



**Cover:** Photoreceptors in *Drosophila* adult compound eyes. The number of rhabdomeres (marked with phalloidin staining; green) within photoreceptors (outlined with Na<sup>+</sup>/K<sup>+</sup>-ATPase staining; magenta) is decreased in *dDBT*-deficient *Drosophila* compared to that in wild type, indicating that loss of *dDBT* activity results in neuronal damage. See article by Tsai et al. (dmm044750). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

## EDITORIAL

DMM Outstanding Paper Prize 2019 winner: Alessandro Bailetti  
**Hackett, R.**  
dmm046672

## FIRST PERSON

First person – Hui-Ying Tsai and Shih-Cheng Wu  
dmm046755

First person – Pratibha Singh  
dmm046870

First person – Mohd. Salman  
dmm046169

## REVIEWS

Sex-dependent effect of *APOE* on Alzheimer's disease and other age-related neurodegenerative disorders  
**Gamache, J., Yun, Y. and Chiba-Falek, O.**  
dmm045211

Integrating fish models in tuberculosis vaccine development  
**Saralahti, A. K., Uusi-Mäkelä, M. I. E., Niskanen, M. T. and Rämetsä, M.**  
dmm045716

## RESEARCH ARTICLES

Loss of the *Drosophila* branched-chain  $\alpha$ -ketoacid dehydrogenase complex results in neuronal dysfunction  
**Tsai, H.-Y., Wu, S.-C., Li, J.-C., Chen, Y.-M., Chan, C.-C. and Chen, C.-H.**  
dmm044750

A regulated NMD mouse model supports NMD inhibition as a viable therapeutic option to treat genetic diseases  
**Echols, J., Siddiqui, A., Dai, Y., Havasi, V., Sun, R., Kaczmarczyk, A. and Keeling, K. M.**  
dmm044891

Maltodextrin-induced intestinal injury in a neonatal mouse model  
**Singh, P., Sanchez-Fernandez, L. L., Ramiro-Cortijo, D., Ochoa-Allemant, P., Perides, G., Liu, Y., Medina-Morales, E., Yakah, W., Freedman, S. D. and Martin, C. R.**  
dmm044776

Generation and characterization of an *Il2rg* knockout Syrian hamster model for XSCID and HAAdV-C6 infection in immunocompromised patients  
**Li, R., Ying, B., Liu, Y., Spencer, J. F., Miao, J., Tollefson, A. E., Brien, J. D., Wang, Y., Wold, W. S. M., Wang, Z. and Toth, K.**  
dmm044602

*suz12* inactivation in *p53*- and *nf1*-deficient zebrafish accelerates the onset of malignant peripheral nerve sheath tumors and expands the spectrum of tumor types  
**Oppel, F., Ki, D. H., Zimmerman, M. W., Ross, K. N., Tao, T., Shi, H., He, S., Aster, J. C. and Look, A. T.**  
dmm042341

Nrf2/HO-1 mediates the neuroprotective effects of pramipexole by attenuating oxidative damage and mitochondrial perturbation after traumatic brain injury in rats  
**Salman, M., Tabassum, H. and Parvez, S.**  
dmm045021

The transcription factor *Maz* is essential for normal eye development  
**Medina-Martinez, O., Haller, M., Rosenfeld, J. A., O'Neill, M. A., Lamb, D. J. and Jamrich, M.**  
dmm044412

Systemic and heart autonomous effects of sphingosine  $\Delta 4$  desaturase deficiency in lipotoxic cardiac pathophysiology  
**Walls, S. M., Chatfield, D. A., Ocorr, K., Harris, G. L. and Bodmer, R.**  
dmm043083