



**Cover:** Tiled confocal image of a transverse section of zebrafish trunk at 4 weeks postfertilization. Long-term lineage tracing shows that embryonic *col1a2*<sup>+</sup> muscle progenitor cells (MPCs) contribute to the skin and skeletal muscles. mCherry (magenta) marks cells derived from 'switched' MPCs at 3 days postfertilization, and GFP (green) labels 'un-switched' cells. See Research article by Sharma et al. (dev178400).

## INTERVIEW

The people behind the papers – Shai Eyal and Elazar Zelzer  
dev182733

## MEETING REVIEW

Reverse-engineering growth and form in Heidelberg  
**Levin, M. and Martinez Arias, A.**  
dev177261

## PRIMERS

Model systems for regeneration: salamanders  
**Joven, A., Elewa, A. and Simon, A.**  
dev167700

Emerging diverse roles of telocytes  
**Kondo, A. and Kaestner, K. H.**  
dev175018

## STEM CELLS AND REGENERATION

Regulation of the ERK signalling pathway in the developing mouse blastocyst  
**Azami, T., Bassalart, C., Allègre, N., Valverde Estrella, L., Pouchin, P., Ema, M. and Chazaud, C.**  
dev177139

BMP4 patterns Smad activity and generates stereotyped cell fate organization in spinal organoids  
**Duval, N., Vaslin, C., Barata, T. C., Frarma, Y., Contremoulins, V., Baudin, X., Nedelec, S. and Ribes, V. C.**  
dev175430

Single cell dynamics of embryonic muscle progenitor cells in zebrafish  
**Sharma, P., Ruel, T. D., Kocha, K. M., Liao, S. and Huang, P.**  
dev178400

## RESEARCH REPORTS

*Nkx2-5* defines a subpopulation of pacemaker cells and is essential for the physiological function of the sinoatrial node in mice  
**Li, H., Li, D., Wang, Y., Huang, Z., Xu, J., Yang, T., Wang, L., Tang, Q., Cai, C.-L., Huang, H., Zhang, Y. and Chen, Y.**  
dev178145

Ror $\beta$  regulates selective axon-target innervation in the mammalian midbrain  
**Byun, H., Lee, H.-L., Liu, H., Forrest, D., Rudenko, A. and Kim, I.-J.**  
dev171926

Migrating cells control morphogenesis of substratum serving as track to promote directional movement of the collective  
**Macabenta, F. and Stathopoulos, A.**  
dev177295

## RESEARCH ARTICLES

Identification of the building blocks of ventricular septation in monitor lizards (Varanidae)  
**Hanemaaijer, J., Gregorovicova, M., Nielsen, J. M., Moorman, A. F. M., Wang, T., Planken, R. N., Christoffels, V. M., Sedmera, D. and Jensen, B.**  
dev177121

Dchs1-Fat4 regulation of osteogenic differentiation in mouse  
**Crespo-Enriquez, I., Hodgson, T., Zakaria, S., Cadoni, E., Shah, M., Allen, S., Al-Khishali, A., Mao, Y., Yiu, A., Petzold, J., Villagomez-Olea, G., Pitsillides, A. A., Irvine, K. D. and Francis-West, P.**  
dev176776

CsTFL1 inhibits determinate growth and terminal flower formation through interaction with CsNOT2a in cucumber  
**Wen, C., Zhao, W., Liu, W., Yang, L., Wang, Y., Liu, X., Xu, Y., Ren, H., Guo, Y., Li, C., Li, J., Weng, Y. and Zhang, X.**  
dev180166

Bone morphology is regulated modularly by global and regional genetic programs  
**Eyal, S., Kult, S., Rubin, S., Krief, S., Felsenthal, N., Pineault, K. M., Leshkowitz, D., Salame, T.-M., Addadi, Y., Wellik, D. M. and Zelzer, E.**  
dev167882

