

Figure 11-32a *Molecular Biology of the Cell* (© Garland Science 2008)

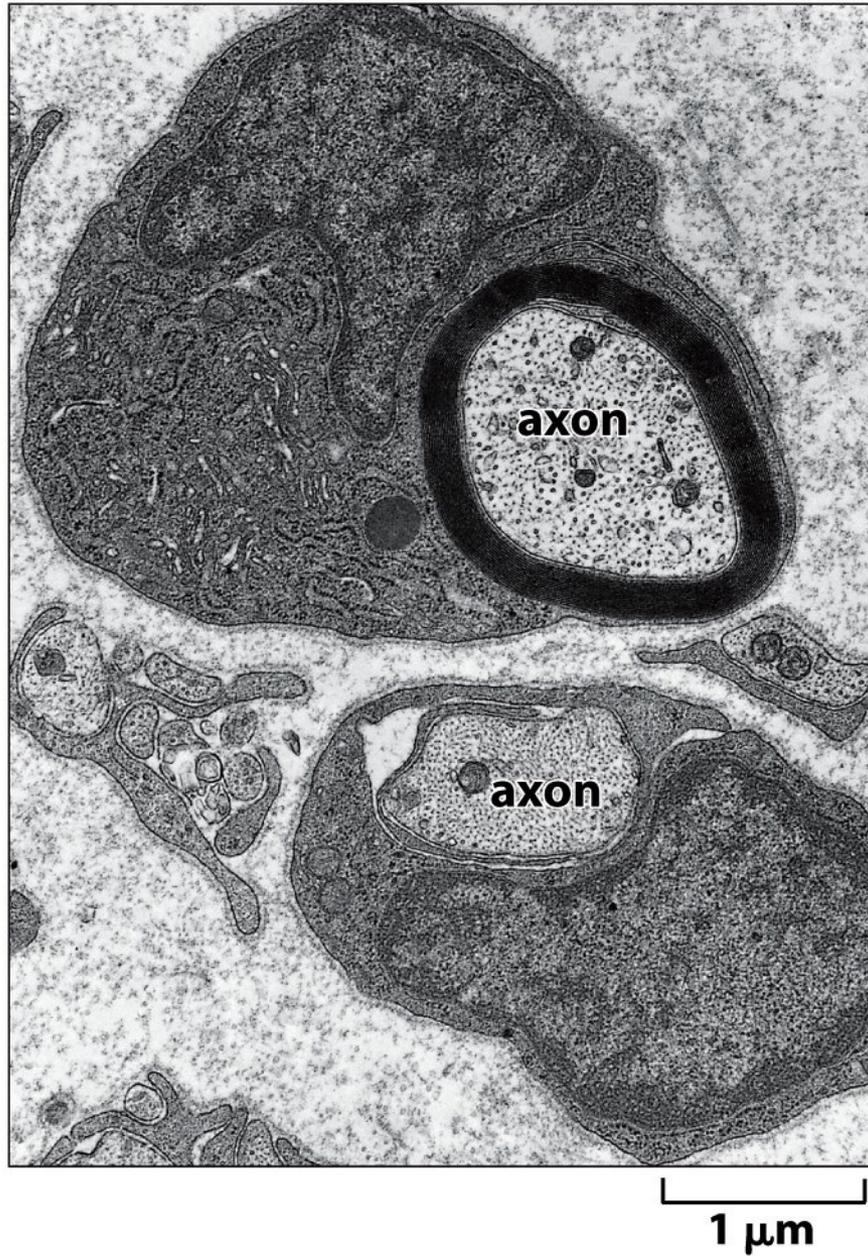


Figure 11-32b *Molecular Biology of the Cell* (© Garland Science 2008)

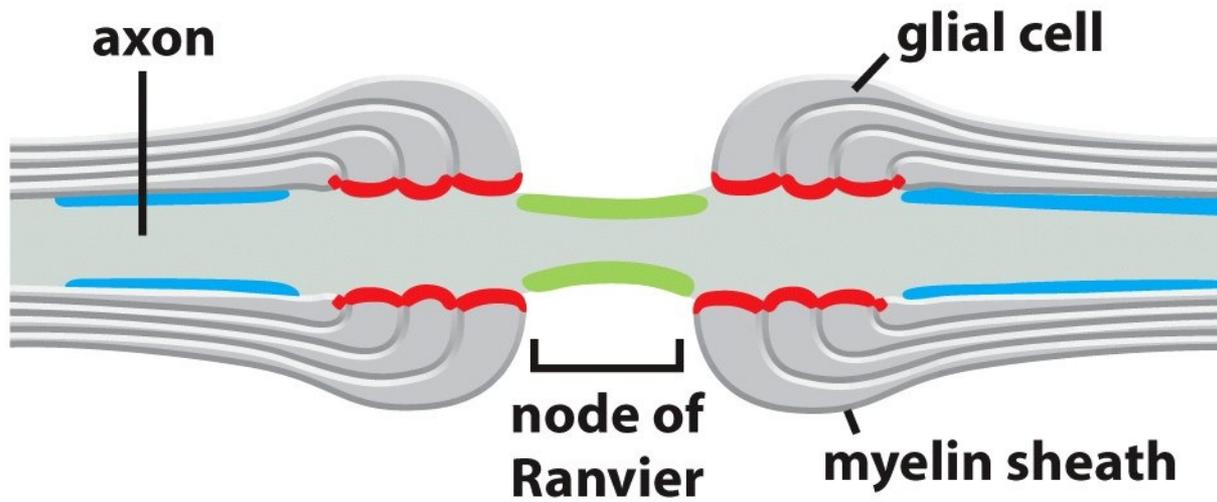
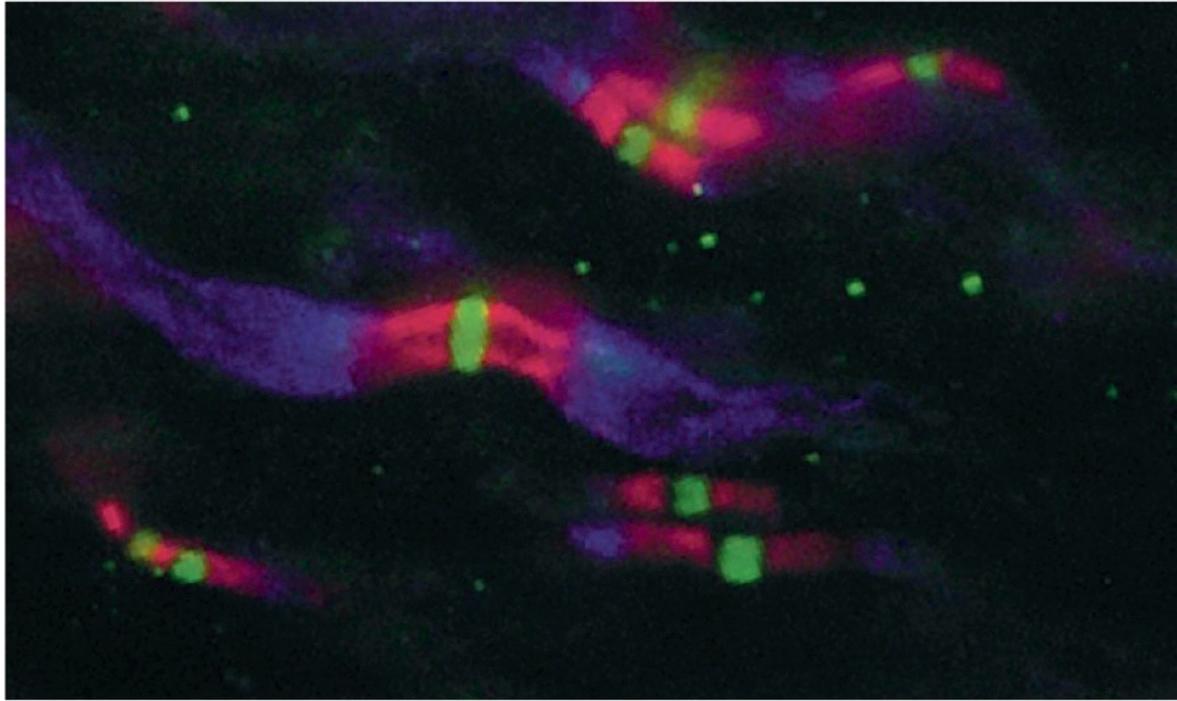
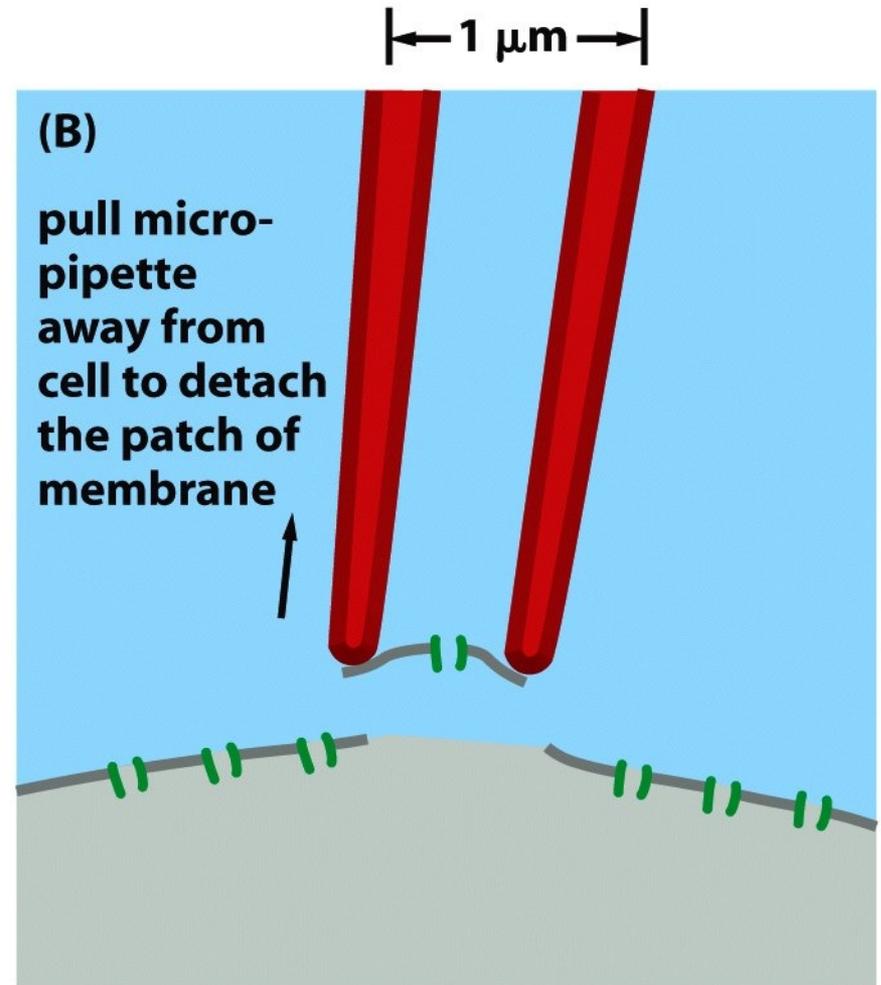
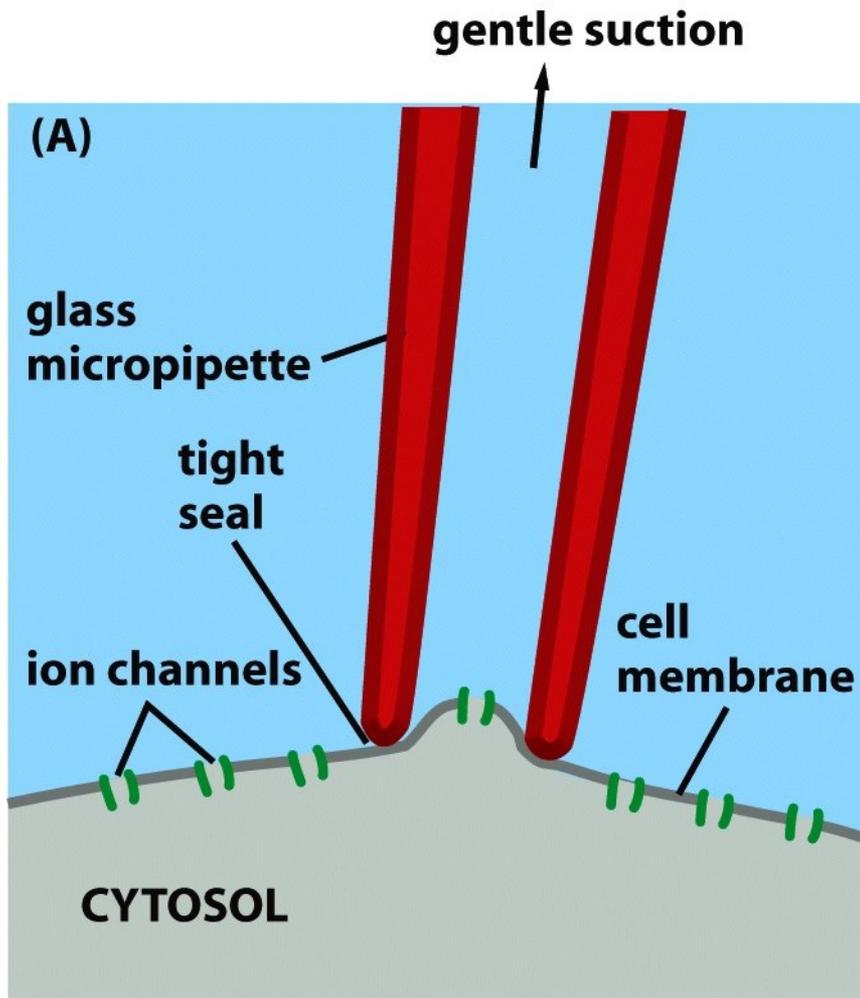


