



Cover: Presence of hydrogen peroxide (H₂O₂; orange) in the gut of *Drosophila melanogaster* following infection. Bandarra et al. identified a novel function of the mammalian hypoxia-inducible factor (HIF) and the *Drosophila* homologue (Sima) in restraining the major inflammation-responsive transcription factor, nuclear factor κB (NF-κB). H₂O₂ levels were increased in *sima* loss-of-function transgenic flies following *Serratia marcescens* infection. HIF-1α was identified as an inhibitor of NF-κB activity, and could therefore be important in preventing excessive and harmful pro-inflammatory responses. See article by Bandarra et al. on page 169.

A MODEL FOR LIFE

- 105 An odyssey in the space of molecules, genes, biology and brain: an interview with Sabine Cordes
Cifra, A.

REVIEW

- 109 Biology and therapy of inherited retinal degenerative disease: insights from mouse models
Veleri, S., Lazar, C. H., Chang, B., Sieving, P. A., Banin, E. and Swaroop, A.

RESEARCH ARTICLES

- 131 Morphological and physiological retinal degeneration induced by intravenous delivery of vitamin A dimers in rabbits
Penn, J., Mihai, D. M. and Washington, I.
- 139 Impact of retinoic acid exposure on midfacial shape variation and manifestation of holoprosencephaly in *Twsg1* mutant mice
Billington, C. J., Jr, Schmidt, B., Marcucio, R. S., Hallgrimsson, B., Gopalakrishnan, R. and Petryk, A.

- 147 Partial genetic suppression of a loss-of-function mutant of the neuronal ceroid lipofuscinosis-associated protease TPP1 in *Dictyostelium discoideum*
Phillips, J. E. and Gomer, R. H.

- 157 The effect of maternal diabetes on the Wnt-PCP pathway during embryogenesis as reflected in the developing mouse eye
López-Escobar, B., Cano, D. A., Rojas, A., de Felipe, B., Palma, F., Sánchez-Alcázar, J. A., Henderson, D. and Ybot-González, P.

- 169 HIF-1α restricts NF-κB-dependent gene expression to control innate immunity signals
Bandarra, D., Biddlestone, J., Mudie, S., Müller, H.-A. J. and Rocha, S.

- 183 *In vitro* treatment of HepG2 cells with saturated fatty acids reproduces mitochondrial dysfunction found in nonalcoholic steatohepatitis
García-Ruiz, I., Solís-Muñoz, P., Fernández-Moreira, D., Muñoz-Yagüe, T. and Solís-Herruzo, J. A.