

EMBL Research Publications 2014

1. Polinkovsky ME, **Gambin Y**, Banerjee PR, Erickstad MJ, Groisman A, Deniz AA.
Ultrafast cooling reveals microsecond-scale biomolecular dynamics.
Nat Commun. 2014 Dec 17;5:5737. doi: 10.1038/ncomms6737. PMID: 25517430
2. **Biro M.**, Munoz M.A., Weninger W.
Targeting Rho-GTPases in immune cell migration and inflammation.
Br J Pharmacol. 2014 Dec;171(24):5491-506. doi: 10.1111/bph.12658. Epub 2014 Jul 2.
3. Berger J, Tarakci H, Berger S, Li M, Hall TE, Arner A, **Currie PD.**
Loss of Tropomodulin4 in the zebrafish mutant träge causes cytoplasmic rod formation and muscle weakness reminiscent of nemaline myopathy.
Dis Model Mech; 2014 Dec;7(12):1407-15. doi: 10.1242/dmm.017376. Epub 2014 Oct 2.
4. Furtado, M.B., H.T. Nim, J.A. Gould, M.W. Costa, **N. Rosenthal**, S.E. Boyd.
Microarray profiling to analyse adult cardiac fibroblast identity.
Genomic Data 2014 Dec;2:345-350. doi:10.1016/j.gdata.2014.10.006
5. Homman-Ludiye J, **Bourne JA.**
The Guidance Molecule Semaphorin3A is Differentially Involved in the Arealization of the Mouse and Primate
Cereb Cortex. 2014 Nov;24(11):2884-98. doi: 10.1093/cercor/bht141. Epub 2013 May 24.
6. Merson, T.D., **J.A. Bourne.**
Endogenous neurogenesis following ischaemic brain injury: insights for therapeutic strategies.
Int J Biochem Cell Biol. 2014 Nov;56:4-19. doi: 10.1016/j.biocel.2014.08.003. Epub 2014 Aug 14.
7. Uribe, V., C. Badia-Careaga, J.C. Casanova, J.N. Dominguez, J.L. de la Pompa, J.J. Sanz-Ezquerro.
Arid3b is essential for second heart field cell deployment and heart patterning.
Development.
2014 Nov;141(21):4168-81. doi: 10.1242/dev.109918.
8. Pinto, A.R., J.W. Godwin, **N.A. Rosenthal.**
Macrophages in cardiac homeostasis, injury responses and progenitor cell mobilisation.

Stem Cell Res. 2014 Nov;13(3 Pt B):705-714. doi:10.1016/j.scr.2014.06.004.
9. **Rosenthal, N.**, M.D. Grounds.

