

ARMI Research Publications 2014

1. **Berger, J., H. Tarakci, S. Berger,** M. Li, T.E. Hall, A. Arner,**P.D. Currie**, *Loss of Tropomodulin4 in the zebrafish mutant trage causes cytoplasmic rod formation and muscle weakness reminiscent of nemaline myopathy*. Dis Model Mech, 2014. **7**(12): p. 1407-1415.^Category: Cell Biology **IF: 5.537** Ranking:44/185
2. Bilbao, D., L. Luciani, B. Johannesson, A. Piszczek,**N. Rosenthal**, *Insulin-like growth factor-1 stimulates regulatory T cells and suppresses autoimmune disease*. EMBO Mol Med, 2014. **6**(11): p. 1423-1435.^Category:Medicine, Research & Experimental **IF: 8.245** Ranking 8/124
3. Bladen, C.L., R. Thompson, J.M. Jackson, C. Garland, C. Wegel, A. Ambrosini, P. Pisano, M.C. Walter, O. Schreiber, A. Lusakowska, M. Jedrzejowska, A. Kostera-Pruszczyk, L. van der Pol, R.I. Wadman, O. Gredal, A. Karaduman, H. Topaloglu, O. Yilmaz, V. Matyushenko, V.M. Rasic, A. Kosac, V. Karcagi, M. Garami, A. Herczegfalvi, S. Monges, A. Moresco, L. Chertkoff, T. Chamova, V. Guergueltcheva, N. Butoianu, D. Craiu, L. Korngut, C. Campbell, J. Haberlova, J. Strenkova, M. Alejandro, A. Jimenez, G.G. Ortiz, G.V. Enriquez, M. Rodrigues, R. Roxburgh, H. Dawkins, L. Youngs, J. Lahdetie, N. Angelkova, P. Saugier-veber, J.M. Cuisset, C. Bloetzer, P.Y. Jeannet, A. Klein, A. Nascimento, E. Tizzano, **D. Salgado**, E. Mercuri, T. Sejersen, J. Kirschner, K. Rafferty, V. Straub, K. Bushby, J. Verschuuren, C. Beroud,H. Lochmuller, *Mapping the differences in care for 5,000 spinal muscular atrophy patients, a survey of 24 national registries in North America, Australasia and Europe*. J Neurol, 2014. **261**(1): p. 152-163.^Category: Clinical Neurology **IF:3.841** Ranking:37/194
4. Cao, B., O.E. Hutt, Z. Zhang, S. Li, S.Y. Heazlewood, B. Williams, J.A. Smith, **D.N. Haylock**, G.P. Savage,**S.K. Nilsson**, *Design, synthesis and binding properties of a fluorescent alpha(9)beta(1)/alpha(4)beta(1) integrin antagonist and its application as an in vivo probe for bone marrow haemopoietic stem cells*. Org Biomol Chem, 2014. **12**(6): p. 965-978.^Category: Chemistry, Organic **Impact Factor: 3.487** Ranking : 13/58
5. 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): p. e95499. 1-10.^Category: Multidisciplinary Sciences **Impact Factor: 3.534** Ranking 8/55
6. Chen, Q., Y. Su, J. Wesslowski, A.I. Hagemann, **M. Ramialison**, J. Wittbrodt, S. Scholpp,G. Davidson, *Tyrosine phosphorylation of LRP6 by Src and Fer inhibits Wnt/beta-catenin signalling*. EMBO Rep, 2014. **15**(12): p. 1254-1267.^Category: Biochemistry & Molecular Biology **IF: 7.858** Ranking 26/291
7. Chung, J.Y., W. Figgitt, K. Fairfax, **C. Bernard**, J. Chan, B.H. Toh, F. Mackay,F. Alderuccio, *Gene therapy delivery of myelin oligodendrocyte glycoprotein (MOG) via hematopoietic stem cell transfer induces MOG-specific B cell deletion*. J Immunol, 2014. **192**(6): p. 2593-2601.^Category: Immunology **Impact Factor: 5.362** Ranking: 24/144
8. David, L.,**J.M. Polo**, *Phases of reprogramming*. Stem Cell Res, 2014. **12**(3): p. 754-761.^Category: Biotechnology & Applied Microbiology **Impact Factor: 3.912** Ranking: 31/165
9. Figeac, N., **O. Serralbo, C. Marcelle**,P.S. Zammit, *ErbB3 binding protein-1 (Ebp1) controls proliferation and myogenic differentiation of muscle stem cells*. Dev Biol, 2014. **386**(1): p. 135-151.^Category: Developmental Biology **Impact Factor: 3.637** Ranking : 9/41
10. **Firas, J., X. Liu, C.M. Nefzger,J.M. Polo**, *GM-CSF and MEF-conditioned media support feeder-free reprogramming of mouse granulocytes to iPS cells*. Differentiation, 2014.^Category: Developmental Biology **IF:2.836** Ranking: 17/41
11. **Firas, J., X. Liu,J.M. Polo**, *Epigenetic memory in somatic cell nuclear transfer and induced pluripotency: Evidence and implications*. Differentiation, 2014. **88**(1): p. 29-32.^Category:Developmental Biology **IF:2.836** Ranking 17/41 **[ANT,ARMI]**

12. **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. **114**(9): p. 1422-34.^Category: Cardiac and Cardiovascular Systems **Impact Factor : 11.089** Ranking 4/125
13. **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*. *Genomics Data*, 2014. **2**: p. 345-350.^Category???
