

Figure 11-20 *Molecular Biology of the Cell* (© Garland Science 2008)

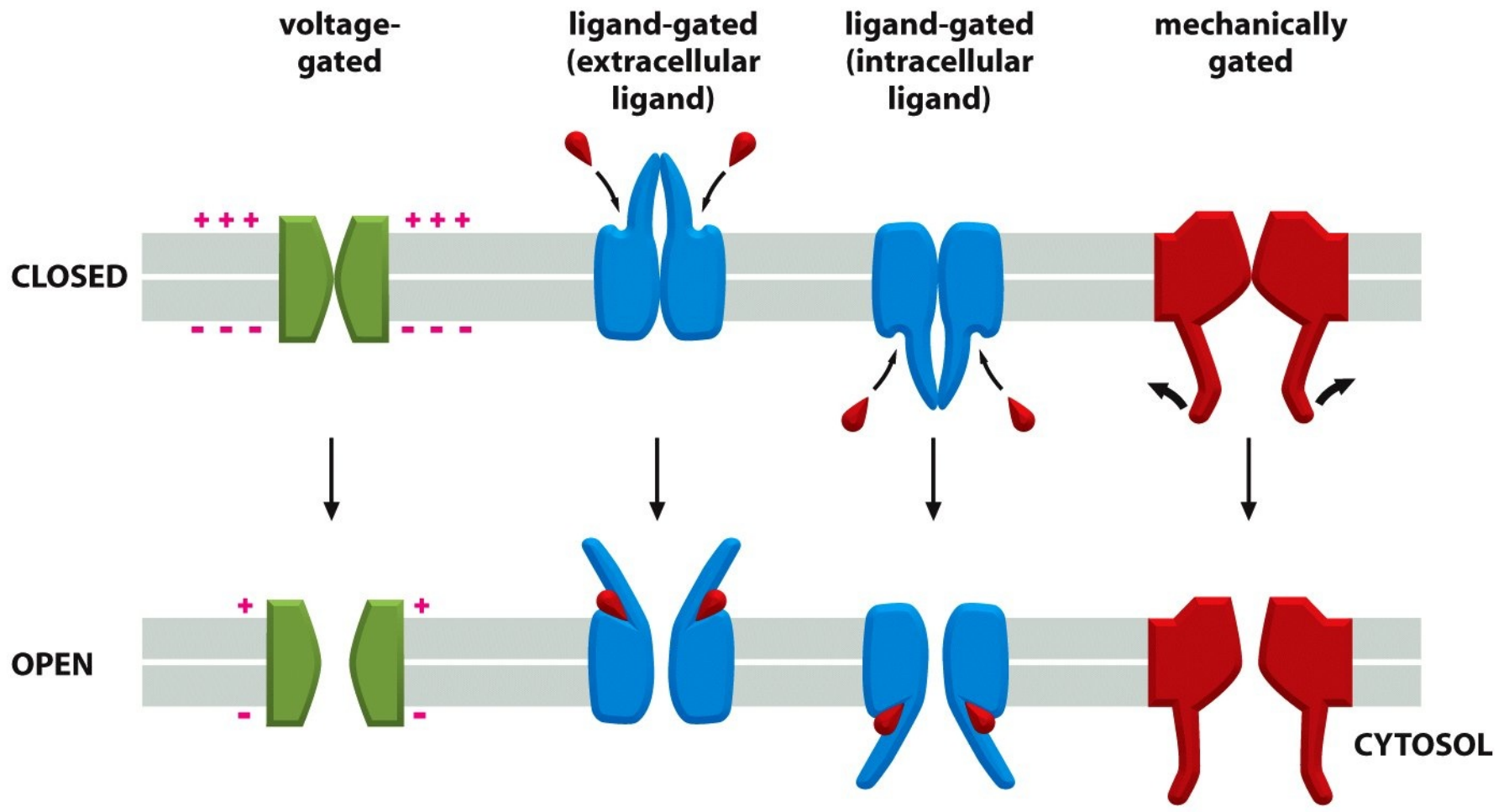
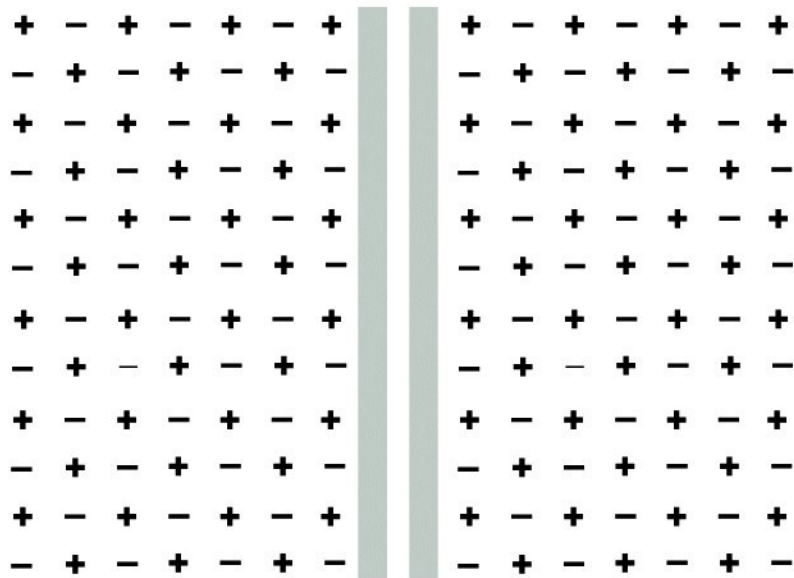
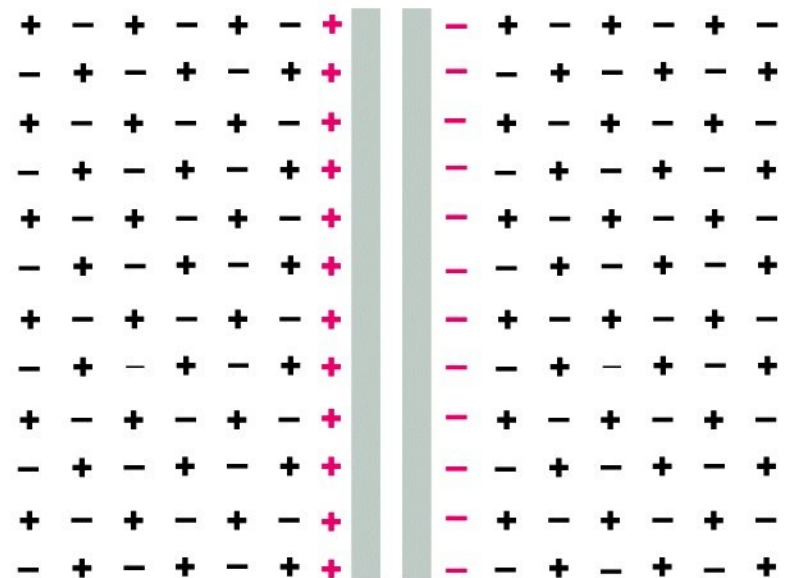


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exact balance of charges on each side of the membrane; membrane potential = 0



