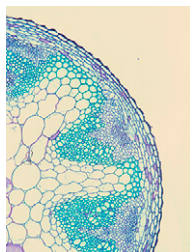


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ON THE COVER



Xylem and phloem are tissues that are essential for the movement of water, nutrients, and photosynthates in vascular plants. They arise on opposite sides of a meristem referred to as the procambium. Smit et al. (pages 319-335) used network and transcriptomic approaches to uncover how vascular organization is regulated by a receptor, PXY, and its ligand, CLE41. They show that CLE41-PXY controls expression of three transcription factors, LBD4, TMO6, and WOX14, which regulate the boundary between the procambium and phloem. The cover image shows a transverse section through an *Arabidopsis* stem overexpressing *CLE41* that exhibits changes to normal vascular organization. Photo by Peter Etchells.

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