14. **Godwin, J.**, *The promise of perfect adult tissue repair and regeneration in mammals: Learning from regenerative amphibians and fish*. *Bioessays*, 2014. **36**(9): p. 861-871.^Category: Biochemistry & Molecular Biology **IF:4.927** Ranking 57/291
15. **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**: p. 47-55.^Category: Biochemistry & Molecular Biology **IF: 4.240** Ranking: 75/291
16. **Godwin, J.W., N. Rosenthal**, *Scar-free wound healing and regeneration in amphibians: immunological influences on regenerative success*. *Differentiation*, 2014. **87**(1-2): p. 66-75.^Category: Developmental Biology **IF:2.836** Ranking: 17/41
17. **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. **4**(2): p. 187-200.^Category:
18. **Goldshmit, Y., J. Homman-Ludiye, J.A. Bourne**, *EphA4 is associated with multiple cell types in the marmoset primary visual cortex throughout the lifespan*. *Eur J Neurosci*, 2014. **39**(9): p. 1419-1428.^Category: Neurosciences **Impact Factor:3.669** Ranking: 85/251
19. **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. **5**(18): p. 8602-8613.^Category: Cell Biology **IF: 6.627** Ranking: 35/185
20. **Herszfeld, D., N.L. Payne, A. Sylvain, G. Sun, C.C. Bernard, J. Clark, H. Sathananthan**, *Fine Structure of Neurally Differentiated iPS Cells Generated from a Multiple Sclerosis (MS) Patient: A Case Study*. *Microsc Microanal*, 2014. **20**(6): p. 1869-1875.^Category: Microscopy **Impact Factor: 2.161** Ranking: 3/11 **[ARMI, MICRO, ANT]**
21. **Hobbs, R.M., J.M. Polo**, *Reprogramming can be a transforming experience*. *Cell Stem Cell*, 2014. **14**(3): p. 269-271.^Category: Cell Biology **Impact Factor: 22.151** Ranking : 5/185 **[ARMI, ANT]**
22. 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. **7**(8): p. 977-985.^Category: Cell Biology **IF: 5.537** Ranking: 44/185
23. **Keightley, M.C., C.H. Wang, V. Pazhakh, G.J. Lieschke**, *Delineating the roles of neutrophils and macrophages in zebrafish regeneration models*. *Int J Biochem Cell Biol*, 2014. **56**: p. 92-106.^Impact Factor: 4.240 Category:
24. **Lee, E.J., P. Godara, D. Haylock**, *Biomanufacture of human platelets for transfusion: Rationale and approaches*. *Exp Hematol*, 2014. **42**(5): p. 332-346.^Category: Medicine, Research & Experimental **Impact Factor: 2.806** Ranking : 47/122

25. **Makela, J.A.**, J. Toppari, A. Rivero-Muller, S. Ventela, *Reconstruction of mouse testicular cellular microenvironments in long-term seminiferous tubule culture*. PLoS One, 2014. **9**(3): p. e90088.1-14.^Category:Multidisciplinary Sciences **Impact Factor: 3.534** Ranking: 8/55
26. Markmiller, S., N. Cloonan, R.M. Lardelli, K. Doggett, **M.C. Keightley**, Y. Boglev, A.J. Trotter, A.Y. Ng, S.J. Wilkins, H. Verkade, E.A. Ober, H.A. Field, S.M. Grimmond, **G.J. Lieschke**, D.Y. Stainier, J.K. Heath, *Minor class splicing shapes the zebrafish transcriptome during development*. Proc Natl Acad Sci U S A, 2014. **111**(8): p. 3062-3067.^Category: Multidisciplinary Sciences **Impact Factor: 9.809** Ranking: 4/55
