

Updated list of publications from Dynamic Molecular Cell Biology students per year

2023

- **Dunkley, S.**, & Mogessie, B. (2023). Actin limits egg aneuploidies associated with female reproductive aging. *Science Advances*, 9(3). DOI: [10.1126/sciadv.adc9161](https://doi.org/10.1126/sciadv.adc9161)
- Bergen, D. J. M., Maurizi, A., Formosa, M. M., **McDonald, G. L. K.**, El-Gazzar, A., Hassan, N., Brandi, M. L., Riancho, J. A., Rivadeneira, F., Ntzani, E., Duncan, E. L., Gregson, C. L., Kiel, D. P., Zillikens, M. C., Sangiorgi, L., Höglér, W., Duran, I., Mäkitie, O., van Hul, W., & Hendrickx, G. (2023). High Bone Mass Disorders: New Insights From Connecting the Clinic and the Bench. *Journal of Bone and Mineral Research*, 38(2), 229–247. <https://doi.org/10.1002/JBMR.4715>
- **Needs, H. I.**, Pereira, G. C., Henley, J. M., & Collinson, I. (2023). The NanoLuc Assay System for Accurate Real-Time Monitoring of Mitochondrial Protein Import within Intact Mammalian Cells. *JMB* <https://doi.org/10.1016/j.jmb.2023.168129>
- Jiménez-Moreno N, Kollareddy M, Stathakos P, Moss JJ, Antón Z, Shoemark DK, Sessions RB, Witzgall R, Caldwell M, Lane JD. (2023) ATG8-dependent LMX1B-autophagy crosstalk shapes human midbrain dopaminergic neuronal resilience. doi: 10.1083/jcb.201910133

2022

- **George, A.**, & Martin, P. (2022). Wound Healing Insights from Flies and Fish. *Cold Spring Harbor Perspectives in Biology*, 14(11), a041217. <https://doi.org/10.1101/CSHPERSPECT.A041217>
- López-Cuevas, P., Xu, C., Severn, C. E., **Oates, T. C. L.**, Cross, S. J., Toye, A. M., Mann, S., Martin, P., López-Cuevas, P., Severn, C. E., Oates, T. C. L., Toye, A. M., Martin, P., Xu, C., & Mann, S. (2022). Macrophage Reprogramming with Anti-miR223-Loaded Artificial Protocells Enhances In Vivo Cancer Therapeutic Potential. *Advanced Science*, 9(35), 2202717. <https://doi.org/10.1002/ADVS.202202717>
- **Tsuji, C.**, & Dodding, M. P. (2022). Luminal components of cytoplasmic microtubules. *Biochemical Society Transactions*, 50(6), 1953–1962. <https://doi.org/10.1042/BST20220851>
- **Parker, C.**, Chambers, A. C., Flanagan, D. J., Ho, J. W. Y., Collard, T. J., Ngo, G., Baird, D. M., Timms, P., Morgan, R. G., Sansom, O. J., & Williams, A. C. (2022). BCL-3 loss sensitises colorectal cancer cells to DNA damage by targeting homologous recombination. *DNA Repair*, 115, 103331. <https://doi.org/10.1016/J.DNAREP.2022.103331>
- Rice, C. M., Lewis, P., Ponce-Garcia, F. M., **Gibbs, W.**, Groves, S., Cela, D., Hamilton, F., Arnold, D., Hyams, C., Oliver, E., Barr, R., Goenka, A., Davidson, A., Wooldridge, L., Finn, A., Rivino, L., & Amulic, B. (2022). Hyperactive immature state and differential CXCR2 expression of neutrophils in severe COVID-19. *Life Science Alliance*, 6(2), 1-13. [e202201658]. <https://doi.org/10.26508/lsa.202201658>

