



**Cover:** Cross-section of an Arabidopsis hypocotyl undergoing secondary growth. Visualisation of lignified cell walls reveals two types of xylem elements: smaller xylary fibres and larger, hollow vessels. See Research report by Felipo-Benavent et al. (dev164962).

## INTERVIEW

The people behind the papers – Vinh Ngoc Pham and Enamul Huq  
dev173518

## PRIMER

Planar cell polarity: two genetic systems use one mechanism to read gradients

**Lawrence, P. A. and Casal, J.**

dev168229

## STEM CELLS AND REGENERATION

Wingless promotes EGFR signaling in follicle stem cells to maintain self-renewal

**Kim-Yip, R. P. and Nystul, T. G.**

dev168716

Fetal Leydig cells dedifferentiate and serve as adult Leydig stem cells

**Shima, Y., Miyabayashi, K., Sato, T., Suyama, M., Ohkawa, Y., Doi, M., Okamura, H. and Suzuki, K.**

dev169136

Pvr receptor tyrosine kinase signaling promotes post-embryonic morphogenesis, and survival of glia and neural progenitor cells in *Drosophila*

**Read, R. D.**

dev164285

*Drosophila small ovary* gene is required for transposon silencing and heterochromatin organization, and ensures germline stem cell maintenance and differentiation

**Jankovics, F., Bence, M., Sinka, R., Faragó, A., Bodai, L., Pettkó-Szandtner, A., Ibrahim, K., Takács, Z., Szarka-Kovács, A. B. and Erdélyi, M.**

dev170639

Simplet-dependent regulation of  $\beta$ -catenin signaling influences skeletal patterning downstream of Cx43

**Bhattacharya, S., Gargiulo, D. and Iovine, M. K.**

dev166975

Kmt2b conveys monovalent and bivalent H3K4me3 in mouse spermatogonial stem cells at germline and embryonic promoters

**Tomizawa, S.-i., Kobayashi, Y., Shirakawa, T., Watanabe, K., Mizoguchi, K., Hoshi, I., Nakajima, K., Nakabayashi, J., Singh, S., Dahl, A., Alexopoulou, D., Seki, M., Suzuki, Y., Royo, H., Peters, A. H. F. M., Anastassiadis, K., Stewart, A. F. and Ohbo, K.**

dev169102

Transcriptional response to Wnt activation regulates the regenerative capacity of the mammalian cochlea

**Samarajeewa, A., Lenz, D. R., Xie, L., Chiang, H., Kirchner, R., Mulvaney, J. F., Edge, A. S. B. and Dabdoub, A.**

dev166579

Notchless defines a stage-specific requirement for ribosome biogenesis during lineage progression in adult skeletal myogenesis

**Gayraud-Morel, B., Le Bouteiller, M., Commere, P.-H., Cohen-Tannoudji, M. and Tajbakhsh, S.**

dev162636

## RESEARCH REPORTS

Centriole planar polarity assessment in *Drosophila* wings

**Garrido-Jimenez, S., Roman, A.-C., Alvarez-Barrientos, A. and Maria Carvajal-Gonzalez, J.**

dev169326

WDR5 regulates left-right patterning via chromatin-dependent and -independent functions

**Kulkarni, S. S. and Khokha, M. K.**

dev159889

The male gamete membrane protein DMP9/DAU2 is required for double fertilization in flowering plants

**Takahashi, T., Mori, T., Ueda, K., Yamada, L., Nagahara, S., Higashiyama, T., Sawada, H. and Igawa, T.**

dev170076

WNT/ $\beta$ -catenin signaling plays a crucial role in myoblast fusion through regulation of nephrin expression during development

**Suzuki, A., Minamide, R. and Iwata, J.**

dev168351

Regulation of xylem fiber differentiation by gibberellins through DELLA-KNAT1 interaction

**Felipo-Benavent, A., Úrbez, C., Blanco-Touriñán, N., Serrano-Mislata, A., Baumberger, N., Achard, P., Agustí, J., Blázquez, M. A. and Alabadí, D.**

dev164962

## RESEARCH ARTICLES

SETDB1 is essential for mouse primordial germ cell fate determination by ensuring BMP signaling

**Mochizuki, K., Tando, Y., Sekinaka, T., Otsuka, K., Hayashi, Y., Kobayashi, H., Kamio, A., Ito-Matsuoka, Y., Takehara, A., Kono, T., Osumi, N. and Matsui, Y.**

dev164160

The RhoGAP HUM-7/Myo9 integrates signals to modulate RHO-1/RhoA during embryonic morphogenesis in *Caenorhabditis elegans*

**Wallace, A. G., Raduwan, H., Carlet, J. and Soto, M. C.**

dev168724

Molecular bases for the constitutive photomorphogenic phenotypes in *Arabidopsis*

**Pham, V. N., Xu, X. and Huq, E.**

dev169870

Inhibition of microRNA suppression of *Dishevelled* results in Wnt pathway-associated developmental defects in sea urchin

**Sampilo, N. F., Stepicheva, N. A., Zaidi, S. A. M., Wang, L., Wu, W., Wikramanayake, A. and Song, J. L.**  
dev167130

*C. elegans* PTEN and AMPK block neuroblast divisions by inhibiting a BMP-insulin-PP2A-MAPK pathway

**Zheng, S., Qu, Z., Zanetti, M., Lam, B. and Chin-Sang, I.**  
dev166876

*De novo* recruitment of Polycomb-group proteins in *Drosophila* embryos

**Alhaj Abed, J., Ghotbi, E., Ye, P., Frolov, A., Benes, J. and Jones, R. S.**  
dev165027

TBX2 and TBX3 act downstream of canonical WNT signaling in patterning and differentiation of the mouse ureteric mesenchyme

**Aydoğdu, N., Rudat, C., Trowe, M.-O., Kaiser, M., Lüdtkke, T. H., Taketo, M. M., Christoffels, V. M., Moon, A. and Kispert, A.**  
dev171827

The plant hormone auxin beats the time for oscillating light-regulated lateral root induction

**Kircher, S. and Schopfer, P.**  
dev169839

### TECHNIQUES AND RESOURCES

Novel initiator caspase reporters uncover previously unknown features of caspase-activating cells

**Baena-Lopez, L. A., Arthurton, L., Bischoff, M., Vincent, J.-P., Alexandre, C. and McGregor, R.**  
dev170811

### CORRECTIONS

Correction: Divergent early mesoderm specification underlies distinct head and trunk muscle programmes in vertebrates (doi: 10.1242/dev.160945)

**Nandkishore, N., Vyas, B., Javali, A., Ghosh, S. and Sambasivan, R.**  
dev173187

Correction: R-spondin 1 is required for specification of hematopoietic stem cells through Wnt16 and Vegfa signaling pathways (doi: 10.1242/dev.139956)

**Genthe, J. R. and Clements, W. K.**  
dev173344