



Cover: Differing *Six2/SIX2* transcriptional networks in mouse and human kidney. E15.5 mouse kidney next to a 15.5 week human fetal kidney with *Six2/SIX2* (cyan) marking the nephron progenitors and cytokeratin (red) highlighting the collecting duct system. Nuclei are in blue. See Research article by O'Brien et al. on p. 595.

MEETING REVIEW

- 547 The Notch meeting: an odyssey from structure to function
Chitnis, A. and Bally-Cuif, L.

REVIEW

- 554 Stomach development, stem cells and disease
Kim, T.-H. and Shivedasani, R. A.

STEM CELLS AND REGENERATION

- 566 Differentiation of zebrafish spermatogonial stem cells to functional sperm in culture
Kawasaki, T., Siegfried, K. R. and Sakai, N.

RESEARCH REPORTS

- 575 The LGN protein promotes planar proliferative divisions in the neocortex but apicobasal asymmetric terminal divisions in the retina
Lacommune, M., Tarchini, B., Boudreau-Pinsonneault, C., Monat, C. and Cayouette, M.

- 582 Disruption of CXCR4 signaling in pharyngeal neural crest cells causes DiGeorge syndrome-like malformations
Escot, S., Blavet, C., Faure, E., Zaffran, S., Duband, J.-L. and Fournier-Thibault, C.

- 589 Endothelial cell-derived semaphorin 3A inhibits filopodia formation by blood vascular tip cells
Ochsenbein, A. M., Karaman, S., Proulx, S. T., Berchtold, M., Jurisic, G., Stoeckli, E. T. and Detmar, M.

RESEARCH ARTICLES

- 595 Differential regulation of mouse and human nephron progenitors by the Six family of transcriptional regulators
O'Brien, L. L., Guo, Q., Lee, Y.J., Tran, T., Benazet, J.-D., Whitney, P. H., Valouev, A. and McMahon, A. P.

- 609 Cannabinoid receptor signaling regulates liver development and metabolism
Liu, L. Y., Alexa, K., Cortes, M., Schatzman-Bone, S., Kim, A. J., Mukhopadhyay, B., Cinar, R., Kunos, G., North, T. E. and Goessling, W.

- 623 Modulation of junction tension by tumor suppressors and proto-oncogenes regulates cell-cell contacts
Bosveld, F., Guirao, B., Wang, Z., Rivière, M., Bonnet, I., Graner, F. and Bellaïche, Y.

- 635 Sperm-borne miRNAs and endo-siRNAs are important for fertilization and preimplantation embryonic development
Yuan, S., Schuster, A., Tang, C., Yu, T., Ortogero, N., Bao, J., Zheng, H. and Yan, W.

- 648 Chondrocytic ephrin B2 promotes cartilage destruction by osteoclasts in endochondral ossification
Tonna, S., Poulton, I. J., Taykar, F., Ho, P. W. M., Tonkin, B., Crimeen-Irwin, B., Tatarczuch, L., McGregor, N. E., Mackie, E. J., Martin, T. J. and Sims, N. A.

- 658 Inositol 1,4,5-trisphosphate (IP3)-dependent Ca^{2+} signaling mediates delayed myogenesis in Duchenne muscular dystrophy fetal muscle
Farini, A., Sitzia, C., Cassinelli, L., Colleoni, F., Parolini, D., Giovanello, U., Maciotta, S., Colombo, A., Meregalli, M. and Torrente, Y.

- 670 Epithelial stratification and placode invagination are separable functions in early morphogenesis of the molar tooth
Li, J., Chatzeli, L., Panousopoulou, E., Tucker, A. S. and Green, J. B. A.

- 682 NO FLOWERING IN SHORT DAY (NFL) is a bHLH transcription factor that promotes flowering specifically under short-day conditions in *Arabidopsis*
Sharma, N., Xin, R., Kim, D.-H., Sung, S., Lange, T. and Huq, E.

- 691 Differences in the spatiotemporal expression and epistatic gene regulation of the mesodiencephalic dopaminergic precursor marker *PITX3* during chicken and mouse development
Klafke, R., Alwin Prem Anand, A., Wurst, W., Prakash, N. and Wizenmann, A.

- 703 RNA-Seq identifies SPGs as a ventral skeletal patterning cue in sea urchins
Piacentino, M. L., Zuch, D. T., Fishman, J., Rose, S., Speranza, E. E., Li, C., Yu, J., Chung, O., Ramachandran, J., Ferrell, P., Patel, V., Reyna, A., Hameeduddin, H., Chaves, J., Hewitt, F. B., Bardot, E., Lee, D., Core, A. B., Hogan, J. D., Keenan, J. L., Luo, L., Coulombe-Huntington, J., Blute, T. A., Oleinik, E., Ibn-Salem, J., Pousta, A. J. and Bradham, C. A.

- 715 Molecular model for force production and transmission during vertebrate gastrulation
Pfister, K., Shook, D. R., Chang, C., Keller, R. and Skoglund, P.