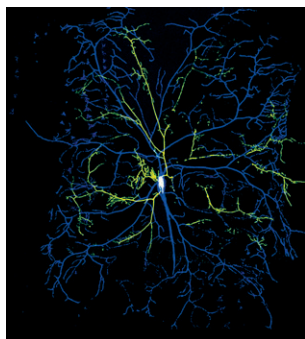


# Development



**Cover:** Superimposed dendritic arbors of class IV ddaC neurons from a wild-type fly (blue) and a *preI* loss-of-function mutant (green). In contrast to the complicated and expansive arbor of the wild-type neuron, that of the *preI* mutant neuron is simplified and major branches are broken. See Research article by Tsubouchi et al. on p. 3757.

## MEETING REVIEW

- 3691** TGF $\beta$  family signaling: novel insights in development and disease  
Wharton, K. and Derynck, R.

## REVIEWS

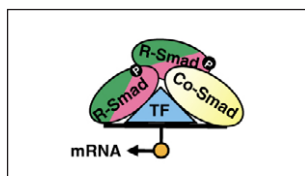
- 3699** The regulation of TGF $\beta$  signal transduction  
Moustakas, A. and Heldin, C.-H.
- 3715** The extracellular regulation of bone morphogenetic protein signaling  
Umulis, D., O'Connor, M. B. and Blair, S. S.
- 3729** Informatics approaches to understanding TGF $\beta$  pathway regulation  
Kahlem, P. and Newfeld, S. J.

## RESEARCH REPORT

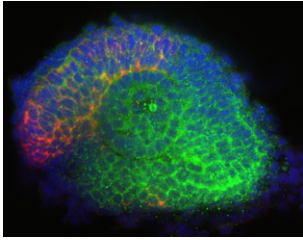
- 3741** The Id2<sup>+</sup> distal tip lung epithelium contains individual multipotent embryonic progenitor cells  
Rawlins, E. L., Clark, C. P., Xue, Y. and Hogan, B. L. M.

## RESEARCH ARTICLES

- 3747** Cell competition, growth and size control in the *Drosophila* wing imaginal disc  
Martín, F. A., Herrera, S. C. and Morata, G.
- 3757** Mitochondrial protein PreI-like is required for development of dendritic arbors and prevents their regression in the *Drosophila* sensory nervous system  
Tsubouchi, A., Tsuyama, T., Fujioka, M., Kohda, H., Okamoto-Furuta, K., Aigaki, T. and Uemura, T.
- 3767** Conserved regulatory sequences in *Atoh7* mediate non-conserved regulatory responses in retina ontogenesis  
Skowronska-Krawczyk, D., Chiodini, F., Ebeling, M., Alliod, C., Kundzewicz, A., Castro, D., Ballivet, M., Guillemot, F., Matter-Sadzinski, L. and Matter, J.-M.
- 3779** A BMP-*Shh* negative-feedback loop restricts *Shh* expression during limb development  
Bastida, M. F., Sheth, R. and Ros, M. A.
- 3791** Zebrafish *zic2a* patterns the forebrain through modulation of Hedgehog-activated gene expression  
Sanek, N. A., Taylor, A. A., Nyholm, M. K. and Grinblat, Y.
- 3801** Wnt-Ror signaling to SIA and SIB neurons directs anterior axon guidance and nerve ring placement in *C. elegans*  
Kennerdell, J. R., Fetter, R. D. and Bargmann, C. I.
- 3811** The entire zebrafish blastula-gastrula margin acts as an organizer dependent on the ratio of Nodal to BMP activity  
Fauny, J.-D., Thisse, B. and Thisse, C.
- 3821** The establishment of sexual identity in the *Drosophila* germline  
Casper, A. L. and Van Doren, M.



In this issue, a Minifocus highlights recent advances in our understanding of TGF $\beta$  signalling, from insights into its intra- and extracellular regulation, to ways in which computational approaches can stimulate progress in the field. See Meeting review on p. 3691 and Reviews on p. 3699, p. 3715 and p. 3729.



Expression of *pax6a* (green) and of GFP-tagged *cldnb* (red), with DAPI-labelled nuclei (blue), in a prim-5 stage embryonic zebrafish retina morphant for the transcription factor *zic2a*, from a study that uncovers a role for Zic2a in forebrain patterning through modulating Hedgehog-activated gene expression. **See Research article by Sanek et al. on p. 3791.**

- 3831** Algorithm of myogenic differentiation in higher-order organisms  
**Piran, R., Halperin, E., Guttman-Raviv, N., Keinan, E. and Reshef, R.**
- 3841** LIM homeodomain transcription factor-dependent specification of bipotential MGE progenitors into cholinergic and GABAergic striatal interneurons  
**Fragkouli, A., Verhey van Wijk, N., Lopes, R., Kessaris, N. and Pachnis, V.**