



Cover: Expression of the Ntl T-box protein (brown) in the notochord and tailbud, and *myod* and *pax2.1* gene transcripts (purple) in adaxial cells and somites (*myod*), and in the developing pronephric ducts (*pax2.1*) in a 10-somite stage zebrafish embryo. See article by Draper et al. on p. 4639.

Meeting review

Wolpert, L.

Cell boundaries: knowing who to mix with and what to shout or whisper

4497-4500

4623-4637

Review

Strutt, D.

Frizzled signalling and cell polarisation in *Drosophila* and vertebrates

4501-4513

4639-4654



Research articles

Sibilia, M., Wagner, B., Hoebertz, A., Elliott, C., Marino, S., Jochum, W. and Wagner, E. F.

Mice humanised for the EGF receptor display hypomorphic phenotypes in skin, bone and heart

4515-4525

4655-4664

Corson, L. B., Yamanaka, Y., Lai, K.-M. V. and Rossant, J.

Spatial and temporal patterns of ERK signaling during mouse embryogenesis

4527-4537

4665-4672

Blackshear, P. J., Graves, J. P., Stumpo, D. J., Cobos, I., Rubenstein, J. L. R. and Zeldin, D. C.

Graded phenotypic response to partial and complete deficiency of a brain-specific transcript variant of the winged helix transcription factor RFX4

4539-4552

4673-4682

Moghal, N., Garcia, L. R., Khan, L. A., Iwasaki, K. and Sternberg, P. W.

Modulation of EGF receptor-mediated vulva development by the heterotrimeric G-protein $\text{G}\alpha_q$ and excitable cells in *C. elegans*

4553-4566

4683-4693

Abzhanov, A., Tzahor, E., Lassar, A. B. and Tabin, C. J.

Dissimilar regulation of cell differentiation in mesencephalic (cranial) and sacral (trunk) neural crest cells in vitro

4567-4579

4695-4708

Harada, K., Oita, E. and Chiba, K.

Metaphase I arrest of starfish oocytes induced via the MAP kinase pathway is released by an increase of intracellular pH

4581-4586

4709-4718

Calestani, C., Rast, J. P. and Davidson, E. H.

Isolation of pigment cell specific genes in the sea urchin embryo by differential macroarray screening

4587-4596

4719-4728

Hartfuss, E., Förster, E., Bock, H. H., Hack, M. A., Leprince, P., Luque, J. M., Herz, J., Frotscher, M. and Götz, M.

Reelin signaling directly affects radial glia morphology and biochemical maturation

4597-4609

4729-4739

Trindade, M., Messenger, N., Papin, C., Grimmer, D., Fairclough, L., Tada, M. and Smith, J. C.

Regulation of apoptosis in the *Xenopus* embryo by Bix3

4611-4622

4741-4750

Supplemental data online



Escalante-Alcalde, D., Hernandez, L., Le Stunff, H., Maeda, R., Lee, H.-S., Jr-Gang-Cheng, Sciorra, V. A., Daar, I., Spiegel, S., Morris, A. J. and Stewart, C. L.
The lipid phosphatase LPP3 regulates extra-embryonic vasculogenesis and axis patterning

4623-4637

Draper, B. W., Stock, D. W. and Kimmel, C. B.
Zebrafish *fgf24* functions with *fgf8* to promote posterior mesodermal development

4639-4654



Mankoo, B. S., Skuntz, S., Harrigan, I., Grigorieva, E., Candia, A., Wright, C. V. E., Arnheiter, H. and Pachnis, V.

The concerted action of Meox homeobox genes is required upstream of genetic pathways essential for the formation, patterning and differentiation of somites.

4655-4664

Rao, C., Foernzler, D., Loftus, S. K., Liu, S., McPherson, J. D., Jungers, K. A., Apte, S. S., Pavan, W. J. and Beier, D. R.

A defect in a novel ADAMTS family member is the cause of the belted white-spotting mutation

4665-4672

Shimmi, O. and O'Connor, M. B.

Physical properties of Tld, Sog, Tsg and Dpp protein interactions are predicted to help create a sharp boundary in BMP signals during dorsoventral patterning of the *Drosophila* embryo

4673-4682

zur Lage, P. I., Prentice, D. R. A., Holohan, E. E. and Jarman, A. P.

The *Drosophila* proneural gene *amos* promotes olfactory sensillum formation and suppresses bristle formation

4683-4693

Steynen, Q. J. and Schultz, E. A.

The FORKED genes are essential for distal vein meeting in *Arabidopsis*

4695-4708

Mathis, C., Collin, L. and Borrelli, E.

Oligodendrocyte ablation impairs cerebellum development

4709-4718

Chandrasekaran, V. and Beckendorf, S. K.

senseless is necessary for the survival of embryonic salivary glands in *Drosophila*

4719-4728

Buxton, P. G., Hall, B., Archer, C. W. and Francis-West, P.

Secondary chondrocyte-derived Ihh stimulates proliferation of periosteal cells during chick development

4729-4739

Research articles: Development and disease

Schimmang, T., Tan, J., Müller, M., Zimmermann, U., Rohbock, K., Köpschall, I., Limberger, A., Minichiello, L. and Knipper, M.

Lack of Bdnf and TrkB signalling in the postnatal cochlea leads to a spatial reshaping of innervation along the tonotopic axis and hearing loss

4741-4750

Nakai, S., Sugitani, Y., Sato, H., Ito, S., Miura, Y., Ogawa, M., Nishi, M., Jishage, K.-i., Minowa, O. and Noda, T.

Crucial roles of Brn1 in distal tubule formation and function in mouse kidney

4751-4759

