



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.

MEETING REVIEW

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

REVIEWS

- 3012** Microtubule organization, dynamics and functions in differentiated cells
Muroyama, A. and Lechler, T.
- 3022** The nature and dynamics of spermatogonial stem cells
de Rooij, D. G.

STEM CELLS AND REGENERATION

- 3031** *In vivo* genetic cell lineage tracing reveals that oviductal secretory cells self-renew and give rise to ciliated cells
Ghosh, A., Syed, S. M. and Tanwar, P. S.
- 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
Crocker, J. and Stern, D. L.

RESEARCH ARTICLES

- 3102** The extracellular metalloprotease AdamTS-A anchors neural lineages in place within and preserves the architecture of the central nervous system
Skeath, J. B., Wilson, B. A., Romero, S. E., Snee, M. J., Zhu, Y. and Lacin, H.
- 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
Marín, M., Ostalé, C. M. and de Celis, J. F.
- 3177** Cellular heterogeneity in the ureteric progenitor niche and distinct profiles of branching morphogenesis in organ development
Rutledge, E. A., Benazet, J.-D. and McMahon, A. P.

TECHNIQUES AND RESOURCES