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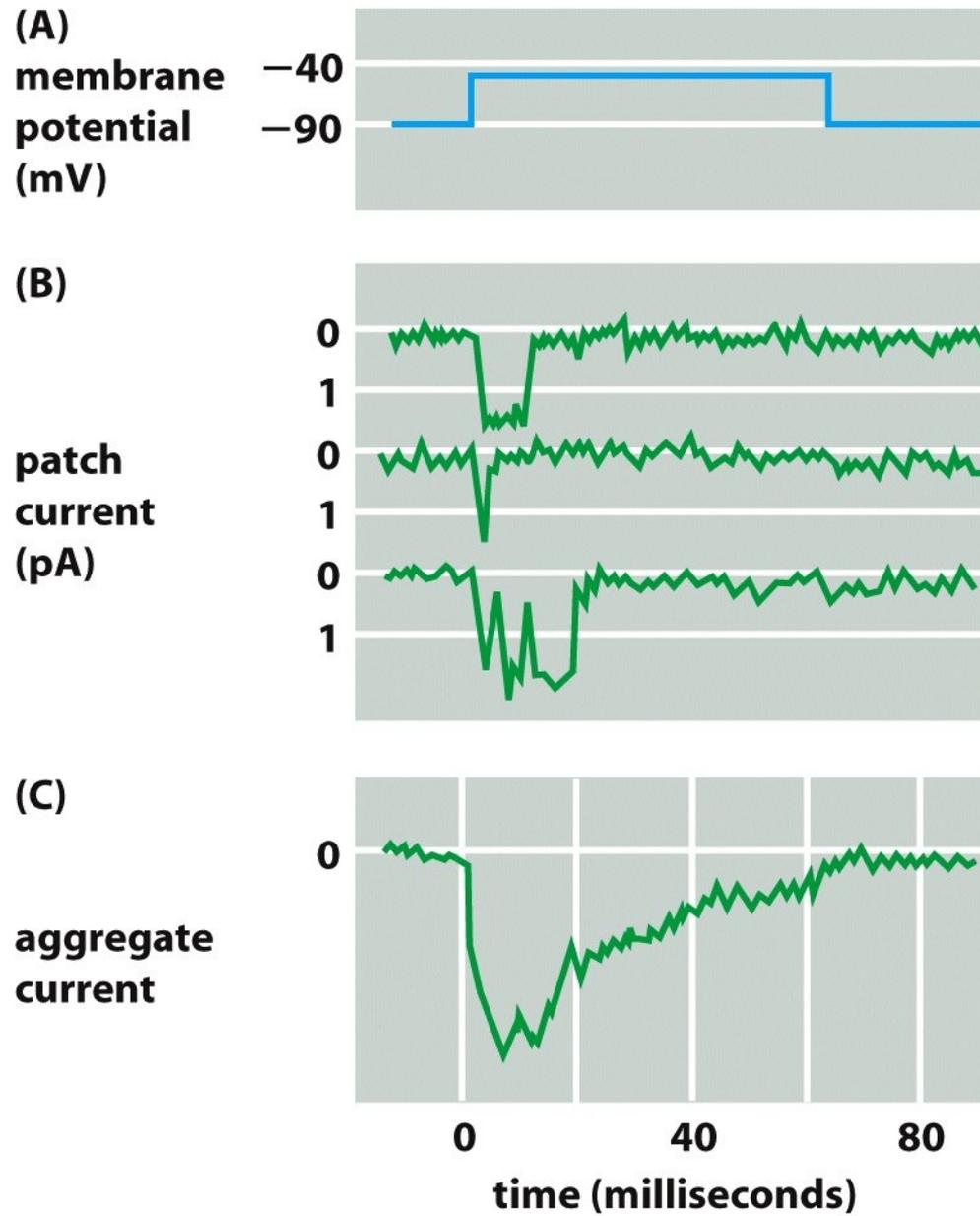
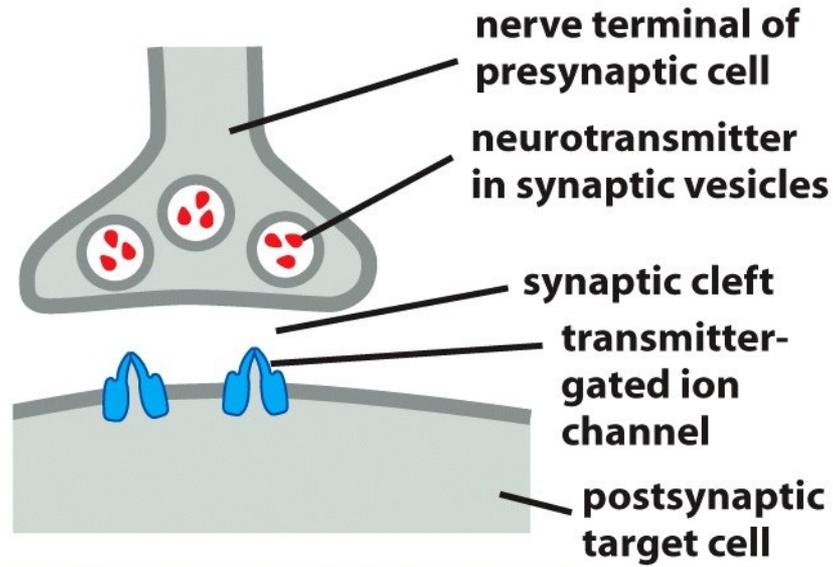
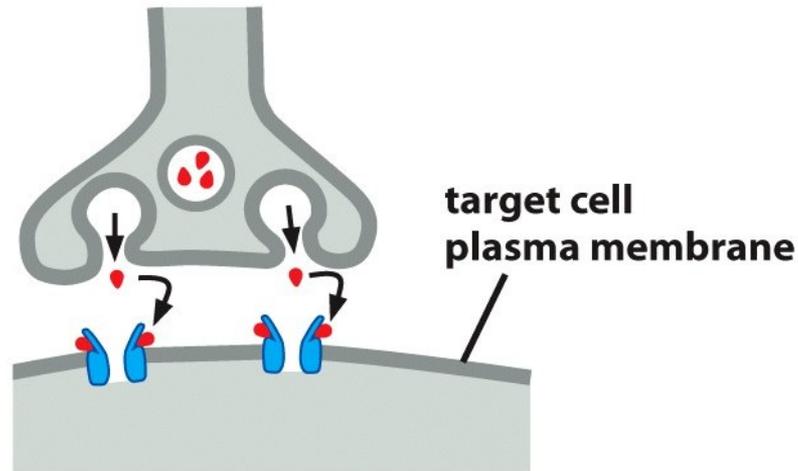


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RESTING CHEMICAL SYNAPSE



ACTIVE CHEMICAL SYNAPSE

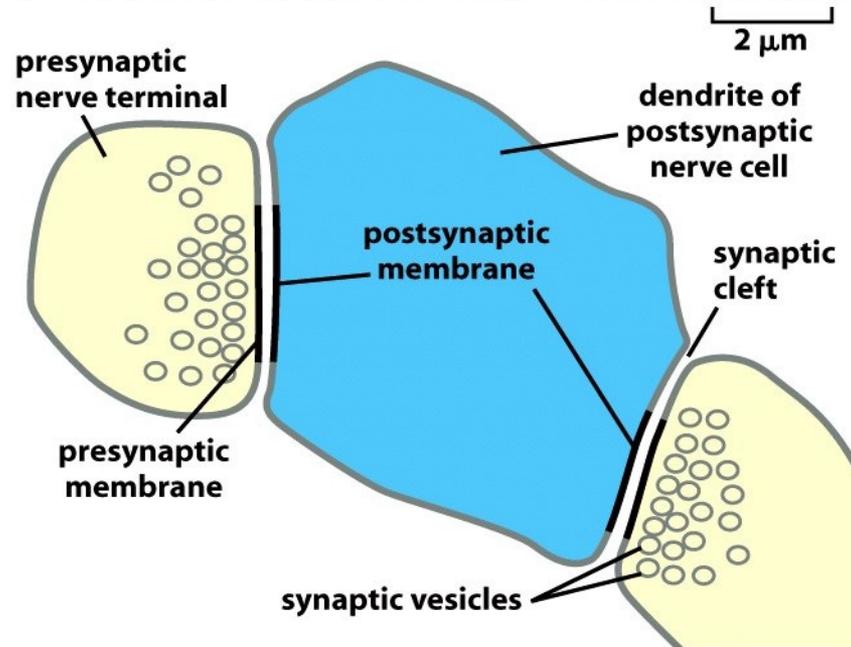
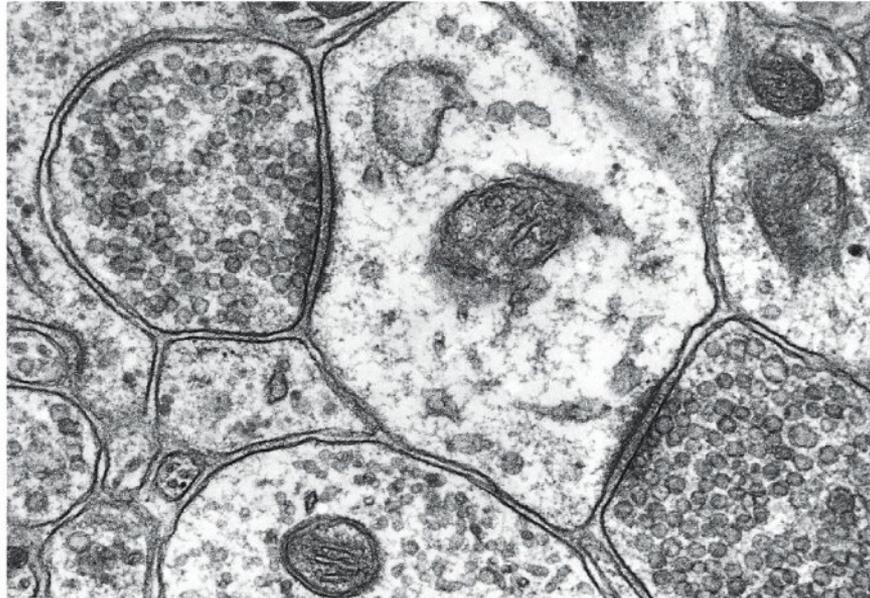