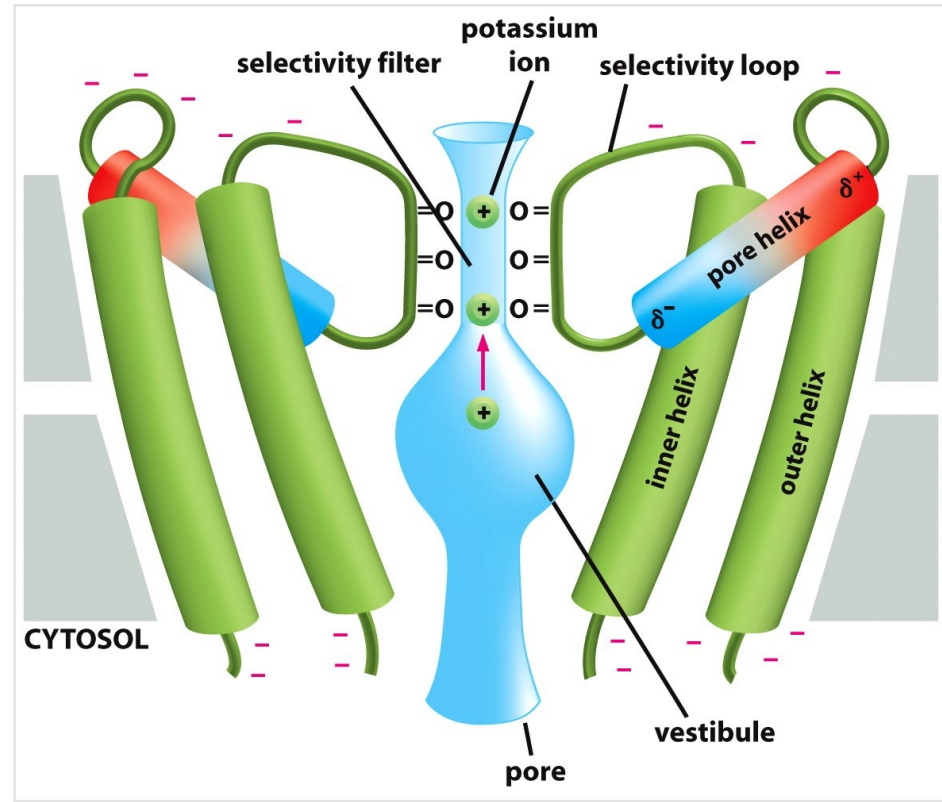
a few of the positive ions (*red*) cross the membrane from right to left, leaving their negative counterions (*red*) behind; this sets up a nonzero membrane potential

K⁺ Kanalları: Na⁺ kanalları ile benzer çapta olmalarına rağmen 10.000 kat daha iyi iletir. Tek bir amino asit değişikliği bile seçiciliğin kaybolmasına ve hücre ölümüne yol açar.

Yüksek geçirgenlik seçici ve yüksek afiniteye sahip K⁺ bağlama bölgelerine uygundur.

Hem yüksek afinite, hem geçirgenlik?

transmembran proteinlerdeki eksi yüklü aminoasitlerin sitozolde yerleşimi, katyonların çekilerek, anyonların itilmesini sağladığı düşünülmektedir.



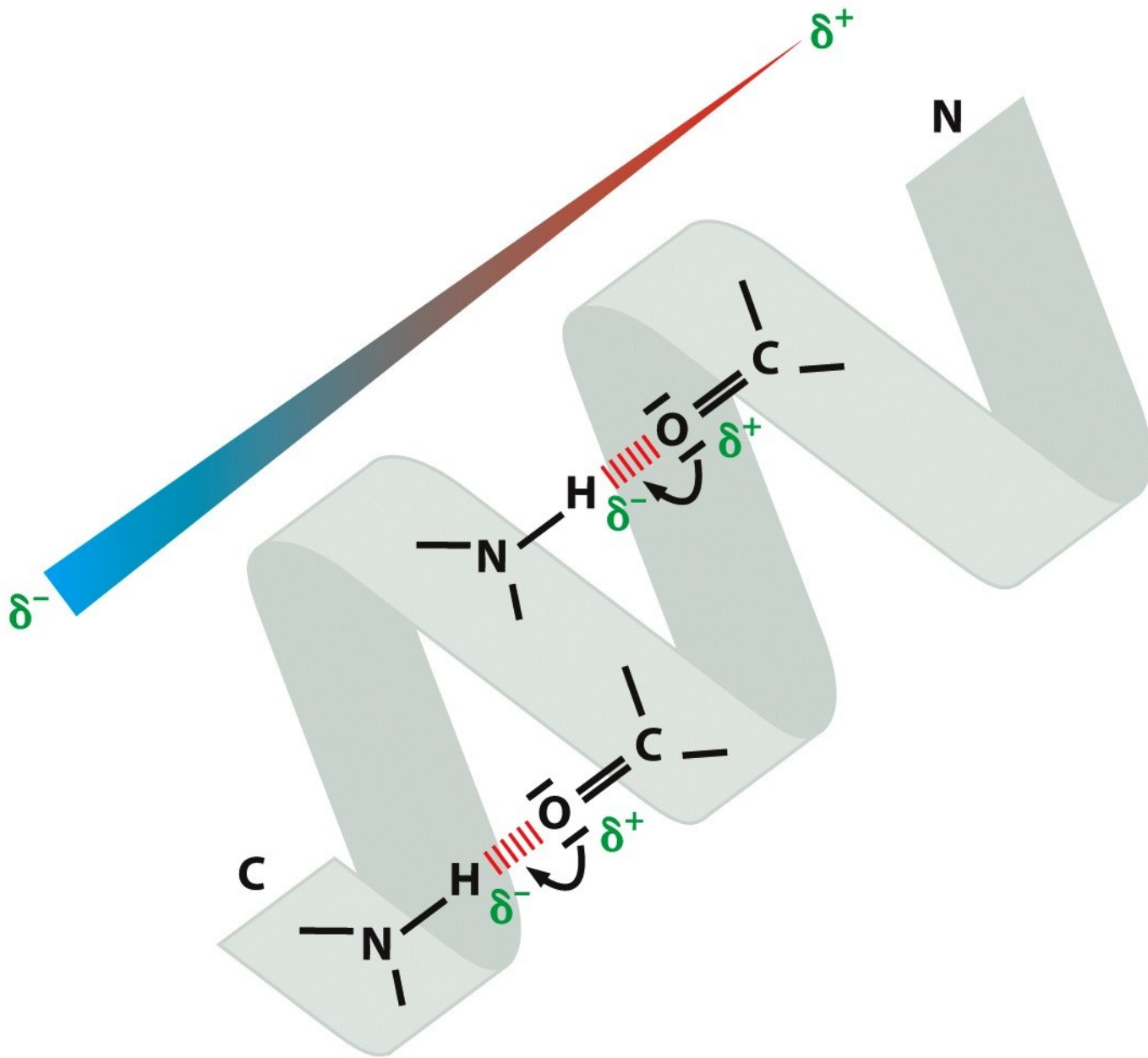
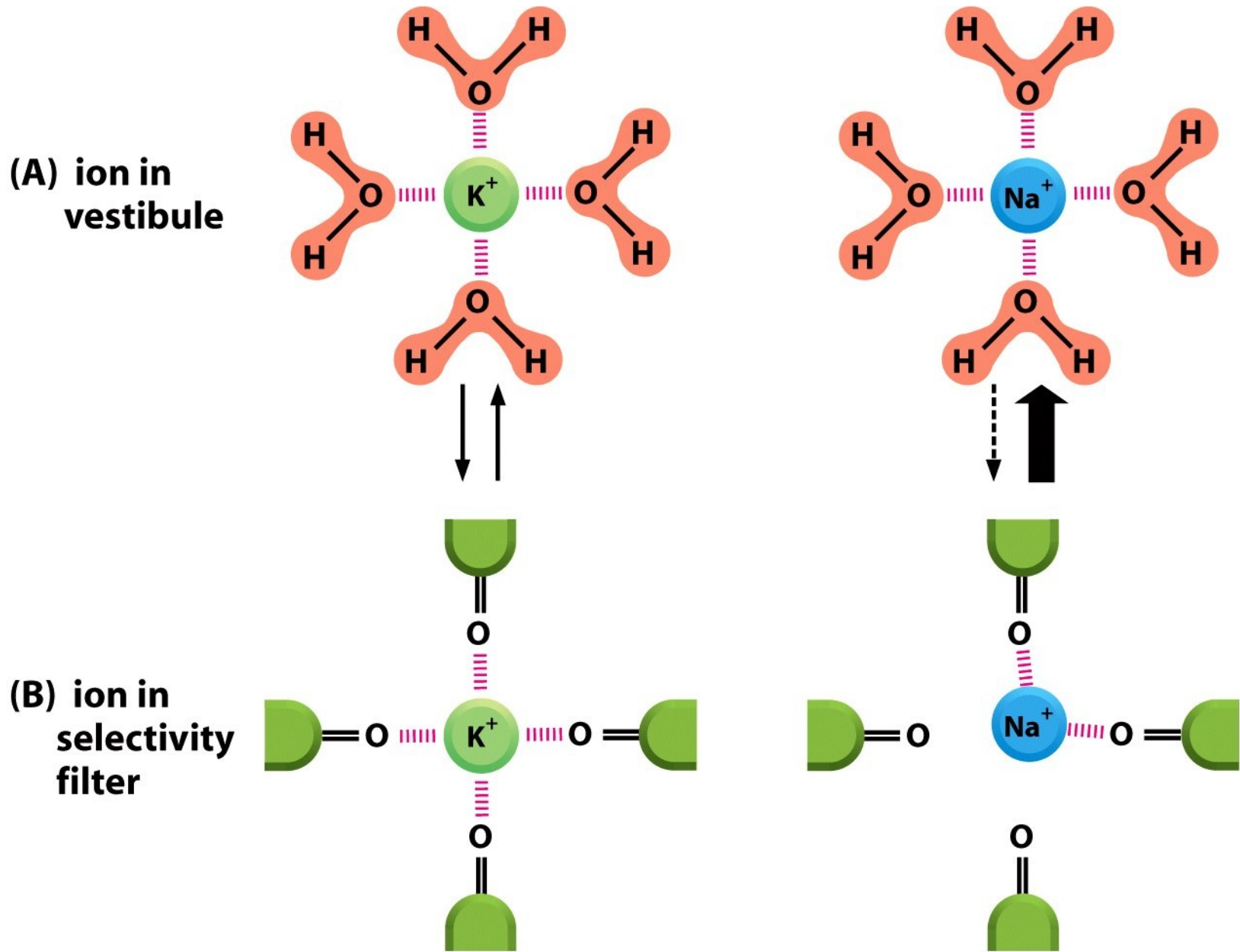