- EDITORIAL: Regenerative Medicine: The Challenge of Translation.*
Int J Biochem Cell Biol. 2014 Nov;56:2-3. doi: 10.1016/j.biocel.2014.10.010. Epub 2014 Oct 13.
10. Munoz M.A., **Biro M.**, Weninger W.
T cell migration in intact lymph nodes in vivo.
Curr Opin Cell Biol. 2014 Oct;30:17-24. doi: 10.1016/j.ccb.2014.05.002. Epub 2014 Jun 5.
 11. Martin S, Papadopulos A, Tomatis VM, Sierrecki E, Malintan NT, Gormal RS, Giles N, Johnston WA, Alexandrov K, **Gambin Y**, Collins BM, Meunier FA.
Increased polyubiquitination and proteasomal degradation of a Munc18-1 disease-linked mutant causes temperature-sensitive defect in exocytosis.
Cell Rep. 2014 Oct 9;9(1):206-18. doi: 10.1016/j.celrep.2014.08.059. Epub 2014 Oct 2. PMID: 25284778
 12. **Goldshmit, Y.**, S.S. Trangle, Y. Kloog, R. Pinkas-Kramarski.
Interfering with the interaction between ErbB1, nucleolin and Ras as a potential treatment for glioblastoma.
Oncotarget. 2014 Sep 30;5(18):8602-13.
 13. **Godwin, J.**
The promise of perfect adult tissue repair and regeneration in mammals: Learning from regenerative amphibians and fish.
Bioessays. 2014 Sep;36(9):861-71. doi: 10.1002/bies.201300144. Epub 2014 Jul 9.
 14. Sierrecki E, Stevers LM, Giles N, Polinkovsky ME, Moustaqil M, Mureev S, Johnston WA, Dahmer-Heath M, Skalamera D, Gonda TJ, Gabrielli B, Collins BM, Alexandrov K, **Gambin Y.**
Rapid mapping of interactions between Human SNX-BAR proteins measured in vitro by AlphaScreen and single-molecule spectroscopy.
Mol Cell Proteomics. 2014 Sep;13(9):2233-45. doi: 10.1074/mcp.M113.037275. Epub 2014 May 27. PMID: 24866125
 15. Teo L, **Bourne JA**
A reproducible and translatable model of focal ischemia in the visual cortex of infant and adult marmoset monkeys.
Brain Path 2014 Sept;24(5):459-474. doi: 10.1111/bpa.12129. Epub 2014 Feb 28.
 16. Nguyen PD, Hollway GE, Sonntag C, Miles LB, Hall TE, Berger S, Fernandez KJ, Gurevich DB, Cole NJ, Alaei S, Ramialison M, Sutherland RL, Polo JM, Lieschke GJ, **Currie PD.**
Haematopoietic stem cell induction by somite-derived endothelial cells controlled by meox1.
Nature; 2014 Aug 21;512(7514):314-8. doi: 10.1038/nature13678. Epub 2014 Aug 13.

17. Johannesson, B., S. Sattler, E. Semenova, S. Pastore, T.M. Kennedy-Lydon, R.D. Sampson, M.D. Schneider, **N. Rosenthal**, D. Bilbao.
Insulin-like growth factor-1 induces regulatory T cell-mediated suppression of allergic contact dermatitis in mice.
Dis Model Mech. 2014 Aug;7(8):977-85. doi: 10.1242/dmm.015362.
18. Skelton, R.J., **M. Costa**, D.J. Anderson, F. Bruveris, B.W. Finnin, K. Koutsis, D. Arasaratnam, A.J. White, A. Rafii, E.S. Ng, A.G. Elefanty, E.G. Stanley, C.W. Pouton, J.M. Haynes, R. Ardehali, R.P. Davis, C.L. Mummery, D.A. Elliott.
SIRPA, VCAM1 and CD34 identify discrete lineages during early human cardiovascular development.
Stem Cell Res. 2014 Jul;13(1):172-9. doi: 10.1016/j.scr.2014.04.016. Epub 2014 May 4.
19. **Rosenthal, N.**, M. Zernicka-Goetz.
EDITORIAL: A tribute to Sir John Gurdon.
Differentiation. 2014 Jul;88(1):1-2. doi: 10.1016/j.diff.2014.11.001. Epub 2014 Nov 20.
20. Brooks AJ, Dai W, O'Mara ML, Abankwa D, Chhabra Y, Pelekanos RA, Gardon O, Tunny KA, Blucher KM, Morton CJ, Parker MW, Sierrecki E, **Gambin Y**, Gomez GA, Alexandrov K, Wilson IA, Doxastakis M, Mark AE, Waters MJ.
Mechanism of activation of protein kinase JAK2 by the growth hormone receptor.
Science. 2014 May 16;344(6185):1249783. doi: 10.1126/science.1249783. PMID: 24833397
21. Furtado, M.B., M.W. Costa, E.A. Pranoto, E. Salimova, A.R. Pinto, N.T. Lam, A. Park, P. Snider, A. Chandran, R.P. Harvey, R. Boyd, S.J. Conway, J. Pearson, D.M. Kaye, **N.A. Rosenthal**.
Cardiogenic genes expressed in cardiac fibroblasts contribute to heart development and repair.
Circ Res. 2014 Apr 25;114(9):1422-34. doi: 10.1161/CIRCRESAHA.114.302530. Epub 2014 Mar 20.
22. Goldshmit Y, Homman-Ludiye J, **Bourne JA**
EphA4 is associated with multiple cell types in the marmoset monkey primary visual cortex throughout the lifespan.
Eur J Neurosci. 2014 May;39(9):1419-28. doi: 10.1111/ejn.12514. Epub 2014 Mar 11.
23. Fatima A., **Lynn D.J.** (Corresponding Author), O'Boyle P., Seoighe C, Morris D.
The miRNAome of the postpartum dairy cow liver under negative energy balance.
BMC Genomics. 2014 Apr 12;15:279. doi: 10.1186/1471-2164-15-279.
24. Han SP, **Gambin Y**, Gomez GA, Verma S, Giles N, Michael M, Wu SK, Guo Z, Johnston W, Sierrecki E, Parton RG, Alexandrov K, Yap AS.
Cortactin scaffolds Arp2/3 and WAVE2 at the epithelial zonula adherens.

