 

**Publications**

Below is a list of all EASTBIO student/alumni/ae publications, by year of publication:

**2019**

Boulton, R.A., Cook, N., Greenway, E.V., Glaser, G.L., Green, J., Shuker, D.M. (2019) 'Local mate competition modifies the costs of mating in a mostly monandrous parasitoid wasp.' Behavioral Ecology 30(2): 417–425, https://doi.org/10.1093/beheco/ary181.

Clegg, J.M., Parkin, H.M., Mason, J.O., and Pratt, T., (2019) 'Heparan Sulfate Sulfation by Hs2st Restricts Astroglial Precursor Somal Translocation in Developing Mouse Forebrain by a Non-Cell-Autonomous Mechanism.' Journal of Neuroscience 39(8) 1386-1404; DOI: https://doi.org/10.1523/JNEUROSCI.1747-17.2018.

De Simone, A., Georgiou, C., Ioannidis, H., Gupta, A.A., Juárez-Jiménez, J., Doughty-Shenton, D., Blackburn, E.A., Wear, M.A., Richards, J.P., Barlow, P.N., Carragher, N., Walkinshaw, M.D., Hulmea, A.N. and Julien Michel, J. (2019) 'A computationally designed binding mode flip leads to a novel class of potent tri-vector cyclophilin inhibitors.' Chem. Sci. 10: 542–547.

Dicks K.L., Pemberton J.M., Ballingall K.T. (2019) 'Characterisation of major histocompatibility complex class IIa haplotypes in an island sheep population.' Immunogenetics. 22:1-1. https://doi.org/10.1007/s00251-019-01109-w.

Hussain, S., Turnbull, M. L., Wise, H. M., Jagger, B. W., Beard, P. M., Kovacikova, K., Taubenberger, J. K., Vervelde, L., Engelhardt, O. G. and Digard, P. (2019) 'Mutation of influenza A virus PA-X decreases pathogenicity in chicken embryos and can increase the yield of reassortant candidate vaccine viruses.' Journal of Virology 93(2), e01551-18. (doi:10.1128/JVI.01551-18) (PMID:30381488).

Innes, B.R. & Otto, T.U. (2019). 'A comparative analysis of response times shows that multisensory benefits and interactions are not equivalent.' Scientific Reports, 9(1), 2921. doi: 10.1038/s41598-019-39924-6.

Walker, D. J., Zimmer, C., Larriva, M., Healy, S. D., Spencer, K. A. (2019) 'Early-life adversity programs long-term cytokine and microglia expression within the HPA axis in female Japanese quail.' Journal of Experimental Biology: jeb.187039 doi: 10.1242/jeb.187039

**2018**

Allan, K.J., Halliday, J.E.B., Moseley, M., Carter, R.W., Ahmed, A., Goris, M.G.A., Hartskeerl, R.A., Keyyu, J., Kibona, T., Maro, V.P. et al (2018). 'Assessment of animal hosts of pathogenic Leptospira in northern Tanzania.' PLoS Negl Trop Dis. 12(6), e0006444.

Alphey, M. S., Fisher, G., Ying Ge, Gould, E. R., Machado, T. F. G., Liu, H., Florence, G. J., Naismith, J. H., and da Silva, R. G. (2018). 'Catalytic and Anticatalytic Snapshots of a Short-Form ATP Phosphoribosyltransferase.' ACS Catal., 2018, 8 (6), pp 5601–5610.

DOI: 10.1021/acscatal.8b00867.

Ashton, A., Stoney, P.N., Ransom, J. & Peter McCaffery, P. (2018) 'Rhythmic Diurnal Synthesis and Signaling of Retinoic Acid in the Rat Pineal Gland and Its Action to Rapidly Downregulate ERK

Phosphorylation,' Mol Neurobiol https://doi.org/10.1007/s12035-018-0964-5.

Brodaczewska, N., Košťálová, Z. Uhrín, D. (2018) '(3, 2)D 1H, 13C BIRDr,X-HSQC-TOCSY for NMR structure elucidation of mixtures. Application to complex carbohydrates.' J Biomol. NMR 70:115–122.

Curley, M., Milne, L., Smith, S., Atanassova, N., Rebourcet, D., Darbey, A., Hadoke, P. W. F., Wells, S. & Smith, L. B. Leukemia Inhibitory Factor-Receptor is Dispensable for Prenatal Testis Development but is Required in Sertoli cells for Normal Spermatogenesis in Mice. Scientific Reports, 8, 11532. https://www.nature.com/articles/s41598-018-30011-w

Curley, M., Milne, L., Smith, S., Jørgensen, A., Frederiksen, H., Hadoke, P., Potter, P. & Smith, L. B. A young testicular microenvironment protects Leydig cells against age-related dysfunction in a mouse model of premature aging. The FASEB Journal, fj.201800612R. https://www.ncbi.nlm.nih.gov/pubmed/30080443

Feng, J., Turnbull, M.L., et al. (2018) 'Interferon-stimulated gene (ISG)-expression screening reveals the specific antibunyaviral activity of ISG20.' Journal of Virology 92(13), e02140-17. (doi:10.1128/JVI.02140-17) (PMID: 29695422) (PMCID: PMC6002717).

