ON THE COVER

Very long chain fatty acids (VLCFAs) are essential for many aspects of plant development. Roudier et al. (pages 364–375) show that the immunophilin PASTICCINO1 (PAS1) is required for VLCFA synthesis in the endoplasmic reticulum. Impairment of PAS1 function results in defective lateral root formation associated with local alteration of polar auxin distribution. VLCFA reduction causes mis-targeting of the auxin efflux carrier PIN FORMED 1 (PIN1) but not the auxin influx carrier AUX1. The cover displays the expression of pAUX1:AUX1-YFP in an Arabidopsis wild-type background during lateral root outgrowth (green) from the primary root (red). This work shows that VLCFAs are essential for polar auxin transport and tissue patterning during plant development.

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