2021

- Torres Montaguth, O. E., Cross, S. J., **Ingram, K. W. A.**, Lee, L., Diffin, F. M., & Szczelkun, M. D. (2021). ENDO-Pore: high-throughput linked-end mapping of single DNA cleavage events using nanopore sequencing. *Nucleic Acids Research*, 49(20), e118–e118. <https://doi.org/10.1093/NAR/GKAB727>
- Stathakos, P., **Jiménez-Moreno, N.**, Crompton, L. A., Nistor, P. A., Badger, J. L., Barbuti, P. A., Kerrigan, T. L., Randall, A. D., Caldwell, M. A., & Lane, J. D. (2021). A monolayer hiPSC culture system for autophagy/mitophagy studies in human dopaminergic neurons. *Autophagy*, 17(4), 855–871. https://doi.org/10.1080/15548627.2020.1739441/SUPPL_FILE/KAUP_A_1739441_SM4705.ZIP
- **Campbell, J. S.**, Davidson, A. J., Todd, H., Rodrigues, F. S. L. M., Elliot, A. M., Early, J. J., Lyons, D. A., Feng, Y., & Wood, W. (2021). PTPN21/Pez Is a Novel and Evolutionarily Conserved Key Regulator of Inflammation In Vivo. *Current Biology*, 31(4), 875–883.e5. <https://doi.org/10.1016/J.CUB.2020.11.014>
- Henley, J. M., Nair, J. D., **Seager, R.**, Yucel, B. P., Woodhall, G., Henley, B. S., Talandyte, K., Needs, H. I., & Wilkinson, K. A. (2021). Kainate and AMPA receptors in epilepsy: Cell biology, signalling pathways and possible crosstalk. *Neuropharmacology*, 195. <https://doi.org/10.1016/J.NEUROPHARM.2021.108569>
- Henley, J. M., **Seager, R.**, Nakamura, Y., Talandyte, K., Nair, J., & Wilkinson, K. A. (2021). SUMOylation of synaptic and synapse-associated proteins: An update. *Journal of Neurochemistry*, 156(2), 145–161. <https://doi.org/10.1111/jnc.15103>
- Nair, J. D., Braksator, E., Yucel, B. P., Fletcher-Jones, A., **Seager, R.**, Mellor, J. R., Bashir, Z. I., Wilkinson, K. A., & Henley, J. M. (2021). Sustained postsynaptic kainate receptor activation downregulates AMPA receptor surface expression and induces hippocampal LTD. *IScience*, 24(9). <https://doi.org/10.1016/J.ISCI.2021.103029>
- Zhao, X., Alibhai, D., Sun, T., Khalil, J., Hutchinson, J. L., Olzak, K., Williams, C. M., Li, Y., Sessions, R., Cross, S., **Seager, R.**, Aungraheeta, R., Leard, A., Mckinnon, C. M., Phillips, D., Zhang, L., Poole, A. W., Banting, G., & Mundell, S. J. (2021). Tetherin/BST2, a physiologically and therapeutically relevant regulator of platelet receptor signalling. <https://doi.org/10.1182/bloodadvances.2020003182>
- **Parker, C.**, Chambers, A. C., Flanagan, D., Collard, T. J., Ngo, G., Baird, D. M., Timms, P., Morgan, R. G., Sansom, O., & Williams, A. C. (2021). Loss of BCL-3 sensitises colorectal cancer cells to DNA damage, revealing a role for BCL-3 in double strand break repair by homologous recombination. *BioRxiv*, 2021.08.03.454995. <https://doi.org/10.1101/2021.08.03.454995>
- **Needs, H. I.**, Protasoni, M., Henley, J. M., Prudent, J., Collinson, I., & Pereira, G. C. (2021). Interplay between mitochondrial protein import and respiratory complexes assembly in neuronal health and degeneration. *Life*, 11(5), 432. <https://doi.org/10.3390/LIFE11050432/S1>
- **Moss, J. J.**, Wirth, M., Tooze, S. A., Lane, J. D., & Hammond, C. L. (2021). Autophagy coordinates chondrocyte development and early joint formation in zebrafish. *FASEB Journal*, 35(11). <https://doi.org/10.1096/FJ.202101167R>
- **McGowan, L. M.**, Kague, E., Vorster, A., Newham, E., Cross, S., & Hammond, C. L. (2021). Wnt16 Elicits a Protective Effect Against Fractures and Supports Bone Repair in Zebrafish. *JBMR Plus*, 5(3). <https://doi.org/10.1002/JBM4.10461>

- Dietrich, K., Fiedler, I. A. K., Kurzyukova, A., López-Delgado, A. C., **McGowan, L. M.**, Geurtzen, K., Hammond, C. L., Busse, B., & Knopf, F. (2021). Skeletal Biology and Disease Modeling in Zebrafish. *Journal of Bone and Mineral Research*, 36(3), 436–458. <https://doi.org/10.1002/JBMR.4256>
- Scott, A., Sueiro Ballesteros, L., Bradshaw, M., Tsuji, C., Power, A., **Lorriman, J.**, Love, J., Paul, D., Herman, A., Emanueli, C., & Richardson, R. J. (2021). In Vivo Characterization of Endogenous Cardiovascular Extracellular Vesicles in Larval and Adult Zebrafish. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 41(9), 2454–2468. <https://doi.org/10.1161/ATVBAHA.121.316539>
- **McDonald, G. L. K.**, Wang, M., Hammond, C. L., & Bergen, D. J. M. (2021). Pharmacological Manipulation of Early Zebrafish Skeletal Development Shows an Important Role for Smad9 in Control of Skeletal Progenitor Populations. *Biomolecules* 2021, Vol. 11, Page 277, 11(2), 277. <https://doi.org/10.3390/BIOM11020277>
- Scott, A., Sueiro Ballesteros, L., Bradshaw, M., **Tsuji, C.**, Power, A., Lorriman, J., Love, J., Paul, D., Herman, A., Emanueli, C., & Richardson, R. J. (2021). In Vivo Characterization of Endogenous Cardiovascular Extracellular Vesicles in Larval and Adult Zebrafish. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 41(9), 2454–2468. <https://doi.org/10.1161/ATVBAHA.121.316539>

