



Cover: A von Kossa-stained L₄ vertebra from a male wild-type mouse at P10 is used as a comparison to demonstrate the delayed skeletal development in *Slc7a7^{Lbu/Lbu}* mice. L₄ vertebrae from *Slc7a7^{Lbu/Lbu}* mice at P14-P18 are more comparable to those from P5-P10 wild-type mice than to those from age-matched controls. See article by Stroup et al. (dmm050118). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

Adult zebrafish as advanced models of human disease

White, R. M. and Patton, E. E.

dmm050351

PERSPECTIVE

Transposable elements in normal and malignant hematopoiesis

Lemerle, E. and Trompouki, E.

dmm050170

SPECIAL ARTICLE

Zebrafish regulatory genomic resources for disease modelling and regeneration

Jimenez Gonzalez, A., Baranasic, D. and Müller, F.

dmm050280

REVIEW

Studying exogenous extracellular vesicle biodistribution by *in vivo* fluorescence microscopy

Lau, S. Y., Kang, M., Hisey, C. L. and Chamley, L. W.

dmm050074

RESEARCH ARTICLES

The *loop-tail* mouse model displays open and closed caudal neural tube defects

Fernández-Santos, B., Reyes-Corral, M., Caro-Vega, J. M., Lao-Pérez, M., Vallejo-Grijalba, C., Mesa-Cruz, C., Morón, F. J. and Ybot-González, P.

dmm050175

A humanized *Caenorhabditis elegans* model of hereditary spastic paraplegia-associated variants in KLC4

Gümüşderelioğlu, S., Resch, L., Brock, T., Undiagnosed Diseases Network, Luxton, G. W. G., Cope, H., Tan, Q. K.-G., Hopkins, C. and Starr, D. A.

dmm050076

Disrupting Hedgehog signaling in melanocytes by SUFU knockout leads to ocular melanocytosis and anterior segment malformation

Wang, W., Li, F., Wang, J., Liu, Z., Tian, M., Wang, Z., Li, H., Qu, J., Chen, Y. and Hou, L.

dmm050210

Clonal architecture and evolutionary history of Waldenström's macroglobulinemia at the single-cell level

García-Sanz, R., García-Álvarez, M., Medina, A., Askari, E., González-Calle, V., Casanova, M., de la Torre-Loizaga, I., Escalante-Barrigón, F., Bastos-Boente, M., Báñez, A., Vidaña-Bedera, N., Alonso, J. M., Sarasquete, M. E., González, M., Chillón, M. C., Alcoceba, M. and Jiménez, C.

dmm050227

Delayed skeletal development and IGF-1 deficiency in a mouse model of lysinuric protein intolerance

Stroup, B. M., Li, X., Ho, S., Zhouyao, H., Chen, Y., Ani, S., Dawson, B., Jin, Z., Marom, R., Jiang, M.-M., Lorenzo, I., Rosen, D., Lanza, D., Aceves, N., Koh, S., Seavitt, J. R., Heaney, J. D., Lee, B. and Burrage, L. C.

dmm050118

Insights into the pathophysiology of DFNA44 hearing loss associated with *CCDC50* frameshift variants

Lachgar-Ruiz, M., Morín, M., Martelletti, E., Ingham, N. J., Preite, L., Lewis, M. A., Serrão de Castro, L. S., Steel, K. P. and Moreno-Pelayo, M. Á.

dmm049757

An interaction between OTULIN and SCRIB uncovers roles for linear ubiquitination in planar cell polarity

Almeida, S. M., Ivantsiv, S., Niibori, R., Dunham, W. H., Green, B. A., Zhao, L., Gingras, A.-C. and Cordes, S. P.

dmm049762

CRISPR-based knockout and base editing confirm the role of MYRF in heart development and congenital heart disease

Doering, L., Cornean, A., Thumberger, T., Benjaminsen, J., Wittbrodt, B., Kellner, T., Hammouda, O. T., Gorenflo, M., Wittbrodt, J. and Gierten, J.

dmm049811

A novel porcine model of CLN3 Batten disease recapitulates clinical phenotypes

Swier, V. J., White, K. A., Johnson, T. B., Wang, X., Han, J., Pearce, D. A., Singh, R., Drack, A. V., Pfeifer, W., Rogers, C. S., Brudvig, J. J. and Weimer, J. M.

dmm050038

Acetaldehyde and defective mismatch repair increase colonic tumours in a Lynch syndrome model with *Aldh1b1* inactivation

Cerretelli, G., Zhou, Y., Müller, M. F., Adams, D. J. and Arends, M. J.

dmm050240

RESOURCE ARTICLE

An inducible model of chronic hyperglycemia

Tucker, T. R., Knitter, C. A., Houry, D. M., Eshghi, S., Tran, S., Sharrock, A. V., Wiles, T. J., Ackerley, D. F., Mumm, J. S. and Parsons, M. J.

dmm050215

FIRST PERSON

First person – Weizhuo Wang

dmm050459