ON THE COVER
Sparkes et al. (pages 3937–3949) use a novel analytical tool to investigate the relative roles of actin, microtubules, myosin, and Golgi bodies on the form and movement of the endoplasmic reticulum (ER) in tobacco leaf epidermal cells. The images show the persistency of microtubules (magenta, top two panels) or cisternae (magenta, bottom two panels) over 80 s of examination. The left panels show all tubules and cisternal structures; the right panels show only those tubules or cisternae large enough and persistent enough for counting. Cyan in all panels shows an ER marker linked to green fluorescent protein. The authors conclude that it is the actin myofilaments and, to some extent, certain myosins, and not microtubules, that drive changes in the form of the ER network and directionality of flow within the ER membrane.

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