2020

- **Young, H. S.**, McGowan, L. M., Jepson, K. A., & Adams, J. C. (2020). Impairment of cell adhesion and migration by inhibition of protein disulphide isomerases in three breast cancer cell lines. *Bioscience Reports*, 40(10), 20193271. <https://doi.org/10.1042/BSR20193271/226652>
- Kollárovič, G., Topping, C. E., **Shaw, E. P.**, & Chambers, A. L. (2020). The human HELLs chromatin remodelling protein promotes end resection to facilitate homologous recombination and contributes to DSB repair within heterochromatin. *Nucleic Acids Research*, 48(4), 1872–1885. <https://doi.org/10.1093/NAR/GKZ1146>
- Ryan, R., **Moyse, B. R.**, & Richardson, R. J. (2020). Zebrafish cardiac regeneration—looking beyond cardiomyocytes to a complex microenvironment. *Histochemistry and Cell Biology* 2020 154:5, 154(5), 533–548. <https://doi.org/10.1007/S00418-020-01913-6>
- **Moyse, B. R.**, & Richardson, R. J. (2020). A Population of Injury-Responsive Lymphoid Cells Expresses mpeg1.1 in the Adult Zebrafish Heart. *ImmunoHorizons*, 4(8), 464–474. <https://doi.org/10.4049/IMMUNOHORIZONS.2000063>
- **Lawrence, E. A.**, Hammond, C. L., & Blain, E. J. (2020). Potential of zebrafish as a model to characterise MicroRNA profiles in mechanically mediated joint degeneration. *Histochemistry and Cell Biology*, 154(5), 521–531. <https://doi.org/10.1007/S00418-020-01918-1/TABLES/1>
- **Daly, J. L.**, Simonetti, B., Klein, K., Chen, K. E., Williamson, M. K., Antón-Plágaro, C., Shoemark, D. K., Simón-Gracia, L., Bauer, M., Hollandi, R., Greber, U. F., Horvath, P., Sessions, R. B., Helenius, A., Hiscox, J. A., Teesalu, T., Matthews, D. A., Davidson, A. D., Collins, B. M., ... Yamauchi, Y. (2020). Neuropilin-1 is a host factor for SARS-CoV-2 infection. *Science*, 370(6518), 861–865. DOI: 10.1126/science.abd3072
- **Seager, R.**, Lee, L., Henley, J. M. M., & Wilkinson, K. A. A. (2020). Mechanisms and roles of mitochondrial localisation and dynamics in neuronal function. *Neuronal Signaling*, 4(2), 20200008. <https://doi.org/10.1042/NS20200008>

- Legge, D. N., Chambers, A. C., **Parker, C. T.**, Timms, P., Collard, T. J., & Williams, A. C. (2020). The role of B-Cell Lymphoma-3 (BCL-3) in enabling the hallmarks of cancer: implications for the treatment of colorectal carcinogenesis. *Carcinogenesis*, 41(3), 249–256. <https://doi.org/10.1093/CARCIN/BGAA003>
- **Moss, J. J.**, Hammond, C. L., & Lane, J. D. (2020). Zebrafish as a model to study autophagy and its role in skeletal development and disease. *Histochemistry and Cell Biology*, 154(5), 549–564. <https://doi.org/10.1007/S00418-020-01917-2/FIGURES/4>
- Alvira, S., Watkins, D. W., Troman, L., Allen, W. J., **Lorriman, J. S.**, Degliesposti, G., Cohen, E. J., Beeby, M., Daum, B., Gold, V. A. M., Mark Skehel, J., & Collinson, I. (2020). Inter-membrane association of the sec and bam translocons for bacterial outer-membrane biogenesis. *ELife*, 9, 1–24. <https://doi.org/10.7554/ELIFE.60669>

2019

- **Simonetti, B.**, & Cullen, P. J. (2019). Actin-dependent endosomal receptor recycling. *Current Opinion in Cell Biology*, 36, 22–33. <https://doi.org/10.1016/j.ceb.2018.08.006>
- Stathakos, P., **Jimenez-Moreno**, N., Crompton, L., Nistor, P., Caldwell, M. A., & Lane, J. D. (2019). Imaging Autophagy in hiPSC-Derived Midbrain Dopaminergic Neuronal Cultures for Parkinson's Disease Research. *Methods in Molecular Biology* (Clifton, N.J.), 1880, 257–280. https://doi.org/10.1007/978-1-4939-8873-0_17
- **Needs, H. I.**, Henley, B. S., Cavallo, D., Gurung, S., Modebadze, T., Woodhall, G., & Henley, J. M. (2019). Changes in excitatory and inhibitory receptor expression and network activity during induction and establishment of epilepsy in the rat Reduced Intensity Status Epilepticus (RISE) model. *Neuropharmacology*, 158, 107728. <https://doi.org/10.1016/J.NEUROPHARM.2019.107728>
- Anderson, M. W., **Moss, J. J.**, Szalai, R., & Lane, J. D. (2019). Mathematical Modeling Highlights the Complex Role of AKT in TRAIL-Induced Apoptosis of Colorectal Carcinoma Cells. *IScience*, 12, 182–193. <https://doi.org/10.1016/J.ISCI.2019.01.015>
- **McGowan, L. M.**, Davey Smith, G., Gaunt, T. R., & Richardson, T. G. (2019). Integrating Mendelian randomization and multiple-trait colocalization to uncover cell-specific inflammatory drivers of autoimmune and atopic disease. *Human Molecular Genetics*, 28(19), 3293–3300. <https://doi.org/10.1093/HMG/DDZ155>

2018

- **Daly, J. L.**, & Cullen, P. J. (2018). Endoplasmic Reticulum–Endosome Contact Sites: Specialized Interfaces for Orchestrating Endosomal Tubule Fission? *Biochemistry*, 57(49), 6738–6740. <https://doi.org/10.1021/acs.biochem.8b01176>
- Gurevich, D. B., Severn, C. E., **Twomey, C.**, Greenhough, A., Cash, J., Toye, A. M., ... Martin, P. (2018). Live imaging of wound angiogenesis reveals macrophage orchestrated vessel sprouting and regression. *The EMBO Journal*, 37(13), e97786. <https://doi.org/10.15252/embj.201797786>
- **Gurung, S.**, Evans, A. J., Wilkinson, K. A., & Henley, J. M. (2018). ADAR2-mediated Q/R editing of GluK2 regulates kainate receptor upscaling in response to suppression of synaptic activity. *Journal of Cell Science*, 131(24), jcs222273. <https://doi.org/10.1242/jcs.222273>