- J Biol Chem. 2014 Mar 14;289(11):7764-75. doi: 10.1074/jbc.M113.544478. Epub 2014 Jan 27. PMID: 24469447
25. Goldshmit, Y., F. Frisca, A.R. Pinto, A. Pebay, J.K. Tang, A.L. Siegel, J. Kaslin, **P.D. Currie**.
Fgf2 improves functional recovery-decreasing gliosis and increasing radial glia and neural progenitor cells after spinal cord injury.
Brain Behav. 2014 Mar;4(2):187-200. doi: 10.1002/brb3.172. Epub 2014 Jan 13.
26. Masselink, W., J.C. Wong, B. Liu, J. Fu, **P.D. Currie**.
Low-cost silicone imaging casts for zebrafish embryos and larvae.
Zebrafish. 2014 Feb;11(1):26-31. doi: 10.1089/zeb.2013.0897. Epub 2013 Nov 15.
27. Godwin, J.W., **N. Rosenthal**.
Scar-free wound healing and regeneration in amphibians: immunological influences on regenerative success.
Differentiation. 2014 Jan-Feb;87(1-2):66-75. doi: 10.1016/j.diff.2014.02.002. Epub 2014 Feb 22.
28. Lawless N., Reinhardt T.A., Bryan K., Baker M., Pesch B., Zimmerman D., Zuelke K., Sonstegard T., O'Farrelly C., Lippolis J.D., **Lynn D.J** (Corresponding Author).
MicroRNA regulation of bovine monocyte inflammatory and metabolic networks in an in vivo infection model.
G3 (Bethesda). 2014 Jan 27;4(6):957-71. doi: 10.1534/g3.113.009936.
29. Weninger W., **Biro M.**, Jain R.
Leukocyte migration in the interstitial space of non-lymphoid organs
Nature Reviews Immunology. 2014;14(4): 232-246. doi:10.1038/nri3641. Epub 07 March 2014
30. **Heisler MG**, Ohno C.
Live-imaging of the Arabidopsis inflorescence meristem
Methods Mol. Biol. 2014;1110:431-440. doi:10.1007/978-1-4614-9408-9_25
31. Carnevali, L., G. Graiani, S. Rossi, M. Al Banchaabouchi, E. Macchi, F. Quaini, **N. Rosenthal**, A. Sgoifo.
Signs of cardiac autonomic imbalance and proarrhythmic remodeling in FTO deficient mice.
PLoS One. 2014; 9(4): e95499. doi: 10.1371/journal.pone.0095499. Epub 2014 Apr 17.
32. Godwin, J., D. Kuraitis, **N. Rosenthal**.
Extracellular matrix considerations for scar-free repair and regeneration: insights from regenerative diversity among vertebrates.
Int J Biochem Cell Biol. 2014;56:47-55. doi:10.1016/j.biocel.2014.10.011.