



Cover: In the fruit fly, *Drosophila melanogaster*, the daily cycle of rest and activity is a rhythmic behavior that relies on the activity of a small number of neurons. The small ventral lateral neurons (sLN_vs) are considered key in the control of locomotor rhythmicity. Pirez et al characterized the impact of different putative postsynaptic partners of the sLN_vs on the control of rhythmic locomotor behavior. Shown here is a confocal projection of the expression pattern of the GRASP negative line 5-43 GAL4 (black), immunostained for the circadian marker PER (red) and the circadian neuropeptide PDF (blue). In this work Pirez et al found that novel non circadian neurons are relevant for the control of locomotor activity. Image licensed under a Creative Commons Attribution 4.0 International license.

RESEARCH ARTICLES

A neurodevelopmental TUBB2B β -tubulin mutation impairs Bim1 (yeast EB1)-dependent spindle positioning
Denarier, E., Brousse, C., Sissoko, A., Andrieux, A. and Boscheron, C.

bio038620

Plasmodium centrin PbcEN-4 localizes to the putative MTOC and is dispensable for malaria parasite proliferation

Roques, M., Stanway, R. R., Rea, E. I., Markus, R., Brady, D., Holder, A. A., Guttery, D. S. and Tewari, R.

bio036822

E-cadherin, actin, microtubules and FAK dominate different spheroid formation phases and important elements of tissue integrity

Smyrek, I., Mathew, B., Fischer, S. C., Lissek, S. M., Becker, S. and Stelzer, E. H. K.

bio037051

Folic acid modifies the shape of epithelial cells during morphogenesis via a Folr1 and MLCK dependent mechanism

Martin, J. B., Muccioli, M., Herman, K., Finnell, R. H. and Plegeman, T. F., Jr

bio041160

Three-dimensional movements of the pectoral fin during yaw turns in the Pacific spiny dogfish, *Squalus suckleyi*

Hoffmann, S. L., Donatelli, C. M., Leigh, S. C., Brainerd, E. L. and Porter, M. E.

bio037291

Maintenance of cell fates and regulation of the histone variant H3.3 by TLK kinase in *Caenorhabditis elegans*

Shibata, Y., Seki, Y. and Nishiwaki, K.

bio038448

IL-31 plays dual roles in lung inflammation in an OVA-induced murine asthma model

Huang, J., Yue, H., Jiang, T., Gao, J., Shi, Y., Shi, B., Wu, X. and Gou, X.

bio036244

The 17 β -estradiol induced upregulation of the adhesion G-protein coupled receptor (ADGRG7) is modulated by ESR α and SP1 complex

Hassan, A., Bagu, E. T., Levesque, M., Patten, S. A., Benhadjeba, S., Edjekouane, L., Villemure, I., Tremblay, A. and Moldovan, F.

bio037390

Local deformation and stiffness distribution in fly wings

Wehmann, H.-N., Heepe, L., Gorb, S. N., Engels, T. and Lehmann, F.-O.

bio038299

Treatment with methyl- β -cyclodextrin prevents mechanical allodynia in resiniferatoxin neuropathy in a mouse model

Lin, C.-L., Chang, C.-H., Chang, Y.-S., Lu, S.-C. and Hsieh, Y.-L.

bio039511

The role of retrograde intraflagellar transport genes in aminoglycoside-induced hair cell death

Stawicki, T. M., Linbo, T., Hernandez, L., Parkinson, L., Bellefeuille, D., Rubel, E. W. and Raible, D. W.

bio038745

Influence of substrate orientation on tadpoles' feeding efficiency

Annibale, F. S., de Sousa, V. T. T., de Sousa, C. E., Venesky, M. D., Rossa-Feres, D. C., Nomura, F. and Wassersug, R. J.

bio037598

Roles of Keber's valve and foot chamber for foot manipulation in the mussel *Nodularia douglasiae*

Seo, E. and Seo, Y.

bio039859

The ATPase TER94 regulates Notch signaling during *Drosophila* wing development

Li, Y., Liu, T. and Zhang, J.

bio038984

Contribution of non-circadian neurons to the temporal organization of locomotor activity

Pirez, N., Bernabei-Cornejo, S. G., Fernandez-Acosta, M., Duhart, J. M. and Ceriani, M. F.

bio039628

Localized disorganization of the cochlear inner hair cell synaptic region after noise exposure

Bullen, A., Anderson, L., Bakay, W. and Forge, A.

bio038547

Genome-wide identification of lncRNAs and mRNAs differentially expressed in non-functioning pituitary adenoma and construction of an lncRNA-mRNA co-expression network

Xing, W., Qi, Z., Huang, C., Zhang, N., Zhang, W., Li, Y., Qiu, M., Fang, Q. and Hui, G.

bio037127

Integral gene drives for population replacement

Nash, A., Urdaneta, G. M., Beaghton, A. K., Hoermann, A., Papathanos, P. A., Christophides, G. K. and Windbichler, N.

bio037762

Development and characterization of a new cell line derived from European eel *Anguilla anguilla* kidney

Chen, B., Zheng, Z., Yang, J., Chi, H., Huang, H. and Gong, H.

bio037507

Glucose starvation triggers filamentous septin assemblies in an *S. pombe* septin-2 deletion mutant
Liu, M., Heimlicher, M. B., Bächler, M., Ibeneche-Nnewiwe, C. C., Florin, E.-L., Brunner, D. and Hoenger, A.
bio037622

Hypoxia evokes increased PDI and PDIA6 expression in the infarcted myocardium of ex-germ-free and conventionally raised mice
Kiouptsi, K., Finger, S., Garlapati, V. S., Knorr, M., Brandt, M., Walter, U., Wenzel, P. and Reinhardt, C.
bio038851

Development and validation of RdRp Screen, a crystallization screen for viral RNA-dependent RNA polymerases
Riccio, F., Talapatra, S. K., Oxenford, S., Angell, R., Mazzon, M. and Kozielski, F.
bio037663

METHODS AND TECHNIQUES

GFP-Forked, a genetic reporter for studying *Drosophila* oocyte polarity
Baskar, R., Bakrhat, A. and Abdu, U.
bio039552

Improved dynamic monitoring of transcriptional activity during longitudinal analysis in the mouse brain
Heo, H., Jo, J., Jung, J. I., Han, Y.-M., Lee, S., Kim, S. R., Kwon, S.-H., Kim, K.-N., Hwang, B. J., Kee, Y., Lee, B. D., Kang, D. and Her, S.
bio037168

FIRST PERSON

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bio040972

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bio039792

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bio041129

First person – Yunlong Li
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First person – Klytaimnistra Kiouptsi
bio040642