

Figure 1.4: Where is the firing threshold? Shown are in vitro recordings of two layer 5 rat pyramidal neurons. Notice the differences of voltage and time scales.

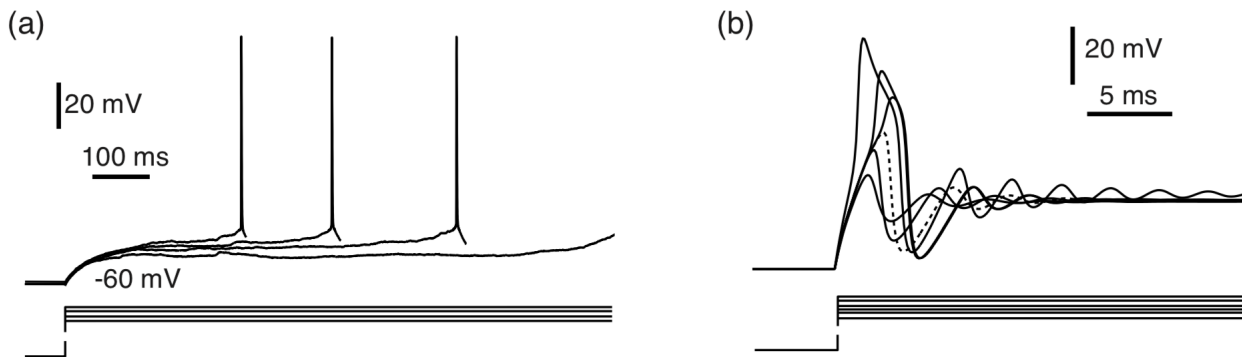


Figure 1.5: Where is the rheobase (i.e., the minimal current that fires the cell)? (a) in vitro recordings of the pyramidal neuron of layer 2/3 of a rat's visual cortex show increasing latencies as the amplitude of the injected current decreases. (b) Simulation of the  $I_{Na,p} + I_K$ -model (pronounced: *persistent sodium plus potassium model*) shows spikes of graded amplitude.