



Cover: Representative tile-scan image of murine inguinal lymph node. PDPN⁺ fibroblastic reticular cells are shown in green, extracellular matrix in red and CD3⁺ T lymphocytes in white. Confocal microscopy imaging permits the study of lymph node dynamics and changes that occur in the organ during disease states. See article by Makris et al. (dmm049256). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

Working to enhance the accessibility of Disease Models & Mechanisms

Hackett, R. and Patton, E. E.

dmm049470

PERSPECTIVE

Autophagy takes it all – autophagy inducers target immune aging

Zinecker, H. and Simon, A. K.

dmm049345

REVIEWS

Immune function and dysfunction are determined by lymphoid tissue efficacy

Makris, S., de Winde, C. M., Horsnell, H. L., Cantoral-Rebordinos, J. A., Finlay, R. E. and Acton, S. E.

dmm049256

Alternative RNA splicing in tumour heterogeneity, plasticity and therapy

Öther-Gee Pohl, S. and Myant, K. B.

dmm049233

RESEARCH ARTICLES

Two cell line models to study multiorganic metastasis and immunotherapy in lung squamous cell carcinoma

Valencia, K., Sainz, C., Bértolo, C., de Biurrun, G., Agorreta, J., Azpilikueta, A., Larrayoz, M., Bosco, G., Zandueta, C., Redrado, M., Redín, E., Exposito, F., Serrano, D., Echepare, M., Ajona, D., Melero, I., Pio, R., Thomas, R., Calvo, A. and Montuenga, L. M.

dmm049137

Vangl2–environment interaction causes severe neural tube defects, without abnormal neuroepithelial convergent extension

Nychyk, O., Galea, G. L., Molè, M., Savery, D., Greene, N. D. E., Stanier, P. and Copp, A. J.

dmm049194

Brain transcriptomes of zebrafish and mouse Alzheimer's disease knock-in models imply early disrupted energy metabolism

Barthelson, K., Newman, M. and Lardelli, M.

dmm049187

Intrinsic and damage-induced JAK/STAT signaling regulate developmental timing by the *Drosophila* prothoracic gland

Cao, X., Rojas, M. and Pastor-Pareja, J. C.

dmm049160

The zebrafish embryo as an *in vivo* model for screening nanoparticle-formulated lipophilic anti-tuberculosis compounds

Knudsen Dal, N.-J., Speth, M., Johann, K., Barz, M., Beauvineau, C., Wohlmann, J., Fenaroli, F., Gicquel, B., Griffiths, G. and Alonso-Rodriguez, N.

dmm049147

Novel patient-derived models of desmoplastic small round cell tumor confirm a targetable dependency on ERBB signaling

Smith, R. S., Odintsov, I., Liu, Z., Lui, A. J.-W., Hayashi, T., Vojnic, M., Suehara, Y., Delasos, L., Mattar, M. S., Hmeljak, J., Ramirez, H. A., Shaw, M., Bui, G., Hartono, A. B., Gladstone, E., Kunte, S., Magnan, H., Khodos, I., De Stanchina, E., La Quaglia, M. P., Yao, J., Laé, M., Lee, S. B., Spraggan, L., Pratillas, C. A., Ladanyi, M. and Somwar, R.

dmm047621

Mapping the metabolomic and lipidomic changes in the bleomycin model of pulmonary fibrosis in young and aged mice

Weckerle, J., Picart-Armada, S., Klee, S., Bretschneider, T., Luippold, A. H., Rist, W., Haslinger, C., Schlüter, H., Thomas, M. J., Krawczyk, B., Fernandez-Albert, F., Kästle, M. and Veyel, D.

dmm049105

RESOURCE ARTICLE

The rat rotenone model reproduces the abnormal pattern of central catecholamine metabolism found in Parkinson's disease

Landau, R., Halperin, R., Sullivan, P., Zibly, Z., Leibowitz, A., Goldstein, D. S. and Sharabi, Y.

dmm049082

FIRST PERSON

First person – Roger Smith and Igor Odintsov

dmm049407