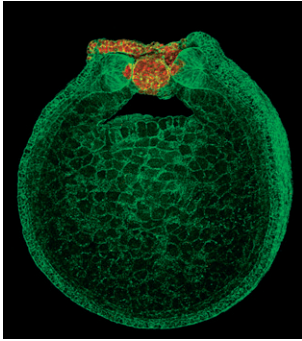
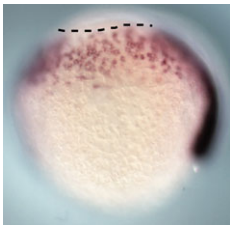


Development



Cover: Cross-section of a *Xenopus* neurula stained for F-actin (green). The cells stained red contain a morpholino oligonucleotide against N-cadherin in the neural plate. The affected neural plate cells fail to invaginate to form a neural tube owing to the loss of N-cadherin-based actin assembly in their apical cytoplasm. See Research article by Nandadasa et al. on p. 1327.



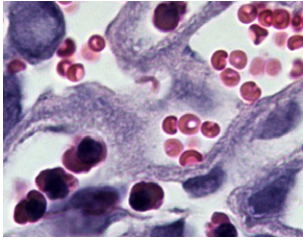
Chemokines and their receptors guide the migration of a wide variety of cells. In this review, Raz and Mahabaleshwar discuss recent insights into their roles in embryonic development, which add some novel and surprising twists to the story of chemokine action. See Review on p. 1223.

REVIEW

- 1223** Chemokine signaling in embryonic cell migration: a fisheye view
Raz, E. and Mahabaleshwar, H.

RESEARCH ARTICLES

- 1231** Lgl2 and E-cadherin act antagonistically to regulate hemidesmosome formation during epidermal development in zebrafish
Sonawane, M., Martin-Maischein, H., Schwarz, H. and Nüsslein-Volhard, C.
- 1241** Caudal-like PAL-1 directly activates the bodywall muscle module regulator *hh-1* in *C. elegans* to initiate the embryonic muscle gene regulatory network
Lei, H., Liu, J., Fukushige, T., Fire, A. and Krause, M.
- 1251** *Drosophila* Neurexin IV stabilizes neuron-glia interactions at the CNS midline by binding to Wrapper
Stork, T., Thomas, S., Rodrigues, F., Silies, M., Naffin, E., Wenderdel, S. and Klämbt, C.
- 1263** The forming limb skeleton serves as a signaling center for limb vasculature patterning via regulation of *Vegf*
Eshkar-Oren, I., Viukov, S. V., Salameh, S., Krief, S., Oh, C., Akiyama, H., Gerber, H.-P., Ferrara, N. and Zelzer, E.
- 1273** Neuronal activity and Wnt signaling act through Gsk3- β to regulate axonal integrity in mature *Drosophila* olfactory sensory neurons
Chiang, A., Priya, R., Ramaswami, M., VijayRaghavan, K. and Rodrigues, V.
- 1283** A novel role for an APC2-Diaphanous complex in regulating actin organization in *Drosophila*
Webb, R. L., Zhou, M.-N. and McCartney, B. M.
- 1295** Steel factor controls primordial germ cell survival and motility from the time of their specification in the allantois, and provides a continuous niche throughout their migration
Gu, Y., Runyan, C., Shoemaker, A., Surani, A. and Wylie, C.
- 1305** Control of convergent yolk syncytial layer nuclear movement in zebrafish
Carvalho, L., Stühmer, J., Bois, J. S., Kalaidzidis, Y., Lecaudey, V. and Heisenberg, C.-P.
- 1317** Transcription factor Gbx2 acts cell-nonautonomously to regulate the formation of lineage-restriction boundaries of the thalamus
Chen, L., Guo, Q. and Li, J. Y. H.
- 1327** N- and E-cadherins in *Xenopus* are specifically required in the neural and non-neural ectoderm, respectively, for F-actin assembly and morphogenetic movements
Nandadasa, S., Tao, Q., Menon, N. R., Heasman, J. and Wylie, C.
- 1339** Activin/Nodal signalling maintains pluripotency by controlling Nanog expression
Vallier, L., Mendjan, S., Brown, S., Chng, Z., Teo, A., Smithers, L. E., Trotter, M. W. B., Cho, C. H.-H., Martinez, A., Rugg-Gunn, P., Brons, G. and Pedersen, R. A.
- 1351** Recruitment and maintenance of tendon progenitors by TGF β signaling are essential for tendon formation
Pryce, B. A., Watson, S. S., Murchison, N. D., Staverosky, J. A., Dünker, N. and Schweitzer, R.
- 1363** *Map2k1* and *Map2k2* genes contribute to the normal development of syncytiotrophoblasts during placentation
Nadeau, V., Guillemette, S., Bélanger, L.-F., Jacob, O., Roy, S. and Charron, J.



Haematoxylin and Eosin staining of a placenta section from an E12.5 mouse, from a study that uncovers the differential functions of the mammalian ERK/MAP kinase kinases MAP2K1 and MAP2K2 in placenta development. **See Research article by Nadeau et al. on p. 1363.**

- 1375** LIM homeobox transcription factors integrate signaling events that control three-dimensional limb patterning and growth
Tzchori, I., Day, T. F., Carolan, P. J., Zhao, Y., Wassif, C. A., Li, L., Lewandoski, M., Gorivodsky, M., Love, P. E., Porter, F. D., Westphal, H. and Yang, Y.

DEVELOPMENT AND DISEASE

- 1387** Sonic hedgehog signaling regulates reciprocal epithelial-mesenchymal interactions controlling palatal outgrowth
Lan, Y. and Jiang, R.
- 1397** Erratum