27. **Masselink, W.**, J.C. Wong, B. Liu, J. Fu, **P.D. Currie**, *Low-cost silicone imaging casts for zebrafish embryos and larvae*. Zebrafish, 2014. **11**(1): p. 26-31.^Category: Developmental Biology **Impact Factor: 1.772** Ranking :35/152
28. Medioni, C., **M. Ramialison**, A. Ephrussi, F. Besse, *Imp promotes axonal remodeling by regulating profilin mRNA during brain development*. Curr Biol, 2014. **24**(7): p. 793-800.^Category: Cell Biology **Impact Factor: 9.916** Ranking 19/185
29. Merson, T.D., **J.A. Bourne**, *Endogenous neurogenesis following ischaemic brain injury: insights for therapeutic strategies*. Int J Biochem Cell Biol, 2014. **56**: p. 4-19.^Category: Biochemistry & Molecular Biology **IF: 4.240** Ranking: 75/291
30. **Nefzger, C.M.**, **S. Alaei**, **A.S. Knaupp**, **M.L. Holmes**, **J.M. Polo**, *Cell Surface Marker Mediated Purification of iPS Cell Intermediates from a Reprogrammable Mouse Model*. J Vis Exp, 2014(91).^Category:
31. **Nguyen, P.D.**, G.E. Hollway, **C. Sonntag**, **L.B. Miles**, **T.E. Hall**, **S. Berger**, K.J. Fernandez, **D.B. Gurevich**, N.J. Cole, S. Alaei, **M. Ramialison**, R.L. Sutherland, **J.M. Polo**, **G.J. Lieschke**, **P.D. Currie**, *Haematopoietic stem cell induction by somite-derived endothelial cells controlled by meox1*. Nature, 2014. **E pub**: p. 1-18.^Category: Multidisciplinary Sciences **Impact Factor: 42.351** Ranking: 1/55
32. **Pinto, A.R.**, **J.W. Godwin**, **N.A. Rosenthal**, *Macrophages in cardiac homeostasis, injury responses and progenitor cell mobilisation*. Stem Cell Res, 2014. **13**(3 Pt B): p. 705-714.^Category: Biotechnology & Applied Microbiology **IF 3.912** Ranking: 31/165
33. Robinson, A.M., S. Sakkal, **A. Park**, V. Jovanovska, **N.L. Payne**, S.E. Carbone, S. Miller, **J.C. Bornstein**, **C. Bernard**, **R. Boyd**, K. Nurgali, *Mesenchymal stem cells and conditioned medium avert enteric neuropathy and colon dysfunction in guinea-pig TNBS-induced colitis*. Am J Physiol Gastrointest Liver Physiol, 2014: p. ajpgi 00174 2014.^Category: Gastroenterology & Hepatology **Impact Factor: 3.737** Ranking: 17/75
34. **Rosenthal, N.**, M.D. Grounds, *EDITORIAL: Regenerative Medicine: The Challenge of Translation*. The International Journal of Biochemistry & Cell Biology, 2014. **56**: p. 2-3.^Category: Biochemistry & Molecular Biology **IF: 4.240** Ranking 75/291
35. **Rosenthal, N.**, M. Zernicka-Goetz, *EDITORIAL: A tribute to Sir John Gurdon*. Differentiation, 2014. **88**(1): p. 1-2.^Category: Developmental Biology **IF: 2.836** Ranking 17/41
36. Ruparelia, A.A., J.E. Simkin, **D. Salgado**, D.F. Newgreen, G.G. Martins, R.J. Bryson-Richardson, *The quail anatomy portal*. Database (Oxford), 2014. **2014**(0): p. bau028.1-6.^Category:Mathematical & Computational Biology **Impact Factor : 4.457** Ranking: 5/52
37. Samson, A.L., **A.S. Knaupp**, I. Kass, O. Kleifeld, E.M. Marijanovic, V.A. Hughes, C.J. Lupton, A.M. Buckle, S.P. Bottomley, R.L. Medcalf, *Oxidation of an exposed methionine instigates the aggregation of glyceraldehyde-3-phosphate dehydrogenase*. J Biol Chem, 2014. **289**(39): p. 26922-26936.^Category: Biochemistry & Molecular Biology **IF:4.600** Ranking 65/291 [**ARMI, BCH**]