Fisher, G., Thomson, C. M., Stroek, R., Czekster, C. M., Hirschi, J. S., and da Silva, R. G. (2018) 'Allosteric Activation Shifts the Rate-Limiting Step in a Short-Form ATP Phosphoribosyltransferase.' Biochemistry, 2018, 57 (29), pp 4357–4367. DOI: 10.1021/acs.biochem.8b00559.

Gill, A.C., Castle, A.R. (2018) 'The cellular and pathologic prion protein.' Handbook of Clinicla Neurology 153: 21-44. https://www.sciencedirect.com/science/article/pii/B9780444639455000027

Herron, L. R., Turnbull, M.L., et al. (2018) 'A chicken bioreactor for efficient production of functional cytokines.' BMC Biotechnology 18(82) (doi: 10.1186/s12896-018-0495-1) (PMID:30594166).

Koerner, M.V., FitzPatrick, L., Selfridge, J., Guy, J., De Sousa, D., Tillotson, R., Kerr, A., Sun, Z., Lazar, M.A., Lyst, M.J., and Bird, A. (2018)'Toxicity of overexpressed MeCP2 is independent of HDAC3 activity.' (2018) Genes & Development. http://genesdev.cshlp.org/content/32/23-24/1514.

Mahony,C, McMenemy, S, Rafipay, AJ, Beedie, SL, Fraga, LR, Gütschow, M, Figg, WD, Erskine, L, Vargesson, N. (2018). 'CPS49-induced neurotoxicity does not cause limb patterning anomalies in developing chicken embryos.' Journal of Anatomy 232(4):568-574 DOI: 10.1111/joa.12712.

McLean, F.H., Grant, C., Morris, A.C., Horgan, G.W., Polanski, A.J., Allan, K., Campbell, F.M., Langston, R.F. and Williams, L.M. (2018). 'Rapid and reversible impairment of episodic memory by a high-fat diet in mice.' Scientific reports, 8(1), p.11976.

Mok, G. F., Lozano-Velasco, E., Maniou, E., Viaut, C., Moxon, S., Wheeler, G., & Muensterberg, A. (2018). 'miR-133-mediated regulation of the Hedgehog pathway orchestrates embryo myogenesis.' Development, 145 (12), UNSP dev159657. doi:10.1242/dev.159657.

Moseley, M.H., Allan, K.J., Hunter, P. (2018). 'Leptospirosis in Infectious Diseases of Livestock.' Part 3. eds. Coetzer, J.A.W. and Tustin, R.C., https://anipedia.org/resources/leptospirosis/1205.

Moseley, M., Rahelinirina, S., Rajerison, M., Garin, B., Piertney, S., Telfer, S. (2018). 'Mixed Leptospira Infections in a Diverse Reservoir Host Community, Madagascar, 2013–2015.' Emerging Infectious Diseases 24(6): 1138-1140.

Ramirez, M., Amorim, M.G., Galedha, C., Milic, I., Welsh, J.A.,… Coakley, G., et al. (2018). 'Technical Challenges of Working with Extracellular Vesicles.' Nanoscale 10: 881-906.

Rebourcet, D., Darbey, A., Curley, M., O'Shaughnessy, P. & Smith, L. B. Testicular Cell Selective Ablation Using Diphtheria Toxin Receptor Transgenic Mice. Methods Mol Biol, 1748, 203-228. https://link.springer.com/protocol/10.1007%2F978-1-4939-7698-0\_15.

Reid AMA, Dunn IC (2018) 'Gastrointestinal distribution of chicken gastrin-cholecystokinin family transcript expression and response to short-term nutritive state.' Gen Comp Endocrinol. 255:64-70. doi: 10.1016/j.ygcen.2017.10.009.

Runcie AC., Zengerle M., Chan K-H., Testa A., van Beurden L., Baud MGJ., Epemolu O., Ellis LCJ., Read KD., Coulthard V., Brien A., Ciulli A. (2018). Optimization of a "Bump-and-Hole" Approach to Allele-Selective BET Bromodomain Inhibition. Chemical Science 9 2452-3468. DOI: 10.1039/C7SC02536J.

Sehgal A, Donaldson DS, Pridans C, Sauter KA, Hume DA, Mabbott NA. (2018). 'The role of CSF1R-dependent macrophages in control of the intestinal stem-cell niche.' Nat Commun. 9(1):1272. doi: 10.1038/s41467-018-03638-6.

Sergi, D., Grant, C., Morris, A.C., Bachmair E.M., Koch C., McLean F.H., Muller, A., Hoggard, N., de Roos, B., Porteiro, B., Boekschoten, M.V., McGillicuddy F.C., Kahn, D., Nicol, P., Benzler, J., Mayer, C.D., Campbell, F.M., Drew, J., Roche, H.M., Muller M., Nogueiras, R., Dieguez, C., Tups, A., Williams, L.M. (2018). 'SerpinA3N is a novel marker of hypothalamic inflammation and is regulated by nutrition, age and leptin.' Genes and Nutrients, 13(1): 28.