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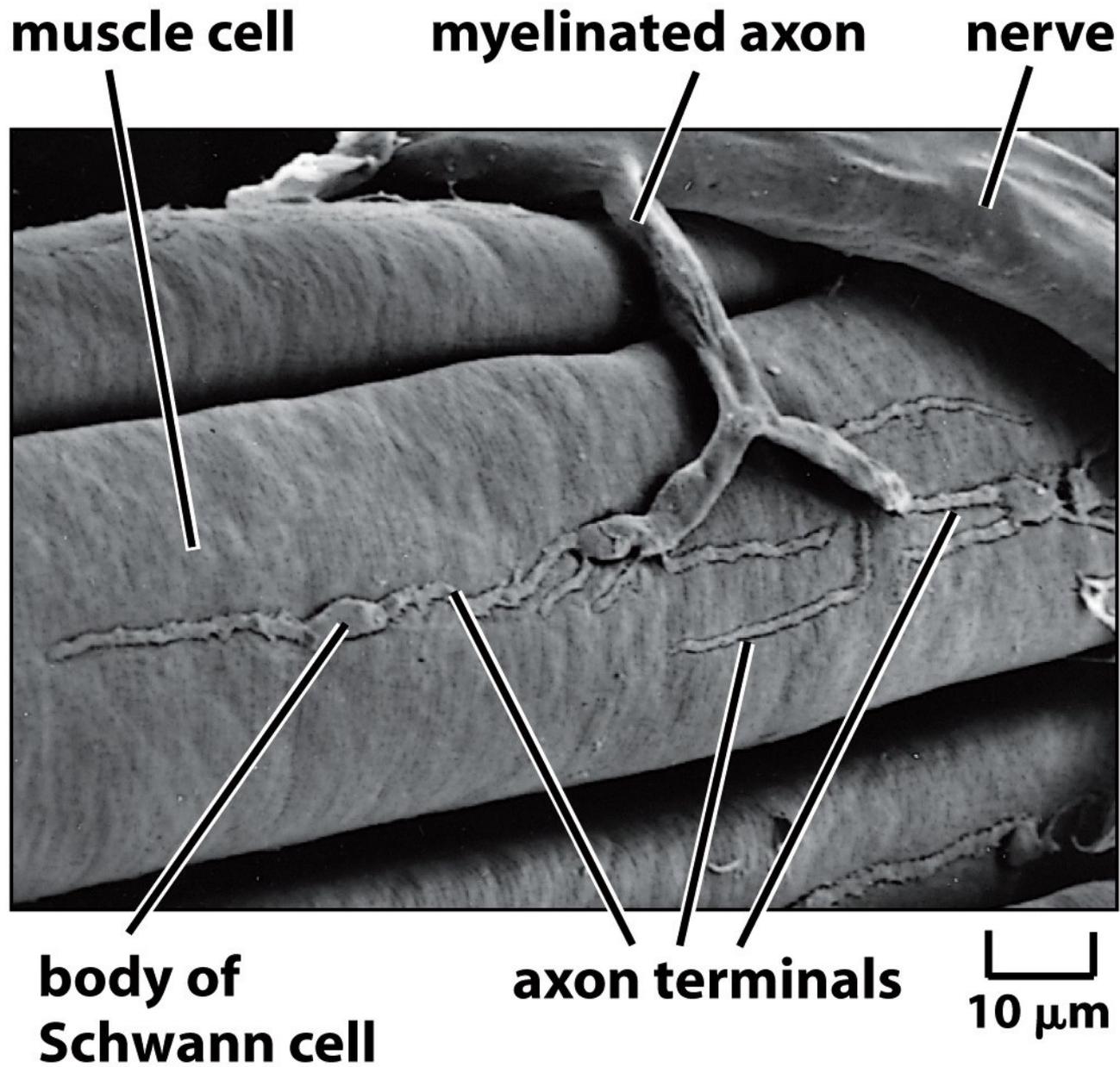


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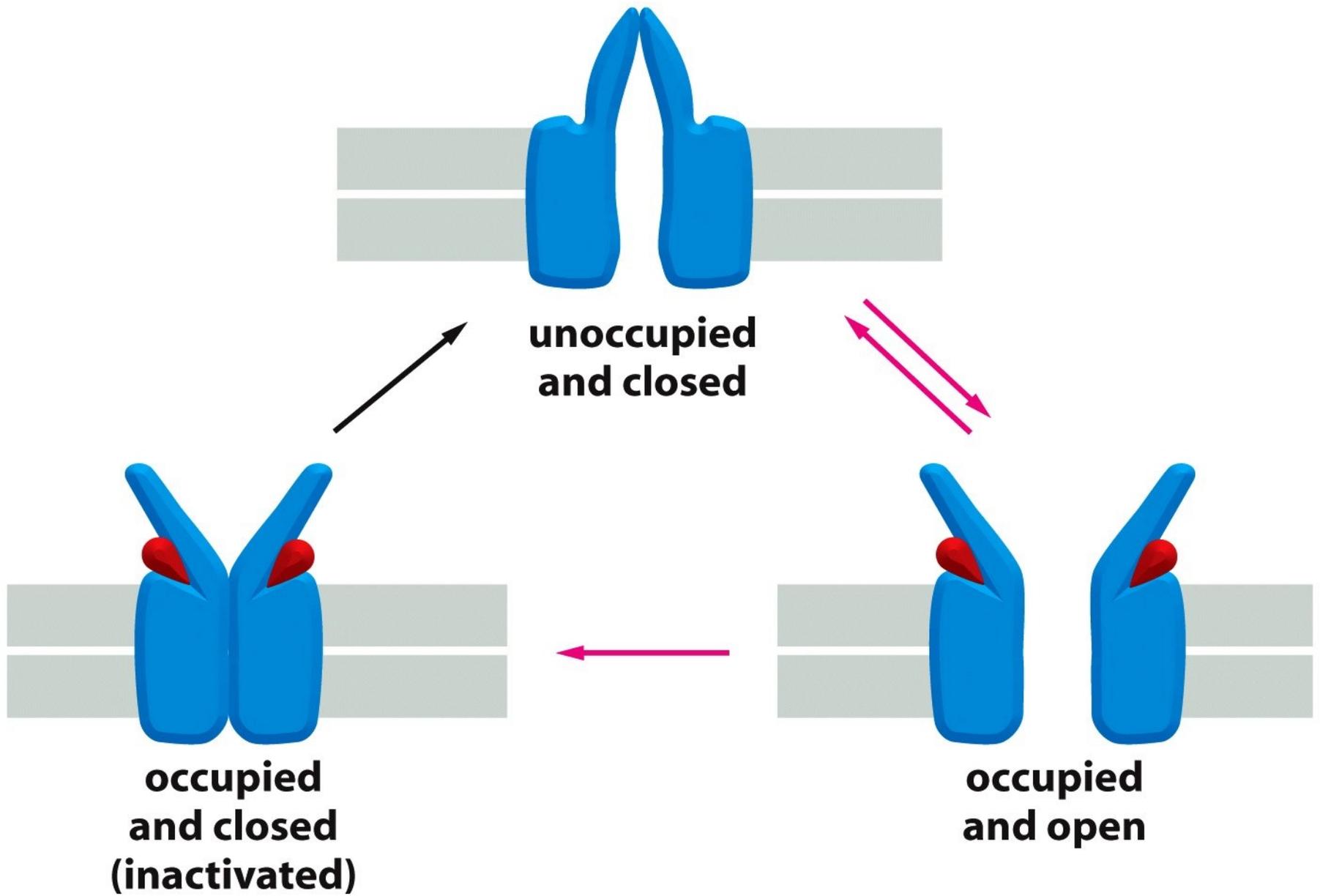


