



Cover: Photoreceptors in *Drosophila* adult compound eyes. The number of rhabdomeres (marked with phalloidin staining; green) within photoreceptors (outlined with Na⁺/K⁺-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 α -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 HAdV-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