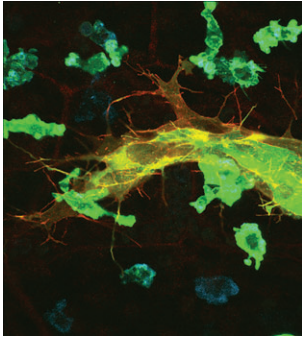


# Development



**Cover:** A confocal z-stack image illustrating a mouse sprouting embryonic dermal lymphatic vessel that is positive for neuropilin 2 (red) and LYVE1 (green). Some of the lymphatic vessel filopodia make contact with macrophages expressing F4/80 (EMR1; blue) and LYVE1. See **Research article by Gordon et al. on p. 3899.**

## SPOTLIGHT

- 3729** An interview with Shinichi Aizawa: President of the Japanese Society of Developmental Biologists  
**Amsen, E.**

## PRIMER

- 3731** FGF signalling: diverse roles during early vertebrate embryogenesis  
**Dorey, K. and Amaya, E.**

## DEVELOPMENT AND STEM CELLS

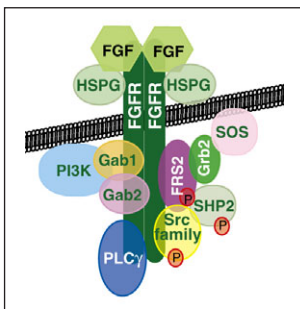
- 3743** Signaling by FGFR2b controls the regenerative capacity of adult mouse incisors  
**Parsa, S., Kuremoto, K., Seidel, K., Tabatabai, R., MacKenzie, B., Yamaza, T., Akiyama, K., Branch, J., Koh, C. J., Al Alam, D., Klein, O. D. and Bellusci, S.**
- 3753** Hedgehog signaling regulates the generation of ameloblast progenitors in the continuously growing mouse incisor  
**Seidel, K., Ahn, C. P., Lyons, D., Nee, A., Ting, K., Brownell, I., Cao, T., Carano, R. A. D., Curran, T., Schober, M., Fuchs, E., Joyner, A., Martin, G. R., de Sauvage, F. J. and Klein, O. D.**
- 3763** Id2a influences neuron and glia formation in the zebrafish retina by modulating retinoblast cell cycle kinetics  
**Uribe, R. A. and Gross, J. M.**
- 3775** OSBP- and FAN-mediated sterol requirement for spermatogenesis in *Drosophila*  
**Ma, Z., Liu, Z. and Huang, X.**
- 3785** Changes in the nuclear deposition of histone H2A variants during pre-implantation development in mice  
**Nashun, B., Yukawa, M., Liu, H., Akiyama, T. and Aoki, F.**

## RESEARCH REPORT

- 3795** *Hox11* genes establish synovial joint organization and phylogenetic characteristics in developing mouse zeugopod skeletal elements  
**Koyama, E., Yasuda, T., Minugh-Purvis, N., Kinumatsu, T., Yallowitz, A. R., Wellik, D. M. and Pacifici, M.**

## RESEARCH ARTICLES

- 3801** Mechanics of head fold formation: investigating tissue-level forces during early development  
**Varner, V. D., Voronov, D. A. and Taber, L. A.**
- 3813** Novel modes of localization and function of *nanos* in the wasp *Nasonia*  
**Lynch, J. A. and Desplan, C.**
- 3823** Endothelin receptor type A expression defines a distinct cardiac subdomain within the heart field and is later implicated in chamber myocardium formation  
**Asai, R., Kurihara, Y., Fujisawa, K., Sato, T., Kawamura, Y., Kokubo, H., Tonami, K., Nishiyama, K., Uchijima, Y., Miyagawa-Tomita, S. and Kurihara, H.**
- 3835** The transcription factor grainyhead-like 2 regulates the molecular composition of the epithelial apical junctional complex  
**Werth, M., Walentin, K., Aue, A., Schönheit, J., Wuebken, A., Pode-Shakked, N., Vilianovitch, L., Erdmann, B., Dekel, B., Bader, M., Barasch, J., Rosenbauer, F., Luft, F. C. and Schmidt-Ott, K. M.**



Since its discovery, FGF signalling has been implicated in numerous developmental processes and in disease. Now Dorey and Amaya provide an update of the main developmental processes for which FGF signalling is vital during early vertebrate embryogenesis. See **Primer on p. 3731.**

- 3847** Pitx2 defines alternate pathways acting through MyoD during limb and somitic myogenesis  
**L'Honoré, A., Ouimette, J.-F., Lavertu-Jolin, M. and Drouin, J.**
- 3857** The CRL2<sup>LRR-1</sup> ubiquitin ligase regulates cell cycle progression during *C. elegans* development  
**Merlet, J., Burger, J., Tavernier, N., Richaudeau, B., Gomes, J.-E. and Pintard, L.**
- 3867** A dual role for ErbB2 signaling in cardiac trabeculation  
**Liu, J., Bressan, M., Hassel, D., Huisken, J., Staudt, D., Kikuchi, K., Poss, K. D., Mikawa, T. and Stainier, D. Y. R.**
- 3877** Diffusion-based DNA target colocalization by thermodynamic mechanisms  
**Scialdone, A. and Nicodemi, M.**
- 3887** Hedgehog targets in the *Drosophila* embryo and the mechanisms that generate tissue-specific outputs of Hedgehog signaling.  
**Biehs, B., Kechris, K., Liu, S. and Kornberg, T. B.**
- 3899** Macrophages define dermal lymphatic vessel calibre during development by regulating lymphatic endothelial cell proliferation  
**Gordon, E. J., Rao, S., Pollard, J. W., Nutt, S. L., Lang, R. A. and Harvey, N. L.**
- 3911** RPK2 is an essential receptor-like kinase that transmits the CLV3 signal in *Arabidopsis*  
**Kinoshita, A., Betsuyaku, S., Osakabe, Y., Mizuno, S., Nagawa, S., Stahl, Y., Simon, R., Yamaguchi-Shinozaki, K., Fukuda, H. and Sawa, S.**