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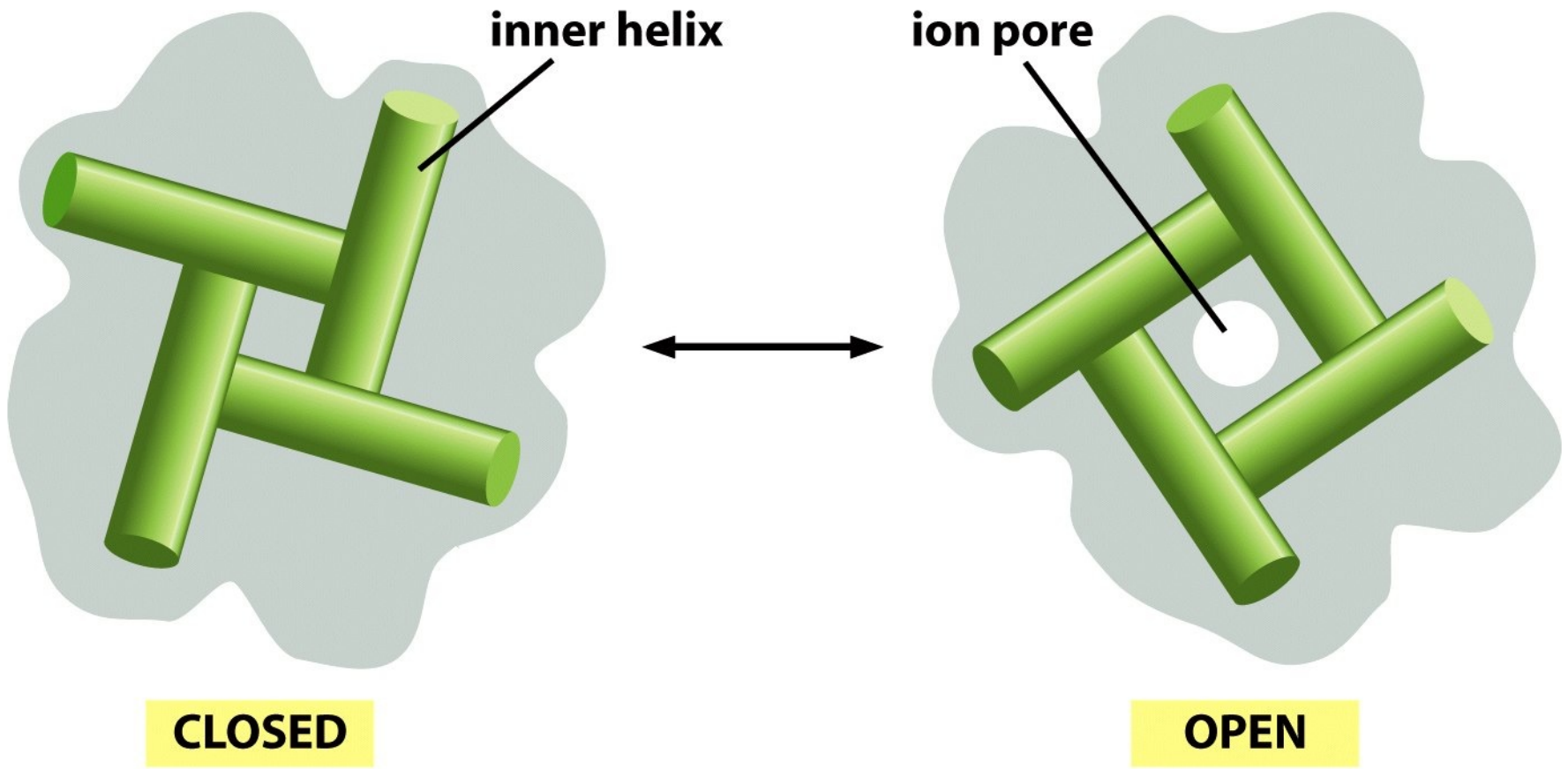
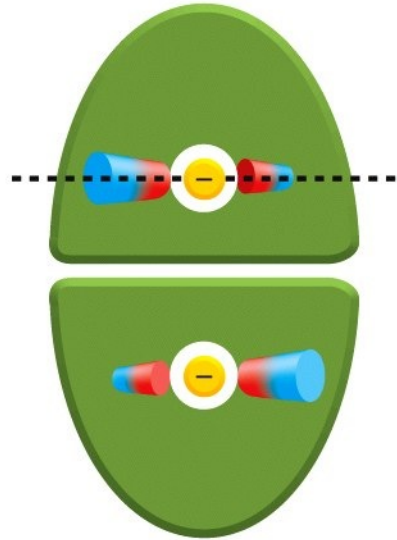


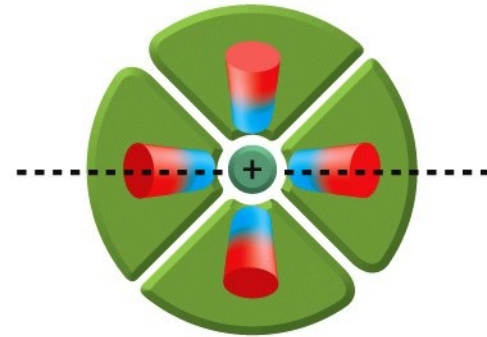
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(A) CHLORIDE CHANNEL