- Hawkins, S. J., Crompton, L. A., Sood, A., Saunders, M., Boyle, N. T., Buckley, A., Minogue, A. M., McComish, S. F., **Jiménez-Moreno, N.**, Cordero-Llana, O., Stathakos, P., Gilmore, C. E., Kelly, S., Lane, J. D., Case, C. P. & Caldwell, M. A. (2018). Nanoparticle-induced neuronal toxicity across placental barriers is mediated by autophagy and dependent on astrocytes. *Nature Nanotechnology*, 13(5), 427–433. <https://doi.org/10.1038/s41565-018-0085-3>
- Heideveld, E., **Hampton-O'Neil, L. A.**, Cross, S. J., van Alphen, F. P. J., van den Biggelaar, M., Toye, A. M., & van den Akker, E. (2018). Glucocorticoids induce differentiation of monocytes towards macrophages that share functional and phenotypical aspects with erythroblastic island macrophages. *Haematologica*, 103(3), 395–405. <https://doi.org/10.3324/haematol.2017.179341>
- **Lawrence, E. A.**, Kague, E., Aggleton, J. A., Harniman, R. L., Roddy, K. A., & Hammond, C. L. (2018). The mechanical impact of col11a2 loss on joints; col11a2 mutant zebrafish show changes to joint development and function, which leads to early-onset osteoarthritis. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 373(1759), 20170335. <http://doi.org/10.1098/rstb.2017.0335>
- **McGough, I. J.**, de Groot, R. E. A., Jellett, A. P., Betist, M. C., Varandas, K. C., Danson, C. M., ... Cullen, P. J. (2018). SNX3-retromer requires an evolutionary conserved MON2:DOPEY2:ATP9A complex to mediate Wntless sorting and Wnt secretion. *Nature Communications*, 9(1), 3737. <https://doi.org/10.1038/s41467-018-06114-3>
- **McNally, K. E.**, & Cullen, P. J. (2018). Endosomal Retrieval of Cargo: Retromer Is Not Alone. *Trends in Cell Biology*, 28(10), 807–822. <https://doi.org/10.1016/j.tcb.2018.06.005>
- Pellegrin, S., Haydn-Smith, K. L., **Hampton-O'Neil, L. A.**, Hawley, B. R., Heesom, K. J., Fermo, E., ... Toye, A. M. (2018). Transduction with BBF2H7/CREB3L2 upregulates SEC23A protein in erythroblasts and partially corrects the hypo-glycosylation phenotype associated with CD41I. *British Journal of Haematology*. <https://doi.org/10.1111/bjh.15189Roloff>,
- E. V. L., **Walas, D.**, Moraes, D. J. A., Kasparov, S., & Paton, J. F. R. (2018). Differences in autonomic innervation to the vertebrobasilar arteries in spontaneously hypertensive and Wistar rats. *The Journal of Physiology*, 596(16), 3505–3529. <https://doi.org/10.1113/JP275973>
- **Simonetti, B.**, & Cullen, P. J. (2018). Endosomal Sorting: Architecture of the Retromer Coat. *Current Biology : CB*, 28(23), R1350–R1352. <https://doi.org/10.1016/j.cub.2018.10.040>,
- Stevenson N. L., **Bergen, D. J. M.**, Xu, A., Wyatt, E., Henry, F., McCaughey, J., ... Stephens, D. J. (2018). Regulator of calcineurin-2 is a centriolar protein with a role in cilia length control. *Journal of Cell Science*, 131(9), jcs212258. <https://doi.org/10.1242/jcs.212258>
- **Thuma, L.**, Carter, D., Weavers, H., & Martin, P. (2018). Drosophila immune cells extravasate from vessels to wounds using Tre1 GPCR and Rho signaling. *The Journal of Cell Biology*, 217(9), 3045–3056. <https://doi.org/10.1083/jcb.201801013>
- **Tilley, F. C.**, Gallon, M., Luo, C., Danson, C. M., Zhou, J., & Cullen, P. J. (2018). Retromer associates with the cytoplasmic amino-terminus of polycystin-2. *Journal of Cell Science*, 131(11), jcs211342. <https://doi.org/10.1242/jcs.211342>
- **Walas, D.**, Nowicki-Osuch, K., Alibhai, D., von Linstow Roloff, E., Coghill, J., Waterfall, C., & Paton, J. F. (2018). Inflammatory pathways are central to posterior cerebrovascular artery remodelling prior to the onset of

congenital hypertension. *Journal of Cerebral Blood Flow and Metabolism* 271678X18769180. <https://doi.org/10.1177/0271678X18769180>

