



Cover: In their study, A. E. McDonald, G. C. Vanlerberghe and J. F. Staples (pp. 2627–2634) discovered that the electron transport chain protein alternative oxidase (AOX), which confers cyanide-resistant mitochondrial respiration, is widespread in the animal kingdom. AOX is found in species such as (from top left clockwise): the echinoderm *Strongylocentrotus purpuratus* (photo credit: Dr Louise Page), the hemichordate *Saccoglossus kowalevskii* (photo credit: Dr Chris Cameron), and the molluscs *Mytilus californianus* (photo credit: Dr Rich Palmer) and *Lymnaea stagnalis* (photo credit: Dr Louise Page).

▼ **Inside JEB**

Coriolis keeps leading edge vortex in place i; Carnivore's masticatory myosin in squirrel jaws ii; Light foragers hover better than heavy nurses iii

Research Articles

Montuelle, S. J., Herrel, A., Schaerlaeken, V., Metzger, K. A., Mutuyeyezu, A. and Bels, V. L. Inertial feeding in the teiid lizard *Tupinambis merianae*: the effect of prey size on the movements of hyolingual apparatus and the cranio-cervical system. 2501-2510

► **Reiser, P. J., Bicer, S., Chen, Q., Zhu, L. and Quan, N.** Masticatory ('superfast') myosin heavy chain and embryonic/atrial myosin light chain 1 in rodent jaw-closing muscles. 2511-2519

Stewart, J. R., Ecay, T. W. and Heulin, B. Calcium provision to oviparous and viviparous embryos of the reproductively bimodal lizard *Lacerta (Zootoca) vivipara*. 2520-2524

Coureaud, G., Hamdani, Y., Schaal, B. and Thomas-Danguin, T. Elemental and configural processing of odour mixtures in the newborn rabbit. 2525-2531

Velez, Z., Hubbard, P. C., Barata, E. N. and Canário, A. V. M. Adaptation to reduced salinity affects the olfactory sensitivity of Senegalese sole (*Solea senegalensis* Kaup 1858) to Ca²⁺ and Na⁺ but not amino acids. 2532-2540

Zhao, Z.-J. and Cao, J. Effect of fur removal on the thermal conductance and energy budget in lactating Swiss mice. 2541-2549

Gräns, A., Albertsson, F., Axelsson, M. and Olsson, C. Postprandial changes in enteric electrical activity and gut blood flow in rainbow trout (*Oncorhynchus mykiss*) acclimated to different temperatures. 2550-2557

Matsukura, K., Tsumuki, H., Izumi, Y. and Wada, T. Physiological response to low temperature in the freshwater apple snail, *Pomacea canaliculata* (Gastropoda: Ampullariidae). 2558-2563

van't Padje, S., Chaudhry, B., Severijnen, L.-A., van der Linde, H. C., Mientjes, E. J., Oostra, B. A. and Willemsen, R. Reduction in fragile X related 1 protein causes cardiomyopathy and muscular dystrophy in zebrafish. 2564-2570

Onken, H., Parks, S. K., Goss, G. G. and Moffett, D. F. Serotonin-induced high intracellular pH aids in alkali secretion in the anterior midgut of larval yellow fever mosquito *Aedes aegypti* L. 2571-2578

Todgham, A. E. and Hofmann, G. E. Transcriptomic response of sea urchin larvae *Strongylocentrotus purpuratus* to CO₂-driven seawater acidification. 2579-2594

Malik, A. I. and Storey, K. B. Activation of extracellular signal-regulated kinases during dehydration in the African clawed frog, *Xenopus laevis*. 2595-2603

► **Vance, J. T., Williams, J. B., Elekonich, M. M. and Roberts, S. P.** The effects of age and behavioral development on honey bee (*Apis mellifera*) flight performance. 2604-2611

Dlugosz, E. M., Chappell, M. A., McGillivray, D. G., Syme, D. A. and Garland, T., Jr. Locomotor trade-offs in mice selectively bred for high voluntary wheel running. 2612-2618

Yaski, O., Portugali, J. and Eilam, D. The dynamic process of cognitive mapping in the absence of visual cues: human data compared with animal studies. 2619-2626

McDonald, A. E., Vanlerberghe, G. C. and Staples, J. F. Alternative oxidase in animals: unique characteristics and taxonomic distribution. 2627-2634

Jones, T. T., Hastings, M. D., Bostrom, B. L., Andrews, R. D. and Jones, D. R. Validation of the use of doubly labeled water for estimating metabolic rate in the green turtle (*Chelonia mydas* L.): a word of caution. 2635-2644

Bartolo, R. C., Harfoot, N., Gill, M., McLeod, B. J. and Butt, A. G. Secretagogues stimulate electrogenic HCO₃⁻ secretion in the ileum of the brushtail possum, *Trichosurus vulpecula*: evidence for the role of a Na⁺/HCO₃⁻ cotransporter. 2645-2655

Sahin, M., Mohseni, K. and Colin, S. P. The numerical comparison of flow patterns and propulsive performances for the hydromedusae *Sarsia tubulosa* and *Aequorea victoria*. 2656-2667

Adamczyk, P. G. and Kuo, A. D. Redirection of center-of-mass velocity during the step-to-step transition of human walking. 2668-2678

Shoele, K. and Zhu, Q. Fluid-structure interactions of skeleton-reinforced fins: performance analysis of a paired fin in lift-based propulsion. 2679-2690

► **Lentink, D. and Dickinson, M. H.** Biofluiddynamic scaling of flapping, spinning and translating fins and wings. 2691-2704

► **Lentink, D. and Dickinson, M. H.** Rotational accelerations stabilize leading edge vortices on revolving fly wings. 2705-2719

Erratum

Jackson, R. R. and Harland, D. P. One small leap for the jumping spider but a giant step for vision science. 2720

► Article featured 'Inside JEB'