two subunits

(B) POTASSIUM CHANNEL



four subunits

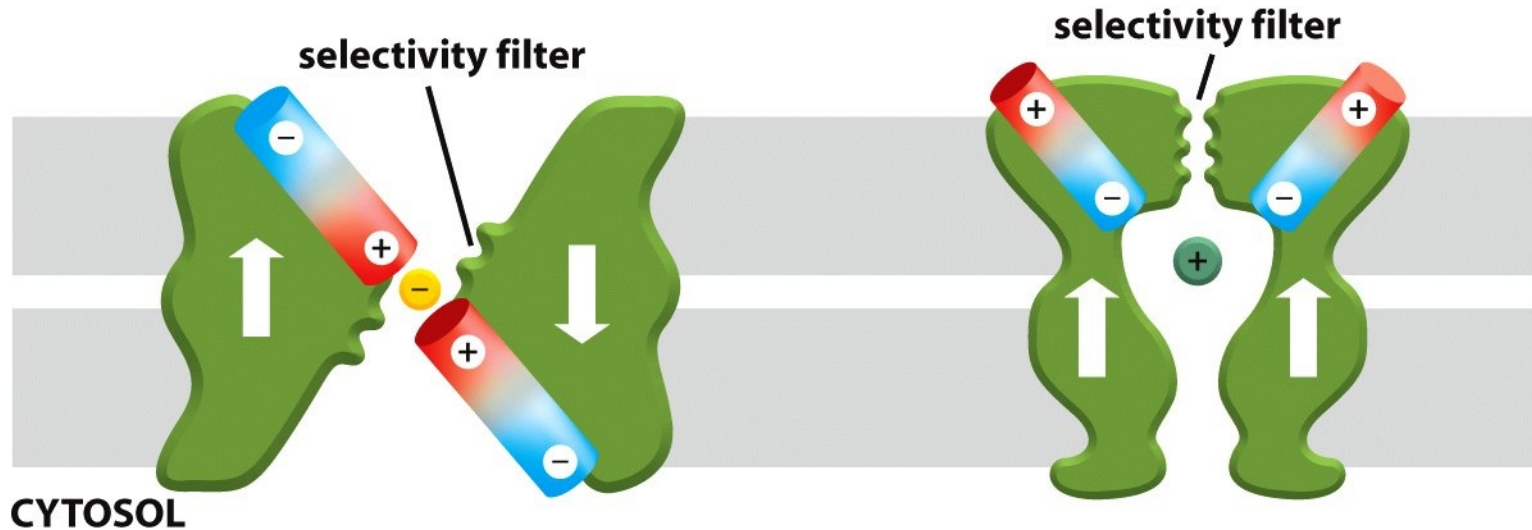
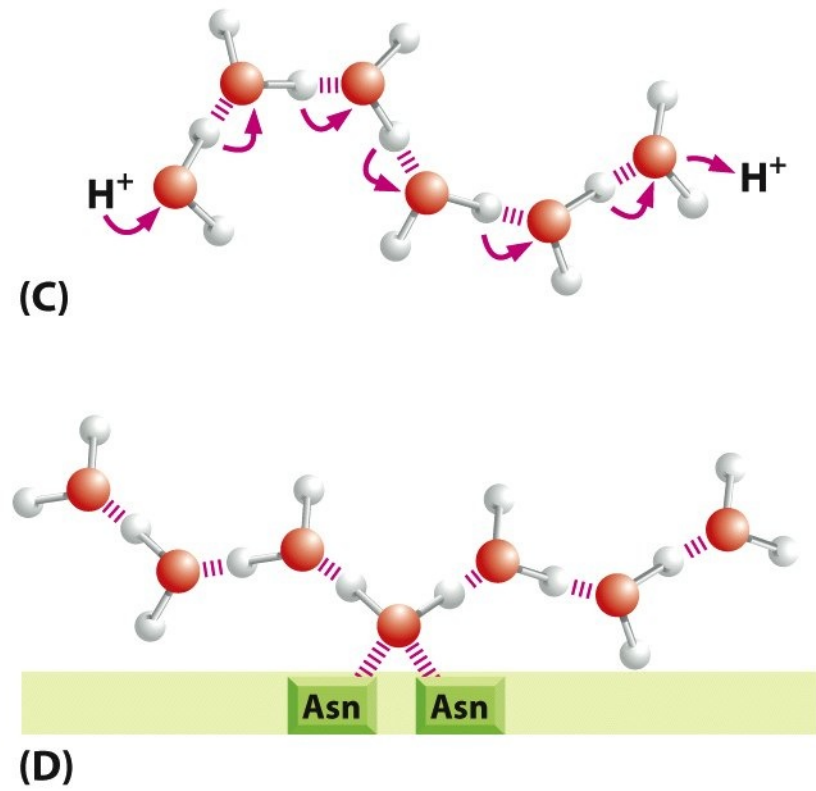
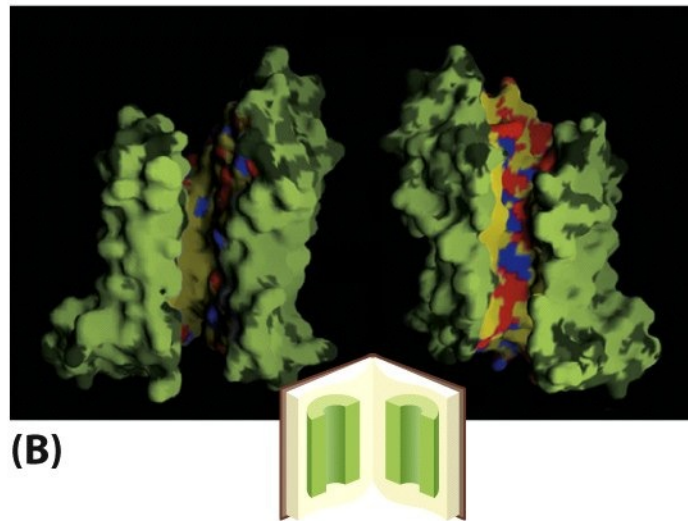
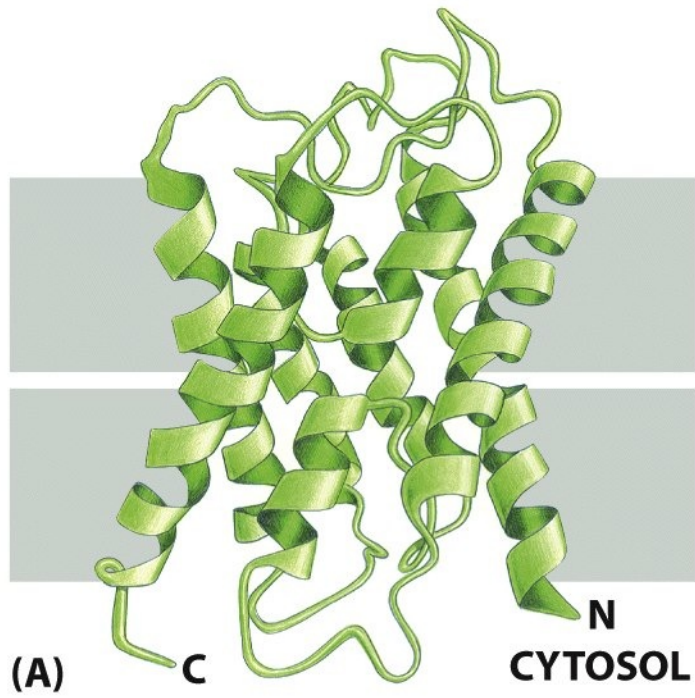


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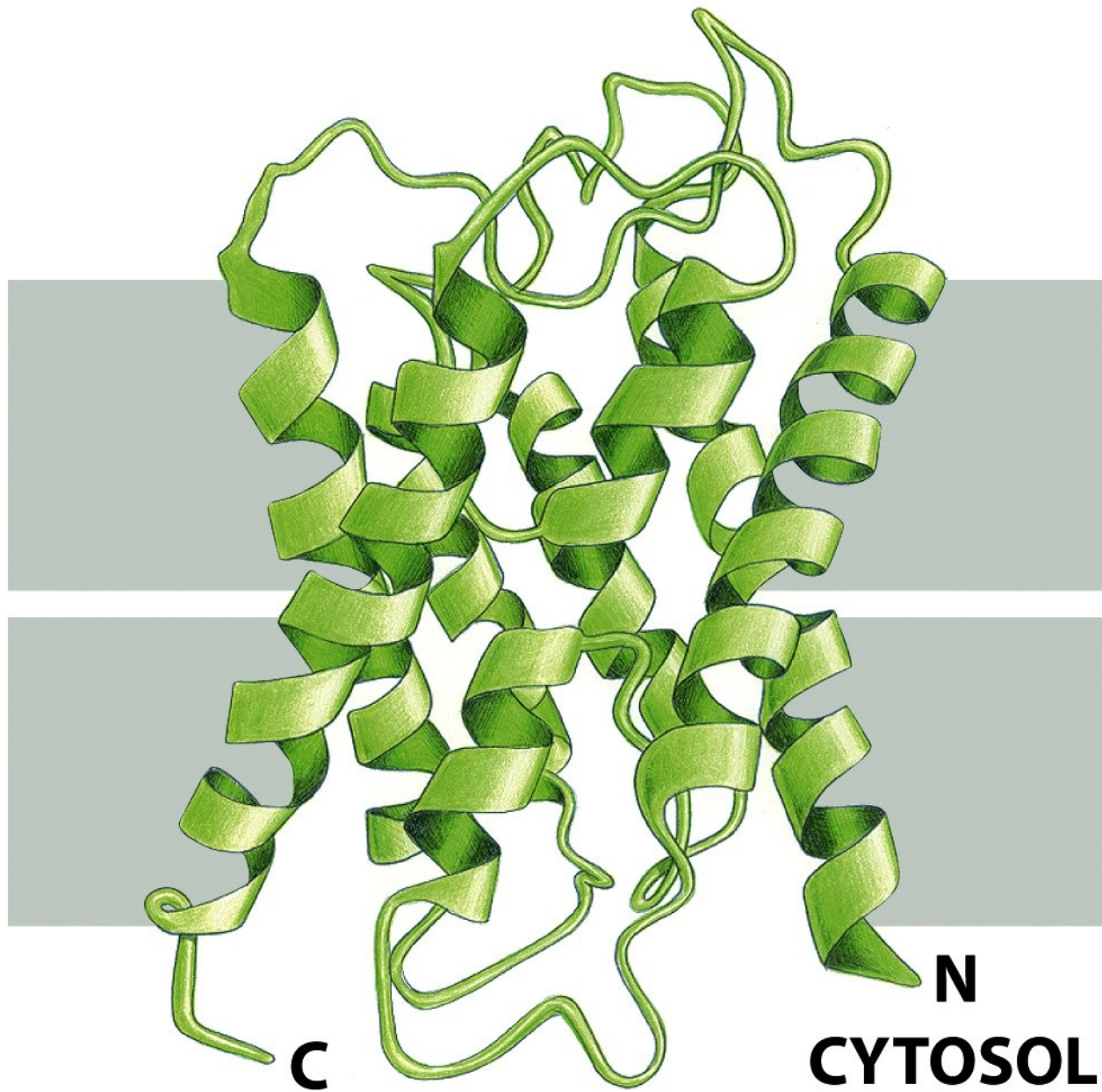