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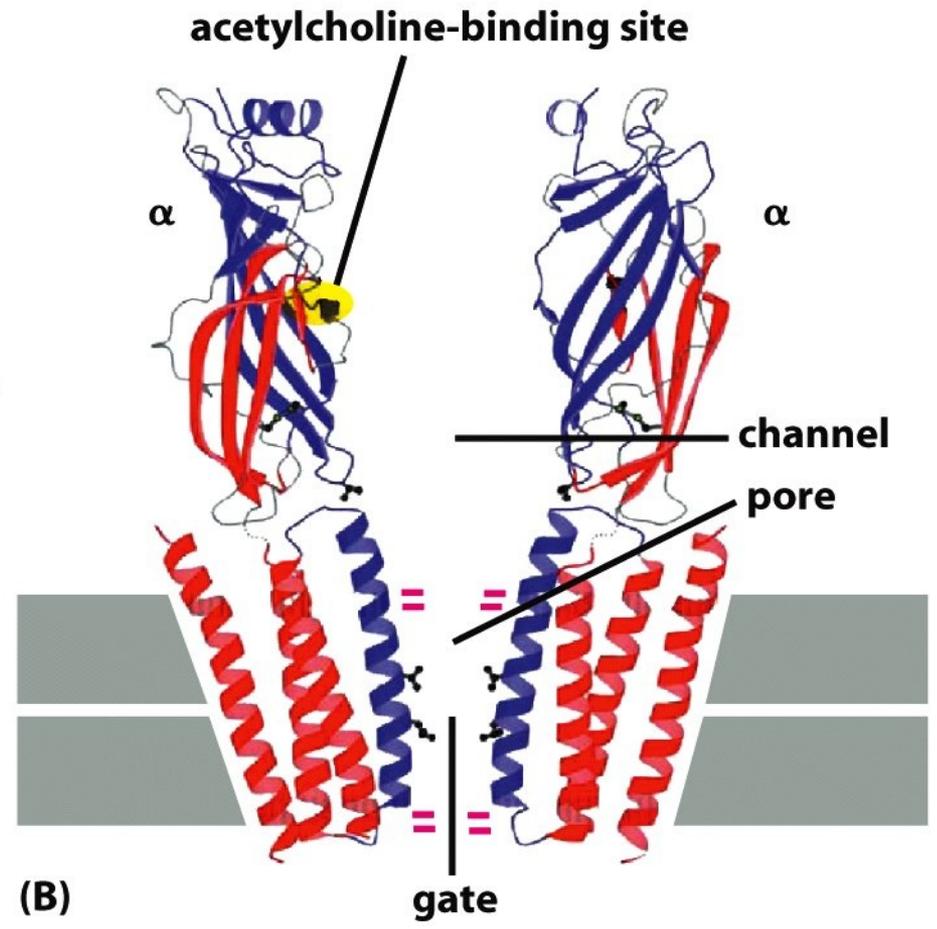
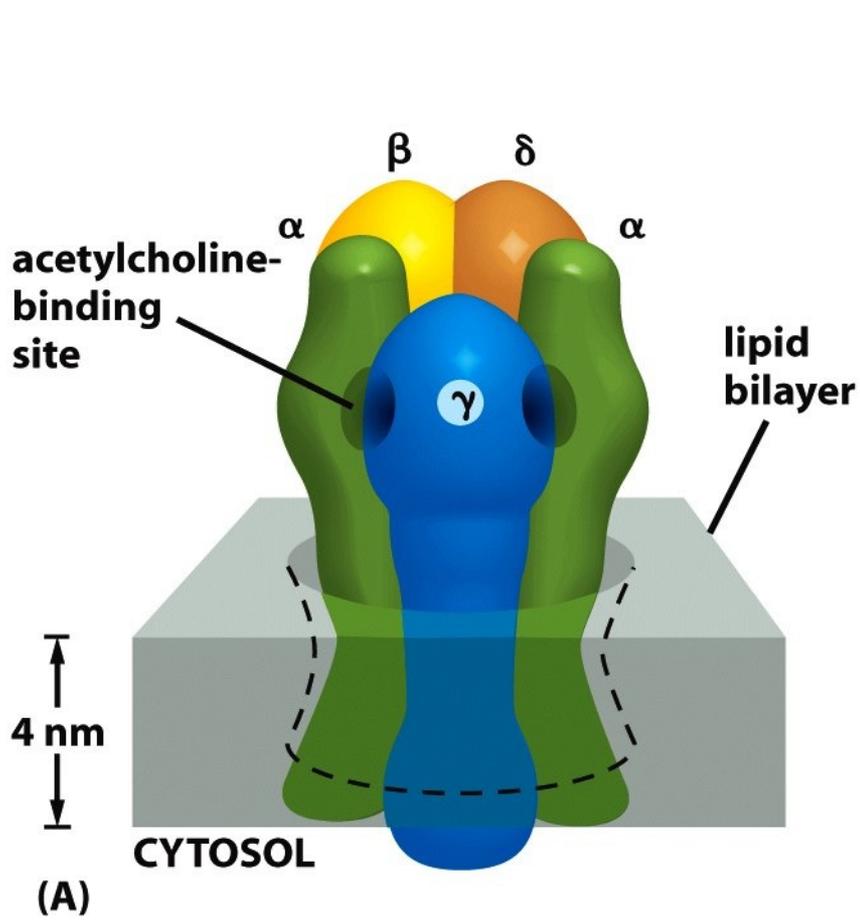
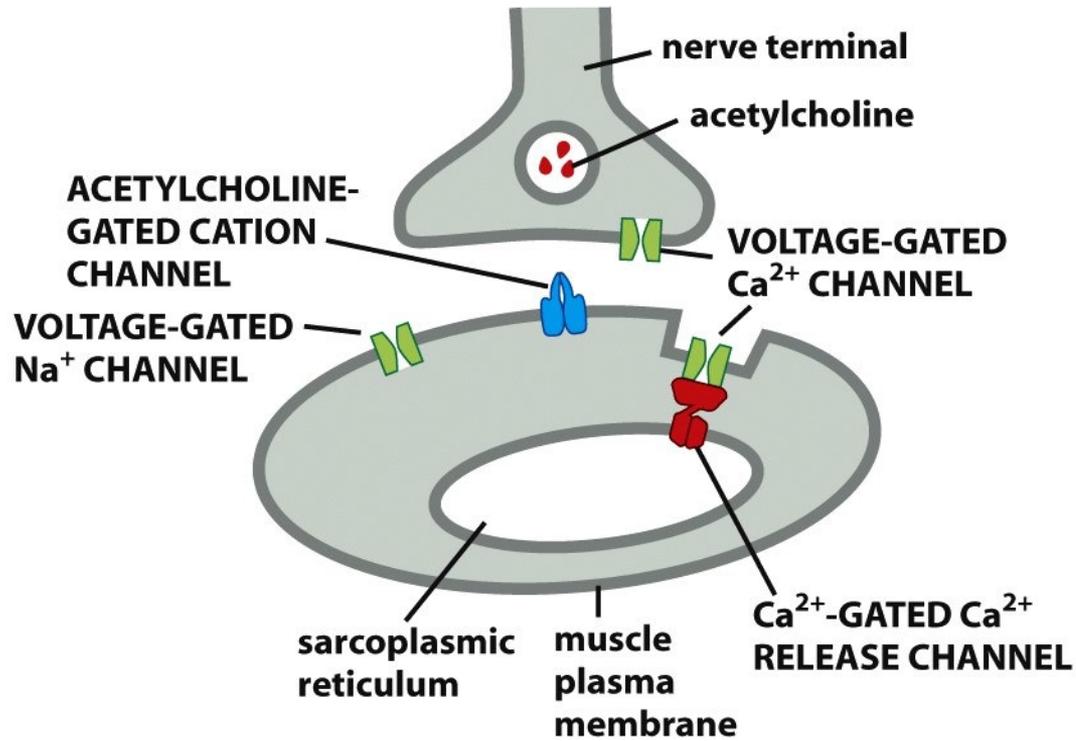
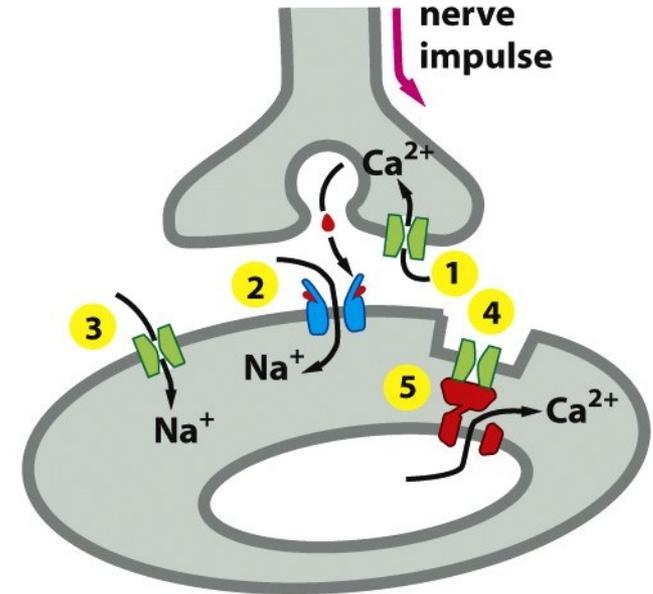


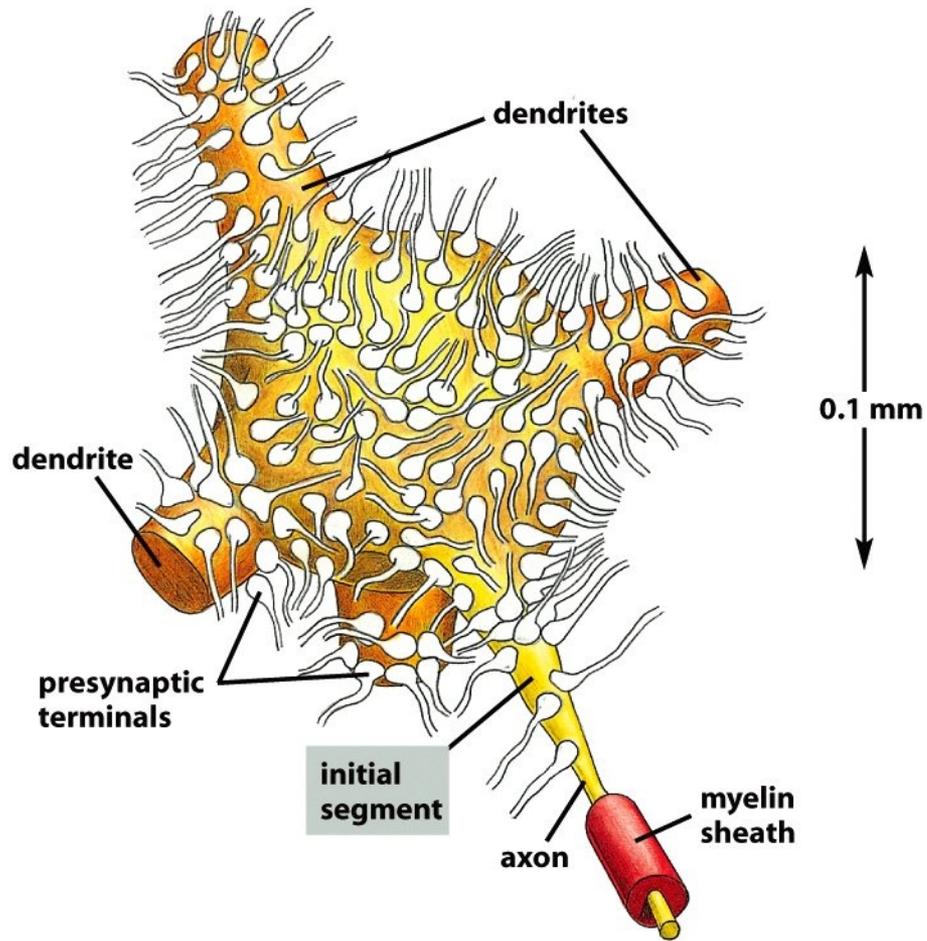
Figure 11-38 *Molecular Biology of the Cell* (© Garland Science 2008)

RESTING NEUROMUSCULAR JUNCTION

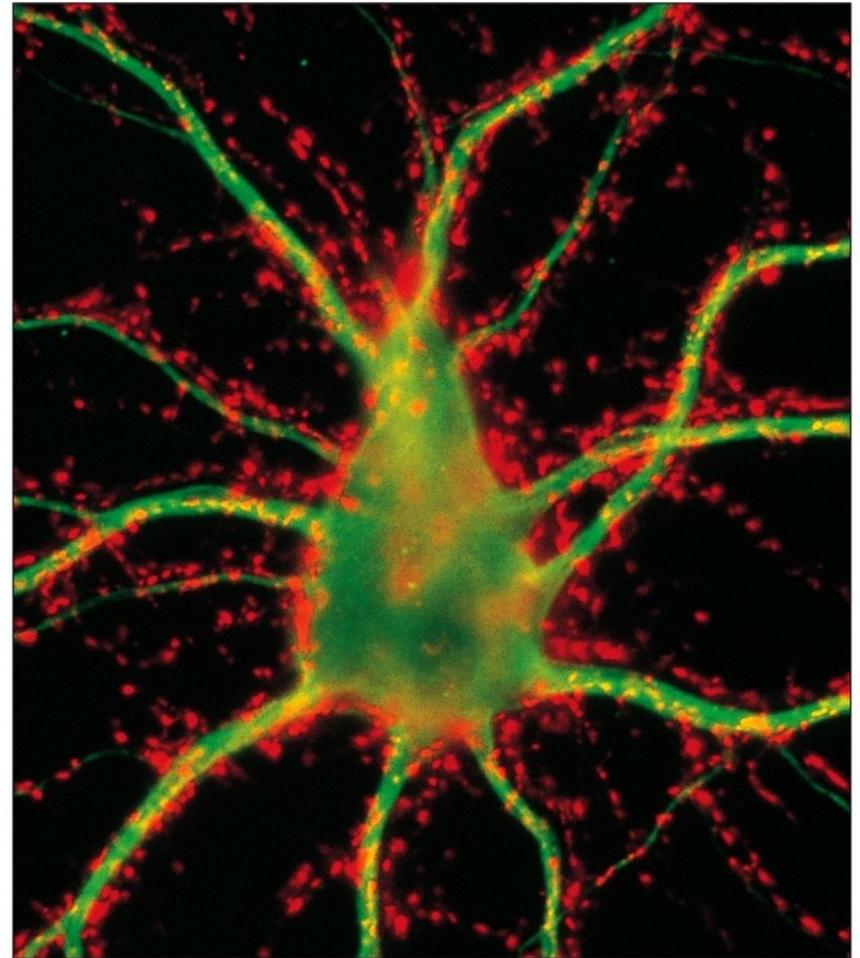


ACTIVATED NEUROMUSCULAR JUNCTION





(A)



