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*Cover picture*: Ion binding sites in the NMDA receptor channel inferred from the kinetics of Mg<sup>2+</sup> blockade. There are two external sites that bind Na<sup>+</sup> or K<sup>+</sup>: one Mg<sup>2+</sup>-selective site, and one site near the internal entrance that specifically binds K<sup>+</sup>. Occupancy of the monovalent cation sites influences the kinetics and apparent voltage dependence of Mg<sup>2+</sup> blockade. See related article by Zhu, Y., and A. Auerbach, in this issue, pp. 287–297.