



Cover: Cross-sections of hatching stage medaka retinae from wild-type fish (left) and transgenic *rx2::caigf1r* reporter (right), which features constitutive activation of *Igf1r* in the retinal stem cell niche. Activated *Igf1r* signalling results in expansion of the retinal stem cell niche, shown by Rx2 antibody staining (magenta), as well as strong increase in neuro-retinal size, highlighted by DAPI staining (grey). See Research article by Becker et al. (dev199133).

OBITUARY

Lewis Wolpert (1929-2021)

Smith, J. C.

dev199618

REVIEWS

Diversity and robustness of bone morphogenetic protein pattern formation

Madamanchi, A., Mullins, M. C. and Umulis, D. M.

dev192344

The origin and mechanisms of smooth muscle cell development in vertebrates

Donadon, M. and Santoro, M. M.

dev197384

Self-organized cell migration across scales – from single cell movement to tissue formation

Stock, J. and Pauli, A.

dev191767

STEM CELLS AND REGENERATION

Full methylation of H3K27 by PRC2 is dispensable for initial embryoid body formation but required to maintain differentiated cell identity

Miller, S. A., Damle, M., Kim, J. and Kingston, R. E.

dev196329

Zebrafish *dazl* regulates cystogenesis and germline stem cell specification during the primordial germ cell to germline stem cell transition

Bertho, S., Clapp, M., Banisch, T. U., Bandemer, J., Raz, E. and Marlow, F. L.

dev187773

RESEARCH REPORT

Electrostatic plasma membrane targeting contributes to Dlg function in cell polarity and tumorigenesis

Lu, J., Dong, W., Tao, Y. and Hong, Y.

dev196956

RESEARCH ARTICLES

The *alx3* gene shapes the zebrafish neurocranium by regulating frontonasal neural crest cell differentiation timing

Mitchell, J. M., Sucharov, J., Pulvino, A. T., Brooks, E. P., Gillen, A. E. and Nichols, J. T.

dev197483

A lineage-specific requirement for YY1 Polycomb Group protein function in early T cell development

Assumpção, A. L. F. V., Fu, G., Singh, D. K., Lu, Z., Kuehnl, A. M., Welch, R., Ong, I. M., Wen, R. and Pan, X.

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Extensive crosstalk of G protein-coupled receptors with the Hedgehog signalling pathway

Saad, F. and Hipfner, D. R.

dev189258

Igf signaling couples retina growth with body growth by modulating progenitor cell division

Becker, C., Lust, K. and Wittbrodt, J.

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The role of Niemann–Pick type C2 in zebrafish embryonic development

Tseng, W.-C., Johnson Escauriza, A. J., Tsai-Morris, C.-H., Feldman, B., Dale, R. K., Wassif, C. A. and Porter, F. D.

dev194258

Myosin-X is dispensable for spindle morphogenesis and positioning in the mouse oocyte

Crozet, F., Da Silva, C., Verlhac, M.-H. and Terret, M.-E.

dev199364

MFN2 interacts with nuage-associated proteins and is essential for male germ cell development by controlling mRNA fate during spermatogenesis

Wang, X., Wen, Y., Zhang, J., Swanson, G., Guo, S., Cao, C., Krawetz, S. A., Zhang, Z. and Yuan, S.

dev196295

An early global role for Axin is required for correct patterning of the anterior-posterior axis in the sea urchin embryo

Sun, H., Jeff Peng, C.-fu, Wang, L., Feng, H. and Wikramanayake, A. H.

dev191197

TECHNIQUES AND RESOURCES

A single-plasmid approach for genome editing coupled with long-term lineage analysis in chick embryos

Gandhi, S., Li, Y., Tang, W., Christensen, J. B., Urrutia, H. A., Vieceli, F. M., Piacentino, M. L. and Bronner, M. E.

dev193565