



Cover: Mouse-zebrafish hematopoietic tissue chimeric embryo generated by transplanting murine hematopoietic stem and progenitor cells into zebrafish blastulae. Mouse cells (cyan) colonize and differentiate in the zebrafish caudal hematopoietic tissue (magenta), allowing visualization of novel murine cell behaviors, such as homing to primitive and definitive hematopoietic tissues, dynamic hematopoietic cell-niche interactions and response to bacterial infection. See article by Parada-Kusz et al. (dmm034876). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

The secret lives of cancer cell lines

Hynds, R. E., Vladimirov, E. and Janes, S. M.
dmm037366

FIRST PERSON

First person – Sudipta Bar
dmm037754

REVIEWS

Modeling epigenetic modifications in renal development and disease with organoids and genome editing
Hurtado del Pozo, C., Garreta, E., Izpisua Belmonte, J. C. and Montserrat, N.
dmm035048

Dissecting human disease with single-cell omics: application in model systems and in the clinic
Strzelecka, P. M., Ranzoni, A. M. and Cvejic, A.
dmm036525

RESEARCH ARTICLES

Targeting ulcerative colitis by suppressing glucose uptake with ritonavir
Jodeleit, H., Al-Amodi, O., Caesar, J., Villarroel Aguilera, C., Holdt, L., Gropp, R., Beigel, F. and Siebeck, M.
dmm036210

Neuromuscular degeneration and locomotor deficit in a *Drosophila* model of mucopolysaccharidosis VII is attenuated by treatment with resveratrol
Bar, S., Prasad, M. and Datta, R.
dmm036954

A novel mutation in the NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 4 (*Ndufa4*) gene links mitochondrial dysfunction to the development of diabetes in a rodent model
Yagil, C., Varadi-Levi, R. and Yagil, Y.
dmm036699

Pathogenic and non-pathogenic *Escherichia coli* colonization and host inflammatory response in a defined microbiota mouse model
Stromberg, Z. R., Van Goor, A., Redweik, G. A. J., Wymore Brand, M. J., Wannemuehler, M. J. and Mellata, M.
dmm035063

Drosophila melanogaster as a function-based high-throughput screening model for antinephrolithiasis agents in kidney stone patients

Ali, S. N., Dayarathna, T. K., Ali, A. N., Osumah, T., Ahmed, M., Cooper, T. T., Power, N. E., Zhang, D., Kim, D., Kim, R., St. Amant, A., Hou, J., Tailly, T., Yang, J., Luyt, L., Spagnuolo, P. A., Burton, J. P., Razvi, H. and Leong, H. S.
dmm035873

Fetal growth restriction in a genetic model of sporadic Beckwith–Wiedemann syndrome

Tunster, S. J., Van de Pette, M., Creeth, H. D. J., Lefebvre, L. and John, R. M.
dmm035832

Cooperation of loss of *NKX3.1* and inflammation in prostate cancer initiation

Le Magnen, C., Virk, R. K., Dutta, A., Kim, J. Y., Panja, S., Lopez-Bujanda, Z. A., Califano, A., Drake, C. G., Mitrofanova, A. and Abate-Shen, C.
dmm035139

Modelling brain dopamine-serotonin vesicular transport disease in *Caenorhabditis elegans*

Young, A. T., Ly, K. N., Wilson, C., Lehnert, K., Snell, R. G., Reid, S. J. and Jacobsen, J. C.
dmm035709

Overexpression of *Fgfr2c* causes craniofacial bone hypoplasia and ameliorates craniosynostosis in the Crouzon mouse

Lee, K. K. L., Peskett, E., Quinn, C. M., Aiello, R., Adeeva, L., Moulding, D. A., Stanier, P. and Pauws, E.
dmm035311

RESOURCE ARTICLES

Generation of mouse-zebrafish hematopoietic tissue chimeric embryos for hematopoiesis and host-pathogen interaction studies
Parada-Kusz, M., Penaranda, C., Hagedorn, E. J., Clatworthy, A., Nair, A. V., Henninger, J. E., Ernst, C., Li, B., Riquelme, R., Jijon, H., Villablanca, E. J., Zon, L. I., Hung, D. and Allende, M. L.
dmm034876

Optimizing the design of population-based patient-derived tumor xenograft studies to better predict clinical response

Floc'h, N., Guerriero, M. L., Ramos-Montoya, A., Davies, B. R., Cairns, J. and Karp, N. A.
dmm036160