



Cover: Digitally enhanced hand-painted illustration of a *Xenopus laevis* stage 48 embryo, dorsal view. Using live samples viewed under a stereomicroscope as reference, a sketch was produced and hand-painted with watercolours. The painting was then digitised and refined by adding further layers and highlights, sharpening edges and adjusting hues. © 2017 Natalya Zahn. See **Spotlight by Zahn et al. on p. 2708.**

EDITORIAL

- 2703 Editorial changes
Pourquié, O. and Brown, K.

SPOTLIGHTS

- 2704 An interview with Jim Smith
Maartens, A.
- 2708 The Zahn drawings: new illustrations of *Xenopus* embryo and tadpole stages for studies of craniofacial development
Zahn, N., Levin, M. and Adams, D. S.

MEETING REVIEW

- 2714 Programming and reprogramming the brain: a meeting of minds in neural fate
Götz, M. and Jarriault, S.

PRIMER

- 2719 KRAB zinc finger proteins
Ecco, G., Imbeault, M. and Trono, D.

STEM CELLS AND REGENERATION

- 2730 Soluble APP functions as a vascular niche signal that controls adult neural stem cell number
Sato, Y., Uchida, Y., Hu, J., Young-Pearse, T. L., Niikura, T. and Mukouyama, Y. S.
- 2737 BMP signaling regulates satellite cell-dependent postnatal muscle growth
Stantzou, A., Schirwis, E., Swist, S., Alonso-Martin, S., Polydorou, I., Zarrouki, F., Mouisel, E., Beley, C., Julien, A., Le Grand, F., Garcia, L., Colnot, C., Birchmeier, C., Braun, T., Schuelke, M., Relaix, F. and Amthor, H.
- 2748 Epigenetic resetting of human pluripotency
Guo, G., von Meyenn, F., Rostovskaya, M., Clarke, J., Dietmann, S., Baker, D., Sahakyan, A., Myers, S., Bertone, P., Reik, W., Plath, K. and Smith, A.

RESEARCH REPORT

- 2764 Acetylcholinesterase plays a non-neuronal, non-esterase role in organogenesis
Pickett, M. A., Dush, M. K. and Nascone-Yoder, N. M.

RESEARCH ARTICLES

- 2771 Inwardly rectifying potassium channels influence *Drosophila* wing morphogenesis by regulating Dpp release
Dahal, G. R., Pradhan, S. J. and Bates, E. A.
- 2784 Defects in dosage compensation impact global gene regulation in the mouse trophoblast
Sakata, Y., Nagao, K., Hoki, Y., Sasaki, H., Obuse, C. and Sado, T.
- 2798 Wnt signalling controls the response to mechanical loading during zebrafish joint development
Brunt, L. H., Begg, K., Kague, E., Cross, S. and Hammond, C. L.
- 2810 Cell interactions, signals and transcriptional hierarchy governing placode progenitor induction
Hintze, M., Prajapati, R. S., Tambalo, M., Christophorou, N. A. D., Anwar, M., Grocott, T. and Streit, A.
- 2824 Multiple modes of Lrp4 function in modulation of Wnt/ β -catenin signaling during tooth development
Ahn, Y., Sims, C., Murray, M. J., Kuhlmann, P. K., Fuentes-Antrás, J., Weatherbee, S. D. and Krumlauf, R.
- 2837 *Coup-TF1* and *Coup-TF2* control subtype and laminar identity of MGE-derived neocortical interneurons
Hu, J. S., Vogt, D., Lindtner, S., Sandberg, M., Silberberg, S. N. and Rubenstein, J. L. R.
- ### TECHNIQUES AND RESOURCES
- 2852 High-efficiency non-mosaic CRISPR-mediated knock-in and indel mutation in F0 *Xenopus*
Aslan, Y., Tadjuidje, E., Zorn, A. M. and Cha, S.-W.