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*Cover picture:* The  $\text{Na,K-ATPase}$  or  $3 \text{ Na}^+ / 2 \text{ K}^+$  pump cycles through four stages, with interlocking alternations of conformation ( $\text{E}_1/\text{E}_2$ ) and of phosphorylation/dephosphorylation and ion binding/occlusion and deocclusion/release reactions. The major current-carrying step,  $\text{Na}^+$  deocclusion/release (forward) or rebinding/reocclusion (reverse), gives backward-running pumps an S-shaped voltage dependence whose midpoint is determined by  $[\text{Na}^+]$ . See related article by De Weer, P., D.C. Gadsby, and R.F. Rakowski, in this issue, pp. 315–328.

<sup>Ⓞ</sup>The online version of this article contains supplemental material.