2017

- **Ambler, R.**, Ruan, X., Murphy, R. F., & Wülfing, C. (2017). Systems Imaging of the Immune Synapse. *Methods in Molecular Biology* (Clifton, N.J.), 1584, 409–421. https://doi.org/10.1007/978-1-4939-6881-7_25
- **Bergen, D. J. M.**, Stevenson, N. L., Skinner, R. E. H., Stephens, D. J., & Hammond, C. L. (2017). The Golgi matrix protein giantin is required for normal cilia function in zebrafish. *Biology Open*, 6(8), 1180–1189. <https://doi.org/10.1242/bio.025502>
- **Britton, G. J.**, Ambler, R., Clark, D. J., Hill, E. V, **Tunbridge, H. M.**, **McNally, K. E.**, ... Wraith, D. C. (2017). PKCθ links proximal T cell and Notch signaling through localized regulation of the actin cytoskeleton. *eLife*, 6. <https://doi.org/10.7554/elife.20003>
- **Britton, G. J.**, **Mitchell, R. E.**, Burton, B. R., & Wraith, D. C. (2017). Protein kinase C theta is required for efficient induction of IL-10-secreting T cells. *PLoS One*, 12(2), e0171547. <https://doi.org/10.1371/journal.pone.0171547>
- **Brunt, L. H.**, Begg, K., Kague, E., Cross, S., & Hammond, C. L. (2017). Wnt signalling controls the response to mechanical loading during zebrafish joint development. *Development*, 144(15), 2798–2809. <https://doi.org/10.1242/dev.153528>
- **Evans, A. J.**, **Gurung, S.**, Henley, J. M., Nakamura, Y., & Wilkinson, K. A. (2017). Exciting Times: New Advances Towards Understanding the Regulation and Roles of Kainate Receptors. *Neurochemical Research*. <https://doi.org/10.1007/s11064-017-2450-2>
- **Evans, A. J.**, **Gurung, S.**, Wilkinson, K. A., Stephens, D. J., & Henley, J. M. (2017). Assembly, Secretory Pathway Trafficking, and Surface Delivery of Kainate Receptors Is Regulated by Neuronal Activity. *Cell Reports*, 19(12), 2613–2626. <https://doi.org/10.1016/j.celrep.2017.06.001>
- **Guo, C.**, Wilkinson, K. A., **Evans, A. J.**, Rubin, P. P., & Henley, J. M. (2017). SENP3-mediated deSUMOylation of Drp1 facilitates interaction with Mff to promote cell death. *Scientific Reports*, 7(1), 43811. <https://doi.org/10.1038/srep43811>
- **Jiménez-Moreno, N.**, Stathakos, P., Caldwell, M., & Lane, J. (2017). Induced Pluripotent Stem Cell Neuronal Models for the Study of Autophagy Pathways in Human Neurodegenerative Disease. *Cells*, 6(3), 24. <https://doi.org/10.3390/cells6030024>
- Luo, J., **Gurung, S.**, Lee, L., Henley, J. M., Wilkinson, K. A., & **Guo, C.** (2017). Increased SUMO-2/3ylation mediated by SENP3 degradation is protective against cadmium-induced caspase 3-dependent cytotoxicity. *The Journal of Toxicological Sciences*, 42(5), 529–538. <https://doi.org/10.2131/jts.42.529>
- **McNally, K. E.**, Faulkner, R., Steinberg, F., **Gallon, M.**, Ghai, R., Pim, D., ... Cullen, P. J. (2017). Retriever is a multiprotein complex for retromer-independent endosomal cargo recycling. *Nature Cell Biology*, 19(10), 1214–1225. <https://doi.org/10.1038/ncb3610>
- **Mitchell, R. E.**, Hassan, M., Burton, B. R., **Britton, G.**, Hill, E. V, Verhagen, J., & Wraith, D. C. (2017). IL-4 enhances IL-10 production in Th1 cells: implications for Th1 and Th2 regulation. *Scientific Reports*, 7(1), 11315. <https://doi.org/10.1038/s41598-017-11803-y>
- **Simonetti, B.**, Danson, C. M., Heesom, K. J., & Cullen, P. J. (2017). Sequence-dependent cargo recognition by SNX-BARs mediates retromer-independent transport of Cl-MPR. *The Journal of Cell Biology*, 216(11), 3695–3712. <https://doi.org/10.1083/jcb.201703015>

- Stevenson, N. L., **Bergen, D. J. M.**, Skinner, R. E. H., Kague, E., Martin-Silverstone, E., Robson Brown, K. A., ... Stephens, D. J. (2017). Giantin-knockout models reveal a feedback loop between Golgi function and glycosyltransferase expression. *Journal of Cell Science*, 130(24), 4132–4143. <https://doi.org/10.1242/jcs.212308>
- Taylor, H., **Campbell, J.**, & Nobes, C. D. (2017). Ephs and ephrins. *Current Biology : CB*, 27(3), R90–R95. <https://doi.org/10.1016/j.cub.2017.01.003>

