



**Cover:** An adult *Drosophila melanogaster* female imaged using micro-computed tomography ( $\mu$ -CT), rendered in 3D. The cuticle was digitally cleared to reveal all major organ systems (coloured surfaces).  $\mu$ -CT can be used for whole-fly phenotyping at any life cycle stage to better understand development and disease processes. Anterior is rightwards; dorsal towards the top. See Research article by Schoborg et al. (dev176685)

## INTERVIEW

An interview with Maria Elena Torres-Padilla  
**Grewal, S.**  
dev186288

## DEVELOPMENT AT A GLANCE

Cell interactions in collective cell migration  
**Mishra, A. K., Campanale, J. P., Mondo, J. A. and Montell, D. J.**  
dev172056

## SPOTLIGHT

Awakening the regenerative potential of the mammalian retina  
**Martin, J. F. and Poché, R. A.**  
dev182642

## REVIEW

Reprogramming: identifying the mechanisms that safeguard cell identity  
**Brumbaugh, J., Di Stefano, B. and Hochedlinger, K.**  
dev182170

## STEM CELLS AND REGENERATION

Single cell transcriptome dynamics from pluripotency to FLK1<sup>+</sup> mesoderm  
**Zhao, H. and Choi, K.**  
dev182097

Dynamics of activating and repressive histone modifications in *Drosophila* neural stem cell lineages and brain tumors  
**Abdusselamoglu, M. D., Landskron, L., Bowman, S. K., Eroglu, E., Burkard, T., Kingston, R. E. and Knoblich, J. A.**  
dev183400

## RESEARCH REPORT

Conditional effects of the epigenetic regulator JUMONJI 14 in *Arabidopsis* root growth  
**Cattaneo, P., Graeff, M., Marhava, P. and Hardtke, C. S.**  
dev183905

## RESEARCH ARTICLES

The role of integrins in *Drosophila* egg chamber morphogenesis  
**Lovegrove, H. E., Bergstralh, D. T. and St Johnston, D.**  
dev182774

Minimal *in vivo* requirements for developmentally regulated cardiac long intergenic non-coding RNAs  
**George, M. R., Duan, Q., Nagle, A., Kathiriya, I. S., Huang, Y., Rao, K., Haldar, S. M. and Bruneau, B. G.**  
dev185314

Neuronal differentiation influences progenitor arrangement in the vertebrate neuroepithelium  
**Guerrero, P., Perez-Carrasco, R., Zagorski, M., Page, D., Kicheva, A., Briscoe, J. and Page, K. M.**  
dev176297

Use of hPSC-derived 3D organoids and mouse genetics to define the roles of YAP in the development of the esophagus  
**Bailey, D. D., Zhang, Y., van Soldt, B. J., Jiang, M., Suresh, S., Nakagawa, H., Rustgi, A. K., Aceves, S. S., Cardoso, W. V. and Que, J.**  
dev178855

Polarized cellular mechano-response system for maintaining radial size in developing epithelial tubes  
**Hirashima, T. and Adachi, T.**  
dev181206

Loss of the E2 SUMO-conjugating enzyme *Ube2i* in oocytes during ovarian folliculogenesis causes infertility in mice  
**Rodriguez, A., Briley, S. M., Patton, B. K., Tripurani, S. K., Rajapakshe, K., Coarfa, C., Rajkovic, A., Andrieux, A., Dejean, A. and Pangas, S. A.**  
dev176701

The fenestrae-associated protein Plvap regulates the rate of blood-borne protein passage into the hypophysis  
**Gordon, L., Blechman, J., Shimoni, E., Gur, D., Anand-Apte, B. and Levkowitz, G.**  
dev177790

The cyclin B2/CDK1 complex inhibits separase activity in mouse oocyte meiosis I  
**Li, J., Ouyang, Y.-C., Zhang, C.-H., Qian, W.-P. and Sun, Q.-Y.**  
dev182519

FGF signaling in mammary gland fibroblasts regulates multiple fibroblast functions and mammary epithelial morphogenesis  
**Sumbal, J. and Koledova, Z.**  
dev185306

## TECHNIQUES AND RESOURCES

Micro-computed tomography as a platform for exploring *Drosophila* development  
**Schoborg, T. A., Smith, S. L., Smith, L. N., Morris, H. D. and Rusan, N. M.**  
dev176685