(B)

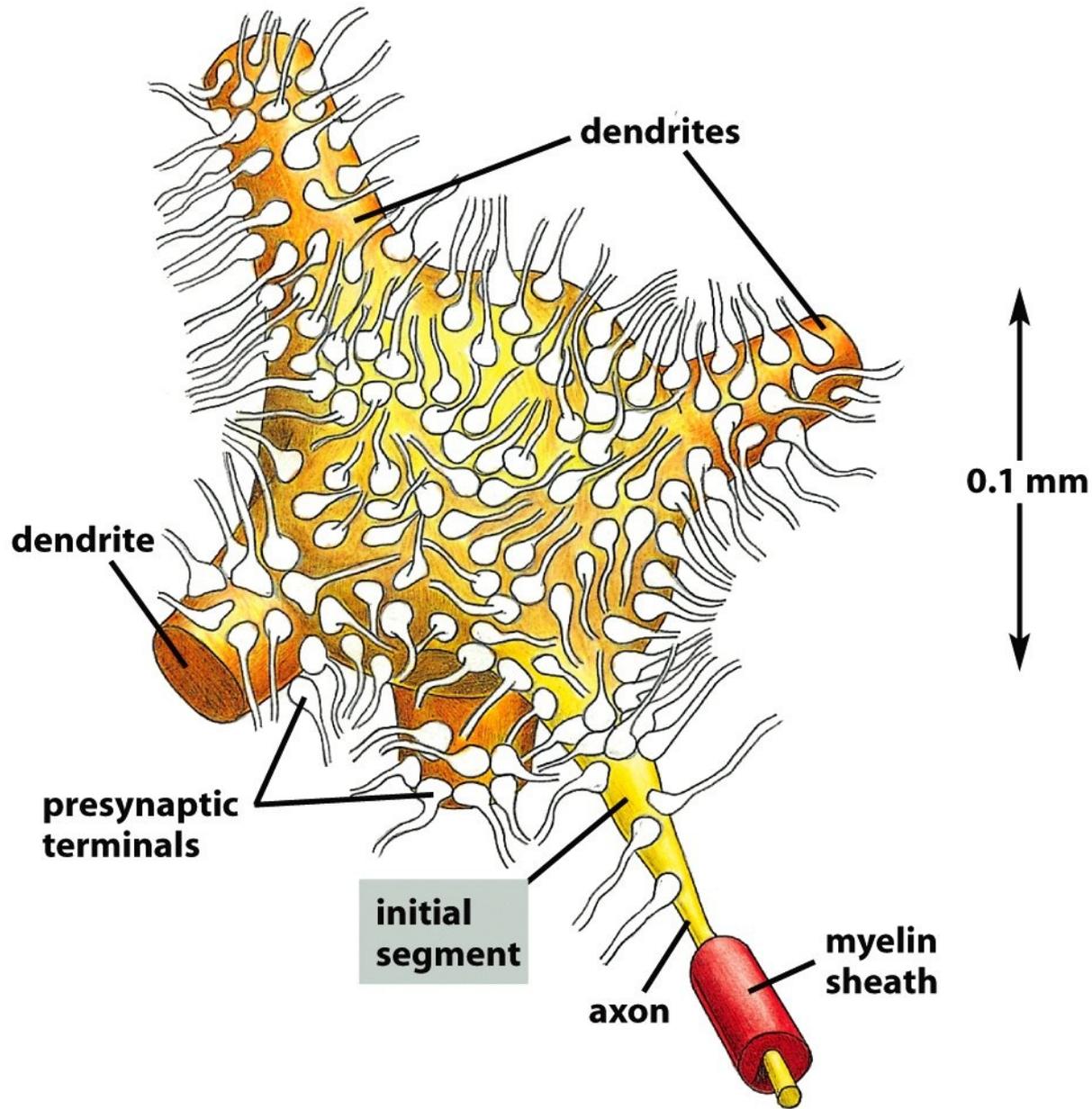


Figure 11-40a *Molecular Biology of the Cell* (© Garland Science 2008)

0.1 mm

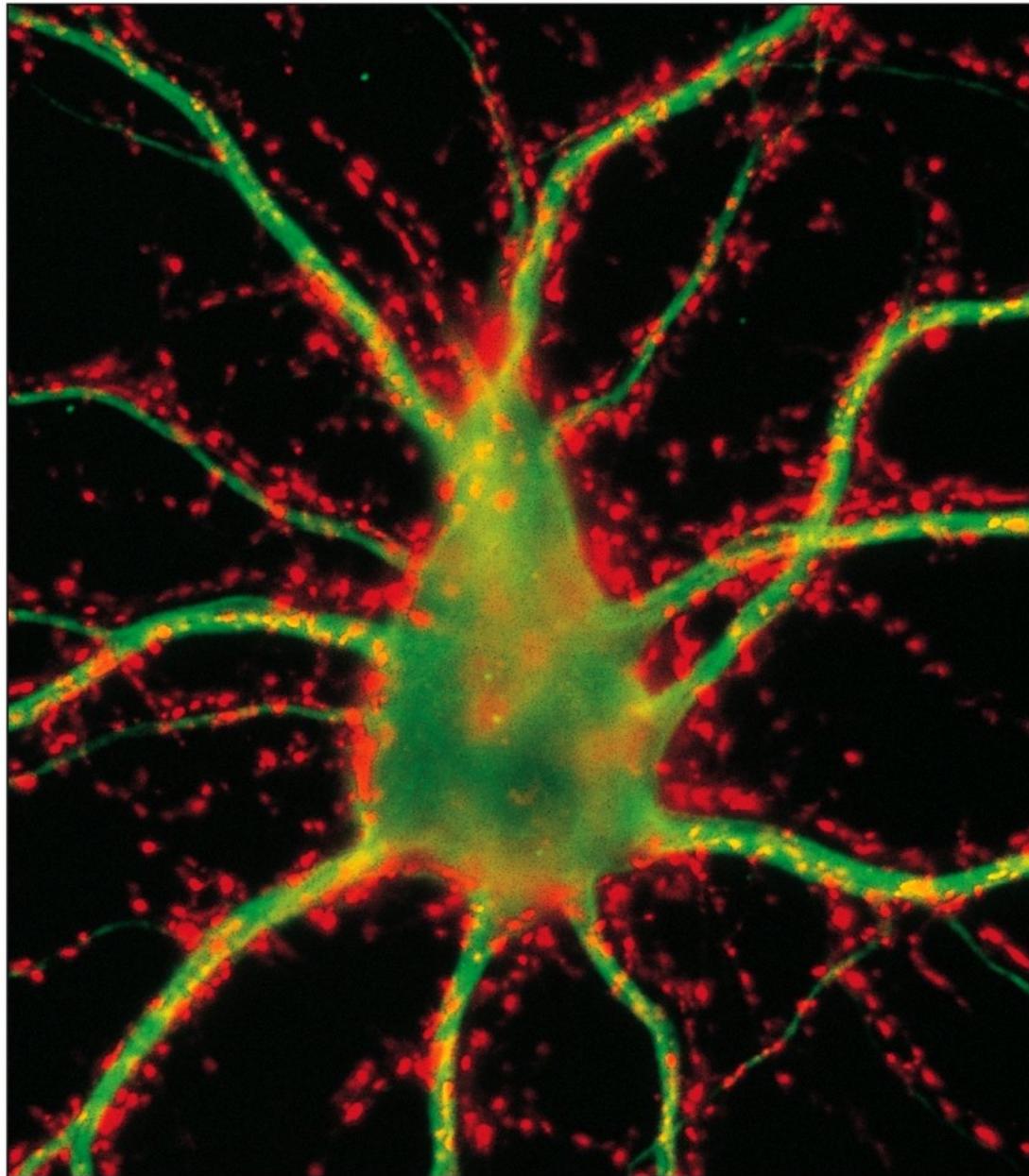


Figure 11-40b *Molecular Biology of the Cell* (© Garland Science 2008)

