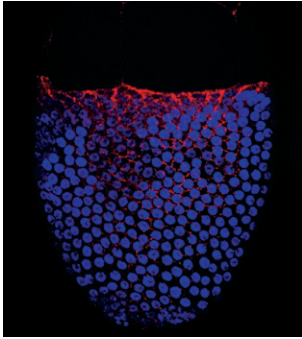


Development



Cover: At a transition during *Drosophila* oogenesis, Tramtrack69 (TTK) restricts responses to the correct locations. First, Broad (blue) is reduced in the midline T and in *ttk* cells, but apices (E-cadherin, red) are unchanged. Later, *ttk* cells respond synchronously with other cells, including apically constricting and partially re-elevating Broad with the roof cells. **See Research article by Boyle and Berg on p. 4187.**

EDITORIAL

- 4065 Hello goodbye
Smith, J.

BOOK REVIEWS

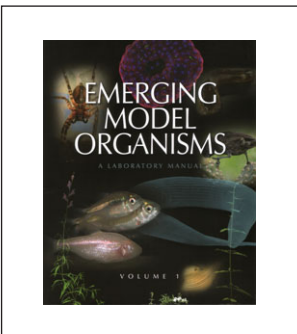
- 4067 Penetrating the black box of phylogenetic analysis
Hileman, L. C.
- 4068 Models for the future
Shimeld, S.
- 4069 Fleshing out the skeletal system
Yang, Y.
- 4070 A guide to the productive poking, prodding and injection of cells
Klymkowsky, M. W.
- 4072 An essential glycobiology resource for developmental biologists
Lin, X.
- 4074 Getting to grips with DNA methylation
Meehan, R. R.
- 4075 Helpful introduction to signal transduction
McKnight, G. S.

RESEARCH REPORTS

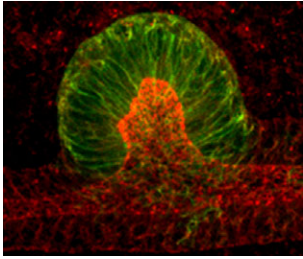
- 4077 Calmodulin-dependent protein kinase gamma 3 (CamKII γ 3) mediates the cell cycle resumption of metaphase II eggs in mouse
Chang, H.-Y., Minahan, K., Merriman, J. A. and Jones, K. T.
- 4083 Secreted Frizzled-related proteins enhance the diffusion of Wnt ligands and expand their signalling range
Mii, Y. and Taira, M.

RESEARCH ARTICLES

- 4089 Sanpodo: a context-dependent activator and inhibitor of Notch signaling during asymmetric divisions
Babaoglan, A. B., O'Connor-Giles, K. M., Mistry, H., Schickedanz, A., Wilson, B. A. and Skeath, J. B.
- 4099 Cdx2 regulation of posterior development through non-Hox targets
Savory, J. G. A., Bouchard, N., Pierre, V., Rijli, F. M., De Repentigny, Y., Kothary, R. and Lohnes, D.
- 4111 Patched regulates Smoothed trafficking using lipoprotein-derived lipids
Khaliullina, H., Panáková, D., Eugster, C., Riedel, F., Carvalho, M. and Eaton, S.
- 4123 The cadherin Fat2 is required for planar cell polarity in the *Drosophila* ovary
Viktorinová, I., König, T., Schlichting, K. and Dahmann, C.
- 4133 Effete-mediated degradation of Cyclin A is essential for the maintenance of germline stem cells in *Drosophila*
Chen, D., Wang, Q., Huang, H., Xia, L., Jiang, X., Kan, L., Sun, Q. and Chen, D.
- 4143 Atf4 regulates chondrocyte proliferation and differentiation during endochondral ossification by activating *Ihh* transcription
Wang, W., Lian, N., Li, L., Moss, H. E., Wang, W., Perrien, D. S., Elefteriou, F. and Yang, X.



In this issue, *Development's* annual Book review section covers a broad range of topics that are relevant to developmental biologists, from phylogenetic analysis to emerging model organisms, microinjection and DNA methylation. **See Book reviews on pp. 4067-4075.**



Budded rat Wolffian duct in culture, immunolabelled for the GDNF co-receptor GFR α 1 (green), the epithelial marker E-cadherin and the tight junction protein ZO-1 (both red), from a study that shows that neuropeptide Y facilitates GDNF-induced ureteric bud formation from Wolffian ducts.

See Research article by Choi et al. on p. 4213.

- 4155** N-cadherin acts in concert with Slit1-Robo2 signaling in regulating aggregation of placode-derived cranial sensory neurons
Shiau, C. E. and Bronner-Fraser, M.
- 4165** *Drosophila* laminins act as key regulators of basement membrane assembly and morphogenesis
Urbano, J. M., Torgler, C. N., Molnar, C., Tepass, U., López-Varea, A., Brown, N. H., de Celis, J. F. and Martín-Bermudo, M. D.
- 4177** The Gli2 transcriptional activator is a crucial effector for Ihh signaling in osteoblast development and cartilage vascularization
Joeng, K. S. and Long, F.
- 4187** Control in time and space: Tramtrack69 cooperates with Notch and Ecdysone to repress ectopic fate and shape changes during *Drosophila* egg chamber maturation
Boyle, M. J. and Berg, C. A.
- 4199** Repression of Wasp by JAK/STAT signalling inhibits medial actomyosin network assembly and apical cell constriction in intercalating epithelial cells
Bertet, C., Rauzi, M. and Lecuit, T.
- 4213** Neuropeptide Y functions as a facilitator of GDNF-induced budding of the Wolffian duct
Choi, Y., Tee, J. B., Gallegos, T. F., Shah, M. M., Oishi, H., Sakurai, H., Kitamura, S., Wu, W., Bush, K. T. and Nigam, S. K.

DEVELOPMENT AND DISEASE

- 4225** Indirect modulation of Shh signaling by Dlx5 affects the oral-nasal patterning of palate and rescues cleft palate in *Msx1*-null mice
Han, J., Mayo, J., Xu, X., Li, J., Bringas, P., Jr, Maas, R. L., Rubenstein, J. L. R. and Chai, Y.