



Cover: Spiders use their special hydraulic system to achieve superior locomotor performance and high drive efficiency. A study by Xin Hao and colleagues explored the energy conversion during the hydraulic drive of spiders (*Haplopelma hainanum*). It was found that for spiders, the bouncing gait and the hydraulic system contribute to the lower transport cost at low speed, while the hydraulic system greatly increases the transport cost at high speed. Image licensed under a Creative Commons Attribution 4.0 International license.

REVIEW

Recent developments of tools for genome and metabolome studies in basidiomycete fungi and their application to natural product research

Alberti, F., Kaleem, S. and Weaver, J. A.
bio056010

RESEARCH ARTICLES

The novel zebrafish model *pretzel* demonstrates a central role for SH3PXD2B in defective collagen remodelling and fibrosis in Frank-Ter Haar syndrome

de Vos, I. J. H. M., Wong, A. S. W., Taslim, J., Ong, S. L. M., Syder, N. C., Goggi, J. L., Carney, T. J. and van Steensel, M. A. M.
bio054270

MicroRNA-9-5p inhibits proliferation and induces apoptosis of human hypertrophic scar fibroblasts through targeting peroxisome proliferator-activated receptor β

Chai, C.-Y., Tai, I.-C., Zhou, R., Song, J., Zhang, C. and Sun, S.
bio051904

Harmine enhances the activity of the HIV-1 latency-reversing agents ingenol A and SAHA

Taylor, J. P., Armitage, L. H., Aldridge, D. L., Cash, M. N. and Wallet, M. A.
bio052969

Chorismate synthase mediates cerebral malaria pathogenesis by eliciting salicylic acid-dependent autophagy response in parasite

Chakrabarti, M., Kannan, D., Munjal, A., Choudhary, H. H., Mishra, S. and Singh, S.
bio054544

iPSC-derived hepatocytes generated from NASH donors provide a valuable platform for disease modeling and drug discovery

Gurevich, I., Burton, S. A., Munn, C., Ohshima, M., Goedland, M. E., Czysz, K. and Rajesh, D.
bio055087

CD47 differentially regulates white and brown fat function
Norman-Burgdorf, H., Li, D., Sullivan, P. and Wang, S.
bio056747

Locomotor mechanism of *Haplopelma hainanum* based on energy conservation analysis

Hao, X., Ma, W., Liu, C., Qian, Z., Ren, L. and Ren, L.
bio055301

Overexpression of an ALS-associated FUS mutation in *C. elegans* disrupts NMJ morphology and leads to defective neuromuscular transmission

Markert, S. M., Skoruppa, M., Yu, B., Mulcahy, B., Zhen, M., Gao, S., Sendtner, M. and Stigloher, C.
bio055129

Drosophila MICOS knockdown impairs mitochondrial structure and function and promotes mitophagy in muscle tissue

Wang, L.-j., Hsu, T., Lin, H.-I and Fu, C.-y
bio054262

Informing epidemic (research) responses in a timely fashion by knowledge management – a Zika virus use case

Bauch, A., Pellet, J., Schleicher, T., Yu, X., Gelemanović, A., Cristella, C., Fraaij, P. L., Polasek, O., Auffray, C., Maier, D., Koopmans, M. and de Jong, M. D.
bio053934

FIRST PERSON

First person – Ivo de Vos
bio057935

First person – Sebastian Markert
bio057760

Future Leader to Watch – Fabrizio Alberti
bio057679