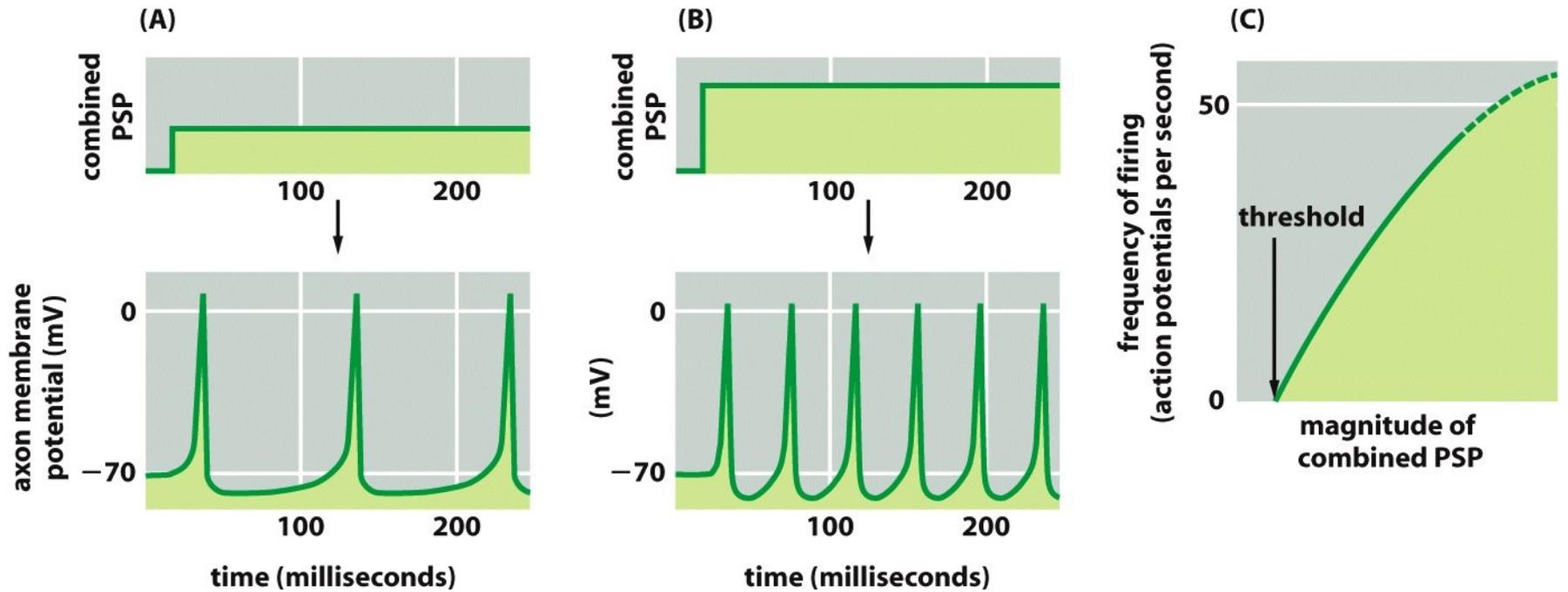


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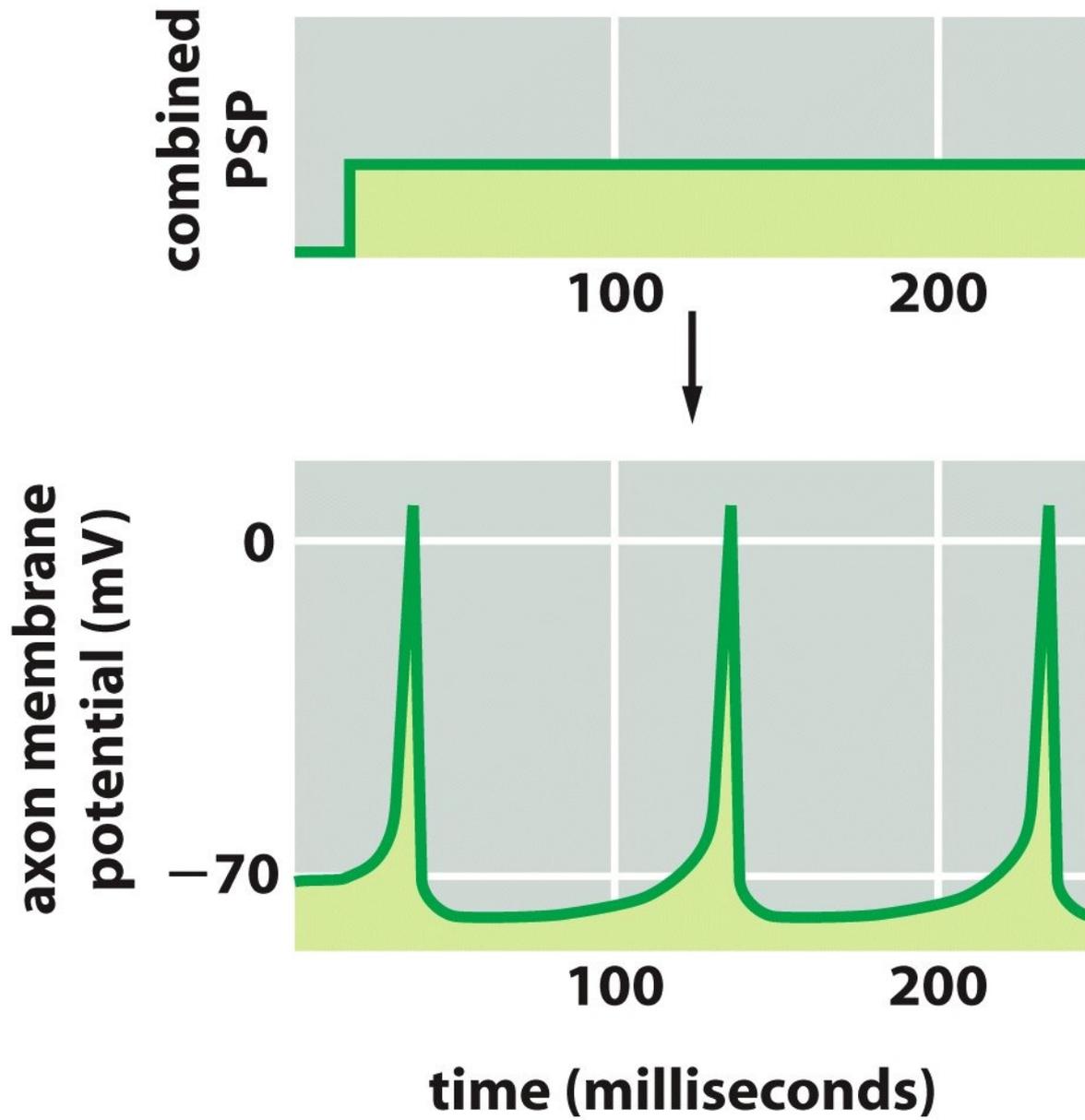


Figure 11-41a *Molecular Biology of the Cell* (© Garland Science 2008)

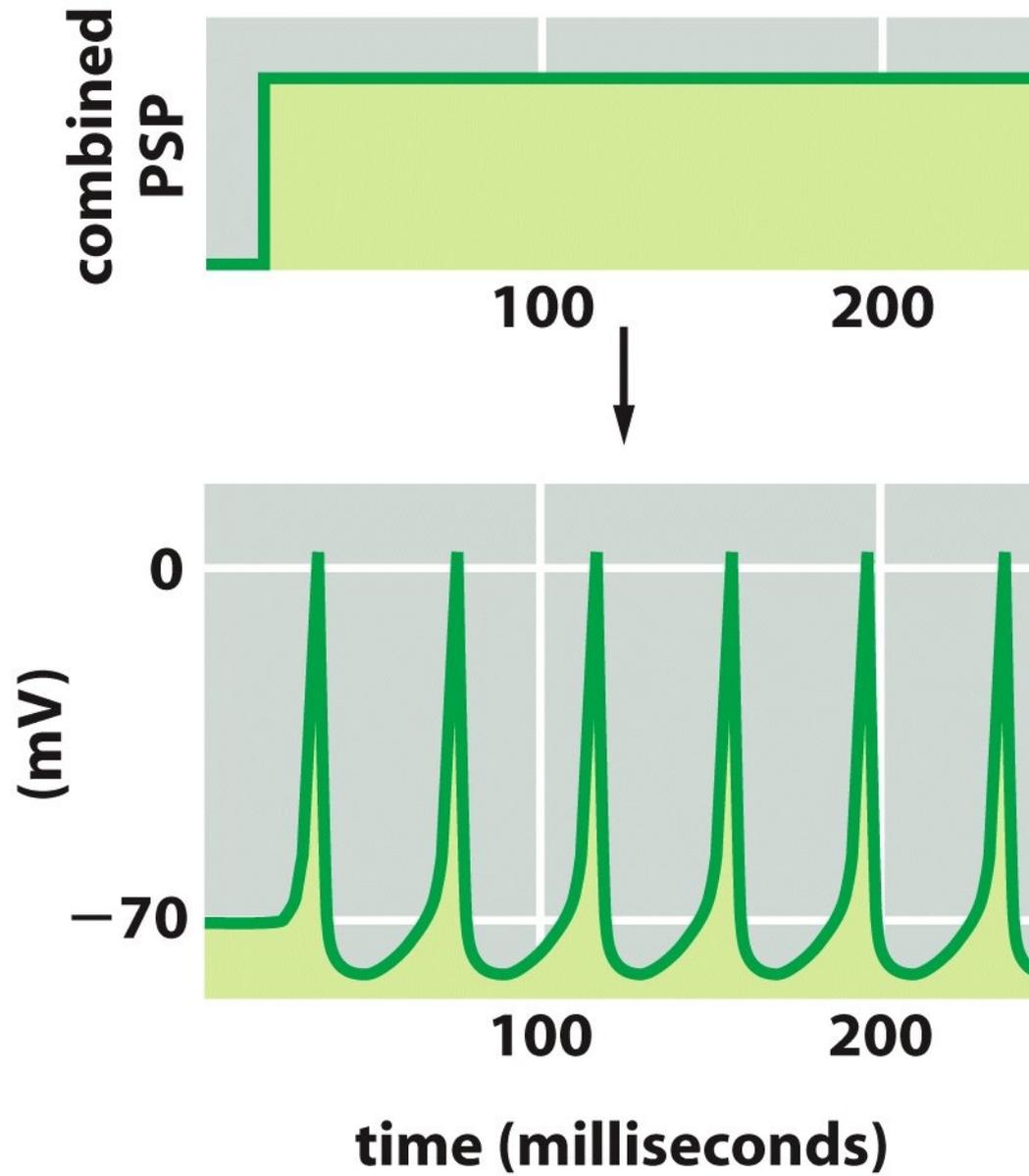


Figure 11-41b *Molecular Biology of the Cell* (© Garland Science 2008)

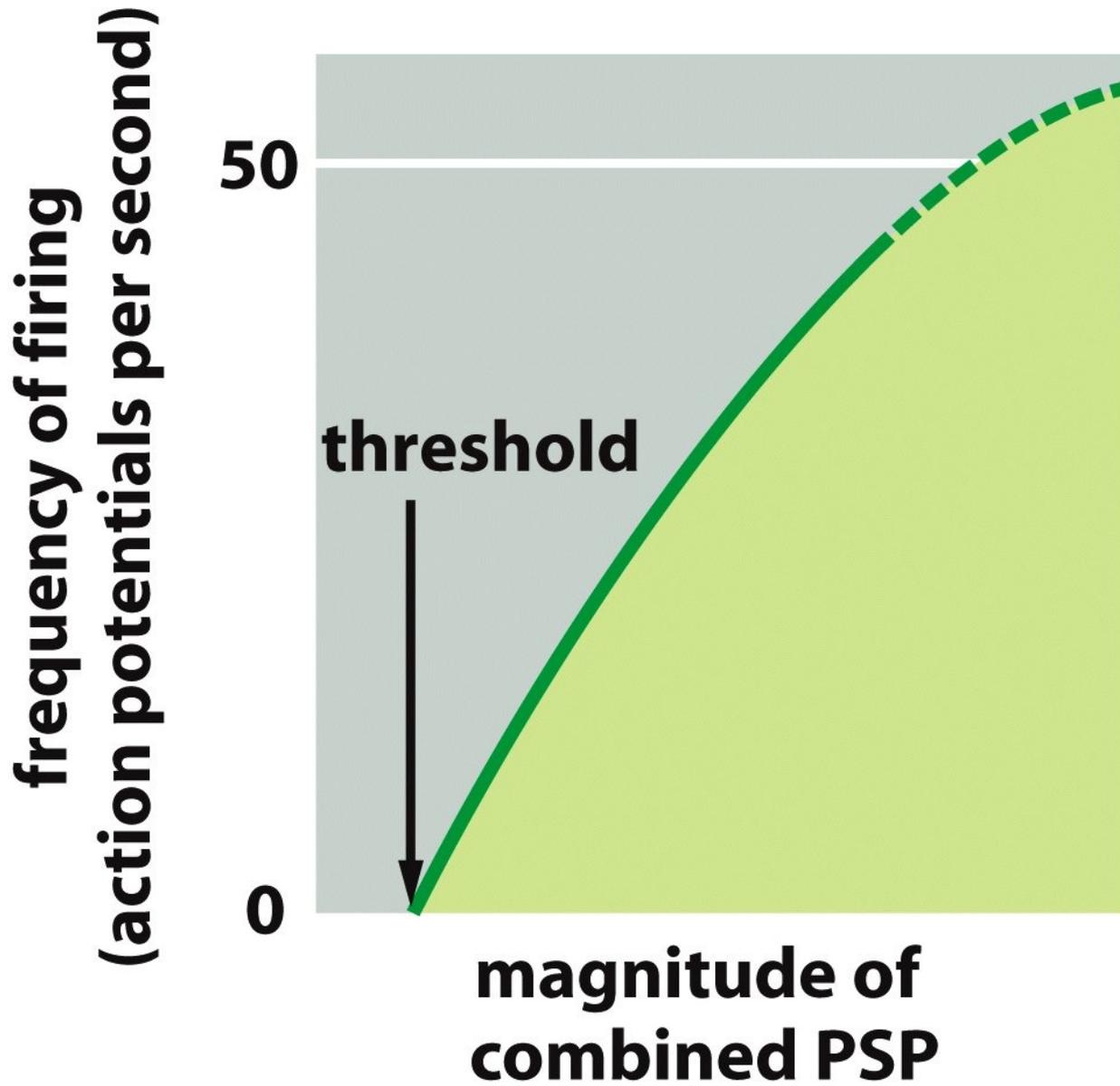


Figure 11-41c *Molecular Biology of the Cell* (© Garland Science 2008)

