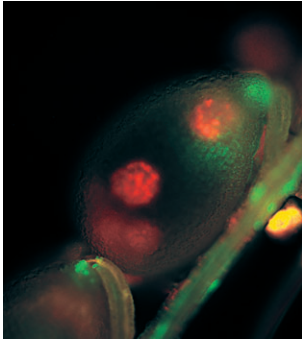
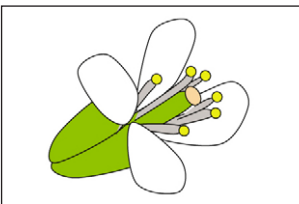


# Development



**Cover:** An *Arabidopsis thaliana* seed lacking maternal Polycomb activity at 7 days after pollination. Red nuclei indicate expression of the *Arabidopsis* formin homologue AtFH5 in the ectopic chalazal cysts that are characteristic of Polycomb mutant seed endosperm. **See Research article by Fitz Gerald et al. on p. 3399.**



In flowering plants, structures known as floral meristems harbour the founder cells from which flowers form. Liu et al. review recent insights into the regulatory networks that control floral meristem specification and discuss their conservation across plant species. **See Review on p. 3379.**

## REVIEW

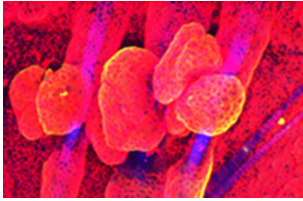
- 3379** Coming into bloom: the specification of floral meristems  
Liu, C., Thong, Z. and Yu, H.

## RESEARCH REPORTS

- 3393** Spindle alignment is achieved without rotation after the first cell cycle in *Drosophila* embryonic neuroblasts  
Rebollo, E., Roldán, M. and Gonzalez, C.
- 3399** Polycomb group-dependent imprinting of the actin regulator *AtFH5* regulates morphogenesis in *Arabidopsis thaliana*  
Fitz Gerald, J. N., Poh, S. H. and Berger, F.

## RESEARCH ARTICLES

- 3405** Developmental switch in NF- $\kappa$ B signalling required for neurite growth  
Gavaldà, N., Gutierrez, H. and Davies, A. M.
- 3413** *H19* acts as a trans regulator of the imprinted gene network controlling growth in mice  
Gabory, A., Ripoche, M. A., Le Digarcher, A., Watrin, F., Ziyat, A., Forné, T., Jammes, H., Ainscough, J. F. X., Surani, M. A., Journot, L. and Dandolo, L.
- 3423** Akt-dependent Pp2a activity is required for epidermal barrier formation during late embryonic development  
O'Shaughnessy, R. F. L., Welti, J. C., Sully, K. and Byrne, C.
- 3433** Lineage-specific cell death in postembryonic brain development of *Drosophila*  
Kumar, A., Bello, B. and Reichert, H.
- 3443** A gene network for long-day flowering activates *RFT1* encoding a mobile flowering signal in rice  
Komiya, R., Yokoi, S. and Shimamoto, K.
- 3451** Smcl is required for phosphorylation of RNA polymerase II and affects 3'-end processing of RNA at the midblastula transition in *Xenopus*  
Collart, C., Ramis, J. M., Down, T. A. and Smith, J. C.
- 3463** Convergent extension movements in growth plate chondrocytes require gpi-anchored cell surface proteins  
Ahrens, M. J., Li, Y., Jiang, H. and Dudley, A. T.
- 3475** Dendrite branching and self-avoidance are controlled by Turtle, a conserved IgSF protein in *Drosophila*  
Long, H., Ou, Y., Rao, Y. and van Meyel, D. J.
- 3485** Early lineage specification of long-lived germline precursors in the colonial ascidian *Botryllus schlosseri*  
Brown, F. D., Tiozzo, S., Roux, M. M., Ishizuka, K., Swalla, B. J. and De Tomaso, A. W.
- 3495** Sonic hedgehog-dependent synthesis of laminin  $\alpha$ 1 controls basement membrane assembly in the myotome  
Anderson, C., Thorsteinsdóttir, S. and Borycki, A. G.



Tail epidermal whole-mount from an adult mouse that overexpresses the intercellular adhesion molecule nectin-like molecule 2 (Necl2), immunolabelled for keratin-14 (green) and Necl2 (red), and with DAPI-labelled nuclei (blue), from a study that shows that Necl2 regulates epidermal stem cell location and proliferation. **See Research article by Giangreco et al. on p. 3505.**

**3505** Necl2 regulates epidermal adhesion and wound repair

**Giangreco, A., Jensen, K. B., Takai, Y., Miyoshi, J. and Watt, F. M.**

**3515** Patched 1 is a crucial determinant of asymmetry and digit number in the vertebrate limb

**Butterfield, N. C., Metzis, V., McGlinn, E., Bruce, S. J., Wainwright, B. J. and Wicking, C.**