Sergi, D., Morris, A.C., Kahn, D.E., McLean, F.H., Hay, E.A., Kubitz, P., MacKenzie, A., Martinoli, M.G., Drew, J.E. and Williams, L.M. (2018). 'Palmitic acid triggers inflammatory responses in N42 cultured hypothalamic cells partially via ceramide synthesis but not via TLR4.' Nutritional neuroscience: 1-14.

Sharma, R., Draicchio, F., Bull, H., Herzig, P., Maurer, A., Pillen, K., Thomas, W.T.B. and Flavell, A.J. (2018) 'Genome-wide association of yield traits in a nested association mapping population of barley reveals new gene diversity for future breeding.' J. Exp. Bot.

Tennant S.A., Fischer L., Garden D.L.F., Gerlei K.Z., Martinez-Gonzalez C., McClure C., Wood E.R. & Nolan M.F. (2018). 'Stellate cells in the medial entorhinal cortex are required for spatial learning.' Cell Reports 22(5): 1313-1324.

Testa A., Lucas X., Castro G.V., Chan K.H., Wright J.E., Runcie A.C., Gadd M.S., Harrison W.T.A., Ko E.J., Fletcher D. & Ciulli A. (2018). '3-Fluoro-4-hydroxyprolines: Synthesis, conformational analysis and stereoselective recognition by the VHL E3 ubiquitin ligase for targeted protein degradation.' Journal of the American Chemical Society 140: 9299-9313.

Walker, D.J. & Spencer, K. A. (2018). 'Glucocorticoid programming of neuroimmune function.’ Gen Comp Endocrinol.' 256:8 0-88.

Wilbourn RV, Moatt JP, Froy H, Walling CA, Nussey DH, Boonekamp JJ. (2018) 'The relationship between telomere length and mortality risk in non-model vertebrate systems: a meta-analysis.' Phil. Trans. R. Soc. B 373: 20160447. http://dx.doi.org/10.1098/rstb.2016.0447.

**2017**

Aarts M., Georgilis A., Beniazza M., Beolchi P., Banito A., Carroll T., Kulisic M., Kaemena D.F., Dharmalingam G., Martin N., Reik W., Zuber J., Kaji K., Chandra T., Gil J. (2017) 'Coupling shRNA screens with single-cell RNA-seq identifies a dual role for mTOR in reprogramming-induced senescence.' Genes Dev. 31:2085-2098.

Benek, O., L. Hroch, L. Aitken, R. Dolezal, P. Guest, M. Benkova, O. Soukup, K. Musil, K. Kuca, T. K. Smith, F. Gunn-Moore and K. Musilek (2017). ‘6-benzothiazolyl ureas, thioureas and guanidines are potent inhibitors of ABAD/17beta-HSD10 and potential drugs for Alzheimer's disease treatment: Design, synthesis and in vitro evaluation.’ Med Chem.

Bradford, EL., Christie CR, Campbell EM, Bowman AS (2017). 'A real-time PCR method for quantification of the total and major variant strains of the deformed wing virus.' PLoS ONE 12(12): e0190017. https://doi.org/10.1371/journal.pone.0190017.

Castle A. R., Gill, A. C. (2017). ‘Physiological Functions of the Cellular Prion Protein.’ Frontiers in Molecular Biosciences 4. DOI=10.3389/fmolb.2017.00019.

Colas, I., Darrier, B., Arrieta, M., Mittmann, S., Ramsay, L., Sourdille P., and Waugh, R. (2017) 'Observation of extensive chromosome axis remodelling during the ‘diffuse-phase’ of meiosis in large genome cereals.' Front. Plant Sci. 8:1235. doi: 10.3389/fpls.2017.01235.

Coakley, G., McCaskill, J.L., Borger, J.G., Simbari, F., Robertson, E., Lear, M., Harcus, Y., McSorley, H.J., Maizels, R.M., and Buck, A.H. (2017). 'Extracellular vesicles from a helminth parasite suppress macrophage activation and constitute an effective vaccine for protective immunity.' Cell Reports 19, 1545 – 1557.

Davies, F. C., J. E. Hope, F. McLachlan, F. Nunez, J. Doig, H. Bengani, C. Smith and C. M. Abbott (2017). ‘Biallelic mutations in the gene encoding eEF1A2 cause seizures and sudden death in F0 mice.’ Sci Rep 7: 46019.

Ferenczi, A., Pyott, D.E., Xipnitou, A. and Molnar, A., (2017). 'Efficient targeted DNA editing and replacement in Chlamydomonas reinhardtii using Cpf1 ribonucleoproteins and single-stranded DNA.' Proceedings of the National Academy of Sciences, doi: 10.1073/pnas.1710597114.

http://www.pnas.org/content/early/2017/12/04/1710597114.

Georgiou, C. et. al., (2017) 'Pushing the Limits of Detection of Weak Binding Using Fragment-Based Drug Discovery: Identification of New Cyclophilin Binders.' J Mol Biol (2017) 429, 2556–2570.

