



Cover: Newborn (P0) *Fgfr2*^{+/S252W} Apert syndrome mouse mandible visualized from μ CT images thresholded for bone. Although this and other FGFR2-related craniosynostosis mouse models are well known for their craniofacial dysmorphology, the authors show that abnormal cartilage formation and intramembranous ossification of dermal bone contribute to dysgenesis of the hemimandibles. The lowest density bone in this specimen is rendered in blue; bone of intermediate density in purple; and highest density bone in yellow. See article by Motch Perrine et al. (dmm038513). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

FIRST PERSON

First person – Susan M. Motch Perrine and Meng Wu
dmm040568

First person – Alessandro A. Bailetti
dmm040535

First person – Tuba Sural-Fehr
dmm040402

First person – Scott Collum
dmm040295

SPECIAL ARTICLE

Predicting human disease mutations and identifying drug targets from mouse gene knockout phenotyping campaigns
Brommage, R., Powell, D. R. and Vogel, P.
dmm038224

REVIEW

Intellectual disability and autism spectrum disorders ‘on the fly’: insights from *Drosophila*
Coll-Tané, M., Krebbers, A., Castells-Nobau, A., Zweier, C. and Schenck, A.
dmm039180

RESEARCH ARTICLES

Enhancer of Polycomb and the Tip60 complex repress hematological tumor initiation by negatively regulating JAK/STAT pathway activity
Bailetti, A. A., Negrón-Piñeiro, L. J., Dhruva, V., Harsh, S., Lu, S., Bosula, A. and Bach, E. A.
dmm038679

Mandibular dysmorphology due to abnormal embryonic osteogenesis in FGFR2-related craniosynostosis mice
Motch Perrine, S. M., Wu, M., Stephens, N. B., Kriti, D., van Bakel, H., Jabs, E. W. and Richtsmeier, J. T.
dmm038513

Glucocorticoids inhibit macrophage differentiation towards a pro-inflammatory phenotype upon wounding without affecting their migration
Xie, Y., Tolmeijer, S., Oskam, J. M., Tonkens, T., Meijer, A. H. and Schaaf, M. J. M.
dmm037887

Effects of subthalamic deep brain stimulation on striatal metabolic connectivity in a rat hemiparkinsonian model
Apetz, N., Kordys, E., Simon, M., Mang, B., Aswendt, M., Wiedermann, D., Neumaier, B., Drzezga, A., Timmermann, L. and Endepols, H.
dmm039065

Vascular defects of *DYRK1A* knockouts are ameliorated by modulating calcium signaling in zebrafish
Cho, H.-J., Lee, J.-G., Kim, J.-H., Kim, S.-Y., Huh, Y. H., Kim, H.-J., Lee, K.-S., Yu, K. and Lee, J.-S.
dmm037044

Inhibition of the IGF-1–PI3K–Akt–mTORC2 pathway in lipid rafts increases neuronal vulnerability in a genetic lysosomal glycosphingolipidosis
Sural-Fehr, T., Singh, H., Cantuti-Catelvetri, L., Zhu, H., Marshall, M. S., Rebiai, R., Jastrzebski, M. J., Givogri, M. I., Rasenick, M. M. and Bongarzone, E. R.
dmm036590

Amyotrophic lateral sclerosis mutant TDP-43 may cause synaptic dysfunction through altered dendritic spine function
Jiang, T., Handley, E., Brizuela, M., Dawkins, E., Lewis, K. E. A., Clark, R. M., Dickson, T. C. and Blizzard, C. A.
dmm038109

Adenosine and hyaluronan promote lung fibrosis and pulmonary hypertension in combined pulmonary fibrosis and emphysema
Collum, S. D., Molina, J. G., Hanmandlu, A., Bi, W., Pedroza, M., Mertens, T. C. J., Wareing, N., Wei, W., Wilson, C., Sun, W., Rajadas, J., Bollyky, P. L., Philip, K. M., Ren, D., Thandavarayan, R. A., Bruckner, B. A., Xia, Y., Blackburn, M. R. and Karmouty-Quintana, H.
dmm038711

Disruption of *asx1* results in myeloproliferative neoplasms in zebrafish
Gjini, E., Jing, C.-B., Nguyen, A. T., Reyon, D., Gans, E., Kesarsing, M., Peterson, J., Pozdnyakova, O., Rodig, S. J., Mansour, M. R., Joung, K. and Look, A. T.
dmm035790

Beneficial effects of exercise on gut microbiota functionality and barrier integrity, and gut-liver crosstalk in an *in vivo* model of early obesity and non-alcoholic fatty liver disease
Carbajo-Pescador, S., Porras, D., García-Mediavilla, M. V., Martínez-Flórez, S., Juárez-Fernández, M., Cuevas, M. J., Mauriz, J. L., González-Gallego, J., Nistal, E. and Sánchez-Campos, S.
dmm039206