Cover: Transverse section through postnatal day 0 mouse hind limb muscles showing muscle connective tissue fibroblasts that highly express the transcription factor Tcf4 (green nuclei) and surround myosin heavy chain-positive myofibres (red). Muscle connective tissue fibroblasts are an important regulator of myogenesis, regulating muscle fibre type and maturation. See Research article by Mathew et al. on p. 371.

During nervous system development, axon branching allows elaborate synaptic connections to form. Recent advances, reviewed by Daniel Gibson and Le Ma, identify how various axon branching morphologies develop and the common principles that regulate them. See Review on p. 183.

SPOTLIGHT
181 An interview with Ben Scheres Senior, K.

REVIEW
183 Developmental regulation of axon branching in the vertebrate nervous system Gibson, D. A. and Ma, L.

DEVELOPMENT AND STEM CELLS
197 Choice of random rather than imprinted X inactivation in female embryonic stem cell-derived extra-embryonic cells Murakami, K., Araki, K., Ohtsuka, S., Wakayama, T. and Niwa, H.

203 Impaired mesenchymal stem cell differentiation and osteoclastogenesis in mice deficient for Igf2-P2 transcripts Hardouin, S. N., Guo, R., Romeo, P.-H., Nagy, A. and Aubin, J. E.

215 Notch regulates numb: integration of conditional and autonomous cell fate specification Rebeiz, M., Miller, S. W. and Posakony, J. W.


237 Small micromeres contribute to the germline in the sea urchin Yajima, M. and Wessel, G. M.

RESEARCH REPORT
245 Vegetative phase change is mediated by a leaf-derived signal that represses the transcription of miR156 Yang, L., Conway, S. R. and Poethig, R. S.

RESEARCH ARTICLES

261 Vax2 regulates retinoic acid distribution and cone opsins expression in the vertebrate eye Alfano, G., Conte, I., Caramico, T., Avellino, R., Arnò, B., Pizzo, M. T., Tanimoto, N., Beck, S. C., Huber, G., Döllé, P., Seeliger, M. W. and Banfi, S.

273 FGF10 controls the patterning of the tracheal cartilage rings via Shh Sala, F. G., Del Moral, P.-M., Tiozzo, C., Al Alam, D., Warburton, D., Grikscheit, T., Veltmaat, J. M. and Bellusci, S.


317 Hindbrain patterning requires fine-tuning of early krox20 transcription by Sprouty 4
Labalette, C., Bouchoucha, Y. X., Wassef, M. A., Gongal, P. A., Le Men, J., Becker, T.,
Gilardi-Hebenstreit, P. and Charnay, P.

327 Bcl-2 proteins and autophagy regulate mitochondrial dynamics during programmed
cell death in the Drosophila ovary
Tanner, E. A., Blute, T. A., Brachmann, C. B. and McCall, K.

339 Ripply3, a Tbx1 repressor, is required for development of the pharyngeal apparatus
and its derivatives in mice
Okubo, T., Kawamura, A., Takahashi, J., Yagi, H., Morishima, M., Matsuoka, R. and
Takada, S.

349 The Drosophila Nol12 homologue viriato is a dMyc target that regulates nucleolar
architecture and is required for dMyc-stimulated cell growth
Marinho, J., Casares, F. and Pereira, P. S.

359 Calcium/calmodulin-dependent protein kinase II activity regulates the proliferative
potential of growth plate chondrocytes

371 Connective tissue fibroblasts and Tcf4 regulate myogenesis
Mathew, S. J., Hansen, J. M., Merrell, A. J., Murphy, M. M., Lawson, J. A.,
Hutcheson, D. A., Hansen, M. S., Angus-Hill, M. and Kardon, G.

385 Corrigendum