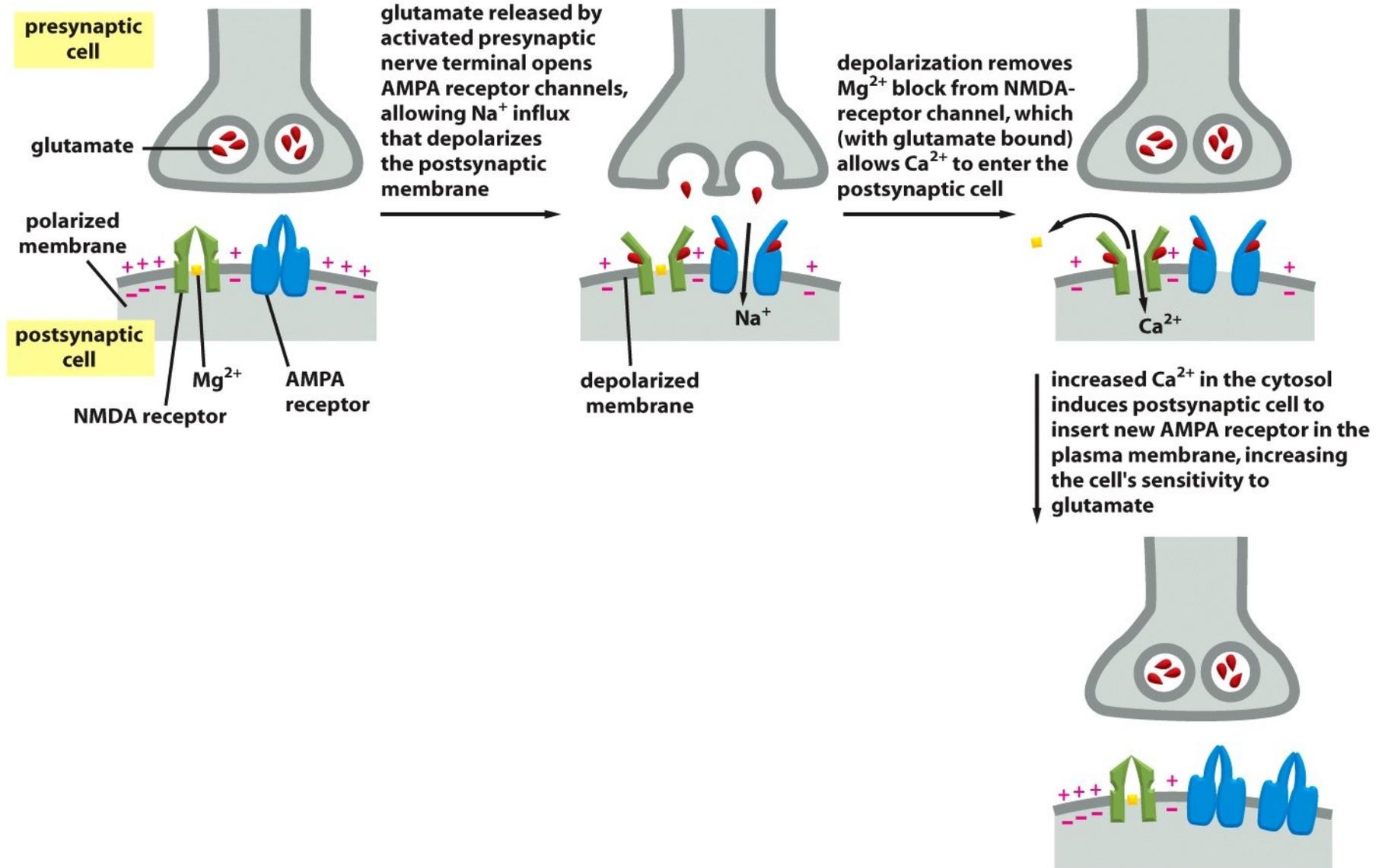


Figure 11-42 *Molecular Biology of the Cell* (© Garland Science 2008)

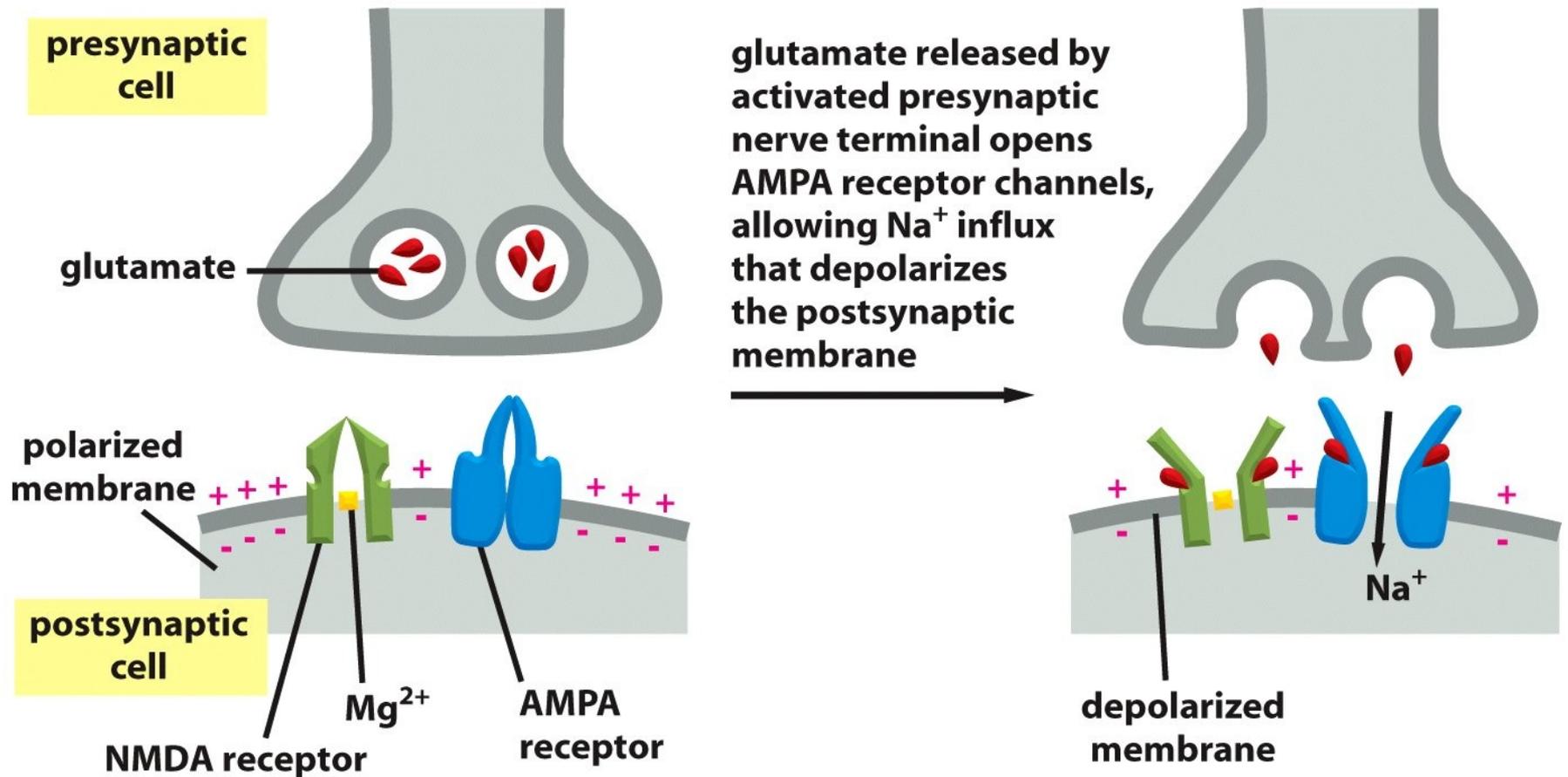
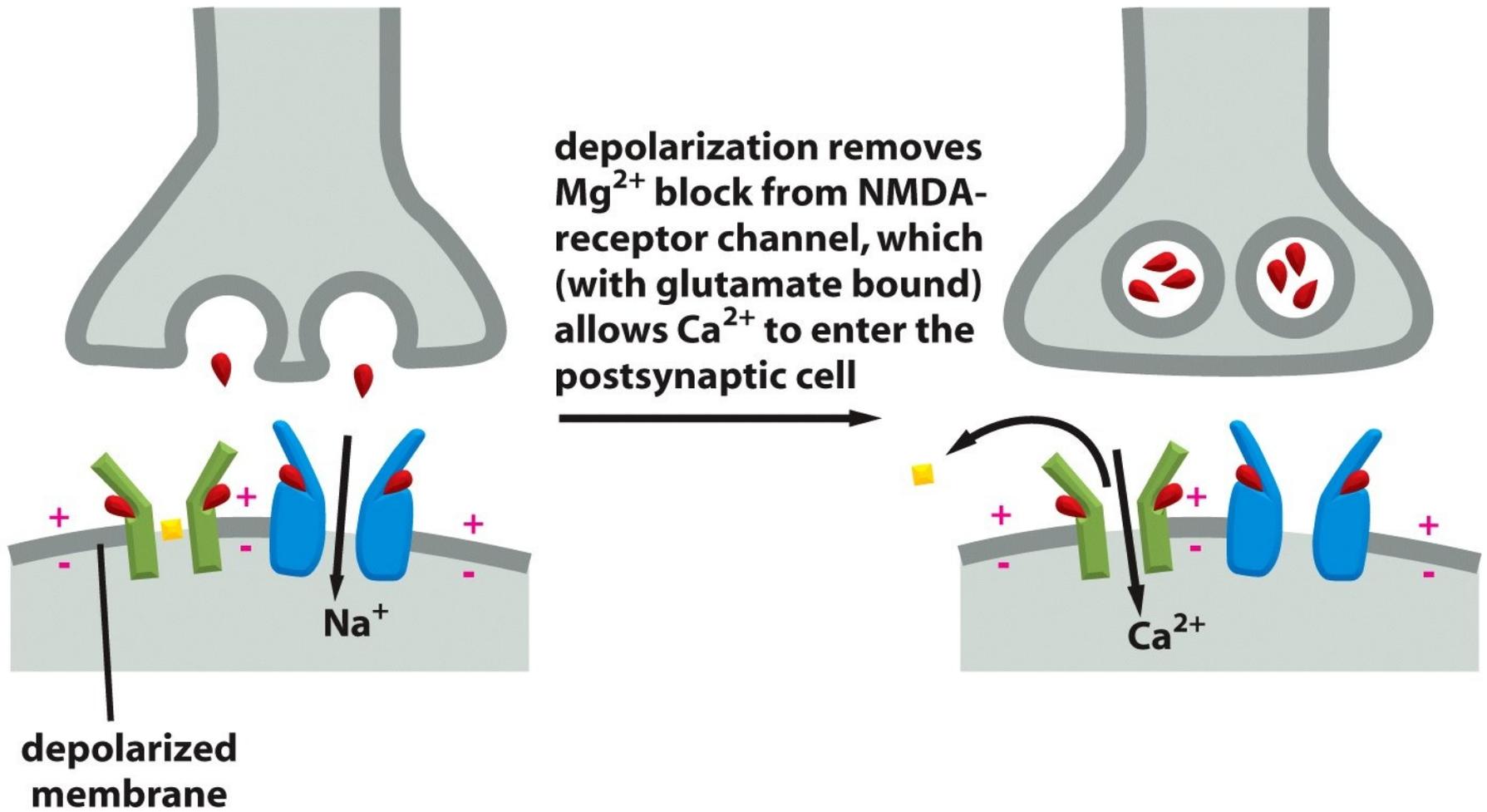


