ON THE COVER

In animals, members of the ORBIT/MAST/CLASP family of microtubule-associated proteins associate with the plus ends of microtubules. Known functions include promoting the addition of tubulin subunits into attached kinetochore fibers during mitosis and stabilizing microtubules in the vicinity of the plasma membrane during interphase. Ambrose et al. (pages 2763–2775) show that the CLASP ortholog in plant cells localizes to microtubules at all stages of the cell cycle and shows enrichment at the growing plus ends. CLASP most likely contributes to cell division, cell expansion, organ morphology, and axial extension in plants through its role in stabilizing microtubules. The cover image highlights microtubule arrays at key stages of the cell cycle in epidermal cells of an Arabidopsis root tip. Ambrose et al. report on the consequences of knocking out CLASP at each of these stages.

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