



Cover: This striking image is a scanning electron micrograph of the anterior end of an adult male *Schistosoma mansoni* worm, taken during a study conducted by Pirovich and colleagues, examining a novel function of the worm's glycolytic enzyme activating plasmin in potentially degrading blood clots. The oral and ventral suckers that the parasites use to adhere to the host vasculature can be seen clearly, and the spines that give the tegument (outer surface) of the worms its characteristic bumpy appearance are also plainly visible. Image licensed under a Creative Commons Attribution 4.0 International license.

EDITORIAL

News from Biology Open in 2020

Hackett, R. (Managing Editor BiO)

bio051821

RESEARCH ARTICLES

Nanomorphological and mechanical reconstruction of mesenchymal stem cells during early apoptosis detected by atomic force microscopy

Su, X., Zhou, H., Bao, G., Wang, J., Liu, L., Zheng, Q., Guo, M. and Zhang, J.

bio048108

Schistosoma mansoni glyceraldehyde-3-phosphate dehydrogenase enhances formation of the blood-clot lysis protein plasmin

Pirovich, D. B., Da'dara, A. A. and Skelly, P. J.

bio050385

Single cell force profiling of human myofibroblasts reveals a biophysical spectrum of cell states

Layton, T. B., Williams, L., Colin-York, H., McCann, F. E., Cabrita, M., Feldmann, M., Brown, C., Xie, W., Fritzsche, M., Furniss, D. and Nanchahal, J.

bio049809

The transcription factor Spalt and human homologue SALL4 induce cell invasion via the dMyc-JNK pathway in *Drosophila*

Sun, J., Zhang, J., Wang, D. and Shen, J.

bio048850

MACF1 promotes preosteoblast migration by mediating focal adhesion turnover through EB1

Su, P., Yin, C., Li, D., Yang, C., Wang, X., Pei, J., Tian, Y. and Qian, A.

bio048173

Suppression of store-operated calcium entry causes dilated cardiomyopathy of the *Drosophila* heart

Petersen, C. E., Wolf, M. J. and Smyth, J. T.

bio049999

MicroRNA-96-5p promotes proliferation, invasion and EMT of oral carcinoma cells by directly targeting FOXF2

Wang, H., Ma, N., Li, W. and Wang, Z.

bio049478

Parametric generation of three-dimensional gait for robot-assisted rehabilitation

Shi, D., Zhang, W., Ding, X. and Sun, L.

bio047332

Long-term sucrose solution consumption causes metabolic alterations and affects hepatic oxidative stress in Wistar rats

Souza Cruz, E. M., Bitencourt de Moraes, J. M., Dalto da Rosa, C. V., da Silva Simões, M., Comar, J. F., de Almeida Chuffa, L. G. and Ferreira Seiva, F. R.

bio047282

FIRST PERSON

First person – David Pirovich

bio051631

First person – Jie Sun

bio051144