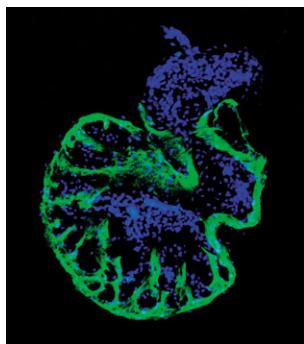


# Development



**Cover:** Transverse section through the heart of a stage 46 *Xenopus laevis* tadpole. Immunolabelling of the myocardial marker tropomyosin (green) identifies the trabeculated ventricle and outflow tract of the developing heart. Nuclei are labeled with DAPI (blue). **See Research article by Mandel et al. on p. 1919.**



The inner ear and epibranchial ganglia appear from recent studies to arise from a common precursor domain. Here, Ladher and colleagues review recent findings on the induction, morphogenesis and innervation of these sensory systems and discuss their specification in the context of their common origin. **See Review on p. 1777.**

## REVIEW

- 1777** From shared lineage to distinct functions: the development of the inner ear and epibranchial placodes  
Ladher, R. K., O'Neill, P. and Begbie, J.

## DEVELOPMENT AND STEM CELLS

- 1787** The Puf RNA-binding proteins FBF-1 and FBF-2 inhibit the expression of synaptonemal complex proteins in germline stem cells  
Merritt, C. and Seydoux, G.

## RESEARCH REPORTS

- 1799** The Groucho ortholog UNC-37 interacts with the short Groucho-like protein LSY-22 to control developmental decisions in *C. elegans*  
Flowers, E. B., Poole, R. J., Tursun, B., Bashillari, E., Pe'er, I. and Hobert, O.

- 1807** Production of Wnt4b by floor plate cells is essential for the segmental patterning of the vertebral column in medaka  
Inohaya, K., Takano, Y. and Kudo, A.

## RESEARCH ARTICLES

- 1815** Lipid phosphate phosphatase activity regulates dispersal and bilateral sorting of embryonic germ cells in *Drosophila*  
Renault, A. D., Kunwar, P. S. and Lehmann, R.

- 1825** The vacuolar ATPase is required for physiological as well as pathological activation of the Notch receptor  
Vaccari, T., Duchi, S., Cortese, K., Tacchetti, C. and Bilder, D.

- 1833** PAR-3 mediates the initial clustering and apical localization of junction and polarity proteins during *C. elegans* intestinal epithelial cell polarization  
Achilleos, A., Wehman, A. M. and Nance, J.

- 1843** Jagged-Notch signaling ensures dorsal skeletal identity in the vertebrate face  
Zuniga, E., Stellabotte, F. and Crump, J. G.

- 1853** Apparent role of *Tribolium orthodenticle* in anteroposterior blastoderm patterning largely reflects novel functions in dorsoventral axis formation and cell survival  
Kotkamp, K., Klingler, M. and Schoppmeier, M.

- 1863** Notch signaling, wt1 and foxc2 are key regulators of the podocyte gene regulatory network in *Xenopus*  
White, J. T., Zhang, B., Cerqueira, D. M., Tran, U. and Wessely, O.

- 1875** Zinc finger genes *Fezf1* and *Fezf2* control neuronal differentiation by repressing *Hes5* expression in the forebrain  
Shimizu, T., Nakazawa, M., Kani, S., Bae, Y.-K., Shimizu, T., Kageyama, R. and Hibi, M.

- 1887** The miR-143-adducin3 pathway is essential for cardiac chamber morphogenesis  
Deacon, D. C., Nevis, K. R., Cashman, T. J., Zhou, Y., Zhao, L., Washko, D., Guner-Ataman, B., Burns, C. G. and Burns, C. E.

- 1897** The basic helix-loop-helix transcription factor Nato3 controls neurogenic activity in mesencephalic floor plate cells  
Ono, Y., Nakatani, T., Minaki, Y. and Kumai, M.

- 1907** Cdk5rap2 regulates centrosome function and chromosome segregation in neuronal progenitors  
**Lizarraga, S. B., Margossian, S. P., Harris, M. H., Campagna, D. R., Han, A.-P., Blevins, S., Mudbhary, R., Barker, J. E., Walsh, C. A. and Fleming, M. D.**
- 1919** The BMP pathway acts to directly regulate *Tbx20* in the developing heart  
**Mandel, E. M., Kaltenbrun, E., Callis, T. E., Zeng, X.-X. I., Marques, S. R., Yelon, D., Wang, D.-Z. and Conlon, F. L.**