



Cover: A frontal section of a mouse heart at embryonic day 17.5 showing normal anatomy, which can be disrupted by short-term exposure to hypoxia during gestation. The image was generated using optical projection tomography. See Research article by Shi et al. on p. 2561.

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- 2479 An interview with Enrico Coen
Vicente, C.

PRIMER

- 2482 Exosomes in developmental signalling
McGough, I. J. and Vincent, J.-P.

REVIEW

- 2494 Direct neuronal reprogramming: learning from and for development
Masserdotti, G., Gascón, S. and Götz, M.

STEM CELLS AND REGENERATION

- 2511 Notch maintains *Drosophila* type II neuroblasts by suppressing expression of the Fez transcription factor Earmuff
Li, X., Xie, Y. and Zhu, S.

- 2522 Inhibition of β-catenin signalling in dermal fibroblasts enhances hair follicle regeneration during wound healing
Rognoni, E., Gomez, C., Pisco, A. O., Rawlins, E. L., Simons, B. D., Watt, F. M. and Driskell, R. R.

RESEARCH REPORTS

- 2536 Cell adhesion in plants is under the control of putative O-fucosyltransferases
Verger, S., Chabout, S., Gineau, E. and Mouille, G.

- 2541 Roles of Wnt pathway genes *wls*, *wnt9a*, *wnt5b*, *frzb* and *gpc4* in regulating convergent-extension during zebrafish palate morphogenesis
Rochard, L., Monica, S. D., Ling, I. T. C., Kong, Y., Roberson, S., Harland, R., Halpern, M. and Liao, E. C.

RESEARCH ARTICLES

- 2548 A unique stylopod patterning mechanism by *Shox2*-controlled osteogenesis
Ye, W., Song, Y., Huang, Z., Osterwalder, M., Ljubojevic, A., Xu, J., Bobick, B., Abassah-Oppong, S., Ruan, N., Shamby, R., Yu, D., Zhang, L., Cai, C.-L., Visel, A., Zhang, Y., Cobb, J. and Chen, Y.P.

- 2561 Gestational stress induces the unfolded protein response, resulting in heart defects
Shi, H., O'Reilly, V. C., Moreau, J. L. M., Bewes, T. R., Yam, M. X., Chapman, B. E., Grieve, S. M., Stocker, R., Graham, R. M., Chapman, G., Sparrow, D. B. and Dunwoodie, S. L.

- 2573 Pins is not required for spindle orientation in the *Drosophila* wing disc
Bergstrahl, D. T., Lovegrove, H. E., Kujawiak, I., Dawney, N. S., Zhu, J., Cooper, S., Zhang, R. and St Johnston, D.

- 2582 A distal 594 bp ECR specifies *Hmx1* expression in pinna and lateral facial morphogenesis and is regulated by the Hox-Pbx-Meis complex

Rosin, J. M., Li, W., Cox, L. L., Rolfe, S. M., Latorre, V., Akiyama, J. A., Visel, A., Kuramoto, T., Bobola, N., Turner, E. E. and Cox, T. C.

- 2593 Alk1 controls arterial endothelial cell migration in lumenized vessels
Rochon, E. R., Menon, P. G. and Roman, B. L.

- 2603 Eph/ephrin signaling maintains the boundary of dorsal forerunner cell cluster during morphogenesis of the zebrafish embryonic left-right organizer
Zhang, J., Jiang, Z., Liu, X. and Meng, A.

- 2616 The novel enterochromaffin marker Lmx1a regulates serotonin biosynthesis in enteroendocrine cell lineages downstream of Nkx2.2
Gross, S., Garofalo, D. C., Balderes, D. A., Mastracci, T. L., Dias, J. M., Perlmann, T., Ericson, J. and Sussel, L.

- 2629 Proteomic analysis reveals APC-dependent post-translational modifications and identifies a novel regulator of β-catenin
Blundon, M. A., Schlesinger, D. R., Parthasarathy, A., Smith, S. L., Kolev, H. M., Vinson, D. A., Kunttas-Tatli, E., McCartney, B. M. and Minden, J. S.

- 2641 A transcription factor network controls cell migration and fate decisions in the developing zebrafish pineal complex
Khuansuwan, S., Clanton, J. A., Dean, B. J., Patton, J. G. and Gamse, J. T.

- 2651 Rx3 and Shh direct anisotropic growth and specification in the zebrafish tuberal/anterior hypothalamus
Muthu, V., Eachus, H., Ellis, P., Brown, S. and Placzek, M.

- 2664 *Drosophila dany* is essential for transcriptional control and nuclear architecture in spermatocytes
Trost, M., Blattner, A. C., Leo, S. and Lehner, C. F.

TECHNIQUES AND RESOURCES

- 2677 The FaceBase Consortium: a comprehensive resource for craniofacial researchers
Brinkley, J. F., Fisher, S., Harris, M. P., Holmes, G., Hooper, J. E., Wang Jabs, E., Jones, K. L., Kesselman, C., Klein, O. D., Maas, R. L., Marazita, M. L., Selleri, L., Spritz, R. A., van Bakel, H., Visel, A., Williams, T. J., Wysocka, J., FaceBase Consortium and Chai, Y.

CORRECTION

- 2689 Regulation of cortical contractility and spindle positioning by the protein phosphatase 6 PPH-6 in one-cell stage *C. elegans* embryos
Afshar, K., Werner, M. E., Tse, Y. C., Glotzer, M. and Gönczy, P.