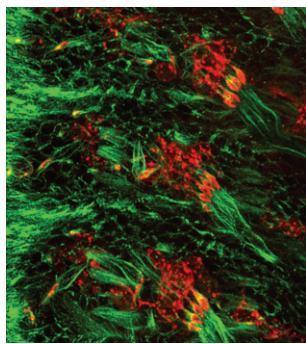


# Development



**Cover:** The cap cell of the v'ch1 chordotonal organ, and the dendrite of its neuron display aberrant orientations in *Netrin-A* mutant *Drosophila* embryos. In each of these three hemisegments, the cap cell (stained green near middle of field) and its associated dendrite (stained red) point ventrally or anteriorly, rather than dorsally. See Research article by Mrkusich et al. on p. 2227.

## SPOTLIGHT

- 2075 An interview with Alex Joyner and Liz Robertson: *Development* editors at the helm of developmental biology societies  
**Amsen, E.**

## REVIEW

- 2079 Mechanism and evolution of cytosolic Hedgehog signal transduction  
**Wilson, C. W. and Chuang, P.-T.**

## DEVELOPMENT AND STEM CELLS

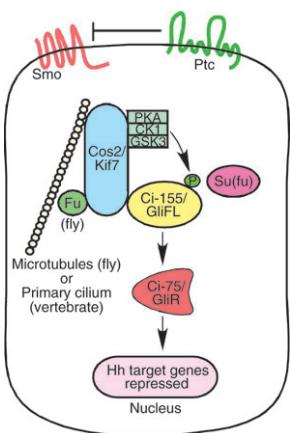
- 2095 Distinct functions of BMP4 during different stages of mouse ES cell neural commitment  
**Zhang, K., Li, L., Huang, C., Shen, C., Tan, F., Xia, C., Liu, P., Rossant, J. and Jing, N.**
- 2107 The zebrafish *flotte lotte* mutant reveals that the local retinal environment promotes the differentiation of proliferating precursors emerging from their stem cell niche  
**Cerveny, K. L., Cavodeassi, F., Turner, K. J., de Jong-Curtain, T. A., Heath, J. K. and Wilson, S. W.**
- 2117 Specific roles of Target of rapamycin in the control of stem cells and their progeny in the *Drosophila* ovary  
**LaFever, L., Feoktistov, A., Hsu, H.-J. and Drummond-Barbosa, D.**

## RESEARCH REPORTS

- 2127 Control of oligodendroglial cell number by the miR-17-92 cluster  
**Budde, H., Schmitt, S., Fitzner, D., Opitz, L., Salinas-Riester, G. and Simons, M.**
- 2133 MCAK regulates chromosome alignment but is not necessary for preventing aneuploidy in mouse oocyte meiosis I  
**Illingworth, C., Pirmadjid, N., Serhal, P., Howe, K. and FitzHarris, G.**

## RESEARCH ARTICLES

- 2139 *Drosophila* Tey represses transcription of the repulsive cue Toll and generates neuromuscular target specificity  
**Inaki, M., Shinza-Kameda, M., Ismat, A., Frasch, M. and Nose, A.**
- 2147 CARM1 is required for proper control of proliferation and differentiation of pulmonary epithelial cells  
**O'Brien, K. B., Alberich-Jordà, M., Yadav, N., Kocher, O., DiRuscio, A., Ebralidze, A., Levantini, E., Sng, N. J. L., Bhasin, M., Caron, T., Kim, D., Steidl, U., Huang, G., Halmos, B., Rodig, S. J., Bedford, M. T., Tenen, D. G. and Kobayashi, S.**
- 2157 *Drosophila acinus* encodes a novel regulator of endocytic and autophagic trafficking  
**Haberman, A. S., Akbar, M. A., Ray, S. and Krämer, H.**
- 2167 Mesoderm migration in *Drosophila* is a multi-step process requiring FGF signalling and integrin activity  
**McMahon, A., Reeves, G. T., Supatto, W. and Stathopoulos, A.**
- 2177 The *Drosophila* serine protease homologue Scarface regulates JNK signalling in a negative-feedback loop during epithelial morphogenesis  
**Rousset, R., Bono-Lauriol, S., Gettings, M., Suzanne, M., Spéder, P. and Noselli, S.**
- 2187 Pulsatile shear and Gja5 modulate arterial identity and remodeling events during flow-driven arteriogenesis  
**Buschmann, I., Pries, A., Styp-Rekowska, B., Hillmeister, P., Loufrani, L., Henrion, D., Shi, Y., Duelsner, A., Hoefer, I., Gatzke, N., Wang, H., Lehmann, K., Ulm, L., Ritter, Z., Hauff, P., Hlushchuk, R., Djonov, V., van Veen, T. and le Noble, F.**



The prevailing view of Hh signalling has recently been that the core events of Hh signal transduction diverge among species. Here, Wilson and Chuang review recent insights into the molecular mechanisms of cytoplasmic Hh signalling that contradict this view. See Review on p. 2079.

- 2197** *doublesex/mab3 related-1 (dmrt1)* is essential for development of anterior neural plate derivatives in *Ciona*  
**Tresser, J., Chiba, S., Veeman, M., El-Nachef, D., Newman-Smith, E., Horie, T., Tsuda, M. and Smith, W. C.**
- 2205** HB-EGF function in cardiac valve development requires interaction with heparan sulfate proteoglycans  
**Iwamoto, R., Mine, N., Kawaguchi, T., Minami, S., Saeki, K. and Mekada, E.**
- 2215** Frizzled-5, a receptor for the synaptic organizer Wnt7a, regulates activity-mediated synaptogenesis  
**Sahores, M., Gibb, A. and Salinas, P. C.**
- 2227** Netrin-guided accessory cell morphogenesis dictates the dendrite orientation and migration of a *Drosophila* sensory neuron  
**Mrkusich, E. M., Osman, Z. B., Bates, K. E., Marchingo, J. M., Duman-Scheel, M. and Whitington, P. M.**
- 2237** Nuclear pre-mRNA 3'-end processing regulates synapse and axon development in *C. elegans*  
**Van Epps, H., Dai, Y., Qi, Y., Goncharov, A. and Jin, Y.**