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Cover: *Naegleria gruberi* is a single-celled eukaryote renowned for its ability to 'transform' from an amoeba to a flagellate. Fritz-Laylin and Cande have taken advantage of the unique biology of *Naegleria* to identify novel centriole and flagella proteins that were probably present in the eukaryotic ancestor. Here, a *Naegleria* amoeba and flagellate are illustrated as forming the Yin (microtubule-based flagellate) and Yang (actin-based amoeba) of cellular motility. Design and artwork by Benjamin O'Neil Cowden. See article by L. K. Fritz-Laylin and W. Z. Cande (pp. 4024-4031).

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