



Cover: A segmented brain MRI scan for a heterozygous *Tubb5* knockout mouse. Depicted are the olfactory bulbs (yellow), cortex (cyan), putamen (dark blue), lateral ventricles (red), hippocampus (green), colliculi (maroon) and cerebellum (pink). These mice have microcephaly reminiscent of patients with *TUBB5* mutations. See Research article by Breuss et al. on p. 1126.

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- 1087 Antagonism between Gdf6a and retinoic acid pathways controls timing of retinal neurogenesis and growth of the eye in zebrafish
Valdivia, L. E., Lamb, D. B., Horner, W., Wierzbicki, C., Tafessu, A., Williams, A. M., Gestri, G., Krasnow, A. M., Vleeshouwer-Neumann, T. S., Givens, M., Young, R. M., Lawrence, L. M., Stickney, H. L., Hawkins, T. A., Schwarz, Q. P., Cavodeassi, F., Wilson, S. W. and Cerveny, K. L.
- 1099 The ciliary marginal zone of the zebrafish retina: clonal and time-lapse analysis of a continuously growing tissue
Wan, Y., Almeida, A. D., Rulands, S., Chalour, N., Muresan, L., Wu, Y., Simons, B. D., He, J. and Harris, W. A.
- 1108 The Myb-domain protein ULTRAPETALA1 INTERACTING FACTOR 1 controls floral meristem activities in *Arabidopsis*
Moreau, F., Thévenon, E., Blanvillain, R., Lopez-Vidriero, I., Franco-Zorrilla, J. M., Dumas, R., Parcy, F., Morel, P., Trehin, C. and Carles, C. C.

RESEARCH REPORT

- 1120 The coordination of ploidy and cell size differs between cell layers in leaves
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- 1126 Mutations in the murine homologue of *TUBB5* cause microcephaly by perturbing cell cycle progression and inducing p53-associated apoptosis
Breuss, M., Fritz, T., Gstrein, T., Chan, K., Ushakova, L., Yu, N., Vonberg, F. W., Werner, B., Eiling, U. and Keays, D. A.

- 1134 Tumor protein Tctp regulates axon development in the embryonic visual system
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- 1149 Progressive developmental restriction, acquisition of left-right identity and cell growth behavior during lobe formation in mouse liver development
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- 1160 G2 phase arrest prevents bristle progenitor self-renewal and synchronizes cell division with cell fate differentiation
Ayeni, J. O., Audibert, A., Fichelson, P., Srayko, M., Gho, M. and Campbell, S. D.
- 1170 *Drosophila* astrocytes cover specific territories of the CNS neuropil and are instructed to differentiate by Prospero, a key effector of Notch
Peco, E., Davla, S., Camp, D., Stacey, S. M., Landgraf, M. and van Meyel, D. J.
- 1182 EFN-4 functions in LAD-2-mediated axon guidance in *Caenorhabditis elegans*
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- 1192 Grainyhead-like 2 downstream targets act to suppress epithelial-to-mesenchymal transition during neural tube closure
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CORRECTIONS

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- 1229 The Notch meeting: an odyssey from structure to function
Chitnis, A. and Bally-Cuif, L.