



Cover: Whole-mount immunostained brain of a 9-day-old zebrafish showing different cellular markers, acquired using a Zeiss Lightsheet fluorescent microscope. Glutamate receptors on neurons and glial cells are in green, phalloidin stain for actin fibers is in red, DAPI stain for nuclear localization is in cyan and the enzyme, glutamine synthetase, is in blue. Expression of these, particularly glutamine synthetase, is reduced under hyperglycemia, a prominent pathology of diabetes. The authors show that this deficiency can be ameliorated by nitric oxide supplementation. See article by Chhabria et al. (dmm039867). Image courtesy of Karishma Chhabria. Cover image is licensed under a Creative Commons Attribution 4.0 International license.

FIRST PERSON

First person – Karishma Chhabria
dmm042085

First person – Eleftheria Pervolaraki
dmm042408

First person – Tamio Furuse and Hiroshi Mizuma
dmm042127

First person – Katja Graf and Antonia Last
dmm041970

First person – Monika J. Tomecka
dmm041848

AT A GLANCE

Modeling hematopoietic disorders in zebrafish
Konantz, M., Schürch, C., Hanns, P., Müller, J. S., Sauter, L. and Lengerke, C.
dmm040360

REVIEW

Experimental models and tools to tackle glioblastoma
Robertson, F. L., Marqués-Torrejón, M.-A., Morrison, G. M. and Pollard, S. M.
dmm040386

RESEARCH ARTICLES

Sodium nitroprusside prevents the detrimental effects of glucose on the neurovascular unit and behaviour in zebrafish
Chhabria, K., Vouros, A., Gray, C., MacDonald, R. B., Jiang, Z., Wilkinson, R. N., Plant, K., Vasilaki, E., Howarth, C. and Chico, T. J. A.
dmm039867

Insoluble A β overexpression in an *App* knock-in mouse model alters microstructure and gamma oscillations in the prefrontal cortex, affecting anxiety-related behaviours
Pervolaraki, E., Hall, S. P., Foresteire, D., Saito, T., Saido, T. C., Whittington, M. A., Lever, C. and Dachtler, J.
dmm040550

Therapeutic targeting of Notch signaling and immune checkpoint blockade in a spontaneous, genetically heterogeneous mouse model of T-cell acute lymphoblastic leukemia
Gao, J., Van Meter, M., Hernandez Lopez, S., Chen, G., Huang, Y., Ren, S., Zhao, Q., Rojas, J., Gurer, C., Thurston, G. and Kuhnert, F.
dmm040931

A new mouse model of GLUT1 deficiency syndrome exhibits abnormal sleep-wake patterns and alterations of glucose kinetics in the brain
Furuse, T., Mizuma, H., Hirose, Y., Kushida, T., Yamada, I., Miura, I., Masuya, H., Funato, H., Yanagisawa, M., Onoe, H. and Wakana, S.
dmm038828

Keeping *Candida* commensal: how lactobacilli antagonize pathogenicity of *Candida albicans* in an *in vitro* gut model
Graf, K., Last, A., Gratz, R., Allert, S., Linde, S., Westermann, M., Gröger, M., Mosig, A. S., Gresnigt, M. S. and Hube, B.
dmm039719

Clinical pathologies of bone fracture modelled in zebrafish
Tomecka, M. J., Ethiraj, L. P., Sánchez, L. M., Roehl, H. H. and Carney, T. J.
dmm037630