Modular tissue-specific regulation of *doublesex* underpins sexually dimorphic development in *Drosophila*  
**Rice, G. R., Barmina, O., Luecke, D., Hu, K., Arbeitman, M. and Kopp, A.**  
dev178285

MOZ directs the distal-less homeobox gene expression program during craniofacial development  
**Vanyai, H. K., Garnham, A., May, R. E., McRae, H. M., Collin, C., Wilcox, S., Smyth, G. K., Thomas, T. and Voss, A. K.**  
dev175042

miR167 limits anther growth to potentiate anther dehiscence  
**Zheng, L., Nagpal, P., Villarino, G., Trinidad, B., Bird, L., Huang, Y. and Reed, J. W.**  
dev174375

A whole organism small molecule screen identifies novel regulators of pancreatic endocrine development  
**Helker, C. S. M., Mullapudi, S.-T., Mueller, L. M., Preussner, J., Tunaru, S., Skog, O., Kwon, H.-B., Kreuder, F., Lancman, J. J., Bonnnavion, R., Dong, P. D. S., Looso, M., Offermanns, S., Korsgren, O., Spagnoli, F. M. and Stainier, D. Y. R.**  
dev172569

Regulation of Notch signaling by the chromatin-modeling protein Hat-trick

**Singh, A., Paul, M. S., Dutta, D., Mutsuddi, M. and Mukherjee, A.**  
dev170837

Wheat *VRN1*, *FUL2* and *FUL3* play critical and redundant roles in spikelet development and spike determinacy

**Li, C., Lin, H., Chen, A., Lau, M., Jernstedt, J. and Dubcovsky, J.**  
dev175398

Adaptive correction of craniofacial defects in pre-metamorphic *Xenopus laevis* tadpoles involves thyroid hormone-independent tissue remodeling

**Pinet, K., Deolankar, M., Leung, B. and McLaughlin, K. A.**  
dev175893

The lymphoid-associated interleukin 7 receptor (IL7R) regulates tissue-resident macrophage development

**Leung, G. A., Cool, T., Valencia, C. H., Worthington, A., Beaudin, A. E. and Forsberg, E. C.**  
dev176180

Yap/Taz-TEAD activity links mechanical cues to progenitor cell behavior during zebrafish hindbrain segmentation

**Voltes, A., Hevia, C. F., Engel-Pizcueta, C., Dingare, C., Calzolari, S., Terriente, J., Norden, C., Lecaudey, V. and Pujades, C.**  
dev176735

Ror $\beta$  regulates selective axon-target innervation in the mammalian midbrain

**Byun, H., Lee, H.-L., Liu, H., Forrest, D., Rudenko, A. and Kim, I.-J.**  
dev171926

Redundant *SCARECROW* genes pattern distinct cell layers in roots and leaves of maize

**Hughes, T. E., Sedelnikova, O. V., Wu, H., Becraft, P. W. and Langdale, J. A.**  
dev177543

Ectodysplasin-A signaling is a key integrator in the lacrimal gland–cornea feedback loop

**Kuony, A., Ikkala, K., Kalha, S., Magalhães, A. C., Pirttiniemi, A. and Michon, F.**  
dev176693

*Sall4* regulates neuromesodermal progenitors and their descendants during body elongation in mouse embryos

**Tahara, N., Kawakami, H., Chen, K. Q., Anderson, A., Yamashita Peterson, M., Gong, W., Shah, P., Hayashi, S., Nishinakamura, R., Nakagawa, Y., Garry, D. J. and Kawakami, Y.**  
dev177659

## TECHNIQUES AND RESOURCES

Proximity labeling reveals novel interactomes in live *Drosophila* tissue

**Mannix, K. M., Starble, R. M., Kaufman, R. S. and Cooley, L.**  
dev176644

## CORRECTION

Correction: Trans-splicing of the *C. elegans let-7* primary transcript developmentally regulates *let-7* microRNA biogenesis and *let-7* family microRNA activity (doi: 10.1242/dev.172031)

**Nelson, C. and Ambros, V.**  
dev182212