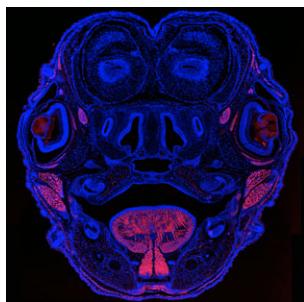
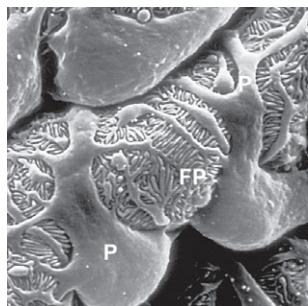


Development



Cover: Head frontal section from an E16 mouse embryo stained for myosin heavy chain (red) and DAPI (blue). Examination of the contribution of the Islet1 lineage from the splanchnic mesoderm to a subset of jaw muscles revealed a surprising heterogeneity in head muscle development. See research article by Nathan et al. on p. 647.



The glomerulus is an intricate renal structure that contains an unusual filtration barrier, which retains certain-sized proteins and blood cells in the circulation. As reviewed by Quaggin and Kreidberg, recent studies have revealed it to be a dynamic structure whose integrity depends on signalling between three major cell lineages: podocytes, endothelial and mesangial cells. **See review on p. 609.**

REVIEW

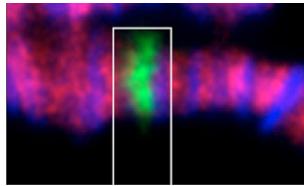
- 609** Development of the renal glomerulus: good neighbors and good fences
Quaggin, S. E. and Kreidberg, J. A.

RESEARCH REPORT

- 621** Dynamic analysis of filopodial interactions during the zippering phase of *Drosophila* dorsal closure
Millard, T. H. and Martin, P.

RESEARCH ARTICLES

- 627** Logic of Wg and Dpp induction of distal and medial fates in the *Drosophila* leg
Estella, C. and Mann, R. S.
- 637** Sox9 and Sox10 influence survival and migration of oligodendrocyte precursors in the spinal cord by regulating PDGF receptor α expression
Finzsch, M., Stolt, C. C., Lommes, P. and Wegner, M.
- 647** The contribution of Islet1-expressing splanchnic mesoderm cells to distinct branchiomeric muscles reveals significant heterogeneity in head muscle development
Nathan, E., Monovich, A., Tirosh-Finkel, L., Harrelson, Z., Rousoo, T., Rinon, A., Harel, I., Evans, S. M. and Tzahor, E.
- 659** The netrin receptor UNC5B promotes angiogenesis in specific vascular beds
Navankasattusas, S., Whitehead, K. J., Suli, A., Sorensen, L. K., Lim, A. H., Zhao, J., Park, K. W., Wythe, J. D., Thomas, K. R., Chien, C.-B. and Li, D. Y.
- 669** The role of Polycomb-group response elements in regulation of *engrailed* transcription in *Drosophila*
DeVido, S. K., Kwon, D., Brown, J. L. and Kassis, J. A.
- 677** Mechanism of asymmetric ovarian development in chick embryos
Ishimaru, Y., Komatsu, T., Kasahara, M., Katoh-Fukui, Y., Ogawa, H., Toyama, Y., Maekawa, M., Toshimori, K., Chandraratna, R. A. S., Morohashi, K. and Yoshioka, H.
- 687** Polo kinases regulate *C. elegans* embryonic polarity via binding to DYRK2-primed MEX-5 and MEX-6
Nishi, Y., Rogers, E., Robertson, S. M. and Lin, R.
- 699** Ectopic histone H3S10 phosphorylation causes chromatin structure remodeling in *Drosophila*
Deng, H., Bao, X., Cai, W., Blacketer, M. J., Belmont, A. S., Girton, J., Johansen, J. and Johansen, K. M.
- 707** Loss of *seven-up* from *Drosophila* R1/R6 photoreceptors reveals a stochastic fate choice that is normally biased by Notch
Miller, A. C., Seymour, H., King, C. and Herman, T. G.
- 717** Inactivation of nuclear Wnt- β -catenin signaling limits blastocyst competency for implantation
Xie, H., Tranguch, S., Jia, X., Zhang, H., Das, S. K., Dey, S. K., Kuo, C. J. and Wang, H.
- 729** *Cux2* (*Cutl2*) integrates neural progenitor development with cell-cycle progression during spinal cord neurogenesis
Iulianella, A., Sharma, M., Durnin, M., Vanden Heuvel, G. B. and Trainor, P. A.
- 743** P-cadherin is a p63 target gene with a crucial role in the developing human limb bud and hair follicle
Shimomura, Y., Wajid, M., Shapiro, L. and Christiano, A. M.



Polytene squash preparation from a *Drosophila* larva homozygous for the *lacO* repeat line P11.3, labelled with LacI antibody (green), Brahma antibody (red) and Hoechst 33258 (blue), from a study that reports that ectopic histone H3S10 phosphorylation by JIL-1 kinase changes a condensed heterochromatin-like state to an open euchromatic state during development. See research article on p. 699.

- 755** Recombinase-mediated cassette exchange reveals the selective use of G_q/G_{11} -dependent and -independent endothelin 1/endothelin type A receptor signalling in pharyngeal arch development
Sato, T., Kawamura, Y., Asai, R., Amano, T., Uchijima, Y., Dettlaff-Swiercz, D. A., Offermanns, S., Kurihara, Y. and Kurihara, H.
- 767** *Hd3a* and *RFT1* are essential for flowering in rice
Komiya, R., Ikegami, A., Tamaki, S., Yokoi, S. and Shimamoto, K.
- DEVELOPMENT AND DISEASE**
- 775** Role of epithelial cell fibroblast growth factor receptor substrate 2 α in prostate development, regeneration and tumorigenesis
Zhang, Y., Zhang, J., Lin, Y., Lan, Y., Lin, C., Xuan, J. W., Shen, M. M., McKeehan, W. L., Greenberg, N. M. and Wang, F.
- 785** Erratum
- 786** Corrigendum
- 787** Corrigendum