



**Cover:** Omphalocele phenotype of a *Six4* and *Six5* double-deficient mouse fetus at E18.5. The fetus exhibits an abdominal body wall closure defect with protrusion of the liver and intestine, reproducing large middle-type omphalocele in humans. See article by Takahashi et al. (dmm034611). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

## EDITORIAL

DMM community consultation: help us plan for the next 10 years  
**Hackett, R. (Managing Editor) and Moulton, O. C. (Publisher)**  
dmm037507

Zebrafish knock-ins swim into the mainstream  
**Prykhodzij, S. V. and Berman, J. N.**  
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## AT A GLANCE

Immune regulation of metastasis: mechanistic insights and therapeutic opportunities  
**Blomberg, O. S., Spagnuolo, L. and de Visser, K. E.**  
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## SPECIAL ARTICLE

Living inside the box: environmental effects on mouse models of human disease  
**Sundberg, J. P. and Schofield, P. N.**  
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## RESEARCH ARTICLES

Mice doubly deficient in *Six4* and *Six5* show ventral body wall defects reproducing human omphalocele  
**Takahashi, M., Tamura, M., Sato, S. and Kawakami, K.**  
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A transgenic minipig model of Huntington's disease shows early signs of behavioral and molecular pathologies  
**Askeland, G., Rodinova, M., Štufková, H., Dosoudilova, Z., Baxa, M., Smatlikova, P., Bohuslavova, B., Klempir, J., Nguyen, T. D., Kuśnierczyk, A., Bjørås, M., Klungland, A., Hansikova, H., Ellederova, Z. and Eide, L.**  
dmm035949

One month of hyperglycemia alters spectral responses of the zebrafish photopic electroretinogram  
**Tanvir, Z., Nelson, R. F., DeCicco-Skinner, K. and Connaughton, V. P.**  
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Bicuspid aortic valve formation: *Nos3* mutation leads to abnormal lineage patterning of neural crest cells and the second heart field  
**Peterson, J. C., Chughtai, M., Wisse, L. J., Gittenberger-de Groot, A. C., Feng, Q., Goumans, M.-J. T. H., VanMunsteren, J. C., Jongbloed, M. R. M. and DeRuiter, M. C.**  
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Functional testing of a human *PBX3* variant in zebrafish reveals a potential modifier role in congenital heart defects  
**Farr, G. H., III, Imani, K., Pouv, D. and Maves, L.**  
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Effective CRISPR/Cas9-based nucleotide editing in zebrafish to model human genetic cardiovascular disorders  
**Tessadori, F., Roessler, H. I., Savelberg, S. M. C., Chocron, S., Kamel, S. M., Duran, K. J., van Haelst, M. M., van Haften, G. and Bakkers, J.**  
dmm035469

CRISPR/Cas9-mediated homology-directed repair by ssODNs in zebrafish induces complex mutational patterns resulting from genomic integration of repair-template fragments  
**Boel, A., De Saffel, H., Steyaert, W., Callewaert, B., De Paepe, A., Coucke, P. J. and Willaert, A.**  
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17-DMAG regulates p21 expression to induce chondrogenesis *in vitro* and *in vivo*  
**Bertram, K. L., Narendran, N., Tailor, P., Jablonski, C., Leonard, C., Irvine, E., Hess, R., Masson, A. O., Abubacker, S., Rinker, K., Biernaskie, J., Yates, R. M., Salo, P., Narendran, A. and Krawetz, R. J.**  
dmm033662

A severe atherosclerosis mouse model on the resistant NOD background  
**Wang, X., Huang, R., Zhang, L., Li, S., Luo, J., Gu, Y., Chen, Z., Zheng, Q., Chao, T., Zheng, W., Qi, X., Wang, L., Wen, Y., Liang, Y. and Lu, L.**  
dmm033852

ENPP1 enzyme replacement therapy improves blood pressure and cardiovascular function in a mouse model of generalized arterial calcification of infancy  
**Khan, T., Sinkevicius, K. W., Vong, S., Avakian, A., Leavitt, M. C., Malanson, H., Marozsan, A. and Askew, K. L.**  
dmm035691

## RESOURCE ARTICLE

Apolipoprotein E deficiency accelerates atherosclerosis development in miniature pigs  
**Fang, B., Ren, X., Wang, Y., Li, Z., Zhao, L., Zhang, M., Li, C., Zhang, Z., Chen, L., Li, X., Liu, J., Xiong, Q., Zhang, L., Jin, Y., Liu, X., Li, L., Wei, H., Yang, H., Li, R. and Dai, Y.**  
dmm036632