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On the Cover: The number of stem cells in the shoot and floral meristem is controlled by two antagonistic components, a stem cell-promoting WUS transcription factor and a stem cell-restricting CLV3-CLV1/CLV2 ligand-receptor complex. Mutation of *WUS* leads to termination of shoot apical meristem, whereas mutation of any of the *CLV* genes, such as the *clv3* mutant shown on the cover, leads to production of extra flowers and floral organs. Previous studies have shown that CLV3 encodes a putative peptide ligand, but the exact form in which CLV3 executes its function remains unknown. In this issue, Fiers et al. (pp. 1284–1292) demonstrate through a deletion analysis that the conserved 14-amino acid CLE motif located near the C terminus of CLV3 acts independent of its adjacent sequences to control the stem cell population in Arabidopsis. Synthetic peptide corresponding to the CLE motif is able to restrict both the *WUS* expression domain and the size of the shoot apical meristem, suggesting that the CLE motif is the functional cue of CLV3. Cover design by Martijn Fiers and Chun-Ming Liu.

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^[W] Indicates Web-only data.

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