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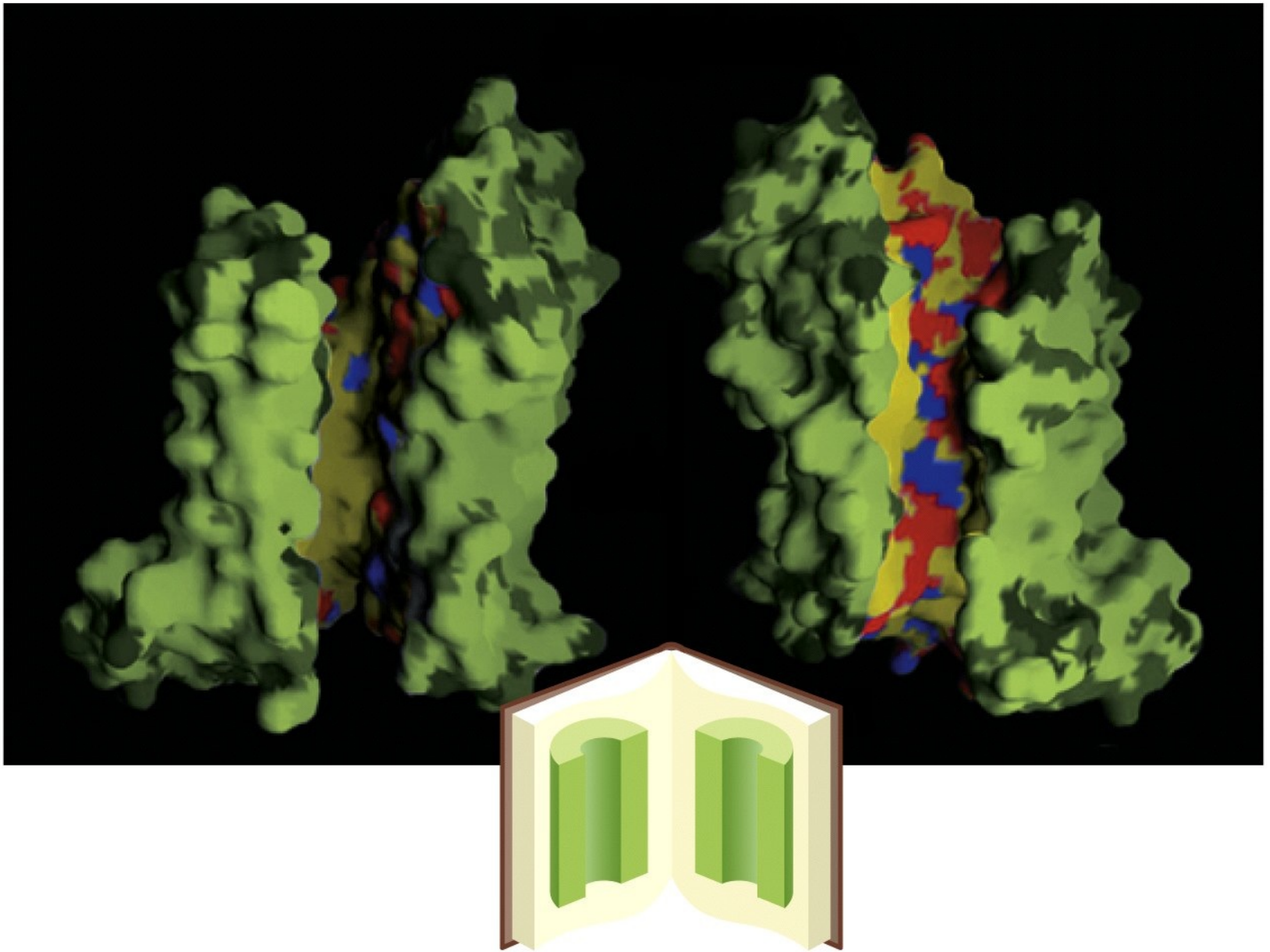
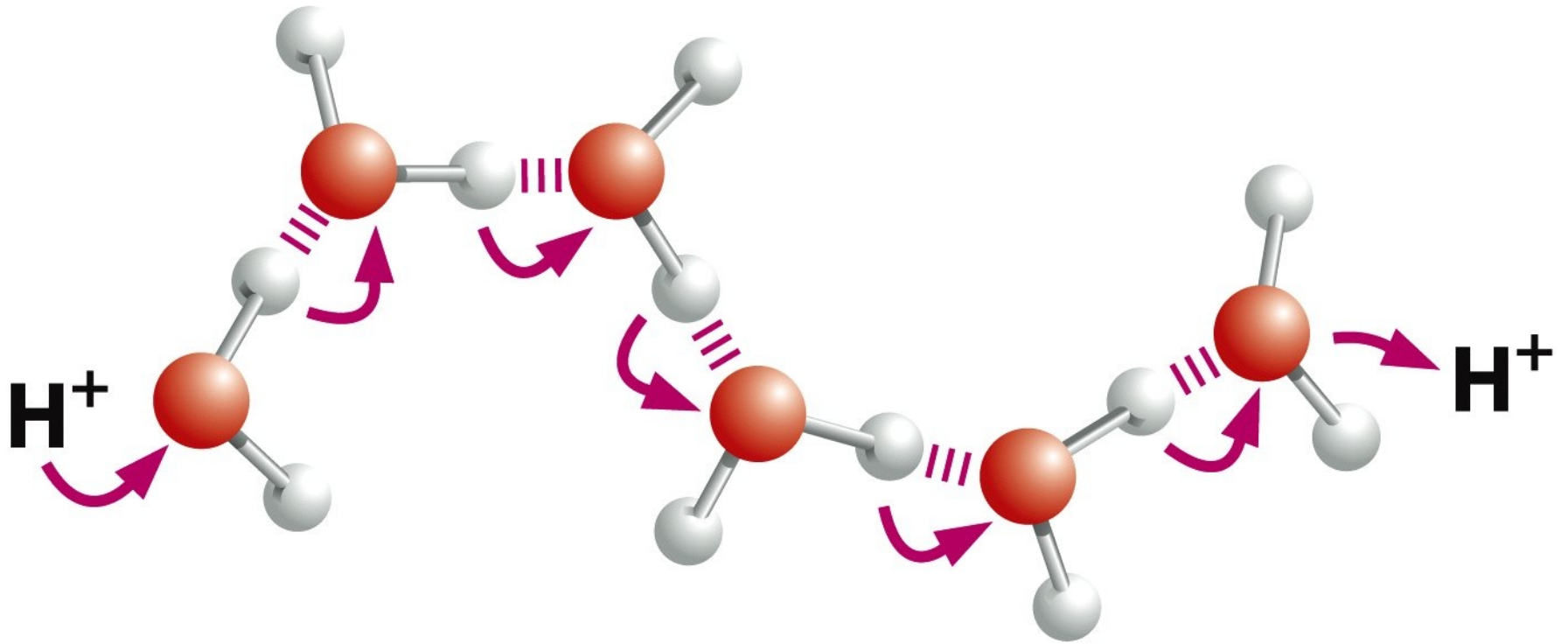


