The Madagascar ground gecko (Paroedura picta) has become a laboratory model for lizard species studies in developmental biology, evolutionary ecology and physiology. On page 1149, Czarnoleski et al. provide evidence suggesting that changes in cell size are involved in the origin of thermal and sexual differences in adult size for this species of lizard. Intriguingly, some cell types grouped according to their coordinated changes in cell size. Image provided by Petr Jan Juračka and licensed under a Creative Commons Attribution 4.0 International licence.

RESEARCH ARTICLES

1123 Notch2 and Notch3 suppress the proliferation and mediate invasion of trophoblast cell lines

1130 Anti-inflammatory and anti-osteoarthritis effects of tectorigenin

1137 Apical and basal epitheliomuscular F-actin dynamics during Hydra bud evagination
Aufschnaiter, R., Wedlich-Söldner, R., Zhang, X. and Hobmayer, B.

1149 Not all cells are equal: effects of temperature and sex on the size of different cell types in the Madagascar ground gecko Paroedura picta

1155 Specific expression and function of the Six3 optix in Drosophila serially homologous organs
Al Khatib, A., Siomava, N., Iannini, A., Posnien, N. and Casares, F.

1165 The protein phosphatase 4 complex promotes the Notch pathway and wingless transcription
Hall, E. T., Pradhan-Sundd, T., Samnani, F. and Verheyen, E. M.

1174 Genetic deletion of amphiregulin restores the normal skin phenotype in a mouse model of the human skin disease tylosis
Hosur, V., Low, B. E., Shultz, L. D. and Wiles, M. V.

1180 The Golgi matrix protein giantin is required for normal cilia function in zebrafish

1190 Effects of temperature and UVR on organic matter fluxes and the metabolic activity of Acropora muricata
Courtial, L., Ferrer-Pagès, C., Jacquet, S., Rodolfo-Metalpa, R., Reynaud, S., Rottler, C. and Houlbrèque, F.

1200 Tg(Th-Cre)/Fl172Gsat (Th-Cre) defines neurons that are required for full hypercapnic and hypoxic reflexes
Sun, J. J. and Ray, R. S.

1209 Adaptive camouflage: what can be learned from the wetting behaviour of the tropical flat bugs Dysodius lunatus and Dysodius magnus

METHODS & TECHNIQUES

1219 A reporter mouse model for in vivo tracing and in vitro molecular studies of melanocytic lineage cells and their diseases
Crawford, M., Leclerc, V. and Dagnino, L.

1229 Investigation of protein synthesis in Drosophila larvae using puromycin labelling

1235 A framework for quantification and physical modeling of cell mixing applied to oscillator synchronization in vertebrate somitogenesis
Uriu, K., Bhavna, R., Oates, A. C. and Morelli, L. G.

1245 Manipulation and quantification of microtubule lattice integrity
Reid, T. A., Coombes, C. and Gardner, M. K.