



**Cover:** From flatworms and insects to frogs and turtles, embryos use disturbance cues and signals to inform hatching timing, yet mechanisms mediating mechanosensing *in ovo* are largely unknown. The arboreal embryos of red-eyed treefrogs, *Agalychnis callidryas*, hatch prematurely to escape predation, cued by physical disturbance in snake attacks. Jung et al. (jeb236141) provide evidence that the development of lateral line neuromasts mediates the earliest onset of mechanosensory-cued hatching. Functional neuromasts were treated to fluoresce using 4-di-2-ASP (pictured) and temporarily ablated to examine their role in vibration sensation *in ovo*. Photo credit: Julie Jung.

## INSIDE JEB

Lateral line helps premature treefrogs evade jaws of death

**Knight, K.**

jeb240655

Coasting zebrafish adjust to pursue

**Knight, K.**

jeb240853

Critical temperature window sends migratory black-headed buntings on their travels

**Knight, K.**

jeb240564

Colour discrimination is in the background

**Knight, K.**

jeb240275

## COMMENTARY

Help, there are 'omics' in my comparative physiology!

**Torson, A. S., Dong, Y.-w. and Sinclair, B. J.**

jeb191262

## REVIEW

Developmental and reproductive physiology of small mammals at high altitude: challenges and evolutionary innovations

**Robertson, C. E. and Wilsterman, K.**

jeb215350

## SHORT COMMUNICATIONS

A direct excitatory action of lactate ions in the central respiratory network of bullfrogs, *Lithobates catesbeianus*

**Burton, M. T. and Santin, J. M.**

jeb235705

Pursuit predation with intermittent locomotion in zebrafish

**Soto, A. P. and McHenry, M. J.**

jeb230623

A deposit-feeder sea cucumber also ingests suspended particles through the mouth

**Mohsen, M., Zhang, L., Sun, L., Lin, C., Liu, S., Wang, Q. and Yang, H.**

jeb230508

## RESEARCH ARTICLES

Drivers of plasticity in freeze tolerance in the intertidal mussel *Mytilus trossulus*

**Kennedy, J. R., Harley, C. D. G. and Marshall, K. E.**

jeb233478

The impact of long-term reduced access to cleaner fish on health indicators of resident client fish

**Ros, A. F. H., Nusbaumer, D., Triki, Z., Grutter, A. S. and Bshary, R.**

jeb231613

Morphological colour adaptation during development in fish: involvement of growth hormone receptor 1

**Delgadín, T. H., Castañeda-Cortés, D. C., Sacks, C., Breccia, A., Fernandino, J. I. and Vissio, P. G.**

jeb230375

Cilia density and flow velocity affect alignment of motile cilia from brain cells

**Pellicciotta, N., Das, D., Kotar, J., Faucourt, M., Spassky, N., Lauga, E. and Cicuta, P.**

jeb229310

Synergetic effects of immune challenge and stress depress cortisol, inflammatory response and antioxidant activity in fish-eating *Myotis*

**Hernández-Arciga, U., Herrera, M., L. G., Königsberg, M., Valdez, R. A., Flores-Martínez, J. J. and Romano, M. C.**

jeb234914

Phylogenetic analysis of maximal oxygen consumption during exercise ( $\dot{V}_{O_{2,max}}$ ) and ecological correlates among lizard species

**Albuquerque, R. L. and Garland, T.**

jeb229013

Social hierarchy is established and maintained with distinct acts of aggression in male *Drosophila melanogaster*

**Simon, J. C. and Heberlein, U.**

jeb232439

Structure and function of the nervous system in nectophores of the siphonophore *Nanomia bijuga*

**Norekian, T. P. and Meech, R. W.**

jeb233494

Limits to sustained energy intake. XXXII. Hot again: dorsal shaving increases energy intake and milk output in golden hamsters (*Mesocricetus auratus*)

**Ohrnberger, S. A., Hambly, C., Speakman, J. R. and Valencak, T. G.**

jeb230383

Elastic wing deformations mitigate flapping asymmetry during manoeuvres in rose chafers (*Protaetia cuprea*)

**Meresman, Y. and Ribak, G.**

jeb225599

Multimodal mechanosensing enables treefrog embryos to escape egg-predators

**Jung, J., Serrano-Rojas, S. J. and Warkentin, K. M.**

jeb236141

A motion compensation treadmill for untethered wood ants (*Formica rufa*): evidence for transfer of orientation memories from free-walking training

**Goulard, R., Buehlmann, C., Niven, J. E., Graham, P. and Webb, B.**

jeb228601

Seismic sensitivity and bone conduction mechanisms enable extratympanic hearing in salamanders

**Capshaw, G., Soares, D., Christensen-Dalsgaard, J. and Carr, C. E.**

jeb236489

Ambient temperature affects multiple drivers of physiology and behaviour: adaptation for timely departure of obligate spring migrants

**Sur, S., Chaturvedi, K., Sharma, A., Malik, S., Rani, S. and Kumar, V.**

jeb236109

Thermal acclimation leads to variable muscle responses in two temperate labrid fishes

**Moran, C. J., Jebb, K. E., Travitz, L., Coughlin, D. J. and Gerry, S. P.**

jeb235226

Chicken colour discrimination depends on background colour

**Olsson, P., Johnsson, R. D., Foster, J. J., Kirwan, J. D., Lind, O. and Kelber, A.**

jeb209429