Giotti, B., A. Joshi and T. C. Freeman (2017). ‘Meta-analysis reveals conserved cell cycle transcriptional network across multiple human cell types.’ BMC Genomics 18(1): 30.

Glendinning, L., Collie, D., Wright, S., Rutherford, K. & McLachlan, G (2017) 'Comparing microbiotas in the upper aerodigestive and lower respiratory tracts of lambs.' Microbiome. 5, 1, 145.

Glendinning, L., S. Wright, P. Tennant, A. C. Gill, D. Collie and G. McLachlan (2017). ‘Microbiota in Exhaled Breath Condensate and the Lung.’ Appl Environ Microbiol.

Heath, S. E., K. Knox, P. F. Vale and S. Collins (2017). ‘Virus Resistance Is Not Costly in a Marine Alga Evolving under Multiple Environmental Stressors.’ Viruses 9(3).

Hroch, L., P. Guest, O. Benek, O. Soukup, J. Janockova, R. Dolezal, K. Kuca, L. Aitken, T. K. Smith, F. Gunn-Moore, D. Zala, R. R. Ramsay and K. Musilek (2017). ‘Synthesis and evaluation of frentizole-based indolyl thiourea analogues as MAO/ABAD inhibitors for Alzheimer's disease treatment.’ Bioorg Med Chem 25(3): 1143-1152.

Kangur, K., Billino, J., & Hesse, C. 'Keeping Safe: Intra-individual Consistency in Obstacle Avoidance Behaviour Across Grasping and Locomotion Tasks.' i-Perception, 8(1): 1-10.

Lamont, C. M. and F. Sargent (2017). ‘Design and characterisation of synthetic operons for biohydrogen technology.’ Arch Microbiol 199(3): 495-503.

Liu W., Tuck LR, Wright J.M., Cai Y. (2017) 'Using Purified Tyrosine Site-Specific Recombinases In Vitro to Rapidly Construct and Diversify Metabolic Pathways.' Methods Mol Biol. 1642:285-302. doi: 10.1007/978-1-4939-7169-5\_18.

Moatt, J. P., C. Hambly, C., Heap, E., Kramer, A., Moon, F., Speakman, J.R., Walling, C.A, 'Body macronutrient composition is predicted by lipid and not protein content of the diet,' Ecology and Evolution: 1-10. DOI: 10.1002/ece3.3529

Patel, S. H., O'Hara, L., Atanassova, N., Smith, S. E., Curley, M. K., Rebourcet, D., Darbey, A. L., Gannon, A.-L., Sharpe, R. M. & Smith, L. B. Low-dose tamoxifen treatment in juvenile males has long-term adverse effects on the reproductive system: implications for inducible transgenics. Scientific reports, 7, 8991-8991. https://www.ncbi.nlm.nih.gov/pubmed/28827578

Picton, L. D., F. Nascimento, M. J. Broadhead, K. T. Sillar and G. B. Miles (2017). ‘Sodium Pumps Mediate Activity-Dependent Changes in Mammalian Motor Networks.’ J Neurosci 37(4): 906-921.

Picton, L.D., Zhang, H., Sillar, K.T. (2017). 'Sodium pump regulation of locomotor control circuits.' J. Neurophysiol.

Regan, C.E., Pilkington, J.G., Bérénos, C., Pemberton, J.M., Smiseth, P.T. & Wilson, A.J. (2017.) 'Accounting for female space sharing in St. Kilda Soay sheep (Ovis aries) results in little change in heritability estimates.' Journal of Evolutionary Biology 30, 96­111.

Regan, C.E., Pilkington, J.G., Smiseth, P.T. (2017) 'Female Soay sheep do not adjust their maternal care behaviour to the quality of their home range.' Behavioral Ecology 28, 962­973.

Reid AMA, Wilson PW, Caughey SD, Dixon LM, D'Eath RB, Sandilands V, Boswell T, Dunn IC (2017). 'Pancreatic PYY but not PPY expression is responsive to short-term nutritional state and the pancreas constitutes the major site of PYY mRNA expression in chickens.' Gen Comp Endocrinol. 252:226-235. doi: 10.1016/j.ygcen.2017.07.002.

Ruetz T., Pfisterer U., Di Stefano B., Ashmore J., Beniazza M., Tian, T.V., Kaemena D.F., Tosti L., Tan, W., Manning J.R., Chantzoura E., Ottosson D.R., Collombet S., Johnsson A., Cohen E., Yusa K., Linnarsson S., Graf T., Parmar M. and Kaji K. (2017) 'Constitutively active SMAD2/3 are broad-scope potentiators of transcription-factor-mediated cellular reprogramming.' Cell Stem Cell. 21: 1-15.

Scobie, K., Schwitzer, C. & Holderied, M. 'Observations of Avahi meridionalis in Eucalyptus plantations.' Lemur News, 20.

Sehgal A, Kobayashi A, Donaldson DS, Mabbott NA. (2017). ‘c-Rel is dispensable for the differentiation and functional maturation of M cells in the follicle-associated epithelium.’ Immunobiology. 222(2):316-326. doi: 10.1016/j.imbio.2016.09.008.

