



**Cover:** Three-dimensional nano-CT reconstruction of an HH-stage 26 avian embryo pharyngeal arch artery complex, in which high pressure (red) occasioned in the developing ventricle attenuates to moderate pressure (green) through the arch arteries, then to lower pressure (blue) into the dorsal aorta, contextualizing the role of fluid forces in great vessel morphogenesis. See Research article by Lindsey et al. (dev162578).

## SPOTLIGHT

An interview with Ida Chow

**Grewal, S.**

dev171868

## PRIMER

GATA transcription factors in development and disease

**Tremblay, M., Sanchez-Ferras, O. and Bouchard, M.**

dev164384

## HUMAN DEVELOPMENT

Characterization of the ventricular-subventricular stem cell niche during human brain development

**Coletti, A. M., Singh, D., Kumar, S., Shafin, T. N., Briody, P. J., Babbitt, B. F., Pan, D., Norton, E. S., Brown, E. C., Kahle, K. T., Del Bigio, M. R. and Conover, J. C.**

dev170100

## STEM CELLS AND REGENERATION

Prepubertal skeletal muscle growth requires Pax7-expressing satellite cell-derived myonuclear contribution

**Bachman, J. F., Klose, A., Liu, W., Paris, N. D., Blanc, R. S., Schmalz, M., Knapp, E. and Chakkalakal, J. V.**

dev167197

Mitochondrial and glycolytic remodeling during nascent neural differentiation of human pluripotent stem cells

**Lees, J. G., Gardner, D. K. and Harvey, A. J.**

dev168997

Targeted DamID reveals differential binding of mammalian pluripotency factors

**Cheetham, S. W., Gruhn, W. H., van den Aamele, J., Krautz, R., Southall, T. D., Kobayashi, T., Surani, M. A. and Brand, A. H.**

dev170209

## RESEARCH REPORT

*RPSA*, a candidate gene for isolated congenital asplenia, is required for pre-rRNA processing and spleen formation in *Xenopus*

**Griffin, J. N., Sondalle, S. B., Robson, A., Mis, E. K., Griffin, G., Kulkarni, S. S., Deniz, E., Baserga, S. J. and Khokha, M. K.**

dev166181

## RESEARCH ARTICLES

*Fam46a* regulates BMP-dependent pre-placodal ectoderm differentiation in *Xenopus*

**Watanabe, T., Yamamoto, T., Tsukano, K., Hirano, S., Horikawa, A. and Michiue, T.**

dev166710

Leukocyte receptor tyrosine kinase interacts with secreted midkine to promote survival of migrating neural crest cells

**Vieceli, F. M. and Bronner, M. E.**

dev164046

The spatial and temporal dynamics of nuclear RNAi-targeted retrotransposon transcripts in *Caenorhabditis elegans*

**Ni, J. Z., Kalinava, N., Mendoza, S. G. and Gu, S. G.**

dev167346

A novel population of Hopx-dependent basal radial glial cells in the developing mouse neocortex

**Vaid, S., Camp, J. G., Hersemann, L., Eugster Oegema, C., Heninger, A.-K., Winkler, S., Brandl, H., Sarov, M., Treutlein, B., Huttner, W. B. and Namba, T.**

dev169276

The dynamics of Hippo signaling during *Drosophila* wing development

**Pan, Y., Alégot, H., Rauskolb, C. and Irvine, K. D.**

dev165712

MicroRNA-dependent regulation of Hox gene expression sculpts fine-grain morphological patterns in a *Drosophila* appendage

**Kaschula, R., Pinho, S. and Alonso, C. R.**

dev161133

Endocytic trafficking factor VPS45 is essential for spatial regulation of lens fiber differentiation in zebrafish

**Mochizuki, T., Kojima, Y., Nishiwaki, Y., Harakuni, T. and Masai, I.**

dev170282

## TECHNIQUES AND RESOURCES

Simultaneous zygotic inactivation of multiple genes in mouse through CRISPR/Cas9-mediated base editing

**Zhang, H., Pan, H., Zhou, C., Wei, Y., Ying, W., Li, S., Wang, G., Li, C., Ren, Y., Li, G., Ding, X., Sun, Y., Li, G.-L., Song, L., Li, Y., Yang, H. and Liu, Z.**

dev168906

Cohort-based multiscale analysis of hemodynamic-driven growth and remodeling of the embryonic pharyngeal arch arteries

**Lindsey, S. E., Butcher, J. T. and Vignon-Clementel, I. E.**

dev162578