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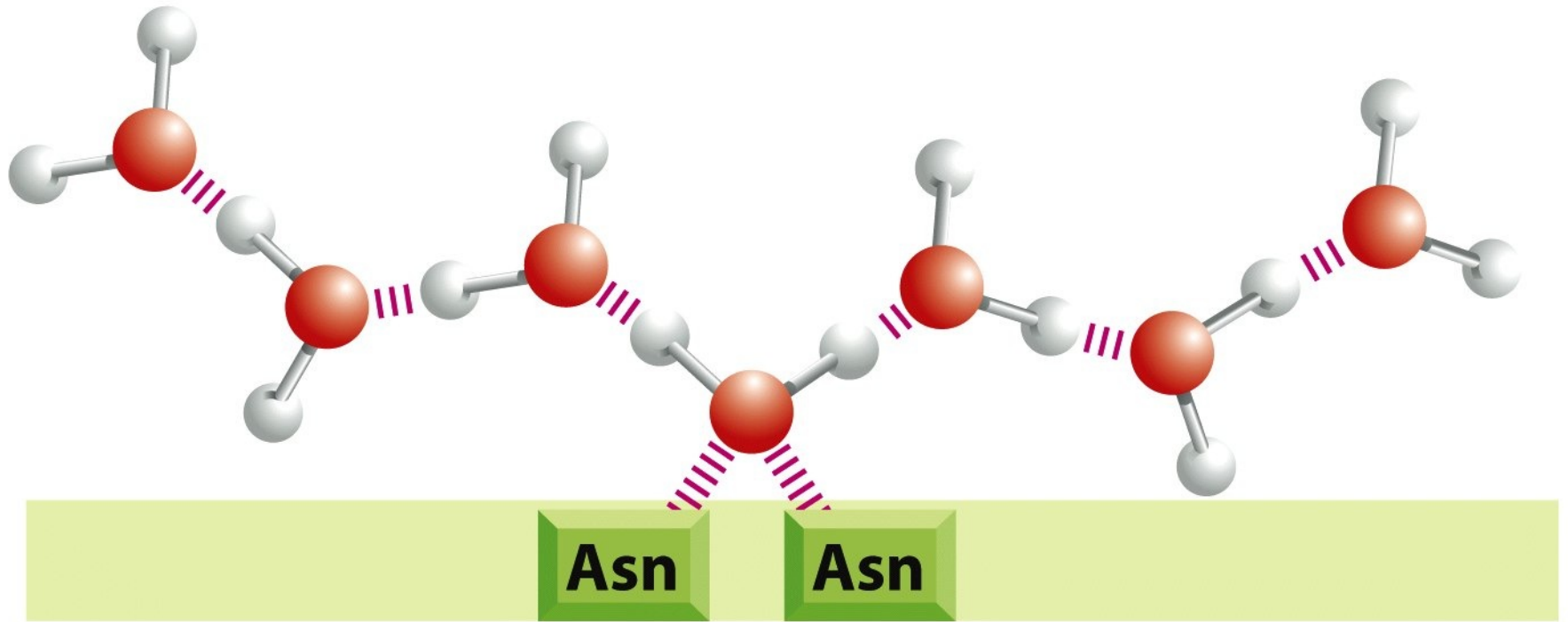


Figure 11-27d *Molecular Biology of the Cell* (© Garland Science 2008)

