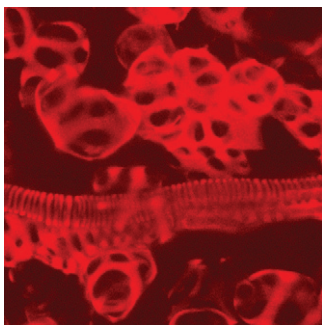


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ON THE COVER



Secondary walls are the major constituent of wood, the most abundant biomass produced by land plants. Dissecting the molecular mechanisms underlying secondary wall biosynthesis during wood formation is an important goal in plant science. Previous studies have discovered that the secondary wall-associated transcription factor SND1 and its close homologs, NST1, NST2, VND6, and VND7, are master switches activating the developmental program of secondary wall biosynthesis. Zhong et al. (pages 2763–2782) show that SND1 together with 11 SND1-regulated downstream targets comprise a transcriptional network involved in regulating secondary wall biosynthesis in fibers. They further demonstrate that NST1, NST2, VND6, and VND7 are functional homologs of SND1 that regulate the same downstream targets in different secondary wall-containing cell types in *Arabidopsis*. The cover image shows ectopic secondary wall deposition in mesophyll cells of *Arabidopsis* leaves ectopically expressing SND1.

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