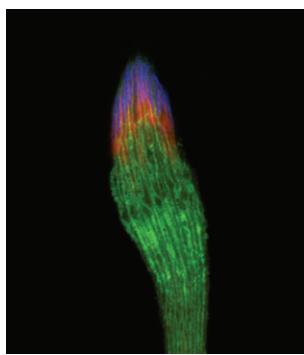
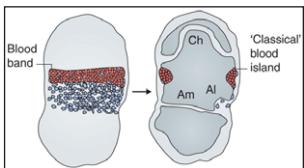


Development



Cover: A section from a syncytial cyst of 64 elongated *Drosophila* spermatids showing investment cones (phalloidin, red) departing the nuclei (Hoechst, blue) and beginning caudal movement to individualise the spermatids. Plasma membrane (β 2tub-myristoylated GFP, green) is present along the cell periphery of each spermatid even before it is individualised. See Research article by Zhou et al. on p. 1111.



Definitive haematopoietic stem cells (HSCs) give rise to all the mature blood cell lineages in adults, and, as reviewed by Alexander Medvinsky and colleagues, recent advances have shed light on the embryonic origin of HSCs. See Review on p. 1017.

REVIEW

- 1017** Embryonic origin of the adult hematopoietic system: advances and questions
Medvinsky, A., Rybtsov, S. and Taoudi, S.

DEVELOPMENT AND STEM CELLS

- 1033** The *C. elegans* SoxC protein SEM-2 opposes differentiation factors to promote a proliferative blast cell fate in the postembryonic mesoderm
Tian, C., Shi, H., Colledge, C., Stern, M., Waterston, R. and Liu, J.

- 1045** EGF signaling regulates the proliferation of intestinal stem cells in *Drosophila*
Biteau, B. and Jasper, H.

- 1057** Continuous live imaging of adult neural stem cell division and lineage progression in vitro
Costa, M. R., Ortega, F., Brill, M. S., Beckervordersandforth, R., Petrone, C., Schroeder, T., Götz, M. and Berninger, B.

- 1069** synMuv B proteins antagonize germline fate in the intestine and ensure *C. elegans* survival
Pettella, L. N., Wang, W., Spike, C. A., Rechtsteiner, A., Reinke, V. and Strome, S.

RESEARCH REPORTS

- 1081** Regulation of mouse stomach development and Barx1 expression by specific microRNAs
Kim, B.-M., Woo, J., Kanelloupolou, C. and Shivdasani, R. A.

- 1087** Kinesin-1 tail autoregulation and microtubule-binding regions function in saltatory transport but not ooplasmic streaming
Moua, P., Fullerton, D., Serbus, L. R., Warrior, R. and Saxton, W. M.

- 1093** Wt1 controls retinoic acid signalling in embryonic epicardium through transcriptional activation of Raldh2
Guadix, J. A., Ruiz-Villalba, A., Lettice, L., Velecela, V., Muñoz-Chápuli, R., Hastie, N. D., Pérez-Pomares, J. M. and Martínez-Estrada, O. M.

RESEARCH ARTICLES

- 1099** The female-specific Doublesex isoform regulates pleiotropic transcription factors to pattern genital development in *Drosophila*
Chatterjee, S. S., Uppendahl, L. D., Chowdhury, M. A., Ip, P.-L. and Siegal, M. L.

- 1111** Auxilin is required for formation of Golgi-derived clathrin-coated vesicles during *Drosophila* spermatogenesis
Zhou, X., Fabian, L., Bayraktar, J. L., Ding, H.-M., Brill, J. A. and Chang, H. C.

- 1121** Pkd1l1 complexes with Pkd2 on motile cilia and functions to establish the left-right axis
Kamura, K., Kobayashi, D., Uehara, Y., Koshida, S., Iijima, N., Kudo, A., Yokoyama, T. and Takeda, H.

- 1131** Pkd1l1 establishes left-right asymmetry and physically interacts with Pkd2
Field, S., Riley, K.-L., Grimes, D. T., Hilton, H., Simon, M., Powles-Glover, N., Siggers, P., Bogani, D., Greenfield, A. and Norris, D. P.

- 1143** Compartmentalized Notch signaling sustains epithelial mirror symmetry
Wibowo, I., Pinto-Texeira, F., Satou, C., Higashijima, S. and López-Schier, H.

- 1153** Neuronal remodeling and apoptosis require VCP-dependent degradation of the apoptosis inhibitor DIAP1
Rumpf, S., Lee, S. B., Jan, L. Y. and Jan, Y. N.

- 1161** Genetic mosaic analysis reveals a major role for frizzled 4 and frizzled 8 in controlling ureteric growth in the developing kidney
Ye, X., Wang, Y., Rattner, A. and Nathans, J.
- 1173** Aplexone targets the HMG-CoA reductase pathway and differentially regulates arteriovenous angiogenesis
Choi, J., Mouillesseaux, K., Wang, Z., Fiji, H. D. G., Kinderman, S. S., Otto, G. W., Geisler, R., Kwon, O. and Chen, J.-N.
- 1183** Specific insulin-like peptides encode sensory information to regulate distinct developmental processes
Cornils, A., Gloeck, M., Chen, Z., Zhang, Y. and Alcedo, J.
- 1195** Apical ectodermal ridge morphogenesis in limb development is controlled by *Arid3b*-mediated regulation of cell movements
Casanova, J. C., Uribe, V., Badia-Careaga, C., Giovinazzo, G., Torres, M. and Sanz-Ezquerro, J. J.
- 1207** Multiple developmental programs are altered by loss of *Zic1* and *Zic4* to cause Dandy-Walker malformation cerebellar pathogenesis
Blank, M. C., Grinberg, I., Aryee, E., Laliberte, C., Chizhikov, V. V., Henkelman, R. M. and Millen, K. J.
- 1217** Involvement of Hedgehog and FGF signalling in the lamprey telencephalon: evolution of regionalization and dorsoventral patterning of the vertebrate forebrain
Sugahara, F., Aota, S., Kuraku, S., Murakami, Y., Takio-Ogawa, Y., Hirano, S. and Kuratani, S.

TECHNICAL PAPER

- 1227** A landmark-free morphometric staging system for the mouse limb bud
Boehm, B., Rautschka, M., Quintana, L., Raspopovic, J., Jan, Z. and Sharpe, J.