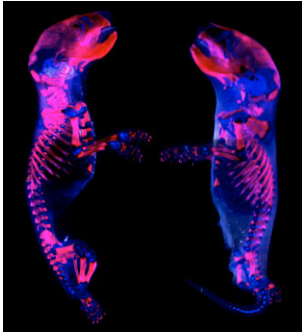
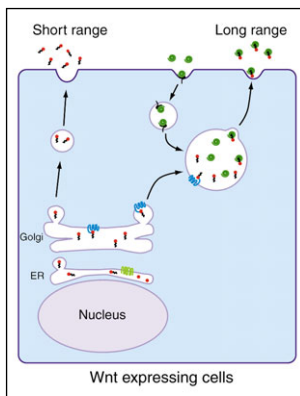


# Development



Dark-field micrographs of skeletal stains of neonatal mice show ossified bone as fuchsia and cartilage as blue. The left-hand neonate is wild type; the right-hand neonate has a limb-specific ablation of *Tbx4* resulting in hypoplastic fibula and pelvis, loss of the femur, and abnormal turning of the hindlimb. See article by Naiche and Papaioannou on p. 93.



The Wnt community has long focused upon events that occur downstream of Wnt binding to its receptors but, in the past 2 years, several key regulators of Wnt production have been discovered. Here, Coudreuse and Korswagen review exciting new findings in this emerging area of the Wnt signaling field. See review on p. 3.

## EDITORIAL

- 1 *Development* in 2007: new developments and sad goodbyes  
Smith, J.

## REVIEW

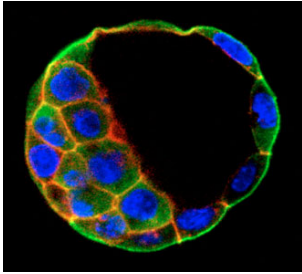
- 3 The making of Wnt: new insights into Wnt maturation, sorting and secretion  
Coudreuse, D. and Korswagen, H. C.

## RESEARCH REPORT

- 13 Homeobox gene *Dlx3* is regulated by p63 during ectoderm development: relevance in the pathogenesis of ectodermal dysplasias  
Radoja, N., Guerrini, L., Lo Iacono, N., Merlo, G. R., Costanzo, A., Weinberg, W. C., La Mantia, G., Calabrò, V. and Morasso, M. I.

## RESEARCH ARTICLES

- 19 A Zn-finger/FH2-domain containing protein, FOZ1-1, acts redundantly with CeMyoD to specify striated body wall muscle fates in the *Caenorhabditis elegans* postembryonic mesoderm  
Amin, N. M., Hu, K., Pruyne, D., Terzic, D., Bretscher, A. and Liu, J.
- 31 Gene replacement reveals a specific role for E-cadherin in the formation of a functional trophoblast  
Kan, N. G., Stemmler, M. P., Junghans, D., Kanzler, B., de Vries, W. N., Dominis, M. and Kemler, R.
- 43 Ptpmeg is required for the proper establishment and maintenance of axon projections in the central brain of *Drosophila*  
Whited, J. L., Robichaux, M. B., Yang, J. C. and Garrity, P. A.
- 55 Projections of *Drosophila* multidendritic neurons in the central nervous system: links with peripheral dendrite morphology  
Grueber, W. B., Ye, B., Yang, C.-H., Younger, S., Borden, K., Jan, L. Y. and Jan, Y.-N.
- 65 The TGF $\beta$  intracellular effector Smad3 regulates neuronal differentiation and cell fate specification in the developing spinal cord  
García-Campmany, L. and Martí, E.
- 77 Functional redundancy among Nanos proteins and a distinct role of Nanos2 during male germ cell development  
Suzuki, A., Tsuda, M. and Saga, Y.
- 85 *Tbx5* is dispensable for forelimb outgrowth  
Hasson, P., Del Buono, J. and Logan, M. P. O.
- 93 *Tbx4* is not required for hindlimb identity or post-bud hindlimb outgrowth  
Naiche, L. A. and Papaioannou, V. E.
- 105 Programmed cell death in the embryonic central nervous system of *Drosophila melanogaster*  
Rogulja-Ortmann, A., Lüer, K., Seibert, J., Rickert, C. and Technau, G. M.
- 117 Ectodysplasin has a dual role in ectodermal organogenesis: inhibition of Bmp activity and induction of Shh expression  
Pummila, M., Fliniaux, I., Jaatinen, R., James, M. J., Laurikkala, J., Schneider, P., Thesleff, I. and Mikkola, M. L.
- 127 Patterning the zebrafish diencephalon by the conserved zinc-finger protein Fezl  
Jeong, J.-Y., Einhorn, Z., Mathur, P., Chen, L., Lee, S., Kawakami, K. and Guo, S.



Staining of a wild-type mouse morula for ezrin (green) and E-cadherin (red) to detect microvilli on the apical pole of the outer cells. Kan et al. report in this study that E-cadherin has a specific function in trophoblast formation that cannot be substituted for by N-cadherin. **See research article on p. 31.**

- 137** Arginine methyltransferase Capsuléen is essential for methylation of spliceosomal Sm proteins and germ cell formation in *Drosophila*  
Anne, J., Ollo, R., Ephrussi, A. and Mechler, B. M.
- 147** A pump-independent function of the Na,K-ATPase is required for epithelial junction function and tracheal tube-size control  
Paul, S. M., Palladino, M. J. and Beitel, G. J.
- 157** Histone methylation is required for oogenesis in *Drosophila*  
Clough, E., Moon, W., Wang, S., Smith, K. and Hazelrigg, T.
- 167** *Dusp6* (*Mkp3*) is a negative feedback regulator of FGF-stimulated ERK signaling during mouse development  
Li, C., Scott, D. A., Hatch, E., Tian, X. and Mansour, S. L.
- 177** Cyp26 enzymes generate the retinoic acid response pattern necessary for hindbrain development  
Hernandez, R. E., Putzke, A. P., Myers, J. P., Margaretha, L. and Moens, C. B.
- DEVELOPMENT AND DISEASE**
- 189** GATA and Nkx factors synergistically regulate tissue-specific gene expression and development in vivo  
Zhang, Y., Rath, N., Hannenhalli, S., Wang, Z., Cappola, T., Kimura, S., Atochina-Vasserman, E., Lu, M. M., Beers, M. F. and Morrissey, E. E.
- 199** Infertility caused by retardation of follicular development in mice with oocyte-specific expression of Foxo3a  
Liu, L., Rajareddy, S., Reddy, P., Du, C., Jagarlamudi, K., Shen, Y., Gunnarsson, D., Selstam, G., Boman, K. and Liu, K.
- 211** The maturation of mucus-secreting gastric epithelial progenitors into digestive-enzyme secreting zymogenic cells requires *Mist1*  
Ramsey, V. G., Doherty, J. M., Chen, C. C., Stappenbeck, T. S., Konieczny, S. F. and Mills, J. C.