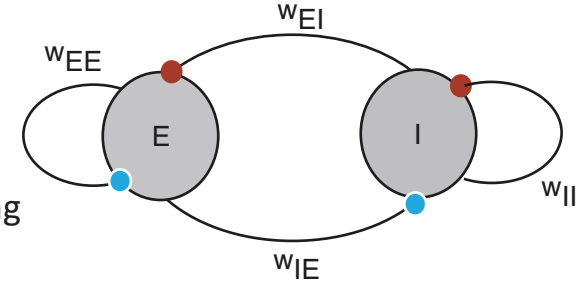
E-coli run-and-tumble and chemotaxis

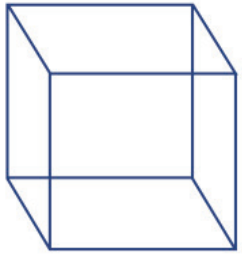


Stochastic neural populations

x = population synaptic current

n = number of spiking neurons





genetic switches