



Cover: Muscle fiber typing from a newly created mouse model of limb-girdle muscular dystrophy generated by gene editing. See article by Demonbreun et al. (dmm040832). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

Moving neuromuscular disorders research forward: from novel models to clinical studies

van Putten, M., Hmeljak, J., Aartsma-Rus, A. and Dowling, J. J.

dmm044370

FIRST PERSON

First person – Phillipe O'Brien, Kai Guo, Stephanie Eid, Amy Rumora and Lucy Hinder

dmm043836

First person – Stephanie Fernandes

dmm043851

First person – Claire L. Wood

dmm043604

First person – Monika Baxa

dmm043372

First person – Trace Stay

dmm043356

First person – Celia Cordero-Sanchez

dmm043349

First person – Claudia Figueroa-Romero and Benjamin Murdock

dmm042952

A MODEL FOR LIFE

To dystrophin and beyond: an interview with Louis Kunkel

Kunkel, L. M.

dmm043018

At the heart of genetic disease: an interview with Elizabeth McNally

McNally, E.

dmm041566

AT A GLANCE

Skeletal muscle in health and disease

Morgan, J. and Partridge, T.

dmm042192

SPECIAL ARTICLES

Translational medicine in neuromuscular disorders: from academia to industry

Cowling, B. S. and Thielemans, L.

dmm041434

The use of genetically humanized animal models for personalized medicine approaches

Aartsma-Rus, A. and van Putten, M.

dmm041673

REVIEWS

Biomarkers for Duchenne muscular dystrophy: myonecrosis, inflammation and oxidative stress

Grounds, M. D., Terrill, J. R., Al-Mshhdani, B. A., Duong, M. N., Radley-Crabb, H. G. and Arthur, P. G.

dmm043638

Mouse models for muscular dystrophies: an overview

van Putten, M., Lloyd, E. M., de Greef, J. C., Raz, V., Willmann, R. and Grounds, M. D.

dmm043562

Improving translatability of preclinical studies for neuromuscular disorders: lessons from the TREAT-NMD Advisory Committee for Therapeutics (TACT)

Willmann, R., Lee, J., Turner, C., Nagaraju, K., Aartsma-Rus, A., Wells, D. J., Wagner, K. R., Csimma, C., Straub, V., Grounds, M. D. and De Luca, A.

dmm042903

RESEARCH ARTICLES

Integrated lipidomic and transcriptomic analyses identify altered nerve triglycerides in mouse models of prediabetes and type 2 diabetes

O'Brien, P. D., Guo, K., Eid, S. A., Rumora, A. E., Hinder, L. M., Hayes, J. M., Mendelson, F. E., Hur, J. and Feldman, E. L.

dmm042101

Modelling the pathogenesis of X-linked distal hereditary motor neuropathy using patient-derived iPSCs

Perez-Siles, G., Cutrupi, A., Ellis, M., Kuriakose, J., La Fontaine, S., Mao, D., Uesugi, M., Takata, R. I., Speck-Martins, C. E., Nicholson, G. and Kennerson, M. L.

dmm041541

Altered *in vitro* muscle differentiation in X-linked myopathy with excessive autophagy

Fernandes, S. A., Almeida, C. F., Souza, L. S., Lazar, M., Onofre-Oliveira, P., Yamamoto, G. L., Nogueira, L., Tasaki, L. Y., Cardoso, R. R., Pavanello, R. C. M., Silva, H. C. A., Ferrari, M. F. R., Bigot, A., Mouly, V. and Vainzof, M.

dmm041244

A comparison of the bone and growth phenotype of *mdx*, *mdx:Cmah^{-/-}* and *mdx:Utrn^{+/-}* murine models with the C57BL/10 wild-type mouse

Wood, C. L., Suchaki, K. J., van 't Hof, R., Cawthorn, W. P., Dillon, S., Straub, V., Wong, S. C., Ahmed, S. F. and Farquharson, C.

dmm040659

Transgenic minipig model of Huntington's disease exhibiting gradually progressing neurodegeneration

Ardan, T., Baxa, M., Levinská, B., Sedláčková, M., Nguyen, T. D., Klíma, J., Juhás, Š., Juhásová, J., Šmatlíková, P., Vochozková, P., Motlík, J. and Ellederová, Z.

dmm041319

Longitudinal study revealing motor, cognitive and behavioral decline in a transgenic minipig model of Huntington's disease
Baxa, M., Levinska, B., Skrivankova, M., Pokorny, M., Juhasova, J., Klima, J., Klempir, J., Motlík, J., Juhas, S. and Ellederova, Z.
dmm041293

In vivo cerebellar circuit function is disrupted in an *mdx* mouse model of Duchenne muscular dystrophy
Stay, T. L., Miterko, L. N., Arancillo, M., Lin, T. and Sillitoe, R. V.
dmm040840

A luminal EF-hand mutation in STIM1 in mice causes the clinical hallmarks of tubular aggregate myopathy
Cordero-Sanchez, C., Riva, B., Reano, S., Clemente, N., Zaggia, I., Ruffinatti, F. A., Potenzieri, A., Pirali, T., Raffa, S., Sangaletti, S., Colombo, M. P., Bertoni, A., Garibaldi, M., Filigheddu, N. and Genazzani, A. A.
dmm041111

Temporal evolution of the microbiome, immune system and epigenome with disease progression in ALS mice
Figuerola-Romero, C., Guo, K., Murdock, B. J., Paez-Colasante, X., Bassis, C. M., Mikhail, K. A., Raue, K. D., Evans, M. C., Taubman, G. F., McDermott, A. J., O'Brien, P. D., Savelieff, M. G., Hur, J. and Feldman, E. L.
dmm041947

A gene-edited mouse model of limb-girdle muscular dystrophy 2C for testing exon skipping
Demonbreun, A. R., Wyatt, E. J., Fallon, K. S., Oosterbaan, C. C., Page, P. G., Hadhazy, M., Quattrocchi, M., Barefield, D. Y. and McNally, E. M.
dmm040832

Interactions among ryanodine receptor isoforms contribute to muscle fiber type development and function
Chagovetz, A. A., Klatt Shaw, D., Ritchie, E., Hoshijima, K. and Grunwald, D. J.
dmm038844