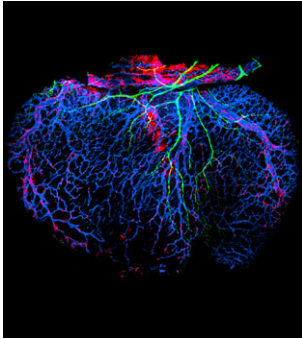
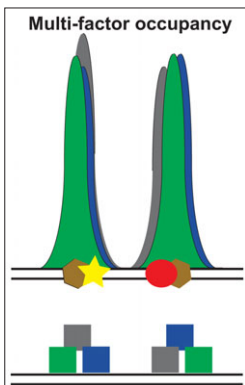


Development



Cover: Whole-mount confocal microscopy using antibodies to the pan-endothelial marker PECAM1 (blue), the vascular smooth muscle cell (VSMC) marker SM22 α (red) and the neuronal marker class III β -tubulin (TUJ1, green) reveals that cardiac axons follow VSMC-associated large-diameter coronary vessels in the subepicardium of the dorsal ventricular wall of the developing mouse heart. **See Research article by Nam et al. on p. 1475.**



Nelson and Wardle outline the various methods used to define *cis*-regulatory elements driving gene expression, and discuss the complex relationship between sequence conservation and functional equivalence of such elements during development and across evolution. **See Review on p. 1385.**

REVIEWS

- 1373** Crossing paths: cytokinin signalling and crosstalk
El-Showk, S., Ruonala, R. and Helariutta, Y.
- 1385** Conserved non-coding elements and *cis* regulation: actions speak louder than words
Nelson, A. C. and Wardle, F. C.

DEVELOPMENT AND STEM CELLS

- 1397** Progesterone drives mammary secretory differentiation via RankL-mediated induction of Elf5 in luminal progenitor cells
Lee, H. J., Gallego-Ortega, D., Ledger, A., Schramek, D., Joshi, P., Szwarc, M. M., Cho, C., Lydon, J. P., Khokha, R., Penninger, J. M. and Ormandy, C. J.
- 1402** Notch regulates blastema proliferation and prevents differentiation during adult zebrafish fin regeneration
Münch, J., González-Rajal, A. and de la Pompa, J. L.
- 1412** Notch signaling coordinates cellular proliferation with differentiation during zebrafish fin regeneration
Grotek, B., Wehner, D. and Weidinger, G.
- 1424** Sox2 marks epithelial competence to generate teeth in mammals and reptiles
Juuri, E., Jussila, M., Seidel, K., Holmes, S., Wu, P., Richman, J., Heikinheimo, K., Chuong, C.-M., Arnold, K., Hochedlinger, K., Klein, O., Michon, F. and Thesleff, I.
- 1433** Single-cell gene expression profiling reveals functional heterogeneity of undifferentiated human epidermal cells
Tan, D. W. M., Jensen, K. B., Trotter, M. W. B., Connelly, J. T., Broad, S. and Watt, F. M.
- 1445** SOX2 maintains the quiescent progenitor cell state of postnatal retinal Müller glia
Surzenko, N., Crowl, T., Bachleda, A., Langer, L. and Pevny, L.

RESEARCH ARTICLES

- 1457** Jun N-terminal kinase maintains tissue integrity during cell rearrangement in the gut
Dush, M. K. and Nascone-Yoder, N. M.
- 1467** Temporal control of BMP signalling determines neuronal subtype identity in the dorsal neural tube
Tozer, S., Le Dréau, G., Marti, E. and Briscoe, J.
- 1475** Coronary veins determine the pattern of sympathetic innervation in the developing heart
Nam, J., Onitsuka, I., Hatch, J., Uchida, Y., Ray, S., Huang, S., Li, W., Zang, H., Ruiz-Lozano, P. and Mukoyama, Y.
- 1486** Modular development of the teleost trunk along the dorsoventral axis and *zic1/zic4* as selector genes in the dorsal module
Kawanishi, T., Kaneko, T., Moriyama, Y., Kinoshita, M., Yokoi, H., Suzuki, T., Shimada, A. and Takeda, H.
- 1497** A truncation allele in *vascular endothelial growth factor c* reveals distinct modes of signaling during lymphatic and vascular development
Villefranc, J. A., Nicoli, S., Bentley, K., Jeltsch, M., Zarkada, G., Moore, J. C., Gerhardt, H., Alitalo, K. and Lawson, N. D.
- 1507** Src kinases mediate the interaction of the apical determinant Bazooka/PAR3 with STAT92E and increase signalling efficiency in *Drosophila* ectodermal cells
Sotillos, S., Krahn, M., Espinosa-Vázquez, J. M. and Hombría, J. C.-G.

- 1517 Intradermal adipocytes mediate fibroblast recruitment during skin wound healing
Schmidt, B. A. and Horsley, V.
- 1528 Conserved and divergent functions of Nfix in skeletal muscle development during vertebrate evolution
Pistocchi, A., Gaudenzi, G., Foglia, E., Monteverde, S., Moreno-Fortuny, A., Pianca, A., Cossu, G., Cotelli, F. and Messina, G.
- 1537 *sfrp1* promotes cardiomyocyte differentiation in *Xenopus* via negative-feedback regulation of Wnt signalling
Gibb, N., Lavery, D. L. and Hoppler, S.
- 1550 Lethal giant larvae 2 regulates development of the ciliated organ Kupffer's vesicle
Tay, H. G., Schulze, S. K., Compagnon, J., Foley, F. C., Heisenberg, C.-P., Yost, H. J., Abdelilah-Seyfried, S. and Amack, J. D.
- 1560 Transmembrane protein OSTA-1 shapes sensory cilia morphology via regulation of intracellular membrane trafficking in *C. elegans*
Olivier-Mason, A., Wojtyniak, M., Bowie, R. V., Nechipurenko, I. V., Blacque, O. E. and Sengupta, P.
- 1573 MAPK1 is required for establishing the pattern of cell proliferation and for cell survival during lens development
Upadhy, D., Ogata, M. and Reneker, L. W.
- 1583 CLIPR-59: a protein essential for neuromuscular junction stability during mouse late embryonic development
Couesnon, A., Offner, N., Bernard, V., Chaverot, N., Backer, S., Dimitrov, A., Perez, F., Molgó, J. and Bloch-Gallego, E.
- 1594 Floor plate-derived sonic hedgehog regulates glial and ependymal cell fates in the developing spinal cord
Yu, K., McGlynn, S. and Matisse, M. P.

TECHNIQUES AND RESOURCES

- 1605 Live imaging of multicolor-labeled cells in *Drosophila*
Boulina, M., Samarajeewa, H., Baker, J. D., Kim, M. D. and Chiba, A.