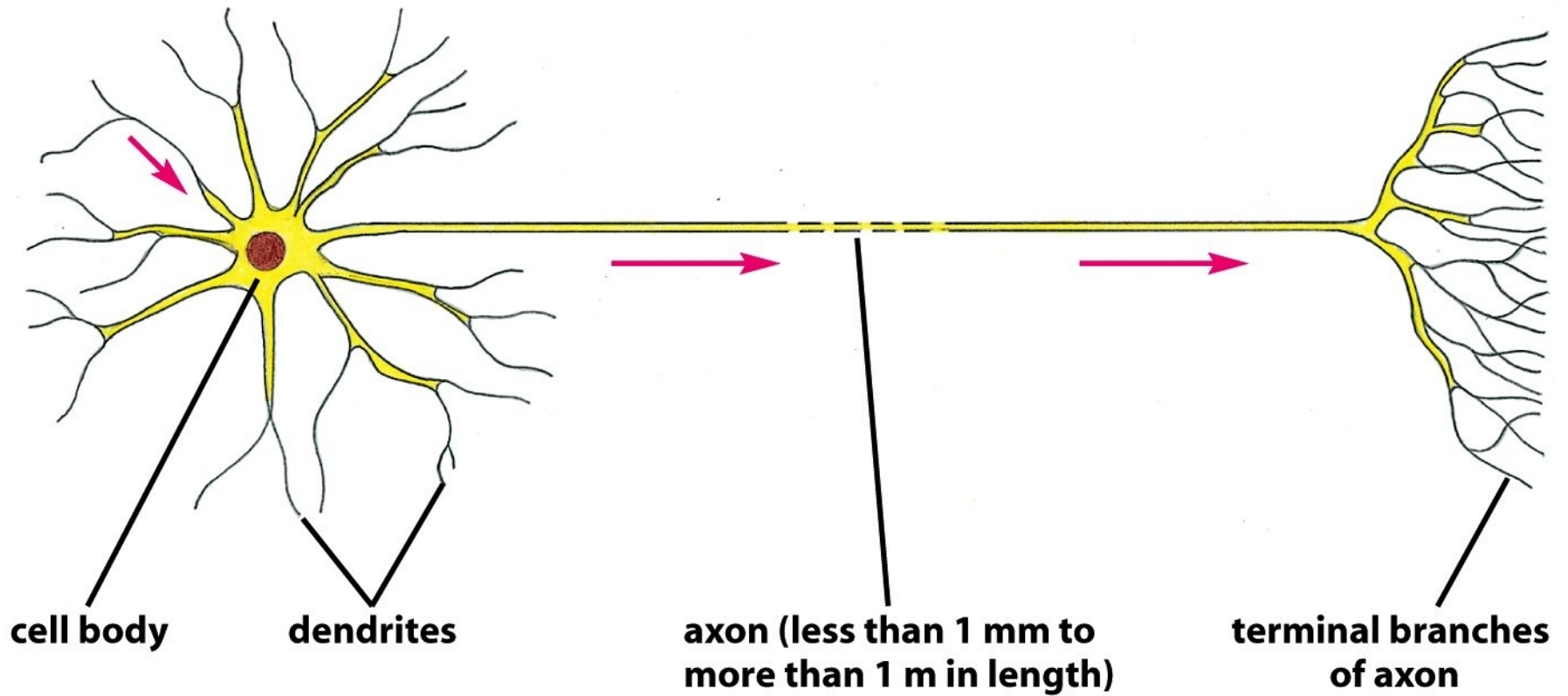


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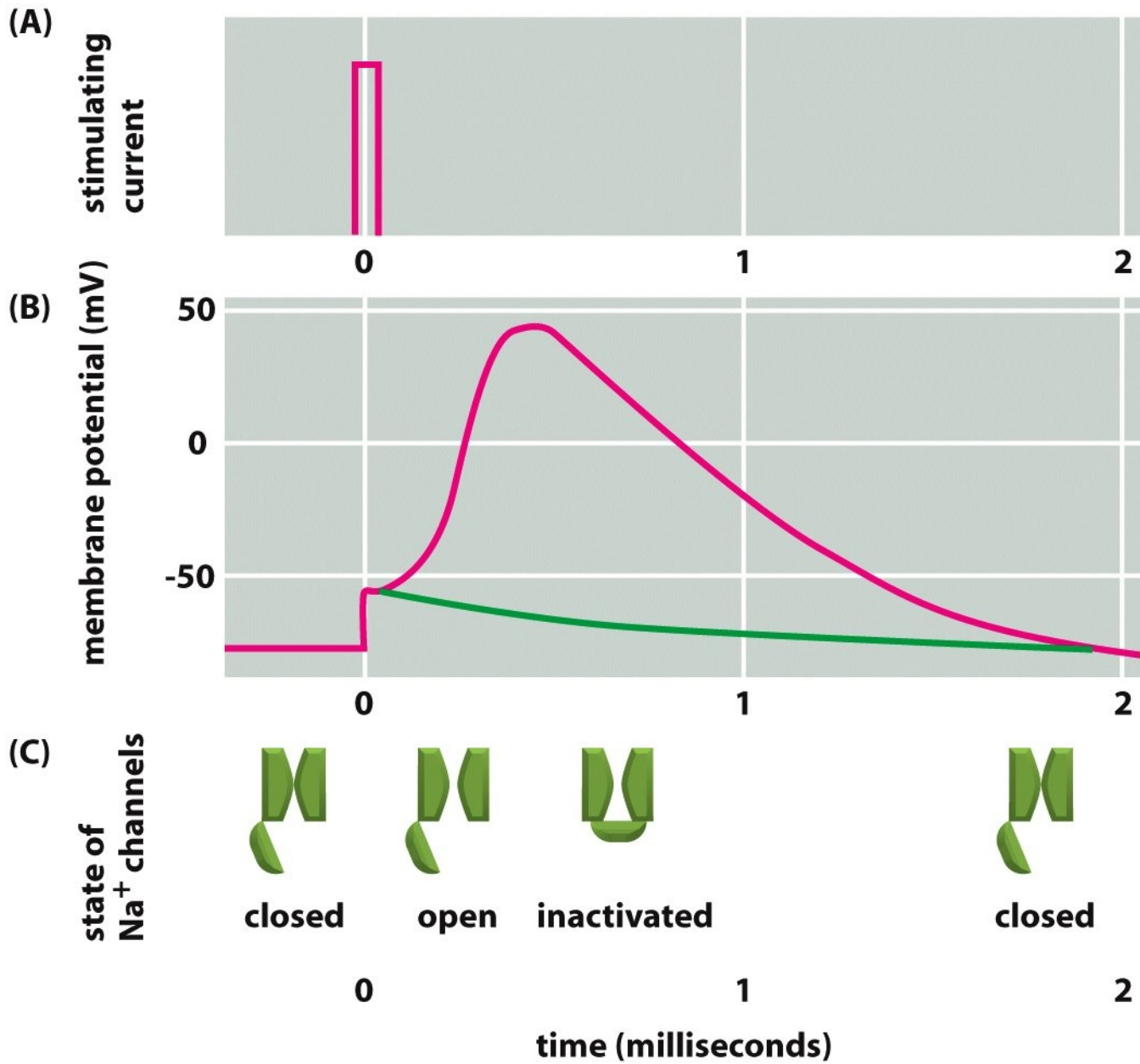


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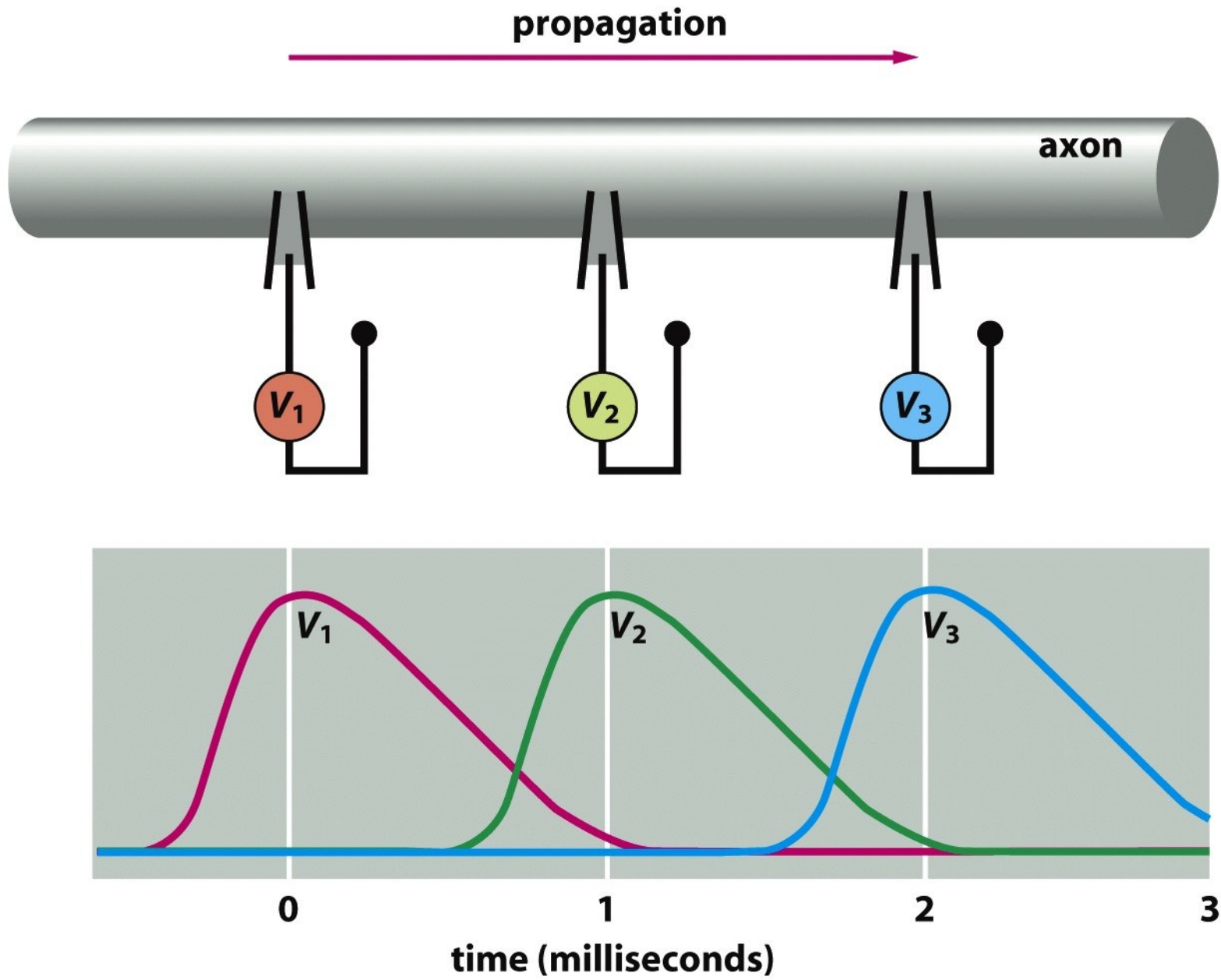
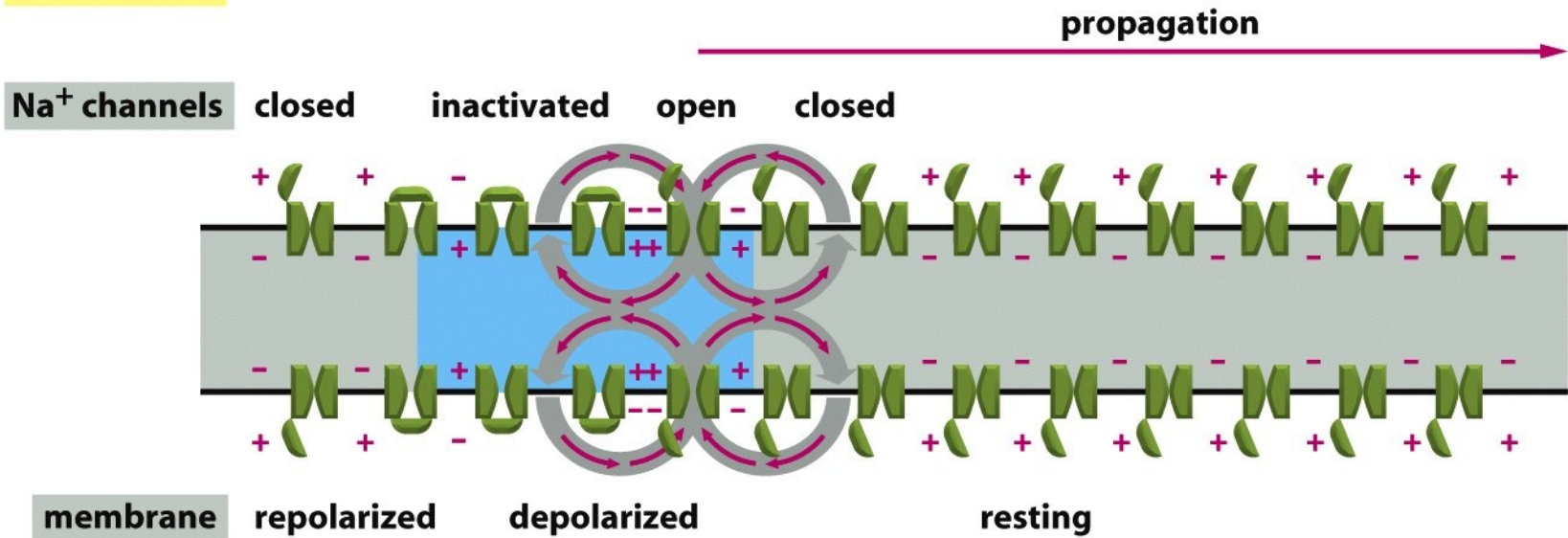


