



Cover: In the *C. elegans* embryo, centrosome duplication is required for bipolar spindle formation and normal cell division. In the article by Medley et al. page 17, the authors report that Casein Kinase II (CK2) acts as a negative regulator of centrosome duplication through a genetic interaction with *zyg-1*. The image illustrates that the *zyg-1(it25)* mutant *C. elegans* embryo exhibits monopolar spindles at the second mitosis, which results from a failure of centrosome duplication during the first cell cycle. The embryo is stained for centrioles (SAS-4: green), microtubules (red), and DNA (blue). Image created by Mi Hye Song and licensed under a Creative Commons Attribution 4.0 International licence.

RESEARCH ARTICLES

- 1 REV-ERB α regulates *Fgf21* expression in the liver via hepatic nuclear factor 6
Chavan, R., Preitner, N., Okabe, T., Strittmatter, L. M., Xu, C., Ripperger, J. A., Pitteloud, N. and Albrecht, U.
- 8 Involvement of BDNF/TrkB and ERK/CREB axes in nitroglycerin-induced rat migraine and effects of estrogen on these signals in the migraine
Guo, J.-Q., Deng, H.-H., Bo, X. and Yang, X.-S.
- 17 Casein kinase II is required for proper cell division and acts as a negative regulator of centrosome duplication in *Caenorhabditis elegans* embryos
Medley, J. C., Kabara, M. M., Stubenvoll, M. D., DeMeyer, L. E. and Song, M. H.
- 29 Knockdown of histidine-rich calcium-binding protein (HRC) suppresses liver fibrosis by inhibiting the activation of hepatic stellate cells
Liu, J., Li, M., Gong, J., Han, P., Wang, Y., Li, D., Tian, D. and Liao, J.
- 35 Ole1, fatty acid desaturase, is required for Atg9 delivery and isolation membrane expansion during autophagy in *Saccharomyces cerevisiae*
Ogasawara, Y., Kira, S., Mukai, Y., Noda, T. and Yamamoto, A.
- 41 Social signals and aversive learning in honey bee drones and workers
Avalos, A., Pérez, E., Vallejo, L., Pérez, M. E., Abramson, C. I. and Giray, T.
- 50 Chicken muscle mitochondrial content appears coordinately regulated and is associated with performance phenotypes
Reverter, A., Okimoto, R., Sapp, R., Bottje, W. G., Hawken, R. and Hudson, N. J.
- 59 Gene silencing of *Nox4* by CpG island methylation during hepatocarcinogenesis in rats
López-Álvarez, G. S., Wojdacz, T. K., García-Cuellar, C. M., Monroy-Ramírez, H. C., Rodríguez-Segura, M. A., Pacheco-Rivera, R. A., Valencia-Antúnez, C. A., Cervantes-Anaya, N., Soto-Reyes, E., Vásquez-Garzón, V. R., Sánchez-Pérez, Y. and Villa-Treviño, S.
- 71 Evidence toads may modulate landing preparation without predicting impact time
Cox, S. M. and Gillis, G.
- 77 Daily feeding and protein metabolism rhythms in Senegalese sole post-larvae
Navarro-Guillén, C., Yúfera, M. and Engrola, S.
- 83 Metabolism and antioxidant defense in the larval chironomid *Tanytarsus minutipalpus*: adjustments to diel variations in the extreme conditions of Lake Magadi
Bianchini, L. F., Wood, C. M., Bergman, H. L., Johannsson, O. E., Laurent, P., Chevalier, C., Kisipan, M. L., Kavembe, G. D., Papah, M. B., Brix, K. V., De Boeck, G., Maina, J. N., Ojoo, R. O. and Bianchini, A.
- 92 Cardiomyocyte-specific expression of the nuclear matrix protein, CIZ1, stimulates production of mono-nucleated cells with an extended window of proliferation in the postnatal mouse heart
Bageghni, S. A., Frentzou, G. A., Drinkhill, M. J., Mansfield, W., Coverley, D. and Ainscough, J. F. X.
- 100 Systematic evaluation of markers used for the identification of human induced pluripotent stem cells
Bharathan, S. P., Manian, K. V., Aalam, S. M. M., Palani, D., Deshpande, P. A., Pratheesh, M. D., Srivastava, A. and Velayudhan, S. R.
- 109 The anti-bat strategy of ultrasound absorption: the wings of nocturnal moths (Bombycoidea: Saturniidae) absorb more ultrasound than the wings of diurnal moths (Chalcosiinae: Zygaenoidea: Zygaenidae)
Ntelezos, A., Guarato, F. and Windmill, J. F. C.
- 118 Movement patterns of cheetahs (*Acinonyx jubatus*) in farmlands in Botswana
Van der Weyde, L. K., Hubel, T. Y., Horgan, J., Shotton, J., McKenna, R. and Wilson, A. M.
- ## METHODS & TECHNIQUES
- 125 Utilising polymorphisms to achieve allele-specific genome editing in zebrafish
Capon, S. J., Baillie, G. J., Bower, N. I., da Silva, J. A., Paterson, S., Hogan, B. M., Simons, C. and Smith, K. A.