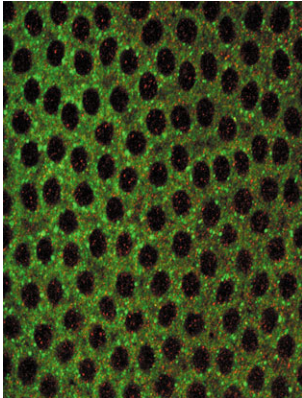
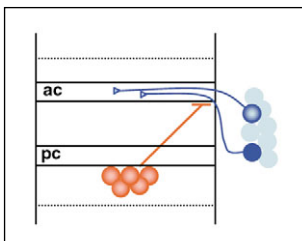


Development



Cover: P bodies in *Drosophila* embryo. The CCR4 deadenylase (red) and the regulatory RNA-binding protein Smaug (green), which are involved together in *nanos* mRNA deadenylation in *Drosophila* embryos, localize in foci or processing bodies (P bodies). The differences in size and composition of these foci indicate their variety and dynamics. **See research article by Zaessinger et al. on p. 4573.**



In this issue, Paola Bovolenta and colleagues discuss recent and compelling findings in *Drosophila*, *C. elegans* and vertebrates that demonstrate that Wnt-mediated signalling at the growth cone, involving two different receptor families, is a general and evolutionary conserved mechanism of axon guidance. **See review article on p. 4399.**

MEETING REVIEW

- 4393** Transcription saga tells developmental stories
Graves, B. J. and Tamkun, J. W.

REVIEW

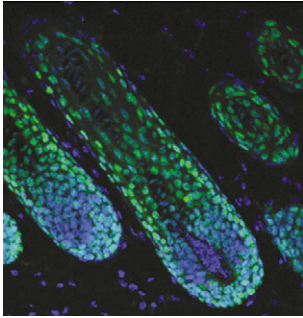
- 4399** Frizzled/RYK mediated signalling in axon guidance
Bovolenta, P., Rodriguez, J. and Esteve, P.

RESEARCH REPORTS

- 4409** Uncoupling Dorsal-mediated activation from Dorsal-mediated repression in the *Drosophila* embryo
Ratnaparkhi, G. S., Jia, S. and Courey, A. J.
- 4415** Genetic analysis of EphA-dependent signaling mechanisms controlling topographic mapping in vivo
Dufour, A., Egea, J., Kullander, K., Klein, R. and Vanderhaeghen, P.
- 4421** Compartments and the control of growth in the *Drosophila* wing imaginal disc
Martin, F. A. and Morata, G.

RESEARCH ARTICLES

- 4427** Jagged 1 is a β -catenin target gene required for ectopic hair follicle formation in adult epidermis
Estrach, S., Ambler, C. A., Lo Celso, C., Hozumi, K. and Watt, F. M.
- 4439** Ptf1a determines horizontal and amacrine cell fates during mouse retinal development
Fujitani, Y., Fujitani, S., Luo, H., Qiu, F., Burlison, J., Long, Q., Kawaguchi, Y., Edlund, H., MacDonald, R. J., Furukawa, T., Fujikado, T., Magnuson, M. A., Xiang, M. and Wright, C. V. E.
- 4451** Canonical Wnt signaling through Lef1 is required for hypothalamic neurogenesis
Lee, J. E., Wu, S.-F., Goering, L. M. and Dorsky, R. I.
- 4463** Essential pro-Bmp roles of crossveinless 2 in mouse organogenesis
Ikeya, M., Kawada, M., Kiyonari, H., Sasai, N., Nakao, K., Furuta, Y. and Sasai, Y.
- 4475** DNA supercoiling factor contributes to dosage compensation in *Drosophila*
Furuhashi, H., Nakajima, M. and Hirose, S.
- 4485** The dynamics of recycled acetylcholine receptors at the neuromuscular junction in vivo
Bruneau, E. G. and Akaaboune, M.
- 4495** The *Ultrabithorax* Hox gene of *Drosophila* controls haltere size by regulating the Dpp pathway
de Navas, L. F., Garaulet, D. L. and Sánchez-Herrero, E.
- 4507** Targeted mutation of serine 697 in the *Ret* tyrosine kinase causes migration defect of enteric neural crest cells
Asai, N., Fukuda, T., Wu, Z., Enomoto, A., Pachnis, V., Takahashi, M. and Costantini, F.
- 4517** Intrinsic chiral properties of the *Xenopus* egg cortex: an early indicator of left-right asymmetry?
Danilchik, M. V., Brown, E. E. and Riepert, K.
- 4527** CPEB controls oocyte growth and follicle development in the mouse
Racki, W. J. and Richter, J. D.



Back skin of Jag1^{fllox/fllox} mice stained with antibodies to CDP (CCAAT displacement protein) from the study by Estrach et al. into the interaction between the Wnt and Notch signalling pathways in the skin, where they report that the Notch pathway acts downstream of the Wnt/ β -catenin pathway to determine epidermal cell fate. **See research article on p. 4427.**

- 4539** *brachyenteron* is necessary for morphogenesis of the posterior gut but not for anteroposterior axial elongation from the posterior growth zone in the intermediate-germband cricket *Gryllus bimaculatus*
Shinmyo, Y., Mito, T., Uda, T., Nakamura, T., Miyawaki, K., Ohuchi, H. and Noji, S.
- 4549** The *Caenorhabditis elegans* p21-activated kinases are differentially required for UNC-6/netrin-mediated commissural motor axon guidance
Lucanic, M., Kiley, M., Ashcroft, N., L'Etoile, N. and Cheng, H.-J.
- 4561** Two separate molecular systems, Dachshous/Fat and Starry night/Frizzled, act independently to confer planar cell polarity
Casal, J., Lawrence, P. A. and Struhl, G.
- 4573** Oskar allows *nanos* mRNA translation in *Drosophila* embryos by preventing its deadenylation by Smaug/CCR4
Zaessinger, S., Busseau, I. and Simonelig, M.
- DEVELOPMENT AND DISEASE**
- 4585** Tgf β signaling is required for atrioventricular cushion mesenchyme remodeling during in vivo cardiac development
Jiao, K., Langworthy, M., Batts, L., Brown, C. B., Moses, H. L. and Baldwin, H. S.
- 4595** Hand1 regulates cardiomyocyte proliferation versus differentiation in the developing heart
Risebro, C. A., Smart, N., Dupays, L., Breckenridge, R., Mohun, T. J. and Riley, P. R.
- 4607** Corrigendum
- 4608** Corrigendum