Figure 11-42 (part 1 of 3) *Molecular Biology of the Cell* (© Garland Science 2008)



increased Ca^{2+} in the cytosol induces postsynaptic cell to insert new AMPA receptor in the plasma membrane, increasing the cell's sensitivity to glutamate

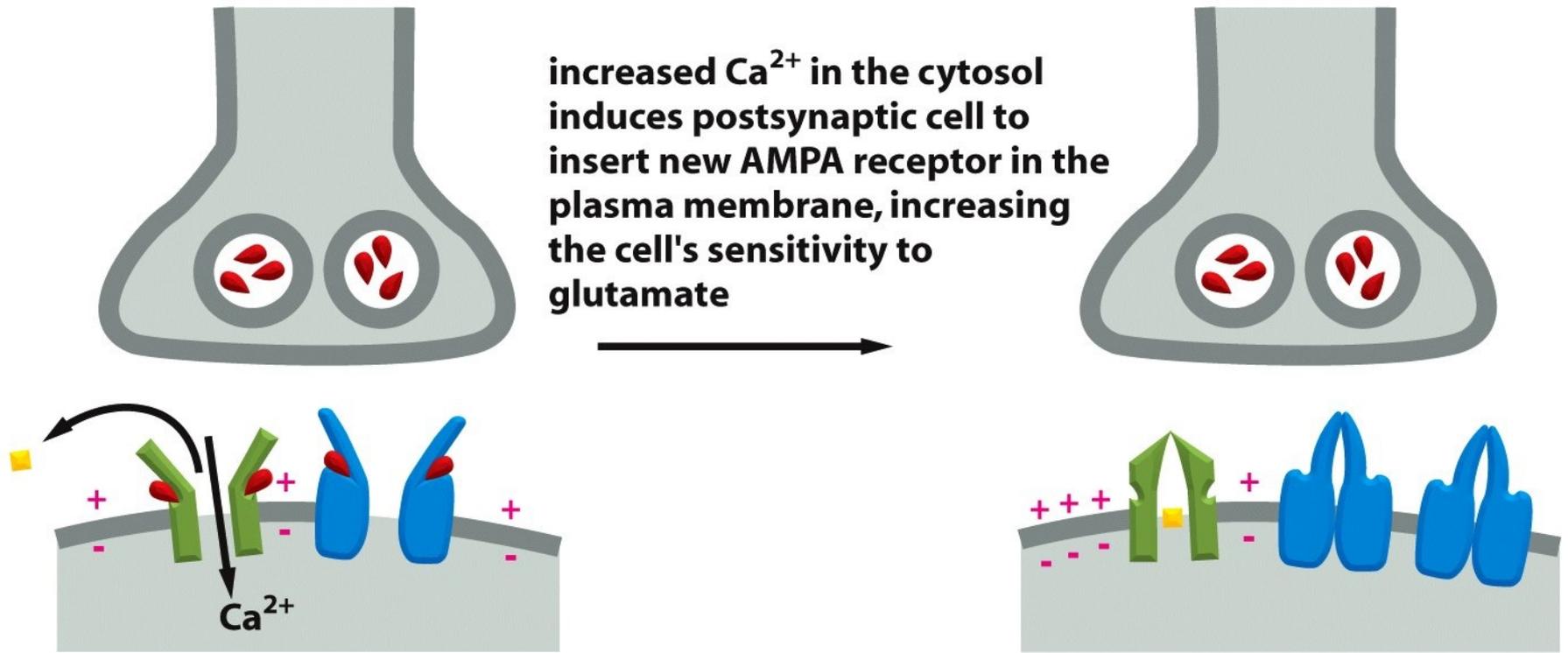
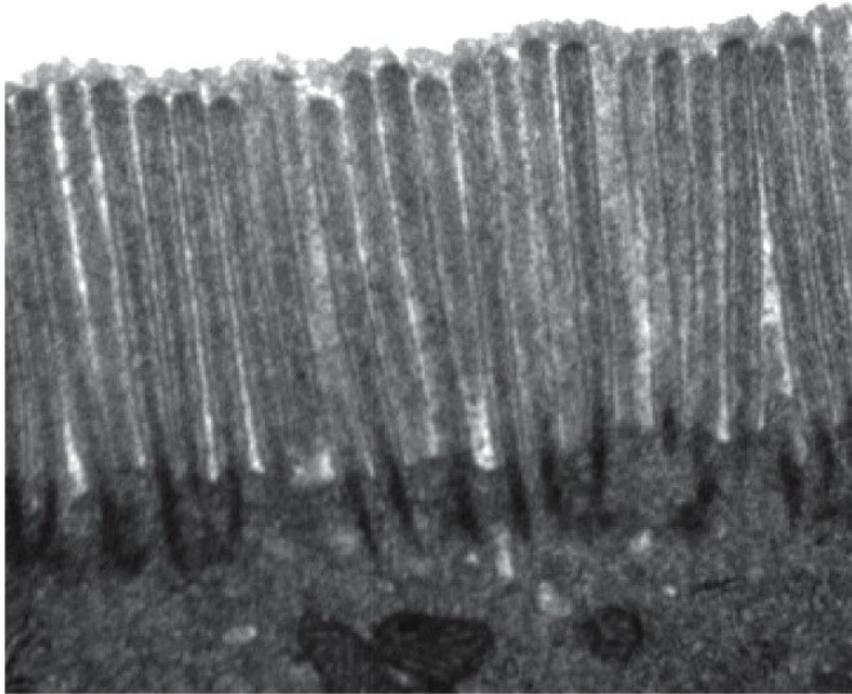


Table 11–2 Some Ion Channel Families

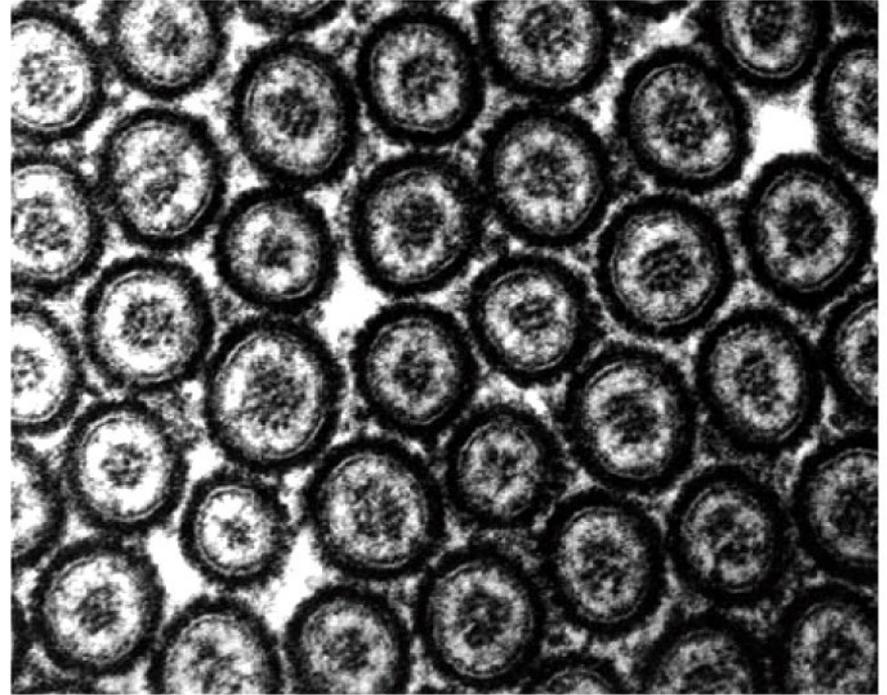
CHANNEL TYPE	REPRESENTATIVE EXAMPLE
<p>Voltage-gated cation channels</p> <p>Transmitter-gated ion channels</p>	<p>voltage-gated Na⁺ channels voltage-gated K⁺ channels (including delayed and early) voltage-gated Ca²⁺ channels</p> <p>acetylcholine-gated cation channels } glutamate-gated Ca²⁺ channels } excitatory serotonin-gated cation channels } GABA-gated Cl⁻ channels } glycine-gated Cl⁻ channels } inhibitory</p>

profile



1 μm

cross-section



0.1 μm

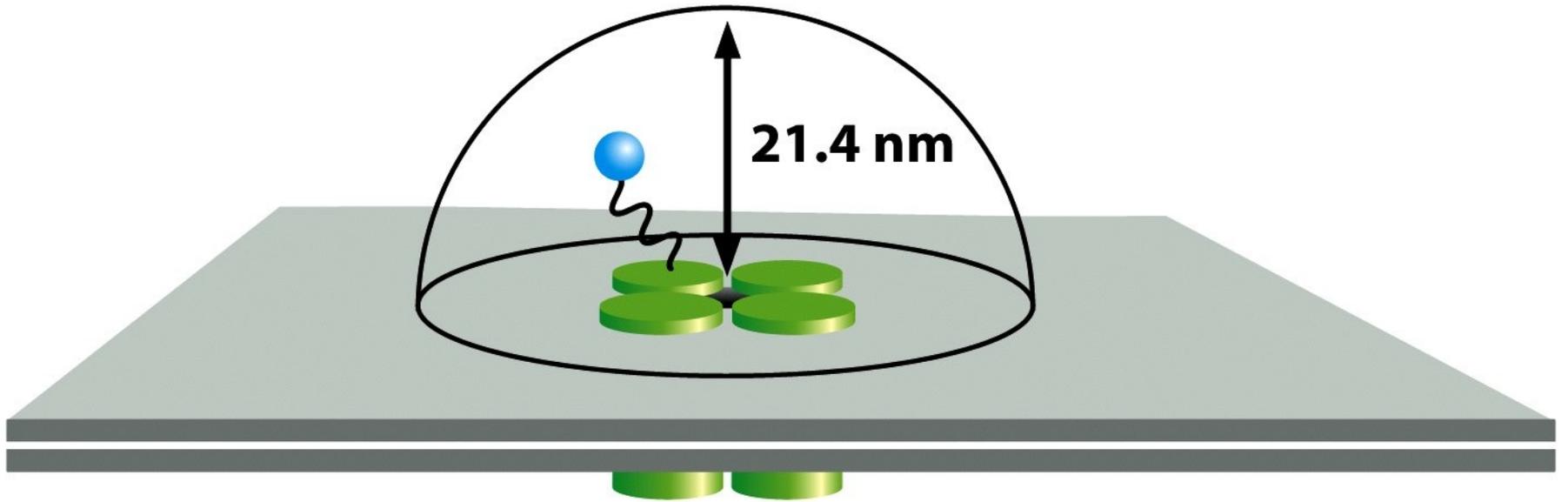


Figure Q11-2 *Molecular Biology of the Cell* (© Garland Science 2008)

Table Q11–1 Ionic composition of seawater and of cytoplasm from the squid giant axon (Problem 11–10).

ION	CYTOPLASM	SEAWATER
Na⁺	65 mM	430 mM
K⁺	344 mM	9 mM