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Cover picture: A computer-aided three-dimensional reconstruction, from serial thin sections, of a newt pneumocyte chromosome fixed immediately after initiating poleward movement on the forming spindle. The chromosome is shaded blue, the kinetochore is orange, and the single microtubule is white. Our finding that poleward movement of the attaching kinetochore occurs along the surface of a single microtubule is dramatically illustrated in this aesthetic reconstruction. See related article in this issue by Reider and Alexander, pp. 81–95.