2016

- **Brunt, L. H.**, Roddy, K. A., Rayfield, E. J., & Hammond, C. L. (2016). Building Finite Element Models to Investigate Zebrafish Jaw Biomechanics. *Journal of Visualized Experiments : JoVE*, (118). <https://doi.org/10.3791/54811>
- **Brunt, L. H.**, Skinner, R. E. H., Roddy, K. A., Araujo, N. M., Rayfield, E. J., & Hammond, C. L. (2016). Differential effects of altered patterns of movement and strain on joint cell behaviour and skeletal morphogenesis. *Osteoarthritis and Cartilage*, 24(11), 1940–1950. <https://doi.org/10.1016/j.joca.2016.06.015>
- Marvar, P. J., Hendy, E. B., Cruise, T. D., **Walas, D.**, DeCicco, D., Vadigepalli, R., ... Paton, J. F. R. (2016). Systemic leukotriene B4 receptor antagonism lowers arterial blood pressure and improves autonomic function in the spontaneously hypertensive rat. *The Journal of Physiology*, 594(20), 5975–5989. <https://doi.org/10.1113/JP272065>
- McMillan, K. J., **Gallon, M.**, Jellett, A. P., Clairfeuille, T., **Tilley, F. C.**, **McGough, I.**, ... Cullen, P. J. (2016). Atypical parkinsonism-associated retromer mutant alters endosomal sorting of specific cargo proteins. *The Journal of Cell Biology*, 214(4), 389–399. <https://doi.org/10.1083/jcb.201604057>
- Roybal, K. T., Buck, T. E., Ruan, X., Cho, B. H., Clark, D. J., **Ambler, R.**, ... Murphy, R. F. (2016). Computational spatiotemporal analysis identifies WAVE2 and cofilin as joint regulators of costimulation-mediated T cell actin dynamics. *Science Signaling*, 9(424), rs3. <https://doi.org/10.1126/scisignal.aad4149>
- Satchwell, T. J., **Bell, A. J.**, Hawley, B. R., Pellegrin, S., Mordue, K. E., van Deursen, C. T. B. M., ... Toye, A. M. (2016). Severe Ankyrin-R deficiency results in impaired surface retention and lysosomal degradation of RhAG in human erythroblasts. *Haematologica*, 101(9), 1018–1027. <https://doi.org/10.3324/haematol.2016.146209>
- **Urban, B. C.**, Collard, T. J., Eagle, C. J., Southern, S. L., Greenhough, A., Hamdollah-Zadeh, M., ... Williams, A. C. (2016). BCL-3 expression promotes colorectal tumorigenesis through activation of AKT signalling. *Gut*, 65(7), 1151–1164. <https://doi.org/10.1136/gutjnl-2014-308270>

2015

- **Antonio, N.**, Bonnelykke-Behrndtz, M. L., Ward, L. C., Collin, J., Christensen, I. J., Steiniche, T., ... Martin, P. (2015). The wound inflammatory response exacerbates growth of pre-neoplastic cells and progression to cancer. *The EMBO Journal*, 34(17), 2219–2236. <https://doi.org/10.15252/embj.201490147>
- **Bergen, D.**, Asante, D., Stevenson, N., Verkade, P., Hammond, C., & Stephens, D. (2015). In vivo characterisation of the Golgi matrix protein giantin: linking extracellular matrix secretion and cilia function. *Cilia*, 4(S1), P38. <http://doi.org/10.1186/2046-2530-4-S1-P38>
- **Brunt, L. H.**, Norton, J. L., Bright, J. A., Rayfield, E. J., & Hammond, C. L. (2015). Finite element modelling predicts changes in joint shape and cell behaviour due to loss of muscle strain in jaw development. *Journal of Biomechanics*, 48(12), 3112–3122. <https://doi.org/10.1016/j.jbiomech.2015.07.017>

- Craig, T. J., Anderson, D., **Evans, A. J.**, Girach, F., & Henley, J. M. (2015). SUMOylation of Syntaxin1A regulates presynaptic endocytosis. *Scientific Reports*, 5(1), 17669. <https://doi.org/10.1038/srep17669>
- Damseh, N., Danson, C. M., Al-Ashhab, M., Abu-Libdeh, B., **Gallon, M.**, Sharma, K., ... Elpeleg, O. (2015). A defect in the retromer accessory protein, SNX27, manifests by infantile myoclonic epilepsy and neurodegeneration. *Neurogenetics*, 16(3), 215–221. <https://doi.org/10.1007/s10048-015-0446-0>
- **Gallon, M.**, & Cullen, P. J. (2015). Retromer and sorting nexins in endosomal sorting. *Biochemical Society Transactions*, 43(1), 33–47. <https://doi.org/10.1042/BST20140290>
- **MacVicar, T.**, Mannack, L., Lees, R., & Lane, J. (2015). Targeted siRNA Screens Identify ER-toMitochondrial Calcium Exchange in Autophagy and Mitophagy Responses in RPE1 Cells. *International Journal of Molecular Sciences*, 16(12), 13356–13380. <https://doi.org/10.3390/ijms160613356>
- Nunan, R., **Campbell, J.**, Mori, R., Pitulescu, M. E., Jiang, W. G., Harding, K. G., ... Martin, P. (2015). Ephrin-Bs Drive Junctional Downregulation and Actin Stress Fiber Disassembly to Enable Wound Re-epithelialization. *Cell Reports*, 13(7), 1380–1395. <https://doi.org/10.1016/j.celrep.2015.09.085>
- Satchwell, T. J., **Bell, A. J.**, & Toye, A. M. (2015). The sorting of blood group active proteins during enucleation. *ISBT Science Series*, 10(Suppl 1), 163–168. <https://doi.org/10.1111/voxs.12127>
- Satchwell, T. J., Hawley, B. R., **Bell, A. J.**, Ribeiro, M. L., & Toye, A. M. (2015). The cytoskeletal binding domain of band 3 is required for multiprotein complex formation and retention during erythropoiesis. *Haematologica*, 100(1), 133–142. <https://doi.org/10.3324/haematol.2014.114538>