38. Serralbo, O., **C. Marcelle**, *Migrating cells mediate long-range WNT signaling*. *Development*, 2014. **141**(10): p. 2057-2063.^Category:Developmental Biology **Impact Factor: 6.273** Ranking: 4/41
39. **Sieiro-Mosti, D., M. De La Celle, M. Pele, C. Marcelle**, *A dynamic analysis of muscle fusion in the chick embryo*. *Development*, 2014. **141**(18): p. 3605-3611.^Category: Developmental Biology **Impact Factor: 6.273** Ranking: 4/41
40. 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. **13**(1): p. 172-179.^Category: Biotechnology & Applied Microbiology **Impact Factor: 3.912** 31/165 [ARMI,ANT]
41. **Soh, C.L., A. Giudice, R.A. Jenny**, D.A. Elliott, **T. Hatzistavrou, S.J. Micallef**, K. Kianizad, **N. Seach**, J.C. Zuniga-Pflucker, **A.P. Chidgey**, A. Trounson, **S.K. Nilsson, D.N. Haylock, R.L. Boyd, A.G. Elefanty, E.G. Stanley**, *FOXN1 (GFP/w) Reporter hESCs Enable Identification of Integrin-beta4, HLA-DR, and EpCAM as Markers of Human PSC-Derived FOXN1(+) Thymic Epithelial Progenitors*. *Stem Cell Reports*, 2014. **2**(6): p. 925-37.^[ANT,ARMI]
42. Tafreshi, A.P., **N. Payne, G. Sun, A. Sylvain**, K. Schulze, **C. Bernard**, *Inactive GSK3beta is disturbed in the spinal cord during experimental autoimmune encephalomyelitis, but rescued by stem cell therapy*. *Neuroscience*, 2014. **277**: p. 498-505.^Category: Neurosciences **IF: 3.327** Ranking: 104/252
43. Tian, W., Y. Wang, Y. Xu, X. Guo, B. Wang, L. Sun, L. Liu, F. Cui, Q. Zhuang, X. Bao, G. Schley, **T.L. Chung, A.L. Laslett**, C. Willam, B. Qin, P.H. Maxwell, M.A. Esteban, *The hypoxia-inducible factor renders cancer cells more sensitive to vitamin C-induced toxicity*. *J Biol Chem*, 2014. **289**(6): p. 3339-3351.^Category: Biochemistry & Molecular Biology **Impact Factor : 4.600** Ranking: 65/291
44. 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. **141**(21): p. 4168-4181.^Category: Developmental Biology **IF:6.273** Ranking: 4/41
45. Wang, C.K., C.W. Gruber, M. Cemazar, **C. Siatskas**, P. Tagore, **N. Payne, G. Sun, S. Wang, C.C. Bernard**, D.J. Craik, *Molecular grafting onto a stable framework yields novel cyclic peptides for the treatment of multiple sclerosis*. *ACS Chem Biol*, 2014. **9**(1): p. 156-163.^Category: Biochemistry & Molecular Biology **Impact Factor: 5.356** Rank:51/291
46. **Wise, A.F., T.M. Williams, M.B. Kiewiet, N.L. Payne, C. Siatskas, C.S. Samuel, S.D. Ricardo**, *Human mesenchymal stem cells alter macrophage phenotype and promote regeneration via homing to the kidney following ischemia-reperfusion injury*. *Am J Physiol Renal Physiol*, 2014. **306**(10): p. F1222-1235.^Category: Urology & Nephrology **Impact Factor: 3.300** Ranking: 15/75 [ARMI,ANT,PHARM]
47. **Zhou, K.**, G. Thouas, **C. Bernard**, J.S. Forsythe, *3D presentation of a neurotrophic factor for the regulation of neural progenitor cells*. *Nanomedicine (Lond)*, 2014. **9**(8): p. 1239-1251.^Category: Nanoscience & Nanotechnology **Impact Factor: 5.824** Ranking: 17/73