



**Cover:** A multiciliated ependymal cell differentiated *in vitro* from mouse brain postnatal radial glial cells. Red, cilia (acetylated tubulin); blue, DNA (Draq5). Mcidas and GemC1 are key players in the generation of multiciliated ependymal cells of the adult neurogenic niche. See Research article by Kyrousi et al. on p. 3661.

## DEVELOPMENT AT A GLANCE

- 3615 Strigolactone biosynthesis and signaling in plant development  
**Lopez-Obando, M., Ligerot, Y., Bonhomme, S., Boyer, F.-D. and Rameau, C.**

## REVIEW

- 3620 Progress and renewal in gustation: new insights into taste bud development  
**Barlow, L. A.**

## STEM CELLS AND REGENERATION

- 3630 Characterisation of the human embryonic and foetal epicardium during heart development  
**Risebro, C. A., Vieira, J. M., Klotz, L. and Riley, P. R.**
- 3637 Inactivating the permanent neonatal diabetes gene *Mnx1* switches insulin-producing  $\beta$ -cells to a  $\delta$ -like fate and reveals a facultative proliferative capacity in aged  $\beta$ -cells  
**Pan, F. C., Brissova, M., Powers, A. C., Pfaff, S. and Wright, C. V. E.**
- 3649 NOTCH activation interferes with cell fate specification in the gastrulating mouse embryo  
**Souilhol, C., Perea-Gomez, A., Camus, A., Beck-Cormier, S., Vandormael-Pourrin, S., Escande, M., Collignon, J. and Cohen-Tannoudji, M.**

- 3661 Mcidas and GemC1 are key regulators for the generation of multiciliated ependymal cells in the adult neurogenic niche  
**Kyrousi, C., Arbi, M., Pilz, G.-A., Pefani, D.-E., Lalioti, M.-E., Ninkovic, J., Götz, M., Lygerou, Z. and Taraviras, S.**

- 3675 Differential DNA damage signalling and apoptotic threshold correlate with mouse epiblast-specific hypersensitivity to radiation  
**Laurent, A. and Blasi, F.**

## RESEARCH REPORT

- 3686 Phenotypic analysis of mice completely lacking netrin 1  
**Yung, A. R., Nishitani, A. M. and Goodrich, L. V.**

## RESEARCH ARTICLES

- 3692 Pak3 regulates apical-basal polarity in migrating border cells during *Drosophila* oogenesis  
**Felix, M., Chayengia, M., Ghosh, R., Sharma, A. and Prasad, M.**

- 3704 Facial whisker pattern is not sufficient to instruct a whisker-related topographic map in the mouse somatosensory brainstem  
**Laumonnerie, C., Bechara, A., Vilain, N., Kurihara, Y., Kurihara, H. and Rijli, F. M.**

- 3713 Control of *Drosophila* Type I and Type II central brain neuroblast proliferation by bantam microRNA  
**Weng, R. and Cohen, S. M.**

- 3721 Modulating the expression level of secreted Wnt3 influences cerebellum development in zebrafish transgenics  
**Teh, C., Sun, G., Shen, H., Korzh, V. and Wohland, T.**

- 3734 Disruption of the ERK/MAPK pathway in neural crest cells as a potential cause of Pierre Robin sequence  
**Parada, C., Han, D., Grimaldi, A., Sarrión, P., Park, S. S., Pelikan, R., Sanchez-Lara, P. A. and Chai, Y.**

- 3746 EMX1 regulates NRP1-mediated wiring of the mouse anterior cingulate cortex  
**Lim, J. W. C., Donahoo, A.-L. S., Bunt, J., Edwards, T. J., Fenlon, L. R., Liu, Y., Zhou, J., Moldrich, R. X., Piper, M., Gobius, I., Bailey, T. L., Wray, N. R., Kessaris, N., Poo, M.-M., Rubenstein, J. L. R. and Richards, L. J.**

- 3758 Theecdysteroidome of *Drosophila*: influence of diet and development  
**Lavrynenko, O., Rodenfels, J., Carvalho, M., Dye, N. A., Lafont, R., Eaton, S. and Shevchenko, A.**

- 3769 microRNA-31 modulates skeletal patterning in the sea urchin embryo  
**Stepicheva, N. A. and Song, J. L.**

- 3781 Modulation of temporal dynamics of gene transcription by activator potency in the *Drosophila* embryo  
**Liu, J. and Ma, J.**

- 3791 Escape of X-linked miRNA genes from meiotic sex chromosome inactivation  
**Sosa, E., Flores, L., Yan, W. and McCarrey, J. R.**

## CORRECTION

- 3801 Crucial requirement of ERK/MAPK signaling in respiratory tract development  
**Boucherat, O., Nadeau, V., Bérubé-Simard, F.-A., Charron, J. and Jeannotte, L.**