



Cover: *In silico* tissue generated by the cellular Potts model, with all cells having the same specified cell shape. Cells adopt different shapes owing to cell-cell interactions, as quantified through the contribution of LOCO-EFA mode 7 and depicted by heat map (blue, low; red, high). See Research article by Sánchez-Corrales et al. (dev156778).

EDITORIAL

A new Editor-in-Chief for Development

Bray, S., Storey, K. and Brown, K.

dev165266

OBITUARY

Ben Barres (1954-2017)

Cayouette, M.

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SPOTLIGHTS

An interview with James Briscoe

Brown, K.

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An interview with Susan Strome

Maartens, A.

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REVIEWS

Developing in 3D: the role of CTCF in cell differentiation

Arzate-Mejía, R. G., Recillas-Targa, F. and Corces, V. G.

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The principles that govern transcription factor network functions in stem cells

Niwa, H.

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STEM CELLS AND REGENERATION

Recapitulating early development of mouse musculoskeletal precursors of the paraxial mesoderm *in vitro*

Chal, J., Al Tanoury, Z., Oginuma, M., Moncuquet, P., Gobert, B., Miyanari, A., Tassy, O., Guevara, G., Hubaud, A., Bera, A., Sumara, O., Garnier, J.-M., Kennedy, L., Knockaert, M., Gayraud-Morel, B., Tajbakhsh, S. and Pourquié, O.

dev157339

Identification, isolation and characterization of human LGR5-positive colon adenoma cells

Dame, M. K., Attili, D., McClintock, S. D., Dedhia, P. H., Ouillette, P., Hardt, O., Chin, A. M., Xue, X., Laliberte, J., Katz, E. L., Newsome, G. M., Hill, D. R., Miller, A. J., Tsai, Y.-H., Agorku, D., Altheim, C. H., Bosio, A., Simon, B., Samuelson, L. C., Stoerker, J. A., Appelman, H. D., Varani, J., Wicha, M. S., Brenner, D. E., Shah, Y. M., Spence, J. R. and Colacino, J. A.

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RESEARCH ARTICLES

Polar cell fate stimulates *Wolbachia* intracellular growth

Kamath, A. D., Deehan, M. A. and Frydman, H. M.

dev158097

Regulatory integration of Hox factor activity with T-box factors in limb development

Jain, D., Nemec, S., Luxey, M., Gauthier, Y., Bemmo, A., Balsalobre, A. and Drouin, J.

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Polycystin 1 loss of function is directly linked to an imbalance in G-protein signaling in the kidney

Zhang, B., Tran, U. and Wessely, O.

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The histone acetyltransferase inhibitor Nir regulates epidermis development

Duteil, D., Tourrette, Y., Eberlin, A., Willmann, D., Patel, D., Friedrichs, N., Müller, J. M. and Schüle, R.

dev158543

Lineage- and stage-specific expressed *CYCD7;1* coordinates the single symmetric division that creates stomatal guard cells

Weimer, A. K., Matos, J. L., Sharma, N., Patell, F., Murray, J. A. H., Dewitte, W. and Bergmann, D. C.

dev160671

Dynamics of chromatin marks and the role of JMJD3 during pancreatic endocrine cell fate commitment

Yu, X.-X., Qiu, W.-L., Yang, L., Li, L.-C., Zhang, Y.-W. and Xu, C.-R.

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Hormonal control of growth in the wing imaginal disks of *Junonia coenia*: the relative contributions of insulin and ecdysone

Nijhout, H. F., Laub, E. and Grunert, L. W.

dev160101

Loss of *Mob1a/b* in mice results in chondrodysplasia due to YAP1/TAZ-TEAD-dependent repression of SOX9

Goto, H., Nishio, M., To, Y., Oishi, T., Miyachi, Y., Maehama, T., Nishina, H., Akiyama, H., Mak, T. W., Makii, Y., Saito, T., Yasoda, A., Tsumaki, N. and Suzuki, A.

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Microtubule organization in presynaptic boutons relies on the formin DAAM

Migh, E., Götz, T., Földi, I., Szikora, S., Gombos, R., Darula, Z., Medzihradzky, K. F., Maléth, J., Hegyi, P., Sigrist, S. and Mihály, J.

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Centrosomal protein Dzip1l binds Cby, promotes ciliary bud formation, and acts redundantly with Bromi to regulate ciliogenesis in the mouse

Wang, C., Li, J., Takemaru, K.-I., Jiang, X., Xu, G. and Wang, B.

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Delayed male germ cell sex-specification permits transition into embryonal carcinoma cells with features of primed pluripotency
Dawson, E. P., Lanza, D. G., Webster, N. J., Benton, S. M., Suetake, I. and Heaney, J. D.
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PER2 regulation of mammary gland development
McQueen, C. M., Schmitt, E. E., Sarkar, T. R., Elswood, J., Metz, R. P., Earnest, D., Rijnkels, M. and Porter, W. W.
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Fat body glycogen serves as a metabolic safeguard for the maintenance of sugar levels in *Drosophila*
Yamada, T., Habara, O., Kubo, H. and Nishimura, T.
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Prothoracotropic hormone modulates environmental adaptive plasticity through the control of developmental timing
Shimell, M., Pan, X., Martin, F. A., Ghosh, A. C., Leopold, P., O'Connor, M. B. and Romero, N. M.
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TECHNIQUES AND RESOURCES

Morphometrics of complex cell shapes: lobe contribution elliptic Fourier analysis (LOCO-EFA)
Sánchez-Corrales, Y. E., Hartley, M., van Rooij, J., Marée, A. F. M. and Grieneisen, V. A.
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In vivo three-dimensional tracking of sperm behaviors in the mouse oviduct
Wang, S. and Larina, I. V.
dev157685

The transcriptome of early chicken embryos reveals signaling pathways governing rapid asymmetric cellularization and lineage segregation
Hwang, Y. S., Seo, M., Lee, B. R., Lee, H. J., Park, Y. H., Kim, S. K., Lee, H. C., Choi, H. J., Yoon, J., Kim, H. and Han, J. Y.
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