2013

- Al-Kharusi, M. R. A., Smartt, H. J. M., Greenhough, A., Collard, T. J., **Emery, E. D.**, Williams, A. C., & Paraskeva, C. (2013). LGR5 promotes survival in human colorectal adenoma cells and is upregulated by PGE2: implications for targeting adenoma stem cells with NSAIDs. *Carcinogenesis*, 34(5), 1150–1157. <https://doi.org/10.1093/carcin/bgt020>
- **Batson, J.**, Astin, J. W., & Nobes, C. D. (2013). Regulation of contact inhibition of locomotion by Ephephrin signalling. *Journal of Microscopy*, 251(3), 232–241. <https://doi.org/10.1111/jmi.12024>
- **Bell, A. J.**, Satchwell, T. J., Heesom, K. J., Hawley, B. R., Kupzig, S., Hazell, M., ... Toye, A. M. (2013). Protein distribution during human erythroblast enucleation in vitro. *PloS One*, 8(4), e60300. <https://doi.org/10.1371/journal.pone.0060300>
- **Billcliff, P. G.**, Gorleku, O. A., Chamberlain, L. H., & Banting, G. (2013). The cytosolic N-terminus of CD317/tetherin is a membrane microdomain exclusion motif. *Biology Open*, 2(11), 1253–1263. <https://doi.org/10.1242/bio.20135793>
- **Billcliff, P. G.**, Rollason, R., Prior, I., Owen, D. M., Gaus, K., & Banting, G. (2013). CD317/tetherin is an organiser of membrane microdomains. *Journal of Cell Science*, 126, 1553–1564. <https://doi.org/10.1242/jcs.112953>
- Danson, C., Brown, E., Hemmings, O. J., **McGough, I. J.**, Yarwood, S., Heesom, K. J., ... Cullen, P. J. (2013). SNX15 links clathrin endocytosis to the PtdIns3P early endosome independently of the APPL1 endosome. *Journal of Cell Science*, 126, 4885–4899. <https://doi.org/10.1242/jcs.125732>
- **Gillespie, J. M.**, & Hodge, J. J. L. (2013). CASK regulates CaMKII autophosphorylation in neuronal growth, calcium signaling, and learning. *Frontiers in Molecular Neuroscience*, 6, 27. <https://doi.org/10.3389/fnmol.2013.00027>

- **Guo, C.**, Hildick, K. L., Luo, J., **Dearden, L.**, Wilkinson, K. A., & Henley, J. M. (2013). SENP3-mediated deSUMOylation of dynamin-related protein 1 promotes cell death following ischaemia. *The EMBO Journal*, 32(11), 1514–1528. <https://doi.org/10.1038/emboj.2013.65>
- MacVicar, T. (2013). Mitophagy. *Essays in Biochemistry*, 55, 93–104. <http://doi.org/10.1042/bse0550093>
- Malik, B. R., **Gillespie, J. M.**, & Hodge, J. J. L. (2013). CASK and CaMKII function in the mushroom body α'/β' neurons during Drosophila memory formation. *Frontiers in Neural Circuits*, 7, 52. <https://doi.org/10.3389/fncir.2013.00052>
- **McGough, I. J.**, & Cullen, P. J. (2013). Clathrin is not required for SNX-BAR-retromer-mediated carrier formation. *Journal of Cell Science*, 126, 45–52. <https://doi.org/10.1242/jcs.112904>
- **Mitchell, R. E.**, Huitema, L. F. A., Skinner, R. E. H., **Brunt, L. H.**, Severn, C., Schulte-Merker, S., & Hammond, C. L. (2013). New tools for studying osteoarthritis genetics in zebrafish. *Osteoarthritis and Cartilage*, 21(2), 269–278. <https://doi.org/10.1016/j.joca.2012.11.004>
- Ng, T. H. S., **Britton, G. J.**, Hill, E. V., Verhagen, J., Burton, B. R., & Wraith, D. C. (2013). Regulation of Adaptive Immunity; The Role of Interleukin-10. *Frontiers in Immunology*, 4. <https://doi.org/10.3389/fimmu.2013.00129>
- Petherick, K. J., Williams, A. C., Lane, J. D., Ordóñez-Morán, P., Huelsken, J., Collard, T. J., Smart, H. J. M., **Batson, J.**, Malik, K., Paraskeva, C., & Greenhough, A. (2013). Autolysosomal β -catenin degradation regulates Wnt-autophagy-p62 crosstalk. *The EMBO Journal*, 32(13), 1903–1916. <https://doi.org/10.1038/emboj.2013.123>
- **Razzell, W.**, Evans, I. R., Martin, P., & Wood, W. (2013). Calcium flashes orchestrate the wound inflammatory response through DUOX activation and hydrogen peroxide release. *Current Biology : CB*, 23(5), 424–429. <https://doi.org/10.1016/j.cub.2013.01.058>
- Rollason, R., **Dunstan, K.**, **Billcliff, P. G.**, Bishop, P., Gleeson, P., Wise, H., ... Banting, G. (2013). Expression of HIV-1 Vpu leads to loss of the viral restriction factor CD317/Tetherin from lipid rafts and its enhanced lysosomal degradation. *PloS One*, 8(9), e75680. <https://doi.org/10.1371/journal.pone.0075680>
- Steinberg, F., **Gallon, M.**, Winfield, M., Thomas, E. C., **Bell, A. J.**, Heesom, K. J., ... Cullen, P. J. (2013). A global analysis of SNX27-retromer assembly and cargo specificity reveals a function in glucose and metal ion transport. *Nature Cell Biology*, 15(5), 461–71. <http://doi.org/10.1038/hcb2721>
- Verhagen, J., Burton, B. R., **Britton, G. J.**, Shepard, E. R., Anderton, S. M., & Wraith, D. C. (2013). Modification of the FoxP3 Transcription Factor Principally Affects Inducible T Regulatory Cells in a Model of Experimental Autoimmune Encephalomyelitis. *PLoS ONE*, 8(4), e61334. <https://doi.org/10.1371/journal.pone.0061334>
- Verhagen, J., Genolet, R., **Britton, G. J.**, Stevenson, B. J., Sabatos-Peyton, C. A., Dyson, J., ... Wraith, D. C. (2013). CTLA-4 controls the thymic development of both conventional and regulatory T cells through modulation of the TCR repertoire. *Proceedings of the National Academy of Sciences*, 110(3), E221–E230. <https://doi.org/10.1073/pnas.1208573110>

