



**Cover:** A squid (*Loligo pealeii*) embryo stained for acetylated tubulin (red) and serotonin (green), and with DAPI (blue, nuclei). The image was taken using a Zeiss LSM 700 confocal microscope by Nathan Kenny, Kathryn McClelland and Sophie Miller at the 2013 Woods Hole MBL Embryology course, and was chosen by readers of the Node (<http://thenode.biologists.com>).

## MEETING REVIEW

- 2745 Regeneration, morphogenesis and self-organization  
**Goldman, D.**

## REVIEWS

- 2750 Cellular and physical mechanisms of branching morphogenesis  
**Varner, V. D. and Nelson, C. M.**

- 2760 Harnessing developmental processes for vascular engineering and regeneration  
**Park, K. M. and Gerecht, S.**

## STEM CELLS AND REGENERATION

- 2770 Stochastic NANOG fluctuations allow mouse embryonic stem cells to explore pluripotency  
**Abranchedes, E., Guedes, A. M. V., Moravec, M., Maamar, H., Svoboda, P., Raj, A. and Henrique, D.**

- 2780 Antagonistic regulation of p57<sup>kip2</sup> by Hes/Hey downstream of Notch signaling and muscle regulatory factors regulates skeletal muscle growth arrest  
**Zalc, A., Hayashi, S., Auradé, F., Bröhl, D., Chang, T., Mademtzoglou, D., Mourikis, P., Yao, Z., Cao, Y., Birchmeier, C. and Relaix, F.**

## RESEARCH REPORT

- 2791 Transit amplification in the amniote cerebellum evolved via a heterochronic shift in *NeuroD1* expression  
**Butts, T., Hanzel, M. and Wingate, R. J. T.**

## RESEARCH ARTICLES

- 2796 The Scribble module regulates retromer-dependent endocytic trafficking during epithelial polarization  
**de Vreeede, G., Schoenfeld, J. D., Windler, S. L., Morrison, H., Lu, H. and Bilder, D.**

- 2803 A transcription factor network specifying inhibitory versus excitatory neurons in the dorsal spinal cord  
**Borromeo, M. D., Meredith, D. M., Castro, D. S., Chang, J. C., Tung, K.-C., Guillemot, F. and Johnson, J. E.**

- 2813 Initiation of Hippo signaling is linked to polarity rather than to cell position in the pre-implantation mouse embryo  
**Anani, S., Bhat, S., Honma-Yamanaka, N., Krawchuk, D. and Yamanaka, Y.**

- 2825 Essential role of the ERK/MAPK pathway in blood-placental barrier formation  
**Nadeau, V. and Charron, J.**

- 2838 A conserved transcriptional network regulates lamina development in the *Drosophila* visual system  
**Piñeiro, C., Lopes, C. S. and Casares, F.**

- 2848 mTORC1 signaling controls mammalian skeletal growth through stimulation of protein synthesis  
**Chen, J. and Long, F.**

- 2855 The cortical hem regulates the size and patterning of neocortex  
**Caronia-Brown, G., Yoshida, M., Gulden, F., Assimacopoulos, S. and Grove, E. A.**

- 2866 Prickle/spiny-legs isoforms control the polarity of the apical microtubule network in planar cell polarity  
**Olofsson, J., Sharp, K. A., Matis, M., Cho, B. and Axelrod, J. D.**

- 2875 Sp8 plays a supplementary role to Pax6 in establishing the pMN/p3 domain boundary in the spinal cord  
**Li, X., Liu, Z., Qiu, M. and Yang, Z.**

- 2885 Dimeric combinations of MafB, cFos and cJun control the apoptosis-survival balance in limb morphogenesis  
**Suda, N., Itoh, T., Nakato, R., Shirakawa, D., Bando, M., Katou, Y., Kataoka, K., Shirahige, K., Tickle, C. and Tanaka, M.**

## TECHNIQUES AND RESOURCES

- 2895 Quantitative 4D analyses of epithelial folding during *Drosophila* gastrulation  
**Khan, Z., Wang, Y.-C., Wieschaus, E. F. and Kaschube, M.**

- 2901 Automated multidimensional image analysis reveals a role for Abl in embryonic wound repair  
**Zulueta-Coarasa, T., Tamada, M., Lee, E. J. and Fernandez-Gonzalez, R.**

## CORRECTIONS

- 2912 Spectrum of Fates: a new approach to the study of the developing zebrafish retina  
**Almeida, A. D., Boije, H., Chow, R. W., He, J., Tham, J., Suzuki, S. C. and Harris, W. A.**

- 2913 Choice of random rather than imprinted X inactivation in female embryonic stem cell-derived extra-embryonic cells  
**Murakami, K., Araki, K., Ohtsuka, S., Wakayama, T. and Niwa, H.**