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Cover picture: Actin polymerization transients induced by chemotactic stimulation of Dictyostelium ameba are terminated by entry of capping protein into the cytoskeleton. A single multinucleate cell has been stimulated with the chemoattractant 2' deoxy-cAMP, extracted with Triton X-100, and stained with rhodamine-phalloidin to visualize F-actin (red) and with antibodies against capping protein (green). The bottom panel shows models for the origin of free barbed ends after chemotactic stimulation: (A) uncapping, (B) severing, and (C) de novo nucleation. Capping protein is represented by green circles, F-actin by red lines, and newly polymerized F-actin by red hatched lines. (Images prepared with the assistance of M. Cammer.) See related article in this issue by Eddy et al., 1243–1253, for details on which models apply stimulation.

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