



Cover: 3D projection of an E18 mouse kidney stained for aquaporin 1 and Na-K-Cl co-transporter (green, loops of Henle), *Lotus tetragonolobus* lectin (red, proximal tubules) and DAPI (blue). Yellow staining highlights the proximal tubule and loop of Henle junctions. See **Research article** by **Basta et al.** on p 3080.

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- 3007** Advances in stem cells and regenerative medicine: single-cell dynamics, new models and translational perspectives
Twigger, A.-J. and Scheel, C. H.

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- 3012** Microtubule organization, dynamics and functions in differentiated cells
Muroyama, A. and Lechler, T.
- 3022** The nature and dynamics of spermatogonial stem cells
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- 3042** Morphogen and community effects determine cell fates in response to BMP4 signaling in human embryonic stem cells
Nemashkalo, A., Ruzo, A., Heemskerk, I. and Warmflash, A.
- 3054** Sonic hedgehog from both nerves and epithelium is a key trophic factor for taste bud maintenance
Castillo-Azofeifa, D., Losacco, J. T., Salcedo, E., Golden, E. J., Finger, T. E. and Barlow, L. A.
- 3066** Cytoplasmic poly (A)-binding protein critically regulates epidermal maintenance and turnover in the planarian *Schmidtea mediterranea*
Bansal, D., Kulkarni, J., Nadahalli, K., Lakshmanan, V., Krishna, S., Sasidharan, V., Geo, J., Dilipkumar, S., Pasricha, R., Gulyani, A., Raghavan, S. and Palakodeti, D.
- 3080** A Sall1-NuRD interaction regulates multipotent nephron progenitors and is required for loop of Henle formation
Basta, J. M., Robbins, L., Denner, D. R., Kolar, G. R. and Rauchman, M.

RESEARCH REPORT

- 3095** Functional regulatory evolution outside of the minimal *even-skipped* stripe 2 enhancer
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- 3114** Sox2 expression in Schwann cells inhibits myelination *in vivo* and induces influx of macrophages to the nerve
Roberts, S. L., Dun, X. P., Doddrell, R. D. S., Mindos, T., Drake, L. K., Onaitis, M. W., Florio, F., Quattrini, A., Lloyd, A. C., D'Antonio, M. and Parkinson, D. B.
- 3126** Non-canonical *WOX11*-mediated root branching contributes to plasticity in *Arabidopsis* root system architecture
Sheng, L., Hu, X., Du, Y., Zhang, G., Huang, H., Scheres, B. and Xu, L.
- 3134** Essential basal cytonemes take up Hedgehog in the *Drosophila* wing imaginal disc
Chen, W., Huang, H., Hatori, R. and Kornberg, T. B.
- 3145** Genome-wide identification of Grainy head targets in *Drosophila* reveals regulatory interactions with the POU domain transcription factor Vvl
Yao, L., Wang, S., Westholm, J. O., Dai, Q., Matsuda, R., Hosono, C., Bray, S., Lai, E. C. and Samakovlis, C.
- 3156** Hes5 regulates the transition timing of neurogenesis and gliogenesis in mammalian neocortical development
Bansod, S., Kageyama, R. and Ohtsuka, T.
- 3168** Patterning of the *Drosophila* L2 vein is driven by regulatory interactions between region-specific transcription factors expressed in response to Dpp signalling
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- 3177** Cellular heterogeneity in the ureteric progenitor niche and distinct profiles of branching morphogenesis in organ development
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TECHNIQUES AND RESOURCES