



**Cover:** Koalas possess a unique morphology for extant marsupials linked with their arboreal lifestyle in the eucalypt forests of eastern Australia, with elongated limbs, an opposable hallux and zygodactylous hands (two opposable digits per hand), reminiscent of other canopy specialists such as primates. Gaschk et al. (jeb207506) explored whether this morphological convergence is also present in their gait characteristics. Koala strategies converged on primate locomotion in arboreal environments, but were marsupial-like for terrestrial locomotion, suggesting that the gait properties of primates and koalas convey an advantage during arboreal locomotion, likely linked to stability on narrow or unstable substrates. Photo credit: Kate Berry.

## INSIDE JEB

Koalas climb like apes but bound like marsupials

**Knight, K.**

jeb218586

How arrowhead spiders reel in tasty prey

**Knight, K.**

jeb218990

Veggie fish depend on bacterial detox backup but carnies do not

**Knight, K.**

jeb219006

## CONVERSATION

Early-career researchers: an interview with Sandy Kawano

jeb219022

## SHORT COMMUNICATIONS

Reduced telomere length in embryos exposed to predator cues

**Noguera, J. C. and Velando, A.**

jeb216176

Temporary caging results in reduced levels of circulating melatonin in migratory robins

**Lupi, S., Canoine, V., Pedrini, P. and Fusani, L.**

jeb210914

## RESEARCH ARTICLES

Visual system development of the spotted unicornfish, *Naso brevirostris* (Acanthuridae)

**Tettamanti, V., de Busserolles, F., Lecchini, D., Marshall, N. J. and Cortesi, F.**

jeb209916

Stepping behaviour contributes little to balance control against continuous mediolateral trunk perturbations

**Best, A. N., Martin, J.-P., Li, Q. and Wu, A. R.**

jeb212787

Quantifying the swimming gaits of veined squid (*Loligo forbesii*) using bio-logging tags

**Flaspohler, G. E., Caruso, F., Mooney, T. A., Katija, K., Fontes, J., Afonso, P. and Shorter, K. A.**

jeb198226

*In vivo* force-length and activation dynamics of two distal rat hindlimb muscles in relation to gait and grade

**Eng, C. M., Konow, N., Tijs, C., Holt, N. C. and Biewener, A. A.**

jeb205559

Defects in mating behavior and tail morphology are the primary cause of sterility in *Caenorhabditis elegans* males at high temperature

**Nett, E. M., Sepulveda, N. B. and Petrella, L. N.**

jeb208041

Prolonged survival out of water is linked to a slow pace of life in a self-fertilizing amphibious fish

**Turko, A. J., Doherty, J. E., Yin-Liao, I., Levesque, K., Kruth, P., Holden, J. M., Earley, R. L. and Wright, P. A.**

jeb209270

Comparing context-dependent call sequences employing machine learning methods: an indication of syntactic structure of greater horseshoe bats

**Zhang, K., Liu, T., Liu, M., Li, A., Xiao, Y., Metzner, W. and Liu, Y.**

jeb214072

Quantifying koala locomotion strategies: implications for the evolution of arborealism in marsupials

**Gaschk, J. L., Frère, C. H. and Clemente, C. J.**

jeb207506

Honey bee caste lipidomics in relation to life-history stage and the long life of the queen

**Martin, N., Hulbert, A. J., Brenner, G. C., Brown, S. H. J., Mitchell, T. W. and Else, P. L.**

jeb207043

An impressive capacity for cold tolerance plasticity protects against ionoregulatory collapse in the disease vector

*Aedes aegypti*

**Jass, A., Yerushalmi, G. Y., Davis, H. E., Donini, A. and MacMillan, H. A.**

jeb214056

Reeling in the prey: fishing behaviour in an orb web spider

**Rao, D., Tapia-McClung, H. and Narendra, A.**

jeb213751

Pectoral and pelvic girdle rotations during walking and swimming in a semi-aquatic turtle: testing functional role and constraint

**Mayerl, C. J., Capano, J. G., Moreno, A. A., Wyneken, J., Blob, R. W. and Brainerd, E. L.**

jeb212688

Diffusive structural colour in *Hoplia argentea*

**Kilchoer, C., Pirih, P., Steiner, U. and Wilts, B. D.**

jeb213306

Disparate responses to salinity across species and organizational levels in anchialine shrimps

**Havird, J. C., Meyer, E., Fujita, Y., Vaught, R. C., Henry, R. P. and Santos, S. R.**

jeb211920

Glucagon regulation of carbohydrate metabolism in rainbow trout: *in vivo* glucose fluxes and gene expression

**Forbes, J. L. I., Kostyniuk, D. J., Mennigen, J. A. and Weber, J.-M.**

jeb211730

The role of intestinal bacteria in the ammonia detoxification ability of teleost fish

**Turner, L. A. and Bucking, C.**

jeb209882

Fat content of striped mice decreases during the breeding season but not during the food-restricted dry season

**Rimbach, R., Blanc, S., Zahariev, A., Robin, J.-P., Pillay, N. and Schradin, C.**

jeb208504

#### CORRECTION

Correction: Experimental evidence that physical activity affects the multivariate associations among muscle attachments (entheses) (doi:10.1242/jeb.213058)

**Karakostis, F. A., Wallace, I. J., Konow, N. and Harvati, K.**

jeb220210