



Cover: The absence of the CAR-like membrane protein (CLMP) caused impaired peristaltic contractions in the intestinal tract and ureter due to a lack of gap-junctional communication between smooth muscle cells. Insufficient transport of chyme and urine caused a fatal delay to thrive and provoked a severe hydronephrosis in *Clmp*-knockout mice. Intrapelvic ink injections demonstrated the absence of physical obstructions (the image shows a *Clmp*-knockout urinary system). Ink easily flowed through the urinary path to the bladder (bottom of image). See article by Langhorst et al. (dmm032128). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

Disease Models & Mechanisms 2018: keeping you in the picture
Hackett, R. (Managing Editor)
dmm034223

REVIEWS

Use of zebrafish to study *Shigella* infection
Duggan, G. M. and Mostowy, S.
dmm032151

Gastroenteropancreatic neuroendocrine neoplasms: genes, therapies and models
Kawasaki, K., Fujii, M. and Sato, T.
dmm029595

Intestinal epithelial cell polarity defects in disease: lessons from microvillus inclusion disease
Schneeberger, K., Roth, S., Nieuwenhuis, E. E. S. and Middendorp, S.
dmm031088

RESEARCH ARTICLES

Developmental abnormalities in supporting cell phalangeal processes and cytoskeleton in the *Gjb2* knockdown mouse model
Chen, S., Xie, L., Xu, K., Cao, H.-Y., Wu, X., Xu, X.-X., Sun, Y. and Kong, W.-J.
dmm033019

Spliceosomal components protect embryonic neurons from R-loop-mediated DNA damage and apoptosis
Sorrells, S., Nik, S., Casey, M., Cameron, R. C., Truong, H., Toruno, C., Gulfo, M., Lowe, A., Jette, C., Stewart, R. A. and Bowman, T. V.
dmm031583

Inorganic arsenic causes fatty liver and interacts with ethanol to cause alcoholic liver disease in zebrafish
Bambino, K., Zhang, C., Austin, C., Amarasiriwardena, C., Arora, M., Chu, J. and Sadler, K. C.
dmm031575

Motor neuron degeneration correlates with respiratory dysfunction in SCA1
Orengo, J. P., van der Heijden, M. E., Hao, S., Tang, J., Orr, H. T. and Zoghbi, H. Y.
dmm032623

Divergent effects of adrenaline in human induced pluripotent stem cell-derived cardiomyocytes obtained from hypertrophic cardiomyopathy
Prajapati, C., Ojala, M. and Aalto-Setälä, K.
dmm032896

The IgCAM CLMP regulates expression of Connexin43 and Connexin45 in intestinal and ureteral smooth muscle contraction in mice
Langhorst, H., Jüttner, R., Groneberg, D., Mohtashamdolatsahi, A., Pelz, L., Purfürst, B., Schmidt-Ott, K. M., Friebe, A. and Rathjen, F. G.
dmm032128

Superior cervical gangliectomy induces non-exudative age-related macular degeneration in mice
Dieguez, H. H., Romeo, H. E., González Fleitas, M. F., Aranda, M. L., Milne, G. A., Rosenstein, R. E. and Dorfman, D.
dmm031641

Environmental factors regulate Paneth cell phenotype and host susceptibility to intestinal inflammation in *Irgm1*-deficient mice
Rogala, A. R., Schoenborn, A. A., Fee, B. E., Cantillana, V. A., Joyce, M. J., Gharaibeh, R. Z., Roy, S., Fodor, A. A., Sartor, R. B., Taylor, G. A. and Gulati, A. S.
dmm031070

Inhibition of galectin-3 ameliorates the consequences of cardiac lipotoxicity in a rat model of diet-induced obesity
Marín-Royo, G., Gallardo, I., Martínez-Martínez, E., Gutiérrez, B., Jurado-López, R., López-Andrés, N., Gutiérrez-Tenorio, J., Rial, E., Bartolomé, M. V., Nieto, M. L. and Cachafeiro, V.
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RESOURCE ARTICLES

Modelling glioblastoma tumour-host cell interactions using adult brain organotypic slice co-culture
Marques-Torrejon, M. A., Gangoso, E. and Pollard, S. M.
dmm031435

High-throughput screen for compounds that modulate neurite growth of human induced pluripotent stem cell-derived neurons
Sherman, S. P. and Bang, A. G.
dmm031906