



Cover: Immunofluorescence of the cardiac extracellular matrix of the *Drosophila* larval heart: Collagen IV (green) decorates the heart tube and the associated muscles to form a dense meshwork of fibers. *Drosophila* has only a limited number of collagens or collagen-like proteins. Pericardin (red) shares sequence similarities with Collagen IV and assembles specifically into the heart matrix. Presence of Pericardin is essential for maintaining heart integrity and, in its absence, the heart architecture desintegrates and the heart lumen collapses. See article by Wilmes et al. (bio030361). Cover image is licensed under a Creative Commons Attribution 4.0 International license.

RESEARCH ARTICLES

Contrast thresholds reveal different visual masking functions in humans and praying mantises

Tarawneh, G., Nityananda, V., Rosner, R., Errington, S., Herbert, W., Arranz-Paraiso, S., Busby, N., Tampin, J., Read, J. and Serrano-Pedraza, I.

bio029439

Functional characterization of DYRK1A missense variants associated with a syndromic form of intellectual deficiency and autism

Widowati, E. W., Ernst, S., Hausmann, R., Müller-Newen, G. and Becker, W.

bio032862

Functional domains of the FSHD-associated DUX4 protein

Mitsuhashi, H., Ishimaru, S., Homma, S., Yu, B., Honma, Y., Beermann, M. L. and Miller, J. B.

bio033977

The *Drosophila* TGF-beta/Activin-like ligands Dawdle and Myoglianin appear to modulate adult lifespan through regulation of 26S proteasome function in adult muscle

Langerak, S., Kim, M.-J., Lamberg, H., Godinez, M., Main, M., Winslow, L., O'Connor, M. B. and Zhu, C. C.

bio029454

Juvenile hormone reveals mosaic developmental programs in the metamorphosing optic lobe of *Drosophila melanogaster*

Riddiford, L. M., Truman, J. W. and Nern, A.

bio034025

Biosynthesis and assembly of the Collagen IV-like protein Pericardin in *Drosophila melanogaster*

Wilmes, A. C., Klinke, N., Rotstein, B., Meyer, H. and Paululat, A.

bio030361

Suppression of miR-26a attenuates physiological disturbances arising from exposure of Nile tilapia (*Oreochromis niloticus*) to ammonia

Zhao, Y., Zhou, H., Ayisi, C. L., Wang, Y., Wang, J., Chen, X. and Zhao, J.

bio029082

Fank1 and Jazf1 promote multiciliated cell differentiation in the mouse airway epithelium

Johnson, J.-A., Watson, J. K., Nikolić, M. Z. and Rawlins, E. L.

bio033944

Food supply and size class depending variations in phytodetritus intake in the benthic foraminifer *Ammonia tepida*

Wukovits, J., Bukenberger, P., Enge, A. J., Gerg, M., Wanek, W., Watzka, M. and Heinz, P.

bio030056

The hidden function of egg white antimicrobials: egg weight-dependent effects of avidin on avian embryo survival and hatchling phenotype

Krkavcová, E., Kreisinger, J., Hyánková, L., Hyršl, P. and Javůrková, V.

bio031518

Concerted evolution of body mass and cell size: similar patterns among species of birds (Galliformes) and mammals (Rodentia)

Czarnoleski, M., Labecka, A. M., Dragosz-Kluska, D., Pis, T., Pawlik, K., Kapustka, F., Kilarski, W. M. and Kozłowski, J.

bio029603

Maternal immunization increases nestling energy expenditure, immune function, and fledging success in a passerine bird

Burness, G., Moher, D., Ben-Ezra, N., Kelly, R. J., Hasselquist, D. and Chin, E. H.

bio028803

Lithobates catesbeianus (American Bullfrog) oocytes: a novel heterologous expression system for aquaporins

Kabutomori, J., Beloto-Silva, O., Geyer, R. R. and Musa-Aziz, R.

bio031880

METHODS & TECHNIQUES

An optimised pipeline for parallel image-based quantification of gene expression and genotyping after *in situ* hybridisation

Dobrzycki, T., Krecsmarik, M., Bonkhofer, F., Patient, R. and Monteiro, R.

bio031096

CORRECTION

Correction: Optogenetic activation of EphB2 receptor in dendrites induced actin polymerization by activating Arg kinase

Locke, C., Machida, K., Tucker, C. L., Wu, Y. and Yu, J.

bio034694