The actin cytoskeleton of a CAD neuroblastoma cell imaged by three-dimensional structured illumination microscopy (3D-SIM). After instantaneous elimination of cofilin activity by chromophore-assisted laser inactivation (CALI), the actin network of the lamellipodium immediately increased in size, with many individual filaments lengthening. This result demonstrates cofilin’s role in actin filament disassembly in lamellipodia. See the article by Vitriol et al. on p. 2238 of this issue of *MBoC*. (Image: Eric Vitriol, Emory University)