# Development



**Cover:** Determinate growth and floral meristem initiation require the combined activity of the *ids1* and *sid1* transcription factors in maize. Hand sections of *ids1* spikelets show an indeterminate meristem with extra florets (left), whereas double mutants with *sid1* (right) have enhanced indeterminacy with no lateral florets. **See research report by Chuck et al. on p. 3013.** 

The vertebrate brain develops in close association with neighbouring tissues. As discussed by Marianne Bronner-Fraser, the molecular and evolutionary relationships between the forming nervous system and other craniofacial structures were at the focus of a recent meeting. **See meeting review** on p. 2995.

#### **MEETING REVIEW**

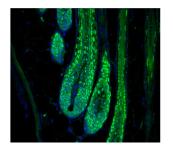
2995 On the trail of the 'new head' in Les Treilles Bronner-Fraser, M.

### **RESEARCH REPORTS**

- **3001** V2a and V2b neurons are generated by the final divisions of pair-producing progenitors in the zebrafish spinal cord Kimura, Y., Satou, C. and Higashijima, S.
- 3007 Non-cell-autonomous effects of *Ret* deletion in early enteric neurogenesis Bogni, S., Trainor, P., Natarajan, D., Krumlauf, R. and Pachnis, V.
- **3013** Floral meristem initiation and meristem cell fate are regulated by the maize *AP2* genes *ids1* and *sid1* Chuck, G., Meeley, R. and Hake, S.

### **RESEARCH ARTICLES**

- **3021** Negative-feedback regulation of proneural proteins controls the timing of neural precursor division Chang, P.-J., Hsiao, Y.-L., Tien, A.-C., Li, Y.-C. and Pi, H.
- **3031** Reciprocal roles for *bowl* and *lines* in specifying the peripodial epithelium and the disc proper of the *Drosophila* wing primordium Nusinow, D., Greenberg, L. and Hatini, V.
- **3043** Sphingosine-1-phosphate receptors regulate individual cell behaviours underlying the directed migration of prechordal plate progenitor cells during zebrafish gastrulation Kai, M., Heisenberg, C.-P. and Tada, M.
- 3053 Chato, a KRAB zinc-finger protein, regulates convergent extension in the mouse embryo García-García, M. J., Shibata, M. and Anderson, K. V.
- **3063** Fgfs control homeostatic regeneration in adult zebrafish fins Wills, A. A., Kidd, A. R., III, Lepilina, A. and Poss, K. D.
- 3071 Multiple Notch signaling events control Drosophila CNS midline neurogenesis, gliogenesis and neuronal identity Wheeler, S. R., Stagg, S. B. and Crews, S. T.
- 3081 Distinct sequential cell behaviours direct primitive endoderm formation in the mouse blastocyst Plusa, B., Piliszek, A., Frankenberg, S., Artus, J. and Hadjantonakis, A.-K.
- **3093** A new family of transcription factors Yamada, Y., Wang, H. Y., Fukuzawa, M., Barton, G. J. and Williams, J. G.
- **3103** Planar polarity genes in the *Drosophila* wing regulate the localisation of the FH3domain protein Multiple Wing Hairs to control the site of hair production **Strutt, D. and Warrington, S. J.**
- 3113 Single-cell gene profiling defines differential progenitor subclasses in mammalian neurogenesis Kawaguchi, A., Ikawa, T., Kasukawa, T., Ueda, H. R., Kurimoto, K., Saitou, M. and Matsuzaki, F.
- 3125 A crucial role for hnRNP K in axon development in *Xenopus laevis* Liu, Y., Gervasi, C. and Szaro, B. G.



DIx3 expression (green) in P9 mouse hair follicles, from a study that reports that DIx3 is a transcriptional regulator of hair formation and regeneration that is essential for hair morphogenesis, differentiation and cycling programmes. **See research article on p. 3149.**  **3137** Gsk3β/PKA and Gli1 regulate the maintenance of neural progenitors at the midbrain-hindbrain boundary in concert with E(Spl) factor activity Ninkovic, J., Stigloher, C., Lillesaar, C. and Bally-Cuif, L.

## **DEVELOPMENT AND DISEASE**

- **3149** Dlx3 is a crucial regulator of hair follicle differentiation and cycling Hwang, J., Mehrani, T., Millar, S. E. and Morasso, M. I.
- Hedgehog signaling to distinct cell types differentially regulates coronary artery and vein development
  Lavine, K. J., Long, F., Choi, K., Smith, C. and Ornitz, D. M.
- 3173 Corrigendum