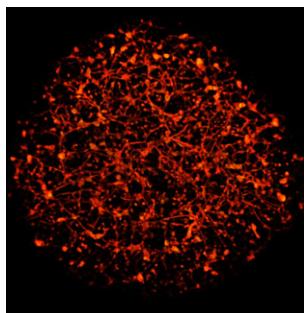


Development



Cover: Fluorescent protein fusion to the sole *Drosophila* type II phosphatidylinositol 4-kinase (mCherry-PI4KII) localizes to round and tubular endosomes that form a dense web in specialized secretory cells of the larval salivary gland. See Research article by Burgess et al. on p. 3040.

REVIEWS

- 2833 Vascular instruction of pancreas development
Cleaver, O. and Dor, Y.
- 2845 Satellite cells are essential for skeletal muscle regeneration: the cell on the edge returns centre stage
Relaix, F. and Zammit, P. S.

DEVELOPMENT AND STEM CELLS

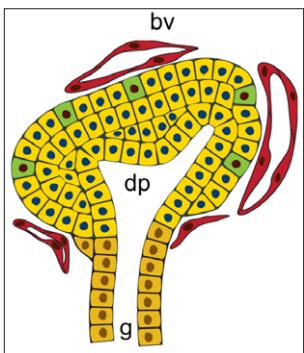
- 2857 Hypoxia promotes satellite cell self-renewal and enhances the efficiency of myoblast transplantation
Liu, W., Wen, Y., Bi, P., Lai, X., Shawn Liu, X., Liu, X. and Kuang, S.
- 2866 Conversion from mouse embryonic to extra-embryonic endoderm stem cells reveals distinct differentiation capacities of pluripotent stem cell states
Cho, L. T. Y., Wamaitha, S. E., Tsai, I. J., Artus, J., Sherwood, R. I., Pedersen, R. A., Hadjantonakis, A.-K. and Niakan, K. K.
- 2878 REST regulates the pool size of the different neural lineages by restricting the generation of neurons and oligodendrocytes from neural stem/progenitor cells
Covey, M. V., Streb, J. W., Spektor, R. and Ballas, N.

RESEARCH REPORTS

- 2891 *Drosophila* Patj plays a supporting role in apical-basal polarity but is essential for viability
Zhou, W. and Hong, Y.
- 2897 β-arrestin control of late endosomal sorting facilitates decoy receptor function and chemokine gradient formation
Mahabaleshwar, H., Tarbashevich, K., Nowak, M., Brand, M. and Raz, E.

RESEARCH ARTICLES

- 2903 Dorsal activity of maternal *squint* is mediated by a non-coding function of the RNA
Lim, S., Kumari, P., Gilligan, P., Quach, H. N. B., Mathavan, S. and Sampath, K.
- 2916 Mechanism of pectoral fin outgrowth in zebrafish development
Yano, T., Abe, G., Yokoyama, H., Kawakami, K. and Tamura, K.
- 2926 Identification of a novel developmental mechanism in the generation of mesothelia
Winters, N. I., Thomason, R. T. and Bader, D. M.
- 2935 Multiscale mechanisms of cell migration during development: theory and experiment
McLennan, R., Dyson, L., Prather, K. W., Morrison, J. A., Baker, R. E., Maini, P. K. and Kulesa, P. M.
- 2945 Regulation of dynein localization and centrosome positioning by *Lis-1* and *asunder* during *Drosophila* spermatogenesis
Sitaram, P., Anderson, M. A., Jodoin, J. N., Lee, E. and Lee, L. A.
- 2955 Absence of Dpy19l2, a new inner nuclear membrane protein, causes globozoospermia in mice by preventing the anchoring of the acrosome to the nucleus
Pierre, V., Martinez, G., Coutton, C., Delarocque, J., Yassine, S., Novella, C., Pernet-Gallay, K., Hennebicq, S., Ray, P. F. and Arnoult, C.



Recent studies suggest that blood vessels provide organs with non-nutritional signals that control their development and homeostasis. Here, Ondine Cleaver and Yuval Dor review the contribution of the vasculature to developing tissues, with a focus on the pancreas. See Review on p. 2833.

- 2966** BCDO2 acts as a carotenoid scavenger and gatekeeper for the mitochondrial apoptotic pathway
Lobo, G. P., Isken, A., Hoff, S., Babino, D. and von Lintig, J.
- 2978** Signalling from hindbrain boundaries regulates neuronal clustering that patterns neurogenesis
Terriente, J., Gerety, S. S., Watanabe-Asaka, T., Gonzalez-Quevedo, R. and Wilkinson, D. G.
- 2988** The protein kinase MLTK regulates chondrogenesis by inducing the transcription factor Sox6
Suzuki, T., Kusakabe, M., Nakayama, K. and Nishida, E.
- 2999** Fascin controls neuronal class-specific dendrite arbor morphology
Nagel, J., Delandre, C., Zhang, Y., Förstner, F., Moore, A. W. and Tavosanis, G.
- 3010** Suppression of Bmp4 signaling by the zinc-finger repressors Osr1 and Osr2 is required for Wnt/β-catenin-mediated lung specification in *Xenopus*
Rankin, S. A., Gallas, A. L., Neto, A., Gómez-Skarmeta, J. L. and Zorn, A. M.
- 3021** Pancreas-enriched miRNA refines endocrine cell differentiation
Kredo-Russo, S., Mandelbaum, A. D., Ness, A., Alon, I., Lennox, K. A., Behlke, M. A. and Hornstein, E.
- 3032** RTK signaling modulates the Dorsal gradient
Helman, A., Lim, B., Andreu, M. J., Kim, Y., Shestkin, T., Lu, H., Jiménez, G., Shvartsman, S. Y. and Paroush, Z.
- 3040** Type II phosphatidylinositol 4-kinase regulates trafficking of secretory granule proteins in *Drosophila*
Burgess, J., Del Bel, L. M., Ma, C. J., Barylko, B., Polevoy, G., Rollins, J., Albanesi, J. P., Krämer, H. and Brill, J. A.
- 3051** Prox1 postmitotically defines dentate gyrus cells by specifying the granule cell identity over CA3 pyramidal cell fate in the hippocampus
Iwano, T., Masuda, A., Kiyonari, H., Enomoto, H. and Matsuzaki, F.
- 3063** Corrigendum