



**Cover:** Eosinophilic esophagitis (EoE) is a chronic, localized allergic disease in human patients. In a new spontaneous model of EoE, mice lacking NF- $\kappa$ B-inducing kinase (NIK) develop severe esophageal eosinophilia, mucosal hyperplasia and tissue remodeling. In this disease, thymic stromal lymphopoietin (TSLP) acts as a potent chemoattractant of Th2 lymphocytes and eosinophils. *Nik*<sup>-/-</sup> mice displayed significantly increased expression of TSLP in their hyperplastic esophageal mucosa, as determined by immunohistochemical staining, as well as several other mediators associated with the human disease. See article by Eden et al. on page 1517. Cover image by Daniel E. Rothschild and Kristin Eden is licensed under a Creative Commons Attribution 4.0 International license.

### SPECIAL ARTICLE

- 1381** Sophisticated lessons from simple organisms: appreciating the value of curiosity-driven research  
**Duronio, R. J., O'Farrell, P. H., Sluder, G. and Su, T. T.**

### RESEARCH ARTICLES

- 1391** Functional assays for the assessment of the pathogenicity of variants of GOSR2, an ER-to-Golgi SNARE involved in progressive myoclonus epilepsies  
**Völker, J. M., Dergai, M., Abriata, L. A., Mingard, Y., Ysselstein, D., Krainc, D., Dal Peraro, M., Fischer von Mollard, G., Fasshauer, D., Koliwer, J. and Schwake, M.**
- 1399** Chronic psychosocial stress disturbs long-bone growth in adolescent mice  
**Foertsch, S., Haffner-Luntzer, M., Kroner, J., Gross, F., Kaiser, K., Erber, M., Reber, S. O. and Ignatius, A.**
- 1411** Evaluation of human dermal fibroblasts directly reprogrammed to adipocyte-like cells as a metabolic disease model  
**Chen, J.-H., Goh, K. J., Rocha, N., Groeneveld, M. P., Minic, M., Barrett, T. G., Savage, D. and Semple, R. K.**
- 1421** Early neonatal loss of inhibitory synaptic input to the spinal motor neurons confers spina bifida-like leg dysfunction in a chicken model  
**Khan, M. S. I., Nabeka, H., Islam, F., Shimokawa, T., Saito, S., Li, X., Kawabe, S., Hamada, F., Tachibana, T. and Matsuda, S.**
- 1433** Inclusion criteria update for the rat intraluminal ischaemic model for preclinical studies  
**Fernández-Susavila, H., Iglesias-Rey, R., Dopico-López, A., Pérez-Mato, M., Sobrino, T., Castillo, J. and Campos, F.**
- 1439** *Mecp2* regulates *tnfa* during zebrafish embryonic development and acute inflammation  
**van der Vaart, M., Svoboda, O., Weijts, B. G., Espín-Palazón, R., Sapp, V., Pietri, T., Bagnat, M., Muotri, A. R. and Traver, D.**
- 1453** A *Drosophila* model of insulin resistance associated with the human TRIB3 Q/R polymorphism  
**Fischer, Z., Das, R., Shipman, A., Fan, J.-Y., Pence, L., Bouyain, S. and Dobens, L. L.**
- 1465** Rescue of ATXN3 neuronal toxicity in *Caenorhabditis elegans* by chemical modification of endoplasmic reticulum stress  
**Fardghassemi, Y., Tauffenberger, A., Gosselin, S. and Parker, J. A.**
- 1481** *Lyplal1* is dispensable for normal fat deposition in mice  
**Watson, R. A., Gates, A. S., Wynn, E. H., Calvert, F. E., Girousse, A., Lelliott, C. J. and Barroso, I.**
- 1489** Systemic HIV-1 infection produces a unique glial footprint in humanized mouse brains  
**Li, W., Gorantla, S., Gendelman, H. E. and Poluektova, L. Y.**
- 1503** Renal carcinoma/kidney progenitor cell chimera organoid as a novel tumorigenesis gene discovery model  
**Xu, Q., Junttila, S., Scherer, A., Giri, K. R., Kivelä, O., Skovorodkin, I., Röning, J., Quaggin, S. E., Marti, H.-P., Shan, J., Samoylenko, A. and Vainio, S. J.**
- 1517** Noncanonical NF- $\kappa$ B signaling and the essential kinase NIK modulate crucial features associated with eosinophilic esophagitis pathogenesis  
**Eden, K., Rothschild, D. E., McDaniel, D. K., Heid, B. and Allen, I. C.**
- 1529** Early VGLUT1-specific parallel fiber synaptic deficits and dysregulated cerebellar circuit in the KIKO mouse model of Friedreich ataxia  
**Lin, H., Magrane, J., Clark, E. M., Halawani, S. M., Warren, N., Rattelle, A. and Lynch, D. R.**

### CORRESPONDENCE

- 1539** *Helicobacter pylori* infection of AZ-521 cells reveals a type IV secretion defect and VacA-independent CagA phosphorylation  
**Tegtmeier, N. and Backert, S.**
- 1541** Response to '*Helicobacter pylori* infection of AZ-521 cells reveals a type IV secretion defect and VacA-independent CagA phosphorylation'  
**Nakano, M. and Hirayama, T.**

### CORRECTION

- 1545** Correction: Lysyl oxidases regulate fibrillar collagen remodelling in idiopathic pulmonary fibrosis (doi: 10.1242/dmm.030114)  
**Tjin, G., White, E. S., Faiz, A., Sicard, D., Tschumperlin, D. J., Mahar, A., Kable, E. P. W. and Burgess, J. K.**