Smith, S. and R. Grima (2017). ‘Fast simulation of Brownian dynamics in a crowded environment.’ J Chem Phys 146(2): 024105.

Stoney, P.N., Rodrigues, D., Helfer, G., Khatib, T., Ashton, A., Hay, E.A., Starr, R., Kociszewska, D., Morgan, P., McCaffery, P.J. (2017) 'A seasonal switch in histone deacetylase gene expression in the hypothalamus and their capacity to modulate nuclear signaling pathways.' Brain Behav Immun. 61: 340–352.

Tillotson, R., Selfridge, J., Koerner, M.V., Gadalla, K.K.E., Guy, J., De Sousa, D., Hector, R.D., Cobb, S.R., Bird, A. (2017) 'Radically truncated MeCP2 rescues Rett syndrome-like neurological defects.' Nature. 550(7676): 398-401. doi: 10.1038/nature24058.

Voss, J. J., C. A. Ford, S. Petrova, L. Melville, M. Paterson, J. D. Pound, P. Holland, B. Giotti, T. C. Freeman and C. D. Gregory (2017). ‘Modulation of macrophage antitumor potential by apoptotic lymphoma cells.’ Cell Death Differ.

Walker, D. W., Spencer, K. A. (2017). 'Glucocorticoid programming of neuroimmune function.' General and Comparative Endrocrinology. Available at https://doi.org/10.1016/j.ygcen.2017.07.016

**2016**

Ait-Ali, T., I. Diaz, F. Soldevila, E. Cano, Y. Li, A. D. Wilson, B. Giotti, A. L. Archibald, E. Mateu and L. Darwich (2016). ‘Distinct functional enrichment of transcriptional signatures in pigs with high and low IFN-gamma responses after vaccination with a porcine reproductive and respiratory syndrome virus (PRRSV).’ Vet Res 47(1): 104.

Ballingall, K., Goh, S., Pemberton, J.M. and Dicks, K. (2016) 'P4071 Extensive functional class I MHC diversity in sheep.' Journal of Animal Science, 94(supplement4): 114-115.

Brewster, R. C., G. C. Gavins, B. Gunthardt, S. Farr, K. M. Webb, P. Voigt and A. N. Hulme (2016). ‘Chloromethyl-triazole: a new motif for site-selective pseudo-acylation of proteins.’ Chem Commun (Camb) 52(82): 12230-12232.

Christensen, L. L., C. Selman, J. D. Blount, J. G. Pilkington, K. A. Watt, J. M. Pemberton, J. M. Reid and D. H. Nussey (2016). ‘Marker-dependent associations among oxidative stress, growth and survival during early life in a wild mammal.’ Proc Biol Sci 283(1840).

Christensen, L. L., K. True, M. P. Hamilton, M. M. Nielsen, N. D. Damas, C. K. Damgaard, H. Ongen, E. Dermitzakis, J. B. Bramsen, J. S. Pedersen, A. H. Lund, S. Vang, K. Stribolt, M. R. Madsen, S. Laurberg, S. E. McGuire, T. F. Orntoft and C. L. Andersen (2016). ‘SNHG16 is regulated by the Wnt pathway in colorectal cancer and affects genes involved in lipid metabolism.’ Mol Oncol 10(8): 1266-1282.

Cianci, C., S. Smith and R. Grima (2016). ‘Molecular finite-size effects in stochastic models of equilibrium chemical systems.’ J Chem Phys 144(8): 084101.

Coakley, G., A. H. Buck and R. M. Maizels (2016). ‘Host parasite communications-Messages from helminths for the immune system: Parasite communication and cell-cell interactions.’ Mol Biochem Parasitol 208(1): 33-40.

Cui, L., D. A. Houston, C. Farquharson and V. E. MacRae (2016). ‘Characterisation of matrix vesicles in skeletal and soft tissue mineralisation.’ Bone 87: 147-158.

Custodio, R., C. J. McLean, A. E. Scott, J. Lowther, A. Kennedy, D. J. Clarke, D. J. Campopiano, M. Sarkar-Tyson and A. R. Brown (2016). ‘Characterization of secreted sphingosine-1-phosphate lyases required for virulence and intracellular survival of Burkholderia pseudomallei.’ Mol Microbiol 102(6): 1004-1019.

Donaldson, D. S., A. Sehgal, D. Rios, I. R. Williams and N. A. Mabbott (2016). ‘Increased Abundance of M Cells in the Gut Epithelium Dramatically Enhances Oral Prion Disease Susceptibility.’ PLoS Pathog 12(12): e1006075. doi: 10.1371/journal.ppat.1006075.

Glendinning, L., S. Wright, J. Pollock, P. Tennant, D. Collie and G. McLachlan (2016). ‘Variability of the Sheep Lung Microbiota.’ Appl Environ Microbiol 82(11): 3225-3238.

Gorgoni, B., L. Ciandrini, M. R. McFarland, M. C. Romano and I. Stansfield (2016). ‘Identification of the mRNA targets of tRNA-specific regulation using genome-wide simulation of translation.’ Nucleic Acids Res 44(19): 9231-9244.

