



Cover: The ability to make rapid changes in direction is a key part of animal locomotion. Turning performance may depend on the ability to successfully complete key challenges including: withstanding lateral forces, maintaining sufficient friction, lateral leaning during a turn and rotating the body to align with the new heading. Haagensen et al. (jeb244435) explored these among trained agility dogs. Medium-sized dogs had greater turning ability compared with smaller and larger bodied dogs. Additionally, longer forelimbs but shorter hindlimbs were associated with better turning ability. These results have significant implications for form and function relationships, but also for predicting the outcome of predator-prey encounters. Photo credit: Johanna Schultz.

INSIDE JEB

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OUTSIDE JEB

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Bigger is not better in warm water
Dichiera, A.
jeb243524

Hot cold-adapted lizards are born 'old'
Marasco, V.
jeb243521

Hot tortoises running out of daytime
Breit, A. M.
jeb243522

Birds flap their wings over wider arcs to overcome challenges
Jaramillo, J. M.
jeb243520

SHORT COMMUNICATIONS

Age-related decrease in appetitive associative memory in fruit flies
König, C. and Gerber, B.
jeb244915

Force loss induced by inhibiting cross-bridge cycling is mitigated in eccentric contraction
Fukutani, A., Kunitatsu, S. and Isaka, T.
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RESEARCH ARTICLES

Fatty acid oxidation: a neglected factor in understanding the adjustment of mitochondrial function to cold temperatures
Mast, H., Holody, C. D. and Lemieux, H.
jeb244934

Feeling the heat: variation in thermal sensitivity within and among populations
DeLiberto, A. N., Drown, M. K., Ehrlich, M. A., Oleksiak, M. F. and Crawford, D. L.
jeb244831

Landing manoeuvres predict roost-site preferences in bats
Chaverri, G., Araya-Salas, M., Barrantes, J. P., Uribe-Etxebarria, T., Peña-Acuña, M., Varela, A. L. and Aihartza, J.
jeb244267

The role of ecdysteroid in the regulation of ovarian growth and oocyte maturation in *Rhodnius prolixus*, a vector of Chagas disease
Benrabaa, S. A. M., Orchard, I. and Lange, A. B.
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Ontogeny of the middle ear and auditory sensitivity in the Natterjack toad (*Epidalea calamita*)
Lauridsen, T. B. and Christensen-Dalsgaard, J.
jeb244759

Zebrafish parental progeny investment in response to cycling thermal stress and hypoxia: deposition of heat shock proteins but not cortisol
Lim, M. Y.-T. and Bernier, N. J.
jeb244715

Metabolic rate increases with acclimation temperature and is associated with mitochondrial function in some tissues of threespine stickleback
Cominassi, L., Ressel, K. N., Brooking, A. A., Marbacher, P., Ransdell-Green, E. C. and O'Brien, K. M.
jeb244659

Exploring the limits to turning performance with size and shape variation in dogs
Haagensen, T., Gaschk, J. L., Schultz, J. T. and Clemente, C. J.
jeb244435

The role of carbonic anhydrase-mediated tissue oxygen extraction in a marine teleost acclimated to hypoxia
Dichiera, A. M., Negrete Jr, B., Ackerly, K. L. and Esbaugh, A. J.
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Effects of different modes of exercise on skeletal muscle mass and function and IGF-1 signaling during early aging in mice
Li, B., Feng, L., Wu, X., Cai, M., Yu, J. J. and Tian, Z.
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Cardiac performance and heat shock response variation related to shell colour morphs in the mudflat snail *Batillaria attramentaria*
Han, G., Du, Y., Du, L., Qu, F. and Zhao, Z.
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Endurance training does not affect maximum exertion/distance capacity in *Anolis carolinensis* lizards
Sorlin, M. V., Marks, J. R. and Lailvaux, S. P.
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Shortened lifespan induced by a high-glucose diet is associated with intestinal immune dysfunction in *Drosophila sechellia*
Abe, M., Kamiyama, T., Izumi, Y., Qian, Q., Yoshihashi, Y., Degawa, Y., Watanabe, K., Hattori, Y., Uemura, T. and Niwa, R.
jeb244423