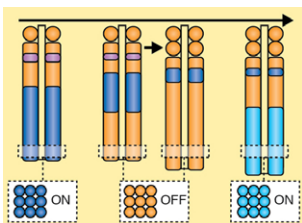


Development



Cover: *Sox10-GFP* transgenic zebrafish embryos, with GFP and DAPI fluorescence merged. This image, taken by Mariana Herrera Cruz together with Juan Pablo Fernández, Miguel Angel Mendoza, Paulette Fernández and German Sabio at the 2012 International Course on Developmental Biology, UNAB, Quintay, Chile, was chosen by readers of the Node (<http://thenode.biologists.com/>).



A segmented body plan is fundamental to all vertebrate species. Segmentation is initiated very early in the developing embryo during the process of somitogenesis. Here, Dale and colleagues provide an overview of somitogenesis and highlight the key events involved in each stage of segmentation. See the **Development at a Glance** poster on p. 2453.

DEVELOPMENT AT A GLANCE

- 2453** Somitogenesis
Maroto, M., Bone, R. A. and Dale, J. K.

MEETING REVIEW

- 2457** Stem cell powwow in Squaw Valley
Chambers, I. and Schroeder, T.

PRIMER

- 2463** Evolutionary crossroads in developmental biology: hemichordates
Röttinger, E. and Lowe, C. J.

DEVELOPMENT AND STEM CELLS

- 2477** Regulated temporal-spatial astrocyte precursor cell proliferation involves BRAF signalling in mammalian spinal cord
Tien, A.-C., Tsai, H.-H., Molofsky, A. V., McMahon, M., Foo, L. C., Kaul, A., Dougherty, J. D., Heintz, N., Gutmann, D. H., Barres, B. A. and Rowitch, D. H.
- 2488** A Notch-dependent molecular circuitry initiates pancreatic endocrine and ductal cell differentiation
Shih, H. P., Kopp, J. L., Sandhu, M., Dubois, C. L., Seymour, P. A., Grapin-Botton, A. and Sander, M.
- 2500** *Foxp1/4* control epithelial cell fate during lung development and regeneration through regulation of anterior gradient 2
Li, S., Wang, Y., Zhang, Y., Lu, M. M., DeMayo, F. J., Dekker, J. D., Tucker, P. W. and Morrisey, E. E.
- 2510** Origin of *Drosophila* mushroom body neuroblasts and generation of divergent embryonic lineages
Kunz, T., Kraft, K. F., Technau, G. M. and Urbach, R.

RESEARCH ARTICLES

- 2523** Targeted inactivation of nuclear interaction partner of ALK disrupts meiotic prophase
Illert, A. L., Kawaguchi, H., Antinozzi, C., Bassermann, F., Quintanilla-Martinez, L., von Klitzing, C., Hiwatari, M., Peschel, C., de Rooij, D. G., Morris, S. W., Barchi, M. and Duyster, J.
- 2535** Wunen, a *Drosophila* lipid phosphate phosphatase, is required for septate junction-mediated barrier function
Ile, K. E., Tripathy, R., Goldfinger, V. and Renault, A. D.
- 2547** An E-cadherin-mediated hitchhiking mechanism for *C. elegans* germ cell internalization during gastrulation
Chihara, D. and Nance, J.
- 2557** Transient downregulation of Bmp signalling induces extra limbs in vertebrates
Christen, B., Cavaco Rodrigues, A. M., Barragán Monasterio, M., Fabregat Roig, C. and Izpisua Belmonte, J. C.
- 2566** *DEVELOPMENT-RELATED PcG TARGET IN THE APEX 4* controls leaf margin architecture in *Arabidopsis thaliana*
Engelhorn, J., Reimer, J. J., Leuz, I., Göbel, U., Huettel, B., Farrona, S. and Turck, F.

- 2576 Evolutionarily conserved requirement of Cdx for post-occipital tissue emergence
van Rooijen, C., Simmini, S., Bialecka, M., Neijts, R., van de Ven, C., Beck, F. and Deschamps, J.
- 2584 Planar cell polarity controls directional Notch signaling in the *Drosophila* leg
Capilla, A., Johnson, R., Daniels, M., Benavente, M., Bray, S. J. and Galindo, M. I.
- 2594 Maize *multiple archesporial cells 1 (mac1)*, an ortholog of rice *TDL1A*, modulates cell proliferation and identity in early anther development
Wang, C.-J. R., Nan, G.-L., Kelliher, T., Timofejeva, L., Vernoud, V., Golubovskaya, I. N., Harper, L., Egger, R., Walbot, V. and Cande, W. Z.
- 2604 Sonic hedgehog is indirectly required for intraretinal axon pathfinding by regulating chemokine expression in the optic stalk
Stacher Hörndli, C. and Chien, C.-B.
- 2614 Six3 cooperates with Hedgehog signaling to specify ventral telencephalon by promoting early expression of Foxg1a and repressing Wnt signaling
Carlin, D., Sepich, D., Grover, V. K., Cooper, M. K., Solnica-Krezel, L. and Inbal, A.
- 2625 Genome-wide characterization of Foxa2 targets reveals upregulation of floor plate genes and repression of ventrolateral genes in midbrain dopaminergic progenitors
Metzakopian, E., Lin, W., Salmon-Divon, M., Dvinge, H., Andersson, E., Ericson, J., Perlmann, T., Whitsett, J. A., Bertone, P. and Ang, S.-L.
- 2635 Corrigendum
- 2636 Corrigendum