Heath, S. E. and S. Collins (2016). ‘Mode of resistance to viral lysis affects host growth across multiple environments in the marine picoeukaryote Ostreococcus tauri.’ Environ Microbiol 18(12): 4628-4639.

Houston, D. A., K. Myers, V. E. MacRae, K. A. Staines and C. Farquharson (2016). ‘The Expression of PHOSPHO1, nSMase2 and TNAP is Coordinately Regulated by Continuous PTH Exposure in Mineralising Osteoblast Cultures.’ Calcif Tissue Int 99(5): 510-524.

Houston, D. A., K. A. Staines, V. E. MacRae and C. Farquharson (2016). ‘Culture of Murine Embryonic Metatarsals: A Physiological Model of Endochondral Ossification.’ J Vis Exp(118).

Jager, F., M. Zoltner, H. Kneuper, W. N. Hunter and T. Palmer (2016). ‘Membrane interactions and self-association of components of the Ess/Type VII secretion system of Staphylococcus aureus.’ FEBS Lett 590(3): 349-357.

McGorum B.C., Pirie R.S., Glendinning L., McLachlan G., Metcalf J.S., Banack S.A., Cox P.A., Codd G.A. (2014) 'Grazing livestock are exposed to terrestrial cyanobacteria.' Veterinary Research. 46: 16 doi:10.1186/s13567-015-0143-x (IF 3.38).

Mittmann, S., Arrieta, M., Ramsay, L., Waugh R., and Colas, I. (2016) 'Preparation of barley pollen mother cells for confocal and super resolution microscopy.' In Barley Methods and Protocols, pp. 167-179. Ed. Wendy Harwood. Springer Verlag.

Moatt, J. P., S. Nakagawa, M. Lagisz and C. A. Walling (2016). ‘The effect of dietary restriction on reproduction: a meta-analytic perspective.’ BMC Evol Biol 16(1): 199.

Pyott, D.E., Sheehan, E. and Molnar, A. (2016) 'Engineering of CRISPR/Cas9-mediated potyvirus resistance in transgene-free Arabidopsis plants.' Molecular Plant Pathology. doi: 10.1111/mpp.12417

Runcie A.C., Chan K.H., Zengerle M. & Ciulli A. (2016). 'Chemical genetics approaches for selective intervention in epigenetics. Current Opinion in Chemical Biology' 33: 186-194.

Sillar, K.T., Picton, L.P. & Heitler, W.J. (2016) The Neuroethology of Predation and Escape. 392 pp. Wiley-Blackwell.

Simbari, F., J. McCaskill, G. Coakley, M. Millar, R. M. Maizels, G. Fabrias, J. Casas and A. H. Buck (2016). ‘Plasmalogen enrichment in exosomes secreted by a nematode parasite versus those derived from its mouse host: implications for exosome stability and biology.’ J Extracell Vesicles 5: 30741.

Smith, S., C. Cianci and R. Grima (2016). ‘Analytical approximations for spatial stochastic gene expression in single cells and tissues.’ J R Soc Interface 13(118).

Smith, S. and R. Grima (2016). ‘Breakdown of the reaction-diffusion master equation with nonelementary rates.’ Phys Rev E 93(5): 052135.

Souilhol, C., J. G. Lendinez, S. Rybtsov, F. Murphy, H. Wilson, D. Hills, A. Batsivari, A. Binagui-Casas, A. C. McGarvey, H. R. MacDonald, R. Kageyama, C. Siebel, S. Zhao and A. Medvinsky (2016). ‘Developing HSCs become Notch independent by the end of maturation in the AGM region.’ Blood 128(12): 1567-1577.

Speakman, J. R., J. D. Blount, A. M. Bronikowski, R. Buffenstein, C. Isaksson, T. B. Kirkwood, P. Monaghan, S. E. Ozanne, M. Beaulieu, M. Briga, S. K. Carr, L. L. Christensen, H. M. Cocheme, D. L. Cram, B. Dantzer, J. M. Harper, D. Jurk, A. King, J. C. Noguera, K. Salin, E. Sild, M. J. Simons, S. Smith, A. Stier, M. Tobler, E. Vitikainen, M. Peaker and C. Selman (2015). ‘Oxidative stress and life histories: unresolved issues and current needs.’ Ecol Evol 5(24): 5745-5757.

Stoney P.N., Fragoso Y.D., Saeed R.B., Ashton A., Goodman T., Simons C., Gomaa M.S., Sementilli A., Sementilli L., Ross A.W., Morgan P.J., McCaffery P.J. (2016) 'Expression of the retinoic acid catabolic enzyme CYP26B1 in the human brain to maintain signaling homeostasis.' Brain Struct Funct. 221(6): 3315-26.

Tsang, H. G., N. A. Rashdan, C. B. Whitelaw, B. M. Corcoran, K. M. Summers and V. E. MacRae (2016). ‘Large animal models of cardiovascular disease.’ Cell Biochem Funct 34(3): 113-132.

Tuck, L. R., Altenbach, K., Ang, T. F., Crawshaw, A. D., Campopiano, D. J., Clarke, D. J. and Marles-Wright, J. (2016). ‘Insight into Coenzyme A cofactor binding and the mechanism of acyl-transfer in an acylating aldehyde dehydrogenase from Clostridium phytofermentans.’ Sci Rep 6: 22108.

