



Cover: 3D volume-rendered heart of a 75 hpf *Tg(kdrl:EGFP)* zebrafish larva. Between the atrium and ventricle (right and left side of image, respectively) is the atrioventricular canal, where the emerging valve leaflet is recognisable as a folded structure. Such 3D analyses provide fundamental insights into the cellular rearrangements underlying cardiac valve formation in zebrafish. See Research article by Pestel et al. on p. 2217.

MEETING REVIEW

- 2039** Ten years of induced pluripotency: from basic mechanisms to therapeutic applications
Karagiannis, P. and Eto, K.

PRIMER

- 2044** Phosphoinositide signaling in plant development
Heilmann, I.

REVIEW

- 2056** Extracellular matrix motion and early morphogenesis
Loganathan, R., Rongish, B. J., Smith, C. M., Filla, M. B., Czirok, A., Bénazéraf, B. and Little, C. D.

STEM CELLS AND REGENERATION

- 2066** Ihha induces hybrid cartilage–bone cells during zebrafish jawbone regeneration
Paul, S., Schindler, S., Giovannone, D., de Millo Terrazzani, A., Mariani, F. V. and Crump, J. G.

- 2077** Re-epithelialization of cutaneous wounds in adult zebrafish combines mechanisms of wound closure in embryonic and adult mammals
Richardson, R., Metzger, M., Knyphausen, P., Ramezani, T., Slanchev, K., Kraus, C., Schmelzer, E. and Hammerschmidt, M.

- 2089** The EGFR signaling pathway controls gut progenitor differentiation during planarian regeneration and homeostasis
Barberán, S., Fraguas, S. and Cebrià, F.

- 2103** RNA polymerase III component Rpc9 regulates hematopoietic stem and progenitor cell maintenance in zebrafish
Wei, Y., Xu, J., Zhang, W., Wen, Z. and Liu, F.

RESEARCH ARTICLES

- 2111** Role of the ABC transporter Mdr49 in Hedgehog signaling and germ cell migration
Deshpande, G., Manry, D., Jourjine, N., Mogila, V., Mozes, H., Bialistoky, T., Gerlitz, O. and Schedl, P.

- 2121** Cadherin 2/4 signaling via PTP1B and catenins is crucial for nucleokinesis during radial neuronal migration in the neocortex
Martinez-Garay, I., Gil-Sanz, C., Franco, S. J., Espinosa, A., Molnár, Z. and Mueller, U.

- 2135** Identification of a regulatory domain controlling the *Nppa*-*Nppb* gene cluster during heart development and stress
Sergeeva, I. A., Hooijkaas, I. B., Ruijter, J. M., van der Made, I., de Groot, N. E., van de Werken, H. J. G., Creemers, E. E. and Christoffels, V. M.

- 2147** Nanos-mediated repression of *hid* protects larval sensory neurons after a global switch in sensitivity to apoptotic signals
Bhogal, B., Plaza-Jennings, A. and Gavis, E. R.

- 2160** Primary cilia maintain corneal epithelial homeostasis by regulation of the Notch signaling pathway
Grisanti, L., Revenkova, E., Gordon, R. E. and Iomini, C.

- 2172** Fat3 and Ena/VASP proteins influence the emergence of asymmetric cell morphology in the developing retina
Krol, A., Henle, S. J. and Goodrich, L. V.

- 2183** Syk kinases are required for spinal commissural axon repulsion at the midline via the ephrin/Eph pathway
Noraz, N., Jaaoini, I., Charoy, C., Watrin, C., Chounlamountri, N., Benon, A., Mallevial, C., Boudin, H., Honnorat, J., Castellani, V. and Pellier-Monnin, V.

- 2194** Delamination of neural crest cells requires transient and reversible Wnt inhibition mediated by Dact1/2
Rabadán, M. A., Herrera, A., Fanlo, L., Usieto, S., Carmona-Fontaine, C., Barriga, E. H., Mayor, R., Pons, S. and Martí, E.

- 2206** Tcf7l1 protects the anterior neural fold from adopting the neural crest fate
Mašek, J., Machoň, O., Kořínek, V., Taketo, M. M. and Kozmík, Z.

- 2217** Real-time 3D visualization of cellular rearrangements during cardiac valve formation
Pestel, J., Ramadass, R., Gauvrit, S., Helker, C., Herzog, W. and Stainier, D. Y. R.

- 2228** BMP regulates regional gene expression in the dorsal otocyst through canonical and non-canonical intracellular pathways
Ohta, S., Wang, B., Mansour, S. L. and Schoenwolf, G. C.

TECHNIQUES AND RESOURCES

- 2238** Quantitative imaging of lipids in live mouse oocytes and early embryos using CARS microscopy
Bradley, J., Pope, I., Masia, F., Sanusi, R., Langbein, W., Swann, K. and Borri, P.