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view at $t = 0$



view at $t = 1$ millisecond

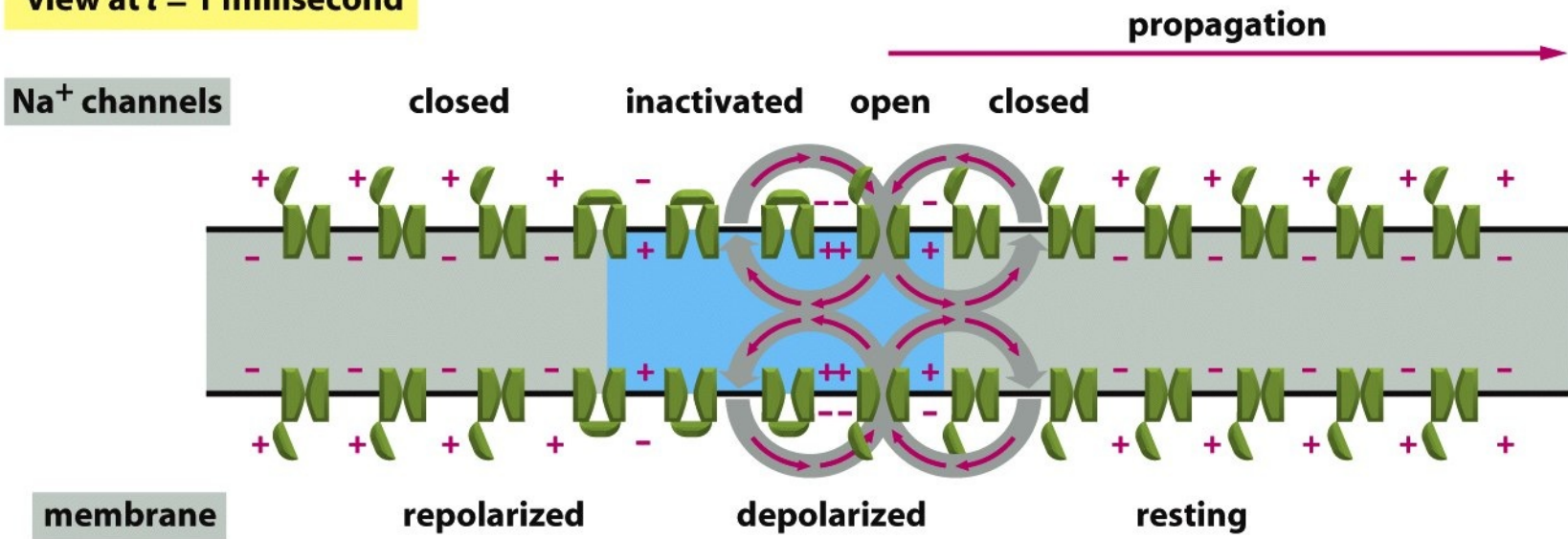


Figure 11-30b *Molecular Biology of the Cell* (© Garland Science 2008)

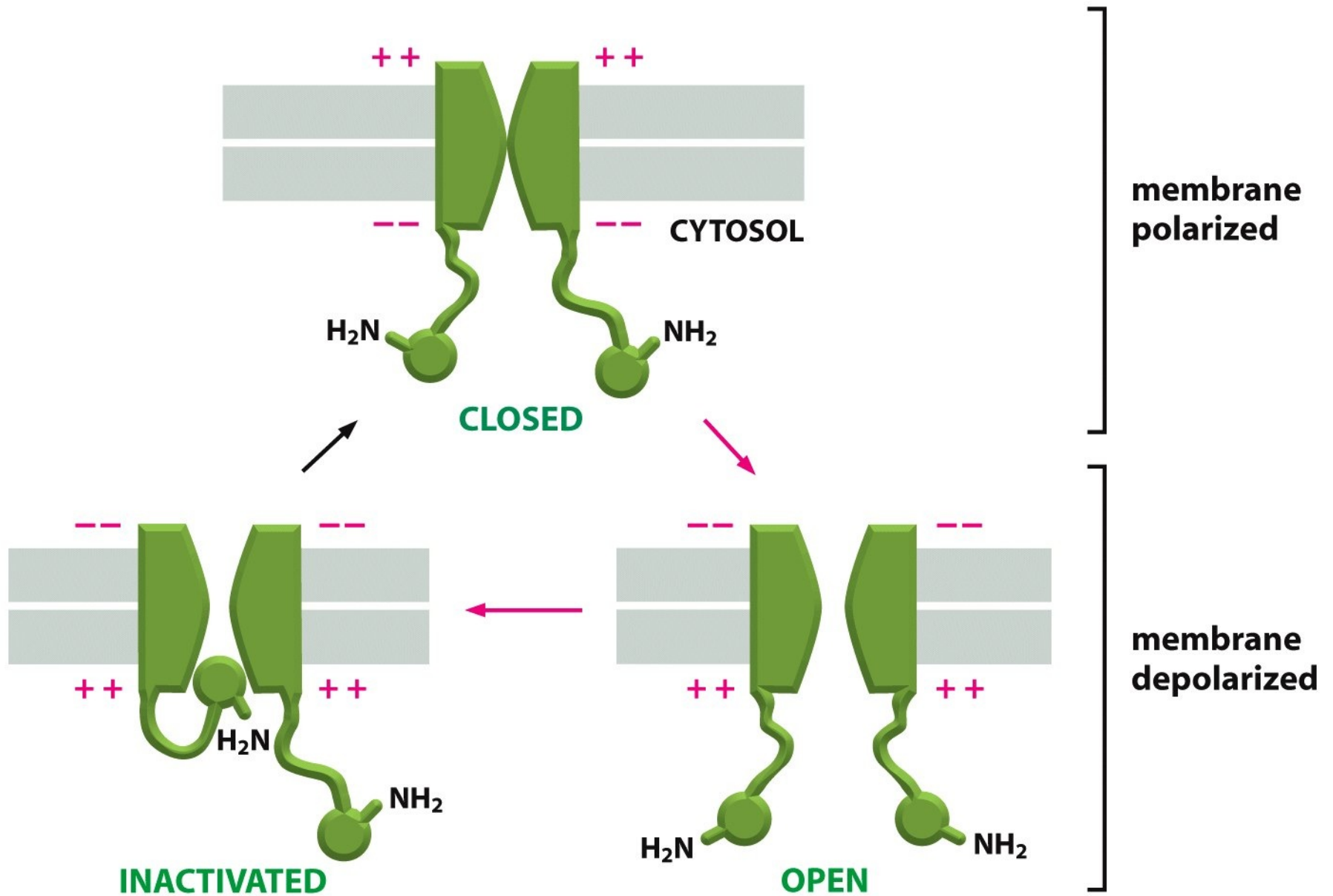


Figure 11-31 *Molecular Biology of the Cell* (© Garland Science 2008)