Turnbull, M. L. et al. (2016) 'The role of the B-Allele of the influenza A virus segment 8 in setting mammalian host range and pathogenicity.' Journal of Virology 90(20): 9263-9284. (doi:10.1128/JVI.01205-16) (PMID: 27489273) (PMCID: PMC5044859).

Watson, R. L., T. N. McNeilly, K. A. Watt, J. M. Pemberton, J. G. Pilkington, M. Waterfall, P. R. Hopper, D. Cooney, R. Zamoyska and D. H. Nussey (2016). ‘Cellular and humoral immunity in a wild mammal: Variation with age & sex and association with overwinter survival.’ Ecol Evol 6(24): 8695-8705.

**2015**

Buck, A. H., G. Coakley, F. Simbari, H. J. McSorley, J. F. Quintana, T. Le Bihan, S. Kumar, C. Abreu-Goodger, M. Lear, Y. Harcus, A. Ceroni, S. A. Babayan, M. Blaxter, A. Ivens and R. M. Maizels (2015). ‘Erratum: Exosomes secreted by nematode parasites transfer small RNAs to mammalian cells and modulate innate immunity.’ Nat Commun 6: 8772.

Christensen, L. L., C. Selman, J. D. Blount, J. G. Pilkington, K. A. Watt, J. M. Pemberton, J. M. Reid and D. H. Nussey (2015). ‘Plasma markers of oxidative stress are uncorrelated in a wild mammal.’ Ecol Evol 5(21): 5096-5108.

Coakley, G., R. M. Maizels and A. H. Buck (2015). ‘Exosomes and Other Extracellular Vesicles: The New Communicators in Parasite Infections.’ Trends Parasitol 31(10): 477-489.

Collie D, Glendinning L, Govan J, Wright S, Thornton E, Tennant P et al. (2015) 'Lung microbiota changes associated with chronic Pseudomonas aeruginosa lung infection and the impact of intravenous colistimethate sodium.' PloS One. 2015; 10: e0142097.

Glintborg, D., L. L. Christensen, T. Kvorning, R. Larsen, K. Hojlund, K. Brixen, D. M. Hougaard, A. Handberg and M. Andersen (2015). ‘Differential effects of strength training and testosterone treatment on soluble CD36 in aging men: Possible relation to changes in body composition.’ Scand J Clin Lab Invest 75(8): 659-666.

Huesa, C., D. Houston, T. Kiffer-Moreira, M. M. Yadav, J. L. Millan and C. Farquharson (2015). ‘The Functional co-operativity of Tissue-Nonspecific Alkaline Phosphatase (TNAP) and PHOSPHO1 during initiation of Skeletal Mineralization.’ Biochem Biophys Rep 4: 196-201.

Javaheri, B., A. Carriero, K. A. Staines, Y. M. Chang, D. A. Houston, K. J. Oldknow, J. L. Millan, B. N. Kazeruni, P. Salmon, S. Shefelbine, C. Farquharson and A. A. Pitsillides (2015). ‘Phospho1 deficiency transiently modifies bone architecture yet produces consistent modification in osteocyte differentiation and vascular porosity with ageing.’ Bone 81: 277-291.

Johnston, C. J., E. Robertson, Y. Harcus, J. R. Grainger, G. Coakley, D. J. Smyth, H. J. McSorley and R. Maizels (2015). ‘Cultivation of Heligmosomoides polygyrus: an immunomodulatory nematode parasite and its secreted products.’ J Vis Exp(98): e52412.

Luo, X., G. McGregor, A. J. Irving and J. Harvey (2015). ‘Leptin Induces a Novel Form of NMDA Receptor-Dependent LTP at Hippocampal Temporoammonic-CA1 Synapses (1, 2, 3).’ eNeuro 2(3).

Mabbott, N. A., Kobayashi, A., A. Sehgal, B. M. Bradford, M. Pattison and D. S. Donaldson (2015). ‘Aging and the mucosal immune system in the intestine.’ Biogerontology 16(2): 133-145. doi: 10.1007/s10522-014-9498-z.

Mabbott N. A., Sehgal A, Donaldson DS. 2015 Sep. ‘M cells.’ In: eLS. John Wiley & Sons Ltd, Chichester. http://www.els.net; doi: 10.1002/9780470015902.a0026239.

McGregor, G., Y. Malekizadeh and J. Harvey (2015). ‘Minireview: Food for thought: regulation of synaptic function by metabolic hormones.’ Mol Endocrinol 29(1): 3-13.

O’Hara, L., Curley, M., Tedim Ferreira, M., Cruickshanks, L., Milne, L. & Smith, L. B. Pituitary Androgen Receptor Signalling Regulates Prolactin but Not Gonadotrophins in the Male Mouse. PLOS ONE, 10, e0121657. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0121657

Pyott, D.E. and Molnar, A. (2015) 'Going mobile: Non-cell-autonomous small RNAs shape the genetic landscape of plants.' Plant Biotechnol J. 13(3): 306-18. doi: 10.1111/pbi.12353.