2012

- Betin, V. M. S., **MacVicar, T. D. B.**, Parsons, S. F., Anstee, D. J., & Lane, J. D. (2012). A cryptic mitochondrial targeting motif in Atg4D links caspase cleavage with mitochondrial import and oxidative stress. *Autophagy*, 8(4), 664–676. <https://doi.org/10.4161/auto.19227>
- Cavaliere, S., **Gillespie, J. M.**, & Hodge, J. J. L. (2012). KCNQ channels show conserved ethanol block and function in ethanol behaviour. *PloS One*, 7(11), e50279. <https://doi.org/10.1371/journal.pone.0050279>

- Cimarosti, H., Ashikaga, E., Jaafari, N., **Dearden, L.**, Rubin, P., Wilkinson, K. A., & Henley, J. M. (2012). Enhanced SUMOylation and SENP-1 protein levels following oxygen and glucose deprivation in neurones. *Journal of Cerebral Blood Flow and Metabolism : Official Journal of the International Society of Cerebral Blood Flow and Metabolism*, 32(1), 17–22. <https://doi.org/10.1038/jcbfm.2011.146>
- Collard, T. J., **Urban, B. C.**, Patsos, H. A., Hague, A., Townsend, P. A., Paraskeva, C., & Williams, A. C. (2012). The retinoblastoma protein (Rb) as an anti-apoptotic factor: expression of Rb is required for the anti-apoptotic function of BAG-1 protein in colorectal tumour cells. *Cell Death & Disease*, 3(10), e408. <https://doi.org/10.1038/cddis.2012.142>
- **Razzell, W.**, & Martin, P. (2012). Cell biology. Embryonic clutch control. *Science (New York, N.Y.)*, 335(6073), 1181–1182. <https://doi.org/10.1126/science.1220388>
- Southern, S. L., Collard, T. J., **Urban, B. C.**, Skeen, V. R., Smartt, H. J., Hague, A., ... Williams, A. C. (2012). BAG-1 interacts with the p50–p50 homodimeric NF-κB complex: implications for colorectal carcinogenesis. *Oncogene*, 31(22), 2761–2772. <https://doi.org/10.1038/onc.2011.452>

2011

- Harterink, M., Port, F., Lorenowicz, M. J., **McGough, I. J.**, Silhankova, M., Betist, M. C., ... Korswagen, H. C. (2011). A SNX3-dependent retromer pathway mediates retrograde transport of the Wnt sorting receptor Wntless and is required for Wnt secretion. *Nature Cell Biology*, 13(8), 914–923. <https://doi.org/10.1038/ncb2281>
- Matsubayashi, Y., **Razzell, W.**, & Martin, P. (2011). “White wave” analysis of epithelial scratch wound healing reveals how cells mobilise back from the leading edge in a myosin-II-dependent fashion. *Journal of Cell Science*, 124(7), 1017–1021. <https://doi.org/10.1242/jcs.080853>
- **McGough, I. J.**, & Cullen, P. J. (2011). Recent Advances in Retromer Biology. *Traffic*, 12(8), 963–971. <https://doi.org/10.1111/j.1600-0854.2011.01201>.
- **Razzell, W.**, Wood, W., & Martin, P. (2011). Swatting flies: modelling wound healing and inflammation in *Drosophila*. *Disease Models & Mechanisms*, 4(5), 569–574. <https://doi.org/10.1242/dmm.006825>
- Satchwell, T. J., **Bell, A. J.**, Pellegrin, S., Kupzig, S., Ridgwell, K., Daniels, G., ... Toye, A. M. (2011). Critical band 3 multiprotein complex interactions establish early during human erythropoiesis. *Blood*, 118(1), 182–191. <https://doi.org/10.1182/blood-2010-10-314187>
- Astin, J. W., **Batson, J.**, Kadir, S., Charlet, J., Persad, R. A., Gillatt, D., ... Nobes, C. D. (2010). Competition amongst Eph receptors regulates contact inhibition of locomotion and invasiveness in prostate cancer cells. *Nature Cell Biology*, 12(12), 1194–1204. <https://doi.org/10.1038/ncb2122>