



Cover: Persistent inflammation underlies many disease processes. At present, there is an unmet need for new alternative therapeutic approaches to treat inflammation. Drug repositioning is the process of 'recycling' existing drugs for new therapeutic uses. The zebrafish model is a well-established system in which to investigate the inflammatory response and is a powerful drug discovery platform. Arraying embryos into multi-well plates (as pictured) and assessing the effects of known drugs on the recruitment of neutrophils during wound healing revealed unknown anti-inflammatory activities for a number of drugs that were validated in mammals.

REVIEWS

1023 Interplay between sirtuins, MYC and hypoxia-inducible factor in cancer-associated metabolic reprogramming
Zwaans, B. M. M. and Lombard, D. B.

1033 Linking susceptibility genes and pathogenesis mechanisms using mouse models of systemic lupus erythematosus
Crampton, S. P., Morawski, P. A. and Bolland, S.

RESEARCH ARTICLES

1047 A BDNF loop-domain mimetic acutely reverses spontaneous apneas and respiratory abnormalities during behavioral arousal in a mouse model of Rett syndrome
Kron, M., Lang, M., Adams, I. T., Sceniak, M., Longo, F. and Katz, D. M.

1057 Age-dependent pattern of cerebellar susceptibility to bilirubin neurotoxicity *in vivo* in mice
Bortolussi, G., Baj, G., Vodret, S., Viviani, G., Bittolo, T. and Muro, A. F.

1069 Repositioning drugs for inflammatory disease – fishing for new anti-inflammatory agents
Hall, C. J., Wicker, S. M., Chien, A.-T., Tromp, A., Lawrence, L. M., Sun, X., Krissansen, G. W., Crosier, K. E. and Crosier, P. S.

1083 Development of hepatocellular adenomas and carcinomas in mice with liver-specific G6Pase- α deficiency
Resaz, R., Vanni, C., Segalerba, D., Sementa, A. R., Mastracci, L., Grillo, F., Murgia, D., Bosco, M. C., Chou, J. Y., Barbieri, O., Varesio, L. and Eva, A.

1093 *In vivo* siRNA delivery of *Keap1* modulates death and survival signaling pathways and attenuates concanavalin-A-induced acute liver injury in mice
González-Rodríguez, A., Reibert, B., Amann, T., Constien, R., Rondinone, C. M. and Valverde, A. M.

1101 Spinal cord pathology is ameliorated by P2X7 antagonism in a SOD1-mutant mouse model of amyotrophic lateral sclerosis
Apolloni, S., Amadio, S., Parisi, C., Matteucci, A., Potenza, R. L., Armida, M., Popoli, P., D'Ambrosi, N. and Volonté, C.

RESOURCE ARTICLES

1111 Modeling tuberculous meningitis in zebrafish using *Mycobacterium marinum*
van Leeuwen, L. M., van der Kuip, M., Youssef, S. A., de Bruin, A., Bitter, W., van Furth, A. M. and van der Sar, A. M.

1123 Robust circadian rhythms in organoid cultures from PERIOD2::LUCIFERASE mouse small intestine
Moore, S. R., Pruszka, J., Vallance, J., Aihara, E., Matsuura, T., Montrose, M. H., Shroyer, N. F. and Hong, C. I.