Smith, S., C. Cianci and R. Grima (2015). ‘Model reduction for stochastic chemical systems with abundant species.’ J Chem Phys 143(21): 214105.

Zhang, H. Y., L. Picton, W. C. Li and K. T. Sillar (2015). ‘Mechanisms underlying the activity-dependent regulation of locomotor network performance by the Na+ pump.’ Sci Rep 5: 16188.

Zhang, R., C. P. Calixto, N. A. Tzioutziou, A. B. James, C. G. Simpson, W. Guo, Y. Marquez, M. Kalyna, R. Patro, E. Eyras, A. Barta, H. G. Nimmo and J. W. Brown (2015). ‘AtRTD - a comprehensive reference transcript dataset resource for accurate quantification of transcript-specific expression in Arabidopsis thaliana.’ New Phytol 208(1): 96-101.

**2014**

Adam, C. L., P. A. Williams, M. J. Dalby, K. Garden, L. M. Thomson, A. J. Richardson, S. W. Gratz and A. W. Ross (2014). ‘Different types of soluble fermentable dietary fibre decrease food intake, body weight gain and adiposity in young adult male rats.’ Nutr Metab (Lond) 11: 36.

Buck, A. H., G. Coakley, F. Simbari, H. J. McSorley, J. F. Quintana, T. Le Bihan, S. Kumar, C. Abreu-Goodger, M. Lear, Y. Harcus, A. Ceroni, S. A. Babayan, M. Blaxter, A. Ivens and R. M. Maizels (2014). ‘Exosomes secreted by nematode parasites transfer small RNAs to mammalian cells and modulate innate immunity.’ Nat Commun 5: 5488.

Gorgoni, B., E. Marshall, M. R. McFarland, M. C. Romano and I. Stansfield (2014). ‘Controlling translation elongation efficiency: tRNA regulation of ribosome flux on the mRNA.’ Biochem Soc Trans 42(1): 160-165.

Gow, D. J., K. A. Sauter, C. Pridans, L. Moffat, A. Sehgal, B. M. Stutchfield, S. Raza, P. M. Beard, Y. T. Tsai, G. Bainbridge, P. L. Boner, G. Fici, D. Garcia-Tapia, R. A. Martin, T. Oliphant, J. A. Shelly, R. Tiwari, T. L. Wilson, L. B. Smith, N. A. Mabbott and D. A. Hume (2014). ‘Characterisation of a novel Fc conjugate of macrophage colony-stimulating factor.’ Mol Ther 22(9): 1580-1592.

Kneuper, H., Z. P. Cao, K. B. Twomey, M. Zoltner, F. Jager, J. S. Cargill, J. Chalmers, M. M. van der Kooi-Pol, J. M. van Dijl, R. P. Ryan, W. N. Hunter and T. Palmer (2014). ‘Heterogeneity in ess transcriptional organization and variable contribution of the Ess/Type VII protein secretion system to virulence across closely related Staphylocccus aureus strains.’ Mol Microbiol 93(5): 928-943.

Lewicka, A. J., J. J. Lyczakowski, G. Blackhurst, C. Pashkuleva, K. Rothschild-Mancinelli, D. Tautvaisas, H. Thornton, H. Villanueva, W. Xiao, J. Slikas, L. Horsfall, A. Elfick and C. French (2014). ‘Fusion of pyruvate decarboxylase and alcohol dehydrogenase increases ethanol production in Escherichia coli.’ ACS Synth Biol 3(12): 976-978.

Pettitt, J., L. Philippe, D. Sarkar, C. Johnston, H. J. Gothe, D. Massie, B. Connolly, and B. Müller. (2014). 'Operons Are a Conserved Feature of Nematode Genomes.' Genetics 197 (4). Genetics: 1201–11.

Sauter, K. A., C. Pridans, A. Sehgal, C. C. Bain, C. Scott, L. Moffat, R. Rojo, B. M. Stutchfield, C. L. Davies, D. S. Donaldson, K. Renault, B. W. McColl, A. M. Mowat, A. Serrels, M. C. Frame, N. A. Mabbott and D. A. Hume (2014). ‘The MacBlue binary transgene (csf1r-gal4VP16/UAS-ECFP) provides a novel marker for visualisation of subsets of monocytes, macrophages and dendritic cells and responsiveness to CSF1 administration.’ PLoS One 9(8): e105429.

Sauter, K. A., C. Pridans, A. Sehgal, Y. T. Tsai, B. M. Bradford, S. Raza, L. Moffat, D. J. Gow, P. M. Beard, N. A. Mabbott, L. B. Smith and D. A. Hume (2014). ‘Pleiotropic effects of extended blockade of CSF1R signaling in adult mice.’ J Leukoc Biol 96(2): 265-274.

**2013**

Elton, D., Turnbull, M.L., et al. (2013) 'The genetics of virus particle shape in equine influenza A virus.' Influenza and Other Respiratory Viruses 7(s4): 81-89. (doi: 10.1111/irv.12197) (PMID: 24224823) (PMCID: PMC5655883).

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