



**Cover:** Testis from a heterozygous *Ccdc151-lacZ* mouse stained with X-gal/FeCN. The *Ccdc151* gene is important for ciliary motility, and is expressed in testicular seminiferous tubules. *Ccdc151* plays critical role in spermatogenesis: the authors show that, in the mouse model of primary ciliary dyskinesia disease, homozygous deletion of *Ccdc151* in the germ line leads to azoospermia, while conditional deletion of *Ccdc151* in adult animals results in abnormal sperm counts and defective sperm motility. See article by Chiani et al. (dmm038489). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

## EDITORIAL

Disease Models & Mechanisms in the Age of Big Data  
**Hatzopoulos, A. K.**  
dmm041699

## FIRST PERSON

First person – Tiantian Ji and Lina Zhang  
dmm041798

First person – Nicoleta Baxan  
dmm041681

First person – Eileen Lynch  
dmm041640

First person – Ling-shiang Chuang  
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First person – Martin Crivello and Marion Hogg  
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First person – Francesco Chiani and Tiziana Orsini  
dmm041442

## REVIEWS

The expanding spectrum of neurological disorders of phosphoinositide metabolism  
**Volpatti, J. R., Al-Maawali, A., Smith, L., Al-Hashim, A., Brill, J. A. and Dowling, J. J.**  
dmm038174

The zebrafish subcortical social brain as a model for studying social behavior disorders  
**Geng, Y. and Peterson, R. T.**  
dmm039446

## RESEARCH ARTICLES

Dynamic MAPK signaling activity underlies a transition from growth arrest to proliferation in *Drosophila scribble* mutant tumors  
**Ji, T., Zhang, L., Deng, M., Huang, S., Wang, Y., Pham, T. T., Smith, A. A., Sridhar, V., Cabernard, C., Wang, J. and Yan, Y.**  
dmm040147

Pramipexole prevents ischemic cell death via mitochondrial pathways in ischemic stroke  
**Andrabi, S. S., Ali, M., Tabassum, H., Parveen, S. and Parvez, S.**  
dmm033860

Mast cells enhance sterile inflammation in chronic nonbacterial osteomyelitis  
**Young, S., Sharma, N., Lee, J. H., Chitu, V., Neumeister, V., Sohr, E., Stanley, E. R., Hedrich, C. M. and Craig, A. W. B.**  
dmm040097

*C9ORF72*-related cellular pathology in skeletal myocytes derived from ALS-patient induced pluripotent stem cells  
**Lynch, E., Semrad, T., Belsito, V. S., FitzGibbons, C., Reilly, M., Hayakawa, K. and Suzuki, M.**  
dmm039552

Vascular regression precedes motor neuron loss in the FUS (1-359) ALS mouse model  
**Crivello, M., Hogg, M. C., Jirström, E., Halang, L., Woods, I., Rayner, M., Coughlan, K. S., Lewandowski, S. A. and Prehn, J. H. M.**  
dmm040238

Zebrafish modeling of intestinal injury, bacterial exposures and medications defines epithelial *in vivo* responses relevant to human inflammatory bowel disease  
**Chuang, L.-s., Morrison, J., Hsu, N.-y., Labrias, P. R., Nayar, S., Chen, E., Villaverde, N., Facey, J. A., Boschetti, G., Giri, M., Castillo-Martin, M., Thin, T. H., Sharma, Y., Chu, J. and Cho, J. H.**  
dmm037432

Mild maternal hyperglycemia in *INS*<sup>C93S</sup> transgenic pigs causes impaired glucose tolerance and metabolic alterations in neonatal offspring  
**Renner, S., Martins, A. S., Streckel, E., Braun-Reichhart, C., Backman, M., Prehn, C., Klymiuk, N., Bähr, A., Blutke, A., Landbrecht-Schessl, C., Wünsch, A., Kessler, B., Kurome, M., Hinrichs, A., Koopmans, S.-J., Krebs, S., Kemter, E., Rathkolb, B., Nagashima, H., Blum, H., Ritzmann, M., Wanke, R., Aigner, B., Adamski, J., Hrabě de Angelis, M. and Wolf, E.**  
dmm039156

Next-generation RNA sequencing of FFPE subsections reveals highly conserved stromal reprogramming between canine and human mammary carcinoma  
**Amini, P., Nassiri, S., Ettl, J., Malbon, A. and Markkanen, E.**  
dmm040444

Functional loss of *Ccdc151* leads to hydrocephalus in a mouse model of primary ciliary dyskinesia  
**Chiani, F., Orsini, T., Gambadoro, A., Pasquini, M., Putti, S., Cirilli, M., Ermakova, O. and Tocchini-Valentini, G. P.**  
dmm038489

## RESOURCE ARTICLE

Characterization of acute TLR-7 agonist-induced hemorrhagic myocarditis in mice by multiparametric quantitative cardiac magnetic resonance imaging  
**Baxan, N., Papanikolaou, A., Salles-Crawley, I., Lota, A., Chowdhury, R., Dubois, O., Branca, J., Hasham, M. G., Rosenthal, N., Prasad, S. K., Zhao, L., Harding, S. E. and Sattler, S.**  
dmm040725