



Cover: Lizard coloration has been explored throughout numerous ecological and evolutionary studies. However, seasonal colour change has been rarely explored in this group. A study by Pellitteri-Rosa and colleagues explored the variation in dorsal pigmentation of the Italian wall lizard (*Podarcis siculus campestris*) at three time points (March, July and October) in a Mediterranean natural area in southern Italy (Apulia). The results demonstrated that lizards are able to alter dorsal coloration during seasonal change, varying from green at the onset of spring, to brownish in the middle of summer and to a greyish colour in October. This modification closely followed environmental background colour variation and enhanced lizard crypsis during each season. Image taken by Cristiano Liuzzi. Image licensed under a Creative Commons Attribution 4.0 International license.

RESEARCH ARTICLES

The yeast cell wall protein Pry3 inhibits mating through highly conserved residues within the CAP domain

Cottier, S., Darwiche, R., Meyenhofer, F., Debelyy, M. O. and Schneider, R.

bio053470

Neural crest cells require Meis2 for patterning the mandibular arch via the Sonic hedgehog pathway

Fabik, J., Kovacova, K., Kozmik, Z. and Machon, O.

bio052043

Overexpression of Wnt7a enhances radiosensitivity of non-small-cell lung cancer via the Wnt/JNK pathway

Ai, P., Xu, X., Xu, S., Wei, Z., Tan, S. and Li, J.

bio050575

Microtubule assembly and pole coalescence: early steps in *Caenorhabditis elegans* oocyte meiosis I spindle assembly

Chuang, C.-H., Schlientz, A. J., Yang, J. and Bowerman, B.

bio052308

lncRNA NEAT1 mediates sepsis progression by regulating Irak2 via sponging miR-370-3p

Xiao, T., Sun, C., Xiao, Y. and Li, Y.

bio049353

Specificity, redundancy and dosage thresholds among *gata4/5/6* genes during zebrafish cardiogenesis

Sam, J., Mercer, E. J., Torregroza, I., Banks, K. M. and Evans, T.

bio053611

Characterization of MORN2 stability and regulatory function in LC3-associated phagocytosis in macrophages

Morita, M., Kajiye, M., Sakurai, C., Kubo, S., Takahashi, M., Kinoshita, D., Hori, N. and Hatsuzawa, K.

bio051029

Site-1 protease ablation in the osterix-lineage in mice results in bone marrow neutrophilia and hematopoietic stem cell alterations

Patra, D., Kim, J., Zhang, Q., Tycksen, E. and Sandell, L. J.

bio052993

Bumblebees land remarkably well in red–blue greenhouse LED light conditions

de Vries, L. J., van Langevelde, F., van Dooremalen, C.,

Kornegoor, I. G., Lankheet, M. J., van Leeuwen, J. L.,

Naguib, M. and Muijres, F. T.

bio046730

A new rat model of treatment-naive quiescent choroidal neovascularization induced by human VEGF165 overexpression

Liu, S., Biesemeier, A. K., Tschulakow, A. V., Thakkar, H. V., Julien-Schraermeyer, S. and Schraermeyer, U.

bio048736

Lizard colour plasticity tracks background seasonal changes

Pellitteri-Rosa, D., Gazzola, A., Todisco, S., Mastropasqua, F. and Liuzzi, C.

bio052415

METHODS & TECHNIQUES

A machine vision system for tracking population behavior of zooplankton in small-scale experiments: a case study on salmon lice (*Lepeophtheirus salmonis* Krøyer, 1838) copepodite population responses to different light stimuli

Kvæstad, B., Nordtug, T. and Hagemann, A.

bio050724

Model selection versus traditional hypothesis testing in circular statistics: a simulation study

Landler, L., Ruxton, G. D. and Malkemper, E. P.

bio049866

A fully automated deep learning pipeline for high-throughput colony segmentation and classification

Carl, S. H., Duempelmann, L., Shimada, Y. and Bühler, M.

bio052936

A gum Arabic assisted sustainable drug delivery system for adult *Drosophila*

Liang, Q., Ma, P., Zhang, Q., Yin, Y., Wang, P., Wang, S., Zhang, Y., Han, R. and Deng, H.

bio052241

FIRST PERSON

First person – Stéphanie Cottier

bio054171

First person – Jessica Sam

bio054247

First person – Lana de Vries

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